

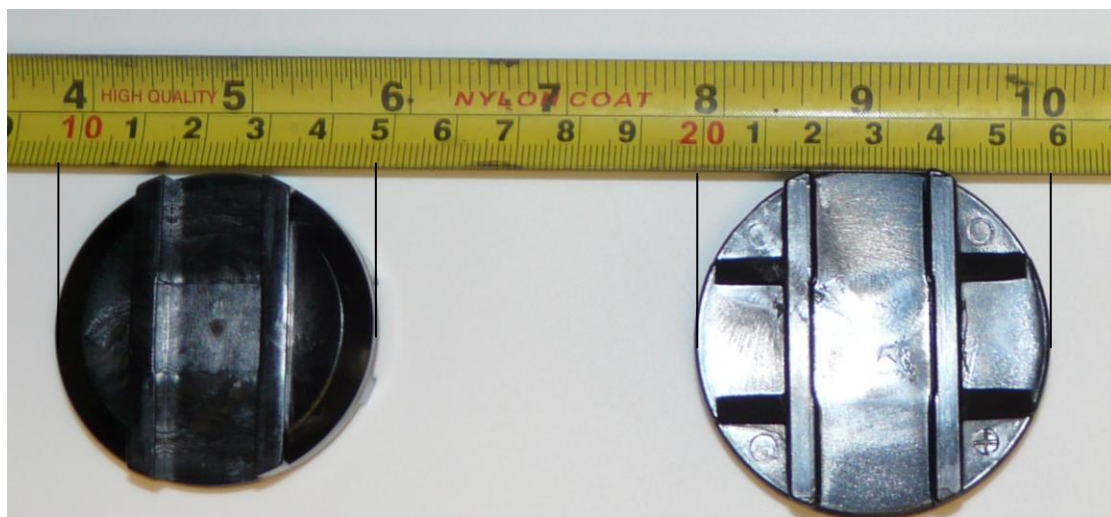
CD 14/15A Drive Coupler Identification

CD14A and 15A use a stepper motor to rotate the cartridge containers into position. As is usual with this type of drive system a coupler is used to protect the expensive Stepper Motor and Gearbox from accidental damage due to obstruction. The coupling used is an Oldham coupler attached to the Stepper Motor Gearbox Driveshaft and an Acetal Disc which connects the coupler to the Drive Key, (a precision engineered Key Steel block) attached to the underside of the carousel). The Acetal Disc shatters under excessive loads protecting the Gearbox and Motor.

Two sizes of Acetal Discs have been used on the CD14A and 15A, a 50mm disc on early models, and on later models, the 57mm disc. The 50mm disc has a peak torque of 30Nm, whereas the 57mm disk has a peak torque of 44Nm, almost 50% higher.

The 57mm disc is also available as an upgrade to dispensers originally fitted with the 50mm system.

The photos below illustrate the variation in size between the two types used:



50mm

57mm

The Oldham coupler is attached to the Stepper Motor Gearbox Shaft; the 57mm version is illustrated below along with the Drive Key on the left, and assembled using the 57mm Acetal Disc on the right:

