

HIGHLIGHTS of REVOL CLUTCH

REVOL Clutch is the product of Özteknik A.Ş., which is 100% made in Turkey according to OE material specifications and are manufactured with completely new parts and materials, without remanufacturing. Products are subject to final control 100% performance tests before packing and dispatch. REVOL Clutches are Özteknik A.Ş. under warranty against production and material defects. In case of customer claim, claimed amount could not exceed purchased amount of the product.

REVOL Clutch products are the products which works together with Flywheel, Pilot Bearing, Clutch Yoke, Clutch Servo Cylinder and Clutch Master Cylinder including hoses, pipes, oil and fluids. Meanwhile, mechanics, truck driver, road and load conditions are the other crucial impacts of Clutch performance. Beside of our Clutch product and failure of these parts and or crucial impacts will cause clutch system failure. Most of the time system failure starts in different parts other than Clutch Cover Assembly, Disc and Release bearing but problem become visible when vehicle stop by burned clutch disc or disengage clutch cover assembly etc.

Please also notice that clutch is a kind of fuse product between Gearbox and Engine, which transmit the Engine torque to wheels through driveline. Sometimes it is good to fail of the clutch system in order to protect Engine, Transmission and driveline.

At the below important Check list might be noticed that should be followed before and while assembly any new clutch kit into vehicle. Skip this check list will cause clutch failure.

General Advices & Diagnosis

Accurate determination of the product to be replaced to the vehicle. The correct product must be identified from the vehicle spare part program via the vehicle chassis number

It is recommended that Clutch Disc, Cover Assembly and Release Bearing be changed as complete Set "Kit", in order to ensure the highest maintenance efficiency and service life

Before the new clutch kit is installed, it is necessary to clean the lining dust and parts of the clutch disc removed from the existing flywheel & Flywheel bell housing, especially if Flywheel will not change or grind

In cases of a new flywheel is to be installed, the rust protective coating on the surface of should be cleaned. New flywheel - crankshaft connection bolts must be checked and ensure that original bolts. Check the crankshaft oil seal and replace it in case of oil leakage.

If the existing flywheel will be used; It should be grinded in the tolerances recommended by the flywheel manufacturers. Parallelism and surface condition of the flywheel should be controlled after grinding operation. Flywheel should be free of burned areas and/or cracked surfaces due to overheating

The Pilot Bearing in the flywheel must be controlled and tight, over-cavity and/or sound rotating bearings should be replaced with a new one. The new bearings must be assembled into place without damaging the bearing by using the appropriate apparatus during assembly.

The clutch fork should be checked for clearance and wear. Check the clearance at the shaft connecting the fork to the transmission and contact surface / rollers with the clutch bearing. In the case of excessive wear in the shaft and/or on the surfaces / rollers of the fork that come into contact with the clutch bearing, change the Clutch fork with new one or maintenance yoke with appropriate repair kit.

Roller of the clutch forks must be checked, cavities or tight rotating Rollers and pins should be changed by using the appropriate repair kit

The wear of the clutch fork counter parts in contact with the Clutch Servo's push rod must be checked. Worn and damaged parts must be replaced with appropriate repair kit

It should be ensured that there is no modification, extension or shortening in the push rod of the clutch Control Servo which is used with the previous clutch pressure. The modified, extended, shortened Clutch Servo's push rod must be replaced by the new Clutch Servo which has conformity with the vehicle manufacturer specifications

In order to ensure the highest efficiency and service life, Travel and Operation of the Clutch Servo must be checked and it should be ensured that it operates properly and is not jammed. Otherwise, the clutch servo must be repaired using the appropriate repair kit and replaced with a new one

Make sure that the clutch travel sensor in the clutch servo is working properly and it is original and undamaged

Inspect the Clutch Servo compressed air line and make sure that it creates an appropriate pressure level. The vehicle must never be started by depressing the clutch pedal during start-up

The operation of the clutch master cylinder must be checked, in case of being engaged or swelling of the pedal, it must be replaced by the new clutch master cylinder with the reference number given by the vehicle manufacturer

The hydraulic Hose/pipe connections between the clutch master cylinders and clutch servo should be visually inspected; such as crushing, internal swelling and crusting should be done in the pipes and replaced with a new hydraulic (rubber) connection system if necessary

Gearbox spline shaft housing should be checked. Worn out, bended, curved and / or not suitable for the vehicle spline shaft housings must be replaced with the new the recommended housing by gearbox manufacturer.

Replacement parts the clutch cover Assembly, disc and / or bearing must not be damaged during transport and should be checked visually for possible damage during transportation. Damaged parts should not be used.

Do not carry out any modification of Revol branded products.

Do not use Revol branded products with other products that are worn, damaged, not suitable for the vehicle

During assembly of new clutch kit with pull type bearings, Bearing must not be greased between spline shaft housing and slave. Pull type bearing should be assembled grease free and dry. Spline shaft housing must be brushed and cleaned before new clutch assembly.

During assembly of new clutch kit, clutch disc lining must not be in contact with the oil and oil free.

Gearbox spline shaft must be brushed and cleaned, assembled clutch disc hub must be slides smoothly and freely on gearbox spline shaft without jammed. Very small amount of lubricant could be applied between clutch disc hub and the spline shaft.

During the assembly of the clutch disc, the centering of the disc to the flywheel must be made with the appropriate guide and the installation direction of the disc must be observed. During installation, the transmission weight must not be carried out on the clutch disc.

Before the assembly of the clutch cover assembly, Pressure plate surface must be cleaned by wiping of the surface clutch pressure must be removed from the protective material by wiping the surface with an oil-free cloth before installation.

Connection bolts of Clutch cover assembly to flywheel must be in compliance with the appropriate hardness, dimension and quality standards.

During the assembly of the clutch cover assembly, the centering of the flywheel must be observed and the mounting bolts must not be tightened without making sure that clutch cover assembly is fully centered. When tightening the bolts, mutually, the gaps must be removed and gradually tightened to the appropriate torque. Especially in flywheels with Ignition grids bolts should not be tightened in one go.

After clutch mounting, especially for vehicles with automated transmission, damaged, broken, loose or moist sockets and pins of the transmission brain sockets, electrical wiring, sensors on the transmission, has negative effect the operation of the automatic clutch gear selection. Cracked, broken, damaged pins & sockets should be replaced with new ones, damaged electrical connection cables should be repaired. It must be ensured that there is no intervention on the transmission electrical - electronic system.

Make sure that the air is vented in clutch control system. Ensure that hydraulic oil and fluids specified by the vehicle manufacturer are filled in the operating system

After assembly of the new clutch system, the introduction of the new clutch system is fully introduce and computerized vehicle software.