



KOZANOĞLU KOZMAKSAN

HYDRAULIC PUMPS & POWER TAKE-OFFS MANUFACTURING LIMITED CO.

HİDROLİK POMPA ve ARA ŞANZİMAN PTO İMALAT SAN.LTD.ŞTİ.



UARA.401.R1.H SSPTO USER MANUAL



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The images used in this user manual are representative. They may not be exactly the same as the product purchased.



Safety Information

The following information is for your safety. Read and make sure you understand these instructions before you start using the product.

General Security

- ✓ Carefully read the instruction manual supplied with the product and follow the instructions given.
- ✓ Important points that are essential for the user's own safety and the long service life of the product are indicated by symbols. Observe these indications.
- ✓ Make sure that the instructions you follow and the tools you use are appropriate for the work you are doing.
- ✓ Never work alone when repairing or servicing products under the vehicle.
- ✓ Make sure that the parts are properly assembled.
- ✓ Never use worn or damaged parts.
- ✓ Do not modify the SSPTO or other driving equipment of the vehicle.

Instructions for Use in Cold Weather

To prevent injuries and possible damage to the gearbox;

- ✓ The driving equipment of the vehicle must be checked.
- ✓ Driving equipment must not be used until the vehicle has been warmed up for at least 5 minutes.



Features of UARA.401.R1.H SSPTO

UARA.401.R1.H SSPTO is connected to the vehicle's drive system with a shaft between the main transmission and differential in superstructure applications;

- ✓ Equipment connection outlet,
- ✓ Speed increase,
- ✓ It is a gearbox used for axis distance changer.

Product features ;

- The UARA.401.R1.H SSPTO is five-axis.
- Lubrication system is provided as standard equipment on the product. Cooling system can also be included in this lubrication system according to the working conditions.
- There is 1 equipment connection output on the product.
- The vehicle has the capability to start equipment when the vehicle is moving or at a standstill.
- It has a pneumatic control system.

Technical Data

Introduction

Maximum Torque	430 Kgm
Maximum Revolutions	-

Exits

Power Rating	85 Kw
Maximum Revolutions	2800-3000 RPM
Ratios	1/1.5 1/1.8

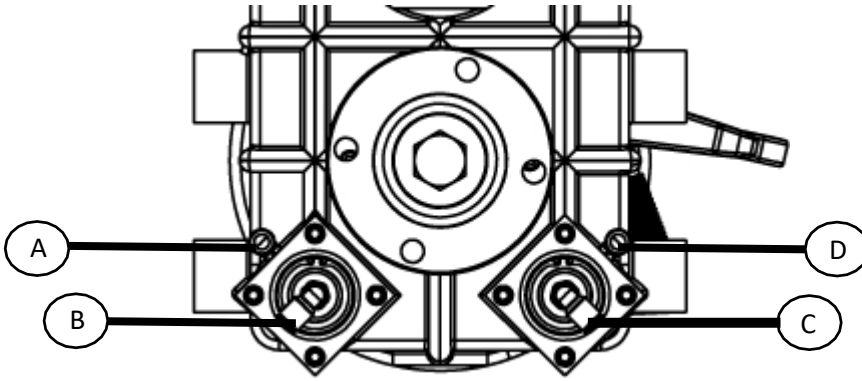


This SSPTO guarantees the specified values if it is used under appropriate conditions and the safety rules are observed.

SSPTO Engage and Disengage

UARA.401.R1.H SSPTO engagement-disengagement is done pneumatically with 2 pneumatic cylinders (6 - 8 bar). Engagement-disengagement is done after the main shaft is completely stopped.

- A: Air Inlet (Top Outlet Engage)
- B: Air Inlet (Top Outlet Disengage)
- C: Air Inlet (Main Drive Engage)
- D: Air Inlet (Main Drive Disengage)



Picture 1.

SSPTO operating functions and air inlet controls are as follows.

- 1) Main drive function (Fig.2); First (B) (The equipment will be deactivated.) Then (C) air inlet is activated. Air must be supplied continuously throughout the function. (Air inlets are defined in Figure 3.)

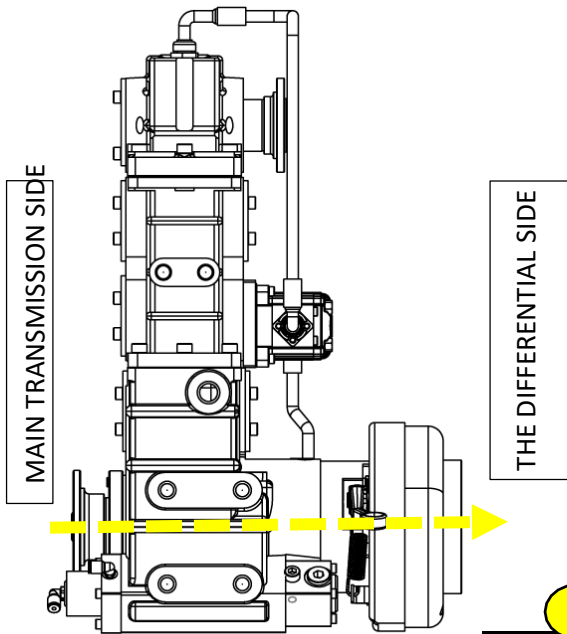


Image.2

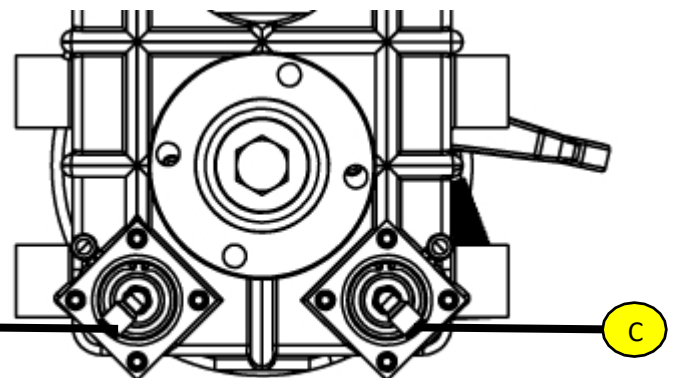


Image.3

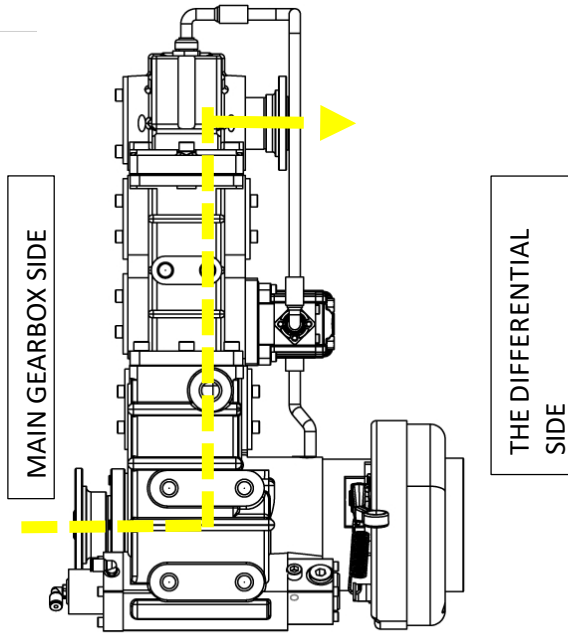


Image.4

2) Top output (Fig.4); Firstly (D) air inlet is activated. (The main drive will be deactivated.) Then (A) air inlet is activated. Air must be supplied continuously throughout the function (Air inlets are defined in Figure 5).

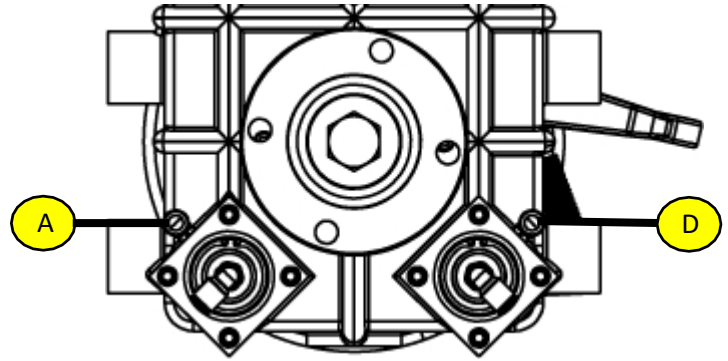


Image.5

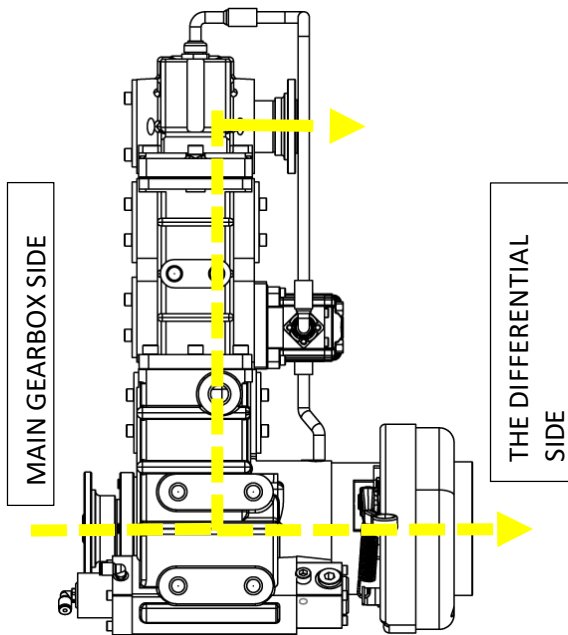


Image.6

3) Equipment Operation while Driving function (Picture 6); Firstly (C) air inlet is activated. Then (A) air inlet is activated. Air must be supplied continuously throughout the function. (Air inlets are defined in Figure 7).

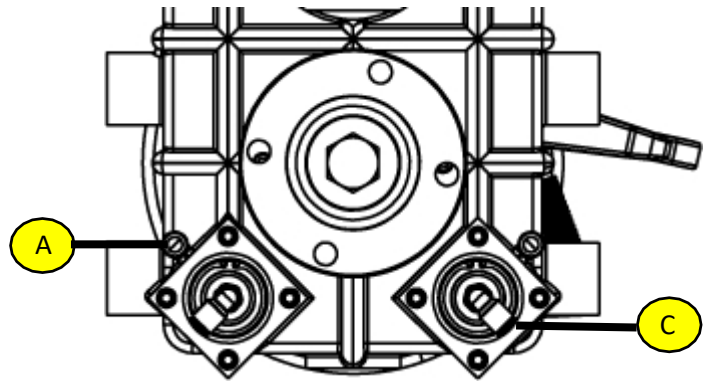


Image.7



The above-mentioned activation-deactivation operations are performed after the main shaft has completely stopped. Do not perform activation-deactivation operations while driving. Damage to the SSPTO as a result of activation-deactivation operations performed while driving is not covered by the warranty.

Parking Brake Engagement and Disengagement

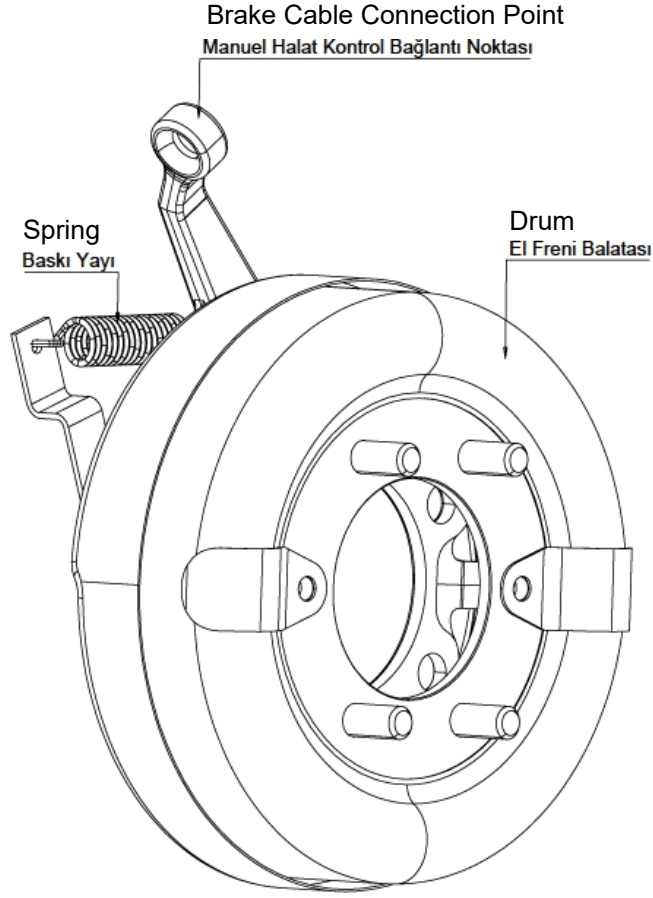


Image.8

The parking brake used in UARA.401 product has a manual control system. Control is provided by the installation pulled into the vehicle at the cable connection point indicated in Picture 8 on the parking brake pad. In order to stop the movement transmitted to the rear differential with the shaft, the pads are activated by pulling the rope and the rear differential movement of the vehicle is cut. When the manual rope handle is released, the pads will be released with the pulling force of the compression spring and motion transmission to the rear differential will be provided.

Handbrake Pad Assembly

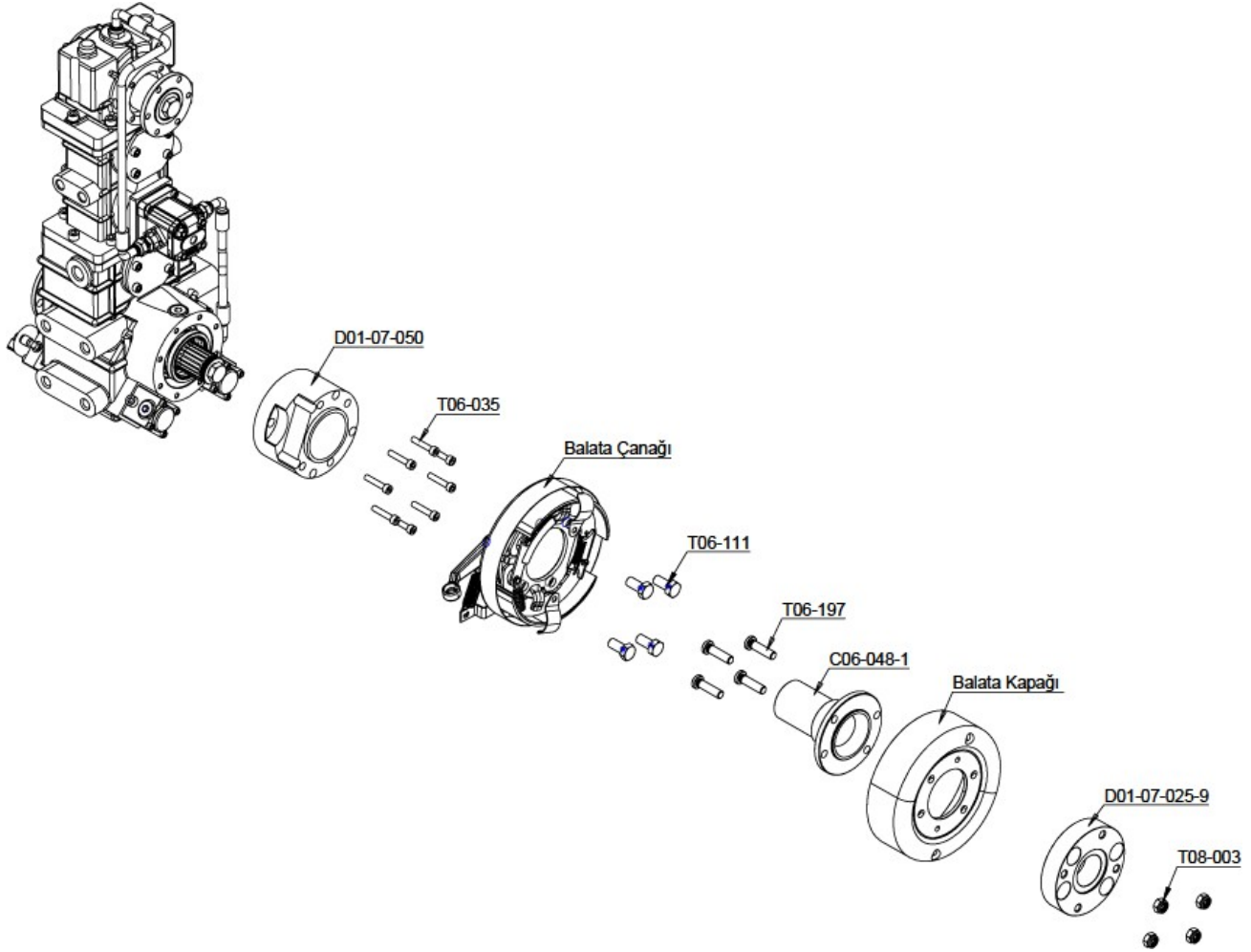


Image.9

When assembling UARA.401 parking brake pad, D01-07-050 coded interconnection adapter is fixed to the main body with M8 L:40 mm imbus bolts. Then the lining cup is mounted on the adapter with 4 pcs M14 L:40 mm AKB bolts. The coupling coded C06-048-1 is centered on the lining cover with 4 pcs M12 L:45 mm countersunk bolts and D01- 07- 025-9 coded upholstery plate is centered on the front side of the lining side and T06-197 coded bolts are pulled with M12 fiber nuts. The integrated lining cover is centered and fixed to the lining cup.

SSPTO Gearbox Assembly

Oil must be added before the SSPTO gearbox is assembled. The position of the SSPTO gearbox should be adjusted and it should be fixed with the appropriate connection bracket and vibration chocks with the help of the chassis connection holes. Make sure that the weight bearing direction of the chocks is in the correct direction for the SSPTO gearbox to be mounted. (See Picture 10)

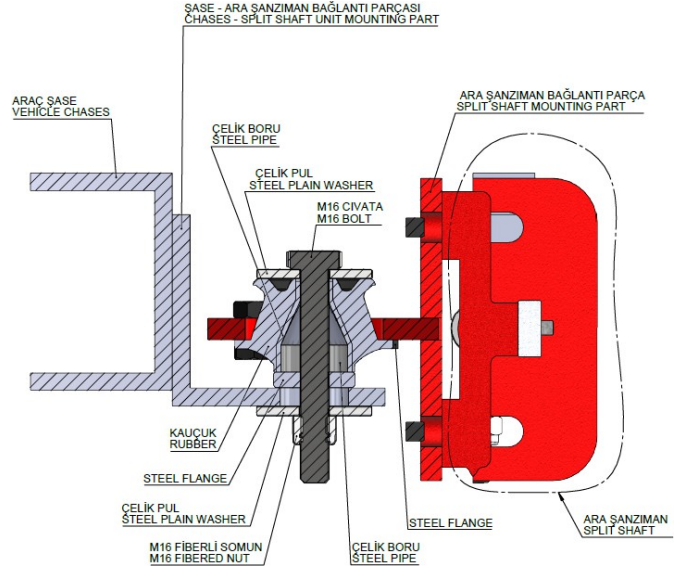


Image.10

The U-tie flanges and the centers indicated by the arrows must be plane parallel. This position prevents vibration and noise. The transmission shaft must also be mounted accordingly. The angles B_1 and B_2 must be identical. Although these angles vary according to the chassis and operating speed, they should be in the range of 3° - 7° (shaft manufacturers; make sure that the shaft connections are made in accordance with the operating speed-connection angle values). It should not be forgotten that connections with a high shaft angle will make noise. (See Figure 11)

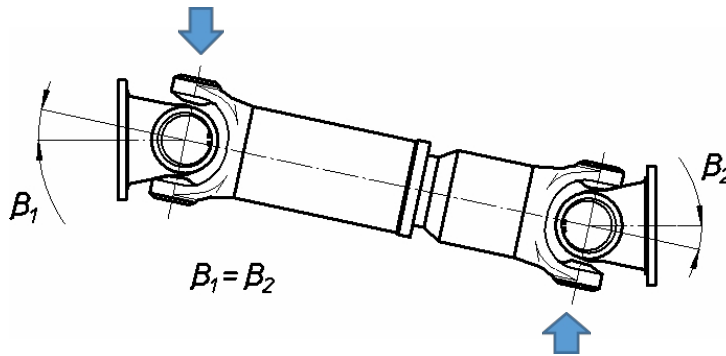


Image.11



Service and Maintenance

Oil Filling

SSPTO transmissions are shipped without oil. Before operation, oil must be filled into the SSPTO gearbox using the oil filling mechanism. Oil filling should be done on a flat surface. Filling oil into the SSPTO gearbox should be done by considering the oil level indicator on the gearbox. The oil must be completely clean. You must use only recommended oils.

Recommended Oil Types

- 75W90 Transmission Oil
- 80W90 Transmission Oil



Oil capacity:

- 4.5 Liters



If any oil other than the recommended oil is used, the vehicle will be out of warranty.



Oil filling is done with reference to the oil level indicator on the SSPTO gearbox. If there is no oil level indicator on the SSPTO gearbox, the oil recommended by KOZMAKSAN should be filled.

Oil Level Check

Oil level control should be done with reference to the oil level indicator on the SSPTO gearbox. Maintenance of the SSPTO gearbox should be performed periodically on a weekly basis; maintenance should also be performed on the SSPTO gearbox after long periods of operation. Maintenance should be performed at ground level and with the vehicle switched off. If the oil level is lower than it should be, oil should be added.



Oil Change

When changing the oil, make sure that the old oil is completely drained. Draining can be done by opening the drain cover. To speed up the process, it is recommended to open the filler cap as well. Before reinstallation, the drain cover must be cleaned. Make sure that the new oil to be used is suitable for the recommended oil type. Mixing used oil with new oil may cause shortening of the transmission oil life.

Detection of Oil Leaks

Periodically check for oil leaks. Watch out for any oil leakage in and around the area where the vehicle is operating. If oil leakage is detected, prevent oil leakage. As a result of the oil level check; add oil to the SSPTO transmission if necessary. In cases where oil leakage continues despite the interventions; contact the manufacturer KOZANOĞLU KOZMAKSAN.



During the oil change process; avoid any contact with hot oil in terms of occupational safety. Do not neglect to use the necessary personal protective equipment while servicing the SSPTO gearbox, taking into account the occupational safety requirements. During the disposal of used oil; perform the necessary procedures in accordance with the necessary legislation, taking into account the environmental sensitivity.

Maintenance Period	What to do
First 50 hours or 1 Month	✓ SSPTO transmission oil leakage should be checked regularly. ✓ 50th hour or 1st month (whichever comes first) oil change should be done.



First 50-300 Hours or 1-6 Months	✓ The SSPTO gearbox should also be checked regularly for oil leakage. ✓ At the 300th hour or 6th month (whichever comes first), the oil should be changed.
First 300 Hours or After 6 Months	✓ The SSPTO gearbox should also be checked regularly for oil leakage. ✓ Oil should be changed every 300th hour or every one year, whichever comes first. ✓ Sealing elements (such as o-ring, seal) should be replaced every 1200th hour or 2nd year (whichever expires first). ✓ All bearings must be replaced every 2400 hours or 4 years, whichever comes first.

⚠ Keep in mind that the equipment you are using is a technical product and replace any maintenance materials in a timely manner. Periodically check the equipment. Check mounting hardware, driveline, drive and pump connecting shafts. If necessary, re-tighten them.

Precautions to be taken in Emergency Situations

If the SSPTO transmission is to be deactivated in an emergency, it must be done by means of the emergency stop system, the equipment for which has been arranged by the bodybuilder. This must also be done by pressing the clutch of the vehicle.



Warranty Terms

1. The warranty period starts from the date of delivery of the product and lasts for two (2) years thereafter.
2. In case of failure of the product during the warranty period;
 - Troubleshooting time is 1 to 8 working days depending on the condition of the malfunction
 - When the repair time of the defect is more than 7 working days (excluding transportation times), the user will be allocated a new product until the defect is repaired.
3. During the warranty period, in case of malfunctions arising from errors that may occur in the production stages of the product, the product is repaired without any charge to the customer in terms of service and parts cost.
4. The Warranty Certificate must be shown in the services requested for the products under warranty. In cases where the warranty certificate is lost or not shown, the sales invoice (may be an invoice with delivery note) must be submitted.

Circumstances Terminating Warranty Obligations

1. If the product is used contrary to its intended use,
2. Changes made on the product without the approval of our company,
3. In case of exceeding the specified specification and reference limits,
4. If one or more products without our stamp of approval are sold to third parties,
5. Failure to carry out the specified maintenance of the products,
6. In case of repair, maintenance or replacement of any part of the product by a service other than the manufacturer or seller within the warranty period,
7. If the product is used contrary to the conditions of use declared in the instructions for use,
8. In case the product is damaged by mounting on the vehicle; warranty obligations will be terminated.