



Maintenance and Running-In Instructions for Friction Clutches:

K92; K92/4; K92E; K92/4E;

K90: K90/4: K94/1:

K96; K96/4; FK96; FK96/4; EFK96; EFK96/4; PFK96; PFK96/4;

EK97/4; EFK97/4

Friction clutches are torque-maintaining clutches and are necessary for accelerating large masses, such as flywheels. The clutch slips during the acceleration phase, converting the absorbed energy into heat in the process.

Similarly, when the drive is blocked, the entire frictional power is converted into heat. Since only a limited diameter with a limited mass is available in the installation space, the clutch heats up very rapidly. The accumulated heat must be dissipated via its surface. Consequently, cooling takes a long time.

The response time and the duration of the slipping time are very limited, since the clutch would otherwise be destroyed by overheating.

In friction clutches, spring-loaded surfaces act on friction linings. The coefficient of friction and the pressure applied determine the transmissible torque.

1. Maintenance Instructions

Prior to first-time use and following prolonged stoppages, check the operation of the friction clutch and release it.

Note:

Clutches that are not used for extended periods are exposed to environmental influences (moisture/temperatures), that can cause seizing/sticking of the friction linings and a change in the coefficient of friction. Consequently, friction clutches must be released after every lengthy stoppage. The clutch should be turned briefly while released.

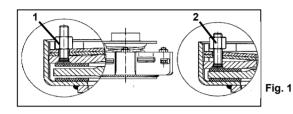


Technical Information



Drive Line Systems

Series K92



Series K96; K97

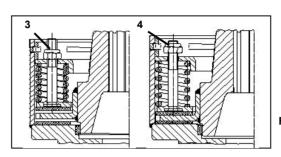


Fig. 2

Uniformly tighten the nuts (Fig. 1/1 or Fig. 2/3) to relieve the pressure on the friction disks.

Turn the clutch.

Subsequently turn the nuts (Fig. 1/2 or Fig. 2/4) back to the end of the thread.

Series K90; K94/1

Series K92E

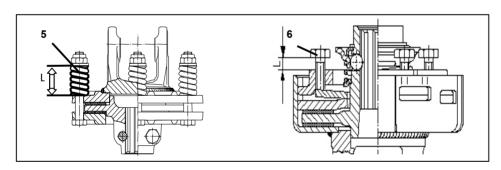


Fig. 3

- a) Measure dimension "L" on the pressure spring (Fig. 3/5) or on the setscrew (Fig. 3/6).
- b) Undo the nuts or screws to relieve the pressure on the friction disks.
- c) Turn the clutch.
- d) Tighten the nuts or screws to dimension "L". The clutch is again ready for use.





2. Running-In Instructions

Friction clutches whose friction linings have been renewed, or friction clutches assembled from individual parts in the Service Department, must be subjected to a running-in procedure. Following the installation of a friction clutch, running-in must be carried out in order to achieve the operating torque of the clutch. The running-in procedure should be performed at low machine power to avoid overheating of the clutch. The specified operating torque has been reached when the clutch subsequently cools down to a hand-hot operating temperature on the clutch housing.

Caution!

If a clutch overheats, allow it to cool to hand-hot operating temperature prior to continuing use in order to achieve the operating torque.

Note:

The friction surfaces must be clean and free of grease!