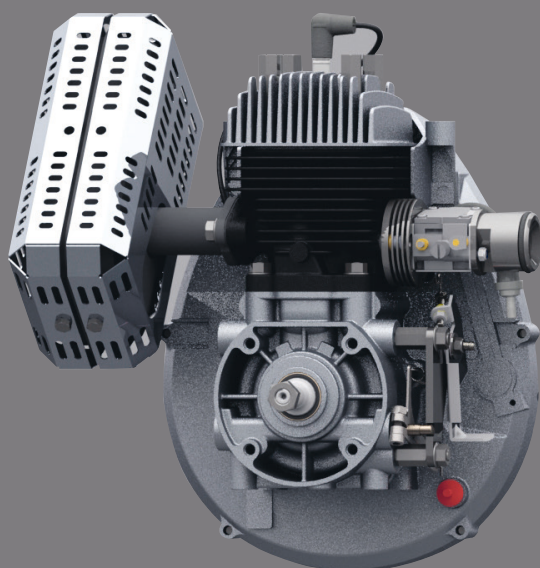
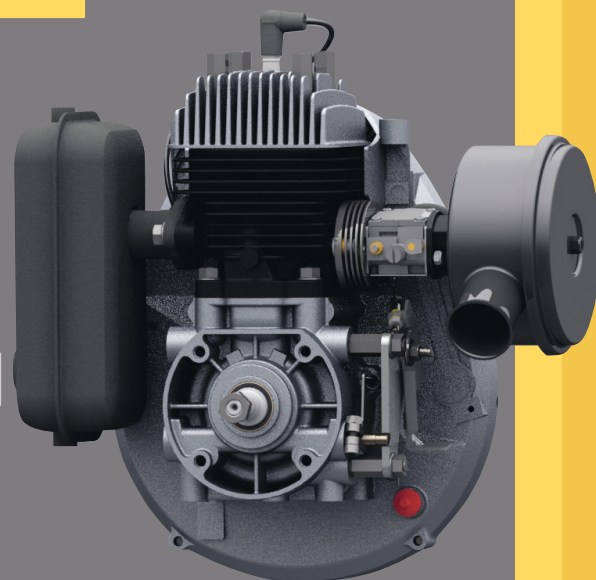


# RAILWAY GRINDING ENGINE

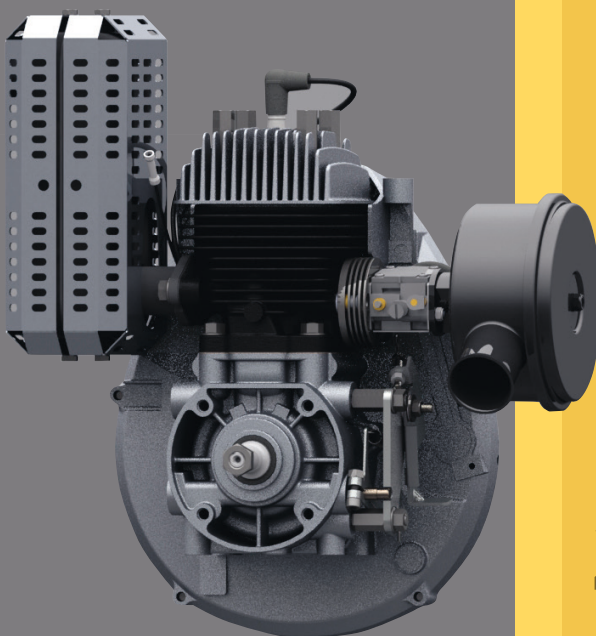
## ENGINE M165 STD

2489



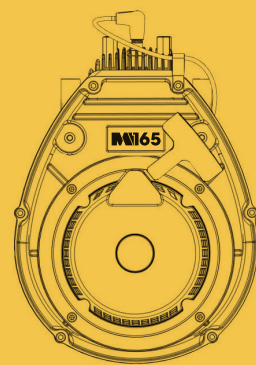
## ENGINE M165 R

12702



## ENGINE M165 G

12342











# M165



# 2022

## USER'S GUIDE

**FUEL TANK FILLING** We recommend the use of mixture of octanes 97 unleaded petrol and fit "TC" API quality synthetic oil for 2-stroke engines in a recommended proportion by supplier.

START		GRINDING		STOP	
Carburetor choke in <b>COLD START</b> Horizontal position	Accelerator handle <b>¼ RPM</b>	Carburetor choke in vertical position	Accelerator handle <b>MAX RPM</b>	Carburetor choke in vertical position	Accelerator handle <b>MIN RPM IDLE RPM</b>
					
WARM START Vertical position					
					
	<b>START THE ENGINE</b> Switch on the petrol tap. Using the rewind starter, slowly pull the grip until you meet resistance, and then pull harder in the proper direction. When the engine starts, let the rope rewind, holding it by the grip. <b>IF THE ENGINE FLOODED</b> , switch off the petrol tap, accelerate to maximum, start up several times.	When the grinding is working do not switch the handle <b>PAUSE MODE</b> When the engine is in a pause mode, Let the engine idle for a few minutes and for longer time stop the engine.		<b>SHORT TIME</b> Switch off the petrol tap and push the stop button until the engine stops. <b>LONG TIME</b> If the engine is not to be used from some time, switch off the petrol tap and wait for the engine to stop when the carburetor is empty.	

## MAINTENANCE

### 27006 MAINTENANCE PREMIUM KIT

- Air filter & paper seal.....50 hours
- Internal petrol filter & gasket .....250 hours
- External petrol filter .....250 hours



## SAFETY RECOMMENDATION

**CAUTION!** The following recommendation cannot preserve from all the dangers that can arise along the engines' use but they must be also integrated with the common sense of the operator being indispensable measures to prevent accidents.



1. **Know the machine.** Read carefully all the instructions reported.
2. **Dress in a suitable way.** Do not use flapping clothes, could get entrapped.
3. **Protect your ears with helmets.** In case where a long time in noisy area.
4. **Protect hands with gloves.** Some sharpened parts (like steel sheets, levers,...) could cause injuries.  
**Protect hands from hot surfaces.** The exhaust muffler, cylinder heads and cylinder can scald.
5. **Exhaust gases are harmful.** In case one works in a close ambient (tunnels), be sure that the venting conditions be suitable.
6. **Check if somebody is moving around.** If dangerous situations are excepted, previously signalize the moves. Do not let children get close to operating machines.
7. **Fuel & oil are harmful.** In case of contamination wash with soap and water. In case of ingestion apply to a doctor. In case of need keep fuels at open air providing to be placed far from the reach of children.
8. **Refrain keeping the engine working while refueling.**
9. **Respect the environment.** Mineral oils, fuels and filters deliver them to the proper salvage dumps.

## VERIFY AIR & PETROL CIRCUITS

1. Fill the tank.
2. Switch on the petrol tap.
3. Test the engine start with the tank in the higher position.
4. **If the engine flooded**, switch off the petrol tap, accelerate to maximum, start up several times. If necessary, remove and clean spark plug.
5. **Start the engine**

Verify the air & petrol circuit does not clog, clean the petrol tap filter and the clamp tightness.

### 27762 CYLINDER SEALS

- Air filter & paper gasket.
- External filter
- Internal carburetor filter.
- Cylinder seals



## TROUBLES IN IGNITION OR ENGINE DOES NOT STOP

### CHECK THE SPARK.

**If does not spark**, Replace the Spark plug, cut the cable 1cm.

**If does not spark**, The stop button does not stop, replace it.

Assure the stop button cable tightness, with NURAL28.

### 484-017R STOP BUTTON

- Stop button, spark plug & cap.

**If does not spark**, the electronic ignition coil is defective, replace it.

### 1512-18R STATOR

- Stator, spark plug & cap.

**AVOID THE CABLE TOUCH ANY HEAT POINT**



## CARBURETOR CLOGGED OR WORN OUT

### 11554 CARBURETOR

- Carburetor
- Air filter & paper gasket.
- External carburetor filter.



## WEAR OR SEIZED CYLINDER

To avoid future worn out, at least replace the repair kit.

### 27230 REPAIR PREMIUM KIT

- **Rings & roller cap, spark plug and cap.**
- **Cylinder seals & spark plug.**
- Petrol filters & carburetor's seals.
- Air filter & paper gasket.
- Crankshaft oil seal.



If the cylinder and rings worn out, replace it.

### 26903 CYLINDER PISTON KIT & MAINTENANCE

- **Piston, rings, roller cage, spark plug and cap.**
- **Cylinder, seals.**
- Petrol filters & carburetor's seals.
- Air filter & paper gasket.
- Crankshaft oil seal.



If cylinder and rings worn out and carburetor clogged, replace it.

### 13820 CYLINDER + PISTON + CARBURATOR

- **Piston & rings roller cage & spark plug and cap.**
- **Cylinder, seals.**
- **Carburetor & seal.**
- Air filter & paper gasket.
- Crankshaft oil seals.










**If the Crankshaft worn out, Replace the engine.**

Difficulty Scale • EASY ••MEDIUM •••HARD

KEEP THESE INSTRUCTION WITH CARE

# 用户指南

**油箱加注:** 我们建议使用 95 辛烷的混合物符合 API TC 质量的无铅汽油。二冲程发动机用合成油的比例为4 % (200cm³ 油/5升汽油)。在使用非合成油 2 冲程发动机, 机油 5 %的比例。**储存混合燃料:** 混合燃料可以发生老化, 并且可能导致发动机损坏。在每次割草使用中, 仅应混合配制此次能够用完的燃料

发动机启动		研磨		停止发动机	
冷机启动 化油器阻塞 水平位置 	油门把手 1/4 	垂直位置的 化油器扼流 圈 	将油门杆调到 最大。 	垂直位置的 化油器扼流 圈 	将油门杆置 于发动机最 低转速的位 置 
 打开燃油阀门。 快速拉拽启动绳 ，并让其慢慢缩 回。重复上-如果发动机熄火， 在阻风门打开的情况下重 复该启动程序		<b>研磨工作时不要切换手柄 暂停模式</b> 当发动机处于暂停模式时，让发 动机怠速几分钟		将发动机停止开关置于“点 火关闭”位置(参见设备制造 商的操作 说明)。 在您离开设备之前，请等待 直至发动机完全停下来。 关闭燃料阀。	

## 日常维护

### 27006维修保养套件

- 空气过滤器和密封件.....50 小时
- 内部汽油过滤器和垫片 .....250 小时
- 外部汽油过滤器 .....250 小时



## 安全建议

**警告！** 以下建议不能避免发动机使用过程中可能出现的所有危险，但它们还必须与操作员的常识相结合，这是预防事故必不可少的措施。



**了解机器。** 仔细阅读报告的所有说明。

**以合适的方式着装。** 不要使用拍打的衣服，可能会被夹住。

**用头盔保护耳朵。** 如果长时间在嘈杂的地方。

**用手套保护双手。** 一些锋利的零件（如钢板、杠杆.....）可能会造成伤害。

**保护双手远离高温表面。** 排气消声器、气缸盖和气缸可能会烫伤。

**废气是有害的。** 如果在封闭环境（隧道）中工作，请确保通风条件合适。

**检查是否有人在四处移动。** 如果危险情况除外，请事先发出动作信号。不要让儿童靠近操作机器。

**燃料和油是有害的。** 在污染的情况下用肥皂和水清洗。在摄入的情况下申请医生。如有需要，请将燃料放在露天，远离儿童。

**加油时不要保持发动机工作。**

**尊重环境。** 矿物油、燃料和过滤器将它们运送到适当的打捞场。

验证空气和汽油电路

1. 加注燃油
2. 打开燃油阀门
3. 在油箱处于较高位置时，测试发动机起动。
4. 如果发动机淹缸，关闭汽油阀门，加速到大值，启动几次。必要时，拆下并清洁火花塞。
5. 启动引擎

确认空气和汽油回路没有堵塞和夹紧性

**27762 气缸 密封件**

- 空气过滤器和纸垫片。
- 外部化油器过滤器。
- 内部汽油过滤器和垫片。
- 气缸 密封件。



点火或发动机故障不停止

**检查一下电火花。**

如果没有火花，则更换火花塞，切断电缆1cm。

如果没有火花，停止按钮不停止，更换它。

确保停止按钮与空号28电缆的紧密性。

**484-017R 停止按钮套件**

- 停止按钮，火花塞和盖子。

如果没有火花，则电子点火线圈有缺陷，请更换。

**1512-18R 点火模块套件**

- 点火模块，火花塞和电源盖。



**AVOID THE CABLE TOUCH ANY HEAT POINT**

化油器堵塞或磨损，换

**11554 化油器套件**

- 空气过滤器和纸垫片。
- 外部化油器过滤器。
- 调速器弹簧。



磨损或卡住的气缸

为了避免将来的磨损，至少要更换维修工具包。

**27230 维修保养套件**

- 环、滚轮片、火花塞和盖。
- 气缸密封件和火花塞。
- 汽油过滤器和化油器的密封件。
- 空气过滤器和纸垫片。
- 曲轴油封。



如果气缸和气环磨损，请更换。

**26903 气缸活塞套件及维护**

- 活塞，密封环，滚针轴承，火花塞，盖。
- 气缸、密封件。
- 汽油过滤器和化油器的密封件。
- 空气过滤器和纸垫片。
- 曲轴油封。



如果气缸和气环磨损，化油器堵塞，请更换。

**13820 气缸+活塞+化油器套件**

- 活塞，密封环，滚针轴承，火花塞，盖。
- 气缸、密封件。
- 化油器和密封件。
- 空气过滤器和纸垫片。
- 曲轴油封。

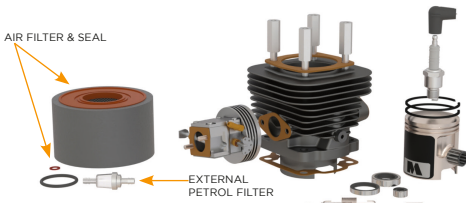
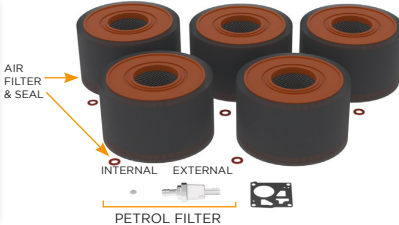
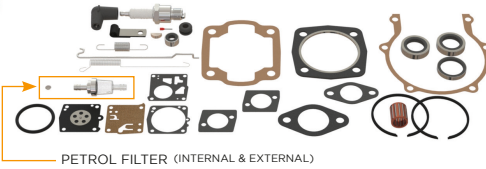

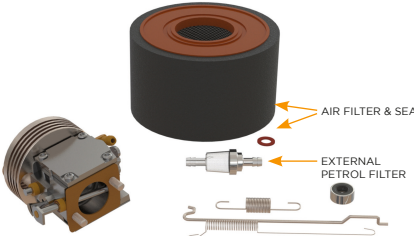
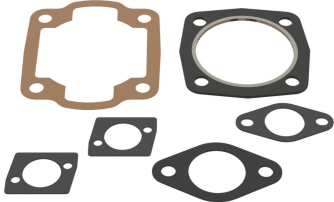

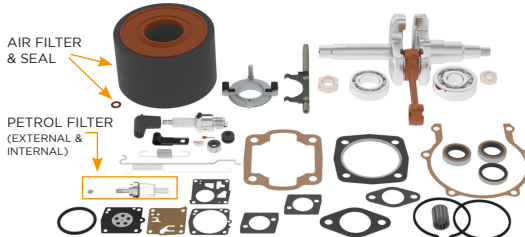




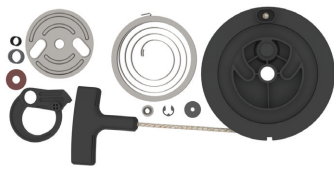


如果曲轴磨损，请更换发动机。









难度量表    • 简单的    •• 中等的    ••• 难的

小心保管这些说明



13820	CYLINDER +PISTON + CARBURETTOR	27006	MAINTENANCE PREMIUM KIT	27230	REPAIR PREMIUM KIT		
							
26903	CYLINDER PISTON KIT & MAINTENANCE	11554	CARBURETOR	14025	CYLINDER SEALS		
							
..1507-26R	HEAD	...012-039	CRANKSHAFT	26055	THROTTLE LEVER		
							
..1512-18R	STATOR	..1512-12R	FLYWHEEL	..1542-80R	RECOIL STARTER	14168	RECOIL STARTER REPAIR KIT
							

## OPTIONALS

STANDARD		ROBEL		GEISMAR	
	STOP BUTTON ...484-017R		STOP BUTTON ...484-017R	X	
	DRY AIR FILTER ...387-021		DRY AIR FILTER LONG DISTANCE 26409		DRY AIR FILTER ...387-021
	STANDAR MUFFLER ...526-026R		ROBEL MUFFLER ...526-067R		GEISMAR MUFFLER ...526-078R