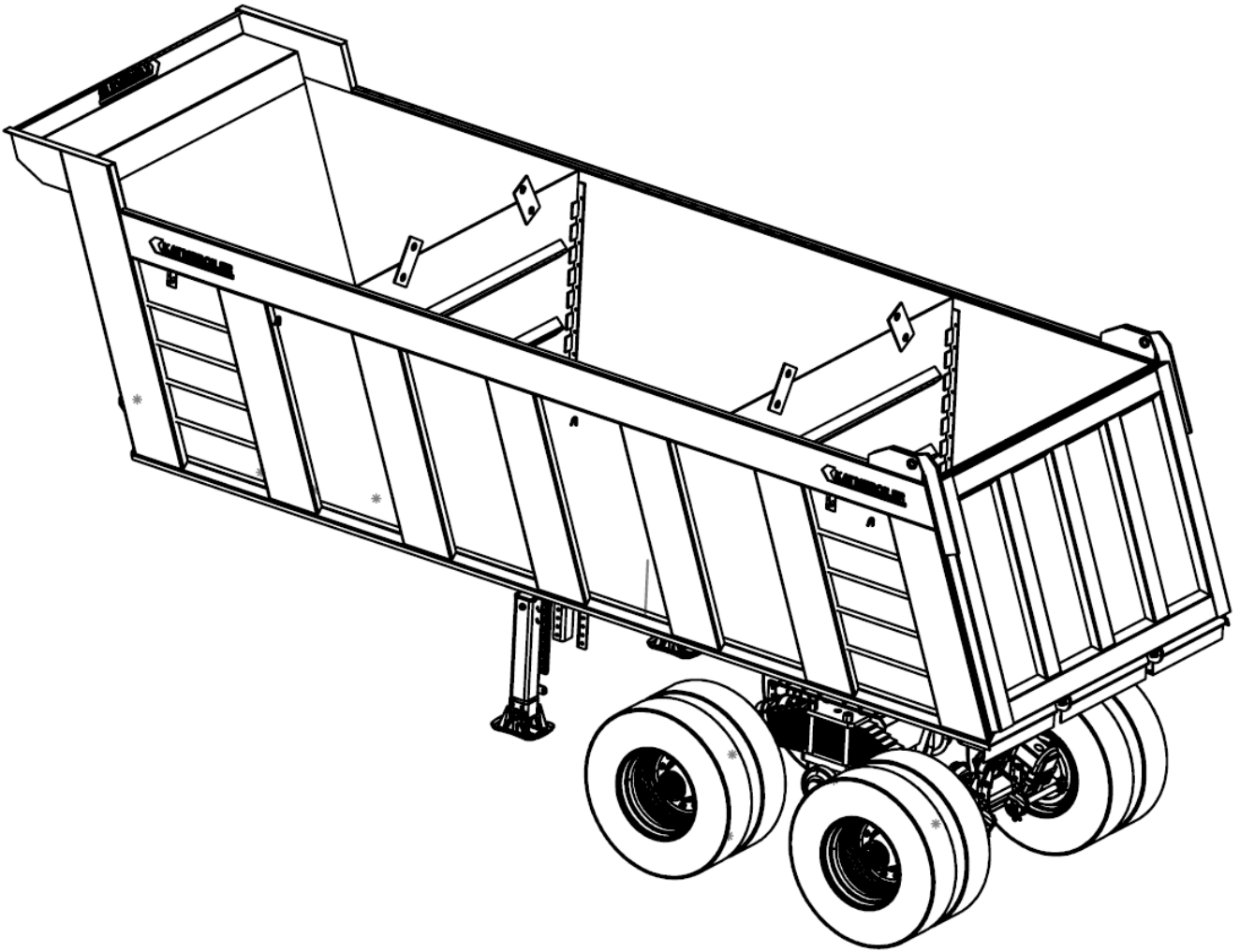




***25m³ TIPPER
SEMITRAILER***

***OPERATION
MAINTENANCE
MANUAL***

2025

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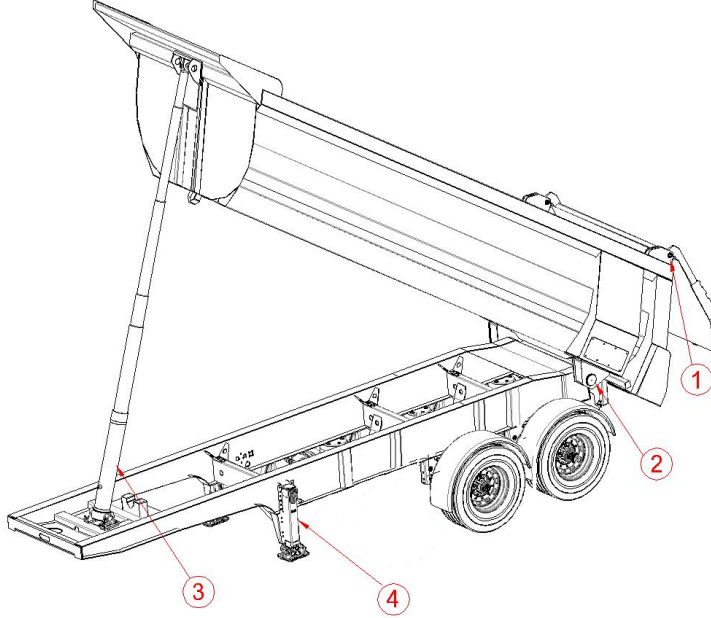
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LUBRICATION DIAGRAM

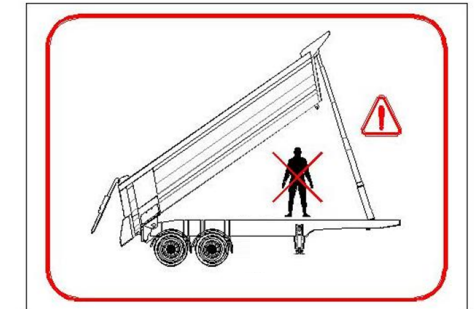
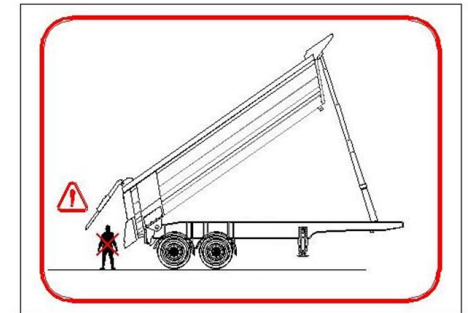
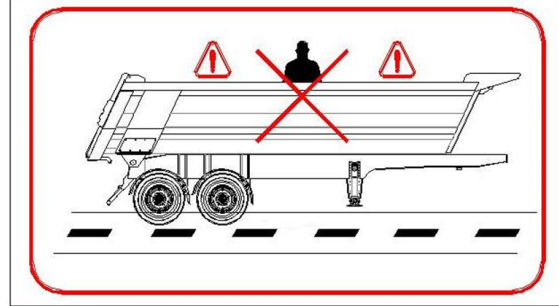


NO	LUBRICATION POINT	LUBRICATION TYPE	LUBRICATION TYPE
1	BACK COVER HINGE	GREASE	WEEKLY
2	DUMP LIFT SHAFT	GREASE	WEEKLY
3	DUMP LIFT CYLINDER JOINT	GREASE	WEEKLY
4	SUPPORT FOOT JOINT	GREASE	MONTHLY

OIL USED IN THE SYSTEM DIN 51825 KP2K-30

CAUTION !!!

HYDRAULIC OIL ACCORDING TO ISO 46 STANDARD IS USED IN THE SYSTEM.
ALWAYS USE ISO 46 OR EQUIVALENT HYDRAULIC OIL IN OIL CHANGES / ADDITIONALS.
HYDRAULIC OIL MUST BE CHANGED PERIODICALLY EVERY YEAR.
OIL SHOULD BE CHANGE WHEN IT IS OBSERVED DURING THE CHECKS THAT THE OIL IS
LOSSING ITS PROPERTIES.



- SAE 46 HYDRAULIC OIL IS USED IN THE HYDRAULIC SYSTEM.
- MAKE SURE THAT THE TANK IS FILLED WITH OIL WHILE THE CYLINDERS ARE CLOSED.
- PROTECTIVE CARE FOR EVERY 750 HOURS.
(CHANGE RETURN FILTER)
- HYDRAULIC OIL MUST BE CHANGED EVERY 24 MONTHS.
- EVERY TIME THE OIL IS CHANGED, CHANGE THE RETURN FILTER.
- THE EQUIPMENT WARRANTY IS VOID IF THE PRESSURE SEAL IS INTERRUPTED/REMOVED.

			TIPPERS		
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1- GENERAL NOTICE

This symbol will always accompany the instructions to prevent any material damages to the equipment, personal injuries or danger situations.

1.1- Manufacturer's responsibility

It is against the operating rules described for the tippers and accessories, not considering the notes and warnings appearing in this guide, the full or partial inappropriate use of the tipper, using non-authorized spare parts, and using the tipper by non-qualified personnel. KATMERCİLER TRAILER S.L. refuses any responsibility due to material or personal damages.

1.2- Regulations

This guide has been written according with the instructions described in the annex "1" of the directive 2006/42/CE, point 1.7.4.

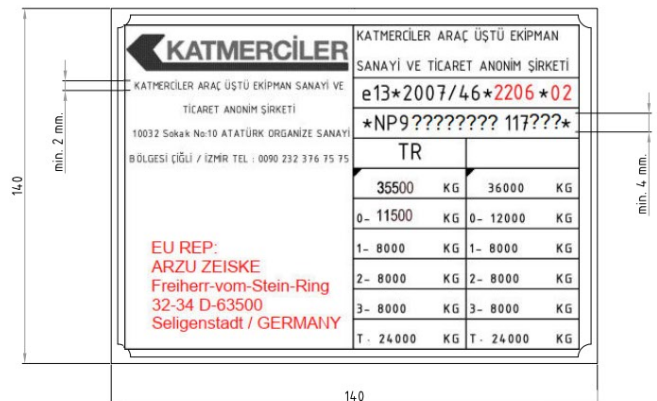
1.3- Keep the certificate and user's guide

This guide is a part of the machine, keep it for future references.

1.4- Vehicle identification:

In order to ask for spare parts and to request some information and support, each vehicle will be provided with a plate where it is included, among other data, the serial number of the vehicle "*Ident. nr.*".

This plate shall be placed on the front part of the frame right beam of the chassis or on other similar structure of the machine.
Observe the following picture.



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2- DESCRIPTION AND LIMITS

2.1- Vehicle description:

KATMERCİLER tippers are designed for goods transport, loading and unloading by a tipping body. The operation of these vehicles is the same, without any substantial change but of those construction elements of the semi-trailer and measures or the quantity of axles (all these elements will not affect the behaviour and efficiency of the tipper).

2.2- Usage:

Intended use of the machines: transporting and unloading by the tipping system of the semi-trailer, for all type of bulk goods.

Transport: Industrial semi-trailers pulled by a tractor unit. The maximum speed for this kind of mixed vehicles (tractor + semi-trailer) is: 100 km/h.

Tilting: This equipment has been designed to be used by only one operator. It will always be operated from the driver's position in the tractor unit and the vehicle danger area will never be crossed (rear part). Do not tilt in front in the presence of people close to the working area or in contact with any point of the semi-trailer.

2.3- Bad usage:

Any use non-described in this guide will be considered inappropriate. It will not be used to load any different materials of the ones here described, as well as any machines, structures, people or animals. It is not allowed loading on the semi-trailer more than the maximum permissible laden weight according with the design and homologated for this model.

3- SAFETY AND GENERAL WARNINGS

 - *The inappropriate use of the tipper, as well as not respecting the security rules can cause serious consequences for the staff and/or material.*



BEFORE USING:

- Read carefully the guide
- Get informed about the sector security rules in force
- Do not modify the cylinder pressure valve
- Before tilting, make sure that there aren't any obstacles, electric cables, ceiling etc. If it can be any contact with a power line, low the vehicle immediately, avoiding any contact between the floor and the vehicle.
- Make sure that there is not anyone on the vehicles way.
- Before driving, make sure that the break, connections and lighting are operating properly
- Do not transport people in the semi-trailer

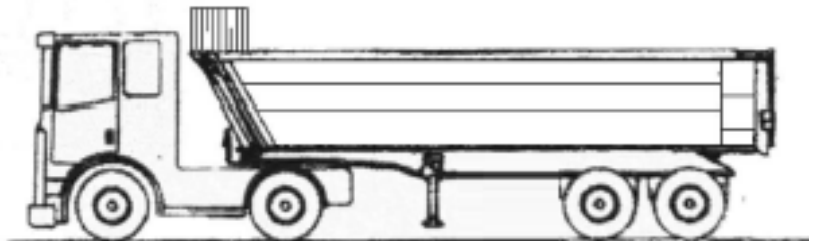
DURING OPERATION:

The tipper was designed to be used by only one operator. The operator position will always be into the truck cab while it is tilted, or on the left side of the tipper for other operations.

When it is operated on a public road, the vehicle must be duly signaled and it is compulsory wearing reflecting clothes.



Before tilting or loading, remove the tarp.



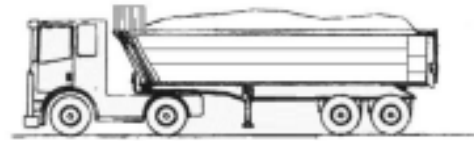
Do not overload the vehicle



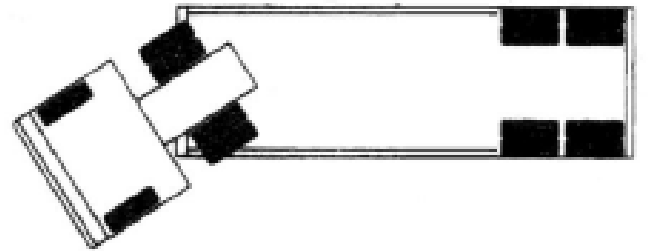
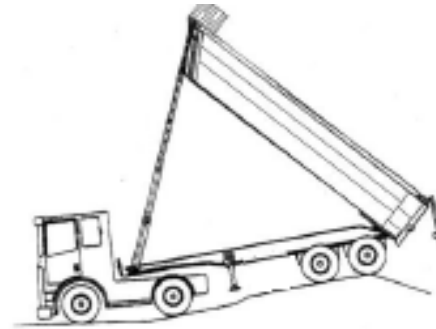
Divide the loading uniformly to avoid overloadings.



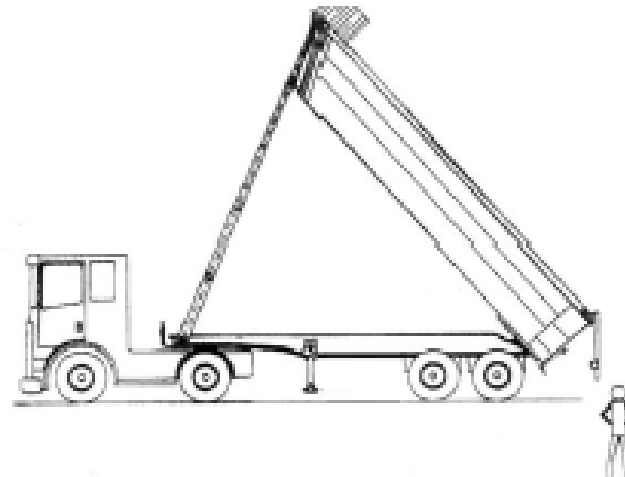
Do not tilt on irregular or soft surfaces



Do not tilt with the truck unit and the semi-trailer at an angle.



Do not stand in the operation area



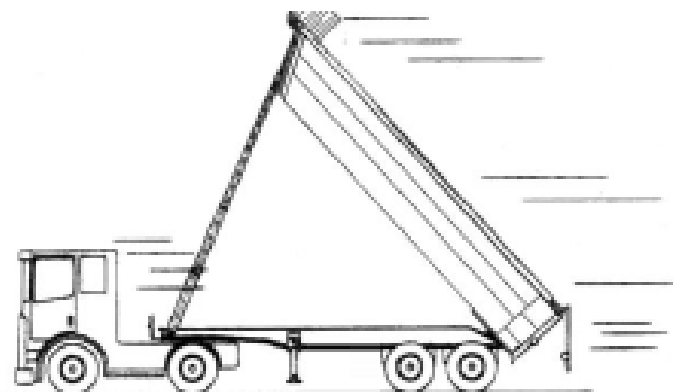
Do not move the vehicle while tilting.



Do not drive with the box lifted



Stop the unloading, if the charge doesn't begin to be unloaded on half way (20° or 25°), or it is blocked or if the charge sticks.



Maintenance and controls:



Before doing any operation, read the instructions and advices of this manual.

- Wear the individual security equipment.
- Careful with the liquids under pressure, protect the hands and the body.
- To avoid any risks, low the hydraulic system and other systems pressure
- In order to do any welding in the tipper, disconnect the electronic equipment and do not put any mass on the hydraulic elements. Put the mass as close as possible to the welding area. Do not do the welding close to the wheels; if it needs to be done, cover them or disassemble them.
- Grease periodically the tipper joints for its proper operation.
- **DO NOT WORK UNDER THE TIPPER WITHOUT ANY SECURITY SUPPORT IN CASE THE BOX WILL GO DOWN.**
- For the maintenance operations, respect the proceeding for labour health and safety risks.
- Respect the advices for the environment preservation.



Wear individual protection clothes

Do not use loose clothes, use tight working clothes.

Safety shoes

When handling, disassembling, doing the maintenance, etc. Use working gloves



Use face masks if there is some dust.



If the noise is very loud (the noise in some workshops is louder than 80 dB (A)), wear a hearing protection equipment and close the doors and windows of the cabin to reduce the noise.



Safety Equipment



It is recommended having a first aid box and an emergency phone list. Respect the fire extinguishers usage rules. If there are some flammable materials, a fire extinguisher should be in the cabin.

4- ATTACHMENT WITH THE TRACTOR UNIT:

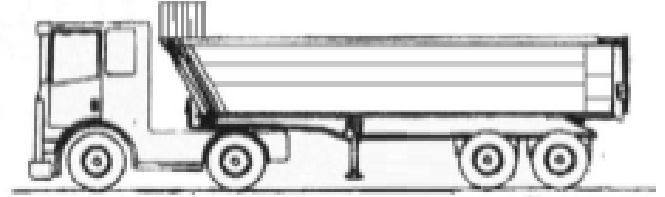


Before starting, make sure that there aren't any people or obstacles close.

- Make sure that the semi-trailer is braked (push the red pusher button).
- Approximate the tractor unit looking for a correct alignment of the King Pin and the 5th wheel.
- If the 5th wheel height corresponds with the neck height, attach according with the standard procedure.
- If the 5th wheel height doesn't correspond with the neck height, level the neck using, preferably, the tractor unit suspension.



Plug every connections between the tractor unit and the platform; hydraulic, electric and pneumatic connections (FIRST THE YELLOW LINE).



5- LOADING AND UNLOADING

Loading and unloading on a levelled surface; make sure that the brakes are on before loading/unloading. Do not overload the tipper or the tractor unit; observe the technical data to know the capacities of each one.



Before loading, make sure that the doors are closed and the accessories are tightened.

5.1- Loading process

Make sure that the tilt control of the truck is on a neutral or lowering position. So, the box will be supported directly on the chassis but not on the cylinder.

Follow the loader instructions, use rear-view mirror and maintain the visual contact to move the vehicle.

When the loading has been done, make sure that there aren't any remains which can fall on the road and can cause an accident to a third party.

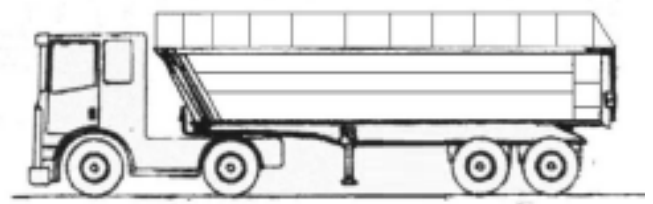
5.2- Tarp use



Before loading or unloading, the box has to be completely uncovered.



Do not drive the vehicle if there are strong gusts of wind. Drive always with the box completely covered.



Do not grease or lubricate the driving pulleys or the cables.

Do not use the tarp to level the material to be transported.

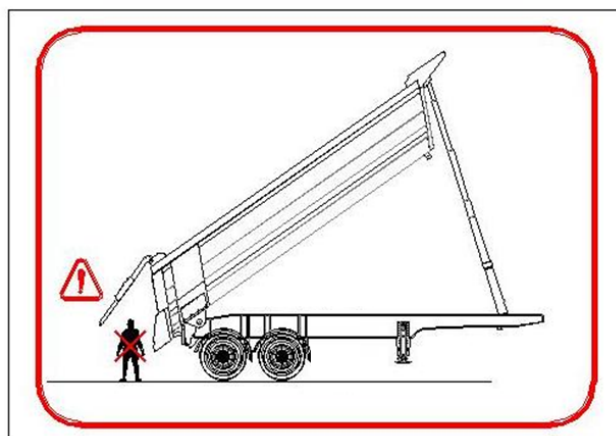
5.3- Door opening and closing

The door lock opens automatically when the tipper starts to tip over





Don't stand behind the lid when it's opening



Stop the unloading process if the door is in contact with the unloading goods.

6- TILTING:

PROCEED TO DO THE TILTING ONLY IF THE FOLLOWING CONDITIONS ARE FULFILLED:

- Every connection in the tractor unit and in the semi-trailer is well done. Make sure that both hydraulic terminals are well connected and the oil flows properly.
- The group is on a stable ground, flat, leveled and that the axles are aligned.
- There is no one in the unloading area.
- There are not lateral winds.
- There is not any contact risk with high-tension wires or other objects.



Stop the unloading if the light or sound pilot is activated. IT IS TIPPING HAZARD.



The hydraulic equipment installed in the tractor unit has to send a maximum pressure of 150 bars to the semi-trailer.

6.1- Box tilting

- Put at neutral or low position and start.
- Press the clutch pedal and put the tipper lever on an elevation position, leave the lever in this position and release the clutch. The tipper will lift until the clutch will be pressed or until the box will reach the maximum angle.
- When the box will be up, put the lever in a neutral or low position. **Do not leave it on a lifting position, since it can cause malfunctions in the cylinder or in the security valves.**



Do not accelerate the engine of the vehicle while the unloading is getting done, the revolutions range needs to be close to the idle speed.

7- TRANSPORT:

- Do not drive with the tipper up, under tipping hazard, collision with electrical lines, jumper cables.
- Do not exceed the speed limit.
- Adapt the speed to the road conditions, the traffic and the weather conditions. Put tyre-chains if needed.
- After using the tipper, close the tarp and clean the vehicle to avoid any mood loosening or leaving any remains on the road.
- Before moving, make sure that the lights are clean and operating, they can be dirty.
- Some models are equipped with folding or retractable bombers, put in circulation mode before driving on public roads.



- Observe the height passing the loading when under a bridge, a viaduct or tunnels.
- Do not put the vehicle into neutral to descend some hills, put a low gear depending on the hill and of the load. Using too much the brake on a hill can cause “Fading” in case of vehicle with drum brake, the drums will heat so much that they expand, and they will avoid a good braking on needed moments.



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8- SEMI-TRAILER DISCONNECTION AND PARKING:

Follow the instructions to disconnect the trailer from the unit truck:

- Park the trailer on a flat surface.
- Put the parking brake of the trailer.
- Raise the suspension of the tractor unit (if possible).
- Low the mechanic support until it will be on the floor, if necessary. The mechanical supports will have a “slow” position which will allow raising the 5th wheel of the tractor unit if it hasn't got any suspension control. In this case, raise around 50 mm from the floor.
- Pull the lever to open the 5th wheel lock.
- Accelerate slowly the tractor unit ahead to disconnect.
- Unplug the connecting tubes of the electric and hydraulic pneumatic system.
- Remove the tractor unit from the trailer and remember to close the drawers which could be opened.



Disconnect every connection (hydraulic, electric or pneumatic) between the tractor unit and the platform (FIRST THE RED LINE).

9- MAINTENANCE/ REPAIR:

9.1- General warnings



IF THE MAINTENANCE TASKS ARE NOT REGULARLY DONE, A RISK OF THE TIPPER BREAKDOWN AND DANGER IN THOROUGHFARE WILL EXIST. IT WILL ALSO BE A RISK OF DAMAGE OF THE TIPPER DRIVER.

While the maintenance is getting done, the safety warnings described on the section number 3 of this manual need to be respected, as well as every safety advise:

Stop the tractor unit motor and take off the key before doing any repair, cleaning or lubrication operation or while any maintenance task is getting done.

While the box is getting raised and the maintenance works between the chassis and the box are getting done, put a safety wedge between both of them.

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Everyday. Check visually the wheels fixing nuts, the tyres pressure and unwearing, the operation of the electrical system and the ABS or EBS system; this system provides any vehicle being more active safety and being more effective while breaking.

After driving 1000 km:

-Make sure that the wheel nuts are tightened.

This checking has to be done each time that a wheel is removed. The tightening torque must be between 600 and 700 Nm.

-Tighten again the suspension and align again the axles (Annex 1).

Everymonth: Change the grease of the 5th wheel disk after the disk and KP cleaning. Clean every vehicle element to grease to warrant its proper operation.

Every 3 months: Check the pads condition for the disk brake. It can be controlled on the brake caliper, as it is indicated on the axle's maintenance manual. For drum brakes, the control is on the automatic brake levers.

Every 6 months: Tighten again the suspension elements and clean the valves filters.

Once a year: Check the joints group and also the suspension tightening to warranty the good operation and align again the axles (Annex 1). Also the valves filters need to be clean.

These intervals have been considered for a normal use of the vehicle, so these periods would be shortened in case of using the vehicle under hard conditions.

In addition to basic checking, it is recommended doing an exhaustive inspection before any trip or if we think that it exist any malfunction.

Check the hydraulic installation of the tractor unit, specially the security valve and its tare, as well as the general condition of the oil, the terminals and the hoses.



The hydraulic equipment installed in the tractor unit, must send maximum pressure of 150 bar to the semi-trailer.

9.3- Particularities of the maintenance operations

- Before doing the greasing, clean the dust, water and dump.
- Inject the grease until the lubrication point will get out clean grease.

- Do not mix different Brand or specifications oils.
- Greasing points:
 - Lifting equipment joints (cylinders).
 - Mobile parts, hinges, bolts, springs, etc.
 - Hinges of the door and of the lower closures.
 - Turning point of the box with the chassis.

The trailer is delivered with grease "GR MV/EP 2", (lithium grease). Use the same or equivalent grease.

TRACTOR UNIT OIL TANK:

In order to check the oil level, the trailer need to be in horizontal position and the oil must be cold. If you want to add the oil, check that the cover and that the whole area are clean and also check the hydraulic oil use according with the following basic information (for other specifications, ask the manufacturer).

HK 46

DIM 51524 TEIL 2 HLP

ISO L-HM



GENERAL WARNINGS ABOUT THE HYDRAULIC OILS USE

- *Do never mix de oils*
- *Using good oil, of good quality, warranties a good lubrication and durability of the elements.*
- *The oil tank must be closed; the air is suctioned by a filling cap with the corresponding filter.*
- *Keep clean the return filters*
- *Check the oil level; it must have from 35% to 40% more than the working volume of the cylinder.*
- *The oil change must be done by experts. The oil removed should be kept and thrown away according with the environment protection rules.*

HYDRAULIC STRUCTURES:

Look for possible leaks

STICKER AND LIGHTING DEVICES:

Check the stickers and lighting cleaning.

WHEELS AND TYRES:

Check the tyres condition, the traffic band, sides and make sure that there are not any fissures.

Check the tyres pressure.

SCREWS:

- Tighten the cylinder screws of the tipper.
- Tighten the support screws of the tilting axle.
- Check the tightening torque in the wheel.

CLEANING:

- Clean the trailer and remove the dirt left and sticking materials.

TARP:

After the first months of use, the tarp strain will be reduced. To avoid these problems, tighten the strains which are on each side of the tipper, on the upper part.

Grease the bearings of the transmission axle between the lever and the tarp pulley system.

AXLES:

Follow the instructions of annex 1 and, in general, those of the axle manufacture.

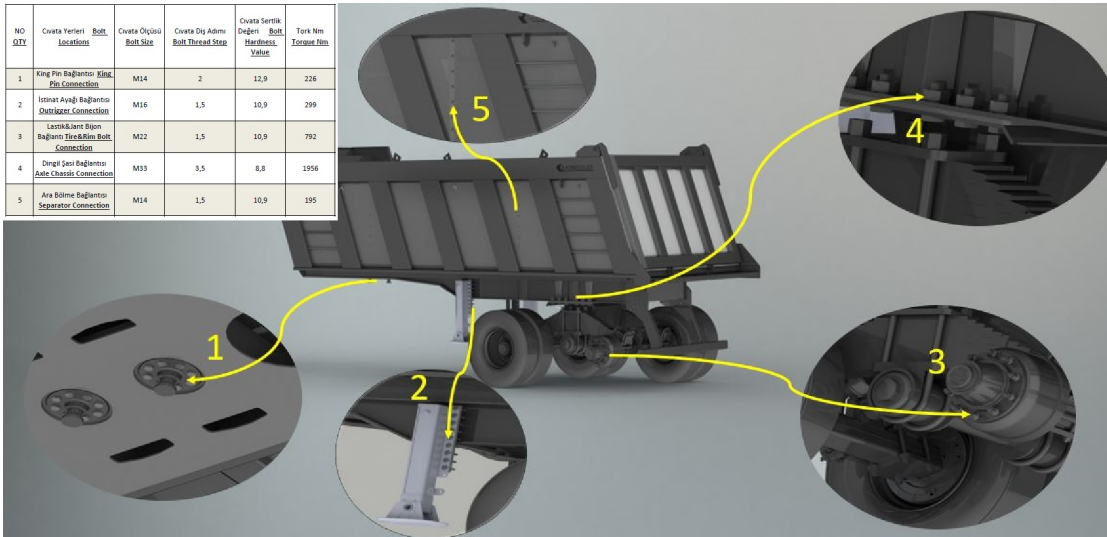


BOTH HYDRAULIC TERMINALS MUST BE CONNECTED BETWEEN THE TRACTOR UNIT AND THE SEMI-TRAILER: PRESSURE AND RETURN



ATTENTION: This system operation must be done exclusively by the qualified staff and designed by KATMERCİLER TRAILER, SL ,or by the manufacture of the brake system Osman Koç.

NO QTY	Cvata Yeri/ Locations	Bolt Locations	Cvata Ölçüsü Bolt Size	Cvata Diş Adımı Bolt Thread Size	Cvata Sertlik Bolt Hardness Value	Tork Nm Torque Nm
1	King Pin Bağlantısı Kinetik Pin Connection	M14	2	12,9	226	
2	İstinat Ayaklı Bağlantısı Distalizer Connection	M16	1,5	10,9	299	
3	Lameliyle Bilek Bağlantısı Bolt Connection	M22	1,5	10,9	792	
4	Önçölü İstinat Ayaklı Distalizer Connection	M33	3,5	8,8	1956	
5	Ara Bölme Bağlantısı Separator Connection	M14	1,5	10,9	195	



LIGHTS AND CONNEXIONS SCHEMAS WITH THE TRUCK:

General Schema of the lighting electric installation:

1

Connexions with the tractor unit:

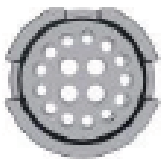
SYMBOL LEGEND



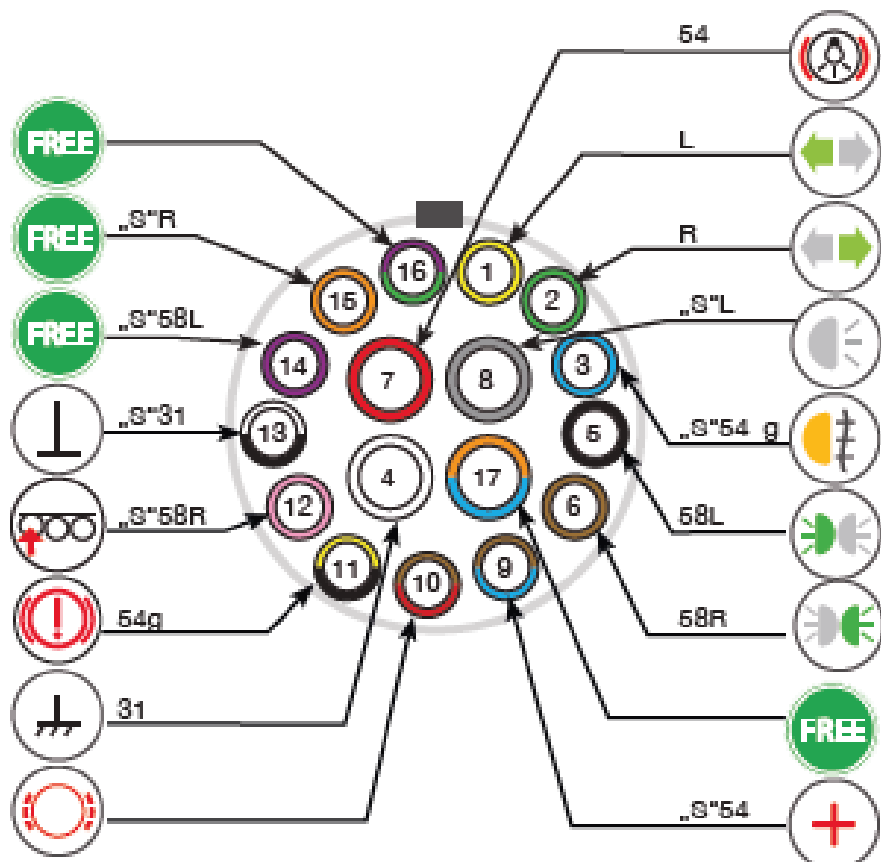
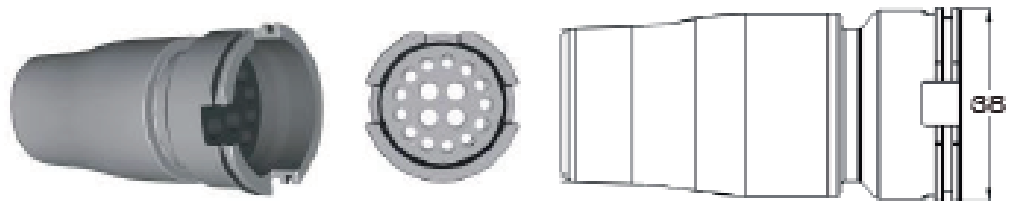
				Symbol
Şase, toprak	ارت	الارضى	הארקה	
Sinyal, sol	راهنما چپ	المؤشر الخلفى لاتجاه اليمين	איתות שמאל	
Sinyal, sağ	راهنما راست	المؤشر الخلفى لاتجاه اليسار	איתות ימין	
Fren	چراغ ترمز	توقف	אור בלם	
Park, sol	چراغ توقف چپ	ضوء التيل اليسار	חניה שמאל	
Park, sağ	چراغ توقف راست	ضوء التيل اليمين	חניה ימין	
Arka sis	چراغ مه شکن عقب	مزيل الضباب الخلفى	אור ערפל	
Geril vites	چراغ دنده عقب	اشارة المسير الى الخف	אור נסיעה לאחור/חורוס	
Sürekli enerji	منبع تغذيه دائمى	امدادات الطاقة دائم - كان ٢٤	הזנה קבועה	
Dinli kaldırma	بالاير محور	رفع المحور	חיזוי הרמת סרן	
Treyler EBS	کنترول ترمز	اشارة التحكم بالوقوف	חיזוי בלם חניה	
Balata aşınma	نشانگر سایش لنت	اشارة انتهاء صلاحية الكوابح	חיזוי בלאי רפידה	
Şase, elektronik	ارت برای الکترونیک	بیانات الارضى	הארקה אלקטרוניקה	
Serbest hal	انتخاب آزاد	حالة عدم الربط(حره)	פסוי	



ASS3
17 pin

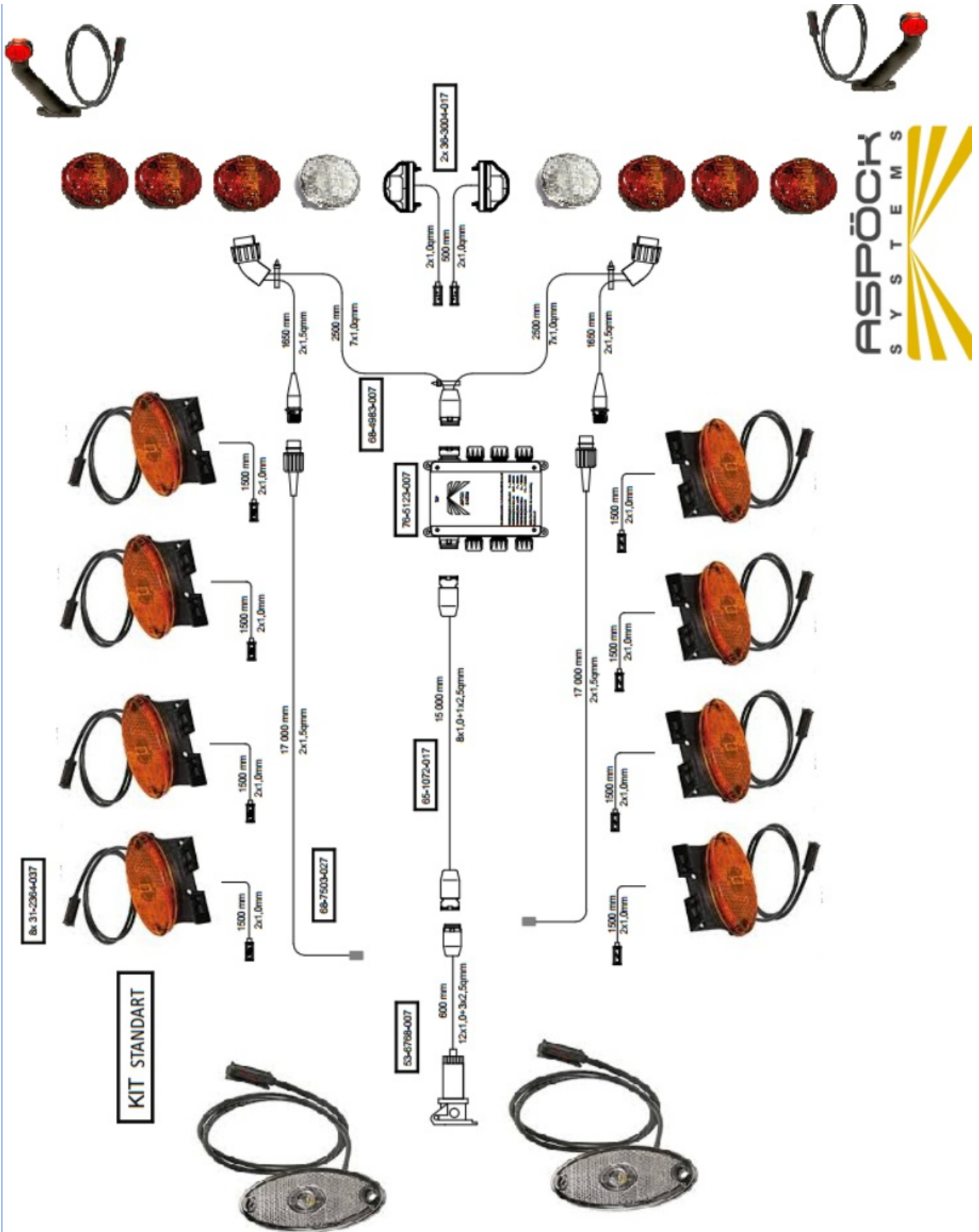


ASS3 17 pin male



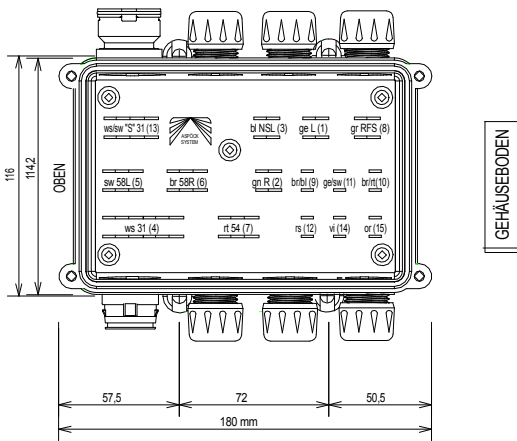
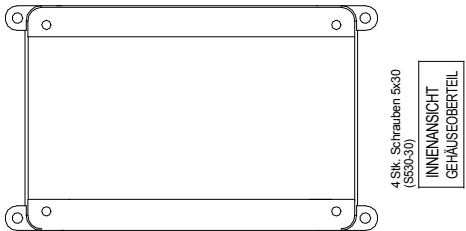
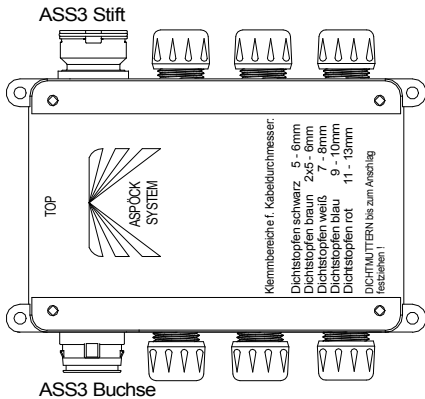
I_{max}=16A





Verteiler Standard + ASS3

Farbe	ASS3
GE	1
GN	2
BL	3
WS	4
SW	5
BR	6
RT	7
GR	8
BR/BL	9
BR/RT	10
GE/SW	11
RS	12
WS/SW	13
VI	14
OR	15



"g"	080908	Km	Text entfernt (ASS3 Stift zuerst stecken)
INDEX	Datum	Name	Änderung
gez.	050517	GB	Bestell-Nr.
gepr.			76-5123-007
Prüfart.	61 926		

Gewicht pro Stück: 0,000 kg

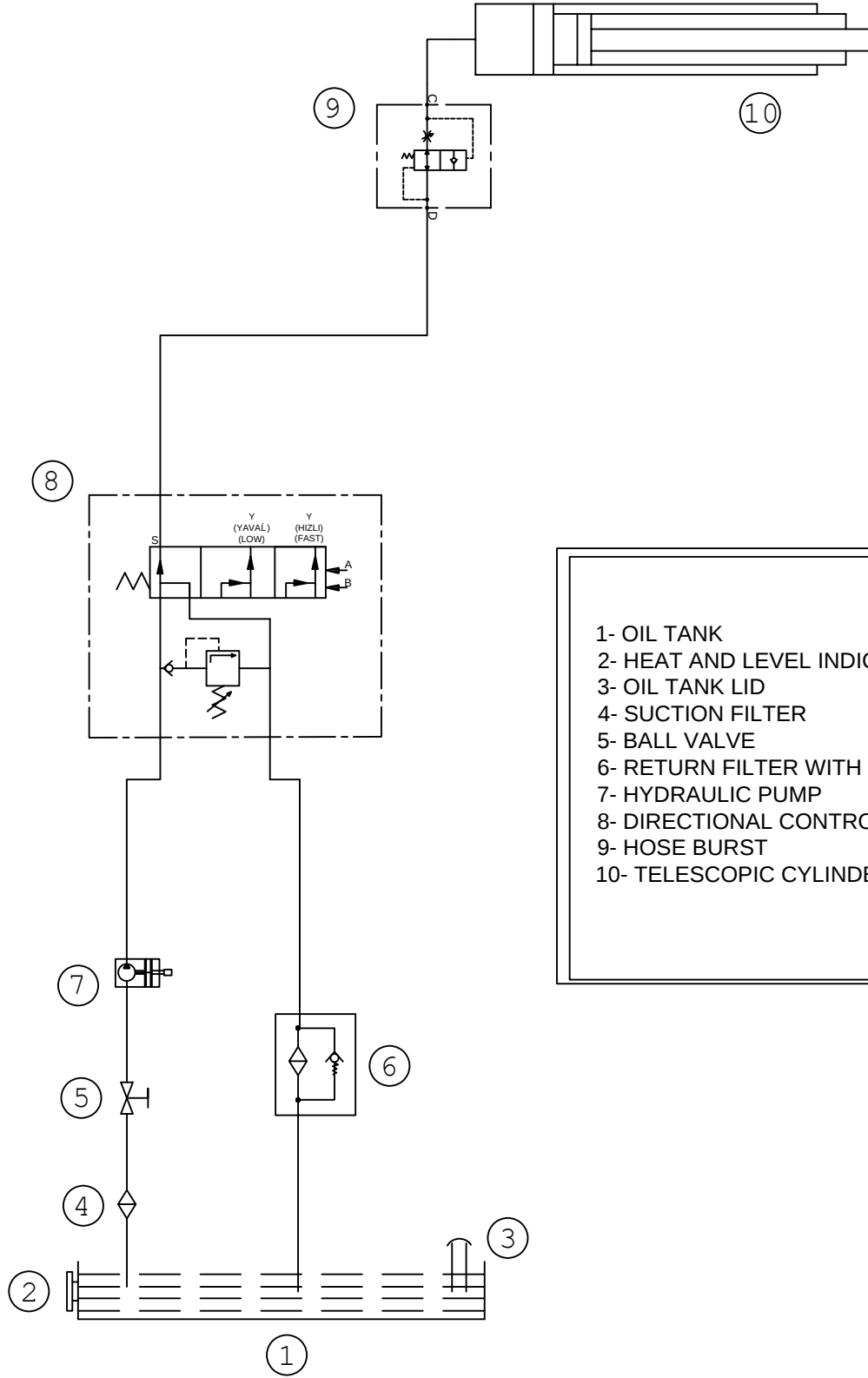
24 VOLT
ADR / PVC für Zone 2

☒ Standard ☐ Kundenspez.

KundenNr.:



Resim Üzerinden Ölçü Almayınız
Do Not Measure From Drawing



Çizen Drawn by	ANIL YENTÜMÜR	Parça Adı/ Item Name:	22/092 TIPPER SEMI TRAILER HYDRAULIC CIRCUIT DIAGRAM	Çizim metodu First angle projection
Kontrol Checked by		Resim No / Drawing No:		
Onay Approved by	S.MUTLU	Yüzey koruma/Surface		
Ağırlık/weght (Kg)	Malzeme/Material	Ölçek/ Scale	1/1	Sayfa/Page
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OBSERVE CAREFULLY THE MAINTENANCE, GREASING, ETC. EXPLAINED IN THIS MANUAL

IT IS VERY IMPORTANT DOING THE FIRST MAINTENANCE AND THE RE-TIGHTENING OF EVERY FIXINGS, AS CLOSE AS POSSIBLE TO THE FIRST LOADING TRIP AND/OR 1000 KM.

THE 90% OF THE PROBLEMS ON AXLES AND SUSPENSION ARE DUE BECAUSE OF ABSENCE OF FOLLOWING-UP THE MAINTENANCE INSTRUCTIONS. NOT FOLLOWING THESE INSTRUCTIONS WILL BE CONSIDERED A DEFECT USE AND, THEREFORE, THE WARRANTY WILL BE VOID.

IMPORTANT: AFTER THE 1ST INSPECTION. THIS FILE NEEDS TO BE DULY FILLED AND SIGNED, AND SENT TO THE e-mail servis@katmerciler.com.tr, TO KATMERCİLER TRAILER , ATTACHING THE TECHNICAL DATA SHEET

IN CASE OF HAVING ANY DOUBTS OR IF ANY INFORMATION ABOUT MAINTENANCE IS NEEDED, CONTACT THE POST-SALES RESPONSABLE ON PHONE NUMBER: + 3 3

COMPANY NAME		V.A.T.	
ADDRESS		CITY	
		COUNTRY	
TELEPHONE N.			
UNIT INFORMATION		WARRANTY STARTING DATE	
MODEL		O.P.	
CHASSIS NUMBER			

DAY	WORK DONE	
WORKSHOP		STAMP

