

Centric Centrigard Overload Clutches

Installation and Operation

P-3045-BG

CGC Series



 **Boston**[®]
Gear

An **Altra Industrial Motion** Company

Centrigard

Centric overload clutches provide consistent rotational timing and repeatable torque levels. This clutch is a roller detent design and is lubricated with Mobilith SHC460. This is a fully automatic clutch that will re-engage once the system is jogged or rotated into location.

When a torque over load or “jam” occurs the roller will roll out of the detent and the trip plate will actuate the proximity sensor or mechanical switch. This clutch is intended to be shut down if a jam occurs although at very slow speeds it can be allowed to run.

Mounting/Installation

If a sprocket or pulley is being mounted to the clutch it should be done before the clutch is mounted securely to the shaft. The housing is drilled and taped to accept 3 each 1/4-20 screws on a 2.875 bolt center diameter. The sprocket should be through bored at 2.375/2.376 inches. Once the sprocket is attached the clutch can be slid onto the shaft and aligned with the mating chain or belt.

This clutch is shaft mounted with two rotor/shaft set screws. These set screws can be accessed through the housing with a 1/8” hex key wrench (grease fitting holes). The set screws should be tightened until the hex key wrench begins to twist. The grease fittings can now be installed into the housing access holes. If the clutch is a coupling style, slide the coupling half against the pin steps and secure the set screws against the shaft.

General Maintenance

The bearings inside this clutch are self lubricated so that lubrication requirements are minimal depending upon the environment. If the operating environment is wet, dirty or frequent overloads occur, relubrication is recommended once monthly with Mobilith SHC460 grease.

Removal

Insure the clutch is engaged in the detent position and remove both grease fittings. Insert a 1/8” hex key wrench through the grease fitting holes and loosen the rotor set screws and slide the clutch from the shaft.

Torque Adjustment

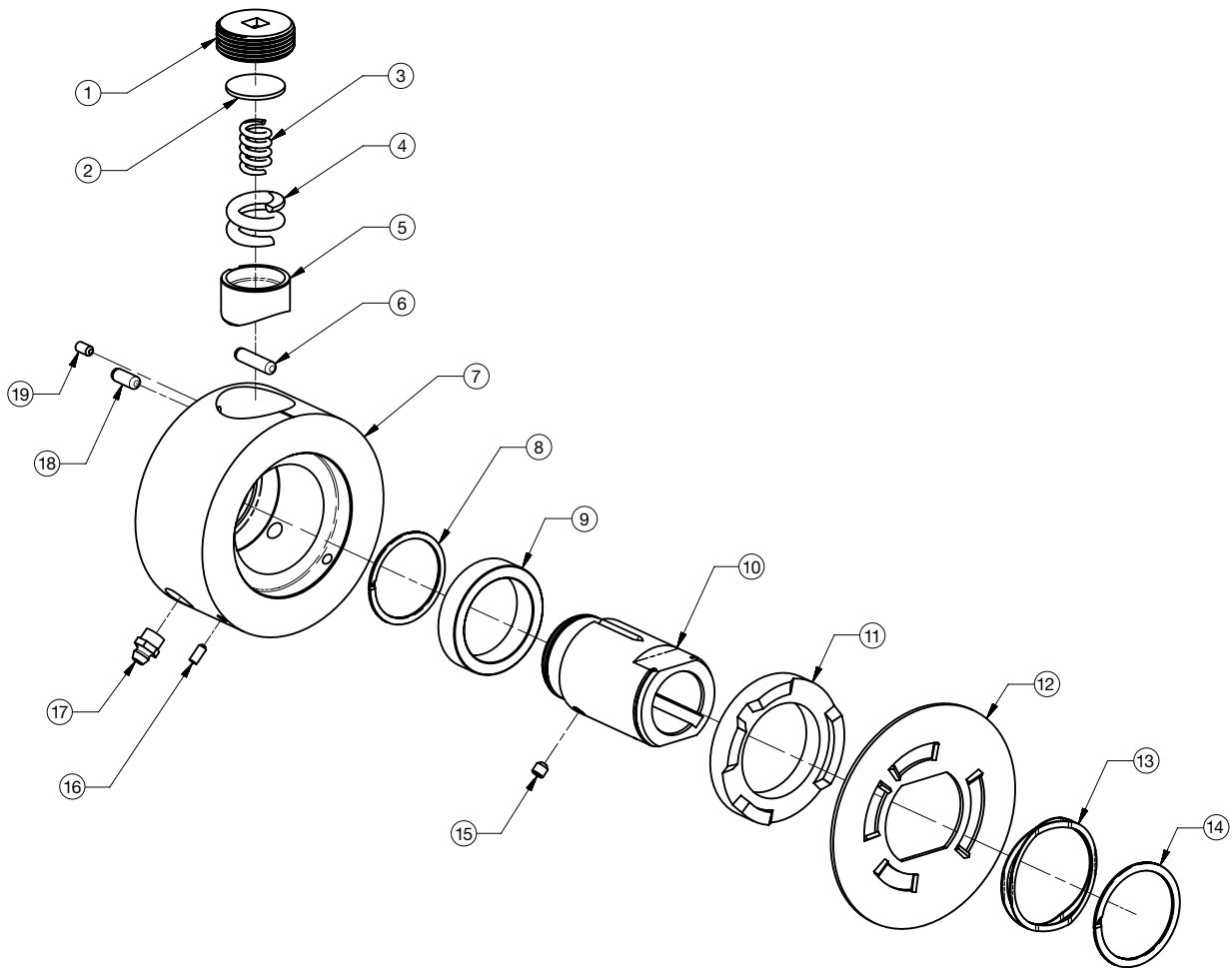
The torque of this clutch is adjustable between 100 and 1000 lb.in. The torque can be varied by rotating the 3/8 square drive screw. The torque values on the screw sticker will provide an indicator of the clutch torque. The standard clutch will be supplied set at the minimum torque value of 100 lb.in.

Customized Clutches

Clutches with special bolt patterns or torque settings can be supplied with short notice.

Contact 704-688-7324 with engineering or application questions.

CGC Series – Exploded View



Key No.	Item Number	Description
1	73216	Springscrew 739891-001-00000
2	77599	Reset Spring Disc 730383-003-00000
3	Z00027	Inner Spring 739917-001-00000
4	73223	Outer Spring 739894-001-00000
5	Z00057	Roller Carrier 739734-001-00000
6	70145	Dowel Pin 023921-021-00000
7	89810	Housing 739725-001-00000
8	73220	Ring 739892-001-00000
9	73265	Bearing, Bronze 739896-001-00000
10	Dependent On Bore Size	Rotor 739724-001-Bore Size

Key No.	Item Number	Description
11	89933	Bearing, Plastic 739732-000-00000
12	89855	Trip Plate, Bent 739726-002-00000
13	73222	Wave Spring 739895-001-00000
14	73221	Ring 739893-001-00000
15	72179 72181	Set Screw 074102-027-00000 (1 Req'd) 074102-031-00000 (1 Req'd)
16	70051	Set Screw 018006-017-00000 (2 Req'd)
17	72017	Grease Fitting 034186-029-00000 (2 Req'd)
18	70150	Dowel Pin 023921-048-00000
19	72178	Set Screw 074102-015-00000

Warranty

Boston Gear warrants that products manufactured or sold by it shall be free from defects in material and workmanship. Any products which shall within two (2) years of delivery, be proved to the Company's satisfaction to have been defective at the time of delivery in these respects will be replaced or repaired by the Company at its option. Freight is the responsibility of the customer. The Company's liability under this limited warranty is limited to such replacement or repair and it shall not be held liable in any form of action for direct or consequential damages to property or person. THE FOREGOING LIMITED WARRANTY IS EXPRESSLY MADE IN LIEU OF ALL OTHER WARRANTIES WHATSOEVER, EXPRESS, IMPLIED AND STATUTORY AND INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS.

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