

KTC.6000 Owner's Manual





WARNINGS!

- 1) Read the supplied operating instructions carefully and follow the instructions.
- 2) Symbols are important for the user's safety and the long-term use of the product. Observe these statements.
- 3) Make sure that the instructions you follow and the tools you use are suitable for your work.
- 4) Never attempt to repair or service the product alone under the vehicle.
- 5) Make sure the parts are properly installed.
- 6) Never use worn or damaged parts.
- 7) Always use the transmission with the cooling system.

TECHNICAL SPECIFICATIONS;

MAX. INPUT TORQUE	32000 Nm	
MAX. INPUT RPM	4500 RPM	
CONTINUOUS INPUT TORQUE	23000 Nm	
MAX. OUTPUT TORQUE	60000 Nm	
INPUT/OUTPUT FLANGE TYPE	DIN 180	
RATIO GEARS	0,577 (LOW) / 0,89 (HIGH)	
CONTROL TYPE	PNEUMATIC	
AIR PRESSURE	6,5-8 BAR	
WEIGHT	435 KG	
DIMENSIONS (MM)	980 X 910 X 470	
OIL AMOUNT	17 LT (0,5 LT FOR FAN AND 0,2 LT/MT FOR EACH HOSE (19 LT FOR FAN AND HOSES ALTOGETHER)	











1) **BREATHER**



BREATHER TECHNICAL SPECS;

VALVE BODY MATERIAL	BRASS	
BODY MATERIAL	STAINLESS STEEL AISI 304	
GASKET MATERIAL	BRASS (SILICON RUBBER COVERED)	
SPRING MATERIAL	STAINLESS STEEL AISI 301	
WORKING TEMPERATURE	-30 °C / +100 °C	
WORKING PRESSURE	200 m bar ± %20	

- 1) When the specified operating pressure is exceeded, the ventilation valves vent the container to prevent excessive pressure in the container.
- 2) In normal conditions, the seal closes the container to prevent dirt and dust from entering the container.
- 3) Mounting position is vertical.



2) Oil Pump And Filter



Warning!: Once every 6 months, pump filter which is located on pump output must be removed and cleaned with air and water and then mounted back.

Optional pump series 1

Pump Technical Specs;

Theoretical Displacement	Theoretic	al (L/min)	Max. Pressure	Max. Revolution	Approx.
(cm ^{-/} /rev)	1500min	1800min	(IVIPa)	(min ')	weight (kg)
2,50	3,75	4,5	0,5	2000	1,3

3) Fan



Technical Specs;

- 1) Waterproof motor, IP68
- 2) Operating Voltage; 24V
- 3) Mounting Bolt ; M5 Bolt
- 4) Max. Airflow; 690 CFM
- 5) Fan Blade; 225 mm



NOTE:

- 2 It oil must be added to Transfercase if a fan will be used for cooling.
- 2- 0,08 LT Oil should be added for each 1 meter hose if customer request to lengthen distance between Transfercase and the Fan.





Check whether oil is available on the connection fittings. Make sure that the pump pumps oil. Additionally, add 4 It of oil to the empty gearbox here. (Pay attention to add oil through this hole)

Remove the connection fitting and add 1 It oil through the hose.

This will be done only once.



Remove the plug and add 20 lt oil. (75W-90 EP)

Note : These will be done only once. Total amount of oil will be 25 lt including the hose and lubrication pump contents



4) ZF Steering Pump Connecting Parts



ZF Steering Pump Plate



Pump Connection Shaft



Mounted Pump View



Technical Specs;

- 1) Plate must be mounted on the body with 8 pcs M8 x30 mm bolts.
- 2) The pump must be mounted on plate with 4 pcs M8 bolts.
- 3) Pump spline must be mounted between the pump and axis shafts through sliding into the splines.



5) Sensors

	RPM Counter	With 2 copper washer			
	Differential Lock Engage/Disengage Sensor	With 3 copper washers between sensor and connection kit; and 2 copper washers between kit and Transfercase.			
	Neutral Gear Engage/Disengage Sensor	With 3 copper washers between sensor and kit and 2 copper washers between kit and Transfercase.			

6) Oil Level / Temperature Sensor



- 1) The available oil level will move the movable part on the Oil Level Sensor upwards to produce ON warning on the screen. When the oil level drops below the required amount, you will see an OFF warning.
- 2) When the oil contacts the movable part on the sensor you will read the oil temperature on the screen.

6.1.) Oil Level / Temperature Sensor Engage Process;

- 1- SET 1 Hold for 10 sec.
- 2- See OUT 1 on the screen.
- 3- Press Fx button and select OUT 2.
- 4- There will be HYS value on the screen. This value represents when ignition will turn off and on. (For example; The value should be 5 if the customer wants to turn on ignition at 5° when temperature reached
- 5- 40° and ignition turned off.)
- 6- Edit option will show up on the screen after press Fx button, then define value for ignition turn on and press Fx for saving the changes. After saving the changes, press SET 1 for exit.
- 7- To arrange max temperature level; double press SET 2 then select required max temperature.(For example; Max. temperature level 40° will be arranged from double press SET 2.)



7.) First Operation After Installation;

7.1- Sensors from page 10 must be mounted on the Transfercase before filling oil.

7.2- Recommended oil amount and type should be filled into Transfercase after installation on the chassis.(75W-90 EP oil/20 It) Oil filling process must be done from air vent plug and open a second top plug for better process with better air flow. After filling oil, tighten both plugs properly.

7.3- 2 litres of oil (75W-90 EP) must be added in neutral gear mechanism to better lubricate the bearing since the product is not running for some time.

7.4- Make sure to add 1 It oil throug the air fitting located at the top of ZF Steering Pump Plate. This will be good for lubricating the pump during initial operation.

Next, follow below steps for this process.



7.4- For main drive engagement, neutral gear mechanism must be disengaged. Airflow should be continuous for this operation.

A: Neutral gear mechanism engaged. (Main drive is disengaged) B: Neutral gear mechanism disengaged (Main drive engaged.)

Note:

- 1- Vehicle should be stationary during engage and disengage process.
- 2- Continuous air flow is recommended for safety.





Transfercase has 2 gear ratios as 0,577 (low) and 0,89 (high). Please follow below steps shifting gear 7.5information.





Note:

- 1- Vehicle should be stationary during engage and disengage process.
- 2- Continuous air flow is recommended for safety.
- 7.6 Transfercase has differential system inside with sensor to observe if it is engaged or not. Differential lock should be disengaged when vehicle drives on road bend at 50 km/h speed. Differential lock must be observed through the sensor and engaged when it is required. Please follow below steps for engaging or disengaging the differential lock.



7.7- Vehicle should run at idle gear for min. 10 mins before any operation for better lubrication inside through the lubrication pump.

disengage process.