

**Motor- and Gear**

**Repair Stand**

**MG-600**

**User Manual**



## **1. Introduction**

### **1.1 Comment**

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**Werner Weitner Ltd. does not take on any liability – neither expressly nor silently – for product information given in this documentation; neither for its operability nor its suitability for any special application.**

**Furthermore Werner Weitner Ltd. is not liable for material defects or other direct or indirect damages of any kind caused by delivery, use, or by function of material or those that may happen in connection with it.**

**Furthermore no liability will be taken on for damages and trouble due to the use of foreign accessories.**

Every constructional modification needs the prior written consent of Werner Weitner Ltd.

For material and production defects Werner Weitner Ltd. offers 12 months warranty to the purchaser. The warranty begins with receipt of the good by the customer.

Within the period of liability a provable defect product will be either repaired or replaced. This decision is on the discretion of Werner Weitner Ltd.

Every product had been tested before delivery to you. Our inspector of quality does this work by reference to detailed check list. If you have more questions despite this fact, feel free to contact the address given above. We shall help you willingly.

## 2. Operation of MG – 600

1. The proper assembly and possible damages have to be checked before using the Motor- and Gear Repair Stand. If the Motor-and Gear Repair Stand or its attachments (worm gear, fixings etc.) are damaged, **do not start operation under any circumstances.**
2. The Motor-and Gear Repair Stand has to be operated with the provided accessories only.
3. The maximal bearing capacity of the Motor-and Gear Repair Stand is 500 kg. It must not exceeded under any circumstances. Overloading may cause serious damages to Motor- and Gear Repair Stand and people as well.
4. The Motor-and Gear Repair Stand is exclusively to the use for DaimlerCrysler – and from Werner Weitner Ltd. authorized motors or work.
5. Move the Motor- and Gear Repair Stand **only in lowest** cylinder position, when loaded with motor or gear.
6. The Motor- and Gear Repair Stand is only to be operated within closed workshop buildings, and only on plane floor. Do not move it on steps and slopes.
7. If you work with the Motor- and Gear Repair Stand, please pay attention, that the fixed load is centric- as far as possible- on the used fixings. Eccentric loading can cause jerky rotation of the crank.
8. When you stop the Motor-and Gear Repair Stand, both locking brakes have to be locked on the caster wheels at the operating side.
9. The Motor- and Gear Repair Stand is equipped that way, that 500 kgs can be lifted.
10. If leakiness of the lifting cylinder or damages on the undercarriage ( e.g. cracks in parts, welding seams etc. ) will occur, the Motor-and Gear repair Stand has to be stopped and checked immediately. Repairs are to be carried out only in expert workshops and Werner Weitner Ltd. has to be contacted as quick as possible.
11. By lowering the Motor-and Gear Repair Stand the enclosed pump tube has to be slipped on the lowering screw. For lowering turn screw slowly counterclockwise.
12. If you do not follow these hints you can cause damages or break down of the Motor-and Gear Repair Stand and thus can cause harm to people and damage things.
13. We do not take on any liability for damages of people or things, caused by improper use of either the Motor-and Gear Repair Stand or the relevant fixing.

## 3. Equipping and Range of Productivity

- easy turning of the motors because of an in any position self locking worm gear ( I = 80 : 1 )
- Ergonomic working because of overall height and individually adjustable operating height.

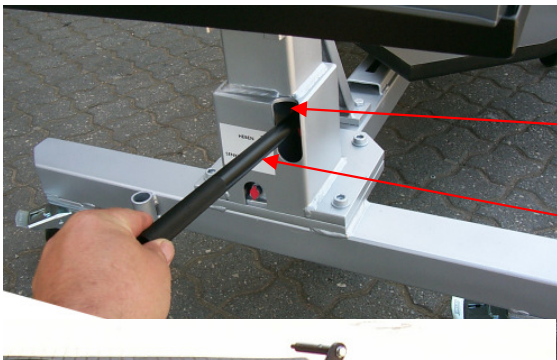
### 3.1 Execution

**The Motor and Gear Repair Stand has only to be operated by means of the installed hydraulic. Any modification of the Motor and Gear Repair Stand will lead to the loss of operating permission.**

Before any modification of parts, e.g. contour, caliber, change of permissible limits etc, Werner Weitner Ltd. has to be contacted in advance.

After a possibly necessary modification of the Stand e.g. alternative fixings manufactured by Werner Weitner Ltd. operation of the Motor and Gear Repair Stand with other motor types is possible.

### 3.2 Hydraulic



Motor and Gear Repair Stand from the rear.

- By pumping the pump tube (moving up and down) the Motor and Gear Repair Stand is to be positioned to an ergonomic operating position.
- 1 – to lower the Motor and Gear Repair Stand the pump tube has to be slipped on the lowering screw, and turned slowly counterclockwise.



Motor and Gear Repair Stand from aside.

- By turning the crank handle the fixed motor can be turned comfortably 360° thanks to worm gear.

### 4.1 Sequence of working/of function

- fixings of motors with relevant fixings

Fixings are individually adjustable and interchangeable!

Loading has to be fixed as centric as possible!



Oil pan is adjustable and removable



-Turning the motor into the correct position.

#### 4.2 Before starting apparatus

General:

The Motor-and Gear Repair Stand is a working place for **one or more people**.

The turning of the Motor-and Gear Repair Stand into correct position is possible by means of the crank handle. Follow the safety instructions.

**Attention: Before starting the Motor- and Gear Repair Stand MG – 600 instructions for operator and safety have to be read carefully!**

#### Authorized use of the Stand

This stand has been constructed according to standards of technology and technologically accepted rules of safety. Despite this fact danger to life and limb of the user or other people, reduction of stand or other material values will also be possible by using it.

Use Stand only if in technologically proper condition and, of course, according to regulations, conscious of safety and danger as instructions for operator demand it. **Especially** let eliminate trouble immediately, which can reduce safety.

The stand is exclusively to be used for the purpose shown in the instructions for operator. Any different use is not in accordance with the regulation. Therefore no liability of the producer/distributor for damages resulting from that irregular use. The risk then will be exclusively on the user.

Observe any notice of safety and danger on the Stand. Keep all these notices in readable condition.

No modification of the Stand, which could spoil safety, without permission of producer. This is also valid for installation and adjusting safety equipment and valves.

Stop and secure Stand immediately if trouble occurs. Let eliminate trouble immediately

Before and during any use of Stand make sure, that nobody will be endangered while running the Stand.

Avoid any working method, that will reduce safety or stability of the Stand.

After use check up Stand for externally visible damages and faults. If there are changes (inclusive action of Stand) report immediately to appropriate place. Stop and secure the Stand. Lock all screwings. Check up externally visible damages and eliminate them.

Working while loaded is prohibited, if loading is only lifted by hydraulic cylinders. If this work is imperative, enough additional mechanical supports are required.

For maintenance and repair work appropriate workshop equipment is absolutely demanded. Only personel with expert knowledge is allowed to work with the Stand.

Before any start of the Motor- and Gear Repair Stand MG – 600 both manually operated brakes on the rear have to be locked on the caster wheels, thus Motor- and Gear Repair Stand will keep position absolutely.

During lifting, lowering or turning of a fixed motor on the Motor- and Gear Repair Stand no people is allowed to stay within the danger zone. Danger zone is the entire front and side area of about 1 m from the center of the Motor- and Gear Repair Stand.

## 5. Safety Regulation and - precaution

This Stand is only to be operated and maintained by instructed and qualified staff. The keeping of the limiting , listed in technological specification is absolutely mandatory. (Hydraulic, lubricants, etc.)

Watch the description of product or technological data.



For maintenance and conversion work the Stand has to be moved in normal position. column sleeve has to be retracted

If there is trouble, the Stand has to be moved in normal position and the cause of fault or trouble has to be eliminated. Afterwards the Stand can be taken in service again.



If the damage is not to repair, the Stand cannot put into service again. Inform Werner Weitner Ltd. immediately!

## 6. Maintenance

### 6.1 **The Stand**

Only regularly instructed and qualified personel is allowed to operate and maintain the Stand. Take always account of safety and the UVV.



#### **Attention**

**Do not reach into the Stand during operation, neither operator nor people standing around the Stand.**



**At maintenance and modification work the Stand has to be moved in normal position (column sleeve has to be retracted)**



**Support of another people during lifting or lowering of turret or while the motor will be turned is prohibited.**

If trouble occurs move Stand into normal position and eliminate cause of fault or trouble.

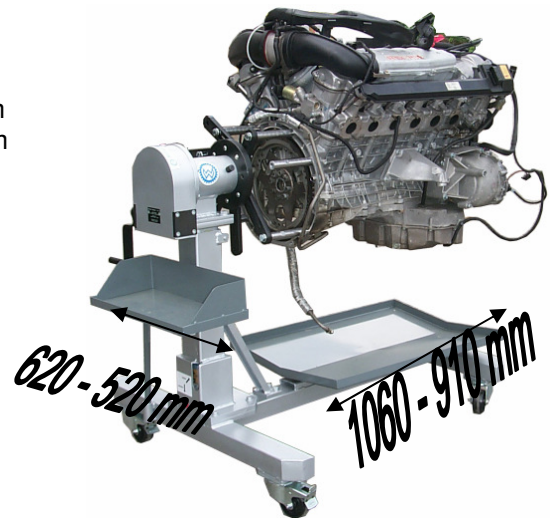
### 6.2 **Motor- and Gear Repair Stand and motor fixings**

Within regular intervals the Motor-and Gear Repair Stand has to be cleaned or the oil pan to be emptied. If there are dirtyings by solid materials (dust, foreign objects etc.) they have to be removed immediately. The tight fit of all screwings at the fixing system has to be checked in regular intervals.

The column sleeve also has to be greased regularly and checked for easy motion and function. If damaged parts have to be exchanged, only equivalent materials can be used. Exchange and repair work of parts or components is prohibited. Only Werner Weitner Ltd, or experts at the customer`s side are authorized to do this work.

## 7. Technological dates

Loading capacity:	500 kg max.
Height of stroke:	180 mm max. (hydraulic)
Chassis	
Dimensions:	Width: 520 – 620 mm Length: 910 – 1060 mm Height: 1070 – 1250 mm
Total height till center:	900 – 1080 mm
Own weight:	100 kg
Fixing flange:	Ø 200 mm LK Ø 150 mm
Fixing boring in flange:	Ø 70 mm
With universal fixing.	
3 depositing boxes	
Oil pan adjustable and removable (550 – 750 mm)	
Especially suitable for 8 and 12 cylincer car motors.	



## 9. Examples for Fixing

