

| Clutch

| 4P Kit

| Recommendation

| All Vehicle

Lack of preload during 4P Kit fitting

Valeo Service Warranty Department received a high numbers of 4P Kit claimed due to a lack of preload

Preload definition

Preload is to maintain the contact between the ball bearing and the mechanism in an input gear position .

A lack of preload causes a friction between the release ball bearing and the fingers of diaphragm. While the system is in an input gear position, the bearing does not turn at the same speed as the diaphragm and risks to cause an excessive wear of the diaphragm's fingers and an overheating of the bearing.

A lack of preload is characterized by an excessive wear and a deformation of the diaphragm's fingers and by an overheating of the release bearing.



Premature wear of the fingers of the diaphragm

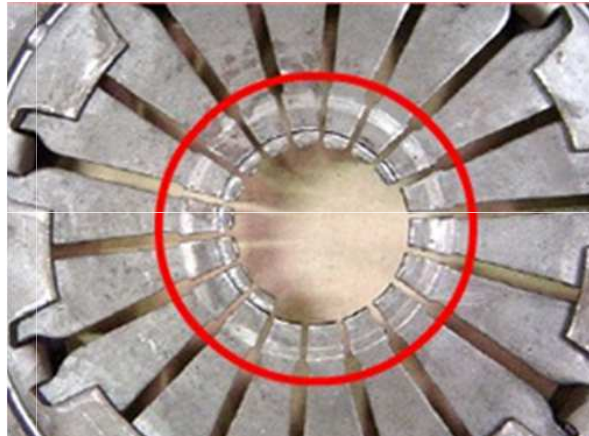
For the end user, a lack of preload is characterized by:

- a difficulty or an impossibility to gearshift.
- noise and vibration

The lack of preload can generate the breakage of the bearing and/or the diaphragm's fingers.



Bearing overheating further to a lack of preload



Cutting through of the fingers of the diaphragm

Valeo recommendation

During the clutch fitting , every organ of command must be checked and necessary removed:

For the command with cable: the cable, the release bearing, the fork axis and the ball joint

For the hydraulic command: the bearing, the clutch master cylinder (CMC), the hydraulic receiver and to remove hydraulic liquid and to flush out .

VALEO Advice:

During the replacement of the clutch it is imperative to verify and to remove the organs of the command, in particular the fork and its joint(preload spring, ball joint , axes , guide tube)

