



UARA.407

SPLIT SHAFT - OPERATING MANUAL

INDEX

i. Safety Information.....	3
ii. Instructions for Operation in Cold Weather.....	3
iii. Features of the Split Shaft PTO.....	4
<i>Technical Data</i>	<i>4</i>
<i>Engage and Disengage</i>	<i>5</i>
iv. Split Shaft Assembly	6
<i>Shaft Assembly.....</i>	<i>7</i>
v.Services	7
<i>Oil Filling Recommended</i>	
<i>Lubricants Oil Level Check</i>	
<i>Oil Change</i>	
<i>Detection of Oil Leaks</i>	
<i>Periodic Maintenance</i>	
viPrecautions to be Taken in Emergencies.....	10
viiTechnical Drawings.....	10
viiiWarranty Terms.....	12
<i>Circumstances Terminating Warranty Obligations</i>	



The images used in this user manual are for illustrative purposes only. They may not be exactly identical to the purchased product.

Safety Information

The following information is for your safety. Make sure to read and understand them before attempting to use the equipment.

Overall Safety

- ✓ Carefully read the user manual provided and take notice of the instructions indicated.
- ✓ The important sections for operator safety and a prolonged product life are marked with symbols. Take notice of such symbols.
- ✓ Make sure to check if the instructions you follow and the tools you use are intended for the work you are engaging in.
- ✓ Never work alone when doing repair or maintenance works under the vehicle.
- ✓ Ensure to mount the parts properly.
- ✓ Never use worn or damaged parts.
- ✓ Do not attempt any modification on the split shaft PTO or any other drive components of the vehicle.

Instructions for Operation in Cold Weather

For prevention of injuries and damage to the gearbox;

- ✓ Check the drive components of the vehicle.
- ✓ Do not attempt to use drive components without warming up the vehicle or a minimum period of 5 minutes.

Features of the UARA.407 Intermediate Transmission:

The UARA.407 intermediate gearbox is a gearbox that connects to the vehicle's drivetrain and is used in superstructure applications for:

- ✓ Equipment connection output,
- ✓ Speed multiplication,
- ✓ Axle distance adjustment.

Product features:

- The UARA.407 intermediate gearbox has five axes.
- A lubrication system is provided as standard equipment. The cooling system is optional and can be included depending on operating conditions and the work environment.
- The product has one equipment connection port; a second equipment port is available as an option.
- It has the capability to operate equipment while the vehicle is in motion or at a standstill.
- It is equipped with a pneumatic control system.

Technical Datas

Main Input & Output

Maximum Torque	430 Kgm
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Output

Maximum Power	125 Kw
Maximum RPM	2500-3000 RPM
Ratios	1/1.5 1/1.8 (Devir Arttırıcı)



This transmission guarantees the specified values provided it is used under appropriate conditions and safety regulations are followed.

Engage and Disengage

The operating functions and air intake controls of the UARA.2005 intermediate gearbox are as follows.

1) Driving function ;

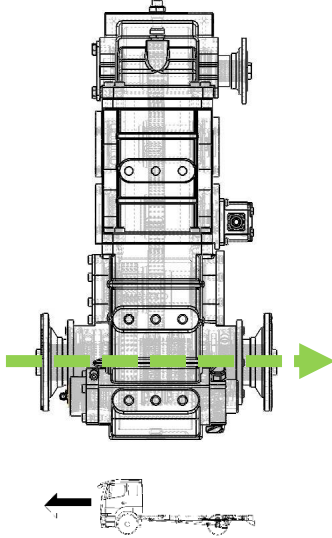


Figure 1

(Figure 1); First, activate air inlet (B). (The equipment will be deactivated.) Then, activate air inlet (C). Air must be supplied continuously throughout the operation. (The air inlets are shown in Figure 2.)

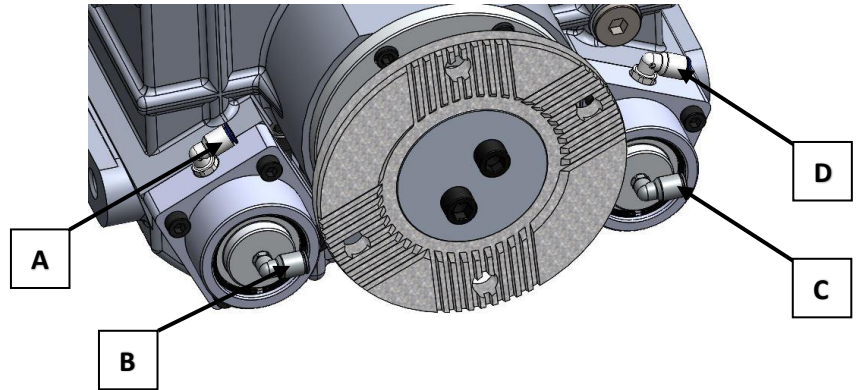


Figure 2

2) Equipment operation function;

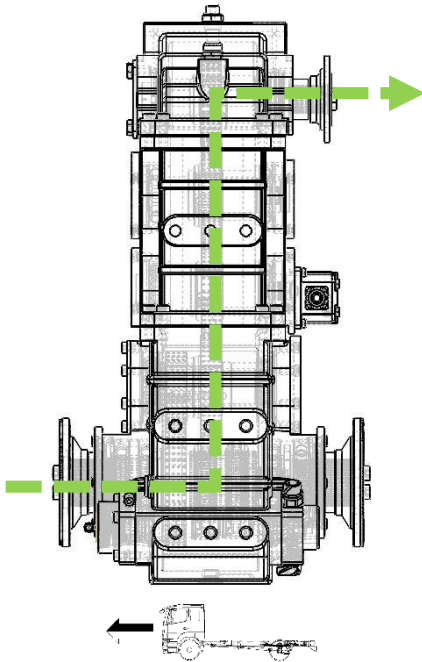


Figure 3

(Figure 3); First, activate air inlet (D). (The main drive will be disabled.) Then, activate air inlet (A). Air must be supplied continuously throughout the operation. (The air inlets are shown in Figure 4.)

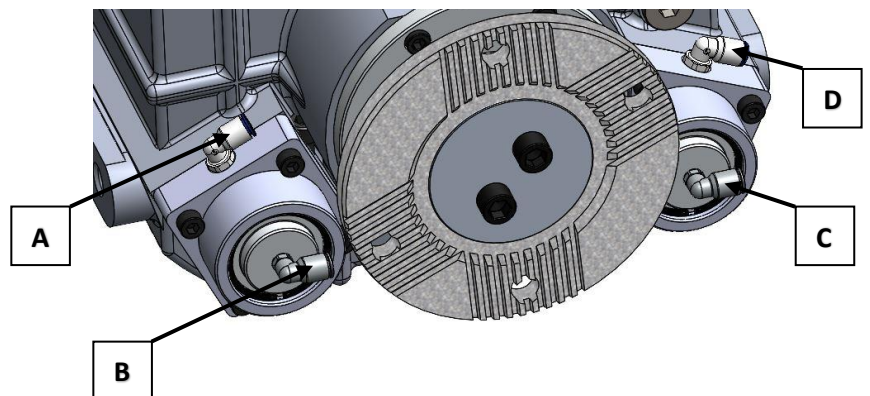


Figure 4

3) Operate Equipment While Driving Feature;

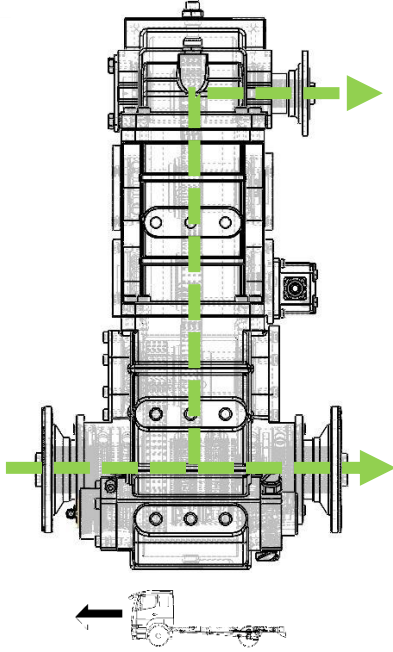


Figure 5

(Figure 5); First, air inlet (C) is activated. Then, air inlet (A) is activated. Air must be supplied continuously throughout the operation. (The air inlets are shown in Figure 6.)

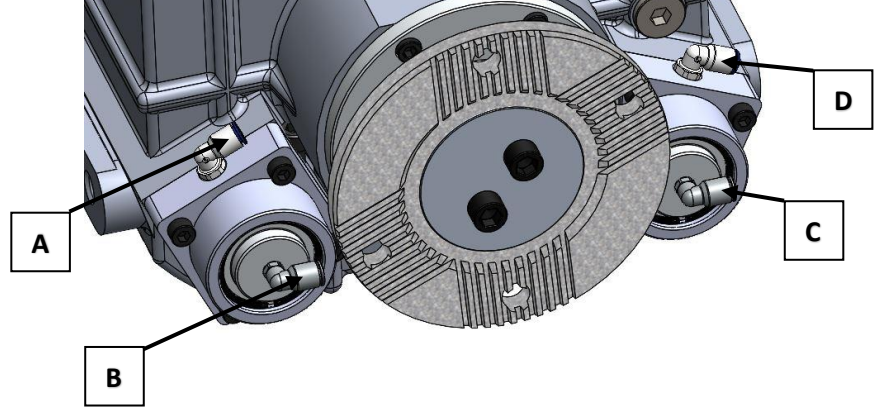


Figure 6

! The engagement and disengagement procedures described above must be performed only after the main shaft has come to a complete stop. Do not perform engagement or disengagement procedures while the machine is in motion. Any damage to the intermediate gearbox resulting from engagement or disengagement procedures performed while the machine is in motion is not covered by the warranty.

Ara Şanzıman Montajı

Oil must be added into the gearbox before the mounting. After adjusting the position, the gearbox must be fastened with suitable connection brackets and rubber pads on the connection holes. Make sure that the loadbearing direction of the pads are correctly aligned with this gearbox. (See Figure 1)

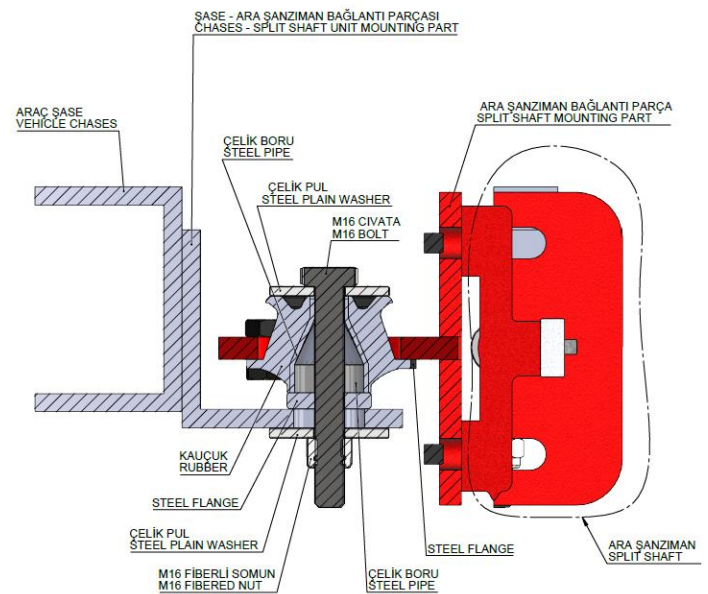


Figure 1

U-connection flanges and the centers indicated by arrows must be parallel to each other in planar sense. Such a position would prevent vibration and noise. The transmission shaft must be mounted accordingly. B1 and B2 angles must be identical. These angles vary depending on the chassis and operating rpm, however they must be between 3° and 7° (Ensure that the shaft manufacturers have provided shaft connections complying with operating rpm-connection angle values). It must be borne in mind that connections with bigger shaft angle would cause noise (See

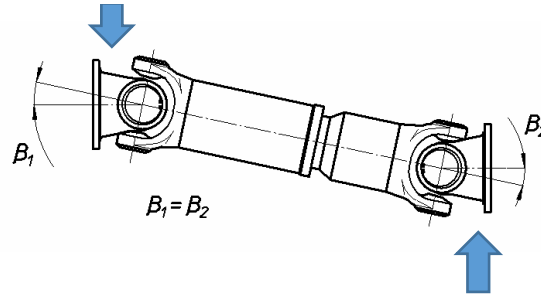


Figure 2

Servicing and Maintenance

Adding Oil

Gearboxes are shipped without oil inside. Oil must be added into them before commissioning through the oil filling mechanism. The task must be performed on a flat ground. Oil must be added by checking the oil level indicator provided on the equipment (or to the amount recommended by Kozmaksan). The oil must be completely clean. You should only use the recommended oil types

Recommend Oil Types

- 75W90 Şanzıman Yağı
- 80W90 Şanzıman Yağı

Oil capacity:

- 2.5 Litre , Designed for vertical use.

 Oil use other than the recommended oil types would put the equipment out of warranty coverage

 The oil adding operation should be done by referring to the oil level indicator on the split shaft PTO. If the equipment does not have such an indicator, then fill oil to the extent recommended by KOZMAKSAN.

Oil Level Inspection

Oil level should be inspected referring to the oil level indicator on the split shaft PTO. The equipment periodic maintenance should be performed weekly, and maintenance works should also be done after long operation hours. The maintenance must be performed on ground level and when the engine is off. Add oil if the oil levels are below the required limit.

Oil Change

Make sure to drain the used oil completely before changing oil. It can be drained by opening the drainage cap. It is recommended to remove the filling cap to accelerate the process. The drainage cap must be cleaned before fastening it back. Care must be taken to have a new oil from the types recommended. Mixing old and new oil would result in shortening gearbox oil life

Oil Leakage Detection

Check for oil leakage periodically. Watch for oil leakage in vehicle operation site or surroundings. Upon detecting leakage, prevent it. After checking the available oil level, add oil into the equipment where necessary. Contact KOZMAKSAN if the oil leakage persists in spite of the intervention.



Avoid contacting hot oil during oil change for your occupational health. Remember to use your required personal protective equipment during split shaft PTO maintenance keeping in mind the occupational health safety requirements. Act in accordance with the applicable regulations considering environmental protection concerns while disposing the used oil.

Bakım Periyodu	Yapılacaklar
Regularly at daily, weekly, and monthly intervals	Check for transmission fluid leaks regularly.
First 100 hours or 1 month	Change the fluid at 100 hours or 1 month (whichever comes first).
Between the First 700 Hours or 6 Months	An oil change must be performed at 700 hours or 6 months (whichever comes first).
1,500 Hours or Annual Maintenance	An oil change must be performed at 1,500 hours or annually (whichever comes first).
After 3,000 Hours or 2 Years	All sealing components (gaskets, O-rings, etc.) must be replaced every 3,000 hours or every 2 years (whichever comes first).
After 6,000 Hours or 4 Years	All sealing components and bearing sets must be replaced every 6,000 hours or every 4 years (whichever comes first).

 **Note that this is a technical product, and change the replacement parts on time for its maintenance. Check the components periodically. Inspect mounting components, transmission elements, drive and pump connection shafts. If required, tighten them again.**

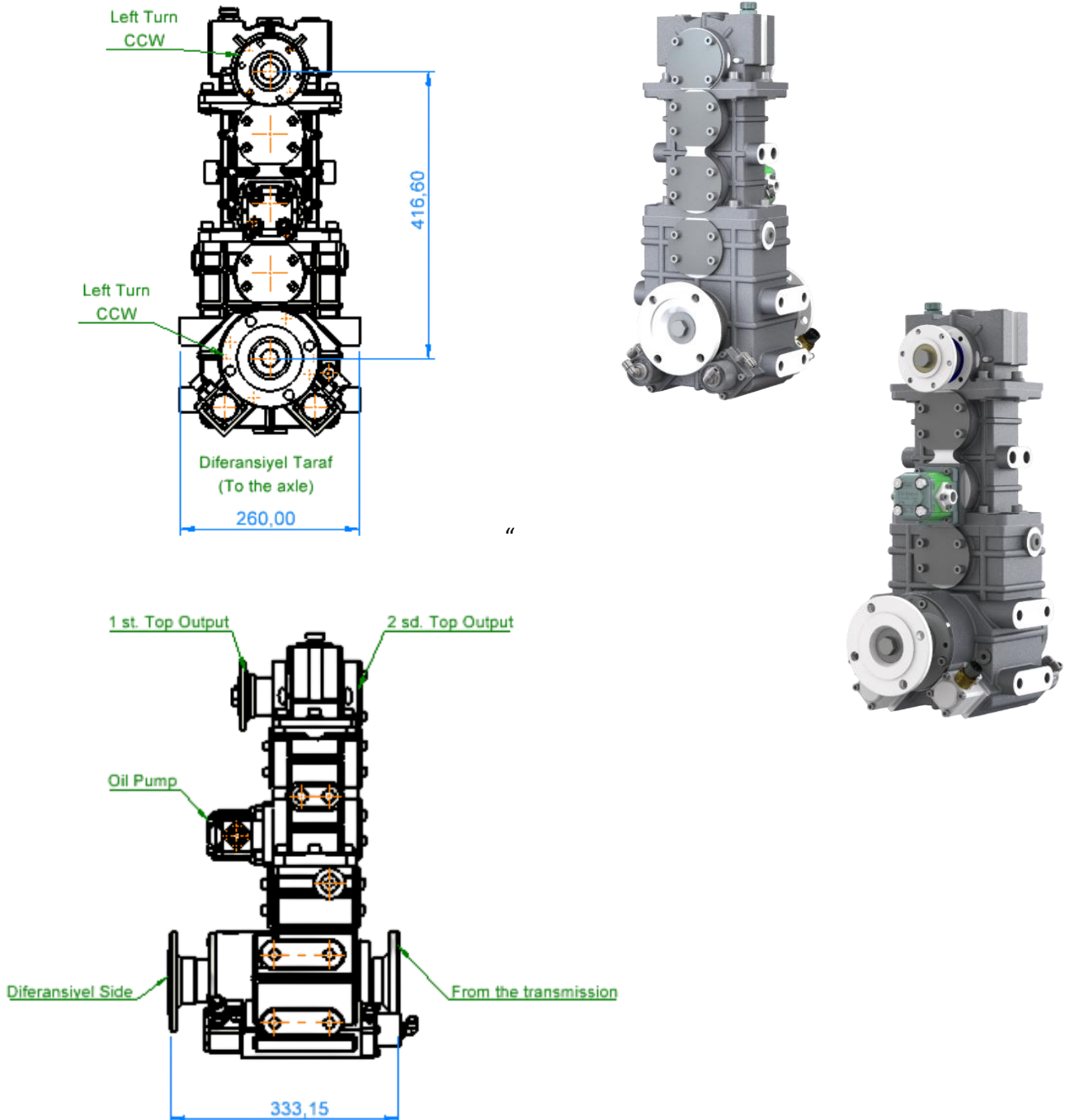


Precautions for Emergency

If you wish to disengage the gearbox in case of emergency, use the emergency stop mechanism provided by the manufacturer of the vehicle superstructure. This has to be done only by pressing the vehicle clutch pedal..

Technical Drawings

UARA.2005



Technical Drawings

1.Warranty period is one (1) year from the delivery of the product.

2.In the event that the product fails during the warranty period, the following apply:

- ✓ Failure repair time is 1 to 8 working days depending on its nature. (Domestic claims)
- ✓ Where the repair time lasts more than 14 working days (except transportation time), a new product shall be supplied to the customer till the failure has been repaired.

3.Where a failure occurs within the warranty period due to the defects possibly arising from the manufacturing stages, the product shall be repaired free of charge in terms of servicing and replaced part price.

4. Warranty certificate has to be presented when asking for services for the products under warranty. Where the certificate is lost or not presented, then sales invoice (invoice with waybill) has to be presented.

Situations Which Terminate Warranty Obligations

- 1.Using the product for a purpose other than the intended use,
- 2.Changes to the product that are not approved by Kozmaksan,
- 3.Digression from defined specifications and reference limits,
- 4.Selling to third parties one or more products not bearing our approval seal,
- 5.Failing to perform indicated product maintenance,
- 6.Having a service provider, other than the manufacturer or trader, repair, carry out maintenance works or replace parts of the product within the warranty period,
- 7.Using the product against the usage terms set forth in the usage instructions,
- 8.Where the product is damaged during the mounting on the vehicle.