



# User Manual

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2024

### CONGRATULATIONS

We congratulate you on having an excellent performance, low consumption, high safety tipper vehicle. We recommend that you carefully read the information on the following pages, which covers important points for the maintenance and use of your vehicle. The more meticulously you comply with maintenance, the more perfect operation and long life will be guaranteed.

We would like to remind you that services and spare parts are the most important factors.

The on-vehicle equipment and parts produced by STAR YAGCILAR are produced in a way that ensures the guarantee of performing all mandatory tasks reliably and continuously under all working conditions for the highest working efficiency.

Besides having the highest technical specifications and being produced with precise production systems, our products are also very durable and have high aesthetic appearances. This catalog gives not only the necessary maintenance operations that you need to know about tipper , but also the basic rules for the maintenance and control of other special systems.

As a result, we recommend that you follow these instructions to get the best results from your vehicle. As a condition of our warranty for part replacements , we recommend that you use only original STAR YAGCILAR spare parts.

## USING RULES

There are no special rules required to use the vehicles and on-vehicle equipment produced STAR YAGCILAR .

By constantly complying with the maintenance rules, you will ensure that your vehicle performs perfectly, has a long life without requiring major repairs, and therefore has low operating costs.

You should follow the explanations on these pages carefully. Maintenance operations must be carried out periodically, as specified in the operation and maintenance manual, regardless of the mileage of your vehicle.

Before starting the greasing process, clean the mud and dirt residues around the greaser fitting to prevent foreign matter from getting on the surfaces of the lubricated parts.

## AFTER SALES SERVICES

The service of your STAR YAGCILAR vehicles is carried out directly by STAR YAGCILAR within the warranty period . Service requirements are made to STAR YAGCILAR or its authorized services.

## SPARE PARTS

To ensure perfect operation of all vehicle parts, we only supply original STAR YAGCILAR We recommend using spare parts. When ordering spare parts, in addition to the part numbers in the spare parts catalogue, the vehicle serial number on the label on the front right side of the vehicle chassis. must be written.

## THINGS TO CONSIDER WHEN USING YOUR VEHICLE

Before starting any operation, ensure that there is no current in the electrical circuit by either turning off the general circuit breaker or disconnecting the battery cables. Never touch the settings of pressure switches and pressure regulating valves.

For these operations, request service from STAR YAGCILAR or its authorized services.

Never attempt to engage the take-off gear (PTO) while it is moving and without the clutch pedal being fully depressed.

## DOCUMENT INFORMATION

This manual has been prepared for safe and correct use and maintenance-repair planning of the equipment. Following these instructions strictly will ensure optimum performance, reduced costs and long equipment life. Additionally, following safety rules will prevent frequent accidents from occurring. Read this manual carefully and pay special attention to the safety instructions. The instructions provided in the manual alone do not ensure safety for use and do not meet national or local safety standards.

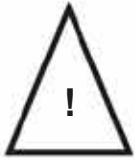
Special safety notes have been included in this manual to highlight unsafe or dangerous situations. Each note begins with a word, sometimes a sign. These are shown below:

The information provided in this manual is suitable for equipment with the relevant serial numbers. Earlier or later editions may not be suitable for this equipment, as *STAR YAĞCILAR* On-Board Equipment Inc. It works to constantly improve its own products.



**DANGER**

It indicates the existence of a serious hazardous situation. If safety recommendations are not followed, death or serious injury will occur.



**DANGER**

It means that there is a possibility of damage to the equipment occurring in an adverse situation. If safety recommendations are not followed, an accident may occur.

### WARNING

**Reminds the user of important information required for the proper operation of the equipment.**



**DANGER**

This manual is part of the equipment supply and should be supplied with the equipment in case of second-hand counting.

THE MANUAL MUST BE KEPT WITH THE EQUIPMENT AT ALL TIMES. It is recommended that you carefully read the section entitled GENERAL SECURITY REQUIREMENTS as it details the relevant security aspects.

## USE AND RESTRICTIONS

### 1.1. Area of use

Transportation of sand, gravel, grain etc.  
It should not contain flammable or explosive substances.

### 1.2. Improper use

#### The Following Are Prohibited:

- Using the equipment for purposes other than those specified in the "AREA OF USE" section.  
Using the equipment in a manner other than that specified in this manual or  
Using components other than those designed,
- Operating the equipment without following the maintenance plan specified by the manufacturer.
- Changing components or equipment features according to different usage conditions.
- Changing factory set pressure values.
- Using non-original spare parts or adding unapproved components.
- Modifying or repairing equipment without the manufacturer's approval.

Any improper use or lack of compliance with the above will lead to the following consequences.

The warranty given by the manufacturer or its authorized representative expires when the equipment is purchased.

The manufacturer's liability is excluded in case of any accident resulting in damage to people, animals or goods.



**ATTENTION**

Improper use may cause equipment malfunctions resulting in inconvenient situations for the operator.

### 1.3. Usage Restrictions

The operation of the equipment is prohibited under the following conditions;  
In fire sensitive conditions (transportation of flammable materials);  
Corrosive atmosphere;  
In an explosive atmosphere (carrying explosives);  
In closed areas;  
Underground;  
In a toxic atmosphere (carrying toxic substances).

## 2.4. OPERATOR TRAINING

Only trained persons should use the equipment. The requirements for the appropriate operator are as follows.

- Ability to operate special equipment and driver's license.
- Training should cover all types of operations that can be performed on the equipment.  
Training must be given by a qualified person from the manufacturer or its authorized representative.
- Read and understand this booklet completely.
- Knowing local safety standards very well.
- Knowing the usage restrictions and inappropriate uses of the equipment.

## 3. GENERAL INTRODUCTION

### 3.1. General

Damper casing is designed to suit the chassis vehicle it is on. The equipment consists of the chassis (chassis, base, side-front-rear cover, visor ) hydraulic and pneumatic installation.

The functions and load distribution of the tipper are arranged in accordance with the technical specifications of the truck placed on it.

#### 3.1.1 Chassis

**The** chassis has a subframe compatible with the truck chassis, connected to each other by crossbars.

It is designed with specially shaped side profiles to increase strength.

There are lubricated bronze bearings at the turning points.

#### 3.1.2 Hydraulic Installation

Hydraulic power is obtained through the hydraulic pump mounted on the PTO in the gearbox. PTO is controlled from the cabin.

There is a 25 µ suction filter, ventilated cover, level and temperature indicator and a ball valve in the suction line on the hydraulic oil tank.

The directional control valve located in front of the chassis controls the lifting and lowering of the damper electro-pneumatically.

In hydraulic equipment, a limit control valve is used when the case is lifted up.

### 3.2. Component List

Main equipment components:

- Tipper
- Hydraulic system
- Pneumatic system
- Subframe
- Pump
- Limit valve

### 3.3.1 Damper Tipper

The plate riveted to the right side of the subframe contains the following information.

- Model and type
- Serial number
- Manufacturing date
- Maximum hydraulic pressure
- Safe working capacity

### 3.3.2. Limit Valve

information is included on the limit valve Damper lowering valve.

- Model
- Product code
- S / N

### 3.3.3. Tipper Lowering Valve

following information is available on the damper valve.

- Model
- Product Code
- S / N

### 3.4. Noise Level

In the following items, the maximum A weight sound pressure level is –  $L_p(A) \leq 85 \text{ Db}(A)$ .

#### Measurement Point

- At a distance of 0.5 m from the control box at a 45° angle towards the rear outside.
- 1.7 m above the ground,

#### Situation

- When the vehicle engine is at 1000 rpm,
- While lifting the damper,
- The vehicle is unloaded.



**WARNING**

Do not make any changes to the equipment that will affect the noise level.

## 4. GENERAL SAFETY REQUIREMENTS

### 4.1 Security requirements for individuals

- **Always wear personal protection equipment.**
- **Only wear appropriate equipment: non-slip type shoes, protective gloves, light reflective jacket, air mask, safety glasses when the task requires.**  
**Consult your supervisor for available safety equipment.**

## 5.3

- Do not wear rings, bracelets, wristwatches, loose or torn clothes that can easily be attached to the work machine.
- Keep a first aid kit and fire extinguisher on the equipment. Make sure that the fire extinguisher is always fully charged.

### 4.2. Safety Requirments for Equipment

The manufacturer is not responsible for accidents caused by the user's failure to comply with general safety requirements.

Read this manual carefully before operating or maintaining the equipment.

Read all safety signs before operating or servicing equipment.

Keep all steps and platforms free from grease, oil or mud to prevent slipping.

## 5. CONTROLS

### 5.1. Cabin Controls

- ÿ Main circuit and PTO control switch,
- ÿ Damper valve control switch
- ÿ Circuit fuse

### 5.2. Tipper Control Button

Tipper body DOWN / FAST

When the PTO is activated, the damper will lift automatically.

## 6. INSTRUCTIONS FOR USE

### 6.1. Pre start - up check

Be careful to take the following with the equipment:

Operation and maintenance manual

Equipment License (appropriate for local authorities)

Working fire extinguisher First aid kit

### 6.2. Checking before any operation Check

the following before starting work each day:

The tachograph

recorded the vehicle's fuel level indicator. Top up fuel if necessary



**DANGER**

Never smoke or light a fire when refueling. Fire hazard.

**daily care**

Check the vehicle and equipment for any damage or malfunction.

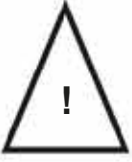
If there is any malfunction, repair it before operation.

Check for oil leaks; If there is, repair it before working.

Security signs and stickers must be in good shape and easily read.



5.3



**ATTENTION**

Operation of the equipment is strictly prohibited while any safety labels are damaged, missing or illegible.

Clean all work lights and cab windows.

### **6.3. Starting the hydraulic pump . Start**

the engine. Depress

the clutch and press the PTO button. At that moment the red button will light up.

Slowly lift your foot off the clutch.

The pump has started to work.



**ATTENTION**

Do not move the vehicle while the PTO is engaged.

## **7. MAINTENANCE AND REPAIR**



**DANGER**

**Never go under the safe without using the safety stop while the damper is in the raised position.**

### **7.1. Safety During Maintenance**

Before starting the maintenance of this damper, carefully read the instructions in this booklet and strictly comply with the safety labels on the equipment.

Do not allow equipment to be maintained by unauthorized persons.

Follow general safety requirements and use your individual safety equipment (gloves, shoes...)

Make sure the vehicle is parked on a level surface and the parking brake is applied.

Before working with flammable materials, make sure that there are no flammable materials in the work area, and have a fire extinguisher available just in case.

Never place your head, arm or leg in places where there is a risk of getting trapped.

Never operate the vehicle during maintenance unless necessary.

### **7.2. Daily Preventive Maintenance**

Check fasteners such as bolts, nuts, washers etc.

Apply grease to the grease

fittings. Check the moving parts.

Check the hydraulic fittings for oil leaks.

### 7.3. Mooth Preventive Maintenance

Check PTO; replace fasteners if necessary.

### 7.4. Hydraulic Oil

If you need to add hydraulic oil, you must use oil of the same specification.

Hydraulic oil should be changed after 1500 operating hours.

Change the filter every time you change the oil.

## TECHNICAL SPECIFICATIONS IN THE EQUIPMENT

- The body is made of sheet metal.
- All body and covers are supported by U-section vertical profiles.
- Side covers are manufactured as fixed.
- The case is lifted from the front by a three-stage single-acting telescopic cylinder.
- Hydraulic power is the hydraulic power of the movement taken by the PTO mounted on the vehicle gearbox.
- It is delivered to the pump.
- PTO and pump are used in the vehicle and PTO is controlled from the vehicle cabin is done.
- The oil tank has a capacity of 135 liters, 125 µ suction filter on the tank,
- vented tank cover, level indicator, ball valve and drain plug there are.
- The hydraulic system control is air operated and the system is controlled from the driver's seat is being done.

## PERIODIC MAINTENANCE

<i>DAILY</i>	<i>CONTROL</i>	<i>CLEANING</i>	<i>LUBRICATION</i>	<i>OIL CHANGE</i>
<i>outrigger</i>	X		X	
<i>TELESCOPIC CYLINDER</i>	X		X	
<i>REAR LOCKING</i>	X		X	
<b>600 HOURS</b>				
<i>HYDRAULIC OIL</i>	X			
<i>RETURN FILTER</i>				
<i>SUCTION FILTER</i>	X	X		
<b>GREASING POINTS</b>	X	X	X	X
<b>1200 HOURS</b>		X		X
<i>HYDRAULIC OIL</i> <i>(The plug at the bottom of the tank and the cleaning cover at the top are opened and cleaned with a suitable chemical.)</i>				

## PERIODIC MAINTENANCE

FAULT	REASON	REMOVAL
<i>DAMPER DOES NOT WORK</i>	<p><i>NO OIL IN THE TANK</i>  <i>SUCTION FILTER IS CLOGGED</i>  <i>RETURN FILTER IS CLOGGED</i>  <i>PUMP DEFECTIVE</i>  <i>VALVE CLOSED</i>  <i>THERE IS DIRT IN THE VALVE</i>  <i>HIS INSURANCE HAS BEEN BROKEN OUT</i>  <i>CYLINDER SEQUENCE VALVE</i>  <i>BROKEN</i>  <i>THERE IS AN INTERNAL LEAK IN THE CYLINDER</i>  <i>CYLINDER HOSES BROKED</i>  <i>DIPPER LOWER SWITCH</i>  <i>OPEN</i></p>	<p><i>PUT OIL IN THE TANK</i>  <i>CLEAN FILTER</i>  <i>CHANGE FILTER</i>  <i>REPLACE PUMP</i>  <i>OPEN VALVE</i>  <i>CLEAN VALVE</i>  <i>CHANGE FUSES</i>  <i>REPLACE VALVE</i>    <i>REPLACE SEALS</i>  <i>REPLACE HOSE</i>  <i>CLOSE DOWNLOAD KEY</i></p>
<i>PTO DEFECTIVE</i>	<p><i>WHEN THE VEHICLE IS MOVING</i>  <i>TURNING IT ON</i>  <i>NO AIR IN PTO</i>    <i>ELECTRICAL SWITCH IS DEFECTIVE</i>  <i>THERE IS OIL LEAK IN PTO</i>  <i>PTO GEAR BROKEN</i></p>	<p><i>WHILE THE VEHICLE IS MOVING</i>  <i>DISABLE</i>  <i>DISCONNECT THE AIR TUBE FROM THE MANOMETER</i>  <i>CHECK</i>  <i>CALL FOR SERVICE</i>  <i>CALL FOR SERVICE</i>  <i>REPLACE WITH NEW ONE</i></p>
<i>IT WORKS BY SHAKING</i>	<p><i>THERE IS AIR IN THE CYLINDER</i>    <i>LOW TANK OIL</i></p>	<p><i>LOCATED ON THE CYLINDER</i>  <i>REMOVE M8 BOLT AND START</i>  <i>AND DELETE THE AIR</i>  <i>CHECK IF NECESSARY</i>  <i>COMPLETE</i></p>
<i>TAILGATE LOCKING DOES NOT WORK</i>	<p><i>THE MECHANISM IS LEFT OIL-FREE</i>  <i>UNBALANCED AND OVERLOADING</i>  <i>MADE</i>  <i>SPRING IS BROKEN OR HAS COME OFF</i></p>	<p><i>OIL THE MECHANISM</i>  <i>CHECK THE LOAD</i>    <i>REPLACE OR REPLACE THE SPRING</i></p>

**TO REMOVE THE DAMPER**

- 1. PULL THE HANDWATER**
- 2. START THE ENGINE (NEUTRAL GEAR)**
- 3. WAIT FOR THE AIR PRESSURE TO BE A MINIMUM OF 8 BAR**
- 4. PRESS THE CLUTCH PEDAL**
- 5. PULL THE PTO SWITCH (THE LIGHT WILL ON)**



- 6. SLOWLY RELEASE THE CLUTCH PEDAL**
- 7. DAMPER WILL START TO RIFSE**

**TO LOWER THE DAMPER**

- 1. PRESS THE CLUTCH PEDAL**
- 2. PUSH PTO SWITCH BACK**
- 3. SLOWLY RELEASE THE CLUTCH PEDAL (PTO IS DISENGAGED)**  
IT IS POSSIBLE)
- 4. TO LOWER THE DAMPER SLOWLY OR FAST, USE THE ADJUSTMENT VALVE.  
YOU CAN SET**

## 5.3

### ATTENTION

Use the damper only in accordance with these instructions. People may be harmed if they are used outside of their intended use. Additionally, vehicles, dumpers and other equipment may be damaged.

Use the dumper only to transport materials suitable for its capacity.

The dumper should only be used by trained personnel.

Dump should only be used to transport materials appropriate to its capacity.

### FOR YOUR SAFETY

#### General Information

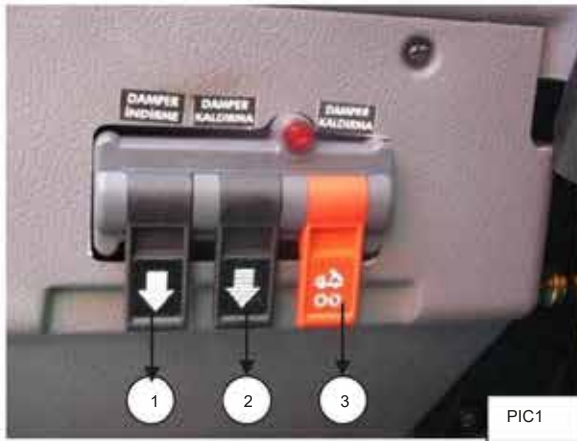
Safe use of technical equipment is only possible if the complete use and maintenance instructions, especially this section, are read and strictly followed.

The operating and maintenance instructions should always be kept easily accessible in the vehicle. Carry out cleaning and regular maintenance work carefully. All damages and repair any deficiencies as soon as possible.

Only carry out maintenance work that you have to do yourself! All other maintenance work will be carried out by trained customer service personnel. Only use original spare parts from the manufacturer.

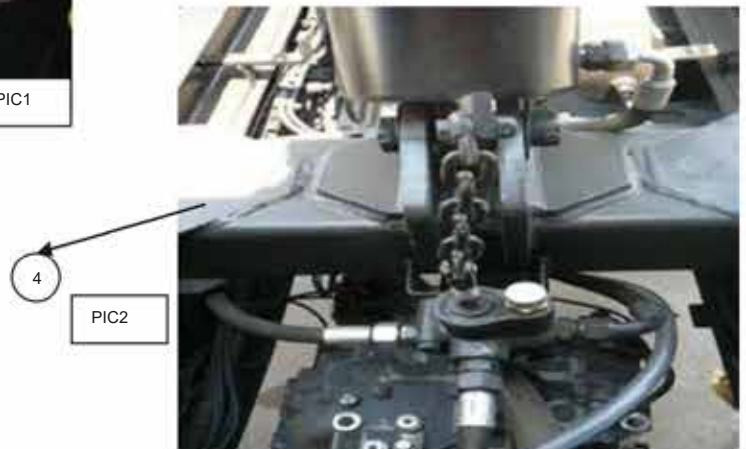
### ATTENTION

Changes to the unit and damper, connection of additional electrical and electronic devices will only be made with the permission of the manufacturer.

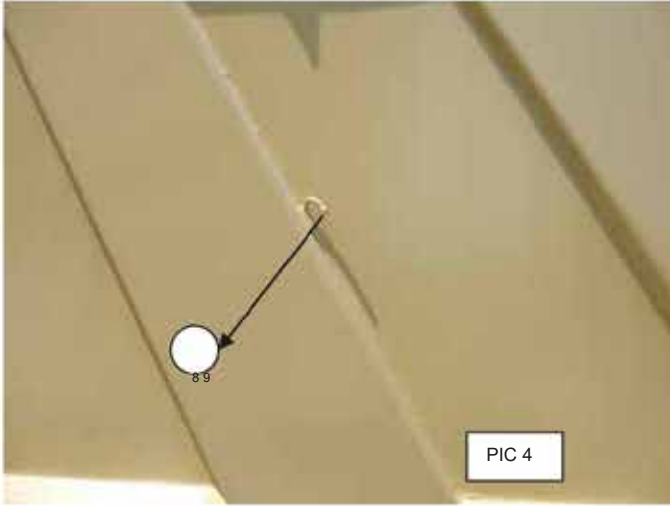


- 1.DUMPER LOWERING
- 2.DUMPER LIFTING
- 3.PTO ACTIVATION

#### 4. CYLINDER CONNECTION



7.LADDER

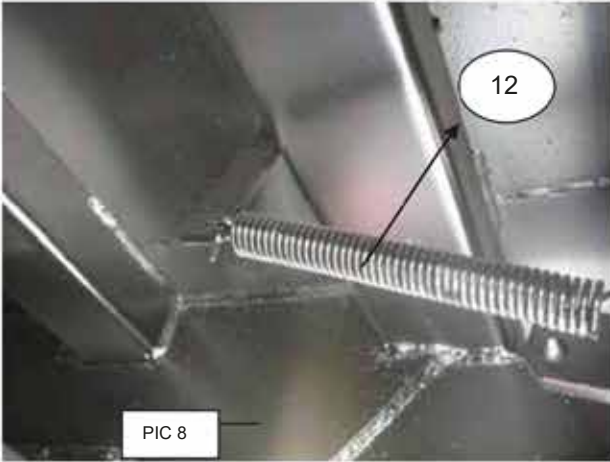


9. BACK COVER LOCK



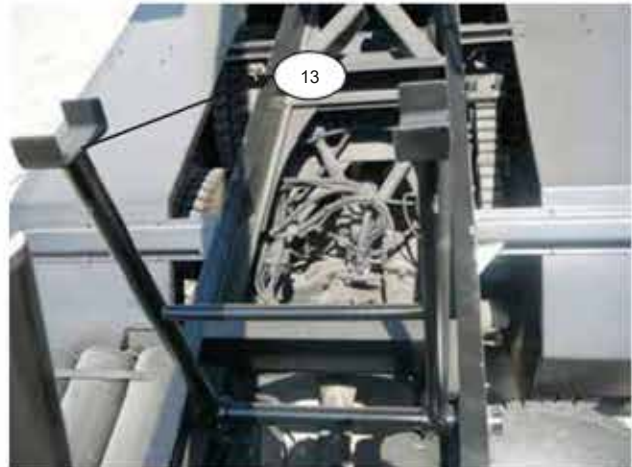
10. SPRING CONNECTION

11. FLAT CONNECTION



12. REAR COVER LOCK SPRING

13. STABILIZER

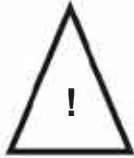






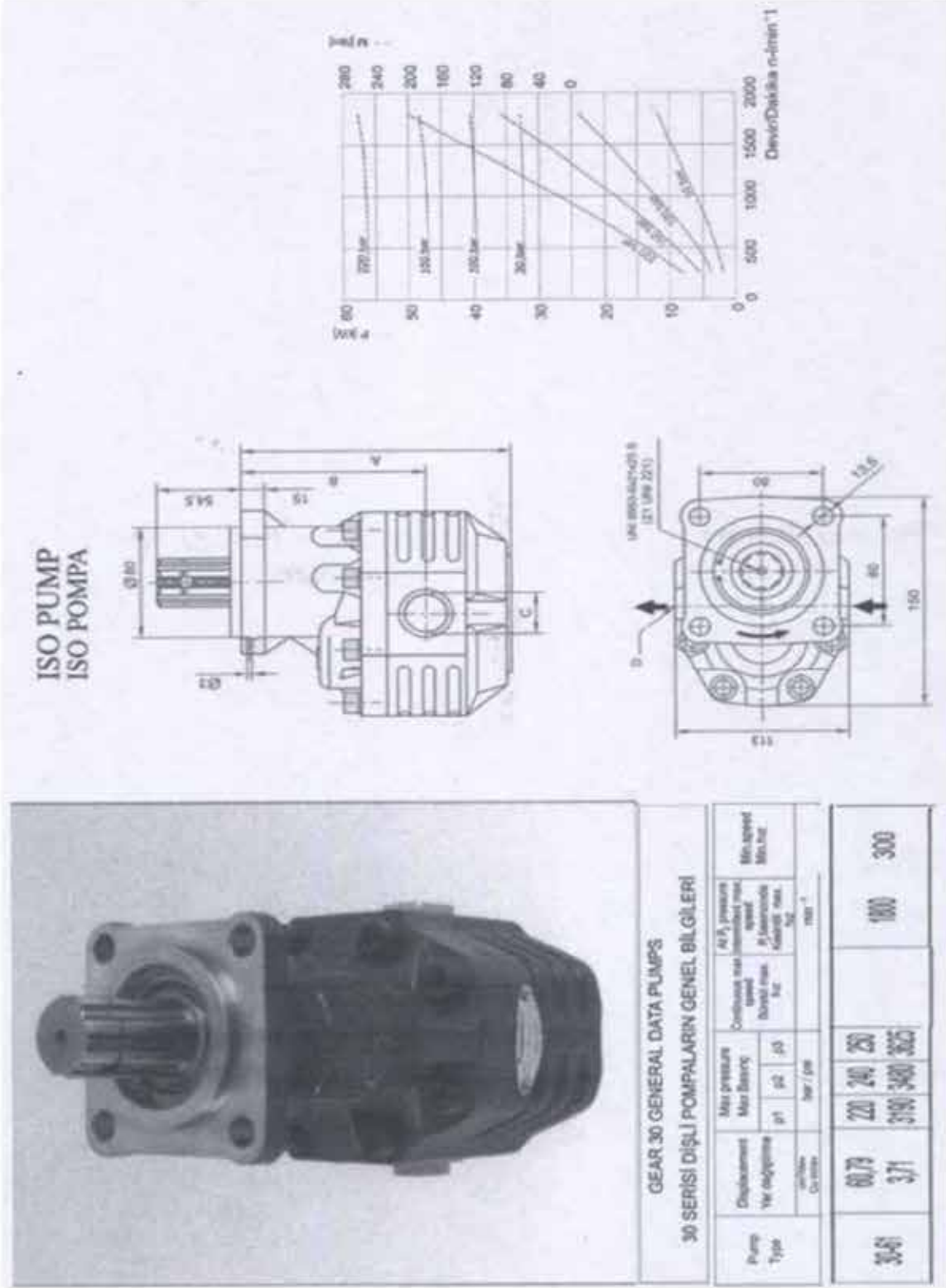
## Hydraulic Oil Tank Of Telescopic Tipper Cylinder

The hydraulic oil tank of the dumper lifting cylinder is between the cabin and the dumper platform. There is a filter at the entrance of the tank. At least one breakwater has been placed inside the tank to prevent the forces that may be created by the oil hitting the walls during sailing. The tank is flexibly attached to the vehicle using bolts, springs and rubber.



**ATTENTION**

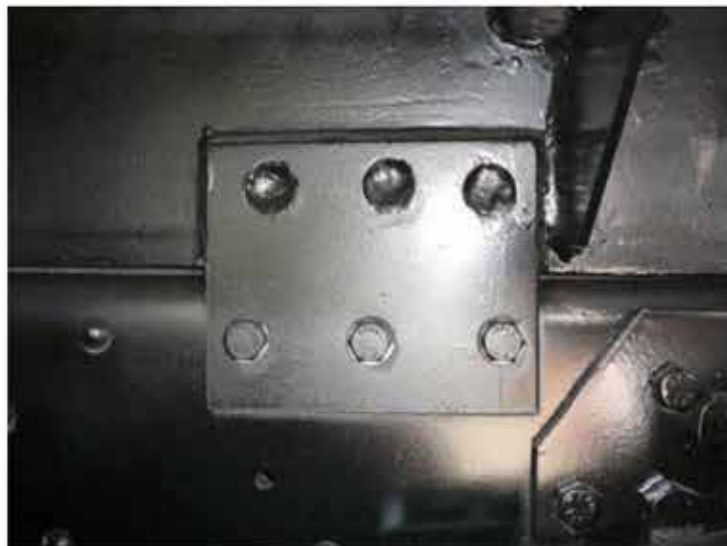
## Hydraulic Oil is TELLUS 37.





### **Spring Flexible Front Side Connection**

It can be used as a semi-flexible connection behind the spring connection in dump trucks that are required to operate under heavy load. Since the displacement of the spring will be less under constant and dynamic loads, it is possible to restrict the movement of the vehicle chassis and reinforcement chassis by using this connection. At the same time, vibrations that may disrupt comfort while driving can be prevented by using this connection type.



## **Rigid connection of rear plate and chassis**

It is a rigid connection type used in all tipper vehicles, starting from the back of the reinforcement chassis after the flexible connections at the front and ending with the rear end. Its upper side is welded to the reinforcement frame. In addition, welding the reinforcement chassis through the holes left on the upper side of the plate (welding by filling the hole completely) increases the strength of the connection by increasing the welding surface against the possibility of breakage of the weld on the edges of the plate. The lower part is attached to the vehicle chassis. It is connected via bolts.

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