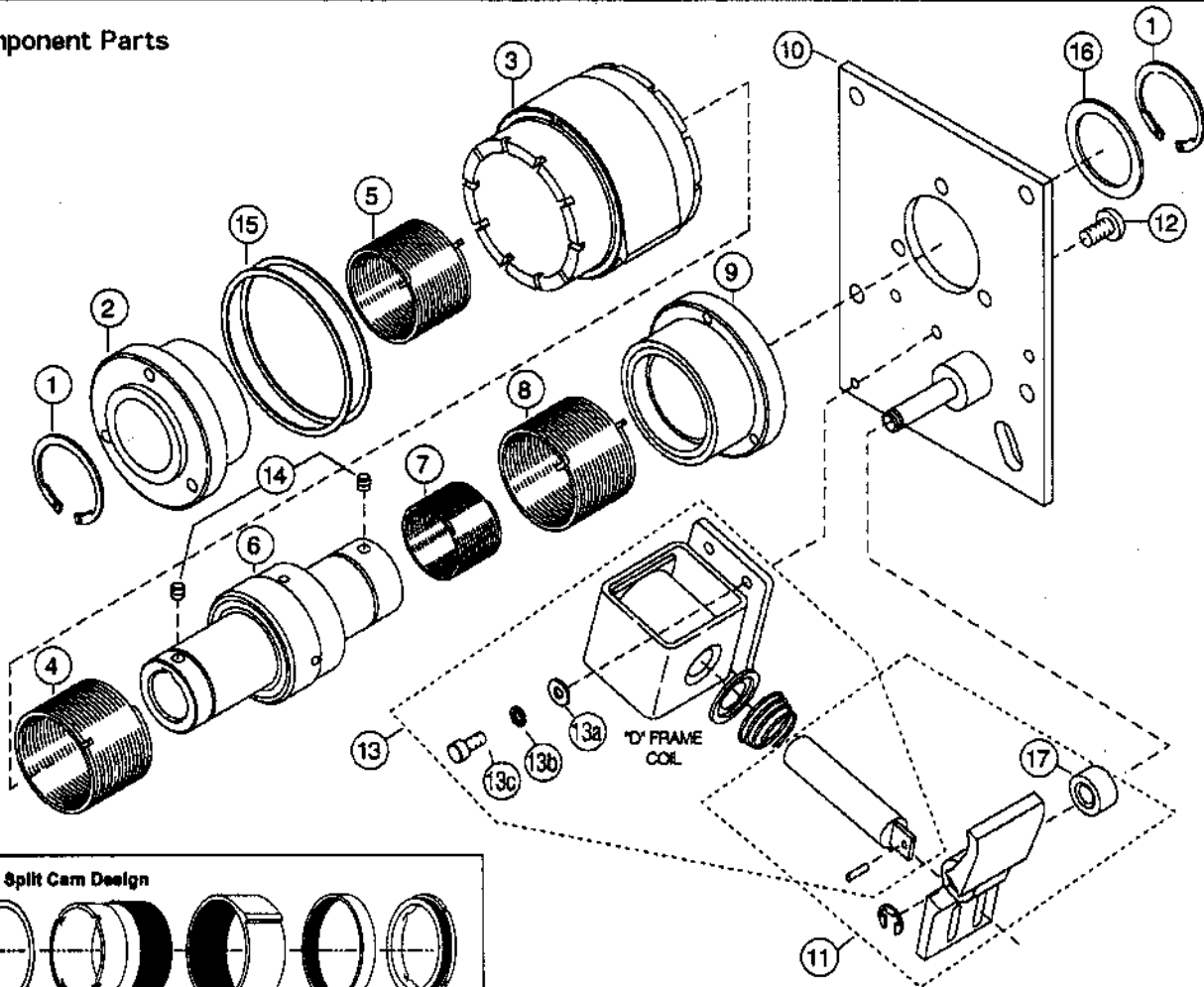
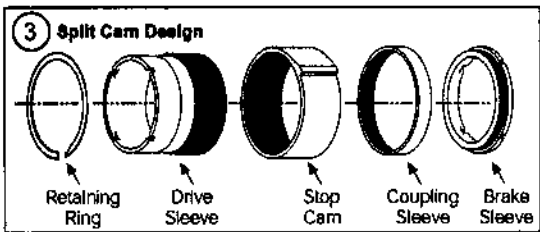


## Component Parts



Standard Wrap Spring Products



For assembly and disassembly see page 95.

Item	Description	Rotation	Part No. Inches (mm)
1	Retaining Ring		748-1-0038
2	Input Hub, Anti-Overrun		540-6-0003 (540-6-0059)
3	Control Collar (Specify No. of Stops) Standard 1.8° Adjustable	CW/CCW	266-6-0726
4	Drive Spring	CW CCW	808-6-0001 808-6-0002
5	Anti-Overrun Spring	CW CCW	808-6-0005 808-6-0006
6	Output Assembly 750 Bore 1.000 Bore (20.0 mm Bore) (25.0 mm Bore)		824-6-0002 824-6-0003 (824-6-0348) (824-6-0349)
7	Anti-Back Spring	CW CCW	808-6-0003 808-6-0004
8	Brake Spring	CW CCW	808-6-0001 808-6-0002
9	Brake Hub		540-6-0001

Item	Description	Rotation	Part No. Inches (mm)
10	Plate Assembly	CW CCW	686-6-0076 686-6-0077
11	Actuator Assembly (includes plunger)	CW CCW	102-1-0032 102-1-0033
12	Button Head Cap Screw (3)		797-1-0243
13	Coil Assembly "D" Frame 24 DC 115 AC 12 DC 90 DC		101-1-0028 101-1-0058 101-1-0027 101-1-0030
13a	Flatwasher		950-1-0006
13b	Lockwasher—Split		950-1-0020
13c	Soc. Head Cap Screw (2)		797-1-0044
14	Headless Socket Set Screw (2) (.75 Bore only) Set Screw (2) (20.0 mm Bore only)		797-1-0162 (797-1-0774)
15	Shim (2)		807-1-0001
16	Shim .005 .010		807-1-0014 807-1-0017
17	Spacer		807-1-9001

\*Shims used as required.

# Disassembly & Assembly Instructions

## CB-2, CB-4

### Disassembly

1. Important—Insure that the spring tang location is marked before the unit is taken apart.
2. Rotate the input hub until the actuator hits the stop cam. Continue to apply torque in the direction of rotation to the output shaft until the brake spring is fully wrapped down.
3. Remove the retaining ring from the input hub end.
4. Remove input hub – turn in direction of rotation only.
5. Release the actuator so that the brake is disengaged.
6. Remove the collar assembly by extracting the collar toward the clutch spring end.

### Assembly

1. Replace parts as needed.
2. Install the collar assembly over the output shaft and spring assembly. (Pull the clutch spring tang through the collar with needle-nosed pliers, taking care not to distort the spring.)
3. Install the input hub – turn in direction of rotation only.
4. Reset spring differential as needed (see "How to Set Spring Differential on a CB Unit" on pages 61–62.)
5. Install the retaining ring with smooth surface facing input hub.

**Note:** Anti-back springs and hubs should not be disassembled because of the difficulty in maintaining endplay setting between hubs. The unit should be returned to the factory for service.

## CB-5 and Super CB-5

### Disassembly

1. Rotate the input hub until the actuator hits the stop cam. Continue to apply torque in the direction of rotation to the output shaft until the brake spring is fully wrapped down.
2. Remove the retaining ring from the input hub end.
3. Remove thrust washer (Super CB-5 only).
4. Remove input hub – turn in direction of rotation only.
5. Release the actuator so that the brake is disengaged.
6. Remove the collar assembly (see split cam design) by extracting the collar toward the clutch spring end.

### Assembly

1. Replace parts as needed.
2. Install the collar assembly over the output shaft and spring assembly. (Pull the clutch spring tang through the collar with needle-nosed pliers, taking care not to distort the spring.)
3. Install the input hub – turn in direction of rotation only.
4. Install thrust washer (Super CB-5 only).
5. Install the retaining ring with smooth surface facing input hub.
6. Reset spring differential as needed (see "How to Set Spring Differential on a CB Unit" on pages 61–62.)

**Note:** Anti-back springs and hubs should not be disassembled because of the difficulty in maintaining endplay setting between hubs. The unit should be returned to the factory for service.

## CB-6 CB-7 and CB-8

### Disassembly

1. Rotate the input hub until the actuator hits the stop cam. Continue to apply torque in the direction of rotation to the output shaft until the brake spring is fully wrapped down.
2. Remove the retaining ring from the input hub end.
3. Remove input hub – turn in direction of rotation only.
4. Remove the retaining ring from the mounting plate end.
5. Remove the output shaft and collar assembly (see split cam design) from the mounting plate – turn in direction of rotation only. **Do not remove brake hub from mounting plate.**
6. Remove the collar assembly (see split cam design) from the output shaft by extracting the collar toward the brake side of the output shaft.

### Assembly

1. Replace parts as needed.
2. Install the collar assembly (see split cam design) over the output shaft and spring assembly. (Pull the brake spring through the collar with needle-nosed pliers, taking care not to distort the spring.)
3. Install the output shaft and collar assembly on the mounting plate – turn in direction of rotation only.
4. Install retaining ring on the mounting plate end with its smooth surface facing brake hub.
5. Install the input hub.
6. Install the retaining ring on the input hub with smooth surface facing the hub.
7. Reset the spring differential (see "How to Set Spring Differential on a CB Unit" on pages 61–62.)

## Super CB-6, 7 & 8

### Disassembly

1. Rotate the input hub until the actuator hits the stop cam. Continue to apply torque in the direction of rotation to the output shaft until the brake spring is fully wrapped down.
2. Remove the retaining ring from the input hub end.
3. Remove the input hub with thrust washer — turn in direction of rotation only. (Super CB-7 and 8 note the orientation of the flange for assembly.)
4. Remove the retaining ring from the mounting plate end.
5. Remove the output shaft and collar assembly (see split cam design) from the mounting plate – turn in direction of rotation only. **Do not remove brake hub from mounting plate.**
6. Remove the collar assembly (see split cam design) from the output shaft by extracting the collar toward the brake side of the output shaft.

### Assembly

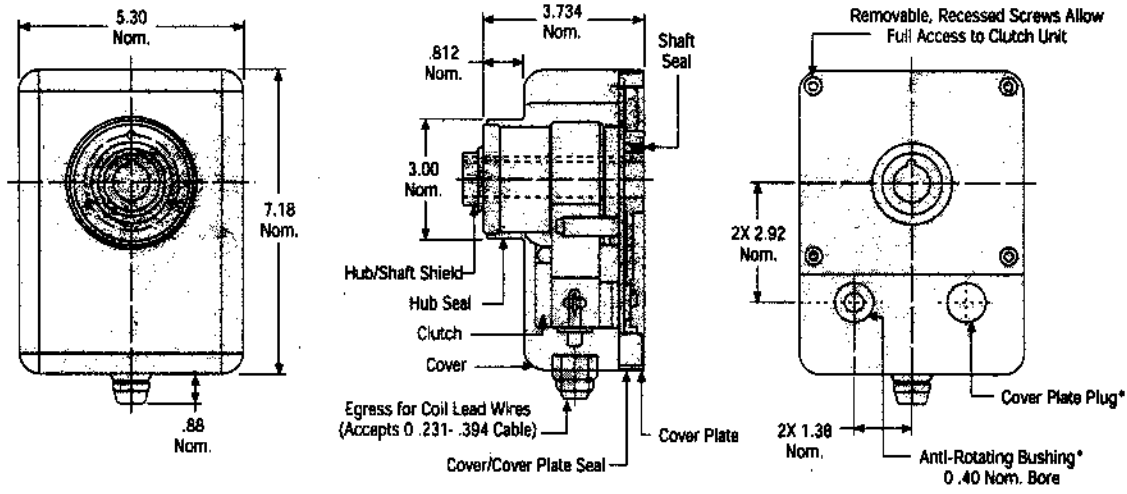
1. Replace parts as needed.
2. Install the collar assembly (see split cam design) over the output shaft and spring assembly. (Pull the brake spring through the collar with needle-nosed pliers, taking care not to distort the spring.)
3. Install the output shaft and collar assembly on the mounting plate – turn in direction of rotation only.
4. Install the retaining ring on the mounting plate end with its smooth surface facing the brake hub.
5. Install the input hub with thrust washer (flange oriented correctly on Super CB-7 and 8).
6. Install the retaining ring on the input hub with its smooth surface facing the hub.
7. Reset the spring differential (see "How to Set Spring Differential on a CB Unit" on pages 61–62.)

## CB-10 and Super CB-10

### Disassembly

1. Important—Insure that the spring tang location is marked before the unit is taken apart.
2. Rotate the input hub until the actuator hits the stop cam. Continue to apply torque in the direction of rotation to the output shaft until the brake spring is fully wrapped down.
3. Remove the retaining ring from the input hub end.
4. Remove the input hub – turn in direction of rotation only (CB-10). (Super CB-10 remove the input hub with the thrust washer – turn in direction of rotation only and note the orientation of the flange for assembly.)
5. Remove the retaining ring from the mounting plate end.
6. Remove the output shaft and collar assembly from the mounting plate – turn in direction of rotation only. **Do not remove brake hub from mounting plate.**

**Dimensions (Aluminum)**

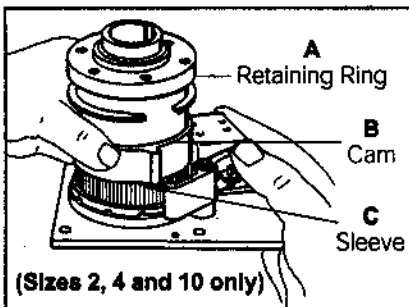


\*Anti-rotating bushings and cover plate plug are interchangeable dependent upon customer rotational requirements.

**Stop Collars and CB Spring Differential Adjustments**

**Stop collar removal and adjustment for Super CB and CB series clutch/brakes (Sizes 2 - 10)**

To adjust the stop collar, remove retaining ring A, slide cam B off sleeve C, rotate the cam to the desired position, slide it onto the sleeve again, and replace the retaining ring.



**Note:** While adjusting the stop collar on split cam units (sizes 5, 6, 7 and 8) the coupling sleeve must be held secure so that it does not move.

**CB spring differential adjustments for Super CB and CB series clutch/brakes (Sizes 2, 4 and 10 only)**

All Super CB and all CB series clutch/brakes are factory preset to the proper spring differential overtravel. Should a component require replacement and the springs are affected, it is advisable to mark the two spring tang slots to ensure correct reassembly. If this is not possible, use the following procedure to reset the springs.

1. Remove the retaining ring from the input hub.
2. Rotate the clutch so the brake spring is fully wrapped down.

**Note:** Merely rotating the unit until the actuator hits the cam will not fully engage the brake spring. The output shaft must be rotated in the driving direction until the brake spring fully wraps down.

3. With the brake fully engaged (per step 2), pull the clutch spring out of its slot and allow it to jump to wherever it comes to rest.
4. The clutch spring should be between two slots. Unwrap the spring and push it back into the nearest slot.
5. Push the input hub back into place, release the actuator and rotate the clutch until the brake spring fully wraps down again.
6. With the brake fully engaged, hold the shaft with one hand and release the actuator.
7. The collar will jump forward as the brake is released and the clutch engages.

*Continued on page 62*

# Stop Collars

## CB Spring Differential Adjustments for Super CB and CB Series Clutch/Brakes (Sizes 2, 4 and 10 Only) Continued

The amount of overtravel varies with the unit.

Model	Overtravel
*CB-2	.09 to .19"
*CB-4	.19 to .31"
CB-5	.15 to .25"
CB-6	.19 to .37"
CB-7	.37 to .50"
CB-8	.37 to .50"
*CB-10	.62 to .75"

Note: \*Non-Split Cam design

8. To obtain the overtravel, use a scale to measure the distance between the tip of the actuator and the tip of the cam. (See picture below.)

9. If the overtravel is within specified limits, reinstall the retaining ring, the unit is set.

10. If the overtravel exceeds the specified amount, move the brake spring back one slot against the direction of rotation and repeat steps two through eight.

11. If the overtravel is less than the specified amount, move the brake spring forward one slot in the direction of rotation.

Note: If the unit is disassembled and the drive and/or brake springs do not need to be replaced, proceed as follows:

— Reposition the drive and brake springs to their original positions onto the output shaft assembly.

— Reassemble the clutch and position the spring tangs of the drive and brake springs in the factory marked locations on the control collar assembly (on the control collar there are designated slots marked with a recessed punch mark).

— After the unit is completely assembled, the differential setting should be back to its original setting.

## Spring Differential Adjustments For Split Cam Units (5, 6, 7, and 8)

To adjust the differential on split cam units (Sizes 5, 6, 7 and 8) the following procedure is used:

1. Slide the retaining ring, stop cam, and coupling towards the free hub (input) separating the two split sleeves.
2. Move the brake sleeve spline in the opposite direction of the drive to wrap down the brake spring.
3. Hold the brake spring sleeve spline in place and slide the coupling onto the splines to secure the two sleeves.
4. Slide the stop cam onto the splined section and re-insert the retaining ring into the groove.

