

恒舰摩托 **500**

HENGJIAN

突破科技 · 驾驭未来



摩托车使用说明书

我们感谢并祝贺您选择了恒舰摩托。如果您能够坚持恰当的保养和维护，它必将为您带来无限的驾驶乐趣。

您要像熟悉自己一样熟悉您的爱车，以便在各种不同的驾驶环境中能够安全可靠地驾驶它。请您在使用这辆新车之前，仔细阅读使用说明书。它包含了驾驶方式和装备的重要信息，以及您必须严格遵守的重要建议。也包含了您需要了解的有关车辆维护及保养的信息和使用预防措施，如果您对于您的车辆有任何问题，恒舰授权的经销商将非常乐意为您提供建议和帮助。

我们祝愿您能享受骑行摩托车的每时每刻。

该车在我公司出厂时已达到 GB 14622-2016《摩托车污染物排放限值及测量方法（中国第四阶段）》所要求的排放水平。

请购买我司产品时，自愿在经销商处购买符合 GB811 标准的乘员头盔，并在骑行时佩戴。

我们衷心祝您驾驶愉快、平安！

请在下表中填写车辆的相关信息：

车辆识别代号 (VIN)		经销商印章
发动机编号		
车辆钥匙编号		



HJ MOT OR202111.01

本使用说明书包含有关使用车辆的重要信息、注意事项、警告和危险提示。要确保本使用说明书一直存放在车上。尤其是将车辆出借或转卖给他人时，这一点非常重要。书中的插图在细节方面可能与本车略有不同，但是其描述的原理是一样的。当您出让本车时，请记住将这本使用说明书一并交付对方，它是整车重要的组成部分。

恒舰一直保持高安全性、高品质的标准，原因在于对设计产品的不断深入研究和设计改进，这会造成使用说明书提供的信息和您的车辆信息可能不完全一致，恒舰授权的经销商将随时为您进行正确的指导。

本说明书的编写符合：GB/T9969-2008 及 GB/T19678-2005。

本说明书最终解释权为重庆恒舰摩托车有限公司。

本说明书多处出现以下警告符号，当您看到以下警告符号时，请您遵守这些安全驾驶和保养程序。

▲ 危险 这个安全警告表示可能导致严重伤害或死亡的潜在危害。

▲ 警告 这个图示表示可能对车辆造成损害

▲ 注意 这个符号说明了更多有效的和方便的驾驶要点。

▲ 危险

本产品仅适合有同类车辆驾驶资格证的人对本车合理、谨慎地驾驶，并注意以下事项：

请用户不要对本车辆进行改装。

用户应遵守当地的法律法规。

对本产品的装置或电器件改装都将影响噪声、排放及整车性能等。

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1 车辆识别

1.1 车辆识别代号 (VIN)



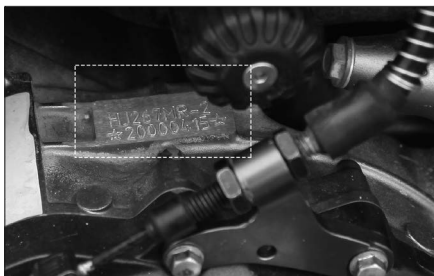
车辆识别代号 (VIN) 位于车辆立管右侧。

1.2 车辆铭牌



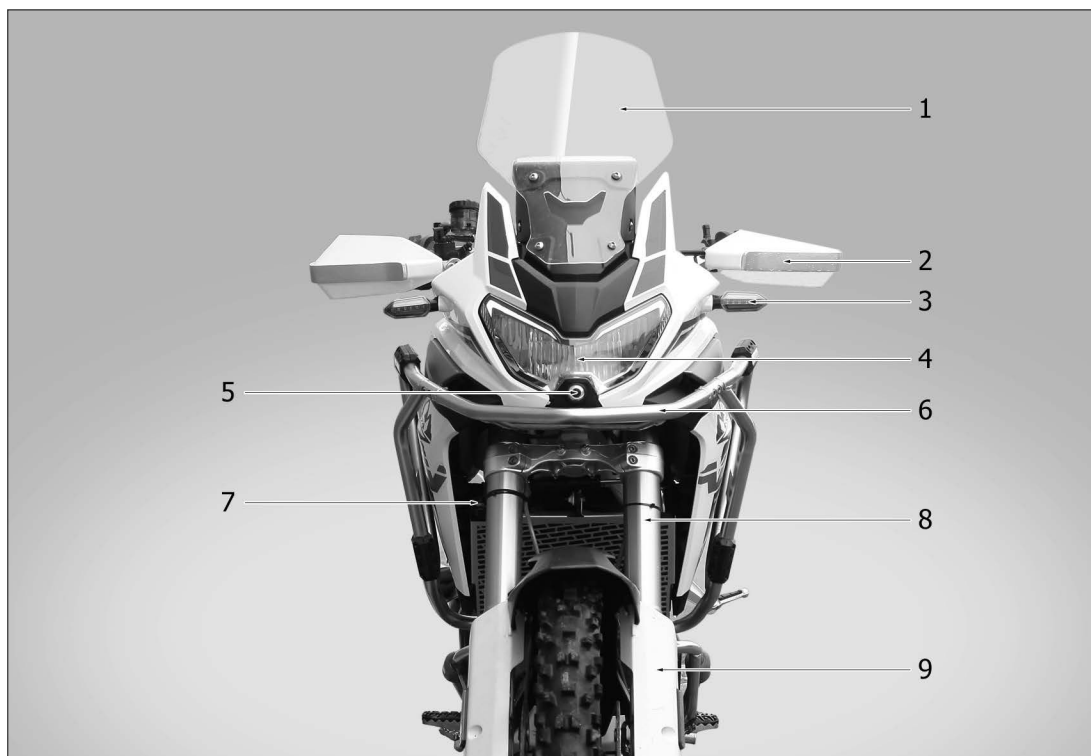
车辆名牌位于车架前端右侧。

1.3 发动机号



发动机号位于车辆右侧发动机顶部。

2.1 车辆前视图



1. 挡风板
2. 闸把护板
3. 转向灯
4. 前照灯
5. 前摄像头
6. 保险杠*
7. 水箱加注口
8. 前减震
9. 前减震装饰护板*

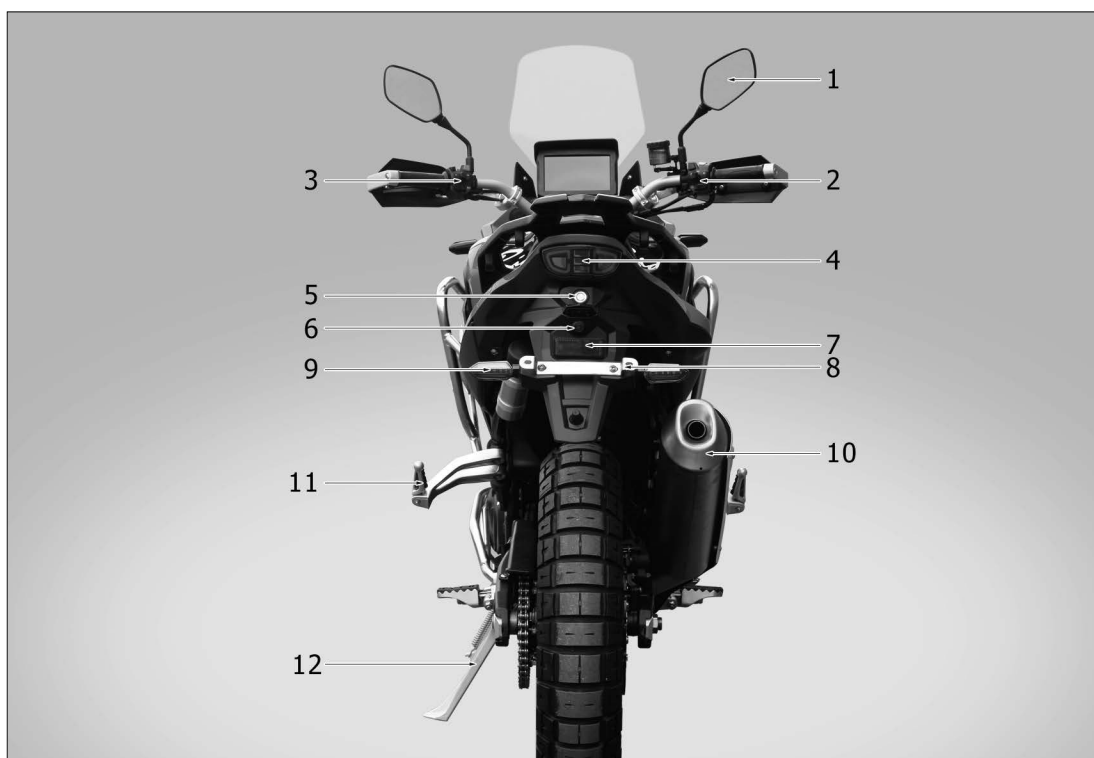
▲ 注意

保险杠 (6) 和前减震装饰护板 (9) 并非全系车标配。

由于公司产品的不断地研发更新, 说明书引用外观图片可能与您购买的车辆外观不一致, 请以实际车辆外观为准。

2 车辆平视图

2.2 车辆后视图



1. 后视镜
2. 右组合闸把
3. 左组合闸把
4. 尾灯 / 刹车灯
5. 座垫锁
6. 后置摄像头
7. 后反光板
8. 牌照支架
9. 后转向灯
10. 消声器
11. 后搁脚踏
12. 侧支架

▲ 注意

由于公司产品的不断地研发更新，说明书引用外观图片可能与您购买的车辆外观不一致，请以实际车辆外观为准。

2.2 车辆左视图



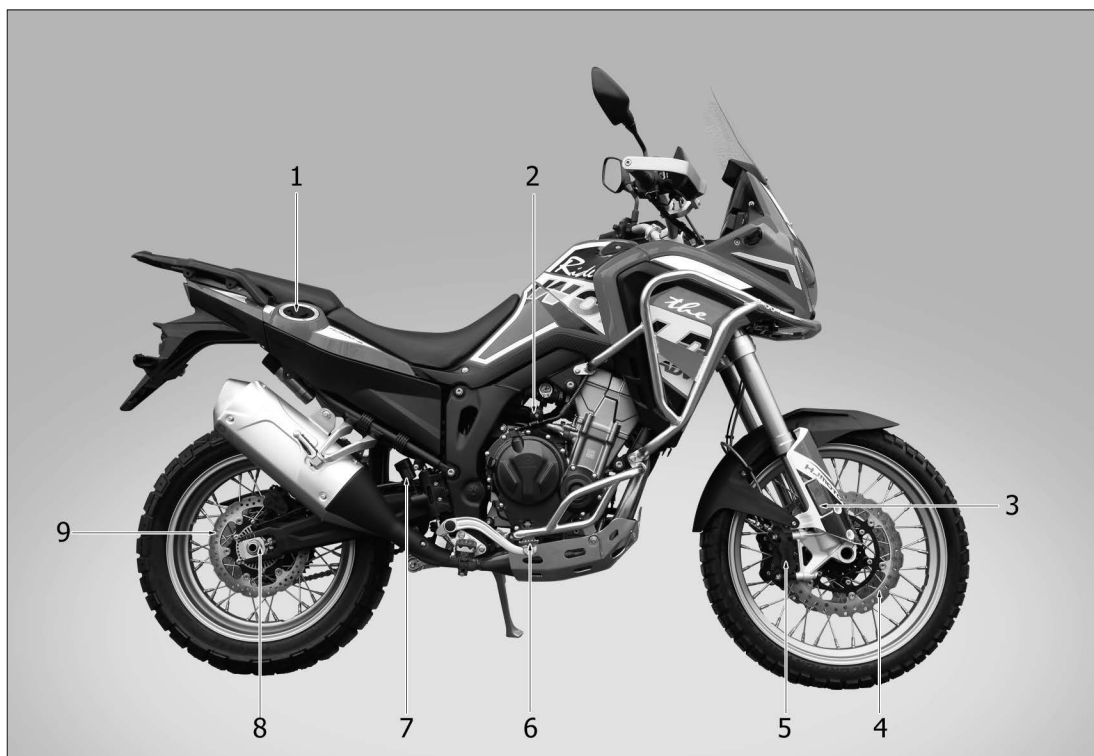
1. 反光板（左侧）
2. 前刹车盘（左侧）
3. 前刹车泵（左侧）
4. 换挡臂
5. 链条松紧调节器（左侧）
6. 后搁脚蹬
7. 后减震气压调节器

▲ 注意

由于公司产品的不断地研发更新，说明书引用外观图片可能与您购买的车辆外观不一致，请以实际车辆外观为准。

2 车辆平视图

2.3 车辆右视图

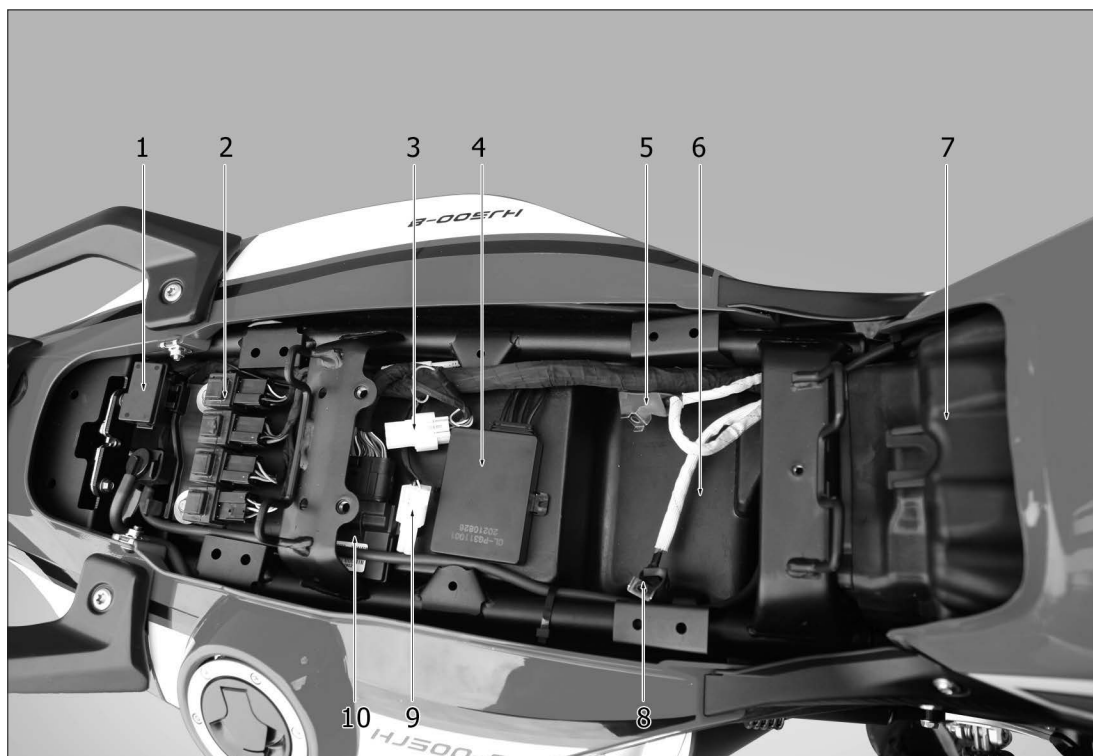


1. 副油箱加油口
2. 后减震预载荷调节旋把
3. 前反光器（右侧）
4. 前刹车盘（右侧）
5. 前刹车泵（右侧）
6. 后刹车踏板
7. 后制动液压杯
8. 链条调节器（右侧）
9. 后制动盘

▲ 注意

由于公司产品的不断地研发更新，说明书引用外观图片可能与您购买的车辆外观不一致，请以实际车辆外观为准。

2.4 座垫下方



1. 全车保险盒
2. 继电器组
3. 故障检测接口
4. 行车记录仪主机
5. 蓄电池正极接头
6. 蓄电池位
7. 空滤器
8. 蓄电池负极接头
9. ABS 检测接口
10. ECU

▲ 注意

由于公司产品的不断地研发更新，说明书引用外观图片可能与您购买的车辆外观不一致，请以实际车辆外观为准。

3 装载与附件信息

▲ 危险

不正确的装载或对本车辆进行不合适的改装或不合适的安装附件或不当维修都可能造成驾驶的安全隐患。

驾驶前，请确保车辆不能超载并遵守这些说明。

始终使用恒舰原厂部件和我们认可的附件。

如果选择非恒舰原厂部件、不当的安装附件和不当的装载等都将影响整车性能，甚至造成违背法规的状态，请注意您必须对自身和他人安全负责。

摩托车整车重量的改变对整车动力性能影响较大，所以您必须接受我们规定的装载货物重量、搭载乘员人数及安装附件。

▲ 注意

我们为本列车配置的部件及配备的附件已经过特别的设计验证，所以我们强烈地推荐您使用恒舰原厂部件及安装我们认可的附件。

⚠ 危险

最大载重量：不能超过 150kg (包含驾驶员、乘员、行李和附件)。

1. 任何驾乘人员必须十分熟悉摩托车驾驶的特殊性，因为乘员乘坐的位置不合适，如在行驶中人体重心偏离摩托车中心平面太多和行驶中突然移动都可能影响摩托车的操纵、控制；行驶中乘员尽量保持平稳地坐在乘员座位上，并且不能影响驾驶员的操纵。
2. 在摩托车上不能搭载动物。
3. 为了减少对摩托车的重心影响，所有搭载在摩托车上的行李必须尽可能低；行李的重量也必须均匀地分配在摩托车的两侧，应避免行李伸出摩托车后面太长。
4. 行李必须安全地固定在摩托车上，驾驶前请确定行李不能移动。当摩托车行驶中感觉不稳时，应立即停车重新检查行李的牢固程度，并且必要时进行重新调整。
5. 不要搭载过重或体积过大的行李，超载必定影响操纵和动力性能。
6. 不要安装降低摩托车性能的附件和搭载降低摩托车性能的行李，确定您所做的一切不会影响到任何灯光系统、离地间隙、制动性能、侧倾角、操纵性能、轮胎压缩行程、前叉工作行程或其它相关摩托车驾驶性能。
7. 手把或前叉处重量加重后将会影响到转向性能，并可造成不安全的驾驶因素。
8. 导流罩、挡风玻璃、靠背和其它大型部件将影响摩托车稳定性和操纵性能，它们不仅仅增加重量，当摩托车行驶时它们的面积也降低了动力性能。缺乏设计验证的附加件，安装它后可能会造成不安全因素。
9. 本车不能改装成边三轮摩托车，不能用于拖拉拖车或其它车辆，如用户对本车自行改装所造成的损害或伤害，我们将不予负任何责任。

5 点火开关



本车点火开关的位置位于燃油箱的前端，仪表的下方，点火开关和方向锁为一体。

本车配备有两把钥匙，其中一把请妥善保管以供备用。

点火开关锁、方向锁、坐垫锁和油箱锁都是共用一把钥匙。

点火开关有三个位置：

🔌 位置点火电路接通，随时可以点火启动，全车所有功能电路接通。在此位置钥匙不能拔下。

🔒 位置点火电路断开，不能点火启动，在此位置钥匙可以拔出来。

🔒 位置为锁止方向把，请先将方向把转至最左位置，在“🔒”位置将钥匙下按，然后再逆时针方向转至“🔌”位置，在此位置钥匙可以拔出，点火电路断开，不能点火启动。

▲ 注意

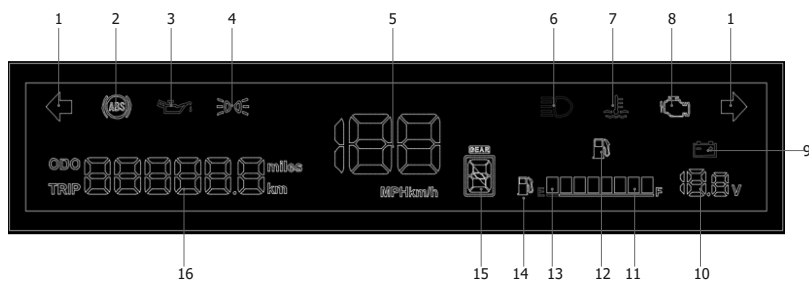
本系列车虽然配置有侧支架支撑系统，为了停车的稳定性，请在锁止方向把时，尽量将方向把转至最左位置，而不是最右位置。

▲ 危险

车辆在行驶过程中不要将点火开关钥匙转至“🔒”位置，否则摩托车将会失去控制。

6.1 小仪表

本仪表位于车辆大仪表下方，采用 VA 负显液晶段码屏，具有高对比度，高亮度，宽温度范围等优点，内置 ECU 诊断、主副油箱识别、各类指示灯、报警灯显示等功能。所显信息，简单明了，便于当大仪表进行多媒体播放时，您可以时刻了解车辆行驶状况。



- | | |
|-------------|-------------|
| 1. 转向指示灯 | 9. 电瓶报警灯 |
| 2. ABS 报警灯 | 10. 电瓶电压显示 |
| 3. 机油报警指示灯 | 11. 燃油指示条 |
| 4. 灯光指示灯 | 12. 燃油油量报警灯 |
| 5. 当前车速显示 | 13. 燃油油量红色带 |
| 6. 远光指示灯 | 14. 主副油箱指示 |
| 7. 水温报警灯 | 15. 档位显示 |
| 8. 发动机故障报警灯 | 16. 总里程显示 |

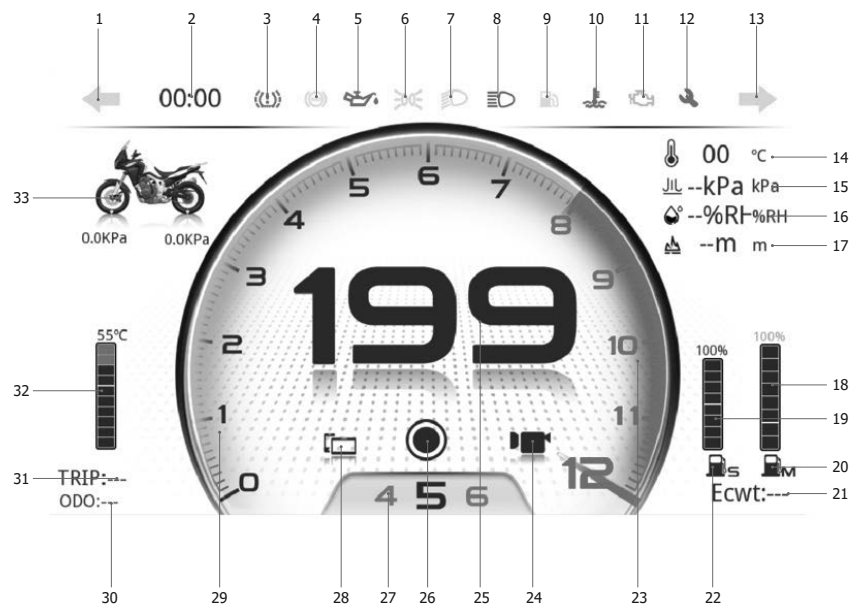
警告

请不要用高压水流直接冲洗仪表，请不要用汽油、酒精等有机溶剂擦拭仪表，否则会造成仪表局部裂纹或褪变色等。

6 仪表和指示灯

6.2 大仪表

本仪表位于小仪表上方，采用全屏触控，具有操作简单，使用便捷的特点。内置胎压、气压及海拔监测，手机互联及充电，前后高清行车记录仪模组等，为您平安出行保驾护航。



- | | | |
|--------------|-----------------|----------------|
| 1. 左转向指示灯 | 12. 保养提示灯 | 23. 转速表红色带 |
| 2. 当时时间 | 13. 右转向指示灯 | 24. 行车记录仪拍照图标 |
| 3. 胎压过低报警灯 | 14. 环境温度显示 | 25. 当前车速显示 |
| 4. ABS 指示灯 | 15. 环境大气压力显示 | 26. 行车记录仪录保护图标 |
| 5. 机油报警灯 | 16. 环境湿度显示 | 27. 档位显示 |
| 6. 灯光指示灯 | 17. 环境海拔高度显示 | 28. 手机互联图标 |
| 7. 近光指示灯 | 18. 主油箱油量指示 | 29. 转速表 |
| 8. 远光指示灯 | 19. 副油箱油量指示 | 30. 总里程显示 |
| 9. 燃油报警灯 | 20. 主油箱报警灯 | 31. 短里程显示 |
| 10. 水温报警灯 | 21. 当前油箱可行驶里程显示 | 32. 水温指示 |
| 11. 发动机故障报警灯 | 22. 副油箱报警灯 | 33. 轮胎胎压监测显示 |

6.3 大仪表操作说明



图 6.3.1



图 6.3.2

1、短里程清零: 手指点击短里程数字显示区 (31), 并保持 5 秒, 即可清零小里程数据值。

2、点击手机互联图标 (28), 即可进入手机互联界面 (图 6.3.1)。

此时, 请将 USB 数据线一端接入手机, 另一端接入仪表左下方 USB2.0 专用数据端口 (图 6.3.2), 选择联接手机, 再打开手机蓝牙, 即可实现手机与仪表的无缝连接。

警告

首次使用需下载并安装 Autolink 软件, 请根据提示操作。

下载 Autolink 软件时, 在非 wifi 环境可能会产生额外的流量费。

手机和仪表连接成功, 可通过仪表反向操作手机的各项功能, 实现诸如在线导航、拨打电话等手机的功能。由于采用有线连接, 通过 USB2.0 数据端口, 可同时对手机进行充电。

注意

如需对手机快速充电, 则只需将 USB 数据线插入专用充电接口即可。

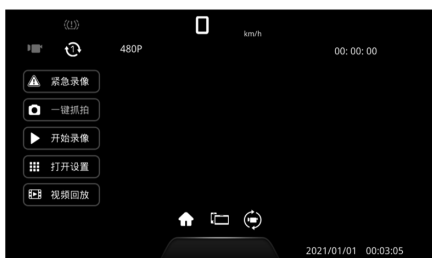




图 6.3.3

在手机连接界面中 (图 6.3.1), 点击左侧  图标, 则返回到仪表主界面。点击右侧  图标, 则进入到行车记录仪界面 (图 6.3.3)。



此界面 (图 6.3.3) 中左则区域为功能按钮区, 点击相应按钮, 则进入对应的功能。点击“打开设置”按钮, 则进入设置界面 (图 6.3.4)。



图 6.3.4

此界面 (图 6.3.4) 中可设置 wifi 是否开启, 日期及时钟等。

如需使用手机直接操控行车记录仪及下载行车记录仪视频文件, 则需在手机上安装“钛马星”软件。详细使用请参阅“钛马星”软件帮助文档。

点击左下  图标, 则返回到仪表主界面。点击左下  图标, 则返回到行车记录仪界面。

▲ 注意

在手机与行车记录仪通过 WIFI 连接期间，仪表将无法操控记录仪，只有退出 WiFi 连接后，才能重新显示及操控行车记录仪。




图 6.3.5

3、夜间模式。

当车辆开启灯光，仪表自动进入夜间模式，并自动调暗仪表亮度。仪表夜间模式如图 6.3.5 所示。

点火开关转至“Q”位置，大仪表显示开机动画和小仪表开机自检，自检完成后显示当前车辆状态。

冷却液温度报警灯“”在自检过程中点亮，自检完成后熄灭。


发动机故障报警灯“”、ABS 故障报警灯“”和机油压力报警灯“”点亮，自检完成后熄灭。

6.4 指示灯说明

左转向指示灯“”

当闸把组件的转向开关推至左侧“”位置时，大仪表和小仪表“”指示灯同时点亮并闪烁。

▲ 注意

车辆转向灯损坏或其它原因导致转向灯不亮时，指示灯“”的闪烁频率会较正常使用时加快，提示检查转向灯故障。


胎压报警灯“”

当某只轮胎气压不足时此灯点亮并闪烁。当该报警灯点亮时，请立即停车检查前后轮胎气压。

▲ 危险


不正常的胎压会影响车辆的操纵性能，并有可能导致车祸。


ABS 故障指示灯“”

车辆的 ABS 防抱死系统出现故障时或被关闭时，大仪表和小仪表上的指示灯“”闪烁或常亮。


点火开关钥匙转到“Q”位置时，指示灯“”点亮，发动机启动后，指示灯“”应立即熄灭。



▲ 警告

如果发动机启动后发现指示灯“”常亮或闪烁，此时继续使用车辆可能会发生车轮异常制动，甚至抱死等现象，请不要继续驾乘车辆。


如果车辆行驶中发现指示灯“”常亮或闪烁，请立即停止使用车辆，并尽快咨询恒舰授权经销商处理。

机油压力指示灯“”

当机油压力低于正常范围时，指示灯“”点亮。

点火开关钥匙转到“O”位置时，指示灯“”点亮；车辆完成自检后，指示灯“”应立即熄灭。

警告

机油压力指示灯“”并不是机油油位显示，而是表示机油压力不正常，所以您应定期检查机油油位是否正常。

检查机油油位高度是否正常的唯一方法是：通过检查机油视窗液面高度的位置来确认。



此警示灯被点亮表示警告润滑系统压力过低，此时应立即停车并关闭发动机。

唯一检查润滑油油位高度是否正确的方法是通过机油视窗来确认。



机油警告信号灯亮启的一个原因就是机油油位过低，检查发动机机油油位高度，如果油位过低则加注机油。

如果在确定机油油位正确的情况下机油警示灯一直处于亮启状态，请不要再行驶，并请尽快到附件的专业维修点进行故障排除，最好是在恒舰授权的经销商处进行处理。



照明指示灯“”


当右闸把组件的灯光开关推到“”位置时，车辆的位置灯点亮，同时该大仪表和小仪表的“”指示灯同时点亮。

近光指示灯“”

当右闸把组件的灯光开关推到“A”位置时，车辆的位置灯、前照灯点亮，同时该大仪表和小仪表的“”指示灯同时点亮。

远光指示灯“”

将左闸把组件的前照灯开关推至“”位置时，指示灯“”点亮。

按下左闸把组件的超车灯按键时，指示灯“”点亮，直到您松开为止。

警告

请不要在有照明道路的城市道路使用远光灯。

跟车时请关闭远光灯。

会车时请关闭远光灯。

燃油警示灯“”

此警示灯点亮警示您当前使用油箱的燃油即将耗尽，些时请切换油箱或尽快加注燃油。

燃油加注注意事项

用点火开关钥匙顺时针旋转打开油箱盖，加注完燃油后，将油箱盖盖回原位，并用力下按逆时针旋转钥匙锁止油箱盖，这时方可取下钥匙。洗车时请不要用高压水枪冲洗油箱锁盖，以免水进入油箱。

请使用 92 号及以上无铅汽油或低铅汽油。

主油箱的容积为 17.2L。

6 仪表和指示灯

副油箱的容积为 10.8L。

▲ 注意

燃油不足将导致发动机不能点火, 如果因燃油不足出现不能点火的情况, 贸然继续点火可能导致无法挽回的损失。

请不要将油箱的燃油用完, 保持油箱的油位处于允许的最低油位之上。

▲ 警告

燃油会腐蚀油漆表面, 使之褪色变得难看。若有燃油附在油漆表面时, 应立即将其擦拭干净。


燃油在高温时会膨胀, 油箱加注过满会导致内部压力过大而造成油箱变形或是燃油溢出。

▲ 危险


加注燃油时要关闭发动机, 不可接近烟火或热源。

冷却液温度指示灯 “”

发动机冷却液温度过高时, 指示灯 “” 点亮。

冷却液温度指示灯 “” 点亮时, 应在道路的安全位置立即停车, 并关闭发动机, 直至指示灯熄灭。待车辆冷却后检查冷却液和散热器。


如果冷却液面过低则补足冷却液。

如果冷却液温度指示灯 “” 点亮时散热器风扇没有工作, 请关闭发动机, 并尽快到附件的专业维修点进行故障排除。

若冷却液不够或是散热器表面被泥沙堵塞严重, 建议以下临时的处理方式:

1. 减少车辆的负荷来减少发动机热量的产生。
2. 在交通拥堵的时候, 尽量使发动机处于怠速状态, 同时不要转动油门避免转速上升造成温度继续升高。
3. 如果上述操作仍不能有效降温, 请关闭发动机, 并尽快到附近的专业维修店进行故障排除。

▲ 危险

若冷却液温度指示灯 “” 点亮, 请查检散热器栅格是否被泥沙灰尘堵塞, 泥沙灰尘会很大程度上降低散热器的散热效率。

冷却液温度过高

此警示灯亮警示冷却液温度过高, 当发动机过热时, 如果继续行驶将导致发动机损坏。您必须遵守下列指令:


1. 如果是冷却液液面过低, 补足冷却液。
2. 如果是散热器风扇没有工作, 请尽快到附件的专业维修点进行故障排除, 最好是在恒舰授权的经销商处进行处理。

冷却液不足

如果可能的话, 可以通过减少负荷来冷却发动机, 在交通拥堵的时候, 尽量使发动机处于怠速状态, 同时不要转动加油手柄, 避免造成发动机转速上升而使发动机温度继续升高。




如果冷却液温度频繁过高，请尽快到附件的专业维修点进行故障排除，最好是在恒舰授权的经销商处进行处理。

▲ 注意



当冷却液温度指示灯“”点亮时，说明发动机过热，此时如果继续行驶将导致发动机损坏。

发动机故障报警灯“”

当车辆的电子燃油喷射系统出现故障时，报警灯“”点亮。

点火开关钥匙转到“”位置时，车辆自检时指示灯“”点亮；当车辆完成自检后，指示灯“”立即熄灭。

▲ 警告

如果车辆完成自检后发现指示灯“”点亮或闪烁，此时继续使用车辆可能会发生发动机无法正常点火，供油系统停止供油等现象。如果车辆行驶中发现指示灯“”常亮或闪烁，请立即停车，并尽快咨询恒舰授权经销商处理。


保养提示灯“”

车辆每行驶 5000KM 保养提示灯点亮，提醒您进行车辆的保养。


右转向灯指示灯“”




当闸把组件的转向开关推至右侧时，指示灯“”点亮。

▲ 警告

车辆转向灯损坏或其它原因导致转向灯不亮时，指示灯“”的闪烁频率会较正常使用时加快，提示检查转向灯故障。


主油箱告警指示灯“”




当主油箱燃油不足时，“”图标呈红色并闪烁，此时请使用仪表右侧油箱切换开关切换到副油箱，或添加燃油。

当使用主油箱时，大仪表“”图标上方油量进度条将以红色数字显示当前油箱内剩余燃油百分比。此时小仪表“”图标右侧将会显示数字“1”，以提示您正在使用主油箱。同时，小仪表“”右侧进度条显示当前主油箱的剩余燃油量。

油箱切换开关压下为使用副油箱，弹上为使用主油箱。

副油箱告警指示灯“”

当副油箱燃油不足时，“”图标呈红色并闪烁，此时请使用仪表右侧油箱切换开关切换到主油箱，或添加燃油。

当使用副油箱时，大仪表“”图标上方油量进度条将以红色数字显示当前油箱内剩余燃油百分比。此时小仪表“”图标右侧将会显示数字“2”，以提示您正在使用副油箱。同时，小仪表“”右侧进度条显示当前副油箱的剩余燃油量。

6 仪表和指示灯

主、副油箱图标下方“ECWT”显示当前油箱油量可续航的里程，当主副油箱燃油都快耗尽时，请即时添加燃油。

▲ 警告

请使用 92 号及以上无铅汽油或低铅汽油。

转速显示

发动机的转速，单位：r/min（转数 / 分钟）——发动机曲轴当前每分钟旋转的圈数。）

转速红色带指示发动机已达速度的最高限度，如在此速度下运行，必然会缩短发动机的使用寿命。

档位显示


显示发动机的当前档位位置，空档时显示为“N”。

同时，大仪表还以较浅颜色显示当前档位的前后档位。

速度显示

显示车辆当前的行驶速度。

冷却液温度条

显示当前冷却液温度范围。若冷却液温度保持在红色位置，请立即停车检查。若此时冷却液温度指示灯“”点亮，请关闭发动机，并尽快到附件的专业维修点进行故障排除。

实时轮胎气压监测显示

大仪表左上方显示车辆当前前后轮胎气压（KPa），若轮胎气压不足或监测到气压快速下降，则该数字呈红色并闪烁，以提醒您立即停车检查。

实时环境数据监测

大仪表右上方显示实时环境数据，包括当前位置环境温度、大气压、湿度、海拔高度数据。

行驶里程显示

大、小仪表均提供车辆行驶里程显示。小仪表提供总里程（ODO）显示；大仪表提供总里程（ODO）和短里程（TRIP）显示。

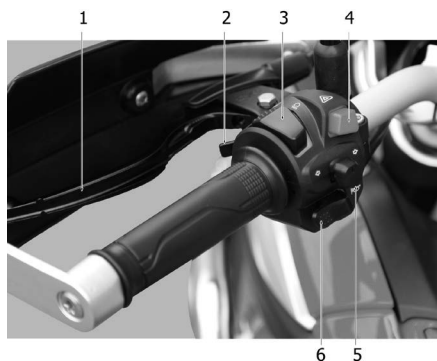
在大仪表短里程（TRIP）数值上轻触（保持 5 秒），则会将该短里程数值清零，从而重新计数。

▲ 警告

在大仪表上操作仪表时，切勿用力按压，轻触即可，以免用力过大致使屏幕损坏。

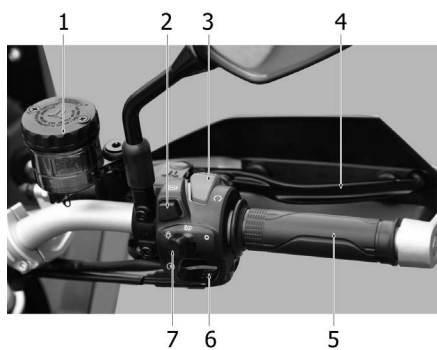
洗车时切勿用高压水枪冲洗仪表，以免损坏仪表。

7.1 左闸把组合开关




1. 离合器手柄
2. 超车灯按键
3. 前照灯变光开关
4. 车辆警示灯开关
5. 转向灯开关
6. 喇叭按键



7.2 右闸把组合开关



1. 前制动上液压油杯
2. ABS 开启开关
3. 发动机熄火开关
4. 前制动手柄
5. 油门旋把
6. 点火开关
7. 灯光开关

7.3 左右闸把操控

ABS 开关 “”

按住 ABS 开关 “” 保持 2 秒，则关闭摩托车前后 ABS，此时大小仪表 “” 指示灯常亮；再次按住 2 秒，则开启车辆 ABS。


关闭点火开关后，再次打开点火锁匙，ABS 自检完成后又将处于前后轮开启状态。


▲ 警告

在行车过程中，强烈建议您不要关闭车辆 ABS 系统，以免在行车过程中发生意外或造成人身伤害。


该 ABS 开关按钮仅为职业车手保留，用于场地内竞速比赛的使用。

熄火开关


当熄火开关按至 “” 时，发动机启动电路断开，发动机不能启动。

当熄火开关按至 “” 时，发动机启动电路接通，发动机可以正常启动。

▲ 危险

如果在车辆行驶过程中将熄火开关按至 “” 时，可能造成后轮突然锁死而摔车。请不要在行驶过程中操作熄火开关按钮。

7 方向把组合开关

发动机在启动状态下，熄火开关按至“”时，发动机立即熄火。

熄火开关是关闭发动机最快最容易的方式。

▲ 注意

本系列车辆设计有点火电路和启动电路的互锁开关，发动机只能在下列条件下启动：

发动机档位置于空档“N”，点火开关和熄火开关处于“Q”位置。

发动机档位置于非空档，点火开关和熄火开关处于“Q”开启位置，并握紧离合器手柄。


前制动手柄

握紧该制动手柄，前轮制动，同时后制动灯点亮。




油门旋把

旋把向驾驶员一侧旋转，增大油门；反之减少油门。

点火开关“”

当按下“”按钮时，发动机启动电路接通，并开始启动。

灯光开关

灯光开关有三个位置，分别是：“”、“”和“”位置。

“”位置：全车灯光关闭。



“”位置：车辆位置灯、尾灯点亮。

“”位置：车辆前照灯、位置灯、尾灯点亮。

▲ 警告



前照灯在没有启动发动机时，依然可以点亮，灯光依赖于蓄电池供电，请不要在发动机未启动时长时间开启灯光。

超车灯按钮“PASS”

当按下“PASS”按钮时，远光灯点亮，同时仪表上的“”远光指示灯也点亮，松开该按钮后，远光灯熄灭，同时仪表上的“”远光指示灯也熄灭。

前照灯变光开关



当前照灯变光开关按至“”时，远光灯点亮，同时仪表上的远光指示灯“”也点亮。



当前照灯变光开关按至“”时，近光灯点亮，同时远光灯和远光指示灯“”熄灭。

警告

请不要在有照明道路的城市道路使用远光灯。
跟车时请关闭远光灯。
会车时请关闭远光灯。



转向灯开关

当左闸把组件的转向开关推至左侧“”时，车辆左侧的前后转向灯同时点亮，仪表的左转向指示灯“”也点亮闪烁。




当左闸把组件的转向开关推至右侧“”时，车辆右侧的前后转向灯同时点亮，仪表的右转向指示灯“”也点亮闪烁。

当左闸把组件的转向开关向里按下时，转向灯熄灭，同时仪表上的转向指示灯也同时熄灭。

警告

车辆某一侧转向灯损坏或其它原因导致转向灯不亮时，仪表上相应一侧的“”或“”转向指示灯的闪烁频率会较正常使用时加快，提示您检查相应一侧的转向灯存在故障。

警示灯按钮“”

当按下“”按钮时，所有转向灯和仪表上的“”和“”转向指示灯同时点亮并闪烁。
请在紧急停车或是您的车辆发生交通事故或故障时使用警示灯以警示其它车辆。

喇叭按钮“”

当按下“”按钮时，车辆的喇叭鸣响。

警告

请不要在禁止鸣号区域鸣号。

8 驾驶前的调整

8.1 方向把的调整



根据您的身高和驾驶姿势，将方向把调整到最合适的位置。如果需要调整，请尽可能到恒舰授权的经销商处操作。

松开四颗紧固螺栓(1)，轻微转动手把至舒适位置；锁紧螺栓(1)。

警告

方向把调整完成后，请反复确认转至极左和极右位置时，左右手是否与油箱有干涉现象，如果有请重新调整至不干涉为止，否则会影响您对车辆的控制能力。

8.2 后视镜的调整



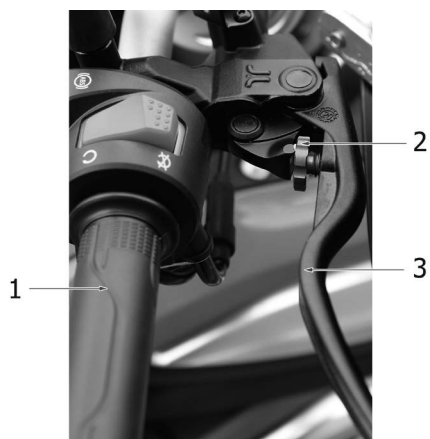
根据您的身高和驾驶姿势，将后视镜(1)调整到正确位置。

用随车工具松开螺母3来调整镜杆2，确定后锁紧螺母3。

警告

在行车过程中调整后视镜会让您对车辆的控制能力降低，请勿在行车过程中调节后视镜。

8.3 前制动手柄的调整



- 调整旋钮(2)可以调节手柄(3)与油门控制手把(1)之间的距离。

- 该距离有5个档位可以调整。方法如下：

1. 调整时请将手柄(3)前推。
2. 转动调整旋钮(2)到您希望的位置。
3. 松开前推的手柄(3)，调整完成。

警告

驾驶车辆时调整前制动手柄很危险，手离开方向把会降低对车辆的控制能力。

8.4 变档踏板的调整



车辆在行驶中，路况千变万化，变档踏板的使用能够改变车辆的速度和牵引能力。变档踏板踏杆可调节，以适应您的驾驶习惯。

1. 先松开锁紧变速连接杆（2）的两颗螺母（1）。
2. 然后旋转变速连接杆（2），使踏板（3）的调到舒适位置。
3. 最后锁紧螺母（1）。

8.5 后制动踏板的调整



后制动踏板（3）的高度应保持在适当的位置，如果位置偏高，使用中容易踩踏，从而使制动摩擦片和制动盘会经常摩擦在一起，造成摩擦片和制动盘长期受热而损伤。

为保证制动的可靠性，后制动踏板的自由行程为 25 ~ 35mm，如自由行程不正确，请按以下方法调整：

1. 松开锁紧螺母（2）。
2. 顺时针或逆时针旋转调节螺母（1）。
3. 顺时针旋转使踏板高度升高，反之，则降低。
4. 使制动踏板（3）的高度调到合适位置时锁紧锁紧螺母（2）。

▲ 注意

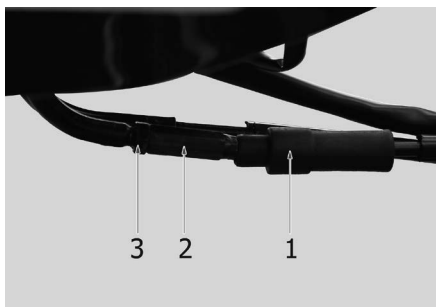
调整完成后需反复压放制动踏板，并确认能清晰地感觉到压力点。

如不能清晰地感觉到压力点，请咨询恒舰授权经销商代为处理。

如果调整不正确，摩擦片和制动盘之间会始终受力，会损坏摩擦片和制动盘。

8 驾驶前的调整

8.6 油门控制手把的调整



油门控制手把用于控制发动机的转速，转向自己的方向是加速，反之是减速。

油门拉索间隙的调整如下：

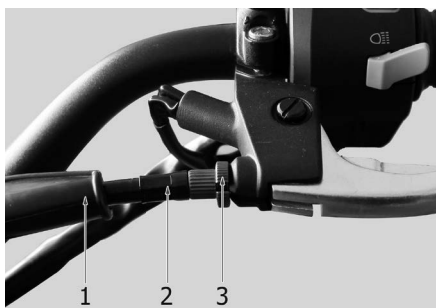
1. 移开胶套（1）。
2. 松开锁紧螺母（3）。
3. 旋转调节器（2），将油门拉索的间隙调整到2 ~ 4mm之间。
4. 锁紧螺母（3）。
5. 复装好胶套（1）。

▲ 注意

油门拉索间隙调整完成后，应确保油门控制手把能自动回位，怠速不应升高。

油门拉索间隙调整完成后，将方向把分别转至左右极限位置，怠速不应升高。

8.7 离合器手柄的调整



当启动发动机、制动或换档时，握紧离合器手柄，使离合器摩擦片分离，从而切断发动机传动动力。离合器手柄末端的自由行程为5 ~ 8mm之间，如果不正确，请按以下方法调整。

1. 移开胶套（1）。
2. 松开锁紧螺母（3）。
3. 旋转调节器（2），使自由行程保证在5 ~ 8mm之间。
4. 锁紧螺母（3）。
5. 复装好胶套（1）。

▲ 注意

离合器手柄的自由行程过大，容易造成离合器和变档机构的磨损和故障。

8.8 后减震器的调整



图 8.8.1

调节后减震器的预载荷是为了适应不同的驾驶者、载荷、驾驶方式和道路环境，本车辆弹簧预压力可调。

弹簧预压调节

后减震弹簧预压力调节旋钮位于车辆右侧，油箱后下方，如图 8.8.1 所示。

- 1、逆时针减少弹簧预压。
- 2、顺时针增加弹簧预压。

减震压缩阻尼调节

后减震压缩调节旋钮位于车辆左侧，座垫左下侧，后减震上方，如图 8.8.2 所示。至上而下看，调节方式如下：

- 1、逆时针减小压缩阻尼。
- 2、顺时针增大压缩阻尼。



图 8.8.2

复原阻尼调节

后减震复原阻尼调节位于后减震下方，如图 8.8.3 所示，需要使用平口螺丝刀调节。

- 1、逆时针减小复原阻尼。
- 2、顺时针增大复原阻尼。

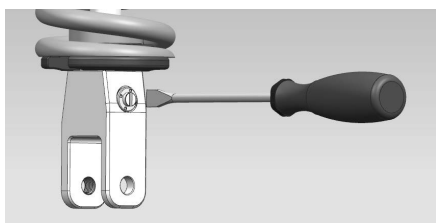


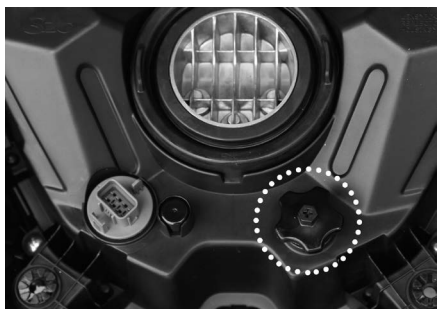
图 8.8.3

后减震器的预载荷调节不当会影响骑行的舒适感受。

警告

请不要盲目地随意调整后减震的预载荷，不当的调节结果会减弱您对车辆的控制能力。

8.9 前照灯灯光高度的调整



前照灯在减震适应不同载荷时均应保持一个合理高度。为了保证夜间行车安全，通过调节大灯的光束倾角来满足不同载荷对整车灯光高度的要求。调节器位置位于前照灯的后方，如图所示。

顺时针旋转灯光调低，反之灯光调整高。

9 新车的磨合

磨合期对车辆的使用寿命及油耗影响很大，因此在使用之前，请仔细阅读说明书（在最初的 1000Km 行程内，正确的使用车辆，会让您可以确保车辆性能，并获得驾驶乐趣）。

9.1 发动机磨合

无论在热机状态或冷机状态，起步前都应让发动机有充分的怠速运转时间，以使机油流到所有的润滑部位。

在磨合期间，0 ~ 500Km 发动机车速不要超过 5000r/min，500 ~ 1000Km 发动机转速不要超过 7000r/min。

在磨合期间，发动机的档位和转速要经常变化，不要在某一个档位和转速下长时间持续运转。

在磨合期间，发动机在固定低速（轻负荷）下运转时，将使零件加剧磨损而配合不良，所以不要长时间轻负荷匀速行驶。

在磨合期间，除了紧急情况外，避免急加速和急刹车。

要不拖档行车，减速时注意提前降档，一直让发动机处在舒适运转的状态下。

磨合期间应避免长途骑行，让发动机有足够的休息时间。

9.2 轮胎的磨合

新轮胎表面光滑，若此时进行高速骑行或是弯道操作，易发生危险。为了达到轮胎的最大抓地力，磨合过程非常必要。

在最初的 200Km 内，你可通过低速弯道骑行对轮胎进行磨合，直至胎冠各个角度磨合完全为止。

轮胎胎冠上的凸起有造成事故的风险，避免胎冠上凸起的方法就是轮胎磨合。

9.3 制动系统的磨合

在最初的 500Km 时间段，新制动盘还处于原始状态，因此没有达到它们的最佳摩擦水平。作为制动效率损失的补偿，您可以用更大的力控制动手柄。

▲ 注意

新车磨合时，发动机的转速要时常变化，不要在某一转速持续行驶。其目的在于使各部件适当加以应力，使其完全配合，但不可过度施加负荷。

▲ 警告

发动机在一定低速（轻负载）运转时，将使元件磨损而配合不良。只要不超过推荐使用的最高速度极限，可挂入各档使发动机充分加速。但起初的 1600 公里期间内，不可放到最大油门。

▲ 危险

为使轮胎得到最好的磨合，在使用新轮胎最初始的 200Km 内，应避免急加速、急转弯和紧急制动。

10.1 驾驶前的检查

如果没有做好车辆行驶前的检查，将增加发生事故的几率和车辆损坏的几率，请注意检查以下项目：

转向系统

- 方向把转向灵活无卡滞。
- 方向柱没有窜动和松动。

油门

- 油门拉索间隙正确。
- 油门操作顺畅无卡滞。

制动器

- 制动手柄和制动踏板操作正常。
- 制动液在制动油杯油位的正确位置。
- 制动过程中压点清晰。
- 制动盘及摩擦片无水渍和油污。

减震器

- 按压能够顺畅回位。

传动链条

- 无过度磨损及损坏。
- 松弛度正确。

轮胎

- 轮胎气压正确。
- 胎纹深度没有过度磨损。
- 胎面没有裂纹及伤口。

发动机机油

- 机油油位正确。

冷却系统

- 冷却液位置正确。
- 冷却液无泄漏。

灯光

- 前照灯 / 前位置灯、尾灯 / 制动灯、转向灯、处于照灯和仪表照明灯可正常点亮。

指示灯

- 通过闸把开关控制远光指示灯、空档指示灯、转向指示灯能够正常指示和工作正常，机油压力报警灯、电喷故障指示灯、水温报警灯、油位报警灯在发动机启动后无闪烁及常亮现象。

喇叭

- 功能正常

发动机熄火开关

- 功能正常。

侧支架

- 可正常收放。

后视镜


- 从在整车上，使车辆保持竖直，从后视镜中能清楚地看到车辆尾端 10 米处、宽 4 米范围内的物体。
- 如不能，请调整后视镜的角度。

10.2 发动机的启动

检查发动机熄火开关是否在“Q”位置。

将钥匙插入点火开关并旋转至“Q”位置。

确认发动机是否处于空档位置，仪表的空档指示灯“N”会点亮。

具备以上条件后，左手握紧离合器以确保安全，右手可以按下电启动按钮“”，此时不需要转动油门手柄，发动机点火后立即松开电启动按钮。

发动机启动，让发动机继续怠速至充分预热。

本系列车设计有点火电路和启动电路的互锁开关，发动机只能如下条件下启动：档位置于空档，点火开关和熄火开关处于“Q”开启位置，并握紧离合器手柄以保证安全。

▲ 危险

摩托车排放的刺激性尾气中含有一氧化碳，这是一种无色无臭的剧毒气体，在通风不良的地方或是没有通风设备的室内不可长时间怠速发动机，以免发生气体中毒的危险。

▲ 警告

天气越冷，发动机需要相应预热的时间越长，充分的预热可以做到更好的润滑，可减少发动机的磨损。

请不要长时间让车辆处于怠速状态，因散热不良容易造成发动机的过热而损坏内部零件。

在寒冷的环境中，为便于启动，可在按电启动按钮的同时适当旋转油门。发动机的润滑仅在发动机运转的时候起作用，因此不要让发动机在停机的情况下推动车辆行车很长的距离。

发动机启动后请检查仪表的指示灯是否有异常常亮或闪烁，如有请立即关闭发动机，并做相应检查。

10.3 道路行车

1. 从左侧上车，跨坐在座垫上。
2. 收起侧支架。
3. 将车辆调整为垂直地面方向，并扶正方向把，保持车轮向前。
4. 握紧离合器。
5. 向加速方向慢慢转动油门控制手柄，同时轻轻放开离合器手柄，离合器啮合，车辆开始起步。
6. 行驶前必须戴头盔、手套、骑行靴及其它专用防护服和长裤。这些对于短途骑行也是必要的。
7. 如果您行驶速度过快，请注意下边的这些因素将对您的操纵产生不利的影响：
 - 调整不当的减震弹簧预载。
 - 宽松的衣服。
 - 超重和不平衡的负载。
 - 即使是少量的酒精或一些对神经产生作用的药品也会对您感知、反应产生不利的影响。
 千万不要在酒后或服用对神经产生作用的药品之后驾驶车辆。

▲ 注意

车辆起步不能使用变速器高档，这会造成发动机损坏，必须使用一档起步。

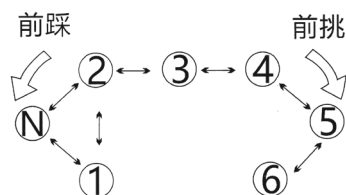
▲ 警告

无论在运转以后的高温状，或冷机状态启动开车之前，都应让发动机有充分的怠速运转时间。如此可使机油渗布所有重要部件。

▲ 危险

在车辆起步之前，要确保侧支架收起至上极限位置，否则在左转向时，侧支架可能会触地造成摔车。

10.4 使用变速装置



变速装置能使发动机在正常的转速范围内平稳地运转。

变速比是适应发动机特性而精心设计的，驾驶人员应根据行驶条件选择最适合的档位，千万不要使用低档高速。

为保证换档平顺和减少后轮的冲击，配合离合器的使用，在变换为低档位前，应降低车速或降低发动机的转速；在变换高档位之前提高车速或提高发动机转速。

▲ 警告

任何时候，不要用半离合的方法来控制车速，任何档位禁止握紧离合器滑行。

10.5 制动和停车

制动时，请先回油以降低车速，同时使用前后制动器制动。

待车速足够低时，挂入低档位，握紧离合器。

将档位挂入空档，制动完全停车。

前制动在制动时，因身体前倾且前减震器下压，整车的重量更多的会瞬间转移到前轮上，这样前轮的制动将更可靠，所以在使用制动时，前制动相对于后制动的制动力更大，更容易让车辆停下来。

当您在山路行驶的时候，只用后制动是一个潜在的危险，在极限情况下，制动器将过热，然后产生严重的损伤。

合理利用前后制动和发动机的减速功能。

在水中、雨中驾驶，碟刹盘将会被弄湿而降低制动性能，建议在干燥后进行使用。

10.6 燃油

您购买车辆看到的油耗参数是车辆以消耗燃油量最少的方式在某一车速下等速行驶的数据，这与您平时操作有很大的区别，所以实际行驶中您会发现实际油耗高于油耗参数。

以下操作会让您在保证正确驾驶的情况下尽可能的降低油耗：

- 驾驶应柔和、平稳，减少行驶中的突然制动频次，重新起步加速会耗费更多的燃油。
- 在市区的行驶对燃油消耗是不利的，频繁的走走停停意味着发动机频繁起步。
- 车辆经常在经济车速行驶，本系列车的经济车速为 90Km/h，车速由 100Km 提高到 140Km/h，燃油量约增加 20%。
- 避免短距离用车，启动车辆在第 1 公里所消耗的燃油相当于正常情况下的两倍以上，这是因为发动机尚未达到最佳的工作温度所致。
- 轮胎的气压不足会增加车轮的滚动阻力，从而增加燃油消耗量。
- 严格按照保养周期检查维护您的车辆也是节省燃油的重要组成部分。

除了上述原因，您的驾驶技术也会随您骑行的里程的增加而逐渐提高，为了体验驾驶乐趣，这时您可能会经常做一些急加速和急减速的操作，而此时的油耗相对于您之前的更多的柔和、平稳驾驶而言会有所提高，实际上这是由您的驾驶风格的变化造成的。

10.7 燃油蒸发

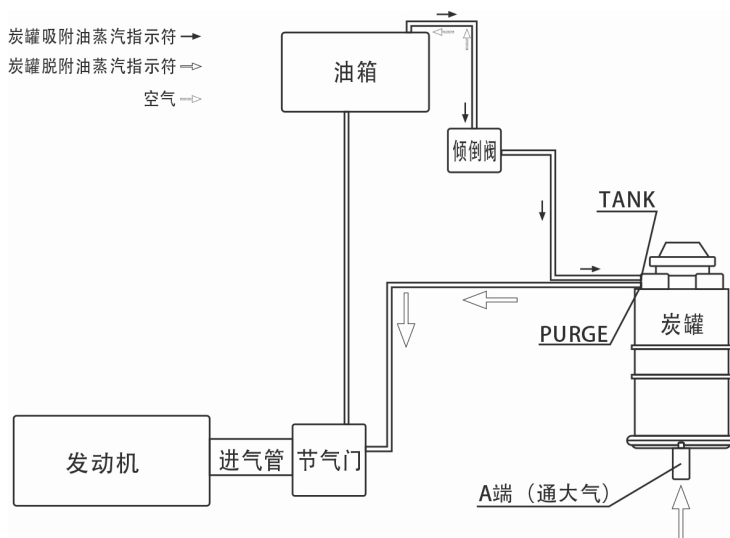
当燃油蒸发系统出现故障时，请联系恒舰服务店进行维修，不要更改燃蒸发系统，否则会造成不符合燃油蒸发排放法规要求。

拆卸维修后，检查各管路连接是否良好，管路接头无漏气，堵塞等现象；胶管无挤压、破裂、损伤等。

燃油箱内的燃油蒸气通过脱附管释放到碳罐中，当发动机停止工作时，由碳罐内的活性炭

吸附燃油蒸气；当发动机工作时，碳罐内的燃油蒸气通过脱附管释放到发动机燃烧室内参与燃烧，防止燃油蒸气直接排放到大气中造成环境污染。

同时吸附管也具有平衡油箱内的气压，当燃油箱内的气压低于外界大气压时，可通过碳罐空气管及吸附管补充燃油箱内的气压；因此应保证各管路通畅，防止堵塞，挤压等现象，保证防倾阀安装正确，否则可造成损坏燃油泵或燃油箱变形、破裂，或其它部件损坏。



燃油蒸发控制系统连接示意图

燃油蒸发控制系统按如下原理工作：

- 油箱汽油受热后，汽油蒸发出来，经倾倒阀到碳罐 TANK 端，被其吸附。
- 新鲜空气由碳罐 A 端流到 PURGE 端，将油蒸汽带入节气门，经进气管到发动机参与燃烧。

10.8 三元催化器

车辆的排放系统配有三元催化器，可降低发动机的尾气的有害成分。发动机的不良运行会损伤三元催化器，因此要遵循以下行为：

- 必须按说明书中的规定定期保养。
- 发动机运转不稳定时，请尽快联系恒舰授权经销商处理。
- 燃油报警灯点亮时，尽快补充燃油，过低的油位会造成不规则的供油。
- 不要以推车或拖车的方式启动发动机。
- 只能在怠速时切断点火开关。

▲ 警告

三元催化器是一个很娇贵的元件，必须使用无铅汽油，含铅汽油会损坏三元催化器，同时也会导致其它重要部件的损坏。

▲ 危险

不要停泊和行驶在易燃物上，如干草上等，三元催化器工作时的温度非常高，会引燃这些物体。

10.9 故障检修

故障检修的内容可以帮助您查找一般的问题的原因，当然这只是一些基本的判断，如仍不能排除，请将车辆送到恒舰授权的经销商处理。

发动机不能启动

空档，熄火开关处于开启位置。

在档，熄火开关处于开启位置，离合器握紧，侧支架处于收起状态。

燃油是否足够。

蓄电池电力是否足够。

发动机启动困难

是否在低温不境中，如果是请在启动时稍微带一点油门。

蓄电池亏电。

机油太粘，判断是否需要更换机油。

发动机无力

空滤器滤芯是否清洁。

燃油滤清器是否堵塞。

是否处于高海拔地区。

不正确的检修和调整将会损坏您的车辆而不能查到故障原因。这样的损坏不能享受恒舰的三包政策。

如果您不确定任何正确操作，请联系恒舰授权的经销商。

11.1 日常检查

在恶劣的条件下使用后，在淋雨后，在洗车后都应进行相应的润滑。为了安全驾驶，保持工作部件的良好润滑是延迟使用寿命的必要操作。

日常检查润滑点如下：

- 离合器手柄轴。
- 制动手柄轴。
- 制动踏板轴承。
- 侧支架轴和侧支架弹簧挂钩。
- 主副搁脚轴及复位弹簧。
- 传动链条。

▲ 警告

除传动链条需要用链条油润滑外，其余润滑点建议采用锂基润滑脂进行润滑。

11.2 蓄电池维护

蓄电池位于座垫下方，本系列车型搭载的蓄电池是全免维护蓄电池，使用周期内不需要定期检查电解液的位置和电解液的比重，但要定期检查充电情况。

▲ 注意

条件允许的情况下，在首次使用前应充电 30 分钟，可有效延长蓄电池的使用寿命。

蓄电池的充电：

如果蓄电池端电压低于 12.6V，建议给蓄电池充电。

使用直流稳压电源进行充电。

充电电压 DC (14.5±0.3) V，充电电流不超过 1.2A；充电时间 6 ~ 8 小时，请不要超过最大的充电电流。

蓄电池过充电会缩短蓄电池的使用寿命，请不要对蓄电池过充电。

蓄电池充电前务必断开与车载电路的连接。

经常检查蓄电池的电极和电缆头是否清洁，如已被腐蚀、氧化应及时清理。

长时间不使用车辆时，应断开蓄电池负极。

超过一个月不使用车辆时，应每个月对蓄电池进行一次充电，蓄电池长期处于不充电的状态容易自然失效。

应使用合适的充电器为蓄电也充电，并严格遵守充电器的使用说明。

蓄电池充满电后应立即与充电器断开。

蓄电池需要较长的时间才能充满。

请妥善处理废弃的蓄电池或废弃的电解液，不要对环境造成污染。

▲ 危险

蓄电池会产生可燃氢气，请让蓄电池远离热源和火花。
用干布擦拭蓄电池会引发静电火花，所以请用湿布擦拭，避免产生静电。

蓄电池的拆装：

拆装蓄电池之前，应关闭点火开关钥匙。

拆卸蓄电池时应先拆下负极端子，然后再拆下正极端子。

安装蓄电池时应先安装正极端子，然后再安装负极端子。

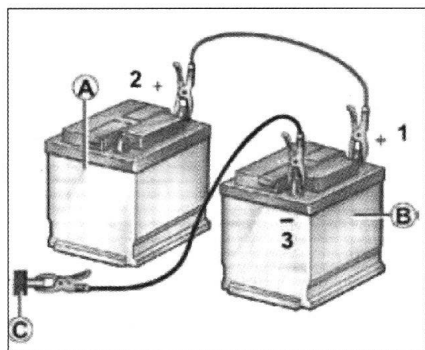
每次重新安装蓄电池后，应打开点火开关等待 1 分钟后再启动发动机，以便让电子设备初始化。

长时间不使用车辆时，蓄电池没有断开，电气回路中的电子产品（如时钟）会逐渐耗尽电量，这可能导致需要使用蓄电池时电量不足。

如果车辆超过一个月不使用，需要断开蓄电池的连接导线或者在使用前对蓄电池进行充电。

▲ 警告

请勿将蓄电池倒置，这会导致内部的电解液从通气孔中渗出。



外接电源的使用：

当蓄电池电量不能满足发动机启动时，可借助外接电源进行启动。

借助外接电源启动时，应使用两端完全绝缘的专用弹簧线夹，以防止导线互相接触引起短路、跳火现象。

蓄电池 A 车载电源，蓄电池 B 为外接电源。

外接电源 B 的正极 1 连接车载电源 A 的正极 2，外接电源的负极在车辆金属车身上以接地。启动发动机，如果启动失败，需等待几分钟再进行下一次启动以保护发动机和蓄电池。

在拆下外接电源的启动导线前，需让发动机运转几分钟，然后断开负极导线和地线，再断开正极导线。

11.3 空气滤清器的维护



空气滤清器位于燃油箱的后面、座垫的下方蓄电池前方，如果空气滤清器被灰尘堵塞，会使进气力增加，造成输出功率下降，油耗上升。

如果在多尘的条件下驾驶，应增加空气滤清器的清理和更换频次。

空气滤清器滤芯的清理和更换：

- 取下消音器后段。
- 松开后制动油杯。
- 先取下后座垫，再取下前座垫。
- 取下蓄电池。
- 取出保险盒和继电器组。
- 松开 ECU 模块
- 拆下油箱左右边条。
- 松开尾架螺栓，将尾架轻轻放下。
- 取下空滤器壳体的 4 颗螺栓，整体拉出。
- 取下连接空气滤清器滤芯的 4 颗螺栓，取下滤芯。
- 小心用压缩空气清理空气滤清器滤芯。

破裂的空气滤清器或滤芯会使灰尘进入发动机，从而损坏发动机，如果破损请更换。

如果空气滤清器滤芯安装位置不正确，灰尘会绕过滤芯进入发动机，从而损坏发动机。请确定滤芯安装在正确的位置。

▲ 注意

松开尾架时，先折下左侧螺栓，再左脚踩在右侧平叉上用大腿稳住尾架再拆尾架右侧螺栓，再轻轻地放下尾架。

▲ 警告

清理滤芯时，气体应从有金属网的一侧吹入，如果别一侧吹入，灰尘会留在滤芯的空隙中，造成清理效果大降低。

11.4 发动机机油维护

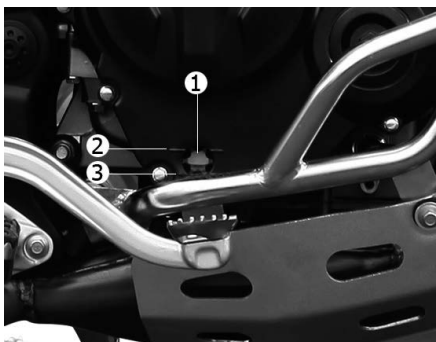


图 11.4.1

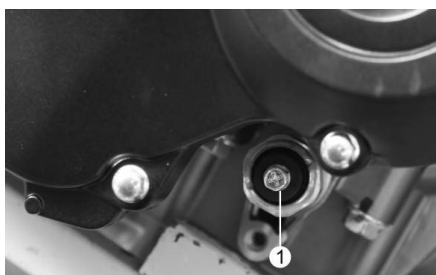


图 11.4.2

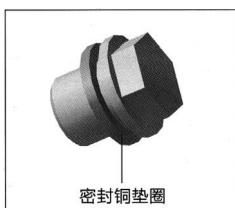


图 11.4.3

机油能够保证发动机内零部件的有效润滑，除此之外还能帮助发动机降温，起到冷却作用，另外机油还能帮助发动机进行密封，所以机油的维护就显得非常重要。

机油油位高度的检查：

机油油位的检查和机油的注入都在发动机右侧盖上（图 11.4.1 所示）。

检查机油高度的方法：

- 发动机在冷机状态。
- 然后保证车身竖直。
- 从机油观察窗口查看机油液面高度。
- 机油的正确油位高度应在机油观察窗口 1 上刻度 2 下刻度 3 之间。

如果机油油位高于上刻度线 2，则需要放出一定的机油。

如果机油油位低于下刻度线 3，则需要注入一定的机油。

不论是放出或是注入机油，在操作完成后均应按上述的机油油位的检查方法重新检查油位高度。

放出机油的方法：

如果机油油位过高，请用套筒扳手将位于发动机左侧下的机油放油螺栓（1）取下（图 11.4.2 所示）。

放出适量的机油后，请再将油螺 1 复位并锁紧。

机油油位过低会使发动机损坏，同样，如果机油油位过高，也会使发动机损坏。

请确保机油油位处于正确的位置。

更换发动机机油：

在达到每个维护周期时，更换发动机机油。

更换机油应在热机的情况下进行，这样旧机油能够排出得更彻底。

更换的方法：

- 用辅助停车架使车辆直立。
- 逆时针旋出加机油口盖。
- 在放油螺栓下面放置汇油盘，用工具拆下放油螺栓，放出旧机油。

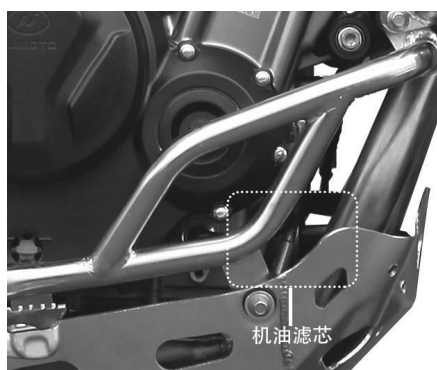
在加注新机油前将放油螺栓锁紧。

▲ 警告

重新安装放油螺栓时需要更换放油螺栓和密封垫圈（图 11.4.3 所示），如果仍用拆下来的密封垫圈，容易造成该位置漏油。

▲ 危险

虽然在热机的时候放旧机油会更彻底，发动机机油和消声器温度较高，会烫伤入，在放旧机油前，请等待放油螺栓和消声器基本冷却后再进行。



更换机油滤芯

- 在达到每个维护周期时，更换发动机机油滤芯。
- 更换机油滤芯应在放出发动机机油的情况下进行。
- 取下下导流罩。
- 垫一块吸油纸或是棉布在发动机的机油滤盖的下方，以防取下机油滤芯盖会有机油溢出污染到发动机表面。
- 用专用工具取下发动机前侧的机油滤芯。
- 取出机油滤芯，并将机油全部排出。
- 更换新的机油滤芯。
- 装回机油滤芯，安装时正确定位机油滤芯盖上的 O 型密封圈非常重要，否则会造成该位置有渗漏的现象。

▲ 警告

检查机油滤芯盖是的 O 型密封圈的完好程度，如有必要需要更换新的。更换错误的机油滤芯会损害发动机，必须使用恒舰提供的纯正部品。

加注发动机机油

确认机油滤芯已更换且机油滤芯盖装配完成。

放油螺栓及密封垫已更换并装配完成。

- 一次先从发动机的加油口注入约 2.7L 新的“恒舰摩托车发动机机油”，然后旋紧架机油口盖，用

不同的转速运转发动机 5 分钟，运行时，检查拆装过的零件是否有渗漏现象。

- 最后，检查油位的高度。

▲ 注意

机油牌号：10W/40-SG；机油加注量：2.7L。

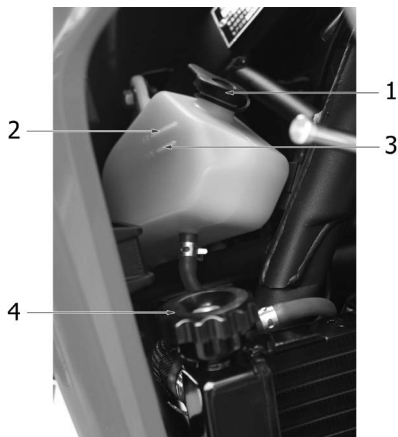
低于 10 摄氏度以下的骑行环境推荐更换 5W/30-SG 机油。

请环保处理更换下来的旧机油和机油滤芯。

▲ 警告

机油牌号不符合或是劣质的机油都会对发动机造成损坏，会损坏电喷系统零部分年，会缩短火花塞和消声器内触媒的使用寿命，所以请千万不能使用。

11.5 冷却液维护与检查



1. 副水箱加注口
2. 水位上限
3. 水位下限
4. 主水箱加注口

冷却液能将发动机高温零部件的热量带走并散发掉，使发动机保持正常的工作体温。

检查冷却液的液面和补充冷却液均在膨胀水箱处进行。

发动机熄火。

因冷却液自身受热要膨胀，检查冷却液面应该在冷机状态。

保证车身竖直。

观察膨胀水箱位置液面的高度，液面高度需在 LOWER (3) 和 UPPER (2) 之间。

如果冷却液在 LOWER 线以下，请从膨胀水箱口 (1) 加入。

冷却液面太高，在使用中会因温度升高造成冷却液膨胀，所以过高的冷却液面会造成冷却液从溢管中喷出。为了避免烫伤，请不要将冷却液加注过量。

如果频繁的补充冷却液，表示冷却系统存在故障，这时请到恒舰授权的经销商处处理。

▲ 警告

在使用中如果发现膨胀水箱已经完全干掉，请不要擅自补充冷却液，因为这时需要排除可能已经进入冷却系统中的气体，这时请到恒舰授权经销商处处理。



冷却液的更换

冷却液的排放：

使用专用停车架让车辆保持竖直。

在发动机下面放置一个积液盘。

取下排水螺栓（1）。因为整个散热系统是相通的，所有的冷却液都会从该泄水口排出。

旧冷却液排放完全后，将排水螺栓（1）安装回去。

冷却液的加注：

冷却液的加注需要从散热器和膨胀水箱两个位置加入。

打开散热器的水箱盖处观察冷却液是否充满，边加注边用手去捏放进出水的水管排气，直至是充满为止，然后盖好散热器水箱盖。

盖好散热器水箱盖后，此时启动发动机运行半分钟，以便冷却液充满各个需要冷却的地方。

将发动机熄火，发动机冷却后才再次打散散热器水箱，检查该位置的冷却液是否为充满状态，如有下降，则再回流到充满状态，盖好散热器水箱盖，反复该过程直到注满，必要时需要反复几次。

最后取掉膨胀水箱的黑色胶盖，加入冷却液至规定的 LOWER 和 UPPER 位置之间。

在气温低于冷却液标签上标明的气温条件下，应选用防冻性能更高的冷却液。

恒舰经过测试的冷却液是 -45°C 冰点的乙二醇型冷却液。最好请到恒舰授权的经销商处购买或更换。

警告

禁止向冷却液系统中加注自来水，否则会造成冷却系统的损坏。
因配方不同，不同型号的冷却液不能相互混用。

危险

加注冷却液过程中，发动机启动后再次打开散热器水箱时，一定要让发动机冷却，否则散热器内的高温液体会随着您打开散热器盖时而喷出造成烫伤事故。

11.6 制动液维护

制动是液压制动系统中传递动力的重要媒介，需要有可靠的高低温性能和较好低温流动性，同时需要防腐蚀的保护性能，请一定选用正确的制动液。

前轮制动液油杯如图 11.6.1 所示，后轮制动油杯如图 11.6.2 所示。



图 11.6.1

制动液的检查

制动油杯内的制动液面太低会使空气进入制动系统，这会显著地降低制动效率，需要定期检查制动液面。

检查制动液面的液面和补充制动液均在前后制动液油杯处进行。

液面应不超过最大（MAX）标记，当液面低于最小限位（MIN）时请及时添加。



图 11.6.2

制动注有一定的腐蚀性，飞溅到油漆表面或是塑胶表面会腐蚀这此物体的表层。

制动液的型号

制动液吸入水分或有杂质时，应及时更换或过滤，否则会造成制动压力不足，影响制动效果。在天气较潮湿的地区，这点更为重要。

制动液连续使用超过 2 年，很容易由于使用时间长而变质，要及时更换。

制动液的型号为 DOT5，请环保处理更换下来的旧制动液。

▲ 警告

需要补充制动液时，擅自打开制动油杯盖可能会造成气体和水分进入，这会造成制动性能大降低或失效，这时请到恒舰授权经销商处补充或更换。

▲ 警告

不同类型和不同品牌的制动液不要混合使用。由于配方不同，混合制动液会造成性能指标下降。

11.7 传动链条

本系列车辆配置的传动链条为油封链条，链销处有特殊的 O 形密封圈，密封圈中密封了润滑脂，该链条为不开口锅环类型，所以更换链条需要专用工具，如有需求请联系恒舰授权经销商处理。

每天驾驶前需检查或调整传动链条，请确认有无以下问题：

- 链销松动
- 链板锈蚀
- 链节转动不灵活

如发现链条有上述任何问题，请联系恒般授权经销商处理。

传动链条的磨损也会造成链轮的磨损，请确认有无以下问题：

- 链轮是否过度磨损
- 轮齿是否折断或损坏

▲ 警告

需更换传动链条时，应检查从动链轮和主动链轮的磨损情况，必要时应同时更换。

如果没有油封链条专用的链条油，可使用高粘度齿轮油 SAE90 代替。

- 如发现链轮有上述任何问题，请联系恒舰授权经销商处理。传动链条的清洁和润滑

链条上的污垢和灰尘会影响链条的使用寿命，请定期清洁和润滑，因为链销处有 O 形圈和润滑脂，所以不正确的清洁和润滑会损伤 O 形圈和润滑脂，这反而会加速减少链条的使用寿命。

不能使用钢丝刷去清洗链条。

清洗完后需立即擦去水或中性清洁剂，晾干链条以备润滑。

使用油封链条专用的链条油均匀地涂覆链条内外链板，完成后，擦去多余的链条油。

一些链条润滑剂含有会损坏密封圈的溶剂和添加剂，请使用专用的油封链条润滑油。

▲ 警告

请使用水或中性清洁剂清洗链条。

不能使用挥发性溶剂清洗链条，例如涂料稀释剂、汽油等。

不能使用高压清洁器去清洗链条。

传动链条的调整

传动链条过松或过紧都是不正确的。

链条松弛度过大，容易造成链条从链轮中脱离而发生意外。

链条太紧会影响链条的使用寿命，同时也会增加传动阻力。

正确的链条松弛度如图所示，如果您的车辆传动链条松弛度不能满足上述要求，则需要做出调整，调整方法如下：

使用专用停车架让车辆保持竖直。

旋松后轮轴螺母（3）和调节螺母（1），根据链条的松弛程度调整螺栓（2）。

如果链条松弛度偏大，则逆时针旋转螺栓；反之，如果链条松弛度偏小则顺时针旋转螺栓，使调节顶块与平叉上的刻度（2）左右保持一致。

锁紧后轮轴螺母（3）及左右两侧调节螺母（1）

传动链条的规格和型号：

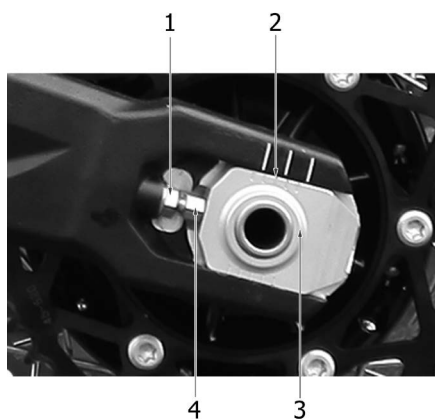
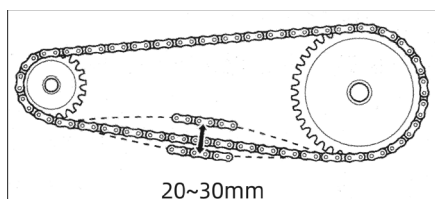
18-21：520 链盘，114 节链条。

17-19：520 链盘，112 节链条。

均为油封链条，不开口锁环型。

调节螺母的锁紧扭矩：14Nm。

后轮轴螺母的锁紧扭矩：95Nm。



11.8 轮胎的维护

轮胎连接车辆和地面，非常重要。不正确的轮胎状态和轮胎规格大大影响车辆性能。

轮胎的胎压

不正常的胎压将会降低轮胎的使用寿命。

轮胎气压过低会造成转弯困难，轮胎磨损加剧。

轮胎气压过高会造成轮胎与地面的接触面积减小，车辆容易打滑，失去控制。

在高速时，由于离心力的作用轮胎的气门芯有打开的趋势。为了防止突然漏气，配上了一个金属内衬的橡胶盖子，用螺纹连接的方式装在气门芯上。

轮胎充气压力与轮胎温度成正比关系。因此，只有轮胎温度基本上与环境温度一致时，才能在冷态下校正轮胎充气压力。

在常温状态下，请按以下表值数据进行胎压检查：

	一人骑行	双人骑行
前轮	220Kpa	250Kpa
后轮	220Kpa	250Kpa

▲ 警告

不正常的胎压会影响车辆的操纵性能，并有可能导致车祸。
过载会导致轮胎故障，并使车辆失去控制。
每月至少检查轮胎压力一次。



轮胎磨损极限的检查

轮胎在主胎面上都有磨损标识。

轮胎在花纹磨损至标识处时已经不能再使用了。

在轮胎边缘 TWI 标识附近有磨损标识，磨损标识位于轮胎胎冠的排水槽内，呈凸包状态，该凸包被磨损时，表示磨损超过了标记，请尽快更换轮胎。

▲ 警告

过度磨损的轮胎会使轮胎穿孔而使车辆失去控制。
车辆轮胎花纹磨损至最小允许的深度时，其操作性和抓地力将大幅削弱。

轮胎的修补

修补无内胎的轮肥的小孔，需要拆下轮胎，在轮胎内部打补丁，不要使用外部修补方法，因为在高速行驶时，轮胎的离心力会使修补的地方松动。

修补轮后的 24 小时，车速不能超过 80 公里 / 小时。

如果轮胎侧面损坏，或轮胎破损的地方大于 6mm，轮胎不能修复使用。

检查轮胎，如果轮胎上有较多明显的损伤，如破损、划伤或是磨损到极限，必须更换轮胎。

轮胎的更换

更换轮胎时，不要在同一车辆上使用品牌不同，型号不同，花纹不同的，新旧程度差异大的轮胎。

更换轮胎后的车辆需要做动平衡检验和校正，如果动平衡不良，车辆的操作性会降低，也会造成轮胎磨损不均匀。

标有滚动方向的轮胎侧面用箭头做有标记，必须按这个规定的转动方向使用轮胎，由此确保在防止滑水现象，提高附着能力，减少行驶噪音和延长耐磨寿命等。

指定型号的轮胎，经过了严格的测试验证，可满足大多数道路的使用要求。其它未经测试的轮胎，不能保证其适应性或安全性。

无内胎轮胎在轮辋和胎唇接触部位密封。

为了避免漏气，拆卸和安装无内胎轮胎需要特殊工具及专门的轮胎拆装机。

更换轮胎请让恒舰授权的经销商处理，他们具备有必工的工具和经验。

11.9 保险片



更换保险片之前，必须了解故障的原因，并消除故障。

本系列车型保险片位于座垫下方。

所有保险片的规格和用途均有标注说明。

整车系统电源保险片 30A：控制电喷系统、ABS 系统、整车其它用电负载（仪表、等具等）的供电和蓄电池的充电回路。备用保险片 30A 一个（绿色）。

ABS 系统马达电源保险片 25A：控制 ABS 防抱死系统马达的供电。备用保险片：10A 一个（白色）。

信号系统电源保险片 10A：控制仪表、灯具、喇叭、闪光器、侧支架熄火开关、继电器等供电。备用保险片：10A 一个（红色，电器盒内部）。

电喷系统电源保险片 15A：控制电喷系统 ECU、氧化传感器、ECU 诊断接口、碳罐电磁阀、喷油器、点火线圈等电喷系统的供电。备用保险片：15A 两个（蓝色，电器盒内部）。

风扇电源保险片 10A：控制散热风扇的供电。备用保险片：10A 一个（红色，电器盒内部）。

燃油泵电源保险片 10A：控制燃油泵的供电。备用保险片：10A 一个（红色，电器盒内部）。

检查或更换保险片后，必须要将保险盒盖盖好，否则在雨天或是洗车进水后容易造成严重电气故障。

▲ 注意

如果保险片经常在短时间内熔断，说明电气系统有故障，请立即联系恒舰授权经销商处理。

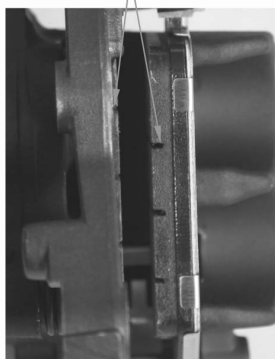
▲ 危险

请选用规定的保险片，不可使用替代品，如铝箔或铁丝。

请不要使用规定规格以外的其它保险片或直接搭接，否则会对电器系统产生严重的影响，甚至会引起失火或烧毁车辆。

11.10 制动摩擦片

前制动摩擦片磨损极限位置



后制动摩擦片磨损极限位置



磨损超过允许的最小厚度的制动摩擦片会导致制动效率的下降，在某些情况下，还会导致系统的损坏。为了制动系统的可靠性，不能允许制动摩擦片的磨损超过所允许的最小厚度。

制动摩擦片的更换

正确的更换摩擦片的方式需要拆卸前后轮，所以这样的工作还是请恒舰授权经销商处理。

不论前还是后制动摩擦片，均应整对更换，如果仅更换一对中的一个，会导致制动不平衡而造成事故。

在摩擦片取下后，一定要注意不要操作制动柄或是制动踏板，否则会造成制动活塞很难复位，同时又有制液泄漏的风险。

更换摩擦片的过程中不要让油或其它污物附着在摩擦片和碟刹盘上，如有请一定清理干净，否则会造成制动打滑效能降低。

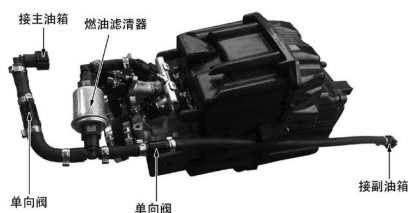
▲ 注意

本系列车型前制动为双碟刹系统，在更换摩擦片时，最好两侧同时更换，以确保制动效果和行车安全。

▲ 危险

更换完成新的摩擦片后，请反复确认制动手柄和制动踏板，确认摩擦片是否有效压紧制动盘。同时确认制动手柄和制动踏板的自由行程是否正确。

11.11 更换燃油滤清器



燃油滤清器的作用是过滤燃油中的杂质，使其不进入喷油器。

喷油器的喷嘴加工极为精细，容易被杂质堵塞，堵塞后喷油器不能正常喷油会造成发动机无法启动。请按时更换燃油滤清器。

取下燃油箱，在空滤器的右侧可看见。

使用螺丝刀取下抱紧燃油滤清器的抱箍。

使用棉布包裹滤清器的两端，以防在取下两的抱箍时造成燃油飞溅，因为在油管内还有残留的燃油和压力，内部的残油会随残留压力飞溅出油管。

在取下燃油滤清器时，用棉布吸收油管内部的残油飞溅。

更换新的燃油滤清器。

复装方法与拆下方法相反。

▲ 危险

燃油滤清器的更换频次为每5000Km 更换一次。

请环保处理更换下来的旧的燃油滤清器。

11.12 灯光信号的更换

卸失信号将会使您处于危险之中，因为信号灯可以帮助别人更容易发现您和您的车辆。应及时更换坏掉的信号灯。

前照灯、位置灯、转向灯、后位灯 / 制动灯和牌照灯均是 LED 封装灯具，若损坏，需到维修店整体更换。

▲ 危险

当信号灯损坏时，请一定使用额定功率和规格相同的信号灯，否则会导致系统超负荷或是灯具过早损坏。



11.13 车载 ABS 系统

本系列车型的 ABS 具有自诊断功能。如果系统有故障发生，系统能自动识别并存储故障信息，同时，点亮摩托车 ABS 指示灯，提示驾驶员系统存在故障。所有的故障码读取只能是车辆静止状态才能自动显示并读取。

ABS 系统正常状态

打开钥匙开关时指示灯点亮，此时能听见 ABS 电机短暂转动声，系统进行静态自检，如自

检有故障，会直接闪烁故障码。如果静态自检没有发现故障，报警灯将熄灭，进入正常监控车辆状态，正常工作。

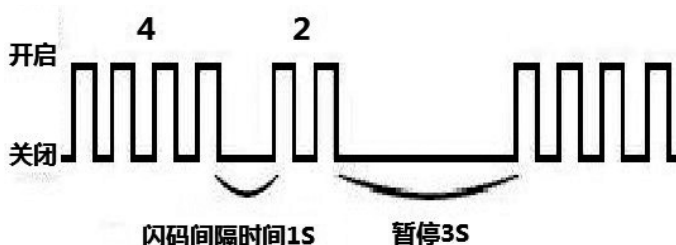
按住右闸把 ABS 开关 “” 2 秒左右关闭摩托车前后 ABS，此时指示灯常亮；再次按住 ABS 开关 “” 2 秒左右则开启车辆前后轮 ABS。关闭点火开关后，再次打开点火锁匙，ABS 处于前后轮开启状态。

ABS 故障排除方法

本系列车型 ABS 系统故障具体情况用故障代码的形式存储在存储器中，必要时可用闪码的形式读出来。请注意诊断故障码时不能关闭当前的车辆电器状态，如熄火、断电等，因为故障代码存储在系统存储器中，熄火断电等操作使 ABS 重新自检上电，会把存储器中的故障码清除，造成读取故障码失败。

ABS 系统发生故障，ABS 警告灯就会按某一规律闪烁，这种规律的闪烁称为“闪码”。“闪码”由两节“闪烁码”组成：“闪烁码”每次闪烁间隔 0.3 秒，一节“闪烁码”与另一节“闪烁码”之间间隔 1 秒。第一节“闪烁码”表示某一故障现象；第二节“闪烁码”表示故障所处的位置。

例后图所示，闪码 “4-2” 表示 “后轮传感器开路故障”（“4” 是第一节闪烁码：表示 “传感器开路” 故障、“2” 是第二节闪烁码：表示故障位置在 “后轮”）。



维修闪码	维修指导
1-1~1-4 2-1~2-5 3-1~3-4	检测 ECU，关闭点火锁匙、断开蓄电池正极，再次通电；若故障重复，更换 ECU。
	检测 ECU，ECU 内部元器件故障、软件运行故障，如果故障重复出现更换 ECU。
	CAN 通讯数据错误，或 ECU 内部通讯硬件故障，重启 ECU，若故障依旧更换 ECU。
	检查电源电压、ABS 系统保险片，检查系统电源接地线耳和端子，是否有氧化或松动。
	检查电源电压，可能车辆充电系统故障。
	检查线路，检查接插件端子是否有松动或未插到位，检查指示灯是否有可以正常点亮。
	检查线路，输出对电池正极短路。
	检查线路，输出对电池负极短路。
	检查电磁阀线路，保压线圈或泄压线圈是否有短路。
	检查电磁阀线路，保压线圈或泄压线圈是否有断路。
检查电磁阀是否与公共端地线短路或断路	
检查电磁阀是否与公共端正极短路或断路	

4-1/4-2	检查线束中的传感器线路,测量是否有断路,检查传感器是否有断路,有断路需更换。
5-1/5-2	检查线束中的传感器线路,测量是否有对地短路,检查传感器是否对地有短路,有短路需更换。
6-1/6-2	检查传感器线路是否对高电平短路,若有需要更换传感器线路或传感器。 传感器信号值弱;检查轮毂轴承有无松动,造成齿圈偏摆,保养轮毂并调整好轮毂间隙。

▲ 注意

用外接电源充电瓶时,要将 ECU 控制盒断开,防止外界高电压损伤 ECU。

当车辆需要电焊时,断开 ECU,不得用万用表测量 ECU 控制盒。

定期监测发电机电压是否稳定。

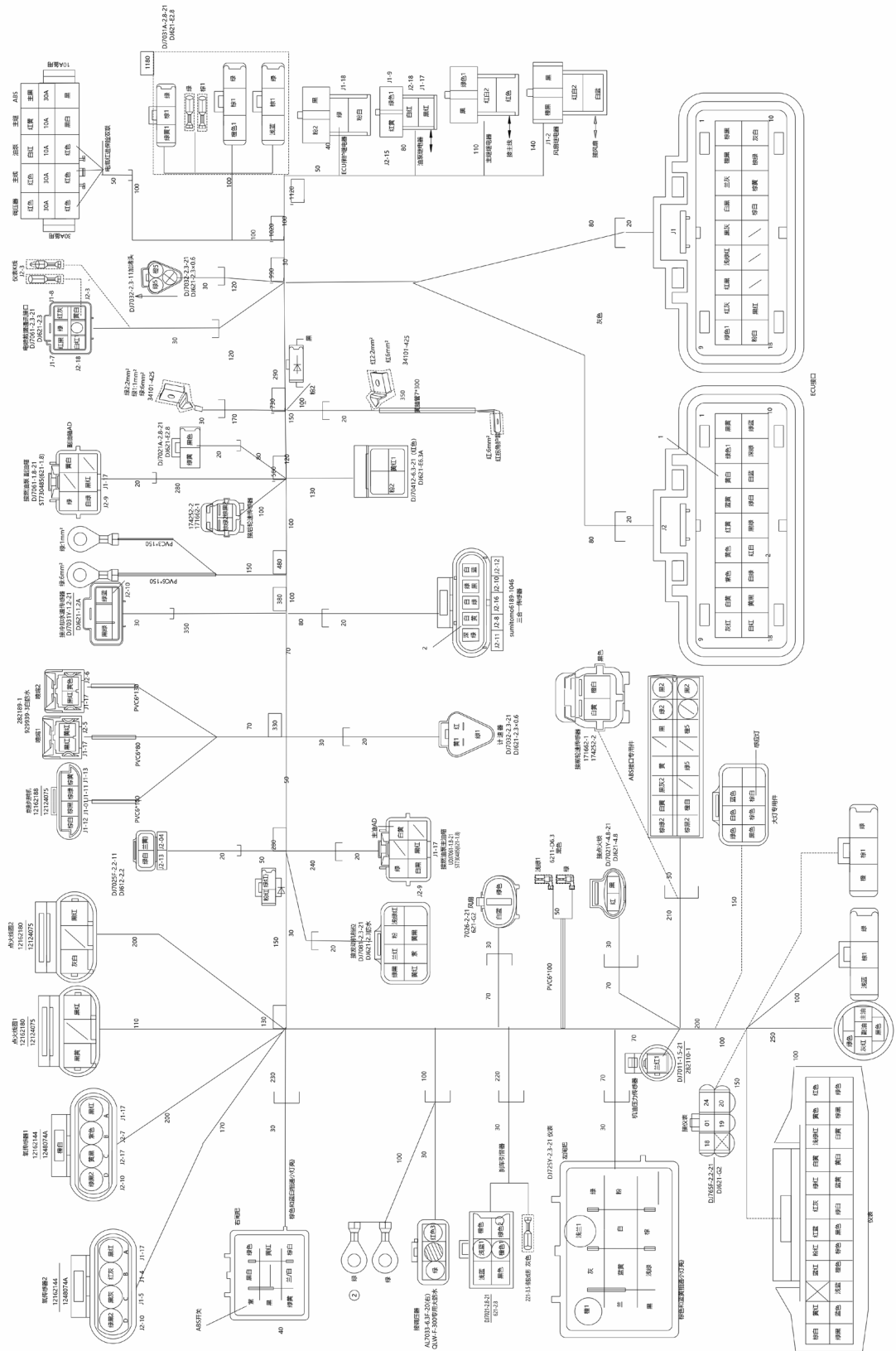
作制动盘、片保养时不要碰伤齿圈及传感器,并对齿圈及传感器进行清洁处理。

各部件的拆装须在断电后进行,并保持各部件清洁、干燥。

不得随意改变保险片容量或跨接保险。

ABS 指示灯是 ABS 对外警示的重要手段,ABS 报警灯应可靠的连接,发现 ABS 指示灯损坏应及时更换。

12 车辆主电缆总成



13.1 车辆的存储

如果您的车辆有一段时间不使用，需要特殊保养，这需要一些特殊的材料，装备和技术，因为此原因，建议您在授权的经销商处完成这些工作。

如果您想自己完成这些工作，请按以下方法：

- 彻底更换新机油。
- 用沾有新机油的抹布堵塞空滤器的进口和消声器的排气口，避免潮湿的空气进入发动机。
- 彻底抽干燃油箱内的燃油。
- 拆下蓄电池，并用中性肥皂水清洗蓄电池表面，同时清理正负极上的氧化物。
- 将蓄电池存放在 0°C 以上的室内。
- 将轮胎气压调整到规定气压。
- 彻底清洗车辆。
- 将橡胶保护剂喷涂在橡胶件的表面。
- 整车外观涂汽车保护蜡。
- 最后将车辆用布罩好并停放在干燥通风的地方。

⚠ 危险

每个月给取下的蓄电池充一次电。

13.2 重新启用车辆的方法

- 彻底清洁车辆。
- 取出空滤器进气口和消声器排气口的抹布。
- 彻底更换发动机机油和机油滤芯。
- 安装蓄电池。
- 启动车辆。

13.3 车辆的防护

根据使用情况，经常清洗车辆，尽量保持车辆干净，干燥。

尽快清洗附着在车辆表面的污物，如鸟粪、沥青和盐分等等。

尽量使用车辆外罩，长时间被中年的太阳晒到会导致外观件老化和变色。

13.4 车辆的清洁

用冷水清洗车辆。

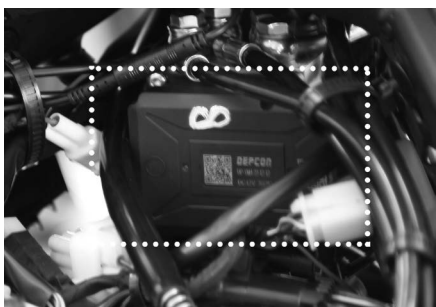
用软布和中性洗涤剂彻底清洗车辆。

不要用喷雾清洗车辆。

不要用高压水清洗车辆。

13 车辆的存储和清洁

在雨天或是洗车后，前照灯或是转向灯内可能会有少量的水雾，只需要让灯点亮一段时间，水雾就会消失，因为灯具都设计有通气孔，这是正常的。



▲ 注意

潮湿的制动器的制动能力会有所下降，请在洗车后用反复低速测试制动系统，使其快速干燥。

▲ 危险

ABS 模块位于前立管下方后侧，清洁车辆时，请不要用水直接冲洗 ABS 模块，以免造成模块损坏。

允许您的车辆使用原厂部件和附件。

您可以从授权经销商那里获得那些已经被授权使用的真正的部件、附件以及其它产品。同时，会有专业人员向您介绍它们的安装和使用方法。

这些零部件和产品的安全性、实用性能和匹配性已经通过检测，会对这些产品负责。相反，不会对那些未被授权使用的部件和附件负责。

无论您何时计划更换部件，都要遵守所有的法律法规要求，确保您的车辆不会破坏国家对公路车辆及其它的法律、法规和规范的要求。

▲ 危险

擅自改动电子控制系统等性能元件装会导至车辆的损伤和事故的发生。

15 整车参数表

整车参数	
长 × 宽 × 高	2200mm×860mm×1370mm
轴距	1440mm
离地间隙	155mm
整备质量	190Kg
载重量	150Kg
最大允许总质量	320Kg
前轮载荷	236Kg
后轮载荷	325Kg
最大设计车速	110Km/h
最在爬坡	≥ 35°
制动减速度	按 GB20073 执行
燃油油耗	≤ 3.0L/100Km
油箱容积	19L
冷却液容量	1.5L
链条规格	520H×112 节
悬架 / 制动系统	
前减震型式	倒置减震 / 叉管 Φ41mm / 行程 120mm
后减震型式	中央减震 / 行程 50mm
前轮规格	3.50×17
后轮规格	4.50×17
前轮毂规格	120/70ZR17M/C
后轮毂规格	160/60ZR17M/C
前制动型式	双盘式、双活塞、浮动钳 / 盘径 298mm
后制动型式	单盘式、单活塞、浮动钳 / 盘径 240mm
ABS	双通道防抱死制动系统
发动机系统	
发动机型式	直列双缸 / 水冷 / 八气门 / DOHC
缸径 × 行程	67mm×68.8mm
排量	471ml
压综比	10.7: 1

进气门间隙	0.16mm±0.03mm
排气门间隙	0.27mm±0.03mm
火花塞间隙	0.8mm ~ 0.9mm
火花塞型号	CPR8EA-9
最大净功率 / 转速	35Kw/8500rpm
最大扭矩 / 转速	43N.m/7000rpm
怠速转速	1300r/min±100rpm
变速箱型式	国际六档
离合器型式	湿式多片
机油容量	3.2L (10W/40-SG)
供油系统	电子燃油喷射系统
排放标准	国家第四阶段 (国 IV)
传动系统	
初级传动比	2.029
末级传动比	3.000
1 档	3.285
2 档	2.105
3 档	1.600
4 档	1.300
5 档	1.150
6 档	1.043
电器系统	
蓄电池型号	12V9Ah
前照灯 (远光 / 近光)	12V 29.4W/12.84W
前位置灯	12V 5W
后位置灯	12V 5W
前转向灯	12V 3W
后转向灯	12V 3W
后牌照灯	12V 5W
片式保险规格	30A、10A

注意查看每次定期维护保养，是否完全遵照本说明书提示认真执行。

维护保养中规定了最少要做的保养，如果您的车辆经常在严酷的环境下使用，维护保养应比保养周期表中规定的要多。

长途旅行中的风沙天气和道路的泥泞都应在旅行结束后特别维护。

建议这样的维护工作在授权经销商处完成。

维护保养过程中产生的废弃物，如清洗剂、废机油等应妥善处理，不要对环境造成污染。

正确的维护保养配件是维护的关键，如果您不能确认配件的来源和品质，建议使用提供的原厂配件，不恰当的维护会在后面的使用中会发生意外。

建议这样的维护工作在授权经销商处完成。

下表所示为每次定期维护保养时应做的检查，其间隔周期应以使用时间和行驶公里数先达到都为准。

项目	周期	Km×1000						
		1	5	10	15	20	25	30
润滑油		R	R	R	R	R	R	R
润滑油滤芯		R	R	R	R	R	R	R
润滑油液面查检		I	I	I	I	I	I	I
燃油管路密封查检		I	I	I	I	I	I	I
燃油泵滤芯查检		\	\	I	\	I	\	I
燃油滤清器		\	R	R	R	R	R	R
节气门体		\	C	C	C	C	C	C
冷却液面查检		I	I	I	I	I	I	I
冷却液	2年	\	\	\	\	\	\	R
进气系统密封检查		I	I	I	I	I	I	I
气门间隙		I	I	I	I	I	I	I
火花塞间隙		\	I	I	I	I	I	I
空滤器滤芯		I	C	R	C	R	C	R
油门操作系统		A	A	A	A	A	A	A
离合操作系统		A	A	A	A	A	A	A
方向轴承润滑和松紧检查		I	\	L	I	L	I	L
前后轮和链轮轴承润滑检查		\	L	L	L	L	L	L
主副搁脚润滑检查		\	L	L	L	L	L	L
侧支架轴润滑检查		\	L	L	L	L	L	L
制动及离合的柄轴润滑检查		\	L	L	L	L	L	L
后减震摇架轴承润滑检查		\	L	L	L	L	L	L
平叉轴轴承润滑检查		\	L	L	L	L	L	L
链条轴轴承润滑检查		A	A	A	A	A	A	A
蓄电池电压		\	I	I	I	I	I	I
制动油管密封性		I	I	I	I	I	I	I
制动液	2年	I	I	I	I	I	I	I
制动液面高度		I	I	I	I	I	I	I
前后制动摩擦片		I	I	I	R	I	I	R
前后制动开并		I	I	I	I	I	I	I
燃油蒸发系统检查		I	I	I	I	I	I	I
整车紧固件松动检查		I	I	I	I	I	I	I
前后减震器渗漏检查		I	I	I	I	I	I	I

表中各符号的意义：I：检查；C：清洗；R：更换；A：调整；L：润滑。

1、目的

根据国家机械工业部颁发的《摩托车商品修理、更换退货责任实施细则》的规定和恒舰摩托车售后政策，为体现恒舰“质量第一、用户至上”的服务宗旨，确保恒舰用户购买恒舰车放心，特制定本细则，以明确恒舰摩托车三包范围与非三包范围的关系、规范服务行为。

2、适用范围

本细则适用于恒舰牌 HJ500-8 两轮摩托车。试验产品及处理产品不在本细则规定范围之内。

3、定义：

3.1 “三包”：是指在规定的期限内，本公司产品出现质量问题时，由经销单位、特约维修中心（站）及本公司承担的修理、更换、退货的责任。

3.2 “三包”期限及范围：除易损、易耗件外的所有摩托车零部件，包括确因产品制造装配问题引起的产品故障，影响使用的车辆，自产品售出之日（以发票开具之日为准）时间和里程只要其中一项超过，则视为超过“三包”期（以下同）。

4 职责

4.1 经销商：负责摩托车 / 发动机等零部件在三包范围内的维修和更换处理。

5 开展“三包”工作的原则

5.1 在“三包”期内的产品，凡由于制造、装配、包装等原因引起的质量故障，影响了整车（机）的外观性、完整性、安全性、动力性及使用性，应由经销单位、特约维修点及本公司负责保修，保修以调整修复为主，调换新件为辅，保修中能换单件的不得换总成。保修后的车辆应达到本公司的相关技术标准。

5.2 在“三包”工作中，应热情对待用户，以实事求是的态度对质量故障进行分析、鉴定，严格执行本细则，做好用户保修工作。

6 非三包范围

6.1 有下列情况之一的，不享受“三包”服务待遇，只实行有偿服务，敬请用户谅解。

6.1.1 自购车之日起，使用时间超过三包有效期的；

6.1.2 行驶里程超过三包有效期的；

6.1.3 无三包凭证或有效发票，或三包凭证上的型号与实际车架号、发动机型号不符，或有涂改痕迹的；

6.1.4 里程表记录失效，或更换里程表后累计里程超过三包有效期的；

6.1.5 用户未按使用说明书要求操作、违反使用保养规定，或因保管不当、违章驾驶造成损坏的；

6.1.6 因交通事故或跌倒、撞击造成损坏的；

6.1.7 未到购车单位（或特约维修点）投保，私下进行拆卸和维修的；

6.1.8 擅自对整车或发动机进行改装，增加附件或更换非恒舰配件造成的损坏；

6.1.9 其它非设计或制造原因造成损坏的；

6.1.10 因不可抗拒因素或化学腐蚀引起损坏的；

6.1.11 对车辆的使用性能、可靠性能没有影响，只因为直观感觉上的现象，如：声音、振动、发热等，无法准确判断的。

7 三包件清退接收的基础条件

7.1 摩托车所有三包范围内的零部件，在符合清退技术准则的前提下应具备下列基础条件才准予清退。

7.1.1 所有三包清退件均应填写三包故障卡并贴附在清退件上，随同清退件一起返回。故障卡必须完整填写：车型、购车日期、发动机号、车架号、行驶里程、故障内容、保修日期、保修单位、用户电话、保修单位电话。

7.1.2 三包清退件都必须是在正常使用条件下产生的损坏或故障，不能有人为损坏现象。（尤其应确保三包件有良好的包装，避免在运输途中造成二次损伤）。

7.1.3 市场退回的三包件，应保证其完整性，若确因特殊原因造成的残缺，应在故障卡上写明原因，并报服务中心备案附带情况说明。如：点火器插头剪掉，原因是新件接插方式与旧件不同，故剪掉接头等。

7.1.4 对于因使用劣质燃料、劣质机油、非恒舰专用配件造成零件损坏的将不予清退。

8 发动机三包清退技术标准细则

8.1 发动机更换标准

8.1.1 标准适用于恒舰摩托车因质量问题需要更换发动机的规定。按国家“三包法”规定，参照引用 QC / 29117.8-93 < 发动机可靠性能评定方法 > 标准。

8.1.2 在购车（发票开据日期为准）后 90 天内，行驶里程 3000 公里以内，以单项为基准，由于发动机制造质量问题出现以下情况，无条件更换发动机整机。

8.1.2.1 因发动机零部件制造缺陷出现的移位、断裂、弯曲引起质量问题的发动机；

8.1.2.2 因裂纹、砂眼导致漏油引起质量问题的发动机；

8.1.2.3 因质量问题造成气门、摇臂、气门弹簧、气门推杆、活塞断裂的；

8.1.2.4 缸套剥落的发动机；

8.1.2.5 超越离合器引起发动机零件损坏致使发动机不能正常工作的发动机（能通过更换超越离合器解决的除外）；

8.1.2.6 正时齿轮（链轮）移位，导致点火不正时的发动机。

8.1.2.7 由于受国家法规影响，因发动机打刻发动机号原因，导致不能上牌的发动机；

8.1.3 在购车（开据发票日期为准）6 个月内或行驶里程 6000 公里以内，需要开中箱维修或

以单项为准, 由于发动机制造质量问题引起的以下故障, 可以更换发动机整机 (须附上故障卡)

序号	内容
1	机油泵损坏造成严重磨损的发动机。
2	因凸轮轴、曲轴抱死, 甚至造成事故的发动机。
3	箱体破损或产生气孔、明显漏油而无法修复的发动机。
4	正常使用状态下, 因主副轴 (含齿轮) 断裂损坏等需打开中箱修复的发动机。
5	曲轴箱中箱漏油的发动机。
6	因连杆断裂导致活塞、缸体、曲轴箱体损坏的发动机。
7	因活塞销断裂导致连杆、缸体损坏的发动机。
8	因活塞破裂导致缸盖、缸体、曲轴箱体损坏的发动机。
9	因离合器质量故障造成发动机曲轴箱损坏的发动机。
10	因曲轴轴承、主副轴轴承 (含滚针轴承) 严重磨损造成发动机严重异响, 影响整车正常行驶。
11	因气门弯曲, 气门弹簧变形、断裂, 造成整车无法正常行驶。
12	因曲轴连杆滚针轴承严重磨损、烧蚀、破裂、保持架开裂造成发动机异响, 影响整车正常行驶的。
13	变速鼓损坏, 造成发动机不能正常行驶的。
14	启动轴打滑, 造成整车无法起动。
15	末级传动齿或离合器外罩传动齿破裂。
16	换档轴变形、断裂, 造成整机无法变换档位。
17	正时主动链轮严重磨损至断齿。
18	机油滤清器破裂。
19	变速鼓拨叉断裂。
20	发动机转速失控, 造成飞车、发动机报废
21	因制造原因润滑油路不通, 造成损坏的发动机

8.2 发动机更换程序及相关规定

8.2.1 终端市场发动机更换申请流程图

8.2.2 市场维修网点若认为故障发动机符合换机条件时, 应首先以传真方式向客户服务中心或售后服务人员 (未设客户服务中心的片区) 提出书面换机申请, 即【发动机退 / 换申请表】;

8.2.3 客户服务中心或售后服务人员接到书面申请后, 应认真落实故障现象, 并据 8.1 规定内容作出判定意见, 对同意更换的【发动机退 / 换申请表】传真或 KOA 流程申报回公司审批, 然后将签署了公司意见的【发动机退 / 换申请表】回传维修网点。维修网点在接到签字认可后的【发动机退 / 换申请表】后, 方可执行更换。要求整个审批过程 2 天完成, 流程节点为: 市场服务人员 → 发动机信息主管 → 顾客服务课课长进行审批后抄送服务分管领导, 市场服务人员收到审

批同意后的【发动机退/换申请表】在1天内通知维修网点。在相关人员出差时，可先通过电话处理，然后补办相应手续。对公司判定不符合换机条件而不同意换机的，维修网点应作维修处理。对客户服务中心能准确判定发动机符合退机条件的，客户服务中心可先为零售商办理发动机更换，后补办更换申请手续。

8.2.4 各维修网点换下的发动机必须保证不缺少任何零部件，必须按公司要求贴附故障卡，且故障卡内容应按公司要求规范填写，同时要有完好的包装（带泡沫垫），并将【发动机退/换申请表】装入包装箱内。因没有及时供应配件或发动机，为了用户正常使用而先进行维修处理后更换发动机的，更换新发动机后，应将故障件与旧发动机一同返回，做为鉴定依据，并在返回的【发动机退/换申请表】中描述清楚。

8.2.5 各维修网点将发动机退至经销商或技术服务中心时，相关人员将对该机再次进行鉴定，若鉴定情况与【发动机退/换申请表】不相符时，将不予清退。鉴定完后的发动机同样要求包装完好，并附有【发动机退/换申请表】清退回公司品技部三包组。

8.2.7 对因维修不当（多装、漏装、错装）造成的发动机误判，顾客服务课将对市场责任人进行处罚。

8.3 发动机配件三包鉴定标准（三包有效期为1年或10000公里）

序号	配件名称	故障现象	故障说明
1	气缸盖（包括左、右盖、头盖）	严重漏气、漏油	用紧固螺母或更换衬垫方法不能消除，严重漏油。更换
2	气门	烧蚀	气门关闭不严，经研磨不能排除，更换
3	气缸头	严重烧蚀	造成吻合不严，气门壁烧蚀，更换
4	气门锁夹	破碎	未引起其它后果，更换
5	气门弹簧	断裂	更换
6	气门摇臂	断裂、严重磨损	更换
7	气门挺杆	弯曲、磨损	影响发动机正常工作，更换
8	簧片阀	变形、断裂	更换
9	气缸盖螺栓	断裂	更换
10	止动板组件	损坏	更换
11	止动板弹簧	失效	造成漏气，更换
12	缸体	破裂、砂眼	严重裂纹使缸体报废，更换
		敲缸	查明原因，缸径超标，更换
13	曲轴箱	裂纹、砂眼、堵头漏油	明显漏油漏气，影响发动机正常使用（包括悬挂），曲轴箱轴承孔串位大的，更换
14	正时齿轮	损坏	断齿，齿面严重磨或剥落，更换
15	正时链条	断裂	更换
		严重磨损	明显松旷拉长，影响发动机正常使用，更换
16	左右曲轴箱盖	裂纹、砂眼	更换
17	活塞	破裂	破裂掉块，更换
		掉顶	顶破裂，更换
		烧顶	顶部严重烧蚀、更换
		卡死	因润滑不良或高温引起活塞在缸筒中卡死
		严重拉伤	更换

17 三包细则

序号	配件名称	故障现象	故障说明
18	活塞销	断裂、磨损	更换
19	连杆	断裂	未造成发动机报废, 更换
		变形	可见弯曲或扭曲, 更换
20	曲轴	断裂	轴颈或曲拐处断裂, 未引起其它后果, 更换
		烧蚀或咬死	曲轴严重烧蚀或咬死, 更换
		弯曲变形	明显弯曲变形, 造成主轴承报废, 更换
21	曲柄销	严重磨损	严重磨损, 不能正常使用, 更换曲轴总成
22	曲轴主轴承	烧蚀、卡死、磨损、移位、断裂	更换
23	正时齿(链)轮	严重磨损、断齿、移位	更换
24	凸轮轴凸轮	严重磨损	严重磨损, 更换
		烧蚀	表面严重烧蚀, 更换
		凸轮正时移位	凸轮轴间隙过小卡死或过大松旷的, 更换
25	凸轮轴轴承	严重磨损	严重磨损, 更换, 异响的, 更换
26	凸轮轴齿(链)轮	断齿	更换
		齿面严重磨损或剥落	影响正常使用, 更换
27	机油泵	卡死、失效	因齿轮泵轴咬死造成, 更换
28	磁电机充电线圈	损坏	不能发电、更换
29	磁电机线圈	串路、短路、断路	更换
30	点火线圈	损坏、击穿、漏电	停机或引起功率下降, 更换
31	转子	磁铁摇动、失磁	更换
32	离合器	失效	机件损坏引起不能切断或不能传递扭矩, 更换
33	离合器齿轮	严重磨损、断齿	更换
34	离合器传动链条	断裂	更换
		严重磨损	
35	变速鼓	磨损	轴断、更换
36	变速轴	断裂	更换
37	变速齿轮	磨损、破损	更换
38	变速拨叉	严重磨损变形或断裂	更换
39	输出链轮轴	断裂	更换
40	输出链轮	损坏、掉齿	更换
41	主副轴齿轮	损坏	严重磨损、剥落、段齿、更换
42	主副轴轴承	损坏	出承损坏或严重磨损, 更换
43	超越离合器	发响、打滑	更换
44	链盘	异常磨损	更换
45	启动电机	断路、短路、不工作	更换
46	启动齿	严重磨损	更换

序号	配件名称	故障现象	故障说明
47	启动齿（齿）	断裂、异常磨损	更换
48	左曲轴箱盖	螺钉紧固部位裂纹	更换
49	ECU	不能正常工作	更换

8.4 发动机部分易损件

发动机易损件在三包有效期出现质量故障后必须附带可追溯的用户信息和档案（用户电话、保修单位电话、购车发票复印件、客户档案卡复印件、《隆鑫摩托车保修记录表》第二联），经核实后真实有效的才给予三包，三包标准如下（三包有效期为 0 的易损件不三包）：

序号	零件名称	三包有效期	
1	整机密封垫（含缸垫）	0	
2	整机油封和密封圈	0	
3	整机螺栓、螺钉、螺母、垫圈等	0	
4	离合器摩擦片	0	
5	废气排放胶管	0	
6	活塞环	0	
7	正时链条	拉长（通过调节不能解决的）	1 年或行驶 6000 公里
		断裂	1 年或行驶 6000 公里
8	机油尺	0	
9	半圆键	0	
10	定位销	0	
11	火花塞（裂纹、断裂、烧蚀）	3 个月或 3000 公里	

9 整车三包更换标准

9.1 退、换车的相关规定及处理程序

9.1.1 自售出之日起 7 日内，因产品质量问题导致整车无法正常行驶，符合国家《摩托车商品修理更换退货实施细则》附件 2《摩托车性能故障表》中条件时，应按购买者需求实行退、换车或维修处理。

9.1.2 自售出之日起 7 日后 15 日内，因产品质量问题导致整车无法正常行驶，符合《摩托车商品修理更换退货实施细则》附件 2《摩托车性能故障表》中条件时，应按购买者需求实行换车或维修处理。

9.1.3 自售出之日起超过 15 日外，90 日内，因产品质量问题导致整车无法正常行驶，符合《摩托车商品修理更换退货实施细则》附件 2《摩托车性能故障表》中条件时，因同一故障经两次维修后（凭维修记录或证明），均不能正常使用，应购买者需求实行换车处理的，应向购买者以其使用天数乘以购车价格的 2‰收取折旧费。

9.2 全车零部件三包清退标准：

序号	配件名称	出现故障	不能更换标准	三包有效期
1	闸把座	开关有失灵的状况, 开和关不能到位或复位 开关按钮脱落 闸把座固定卡座断裂 闸把座内搭铁、断路 闸把座线路有不相符现象 差、缺件	因人为原因使闸把座表面损伤(例掉铬、脱漆等) 线路人为改动	1年或10000公里
2	座垫	正常使用而引起的皮革、底板破裂 正常使用而产生支架、锁扣等附件的损坏的 正常使用泡沫严重变形的	底板破裂、断裂、泡沫严重变形以外的	1年或10000公里
3	缓冲体	轴承脱落松动 壳体本体破裂	除断裂以外的	1年或10000公里
4	三锁	点火开关失灵 方向锁失灵 油箱锁失灵 线路烧蚀及破损严重的	退三锁时无钥匙 三锁有被铁器撬过的现象 电门锁线路被剪断 缺失零部件 非自身原因烧损	1年或10000公里
5	油箱	漏油严重(砂眼、裂纹、漏焊、断裂) 油箱盖处不平, 有溢油现象 尾部铁块有脱焊现象 表面烤漆有起层起泡、贴花有起层现象 标牌脱焊现象	表面有严重碰伤、擦花 有明显撞凹现象 油箱口处有被铁器撬过的现象 人为原因造成	1年或10000公里
6	轮辋总成	轮辋钢圈镀铬起层 铝轮有裂纹 轴承走外圆 辐条严重不能调节	因使用不当使轮辋变形, 碰划伤, 超负荷使用等 撬胎时严重损伤	1年或10000公里
7	制动器	因材质问题断裂 前轮毂转速器卡死不能转动 因轴承卡死不能更换轴承	因使用不当造成碰划伤、断裂等	1年或10000公里
9	仪表	指针不能复位, 在不能修复的情况下可退指针坏的表 有卡死及双重跳位 里程显示乱跳字	因人为因素造成的损坏 仪表配件缺少 3、进水, 碰划伤	1年或10000公里
10	反光镜	开箱反光镜是同一方向 新车有滑丝现象, 不能紧固 显示的影像失真	因人为因素造成的损坏的	1年或10000公里
11	点火线圈	不着火、断火、火弱、漏电	经测试能正常使用的不退	1年或10000公里
12	点火器	不能正常点火, 无高速或怠速, 内部短路	经测试能正常使用的不退	1年或10000公里

序号	配件名称	出现故障	不能更换标准	三包有效期
13	调压器	内部损坏, 不调压、无直流输出、供电电压过高	经测试能正常使用的不退	1 年或 10000 公里
14	闪光器	不通电 超过闪频范围	经测试能正常使用的不退	1 年或 10000 公里
15	继电器	励磁线圈断短路、吸合不到位、触点烧蚀、不能分开, 螺栓滑丝	经测试能正常使用的不退	1 年或 10000 公里
16	方向柱	方向柱有倾斜、滑牙现象 上三角板和方向柱孔不在同一线上	因人为因素或使用不当造成变形、断裂等损坏	1 年或 10000 公里
17	ABS	不能正常工作的	人为损坏的	1 年或 10000 公里
18	手把管	严重脱落、生锈层 手把两边高低不平 手把两边长短不一 弯道变形	因人为因素或使用不当造成损坏	1 年或 10000 公里
19	主站架	有断裂或脱焊现象 左右高低不平	因人为因素或使用不当造成损坏	1 年或 10000 公里
20	全车电缆	新车开箱线路有相碰短路现象 (属主电缆搭铁而非其它电器件、同时检查成型护套是否滑落) 使用过程中因搭铁造成短路断路、烧蚀	自行改动的	1 年或 10000 公里
21	灯具	灯座不能正常接触或有短路现象 大灯银瓦不能起到聚光作用 三包期内灯壳有因其质量原因引起的生锈或脱锈、脱铬	因人为因素或使用不当造成损坏	1 年或 10000 公里
22	平叉	左右不平 左右长短不齐 平叉套子松动, 平叉断裂、脱焊	因人为因素或使用不当造成损坏	1 年或 10000 公里
23	消声器	内芯断裂 尾部接头漏气焊接外断焊 排气管镀铬脱层	因人为因素造成的变形、脱铬	1 年或 10000 公里
24	车架	各焊接处脱焊, 漏焊、虚焊 大架各部有致脆因素造成断裂 大架扭曲变形	因人为因素或使用不当造成损坏	1 年或 10000 公里
25	前后脚踏	三包期内出现裂纹、断裂现象的 焊接不牢, 出现脱焊现象的	因人为因素或使用不当造成断裂	1 年或 10000 公里
26	后扶手	断裂 镀层脱落		1 年或 10000 公里
27	镀铬件等外观件	锈蚀	生锈超过三个月的;	3 个月或 3000 公里
		起皮、脱铬	镀铬起皮、脱铬超过 1 年的。	1 年或 10000 公里

序号	配件名称	出现故障	不能更换标准	三包有效期
28	前后减震	前减震油封严重漏油，更换油封 前减震叉管生锈现象，拉伤现象 后减震接头有脱焊现象，漏油现象 减震筒有砂眼、发响、无法排除太软，调节无效 后减震芯有断裂现象 后减震接头脱落、阻尼器卡死，弹簧严重弯曲变形	1、因人为因素或使用不当造成 2、可更换前减震油封解决漏油的，不能更换前减震总成 3、仅从感官判断的减震软或硬	1 年或 10000 公里
29	方向轴承	破裂、保持架破裂、方向卡滞不灵活		1 年或 10000 公里

9.4 整车部分易损件时限明细

整车易损件在三包有效期出现质量故障后必须附带可追溯的用户信息和档案（用户电话、保修单位电话、购车发票复印件、客户档案卡复印件、《恒舰摩托车保修记录表》第二联），经核实后真实有效的才给予三包。三包标准如下（三包有效期为 0 的易损件不三包）：

No	零件名称	三包有效期
1	烤漆外观覆盖件（锈蚀、变色、起层、龟裂）	3 个月或行驶 3000 公里
2	全车油封	3 个月或行驶 3000 公里
3	减震胶套、防尘罩脚蹬、手把胶套等橡胶件	0
4	全车轴承	3 个月或行驶 3000 公里
5	后视镜（脱落、滑丝、连接松动）	3 个月或行驶 3000 公里
6	灯泡	0
7	玻璃	0
8	刹车蹄片	0
9	内外胎（鼓包、起层、老化开裂）	3 个月或行驶 3000 公里
10	大小链盘断齿	6 个月或行驶 6000 公里
11	驱动链条断裂	6 个月或行驶 6000 公里
12	速度计齿轮（涡轮、涡杆）	3 个月或行驶 3000 公里
13	辐条	0
14	全车紧固标件	0
15	保险管	0
16	各种垫片、衬垫	0

不予三包范围

1. 超过规定期限或行驶里程者（以有效购车发票为准）；
2. 无有效“三包”卡者；
3. 涂改“三包”卡或与“三包”卡上产品型号、车架号、发动机号不符的车辆；
4. 非承担“三包”修理者修拆而造成损坏的；
5. 用户未按产品使用说明书的要求使用、维护、保养而造成摩托车损坏的。

6. 要求调换的三包零件不齐全或不完整的；
7. 自行改装或增加电器元件而造成损坏的；
8. 由于地震、台风、水灾等不可抗力因素造成损坏的；
9. 用户发现故障，未及时保修，造成保修期满的；
10. 所购车辆属降价处理的；
11. 正常磨损的。

车辆信息登记

用户姓名		购车日期		发票号	
联系电话					
常住地址					
购买车型		购车颜色		出厂日期	
VIN 号			发动机号		
经销商名称					
地址					
联系电话					
经销商或维修单位 (盖章)					
年 月 日					

日期	维修或保养项目	维修人员签章

HENGJIAN



HJ MOTOR202111.01

保修卡

用户姓名		购车日期		发票号	
联系电话					
常住地址					
购买车型		购车颜色		出厂日期	
VIN 号			发动机号		
经销商名称					
经销商地址					
联系电话					
联系电话					
用户签字					
					年 月 日
经销商或维保存单位 (盖章)					
					年 月 日
本联由售后服务部存档					

We thank and congratulate you for choosing Hengjian motorcycle. If you can insist on proper maintenance, it will bring you unlimited driving fun.

You should know your car as well as yourself, so that you can drive it safely and reliably in various driving environments. Please read the operation manual carefully before using the new car. It contains important information about driving style and equipment, as well as important suggestions that you must strictly follow. It also contains the information about vehicle maintenance and preventive measures you need to know. If you have any problems with your vehicle, the authorized dealer of Hengjian will be happy to provide you with advice and help.

We wish you every moment of riding a motorcycle.

The vehicle has reached the emission level required by GB 14622-2016 emission limits and measurement methods of pollutants from motorcycles (China Phase IV).

When purchasing our products, please voluntarily purchase passenger helmets conforming to gb811 standard at the dealer and wear them when riding.

We sincerely wish you a happy and safe driving!

Please fill in the following table with the relevant information of the vehicle:

VIN		Dealer seal
Engine No.		
Key No.		



HJ MOTOR202111.01

ABOUT THIS INSTRUCTION MANUAL

This operation manual contains important information, precautions, warnings and danger tips related to the use of the vehicle. Ensure that this instruction manual is kept on the vehicle at all times. This is especially important when lending or reselling vehicles to others. The illustrations in the book may be slightly different from the car in detail, but the principle described is the same. When you sell the car, please remember to deliver this manual to the other party. It is an important part of the whole car.

Hengjian has always maintained high safety and high quality standards because of the continuous in-depth research and design improvement of the designed products, which may cause the information provided in the operation manual to be inconsistent with your vehicle information. The authorized dealer of Hengjian will provide you with correct guidance at any time.

This manual is prepared in accordance with GB / t9969-2008 and GB / t19678-2005.

Chongqing HENGJIAN Motorcycle Co., Ltd. reserves the final right to interpret this manual.

The following warning symbols appear in many places in this manual. When you see the following warning symbols, please follow these safe driving and maintenance procedures.

⚠ WARNING This safety warning indicates a potential hazard that could result in serious injury or death.

⚠ DANGER This graphic indicates possible damage to the vehicle.

⚠ CAUTION This symbol indicates more effective and convenient driving points.

⚠ DANGER

This product is only suitable for people with similar vehicle driving license to drive the vehicle reasonably and carefully, and please pay attention to the following matters:

Please do not modify the vehicle.

Users should comply with local laws and regulations.

The modification of the device or electrical parts of this product will affect the noise, emission and vehicle performance.

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1 VEHICLE IDENTIFICATION

1.1 VEHICLE CODE (VIN)



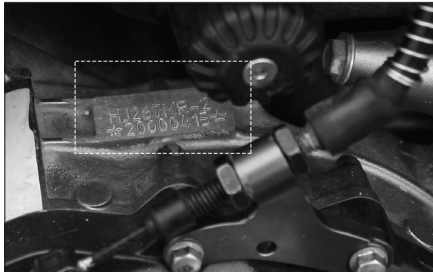
The VIN number is located on the right side of the vehicle riser.

1.2 VEHICLE NAMEPLATE



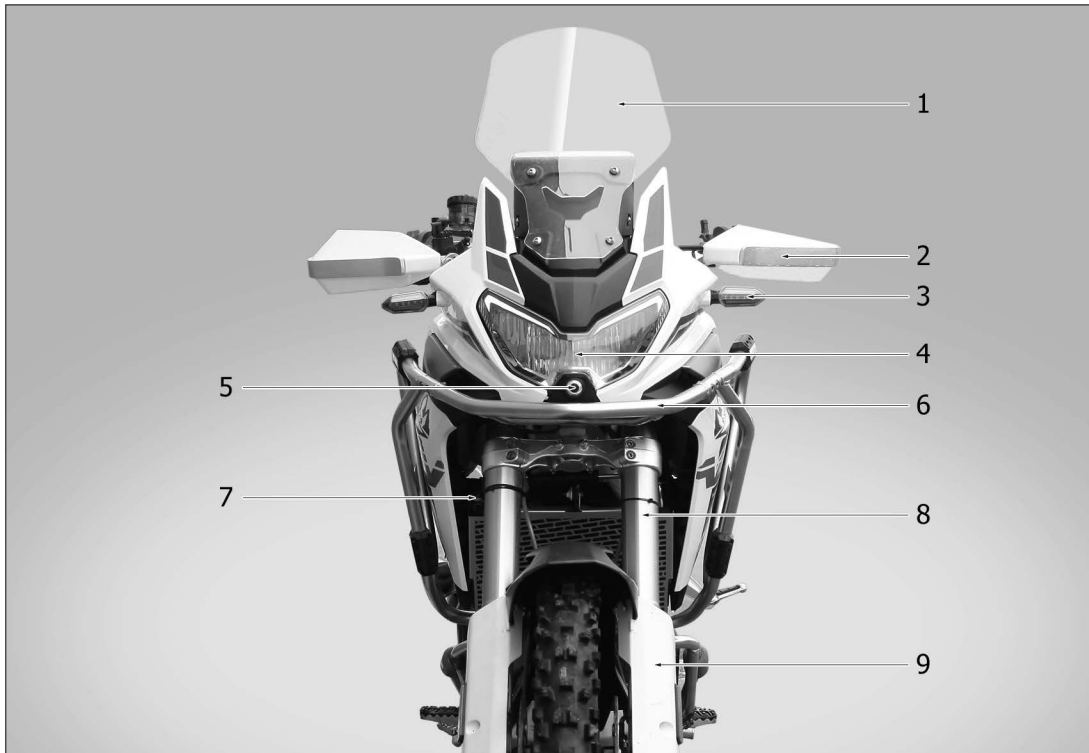
The vehicle name plate is located on the right side of the front end of the frame.

1.3 ENGINE NUMBER



The engine number is located on the top of the engine on the right side of the vehicle.

2.1 FRONT VIEW OF VEHICLE



1. Wind deflector
2. Brake handle guard
3. cornering lamp
4. Headlamp
5. Front camera head
6. Bumper*
7. Water tank filler
8. Front shock absorber
9. Front shock absorber trim panel

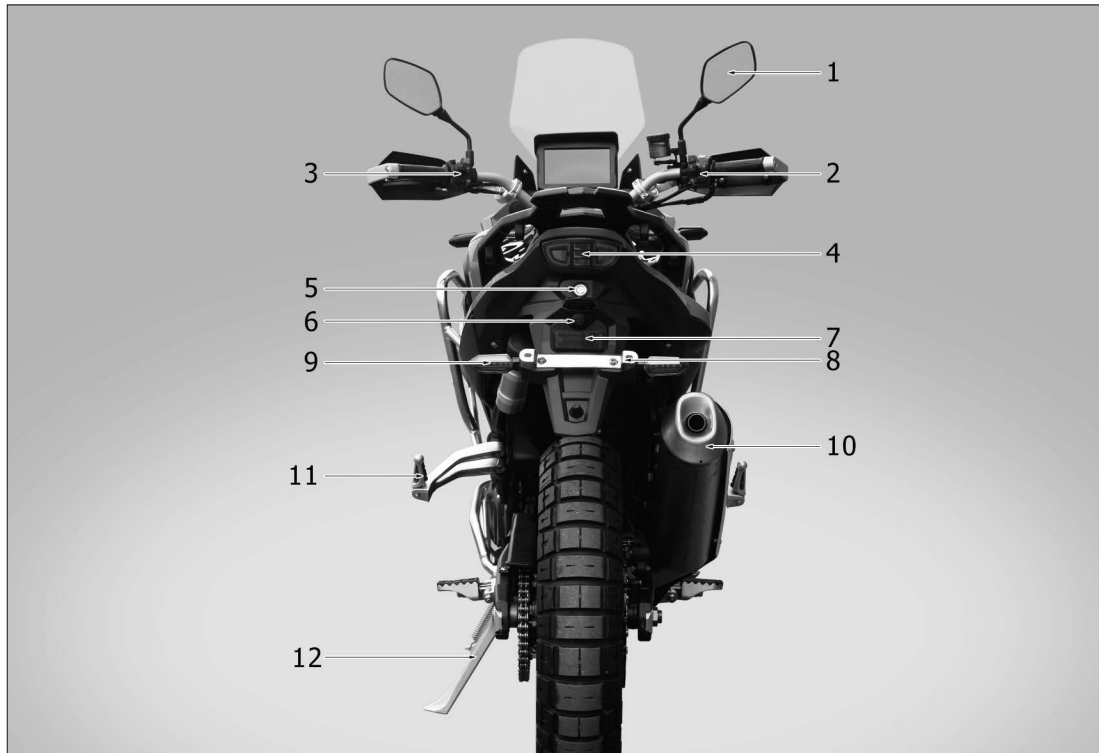
▲ NOTE

Bumper (6) and front shock absorber trim panel (9) are not standard for all vehicles.

Due to the continuous R & D and updating of the company's products, the appearance pictures quoted in the manual may be inconsistent with the appearance of the vehicle you purchased. Please take the actual appearance of the vehicle as the standard.

2 VEHICLE VIEW

2.2 REAR VIEW OF VEHICLE

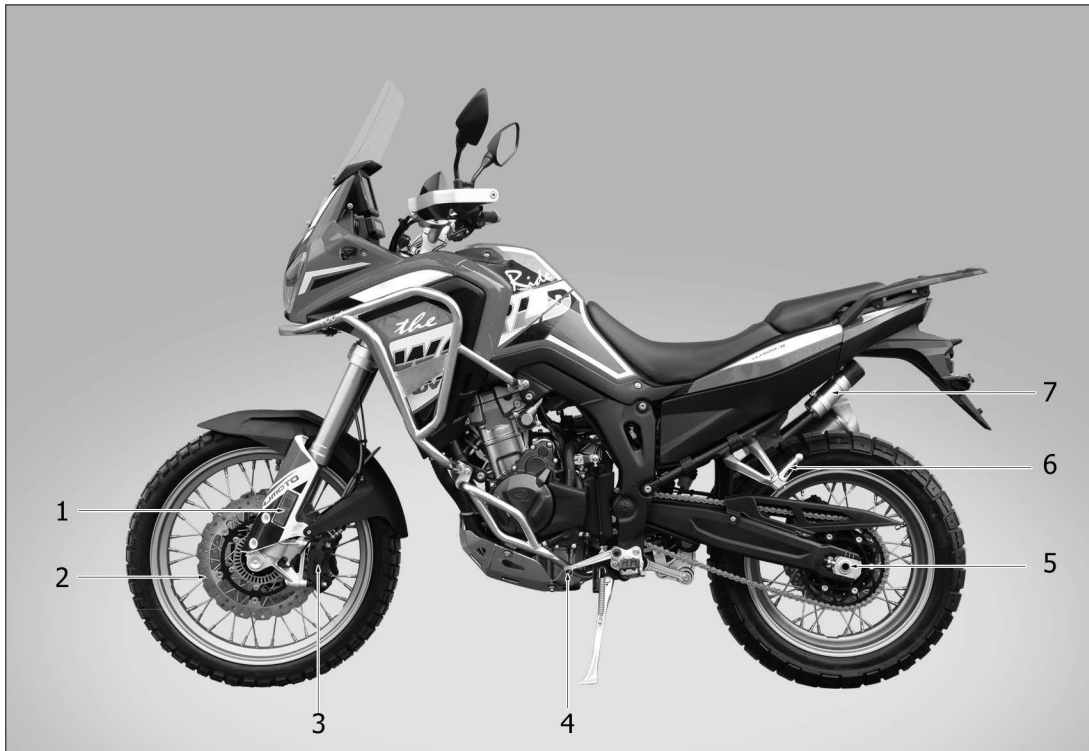


1. Rearview mirror
2. Right combined brake handle
3. Left combined brake handle
4. Tail light / stop light
5. Seat cushion lock
6. Rear camera
7. Rear reflector
8. License plate bracket
9. Rear turn signal lamp
10. Muffler
11. Rear footrest
12. Side support

▲ NOTE

Due to the continuous R & D and updating of the company's products, the appearance pictures quoted in the manual may be inconsistent with the appearance of the vehicle you purchased. Please take the actual appearance of the vehicle as the standard.

2.2 LEFT SIDE VIEW OF VEHICLE



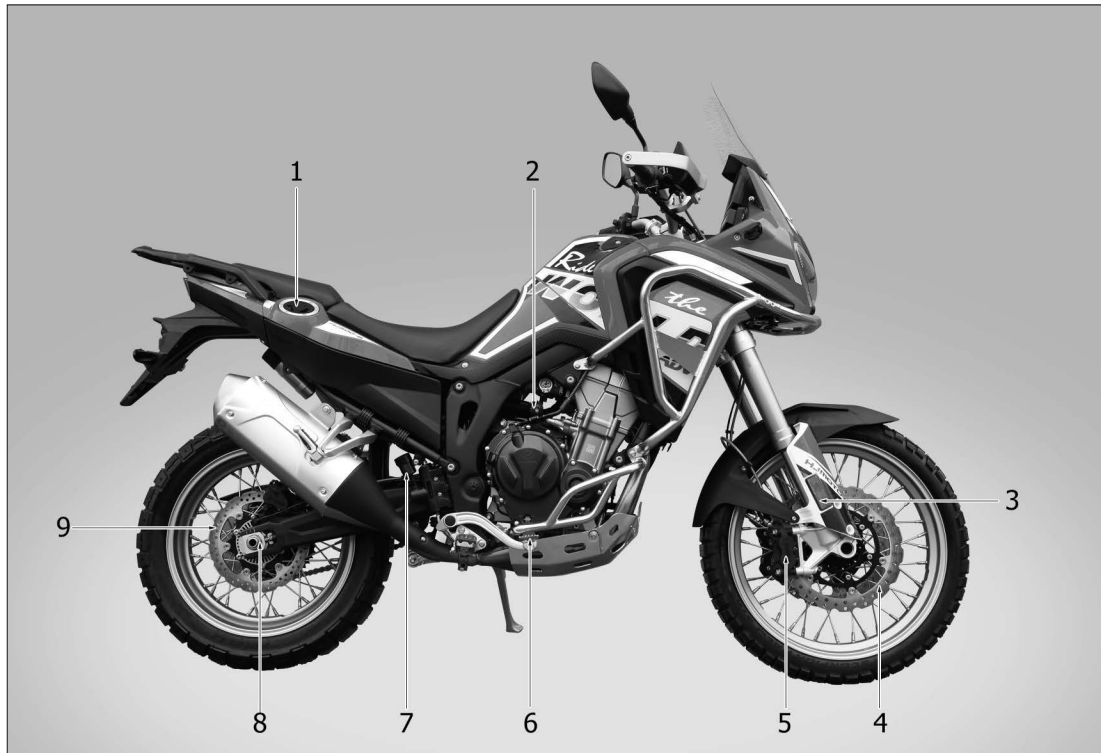
1. Reflector (left)
2. Front brake disc (left)
3. Front brake pump (left)
4. Shift arm
5. Chain slack adjuster (left)
6. Rear footrest
7. Rear shock absorber air pressure regulator

▲ NOTE

Due to the continuous R & D and updating of the company's products, the appearance pictures quoted in the manual may be inconsistent with the appearance of the vehicle you purchased. Please take the actual appearance of the vehicle as the standard.

2 VEHICLE VIEW

2.3 RIGHT SIDE VIEW OF VEHICLE

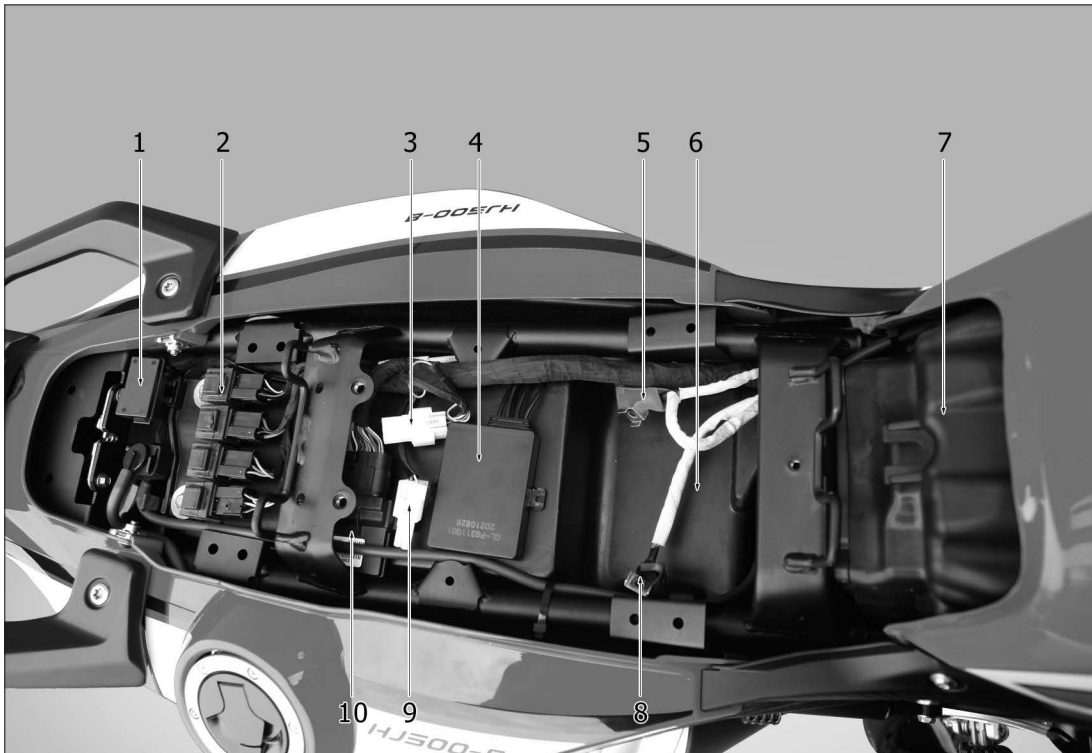


1. Auxiliary oil tank filler
2. Rear damping preload adjusting knob
3. Front reflector (right)
4. Front brake disc (right side)
5. Front brake pump (right side)
6. Rear brake pedal
7. Rear brake hydraulic cup
8. Chain adjuster (right)
9. Rear brake disc

▲ NOTE

Due to the continuous R & D and updating of the company's products, the appearance pictures quoted in the manual may be inconsistent with the appearance of the vehicle you purchased. Please take the actual appearance of the vehicle as the standard.

2.4 UNDER SEAT CUSHION



1. Whole car fuse box
2. Relay group
3. Fault detection interface
4. Dash cam host
5. Battery positive connector
6. Battery position
7. Air filter
8. Battery negative connector
9. ABS detection interface
10. ECU

▲ NOTE

Due to the continuous R & D and updating of the company's products, the appearance pictures quoted in the manual may be inconsistent with the appearance of the vehicle you purchased. Please take the actual appearance of the vehicle as the standard.

3 LOADING AND ATTACHMENT INFORMATION

▲ DANGER

Incorrect loading or improper modification of the vehicle, improper installation of accessories or improper maintenance may cause hidden dangers of driving.

Before driving, make sure the vehicle is not overloaded and follow these instructions.

Always use original Hengjian parts and our approved accessories.

If you choose non constant ship original parts, improper installation accessories and improper loading, the performance of the whole vehicle will be affected, and even the state of violating laws and regulations will be caused. Please note that you must be responsible for the safety of yourself and others.

The change of motorcycle weight has a great impact on the power performance of the whole vehicle, so you must accept the load weight, number of passengers and installation accessories specified by us.

▲ CAUTION

The parts and accessories we have configured for this series of vehicles have been specially designed and verified, so we strongly recommend you to use the original parts of Hengjian and install the accessories we approve.

▲ DANGER

Maximum load capacity: no more than 150kg (including driver, passenger, luggage and accessories).

1. Any driver and passenger must be very familiar with the particularity of motorcycle driving, because the passenger's seat position is inappropriate. If the center of gravity of the human body deviates too much from the central plane of the motorcycle during driving and moves suddenly during driving, it may affect the operation and control of the motorcycle; During driving, the passengers shall sit on the passenger seat as stably as possible and shall not affect the driver's manipulation.
2. Animals cannot be carried on motorcycles.
3. In order to reduce the impact on the center of gravity of the motorcycle, all luggage carried on the motorcycle must be as low as possible; The weight of luggage must also be evenly distributed on both sides of the motorcycle, and the luggage should not extend too long behind the motorcycle.
4. The baggage must be fixed on the motorcycle safely. Please make sure that the baggage cannot be moved before driving. When the motorcycle feels unstable during driving, stop immediately, recheck the firmness of the luggage, and readjust it if necessary.
5. Do not carry heavy or bulky luggage. Overload will inevitably affect handling and power performance.
6. Do not install accessories and carry luggage that reduce the performance of the motorcycle. Make sure that everything you do will not affect any lighting system, ground clearance, braking performance, roll angle, handling performance, tire compression stroke, front fork working stroke or other related motorcycle driving performance.
7. When the weight of the handlebar or front fork is increased, the steering performance will be affected and unsafe driving factors may be caused.
8. The deflector, windshield, backrest and other large parts will affect the stability and handling performance of the motorcycle. They not only increase the weight, but also reduce the power performance when the motorcycle is running. Lack of additional parts for design verification, which may cause unsafe factors after installation.
9. This vehicle cannot be modified into a side three wheeled motorcycle and cannot be used to tow a trailer or other vehicles. We will not be responsible for the damage or injury caused by the user's self modification.

5 IGNITION SWITCH



The ignition switch of the vehicle is located at the front end of the fuel tank and below the instrument. The ignition switch and direction lock are integrated.

This car is equipped with two keys, one of which should be kept properly for standby.

Ignition switch lock, direction lock, cushion lock and fuel tank lock all share the same key.

The ignition switch has three positions:

🔑 The position ignition circuit is connected, the ignition can be started at any time, and all functional circuits of the whole vehicle are connected. The key cannot be removed in this position.

🔒 If the ignition circuit is disconnected and the ignition cannot be started, the key can be pulled out at this position.

🔒 position is the locking steering handle. First turn the steering handle to the leftmost position, press the key at "🔒" position, and then turn counterclockwise to "🔑" position. In this position, the key can be pulled out, the ignition circuit is disconnected, and the ignition cannot be started.

⚠ CAUTION

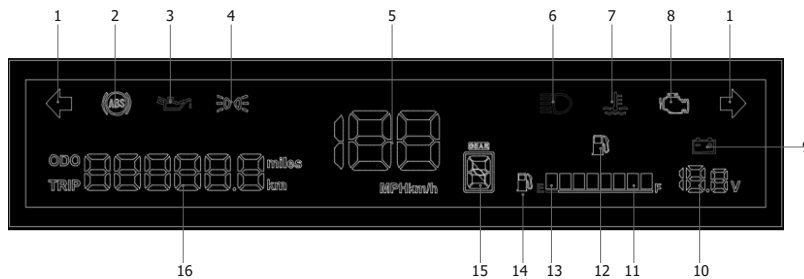
Although this series of vehicles are equipped with side support system, for parking stability, please try to turn the steering handle to the leftmost position instead of the rightmost position when locking the steering handle.

⚠ DANGER

Do not turn the ignition switch key to the "🔒" position during driving, otherwise the motorcycle will lose control.

6.1 SMALL METER

The instrument is located under the large instrument of the vehicle and adopts VA negative display LCD segment code screen. It has the advantages of high contrast, high brightness and wide temperature range. It has built-in functions such as ECU diagnosis, identification of main and auxiliary fuel tanks, display of various indicator lights and alarm lights. The displayed information is simple and clear, so that you can always understand the driving conditions of the vehicle when the large instrument is playing multimedia.



- | | |
|----------------------------------|--|
| 1. Direction indicator | 9. Battery alarm lamp |
| 2. ABS warning lamp | 10. Battery voltage display |
| 3. Oil alarm indicator | 11. Fuel indicator strip |
| 4. Light indicator | 12. Fuel volume warning lamp |
| 5. Current vehicle speed display | 13. Natural oil quantity red band |
| 6. high beam indicator | 14. Indication of main and auxiliary oil tanks |
| 7. Water temperature alarm lamp | 15. Gear display |
| 8. Engine fault warning lamp | 16. Total mileage display |

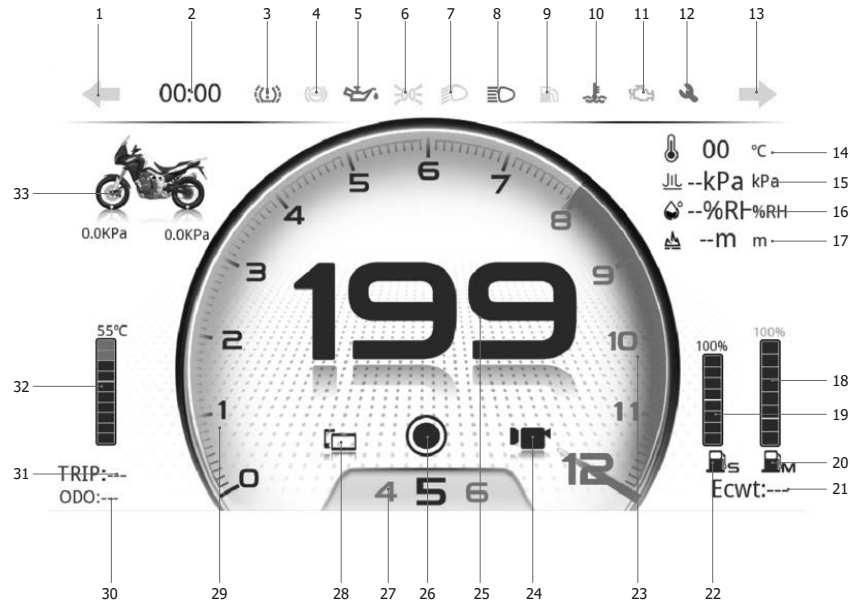
▲ WARNING

Please do not wash the instrument directly with high-pressure water flow. Please do not wipe the instrument with organic solvents such as gasoline and alcohol, otherwise it will cause local cracks or discoloration of the instrument.

6 METER AND INDICATORS

6.2 LARGE METER

The instrument is located above the small instrument and adopts full screen touch control. It has the characteristics of simple operation and convenient use. Built in tire pressure, air pressure and altitude monitoring, mobile phone interconnection and charging, front and rear high-definition tachograph modules, etc. to protect your safe travel.



1. Left turn indicator	12. Maintenance indicator	23. Tachometer red band
2. Time at that time	13. Right turn indicator	24. Tachograph Photo Icon
3. Low tire pressure warning lamp	14. Ambient temperature display	25. Current vehicle speed display
4. ABS indicator	15. Ambient atmospheric pressure display	26. Dash cam protection icon
5. Oil alarm lamp	16. Ambient humidity display	27. Gear display
6. Light indicator	17. Ambient altitude display	28. Mobile internet Icon
7. Low beam indicator	18. Oil quantity indication of main oil tank	29. Tachometer
8. high beam indicator	19. Oil quantity indication of auxiliary oil tank	30. Total mileage display
9. Fuel warning lamp	20. Main oil tank warning lamp	31. Short mileage display
10. Water temperature alarm lamp	21. Current fuel tank mileage display	32. Water temperature indication
11. Engine fault warning lamp	22. Auxiliary oil tank warning lamp	33. Tire pressure monitoring display

6.3 OPERATING INSTRUCTIONS FOR LARGE INSTRUMENTS



Figure 6.3.1



Figure 6.3.2

1. Short mileage reset: click the short mileage digital display area (31) with your finger and keep it for 5 seconds to reset the small mileage data value.
2. Click the mobile phone interconnection icon (28) to enter the mobile phone interconnection interface (Figure 6.3.1).

At this time, connect one end of the USB data cable to the mobile phone and the other end to USB2 at the lower left of the instrument 0 special data port (Figure 6.3.2), select to connect the mobile phone, and then turn on the mobile phone Bluetooth to realize the seamless connection between the mobile phone and the instrument

▲ WARNING

You need to download and install AutoLink software for the first time. Please follow the prompts.

When downloading AutoLink software, additional traffic charges may be incurred in non WiFi environments.

If the mobile phone is successfully connected with the instrument, the functions of the mobile phone can be operated in reverse through the instrument to realize the functions of the mobile phone such as online navigation and making calls. Due to wired connection, through USB2 0 data port, which can charge the mobile phone at the same time.

▲ NOTE

To quickly charge the mobile phone, just plug the USB data cable into the special charging interface.

6 METER AND INDICATORS

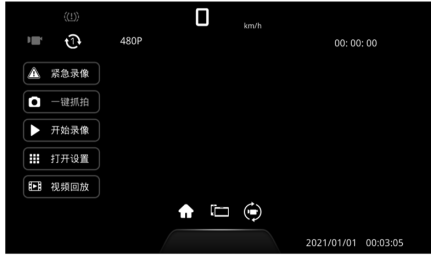




Figure 6.3.3





Figure 6.3.4

In the mobile phone connection interface (Figure 6.3.1), click the  icon on the left to return to the main interface of the instrument. Click the  icon on the right to enter the tachograph interface (Figure 6.3.3).

The left area in this interface (Figure 6.3.3) is the function button area. Click the corresponding button to enter the corresponding function. Click the "open setting" button to enter the setting interface (Figure 6.3.4).

In this interface (Figure 6.3.4), you can set whether WiFi is turned on, date and time clock, etc.

If you need to use your mobile phone to directly control the dash cam and download the video files of the dash cam, you need to install the "Ti Ma Xing" software on your mobile phone. Please refer to the "Titan star" software help document for details.

Click the  icon at the bottom left to return to the main interface of the instrument. Click the  icon at the bottom left to return to the tachograph interface.

CAUTION

During the WiFi connection between the mobile phone and the dash cam, the instrument will not be able to operate the recorder. The dash cam can be displayed and operated again only after exiting the WiFi connection.







Figure 6.3.5

3. Night mode.

When the vehicle turns on the light, the instrument automatically enters the night mode and automatically dims the brightness of the instrument. The night mode of the instrument is shown in Figure 6.3.5.



Turn the ignition switch to the "Q" position, the large instrument will display the startup animation and the small instrument will display the self-test, and the current vehicle state will be displayed after the self-test is completed.

The coolant temperature warning lamp  turns on during the self-test and turns off after the self-test.


The engine fault alarm lamp "", ABS fault alarm lamp " " and oil pressure alarm lamp " " are on and off after self inspection.

6.4 INDICATOR DESCRIPTION

Left turn indicator ""

When the steering switch of the brake assembly is pushed to the "" position on the left, the "" indicator lights of the large instrument and small instrument light up and flash at the same time.

▲ CAUTION

When the steering light of the vehicle is damaged or does not light up due to other reasons, the flashing frequency of the indicator "" will be faster than that in normal use, prompting to check the steering light fault.


Tire pressure warning lamp ""




When a tire has insufficient air pressure, the lamp lights up and flashes. When the warning light is on, please stop immediately to check the front and rear tire pressure.

▲ DANGER


Abnormal tire pressure will affect the handling performance of the vehicle and may lead to an accident.


ABS fault indicator ""

When the ABS system of the vehicle fails or is turned off, the indicator light "" on the large instrument and small instrument flashes or is always on.

When the ignition switch key is turned to the "" position, the indicator light "" is on, and the indicator light "" should be off immediately after the engine is started.




▲ WARNING

If the indicator light "" is always on or flashing after the engine is started, abnormal braking or even locking of wheels may occur if you continue to use the vehicle at this time. Please do not continue to drive the vehicle.

If the indicator light "" is always on or flashing during driving, please stop using the vehicle immediately and consult the authorized dealer of Hengjian as soon as possible.

Oil pressure indicator ""

When the oil pressure is lower than the normal range, the indicator light "" is on.

When the ignition switch key is turned to "" position, the indicator light "" will be on; After the vehicle completes the self-test, the indicator light "" shall go out immediately.

This warning light is lit to warn that the pressure of the lubrication system is too low. At this time, stop the engine immediately and shut down the engine.


The only way to check whether the lubricating oil level is correct is to confirm through the oil window.

6 METER AND INDICATORS

One reason why the oil warning signal light is on is that the oil level is too low. Check the engine oil level. If the oil level is too low, add oil.



If the engine oil warning light is always on when the engine oil level is determined to be correct, please do not drive any more, and please go to the professional repair point of accessories for troubleshooting as soon as possible, preferably at the dealer authorized by Hengjian.

▲ WARNING



The oil pressure indicator "" does not indicate the oil level, but indicates that the oil pressure is abnormal, so you should regularly check whether the oil level is normal.

The only way to check whether the oil level is normal is to check the position of the oil level in the oil window.



Lighting indicator ""


When the light switch of the right brake assembly is pushed to the "" position, the position light of the vehicle is on, and the "" indicator lights of the large instrument and small instrument are on at the same time.

Low beam indicator ""

When the light switch of the right brake assembly is pushed to the "" position, the position lamp and headlamp of the vehicle are on, and the "" indicators of the large instrument and small instrument are on at the same time.

High beam indicator ""

When the headlamp switch of the left brake assembly is pushed to the "" position, the indicator light "" will be on.

When the overtaking light button of the left brake handle assembly is pressed, the indicator light "" will be on until you release it.

▲ WARNING

Please do not use high beam on urban roads with illuminated roads.

Please turn off the high beam when following.

Please turn off the high beam when meeting.

Fuel filling precautions

Turn the ignition switch key clockwise to open the fuel tank cover. After filling the fuel, return the fuel tank cover to its original position, and firmly rotate the key counterclockwise to lock the fuel tank cover. At this time, the key can be removed. When washing the car, please do not flush the tank lock cover with a high-pressure water gun to prevent water from entering the tank.

Please use unleaded or low lead gasoline No. 92 or above.

The volume of the main oil tank is 17.2l.

The volume of auxiliary oil tank is 10.8l.

Coolant temperature indicator "🔥"

When the engine coolant temperature is too high, the indicator light "🔥" is on.

When the coolant temperature indicator "🔥" is on, stop at a safe place on the road and turn off the engine until the indicator goes out.

▲ NOTE

Insufficient fuel will cause the engine to fail to ignite. If the engine fails to ignite due to insufficient fuel, hastily continuing ignition may lead to irreparable losses.

Please do not use up the fuel in the tank and keep the oil level in the tank above the allowable minimum oil level.

▲ WARNING

The fuel will corrode the paint surface and make it fade and ugly. If fuel oil is attached to the painted surface, it shall be wiped clean immediately.

The fuel will expand at high temperature. Overfilling the fuel tank will lead to excessive internal pressure, resulting in tank deformation or fuel overflow.

▲ DANGER

Turn off the engine when filling fuel, and do not approach fireworks or heat sources.

If the coolant level is too low, replenish the coolant.

If the radiator fan does not work when the coolant temperature indicator "🔥" is on, please shut down the engine and go to the professional service point of accessories for troubleshooting as soon as possible.

If the coolant is insufficient or the radiator surface is seriously blocked by sediment, the following temporary treatment methods are recommended:

1. Reduce the load of the vehicle to reduce the generation of engine heat.
2. In case of traffic congestion, try to keep the engine at idle speed and do not turn the throttle to avoid the temperature rising due to the increase of speed.
3. If the above operation still can not effectively cool down, please shut down the engine and go to a nearby professional repair shop for troubleshooting as soon as possible.

▲ DANGER

If the coolant temperature indicator "🔥" is on, please check whether the radiator grid is blocked by sediment dust, which will greatly reduce the heat dissipation efficiency of the radiator.

Coolant temperature too high

This warning light is on to warn that the coolant temperature is too high. When the engine is overheated, if you continue to drive, the engine will be damaged. You must follow the following instructions:

1. If the coolant level is too low, replenish the coolant.

6 METER AND INDICATORS

2. If the radiator fan does not work, please go to the professional repair point of the accessory as soon as possible for troubleshooting, preferably at the dealer authorized by Hengjian.

Insufficient coolant

If possible, the engine can be cooled by reducing the load. In case of traffic congestion, try to keep the engine at idle speed. At the same time, do not turn the refueling handle to avoid causing the engine speed to rise and the engine temperature to continue to rise.

If the coolant temperature is too high frequently, please go to the professional repair point of accessories for troubleshooting as soon as possible, preferably at the dealer authorized by Hengjian.

▲ CAUTION

If the coolant temperature indicator "🌡️" is on, please check whether the radiator grid is blocked by sediment dust, which will greatly reduce the heat dissipation efficiency of the radiator.

Engine fault warning lamp "🔧"

When the electronic fuel injection system of the vehicle fails, the warning lamp "🔧" will be on.

When the ignition switch key is turned to "🔑" position, the indicator light "🔧" will be on during vehicle self-test; When the vehicle completes the self-test, the indicator light "🔧" goes out immediately.

▲ WARNING

If the indicator light "🔧" turns on or flashes after the vehicle completes the self-test, if the vehicle continues to be used at this time, the engine may not ignite normally, and the oil supply system may stop supplying oil. If the indicator light "🔧" is always on or flashing during driving, please stop immediately and consult the authorized dealer of Hengjian as soon as possible.

Maintenance light "🔧"

The maintenance indicator lights up every 5000km to remind you to carry out vehicle maintenance.

Right turn signal indicator "➡️"

When the steering switch of the brake assembly is pushed to the right, the indicator light "➡️" is on.

▲ WARNING

When the steering light of the vehicle is damaged or does not light up due to other reasons, the flashing frequency of the indicator "➡️" will be faster than that in normal use, prompting to check the steering light fault.

Main oil tank warning indicator "🛢️"

When the fuel in the main tank is insufficient, "🛢️" icon is red and flashes. At this time, please use the fuel tank switch on the right side of the instrument to switch to the auxiliary tank or add fuel.

When the main fuel tank is used, the fuel volume progress bar above the "🛢️" icon of the large instrument will display the percentage of fuel remaining in the current fuel tank in red numbers. At this time, the number "1" will be displayed on the right side of the "🛢️" icon of the small instrument to remind you that you are using the main oil tank. At the same time, the progress bar on the right side of the small instrument "🛢️" displays the remaining fuel quantity of the current main oil tank.

Press the oil tank switch down to use the auxiliary oil tank, and pop up to use the main oil tank.

Auxiliary oil tank warning indicator light "🛢️"

When the auxiliary fuel tank is short of fuel, "🛢️" icon is red and flashes. At this time, please use the fuel tank switch on the right side of the instrument to switch to the main fuel tank or add fuel.

When the auxiliary fuel tank is used, the fuel volume progress bar above the "🛢️" icon of the large instrument will display the percentage of remaining fuel in the current fuel tank in red numbers. At this time, the number "2" will be displayed on the right side of the "🛢️" icon of the small instrument to remind you that you are using the auxiliary oil tank. Meanwhile, the progress bar on the right side of the small instrument "🛢️" displays the remaining fuel quantity of the current auxiliary fuel tank.

The "ECWT" below the icons of the main and auxiliary fuel tanks displays the mileage of the current fuel tank. When the fuel of the main and auxiliary fuel tanks is almost exhausted, please add fuel immediately.

▲ WARNING

Please use unleaded or low lead gasoline No. 92 or above.

Engine speed display

Engine speed, unit: R / min (revolutions / minute) - the current number of revolutions per minute of the engine crankshaft.)

The speed red band indicates that the engine has reached the maximum speed. If it runs at this speed, it will inevitably shorten the service life of the engine.

Gear display

Displays the current gear position of the engine and "N" in neutral.

At the same time, the large instrument also displays the front and rear gears of the current gear in a lighter color.

Speed display

Displays the current driving speed of the vehicle.

6 METER AND INDICATORS

Coolant temperature bar

Displays the current coolant temperature range. If the coolant temperature remains in the red position, please stop immediately for inspection. If the coolant temperature indicator "⚠" is on at this time, please shut down the engine and go to the professional maintenance point of accessories for troubleshooting as soon as possible.

Real time tire pressure monitoring display

The current front and rear tire pressure (kPa) of the vehicle is displayed on the upper left of the large instrument. If the tire pressure is insufficient or the rapid drop of tire pressure is detected, the number will be red and flash to remind you to stop immediately for inspection.

Real time environmental data monitoring

The upper right of the large instrument displays real-time environmental data, including ambient temperature, atmospheric pressure, humidity and altitude data of the current position.

Mileage display

Both large and small instruments provide vehicle mileage display. Small instrument provides total mileage (ODO) display; The large instrument provides total mileage (ODO) and short mileage (trip) display.

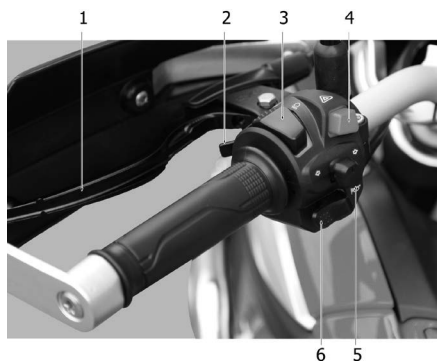
Tap (hold for 5 seconds) on the trip value of the large instrument, and the trip value will be cleared to zero, so as to count again.

⚠ WARNING

When operating the instrument on the large instrument, do not press it hard, just touch it gently, so as not to damage the screen.
When washing the car, do not wash the instrument with high-pressure water gun to avoid damaging the instrument.

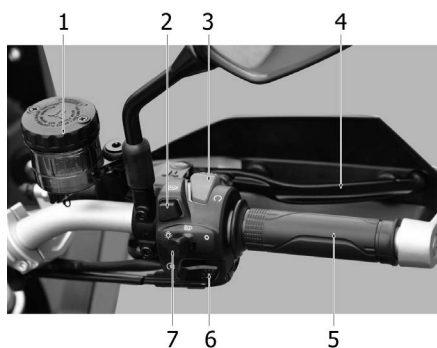
7 STEERING HANDLE COMBINATION SWITCH

7.1 LEFT BRAKE HANDLE COMBINATION SWITCH



1. Clutch handle
2. Overtaking light button
3. Headlamp dimmer switch
4. Vehicle warning light switch
5. Turn signal switch
6. Horn

7.2 RIGHT BRAKE HANDLE COMBINATION SWITCH



1. Front brake upper hydraulic oil cup
2. ABS on switch
3. Engine shutdown switch
4. Front brake handle
5. Throttle knob
6. The ignition switch
7. Light switch

7.3 LEFT AND RIGHT HANDLE CONTROL

ABS switch "ABS"

Press and hold the ABS switch "ABS" for 2 seconds to turn off the front and rear ABS of the motorcycle. At this time, the "ABS" indicator of the large and small instruments is always on; Press and hold again for 2 seconds to turn on the vehicle ABS.

After turning off the ignition switch, turn on the ignition key again. After the ABS self-test is completed, the front and rear wheels will be turned on again.

▲ WARNING

During driving, it is strongly recommended that you do not turn off the vehicle ABS system to avoid accidents or personal injury during driving. The ABS switch button is reserved for professional drivers only and is used for racing in the field.

Engine stop

When the flameout switch is pressed to "⊗", the engine starting circuit is disconnected and the engine cannot be started.

When the flameout switch is pressed to "⊙", the engine starting circuit is connected and the

7 STEERING HANDLE COMBINATION SWITCH

engine can start normally.

When the engine is started and the flameout switch is pressed to "☒", the engine will shut down immediately.

The flameout switch is the fastest and easiest way to turn off the engine.

▲ WARNING

If the flameout switch is pressed to "☒" during vehicle driving, the rear wheels may be suddenly locked and the vehicle may fall. Please do not operate the flameout switch button during driving.

Front brake handle

Hold the brake handle tightly, the front wheel brakes, and the rear brake lamp lights up at the same time.

Throttle knob

Rotate the handle to the driver's side to increase the throttle; Conversely, reduce the throttle.

Ignition switch "⚡"

When the "⚡" button is pressed, the engine start circuit is turned on and starts.

Light switch

The light switch has three positions, namely: "☀", "☁" and "●".

"●" position: all vehicle lights are off.

"☁" position: vehicle position lamp and tail lamp are on.

"☀" position: vehicle headlamp, position lamp and tail lamp are on.

▲ WARNING

The headlamp can still be on when the engine is not started. The light depends on the battery power supply. Please do not turn on the light for a long time when the engine is not started.

Overtaking light button "PASS"

When the "PASS" button is pressed, the high beam lamp will turn on and the "☀" high beam indicator lamp on the instrument will also turn on. After releasing the button, the high beam lamp will turn off and the "☀" high beam indicator lamp on the instrument will also turn off.

Headlamp dimmer switch

When the headlamp dimmer switch is pressed to "☀", the high beam lamp is on, and the high beam indicator lamp "☀" on the instrument is also on.

When the headlamp dimmer switch is pressed to "☁", the low beam lamp is on, and the high beam lamp and high beam indicator lamp "☀" are off.

▲ WARNING

Please do not use high beam on urban roads with illuminated roads. Please turn off the high beam when following. Please turn off the high beam when meeting.

7 STEERING HANDLE COMBINATION SWITCH

Turn signal switch

When the steering switch of the left brake assembly is pushed to the left "←", the front and rear steering lamps on the left side of the vehicle will be on at the same time, and the left steering indicator lamp "←" of the instrument will also be on and flash.

When the steering switch of the left brake assembly is pushed to "→" on the right side, the front and rear steering lamps on the right side of the vehicle will light up at the same time, and the right steering indicator lamp "→" of the instrument will also light up and flash.

When the steering switch of the left brake handle assembly is pressed inward, the steering light goes out and the steering indicator light on the instrument goes out at the same time.

▲ WARNING

When the turn signal on one side of the vehicle is damaged or the turn signal is not on due to other reasons, the flashing frequency of the "←" or "→" turn signal on the corresponding side of the instrument will be faster than that in normal use, prompting you to check whether the turn signal on the corresponding side is faulty.

Warning light button "▲"

When the "▲" button is pressed, all steering lamps and "←" and "→" steering indicators on the instrument light up and flash at the same time.

Please use warning lights to warn other vehicles in case of emergency stop or traffic accident or failure of your vehicle.

Horn button "🔊"

When the "🔊" button is pressed, the vehicle horn sounds.

▲ WARNING

Please do not sound in the no sound area.

8 ADJUSTMENT BEFORE DRIVING

8.1 ADJUSTMENT OF STEERING HANDLE



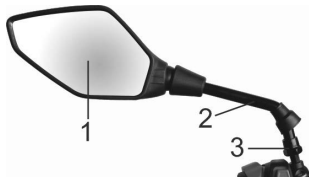
Adjust the steering handle to the most comfortable position according to your height and driving posture. If adjustment is required, please go to the dealer authorized by Hengjian as far as possible.

Loosen the four fastening bolts (1) and slightly turn the handle to a comfortable position; Lock the bolt (1).

▲ WARNING

After adjusting the steering handle, please repeatedly confirm whether the left and right hands interfere with the fuel tank when turning to the extreme left and right positions. If so, please re adjust until there is no interference, otherwise your control ability of the vehicle will be affected.

8.2 MIRROR ADJUSTMENT



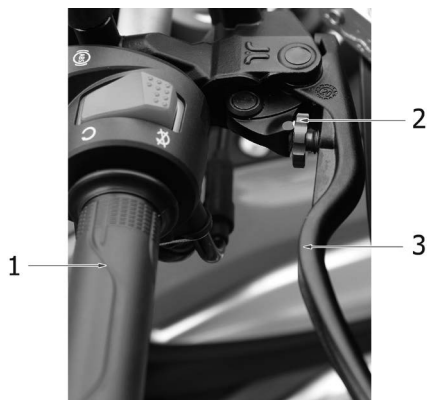
Adjust the rear-view mirror (1) to the correct position according to your height and driving posture.

Loosen the nut (3) with the vehicle tool to adjust the mirror rod (2) and determine the rear lock nut (3).

▲ WARNING

Adjusting the rearview mirror during the driving process will reduce your control of the vehicle. Do not adjust the rearview mirror during the driving process.

8.3 ADJUSTMENT OF FRONT BRAKE HANDLE



The adjustment knob (2) can adjust the distance between the handle (3) and the throttle control handle (1).

The distance can be adjusted in 5 gears. The method is as follows:

1. Please push the handle (3) forward during adjustment.
2. Turn the adjustment knob (2) to the position you want.

8 ADJUSTMENT BEFORE DRIVING

3. Release the push forward handle (3) and the adjustment is completed.

▲ WARNING

It is dangerous to adjust the front brake handle when driving the vehicle. Leaving the steering handle will reduce the control ability of the vehicle.

8.4 ADJUSTMENT OF SHIFT PEDAL



When the vehicle is running, the road conditions are changeable. The use of shift pedal can change the speed and traction capacity of the vehicle. The shift pedal lever can be adjusted to suit your driving habits.

1. First loosen and lock the two nuts (1) of the transmission connecting rod (2).
2. Then rotate the speed change connecting lever (2) to adjust the of the pedal (3) to the comfortable position.
3. Finally, lock the nut (1).

8.5 ADJUSTMENT OF REAR BRAKE PEDAL



The height of the rear brake pedal (3) shall be kept at an appropriate position. If the position is high, it is easy to step on in use, so that the brake friction plate and brake disc will often rub together, resulting in long-term heating and damage of the friction plate and brake disc.

If the free brake pedal travel is not correct, please adjust it according to the following method: the free brake pedal travel is 35mm to 35mm.

1. Loosen the locknut (2).
2. Turn the adjusting nut (1) clockwise or counterclockwise.
3. Clockwise rotation increases the pedal height, otherwise, it decreases.
4. Lock the lock nut (2) when the height of the brake pedal (3) is adjusted to the appropriate position.

8 ADJUSTMENT BEFORE DRIVING

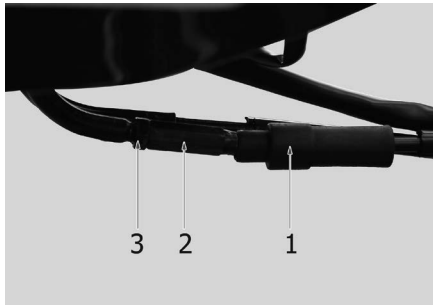
▲ CAUTION

After adjustment, press and release the brake pedal repeatedly and confirm that the pressure point can be clearly felt.

If you can't feel the pressure point clearly, please consult the authorized dealer of Hengjian for treatment.

If the adjustment is not correct, there will always be force between the friction plate and brake disc, which will damage the friction plate and brake disc.

8.6 ADJUSTMENT OF THROTTLE CONTROL HANDLE



The throttle control handle is used to control the speed of the engine. Turning to its own direction is acceleration, and vice versa.

The adjustment of throttle cable clearance is as follows:

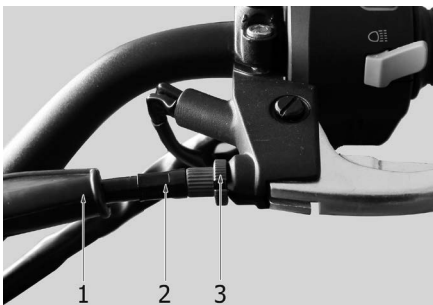
1. Remove the rubber sleeve (1).
2. Loosen the locknut (3).
3. Rotate the adjuster (2) to adjust the clearance of the throttle cable to 2 ~ 4mm.
4. Lock nut (3).
5. Reinstall the rubber sleeve (1).

▲ CAUTION

After the throttle cable clearance adjustment is completed, ensure that the throttle control handle can return automatically, and the idle speed should not increase.

After the throttle cable clearance is adjusted, turn the steering handle to the left and right limit positions respectively, and the idle speed shall not increase.

8.7 ADJUSTMENT OF CLUTCH HANDLE



When starting the engine, braking or shifting gear, hold the clutch handle to separate the clutch friction plate, so as to cut off the transmission power of the engine. The free stroke at the end of the clutch handle is between 5 ~ 8mm. If it is incorrect, please adjust it according to the following methods.

1. Remove the rubber sleeve (1).
2. Loosen the locknut (3).
3. Rotate the regulator (2) to ensure that the free stroke is between 5 ~ 8mm.
4. Lock nut (3).

8 ADJUSTMENT BEFORE DRIVING

5. Reinstall the rubber sleeve (1).

▲ CAUTION

The free stroke of the clutch handle is too large, which is easy to cause wear and failure of the clutch and shift mechanism.

8.8 ADJUSTMENT OF REAR SHOCK ABSORBER



Figure 8.8.1

The preload of the rear shock absorber is adjusted to adapt to different drivers, loads, driving modes and road environment. The spring preload of the vehicle is adjustable.

Spring preload adjustment

The pre pressure adjustment knob of the rear damping spring is located on the right side of the vehicle and below the rear of the fuel tank, as shown in figure 8.8.1.

1. Decrease the spring preload counterclockwise.
2. Increase the spring preload clockwise.

Damping compression damping adjustment

The rear shock absorption compression adjustment knob is located on the left side of the vehicle, on the lower left side of the seat cushion and above the rear shock absorption, as shown in figure 8.8.2. From top to bottom, the adjustment method is as follows:

1. Reduce compression damping counterclockwise.
2. Increase compression damping clockwise.



Figure 8.8.2

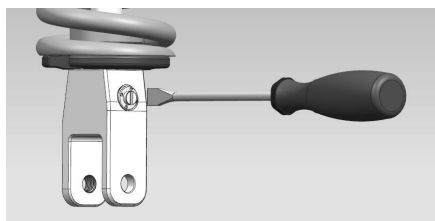


Figure 8.8.3

Restoring damping adjustment

The rear shock absorber recovery damping adjustment is located below the rear shock absorber, as shown in figure 8.8.3. It needs to be adjusted with a flat screwdriver.

1. Reduce the recovery damping counterclockwise.
2. Increase the recovery damping clockwise.

Improper adjustment of the preload of the rear shock absorber will affect the riding comfort.

▲ WARNING

Please do not blindly and arbitrarily adjust the preload of the rear shock absorber. Improper adjustment will weaken your control over the vehicle.

8 ADJUSTMENT BEFORE DRIVING

8.9 HEADLAMP LIGHT HEIGHT ADJUSTMENT



The headlamp shall maintain a reasonable height when the shock absorption is adapted to different loads. In order to ensure driving safety at night, the beam inclination of headlamp is adjusted to meet the requirements of different loads on the light height of the whole vehicle. The position of the adjuster is located behind the headlamp, as shown in the figure.

Rotate the light clockwise to turn it down, otherwise the light will turn it up. The running in period has a great impact on the service life and fuel consumption of the vehicle, so please read the manual carefully before use (in the initial 1000km journey, correct use of the vehicle will enable you to ensure the performance of the vehicle and have fun driving).

9.1 ENGINE RUNNING IN

Whether in hot or cold state, the engine shall have sufficient idle running time before starting to make the oil flow to all lubricating parts.

During running in, the engine speed at 0 ~ 500km shall not exceed 5000r / min, and the engine speed at 500 ~ 1000km shall not exceed 7000r / min.

During the running in period, the gear and speed of the engine should change frequently, and do not run continuously for a long time under a certain gear and speed.

During the running in period, when the engine is running at a fixed low speed (light load), the wear of parts will be intensified and the matching will be poor. Therefore, do not drive at an average speed with light load for a long time.

During running in, avoid sudden acceleration and braking except in case of emergency.

Do not drag the gear to drive, pay attention to downshifting in advance when decelerating, and keep the engine in a comfortable running state all the time.

Long distance riding shall be avoided during running in, so that the engine has enough rest time.

9.2 TYRE RUNNING IN

The surface of the new tire is smooth. If you ride at high speed or bend at this time, it is easy to be dangerous. In order to achieve the maximum grip of the tire, the running in process is very necessary.

In the first 200km, you can run in the tire through low-speed curve until all angles of the crown are completely run in.

The bulge on the tire crown has the risk of causing accidents. The way to avoid the bulge on the tire crown is tire running in.

9.3 RUNNING IN OF BRAKING SYSTEM

In the initial 500 km period, the new brake discs are still in their original state, so their optimal friction level is not reached. As compensation for the loss of braking efficiency, you can control the brake handle with greater force.

▲ CAUTION

When running in a new car, the engine speed should change from time to time. Do not drive continuously at a certain speed. The purpose is to properly stress the components to make them fully fit, but do not apply excessive load.

10.1 PRE DRIVING INSPECTION

If the vehicle is not inspected before driving, the probability of accident and vehicle damage will be increased. Please pay attention to the following items:

Steering system

- The steering handle turns flexibly without jamming.
- The steering column is not moving or loose.

Throttle

- The throttle cable clearance is correct.
- The throttle operates smoothly without jamming.

Brake

- The brake handle and brake pedal operate normally.
- The brake fluid is at the correct level of the brake oil cup.
- The medium pressure point is clear during braking.
- The brake disc and friction plate shall be free of water and oil stain.

Shock absorber

- Press to return smoothly.

Drive chain

- No excessive wear and damage.
- The relaxation is correct.

Tyre

- The tire pressure is correct.
- The tread depth is not excessively worn.
- The tread is free of cracks and wounds.

Engine oil

- The oil level is correct.

Cooling system

- The coolant position is correct.
- No coolant leakage.

Lighting

- The headlamp / front position lamp, tail lamp / brake lamp, turn signal lamp, headlamp and instrument lamp can be turned on normally.

Indicator light

- The high beam indicator, neutral indicator and steering indicator controlled by the

brake handle switch can indicate and work normally. The oil pressure alarm lamp, EFI fault indicator lamp, water temperature alarm lamp and oil level alarm lamp do not flash or normally light after the engine is started.

Horn

- orthergasia

Engine shutdown switch

- The function is normal.

Side support

- It can be retracted and played normally.

Rearview mirror

- On the whole vehicle, keep the vehicle vertical, and the objects within 10m at the rear end and 4m wide can be clearly seen from the rearview mirror.
- If not, please adjust the angle of the rearview mirror.

10.2 ENGINE START

Check whether the engine shutdown switch is in "Q" position.

Insert the key into the ignition switch and turn it to the "Q" position.

Confirm whether the engine is in the neutral position, and the neutral indicator "N" of the instrument will be on.

After the above conditions are met, hold the clutch with your left hand to ensure safety, and press the electric start button "⚡" with your right hand. At this time, it is not necessary to turn the throttle handle. Release the electric start button immediately after the engine is ignited.

Start the engine and allow the engine to idle until it is fully warmed up.

▲ WARNING

The colder the weather, the longer the engine needs to be preheated. Sufficient preheating can achieve better lubrication and reduce engine wear.

Please do not let the vehicle idle for a long time. Poor heat dissipation is likely to cause overheating of the engine and damage internal parts.

In cold environment, to facilitate start-up, the accelerator can be properly rotated while pressing the electric start button.

The lubrication of the engine only works when the engine is running, so do not let the engine drive the vehicle for a long distance when the engine is stopped.

After the engine is started, please check whether the indicator light of the instrument is abnormally on or flashing. If so, please shut down the engine immediately and check accordingly.

10 VEHICLE DRIVING

This series of vehicles are designed with interlocking switches of ignition circuit and starting circuit. The engine can only be started under the following conditions: the gear is in neutral, the ignition switch and flameout switch are in "O" open position, and hold the clutch handle to ensure safety.

▲ DANGER

The irritating tail gas emitted by motorcycles contains carbon monoxide, a colorless and odorless highly toxic gas. Do not idle the engine for a long time in poorly ventilated places or rooms without ventilation equipment, so as to avoid the risk of gas poisoning.

10.3 ROAD DRIVING

1. Get in the car from the left and sit across the seat cushion.
2. Stow the side support.
3. Adjust the vehicle to be vertical to the ground, straighten the steering handle and keep the wheels forward.
4. Hold the clutch.
5. Slowly turn the throttle control handle in the acceleration direction, and gently release the clutch handle. The clutch engages and the vehicle starts to start.
6. Helmet, gloves, riding boots and other special protective clothing and trousers must be worn before driving. These are also necessary for short distance cycling.
7. If you drive too fast, please note that the following factors will adversely affect your handling:
 - Improperly adjusted damping spring preload.
 - Loose clothes.
 - Overweight and unbalanced loads.
 - Even a small amount of alcohol or some drugs that have an effect on nerves will have an adverse impact on your perception and response. Never drive after drinking or taking drugs that have an effect on nerves.

▲ WARNING

Whether the engine is in high temperature after operation or before starting in cold state, the engine shall have sufficient idle running time. This allows oil to penetrate all important components.

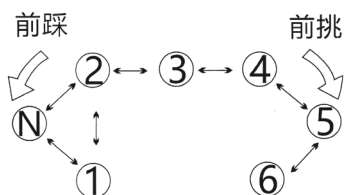
▲ CAUTION

The vehicle cannot start with the high gear of the transmission, which will cause engine damage. You must start with the first gear.

▲ DANGER

Before starting the vehicle, make sure that the side support is retracted to the upper limit position, otherwise the side support may touch the ground and fall when turning left.

10.4 VARIABLE SPEED DEVICE



The transmission enables the engine to run smoothly within the normal speed range.

The gear ratio is carefully designed to adapt to the characteristics of the engine. The driver should select the most suitable gear according to the driving conditions, and never use low gear and high speed.

In order to ensure smooth gear shifting and reduce the impact of rear wheels, with the use of clutch, reduce the vehicle speed or engine speed before changing to low gear; Increase vehicle speed or engine speed before changing high gear.

▲ WARNING

At any time, do not use the semi clutch method to control the speed. It is forbidden to hold the clutch and slide in any gear.

10.5 BRAKING AND PARKING

When braking, please return the oil first to reduce the speed, and use the front and rear brakes at the same time.

When the vehicle speed is low enough, shift into low gear and hold the clutch tightly.

Put the gear in neutral, brake and stop completely.

During front braking, because the body leans forward and the front shock absorber is pressed down, more weight of the whole vehicle will be instantly transferred to the front wheels, so the braking of the front wheels will be more reliable. Therefore, when braking is used, the braking force of the front braking is greater than that of the rear braking, making it easier for the vehicle to stop.

When you are driving on a mountain road, it is a potential danger to only use the rear brake. In extreme cases, the brake will overheat and cause serious damage.

Make rational use of the front and rear brakes and the deceleration function of the engine.

When driving in water or rain, the disc brake disc will get wet and reduce the braking performance. It is recommended to use it after drying.

10.6 FUEL

The fuel consumption parameters you see when you buy a vehicle are the data that the vehicle drives at a constant speed at a certain speed with the least fuel consumption, which is very different from your usual operation, so you will find that the actual fuel consumption is higher than the fuel consumption parameters during actual driving.

The following operations will help you reduce fuel consumption as much as possible while ensuring correct driving:

10 VEHICLE DRIVING

- Driving should be flexible and stable, reduce the frequency of sudden braking during driving, and restart and accelerate will consume more fuel.
- Driving in urban areas is unfavorable to fuel consumption. Frequent stop and go means that the engine starts frequently.
- The vehicles often drive at the economic speed. The economic speed of this series of vehicles is 90km / h, the speed is increased from 100km to 140km / h, and the fuel volume is increased by about 20%.
- Avoid short-distance vehicles. The fuel consumed by starting the vehicle in the first kilometer is more than twice that under normal conditions, because the engine has not reached the optimal operating temperature.
- Insufficient tire pressure will increase the rolling resistance of the wheels, thus increasing fuel consumption.
- Checking and maintaining your vehicle in strict accordance with the maintenance cycle is also an important part of saving fuel.

In addition to the above reasons, your driving skills will gradually improve with the increase of your mileage. In order to experience driving fun, you may often do some operations of rapid acceleration and deceleration, and the fuel consumption will be improved compared with your previous soft and smooth driving. In fact, this is caused by the change of your driving style.

10.7 FUEL EVAPORATION

When the fuel evaporation system fails, please contact Hengjian service shop for maintenance. Do not change the fuel evaporation system, otherwise it may not meet the requirements of fuel evaporation emission regulations.

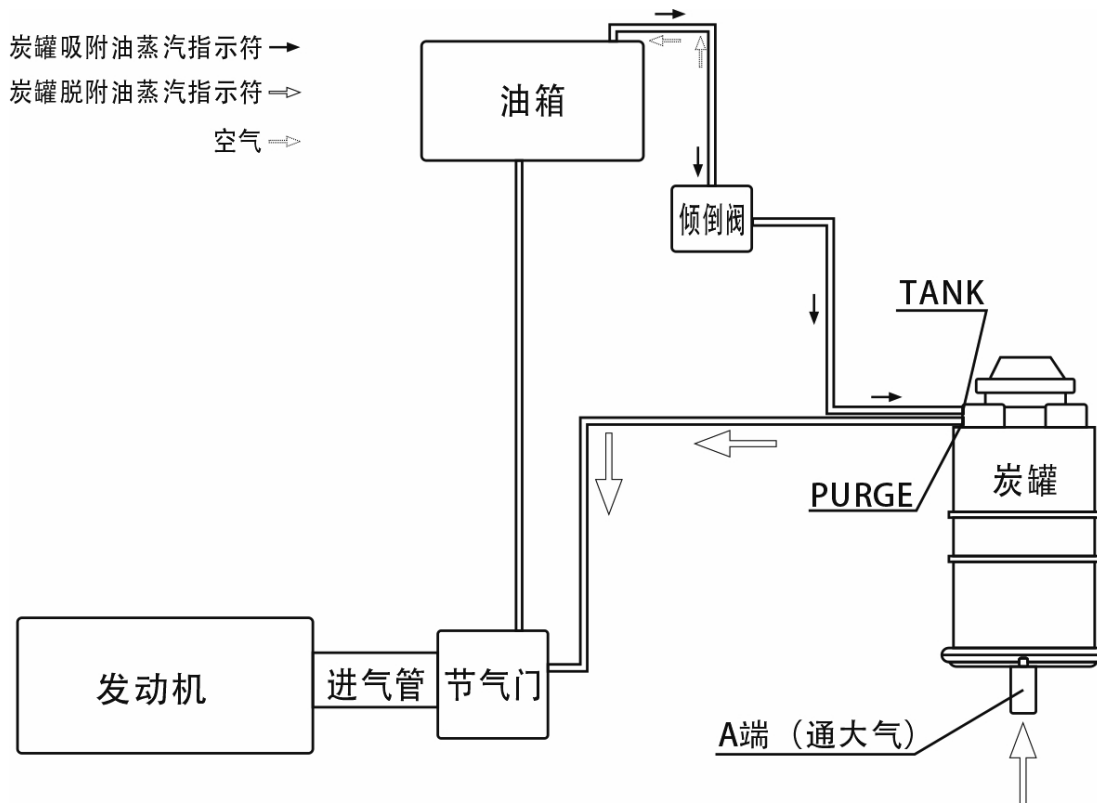
After disassembly and maintenance, check whether all pipelines are well connected and whether the pipeline joints are free of air leakage, blockage, etc; The rubber hose shall be free from extrusion, fracture, damage, etc.

The fuel vapor in the fuel tank is released into the carbon canister through the desorption pipe. When the engine stops working, the fuel vapor is adsorbed by the activated carbon in the carbon canister; When the engine is working, the fuel vapor in the carbon canister is released to the engine combustion chamber through the desorption pipe to participate in combustion, so as to prevent the fuel vapor from being directly discharged into the atmosphere and causing environmental pollution.

At the same time, the adsorption pipe also balances the air pressure in the fuel tank. When the air pressure in the fuel tank is lower than the external atmospheric pressure, the air pressure in the fuel tank can be supplemented through the carbon canister air pipe and adsorption pipe; Therefore, ensure that all pipelines are unobstructed, prevent blockage, extrusion and other phenomena, and ensure that the anti tilt valve is installed correctly, otherwise it may cause damage to the fuel pump or fuel tank, deformation, rupture or other parts.

The fuel evaporation control system works according to the following principles:

- After the gasoline in the fuel tank is heated, the gasoline evaporates, passes through the dump valve to the tank end of the carbon tank and is adsorbed by it.
- The fresh air is brought into the engine through the throttle pipe to the engine inlet through the purge.



燃油蒸发控制系统连接示意图

10.8 TERNARY CATALYST

The emission system of the vehicle is equipped with three-way catalyst, which can reduce the harmful components of the engine exhaust. Poor operation of the engine will damage the three-way catalyst, so follow the following behavior:

- Regular maintenance must be carried out according to the provisions in the manual.
- In case of unstable engine operation, please contact the authorized dealer of Hengjian as soon as possible.
- When the fuel alarm light is on, replenish fuel as soon as possible. Too low oil level will cause irregular fuel supply.
- Do not start the engine in the form of a cart or trailer.
- The ignition can only be switched off at idle speed.

▲ WARNING

The three-way catalyst is a very delicate component. Unleaded gasoline must be used. Leaded gasoline will damage the three-way catalyst and other important parts.

▲ DANGER

Do not park or drive on inflammables, such as hay, etc. the temperature of the three-way catalyst is very high, which will ignite these objects.

10.9 TROUBLESHOOTING

The troubleshooting content can help you find the cause of the general problem. Of course, this is only some basic judgment. If it still cannot be eliminated, please send the vehicle to the dealer authorized by Hengjian for treatment.

The engine will not start

- Neutral, the flameout switch is in the open position.
- In gear, the flameout switch is in the open position, the clutch is clenched, and the side support is retracted.
- Whether the fuel is sufficient.
- Whether the battery power is sufficient.

Difficult engine start

- Whether it is in a low temperature environment. If so, please bring a little throttle when starting.
- Battery power loss.
- If the oil is too sticky, judge whether the oil needs to be changed.

Engine weakness

- Check whether the filter element of air filter is clean.
- Check whether the fuel filter is blocked.
- Whether it is at high altitude.
- Incorrect maintenance and adjustment will damage your vehicle without finding the cause of the fault. Such damage cannot enjoy the three guarantees policy of Hengjian.
- If you are not sure of any correct operation, please contact the authorized dealer of Hengjian.

11.1 DAILY INSPECTION

After use under harsh conditions, after rain and after car washing, corresponding lubrication shall be carried out. In order to drive safely, maintaining good lubrication of working parts is a necessary operation to delay service life.

Daily inspection and lubrication points are as follows:

- Clutch handle shaft.
- Brake handle shaft.
- Brake pedal bearing.
- Side support shaft and side support spring hook.
- Main and auxiliary footrest shafts and return springs.
- Drive chain.

▲ WARNING

Except that the transmission chain needs to be lubricated with chain oil, it is recommended to lubricate other lubrication points with color lithium grease.

11.2 BATTERY MAINTENANCE

The battery is located under the seat cushion. The battery equipped with this series of models is a maintenance free battery. It is not necessary to regularly check the position and proportion of electrolyte during the service cycle, but the charging condition should be checked regularly.

▲ WARNING

If conditions permit, the battery shall be charged for 30 minutes before the first use, which can effectively prolong the service life of the battery.

Battery charging:

If the turbulent voltage of the battery is lower than 12.6V, it is recommended to charge the battery.

Use DC regulated power supply for charging.

The charging voltage is DC (14.5 ± 0.3) V, and the charging current does not exceed 1.2A; The charging time is 6 ~ 8 hours. Please do not exceed the maximum charging current.

Overcharging of the battery will shorten the service life of the battery. Please do not overcharge the battery.

Be sure to disconnect from the on-board circuit before charging the battery.

Regularly check whether the electrode and cable head of the battery are clean. If they have been corroded and oxidized, they shall be cleaned in time.

When the vehicle is not used for a long time, disconnect the negative pole of the battery.

If the vehicle is not used for more than one month, the battery shall be charged once a

11 INSPECTION AND MAINTENANCE

month. If the battery is not charged for a long time, it is easy to fail naturally.

A suitable charger shall be used to charge the storage battery and strictly follow the instructions of the charger.

Disconnect the battery from the charger immediately after it is fully charged.

The battery takes a long time to fill.

Please properly dispose of the waste battery or waste electrolyte, so as not to pollute the environment.

▲ WARNING

The battery will produce combustible hydrogen. Please keep the battery away from heat sources and sparks.
Wiping the battery with a dry cloth will cause static sparks, so please wipe it with a wet cloth to avoid static electricity.

Disassembly and assembly of battery:

Turn off the ignition key before removing the battery.

When removing the battery, remove the negative terminal first and then the positive terminal.

When installing the battery, install the positive terminal first and then the negative terminal.

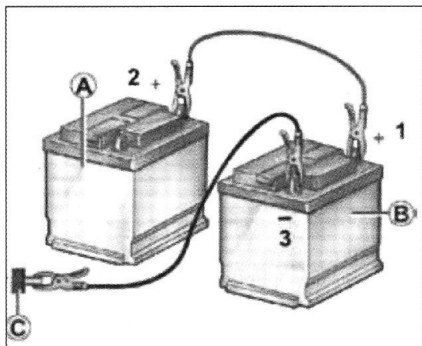
After each new installation of the battery, turn on the point switch and wait for 1 minute before starting the engine to initialize the electronic equipment.

When the vehicle is not used for a long time, the battery is not disconnected, and the electrical circuit is electronic products (such as clock) will gradually run out of power, which may lead to insufficient power when the battery needs to be used.

If the vehicle is not used for more than one month, disconnect the connecting wire of the battery or charge the battery before use.

▲ WARNING

Do not turn the battery upside down, which will cause the internal electrolyte to seep out of the vent hole.



Use of external power supply:

When the battery power cannot meet the engine starting, it can be started with the help of external power supply.

When starting with external power supply, special spring clamp with complete insulation at both ends shall be used to prevent short circuit and fire jumping caused by wire contact.

Battery a is the on-board power supply, and battery B is the external power supply.

The positive pole 1 of the external power supply B is connected to the positive pole 2 of the on-board

power supply a, and the negative pole of the external power supply is grounded on the metal body of the vehicle. Start the engine. If the start fails, wait a few minutes before starting the next time to protect the engine and battery.

Before removing the starting wire of the external power supply, let the engine run for a few minutes, then disconnect the negative wire and ground wire, and then disconnect the positive wire.

11.3 MAINTENANCE OF AIR FILTER



The air filter is located behind the fuel tank, below the seat cushion and in front of the battery. If the air filter is blocked by dust, it will increase the air inlet force, reduce the output power and increase the fuel consumption.

If you drive in dusty conditions, you should increase the frequency of cleaning and replacing the air filter.



Cleaning and replacement of air filter element:



- Remove the rear section of the muffler.
- Loosen the rear brake oil cup.
- Remove the rear seat cushion first, and then the front seat cushion.
- Remove the battery.
- Take out the fuse box and relay group.
- Release the ECU module.
- Remove the left and right side strips of the oil tank.
- Loosen the tailstock bolts and gently lower the tailstock.
- Remove 4 bolts from the air filter housing and pull it out as a whole.
- Remove the 4 bolts connecting the air filter element and remove the element.
- Carefully clean the air cleaner element with compressed air.
- The broken air filter or filter element will cause dust to enter the engine and damage the engine. If it is damaged, please replace it.
- If the air cleaner element is not installed in the correct position, dust will bypass the element and enter the engine, thus damaging the engine. Make sure that the filter element is installed in the correct position.

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▲ CAUTION

When loosening the tailstock, first fold down the left bolt, then step on the right flat fork with your left foot, stabilize the tailstock with your thigh, then remove the right bolt of the tailstock, and then gently put down the tailstock.

▲ WARNING

When cleaning the filter element, the gas should be blown in from the side with metal mesh. If blown in from the other side, the dust will remain in the gap of the filter element, resulting in greatly reduced cleaning effect.

11.4 ENGINE OIL MAINTENANCE

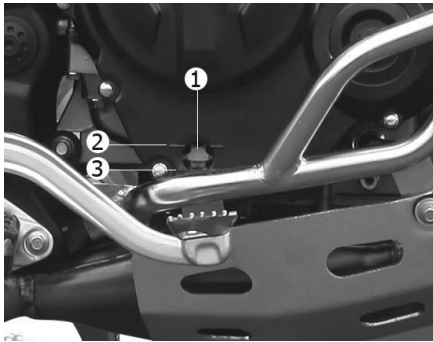


Figure 11.4.1

Engine oil can ensure the effective lubrication of parts in the engine. In addition, it can also help the engine cool down and play a cooling role. In addition, engine oil can also help the engine seal, so the maintenance of engine oil is very important.

Inspection of oil level:

The oil level inspection and oil injection are on the right side of the engine cover (as shown in figure 11.4.1).

Method for checking oil level:

- The engine is cold.
- Then make sure the body is vertical.
- Check the oil level from the oil sight glass.
- The correct oil level height of the oil should be between the upper scale 2 and the lower scale 3 of the oil observation window 1.

If the oil level is higher than the upper scale mark 2, some oil needs to be drained.

If the oil level is below the lower scale mark 3, a certain amount of oil needs to be injected.

Whether the oil is drained or injected, the oil level shall be rechecked according to the above oil level inspection method after the operation is completed.

Method of draining oil:

If the oil level is too high, use a socket wrench to remove the oil drain bolt (1) located under the left side of the engine (as shown in figure 11.4.2).

After draining an appropriate amount of engine oil, reset and lock the oil screw 1.

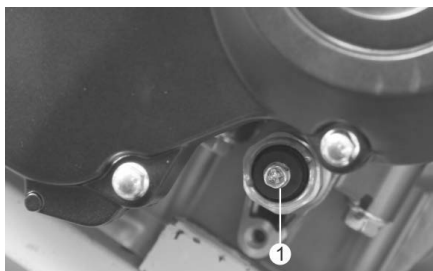


Figure 11.4.2

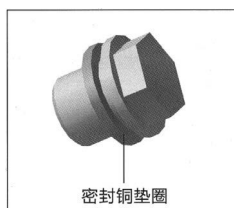


Figure 11.4.3

The engine will be damaged if the oil level is too low. Similarly, the engine will be damaged if the oil level is too high.

Make sure that the oil level is at the correct position.

Change engine oil:

Change the engine oil when each maintenance cycle is reached.

The oil change should be carried out when the engine is hot, so that the old oil can be drained more thoroughly.

Replacement method:

Use the auxiliary parking rack to keep the vehicle upright.

Unscrew the oil filler cap counterclockwise.

Place the oil collecting pan under the oil drain bolt, remove the oil drain bolt with a tool and drain the old engine oil.

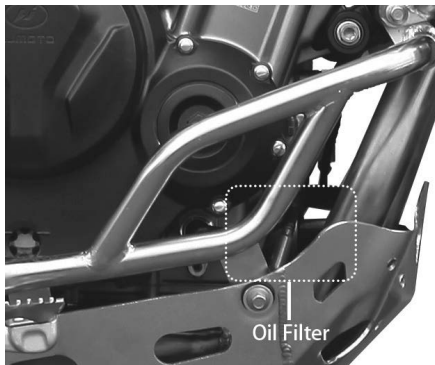
Lock the oil drain bolt before adding new oil.

▲ WARNING

When reinstalling the oil drain bolt, replace the oil drain bolt and sealing washer (as shown in figure 11.4.3). If the removed sealing washer is still used, it is easy to cause oil leakage at this position.

▲ DANGER

Although it will be more thorough to drain the old engine oil when the engine is hot, the engine oil and muffler will be hot and burn people, please wait until the drain bolt and muffler are basically cooled before draining the old engine oil.



Replace the oil filter element

- When each maintenance cycle is reached, replace the engine oil filter element.
- The oil filter element should be replaced when the engine oil is drained.
- Remove the lower shroud.
- Place a piece of oil absorbing paper or cotton cloth under the engine oil filter cover to prevent oil overflow from polluting the engine surface when the engine oil filter cover is removed.
- Remove the oil filter element at the front of the engine with the special tool.
- Take out the oil filter element and drain all the oil.
- Replace the oil filter element with a new one.
- Replace the oil filter element. It is very

11 INSPECTION AND MAINTENANCE

important to correctly position the O-ring on the oil filter element cover during installation, otherwise there will be leakage at this position.

▲ WARNING

Check the integrity of the O-ring of the oil filter element cover, and replace it if necessary. Replacing the wrong oil filter element will damage the engine. The pure parts provided by Hengjian must be used.

Fill in engine oil

Confirm that the oil filter element has been replaced and the oil filter element cover has been assembled.

The oil drain bolt and gasket have been replaced and assembled.

- First inject about 2.7L of new "Hengjian motorcycle engine oil" from the oil filler of the engine, then tighten the oil filler cover of the frame, run the engine at different speeds for 5 minutes, and check whether the disassembled parts have leakage during operation.
- Finally, check the height of the oil level.

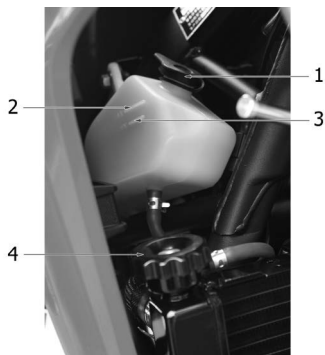
▲ NOTE

Oil grade: 10W/40-SG; Oil filling capacity: 2.7L.
It is recommended to replace 5W/30-sg engine oil in the riding environment below 10 °C.
Please dispose of the replaced old engine oil and engine oil filter element in an environmentally friendly manner.

▲ WARNING

Unqualified or inferior engine oil will damage the engine, damage parts of the EFI system, and shorten the service life of the catalyst in the spark plug and muffler, so please do not use it.

11.5 COOLANT MAINTENANCE AND INSPECTION



1. Auxiliary water tank filler
2. Upper limit of water level
3. Lower limit of water level
4. Main water tank filler

The coolant can take away and dissipate the heat of high-temperature parts of the engine, so as to keep the engine at normal working temperature.

Check the coolant level and replenish coolant at the expansion tank.

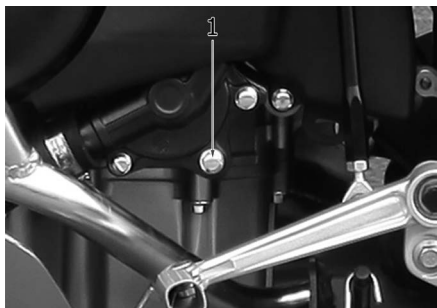
Engine off.

Since the coolant will expand due to heating, check that the coolant level should be in the cold state.

Keep the body vertical.

Observe the liquid level at the expansion water tank, and the liquid level shall be between lower (3) and upper (2).

If the coolant is below the lower line, add it from the



expansion tank port (1).

If the cooling liquid level is too high, the coolant will expand due to the temperature rise in use, so too high cooling liquid level will cause the coolant to eject from the overflow pipe. To avoid scalding, do not overfill the coolant.

If you replenish coolant frequently, it indicates that there is a fault in the cooling system. At this time, please go to the dealer authorized by Hengjian for treatment.

▲ WARNING

If it is found that the expansion tank has been completely dried out during use, please do not supplement the coolant without authorization, because it is necessary to eliminate the gas that may have entered the cooling system. At this time, please go to the authorized dealer of Hengjian for treatment.

Coolant replacement

Coolant discharge:

Use a special parking rack to keep the vehicle upright.

Place a drip pan under the engine.

Remove the drain bolt (1). Because the whole heat dissipation system is connected, all coolant will be discharged from the drain.

After the old coolant is completely drained, install the drain bolt (1) back.

Coolant filling:

The coolant needs to be added from the radiator and expansion tank.

Open the radiator water tank cover and observe whether the coolant is full. While filling, pinch the water inlet and outlet pipe to exhaust until it is full, and then cover the radiator water tank cover.

After covering the radiator tank cap, start the engine and run for half a minute so that the coolant can fill all places that need cooling.

Turn off the engine and load the radiator tank again after the engine is cooled. Check whether the coolant at this position is full. If it drops, return to the full state. Cover the radiator tank cover and repeat the process until it is full. If necessary, repeat several times.

Finally, remove the black rubber cover of the expansion tank and add coolant to the specified position between lower and upper.

When the air temperature is lower than that indicated on the coolant label, the coolant with higher antifreeze performance shall be selected.

The tested coolant of Hengjian is ethylene glycol coolant with freezing point of - 45 °C. You'd better go to the dealer authorized by Hengjian to buy or replace it.

11 INSPECTION AND MAINTENANCE

▲ WARNING

Do not fill the coolant system with tap water, otherwise the cooling system will be damaged.
Due to different formulations, different types of coolants cannot be mixed with each other.

▲ DANGER

In the process of filling coolant, when you open the radiator tank again after the engine, be sure to let the engine cool, otherwise the high-temperature liquid in the radiator will spray out as you open the radiator cap, resulting in scalding accidents.

11.6 BRAKE FLUID MAINTENANCE



Figure 11.6.1



Figure 11.6.2

Braking is an important medium for transmitting power in the hydraulic braking system. It needs reliable high and low temperature performance and good low temperature fluidity, as well as anti-corrosion protection performance. Please be sure to select the correct brake fluid.

The front wheel brake fluid cup is shown in figure 11.6.1, and the rear wheel brake fluid cup is shown in figure 11.6.2.

Inspection of brake fluid

If the brake fluid level in the brake oil cup is too low, air will enter the brake system, which will significantly reduce the braking efficiency. It is necessary to check the brake fluid level regularly.

Check the brake fluid level and replenish the brake fluid at the front and rear brake fluid cups.

The liquid level shall not exceed the maximum (max) mark. When the liquid level is lower than the minimum limit (min), please add it in time.

The brake note is corrosive to a certain extent. Splashing on the paint surface or plastic surface will corrode the surface of the object.

Model of brake fluid

When the brake fluid absorbs water or impurities, it shall be replaced or filtered in time, otherwise it will cause insufficient braking pressure and affect the braking effect. This is more important in humid areas.

If the brake fluid has been used continuously for more than 2 years, it is easy to deteriorate due to

long service time. It should be replaced in time.

The model of brake fluid is dot5. Please dispose of the replaced old brake fluid in an environmentally friendly manner.

▲ WARNING

When it is necessary to replenish the brake fluid, opening the brake oil cup cover without authorization may cause the entry of gas and moisture, which will greatly reduce or invalidate the braking performance. At this time, please go to the authorized dealer of Hengjian for replenishment or replacement.

▲ DANGER

Do not mix brake fluids of different types and brands. Due to different formulations, the performance index of mixed brake fluid will be reduced.

11.7 DRIVE CHAIN

The transmission chain of this series of vehicles is an oil sealed chain. There is a special O-ring at the chain pin. The sealing ring is sealed with grease. The chain is of the type of non open pot ring, so special tools are required to replace the chain. If necessary, please contact the authorized dealer of Hengjian.

Check or adjust the transmission chain before driving every day. Please confirm whether there are the following problems:

- Loose chain pin
- Chain plate rusted
- Inflexible chain link rotation

If any of the above problems are found in the chain, please contact the authorized dealer of HengBan for treatment.

The wear of the transmission chain will also cause the wear of the sprocket. Please confirm whether there are the following problems:

- Is the sprocket excessively worn
- Are the teeth broken or damaged
- If any of the above problems are found on the sprocket, please contact the authorized dealer of Hengjian for treatment. Cleaning and lubrication of drive chain.

Dirt and dust on the chain will affect the service life of the chain. Please clean and lubricate it regularly. Because there are O-rings and grease at the chain pin, incorrect cleaning and lubrication will damage the O-rings and grease, which will accelerate the reduction of the service life of the chain.

Do not use a wire brush to clean the chain.

After cleaning, wipe off water or neutral detergent immediately and dry the chain for lubrication.

Use the special chain oil for oil seal chain to evenly coat the inner and outer chain plates of

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the chain. After completion, wipe off the excess chain oil.

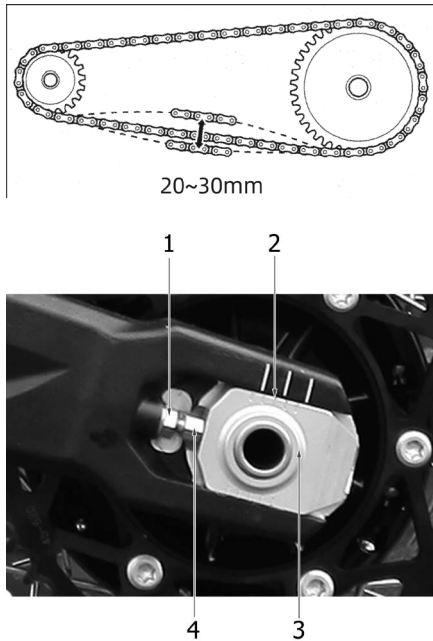
Some chain lubricants contain solvents and additives that can damage the sealing ring. Please use special oil seal chain lubricant.

▲ WARNING

Please clean the chain with water or neutral detergent.

Do not use volatile solvents to clean the chain, such as paint thinner, gasoline, etc.

Do not use a high-pressure cleaner to clean the chain.



Adjustment of drive chain

Too loose or too tight drive chain is incorrect.

If the chain looses too much, it is easy to cause the chain to separate from the sprocket and cause accidents.

Too tight chain will not only affect the service life of the chain, but also increase the transmission resistance.

The correct chain looseness is shown in the figure. If the looseness of your vehicle's transmission chain cannot meet the above requirements, it needs to be adjusted as follows:

Use a special parking rack to keep the vehicle upright.

Loosen the rear axle nut (3) and adjusting nut (1), and adjust the bolt (2) according to the looseness of the chain.

If the chain looseness is too large, rotate the bolt counterclockwise; Conversely, if the chain looseness is too small, rotate the bolt clockwise to make the adjustment top block consistent with the scale (2) on the flat fork.

Lock the rear axle nut (3) and the left and right adjusting nuts (1)

Specification and model of transmission chain:

18-21:520 chain disk, 114 chains.

17-19:520 chain disk, 112 chains.

All are oil seal chains without open lock ring.

Locking torque of adjusting nut: 14nm.

Locking torque of rear axle nut: 95nm.

11.8 TIRE MAINTENANCE

Tires connect the vehicle and the ground, which is very important. Incorrect tire condition and tire specification greatly affect vehicle performance.

Tire pressure

Abnormal tire pressure will reduce the service life of tires.

Low tire pressure will make it difficult to turn and aggravate tire wear.

Too high tire pressure will reduce the contact area between the tire and the ground, and the vehicle is easy to slip and lose control.

At high speed, the valve core of the tire tends to open due to the action of centrifugal force. In order to prevent sudden air leakage, a metal lined rubber cover is equipped and installed on the valve core by threaded connection.

Tire inflation pressure is directly proportional to tire temperature. Therefore, the tire inflation pressure can be corrected in the cold state only when the tire temperature is basically consistent with the ambient temperature.

Under normal temperature, please check the tire pressure according to the following table data:

	Ride alone	Double riding
Front wheel	220Kpa	250Kpa
Rear wheel	220Kpa	250Kpa

▲ WARNING

Abnormal tire pressure will affect the handling performance of the vehicle and may lead to an accident.

Overloading can lead to tire failure and loss of control of the vehicle.

Check the tire pressure at least once a month.



Inspection of tire wear limit

The tires have wear marks on the main tread.

When the tire is worn to the mark, it can no longer be used.

There is a wear mark near the twi mark on the edge of the tire. The wear mark is located in the drainage groove of the tire crown and is in a convex hull state. When the convex hull is worn, it indicates that the wear exceeds the mark. Please replace the tire as soon as possible.

▲ WARNING

Excessively worn tires can puncture the tires and cause the vehicle to lose control.

When the tire pattern of the vehicle is worn to the minimum allowable depth, its operability and grip will be greatly weakened.

11 INSPECTION AND MAINTENANCE

Tire repair

To repair the small hole of wheel fertilizer without inner tube, remove the tire and patch it inside the tire. Do not use external repair methods, because the centrifugal force of the tire will loosen the repaired place when driving at high speed.

The vehicle speed shall not exceed 80 km / h within 24 hours after repairing the wheel.

If the side of the tire is damaged, or the damaged part of the tire is greater than 6mm, the tire cannot be repaired.

Check the tire. If there are many obvious damages on the tire, such as damage, scratch or wear to the limit, the tire must be replaced.

Tire replacement

When changing tires, do not use tires with different brands, models, patterns and different degrees of newness on the same vehicle.

The vehicle after tire replacement needs dynamic balance inspection and correction. If the dynamic balance is poor, the operability of the vehicle will be reduced and the tire wear will be uneven.

The side of the tire marked with the rolling direction is marked with an arrow. The tire must be used according to the specified rotation direction, so as to prevent water skiing, improve adhesion, reduce driving noise and prolong wear life.

The tires of the specified model have been strictly tested and verified, and can meet the use requirements of most roads. Other untested tires cannot guarantee their adaptability or safety.

Tubeless tire is sealed at the contact part between rim and tire lip.

In order to avoid air leakage, disassembly and installation of tubeless tires require special tools and special tire disassembly and assembly machines.

Please let the dealer authorized by Hengjian handle the tire replacement. They have the necessary tools and experience.

11.9 INSURANCE FILM



Before replacing the fuse, you must understand the cause of the fault and eliminate the fault.

The safety plate of this series of models is located under the seat cushion.

The specifications and uses of all insurance sheets are marked.

Vehicle system power fuse 30A: control the power supply of EFI system, ABS system, other electrical loads (instruments, tools, etc.) of the vehicle and the charging circuit of battery. One spare fuse 30A (green).

11 INSPECTION AND MAINTENANCE

ABS system motor power fuse 25A: controls the power supply of ABS anti lock system motor. Spare fuse: one 10A (white).

Signal system power fuse 10A: power supply for control instruments, lamps, horns, flashers, side support flameout switches, relays, etc. Spare fuse: one 10A (red, inside the electrical box).

EFI system power fuse 15A: controls the power supply of EFI system ECU, oxidation sensor, ECU diagnostic interface, carbon canister solenoid valve, fuel injector, ignition coil and other EFI systems. Spare fuse: two 15A (blue, inside the electrical box).

Fan power fuse 10A: controls the power supply of the cooling fan. Spare fuse: one 10A (red, inside the electrical box).

Fuel pump power fuse 10A: controls the power supply of the fuel pump. Spare fuse: one 10A (red, inside the electrical box).

After checking or replacing the fuse, the cover of the fuse box must be covered, otherwise it is easy to cause serious electrical failure in rainy days or after washing the car with water.

▲ WARNING

If the fuse often blows in a short time, it indicates that the electrical system is faulty. Please contact the authorized dealer of Hengjian immediately.

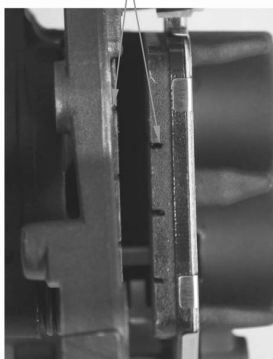
▲ DANGER

Please select the specified safety sheet, and do not use substitutes, such as aluminum foil or iron wire.

Please do not use other safety sheets or direct lap joints other than the specified specifications, otherwise it will have a serious impact on the electrical system, and even cause fire or burn down the vehicle.

11.10 BRAKE FRICTION PLATE

前制动摩擦片磨损极限位置



The wear of brake friction plates exceeding the allowable minimum thickness will lead to the decline of braking efficiency and, in some cases, the damage of the system. For the reliability of the braking system, the wear of the brake friction plate shall not exceed the allowable minimum thickness.

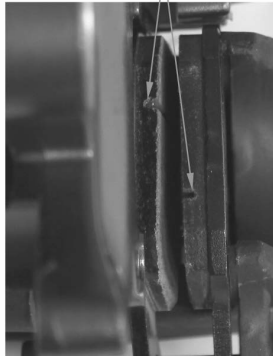
Replacement of brake friction plate

The correct way to replace the friction plate requires the removal of the front and rear wheels, so please refer to the authorized dealer of Hengjian for such work.

Both front and rear brake friction plates shall be replaced in a whole pair. If only one of the pair is replaced, it will lead to braking imbalance and accidents.

11 INSPECTION AND MAINTENANCE

后制动摩擦片磨损极限位置



After the friction plate is removed, be careful not to operate the brake handle or brake pedal, otherwise it will be difficult to reset the brake piston and there is a risk of fluid leakage.

During the process of replacing the friction plate, do not allow oil or other dirt to adhere to the friction plate and disc brake disc. If there is any, please clean it up, otherwise the braking slip efficiency will be reduced.

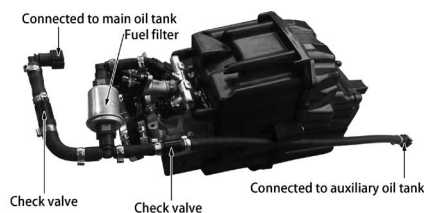
▲ WARNING

The front brake of this series of models is a double disc brake system. When replacing the friction plate, it is best to replace both sides at the same time to ensure the braking effect and driving safety.

▲ DANGER

After replacing the new friction plate, please repeatedly confirm the brake handle and brake pedal, and confirm whether the friction plate effectively compresses the brake disc. At the same time, confirm whether the free stroke of the brake handle and brake pedal is correct.

11.11 REPLACE THE FUEL FILTER



The function of the fuel filter is to filter the impurities in the fuel so that they do not enter the fuel injector.

The nozzle of the fuel injector is processed very finely and is easy to be blocked by impurities. If the fuel injector cannot inject normally after blocking, the engine will not start. Please replace the fuel filter on time.

Remove the fuel tank, which can be seen on the right side of the air filter.

Remove the clamp holding the fuel filter with a screwdriver.

Wrap both ends of the filter with cotton cloth to prevent fuel splashing when removing the two hoops, because there is residual fuel and pressure in the oil pipe, and the internal residual oil will splash out of the oil pipe with the residual pressure.

When removing the fuel filter, use cotton cloth to absorb the residual oil splash inside the oil pipe.

Replace the fuel filter with a new one.

The reassembly method is opposite to the disassembly method.

▲ WARNING

The replacement frequency of fuel filter is once every 5000km.
Please dispose of the replaced old fuel filter in an environmentally friendly manner.

11.12 REPLACEMENT OF LIGHT SIGNAL

Losing the signal will put you in danger because the signal light can help others find you and your vehicle more easily. Replace the broken signal lamp in time.

Headlamp, position lamp, turn signal lamp, rear position lamp / brake lamp and license plate lamp are led encapsulated lamps. If they are damaged, they need to be replaced in the maintenance shop.

▲ DANGER

When the signal lamp is damaged, please use the signal lamp with the same rated power and specification, otherwise the system will be overloaded or the lamp will be damaged prematurely.

11.13 ON BOARD ABS SYSTEM

ABS of this series of models has self diagnosis function. If there is a fault in the system, the system can automatically identify and store the fault information. At the same time, turn on the motorcycle ABS indicator to prompt the driver that there is a fault in the system. All fault codes can be displayed and read automatically only when the vehicle is stationary.

ABS system normal status

When the key switch is turned on, the indicator light is on. At this time, you can hear the short rotation sound of ABS motor. The system performs static self-test. If there is a fault in the self-test, the fault code will flash directly. If no fault is found in the static self-test, the alarm lamp will go out and enter the normal monitoring vehicle state for normal operation.

Press and hold the right brake handle ABS switch "ABS" for about 2 seconds to turn off the front and rear ABS of the motorcycle. At this time, the indicator light is always on; Press and hold the ABS switch "ABS" again for about 2 seconds to turn on the ABS of the front and rear wheels of the vehicle. After turning off the ignition switch, turn on the ignition key again, and the ABS is in the front and rear wheels on state.

ABS troubleshooting

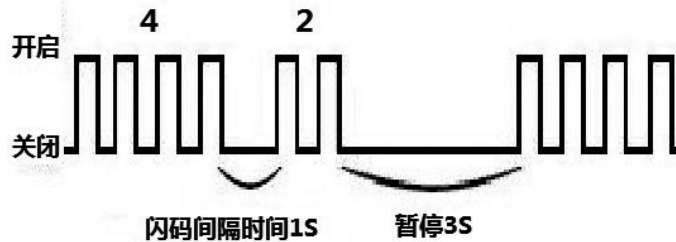
The specific conditions of ABS system faults of this series of models are stored in the memory in the form of fault code, and can be read out in the form of flash code if necessary. Please note that the current vehicle electrical status, such as flameout and power-off, cannot be turned off when diagnosing the fault code, because the fault code is stored in the system memory. The operation of flameout and power-off will power up the ABS self-test again, which will clear the fault code in the memory, resulting in failure to read the fault code.

When the ABS system fails, the ABS warning lamp will flash according to a certain law, which is called "flash code". The "flash code" consists of two sections of "flash code": each flash interval of the "flash code" is 0.3 seconds, and the interval between one section of "flash

11 INSPECTION AND MAINTENANCE

code" and the other section of "flash code" is 1 second. Section I "flashing code" indicates a fault phenomenon; The second section "flashing code" indicates the location of the fault.

As shown in the figure after the example, the flashing code "4-2" indicates "rear wheel sensor open circuit fault" ("4" is the first flashing Code: it indicates "sensor open circuit" fault, "2" is the second flashing Code: it indicates that the fault location is "rear wheel").



Flash code	Maintenance guidance
	Check the ECU, turn off the ignition key, disconnect the positive pole of the battery, and power on again; If the fault is repeated, replace the ECU.
	Detect ECU, ECU internal component failure and software operation failure. If the failure occurs repeatedly, replace ECU.
	If the can communication data is wrong or the internal communication hardware of ECU is faulty, restart the ECU. If the fault persists, replace the ECU.
	Check the power supply voltage, ABS system fuse, and check the system power grounding lug and terminal for oxidation or looseness.
	Check the power supply voltage. There may be a fault in the vehicle charging system.
1-1~1-4	Check the circuit, check whether the connector terminal is loose or not inserted in place, and check whether the indicator light can be lit normally.
2-1~2-5	Check the circuit and the output is short circuited to the positive pole of the battery.
3-1~3-4	Check the circuit and the output is short circuited to the negative pole of the battery.
	Check whether there is short circuit in solenoid valve circuit, pressure maintaining coil or pressure relief coil.
	Check the solenoid valve circuit, pressure maintaining coil or pressure relief coil for open circuit.
	Check whether the solenoid valve is short circuited or open circuited with the common ground.
	Check whether the solenoid valve is short circuited to the common terminal positive or open circuit.

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Flash code	Maintenance guidance
	Check the sensor circuit in the harness, measure whether there is an open circuit, check whether there is an open circuit in the sensor, and replace it if there is an open circuit.
4-1/4-2	Check the sensor circuit in the harness, measure whether there is a short circuit to ground, and check whether there is a short circuit to ground. If there is a short circuit, replace it.
5-1/5-2	Check whether the sensor circuit is short circuited to high level. If necessary, replace the sensor circuit or sensor.
6-1/6-2	Weak sensor signal value; Check whether the hub bearing is loose, resulting in ring gear deflection. Maintain the hub and adjust the hub clearance.

▲ WARNING

When charging the bottle with external power supply, disconnect the ECU control box to prevent the ECU from being damaged by external high voltage.

When the vehicle needs electric welding, disconnect the ECU and do not measure the ECU control box with a multimeter.

Regularly monitor whether the generator voltage is stable.

Do not damage the ring gear and sensor when maintaining the brake disc and pad, and clean the ring gear and sensor.

The disassembly and assembly of all parts shall be carried out after power failure, and all parts shall be kept clean and dry.

It is not allowed to change the capacity of the fuse or jumper fuse at will.

ABS indicator light is an important means of ABS external warning. ABS alarm light shall be reliably connected. If ABS indicator light is damaged, it shall be replaced in time.

13 STORAGE AND CLEANING OF VEHICLES

13.1 VEHICLE STORAGE

If your vehicle is not used for a period of time and needs special maintenance, it requires some special materials, equipment and technology. For this reason, it is recommended that you complete these works at an authorized dealer.

If you want to complete these tasks by yourself, please follow the following methods:

- Completely replace with new oil.
- Block the inlet of the air filter and the exhaust port of the muffler with a rag stained with new engine oil to prevent moist air from entering the engine.
- Completely drain the fuel in the fuel tank.
- Remove the battery, clean the battery surface with neutral soapy water, and clean the oxide on the positive and negative electrodes at the same time.
- Store the battery in a room above 0 °C.
- Adjust the tire pressure to the specified pressure.
- Wash the vehicle thoroughly.
- Spray rubber protective agent on the surface of rubber parts.
- The appearance of the whole vehicle shall be coated with automobile protective wax.
- Finally, cover the vehicle with cloth and park it in a dry and ventilated place.

▲ DANGER

Charge the removed battery once a month.

13.2 HOW TO REACTIVATE THE VEHICLE

- Clean the vehicle thoroughly.
- Take out the rags at the air inlet of the air filter and the exhaust port of the muffler.
- Completely replace the engine oil and oil filter element.
- Install the battery.
- Start the vehicle.

13.3 VEHICLE PROTECTION

According to the use, wash the vehicle frequently and try to keep the vehicle clean and dry.

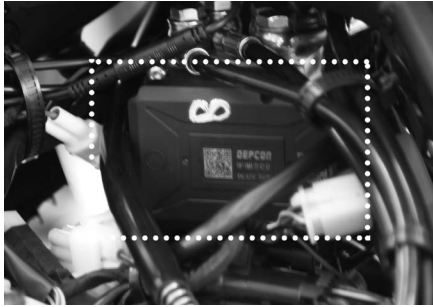
Clean the dirt attached to the vehicle surface as soon as possible, such as bird droppings, asphalt, salt, etc.

Try to use the vehicle cover. Being exposed to the middle-aged sun for a long time will lead to aging and discoloration of appearance parts.

13.4 VEHICLE CLEANING

Wash the vehicle with cold water.

13 STORAGE AND CLEANING OF VEHICLES



Wash the vehicle thoroughly with a soft cloth and neutral detergent.

Do not spray the vehicle.

Do not wash the vehicle with high-pressure water.

In rainy days or after washing the car, there may be a small amount of water mist in the headlamp or steering lamp. It only needs to light the lamp for a period of time, and the water mist will disappear, because the lamps are designed with vent holes, which is normal.

▲ CAUTION

The brake capacity of wet brake will decrease. Please test the brake system at low speed repeatedly after washing the car to make it dry quickly.

▲ DANGER

The ABS module is located behind the front riser. When cleaning the vehicle, please do not directly flush the ABS module with water to avoid module damage.

14 MODIFICATIONS AND ACCESSORIES

Allow your vehicle to use original parts and accessories.

You can obtain genuine parts, accessories and other products that have been authorized from authorized dealers. At the same time, professionals will introduce you to their installation and use.

The safety, practical performance and matching of these parts and products have passed the test, and will be responsible for these products. On the contrary, it will not be responsible for the unauthorized parts and accessories.

Whenever you plan to replace parts, you should comply with all laws and regulations to ensure that your vehicle will not destroy the national requirements for road vehicles and other laws, regulations and specifications.

▲ DANGER

Unauthorized modification of performance components such as electronic control system will lead to vehicle damage and accidents

15 VEHICLE PARAMETER TABLE

Vehicle parameters	
L×W×H	2200mm×860mm×1370mm
wheelbase	1440mm
Ground clearance	155mm
curb weight	190Kg
Load capacity	150Kg
Max allowable total mass	320Kg
Front wheel load	236Kg
Rear wheel load	325Kg
Max speed	110Km/h
Max climbing	≥ 35°
Braking deceleration	GB20073
Fuel consumption	≤ 3.0L/100Km
Tank volume	19L
Coolant capacity	1.5L
Chain specification	520H×112
Rack / Brake system	
Front damping type	Inverted shock absorber / fork tube Φ 41mm / stroke 120mm
Rear shock absorption type	Central shock absorber / stroke 50mm
Front tire	3.50×17
Rear tire	4.50×17
Front hub specification	120/70ZR17M/C
Rear hub specification	160/60ZR17M/C
Front brake type	Double disc, double piston, floating pliers / disc diameter 298mm
Rear brake type	Single disc, single piston, floating Tong / disc diameter 240mm
ABS	Dual channel anti lock braking system
Engine system	
Engine type	In line two cylinder / water cooled / eight valve / DOHC
Cylinder bore × trip	67mm×68.8mm
Displacement	471ml
Compression ratio	10.7: 1
Inlet valve clearance	0.16mm±0.03mm

Exhaust valve clearance	0.27mm±0.03mm
Spark plug gap	0.8mm ~ 0.9mm
Spark plug model	CPR8EA-9
Maximum net power / speed	35Kw/8500rpm
Maximum torque / speed	43N.m/7000rpm
Idle speed	1300r/min±100rpm
Transmission type	International sixth gear
Clutch type	Warm multi slice
Oil capacity	3.2L (10W/40-5G)
Oil supply system	Electronic fuel injection system
Emission standard	CHINA country IV
Drive system	
Primary transmission ratio	2.029
Last stage transmission ratio	3.000
1st gear	3.285
2nd gear	2.105
3rd gear	1.600
4th gear	1.300
5th gear	1.150
6th gear	1.043
Electrical system	
Battery model	12V9Ah
Headlamp (high beam / low beam)	12V 29.4W/12.84W
Front position lamp	12V 5W
Rear position lamp	12V 5W
Front turn signal lamp	12V 3W
Rear turn signal lamp	12V 3W
Rear license plate lamp	12V 5W
Chip fuse specification	30A、10A

通过
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