



YC6A、YC6B、YC6J 工程用系列发动机

使用说明书

YC6A、YC6B、YC6J Series Construction Engine
Operation & Maintenance Manual

使用前请仔细阅读使用说明书
Please read the Manual carefully before using.



广西玉柴机器股份有限公司

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二 00 八年六月

June.2008

前 言 Foreword

本说明书介绍了 YCA、YC6B、YC6J 工程用系列发动机的主要结构、技术参数、主要附件的技术规格与数据以及使用和维护方面的基本知识，并对一些常见故障及其排除方法作了初步的介绍。

This Instruction Manual introduces the YCA、YC6B、YC6J series construction engine about its structure and technical parameters, the technical specifications and data of its main accessories as well as the basics information on use and service. It also describes some common malfunctions and solutions.

为了使机器的优越性能得到更好的发挥，并保证机器的安全运行，请您在使用之前首先详细阅读本使用说明书，正确认识、了解与掌握 YCA、YC6B、YC6J 工程用系列发动机的使用和维护要求，并特别注意以下的“安全行车注意事项”。

Please read this manual carefully to understand and master the operation and maintenance requirements about YCA、YC6B、YC6J series construction engine prior to

putting the machine into operation and pay your particular attention to the Precautions for Safe Operation described below in order to enable the machine to bring its superior performance into full play and ensure its safe operation.

随着社会不断发展和需要，发动机将不断优化和提高，并不断增加变型设计的产品，除特别重大的设计变型外，本说明书不再作更改，因此过了一定的时间后说明书的介绍可能与实际的发动机有一定的出入，请以实物为准，敬请广大用户加以注意和谅解。

With continuous development and demand of the society, the engine will be uninterruptedly optimized and improved and its modified products will also be continuously increased. Except for especially great modifications in the design this manual will not be altered again. Therefore, after a certain period, there will be some discrepancies between the description in the manual and the actual engine, to which kindly ask our customers to pay due attention.

本说明书只对基本型发动机详加说明，变型产品不作列举，请用户注意和谅解。

The manual gives a detailed description for the basic model engine only, and any modifications of it are not laid out to which we ask our customers to pay due attention and understand it well.

本说明书的解释权归玉柴。

YuChai reserves the explanation right of this manual.



安全行车注意事项! Precautions for Safe Operation!

1. 润滑油压力感应塞、水温感应塞、润滑油压力过低报警器这些零件非常重要，凡有失灵者，须立即更换，以确保这些零件能正常工作。否则会造成因缺油烧坏曲轴或因缺水致使气缸盖过热而开裂。

Such parts as lubricating oil pressure sensing plug, water temperature sensing plug and alarm for too low lubricating oil pressure are very important. In case any failure, immediately replace it to ensure normal working of these parts, otherwise the crankshaft may be burned due to lack of the oil or the cylinder head may crack due to overheating resulted from lack of the water.

2. 凡在保养过程中更换润滑油滤清器时，应先将新润滑油滤清器灌满润滑油再安装，而且安装完成后，必须起动发动机，并使其怠速运转，然后下车仔细观察滤清器有无渗漏现象，若有则须及时排除，否则会导致缺油烧坏曲轴、轴瓦等运动副零部件。

After cleaning the oil filter or during the process of replacing filter gauze, reinstall the filter

only after refilling oil fully, and start the engine on idle running immediately after reinstallation; meantime, check if there is any sign of leakage to any filter. Correct the leaking filters or it may easily lead to crankshaft burn caused by oil shortage.

3.每次起动发动机，须怠速运转 3~5 分钟，待各种仪表正常工作后，方可起步运行。不允许冷车突然加大油门，否则会损坏各种仪表及其相应零件、加速发动机运动件的磨损及损坏增压器，从而缩短发动机的使用寿命。

Each time you start the vehicle, first start the engine on idle running for 3 to 5 minutes till the engine warms up and all gauges working in normal function, then start to move. Never put the vehicle to sudden acceleration from cold-start. For any dramatic speed-up on cold status will damage the instruments and their corresponding parts and components and accelerate the wear and tear of engine's kinetic parts, consequently it will shorten the engine's life cycle.

4. 不允许高速、大负荷运转状态下突然熄火停机，怠速运转 3~5 分钟后再停机。否则会损坏发动机的运动件，从而缩短发动机的使用寿命。

Avoid any sudden stall and stop at high speed & high load status, the appropriate way is to gear down gradually and stop the vehicle after 3~5 minutes of engine idle running. Otherwise it will damage turbocharger and other moving parts and shorten engine service life consequently.

5.应经常检查进气管路是否漏气、空气滤清器是否堵塞，若有以上现象则必须及时维护，否则会对发动机造成损坏；同时发动机功率会下降，整车只能以较低的车速行驶，应及时维修。

Check often for the leakage and blockage of the intake piping and air cleaner to make them work normally. Do make adjustment or maintenance when there is leakage in the intake system and blockage in air cleaner, for they will damage the turbo-charger and cause the cylinder scoring, and will decrease the engine's power at the same time , therefore maintain timely as the vehicle can be driven at pretty low speed .

6.使用发动机时要一档起步，否则发动机可能会熄火。

Start the engine on first gear, otherwise it may stop.

7.凡发现发动机工作不正常时，应及时处理。

Whenever the engine works abnormally, it shall be dealt with care.

8.发动机运转时严禁靠近旋转部件，严禁直接触摸发动机的高温部件（例如排气管等）；停机后不要立即打开水箱盖以免烫伤。

Don't approach rotating components and directly touch the high temperature parts (such as exhaust pipe and turbocharger etc.) of the engine when you check it, don't open the water tank cover immediately just after stop, for this may cause physical burn.

9.凡新机运行 50~60 小时时，须及时通过玉柴的委托技术服务站进行走合保养，否则不予实行发动机的保修。

Send the engine to a consignment technical service station of YuChai for run-in service

when it runs 50-60hour, or you will waive the warranty for this engine.

10.冷却系统必须使用防冻液，否则由此引起的故障，不予实行免费保修。

Anti-freeze coolant shall be used in the cooling system; otherwise the consequent failure will not be included in the free warranty

11.严禁用户擅自拔插各接插件。

Customer is prohibited to insert or pull out the connectors.

12.严禁以水或任何清洗液冲洗发动机。

Water and any other cleaning agent are prohibited to use for washing and cleaning the engine.

13 按规定放燃油预滤器积水、更换预滤器滤芯总成和精滤器滤芯总成。

Follow the instruction to drain water of fuel pre-filter, replace filter element assy. of pre-filter and filter element assy. of precision fuel filter.

14.拆卸蓄电池和断开蓄电池主开关之前，确认点火开关已关闭。

Make sure the ignition switch is turned off before dismounting and cutting off the battery.

15. 根据包装箱外的注意事项进行吊装、运输，贮存发动机的环境应通风、干燥、清洁、无腐蚀性物质，发动机有效封存期为见发动机包装箱上注明。

Hoist and transport the engine in accordance with the precautions described on the outside the packaging case. The place for storage of the engine shall be well-ventilated, dry, clean and free of corrosive substances. See the mark on the package for preservation of the engine.

16. 发动机的标牌含有发动机的基本信息包括:标定功率、标定转速、系列号、生产日期、执行标准等。发动机的标牌位于缸盖罩顶面。

The basic information of the engine is on the nameplate, including: rated power, rated speed, series number, production date and implement standard. The nameplate of the engine is located at the top of the cylinder cover housing.

17. 发动机型号和出厂编号还打印在气缸体下缘中间的平台。

The engine type and ex-work number are printed on the platform in the middle of the cylinder lower margin.

18.安全警告包括：敬告用户、曲轴转向、转动危险及高温危险，分别贴在发动机的缸盖罩、离合器壳、缸盖罩靠排气管侧。

The safety warnings include user's precaution, crankshaft steering/rotating danger and high temperature danger sticking on engine cover, clutch housing and cover on exhaust pipe respectively

19. 包装箱内随带下列随机文件（使用说明书、随机备件清单、随机工具清单、合格证、装箱清单），用户开箱后应及时清点。

Random documents are included in the package: user's manual, parts list, tool list, certification and packing list. Please check after opening.

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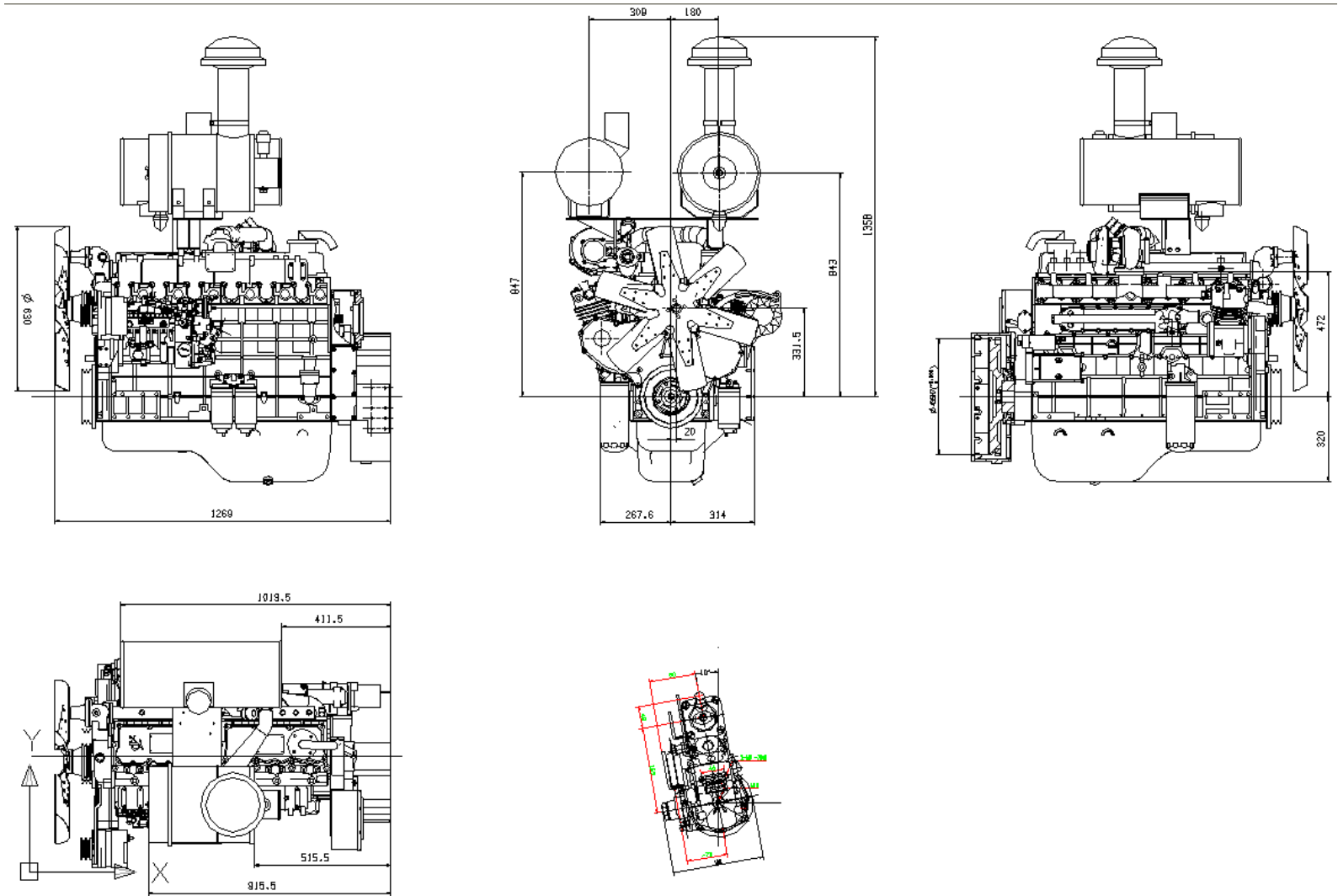


图 1 YC6A 系列柴油机外形安装图 (实际跟配套布置会有小差距)

Fig 1 Assembly Layout for YC6A Diesel Engine (may differ from the practical configuration)

