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SYDNEY-TAMWORTH-BRISBANE-GEELONG-ADELAIDE-TOWNSVILLE-PERTH-LAUNCESTON-HAMILTON-CHRISTCHURCH-SACRAMENTO

## FRICTION CLUTCH SETTING

### Factory settings:

When delivered from the factory, friction clutches are normally set to their rated torque settings. This is achieved by tensioning the clutch springs to their maximum compressed length. Compressing the springs beyond these lengths will cause damage to the clutch

In all cases the clutch will need to be set to suit the specific application. This can be done by following the procedure below.

### Slip clutches need to be set if one of the following occurs:

- The clutch is new.
- The clutch has been repaired (including replacing the friction discs).
- The clutch is slipping in work (clutch getting hot, burning out friction discs, machine slowing down in work)
- The clutch has been freed up after a period of storage (see how to free up clutch below).

### How to set clutch:

The setting on the clutch is dependent on many variables - the work, the size of the tractor, the size of the machine. It is best to set up each clutch individually if possible. The aim is to start with a loose clutch and tighten it up to the exact point where it stops slipping in normal work. If set in this way, the clutch will slip if any load exceeds this point, protecting both machine and tractor. It is best to set up the clutch with the machine on the tractor and in conditions which approximate to the normal work the machine does.

The bolts which go through the springs and hold tension on the clutch determine the point at which the clutch slips. These must all be set evenly, either by measuring spring length or counting the number of turns the nut has been tightened.

Bareco clutches use the following measurements-

#### Standard Duty (Silver or Gold Spring)

Compress springs fully then back off 2 turns.

Fine tune so that the clutch slips occasionally.

Once per year release springs completely and allow clutch to slip to polish pressure plate.

#### Blue torque heavy duty clutches-

For 150 mm (6") Diameter Clutch- Basic Spring Length 28.6mm (1 1/8")

For 200 mm (8") Diameter Clutch- Basic Spring Length 31.75mm (1 1/4")

**NOTE-** These are standard measurements. You **MUST** adjust the clutch for your specific implement to ensure correct protection of the implement, and the tractor.

Adjust to Slip on Overload.

At 6 Months, back off to polish discs.

The clutch must be quite loose initially to ensure it will slip. Slipping can be identified by the clutch getting very hot. (The clutch will always be quite warm in work as the gearbox gets warm). Run the machine for a short distance (20 metres) in work and check if the clutch slips. Then tighten each tension bolt one turn (more if the clutch was very loose) evenly and run a short distance again. Keep repeating this procedure until the clutch is not slipping - it should only take a few attempts. As you get to the point at which you think it is not slipping tighten the tension bolts half a turn instead of a full turn. Continue to work the slasher checking the clutch regularly; you will soon get an idea of how the clutch is performing. You may want to adjust it for varying conditions. If the clutch is too loose it will slip, wearing out the friction discs, getting hot and possibly damage the clutch friction discs.

If the clutch is too tight it will fail to protect the tractor and machine if the machine hits an obstruction (tractor stalls, breakage occurs).

#### **How to free up the clutch after a period of storage:**

As outlined in the instructions on most implements, the slip clutch can seize if left for long periods without use, or left outside in the elements. The best way to free up a slip clutch is to loosen all the bolts that hold the spring tension on the friction plates (so they are quite loose), then run the machine with it either jammed so it cannot move, or put into heavy work, to slip the clutch. The clutch only needs to be slipped for 30 seconds to a minute to clean up the surfaces. Alternatively dismantle the clutch and clean it.