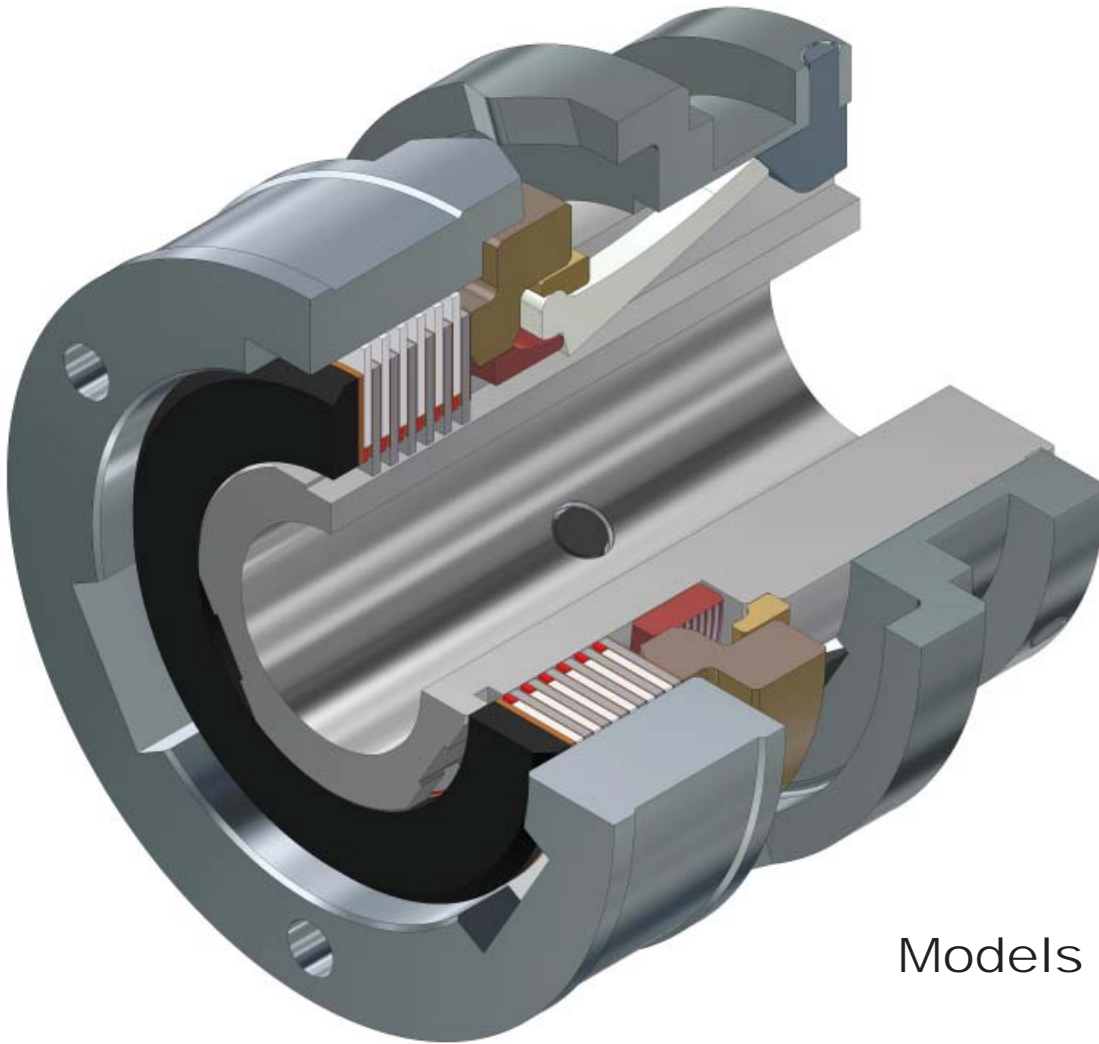


Automatic Overload Release Clutch



Models MOR & ORI

THE MAXITORQ® ADVANTAGE

- Dependable, positive safety protection for operators and machines
- Recommended for excessive torsional loading
- Automatically disengages
- Easy on-line manual adjustment
- Available in single position models offering timer registration
- Highest torque in smallest space
- Drag free neutral

- **Dependable, positive safety protection for operators and machines – eliminates costly shutdowns**
- **Recommended for excessive torsional loading due to heavy shock or sudden over normal load**
- **Automatically disengages – no heat or drag in neutral**
- **Highest torque in the smallest space**
- **Easy on-line manual adjustment allows fine-tuning of the machine**
- **Available in single position models offering timer registration**
- **Easy on-line adjustment allows for wear compensation and for release settings over a wide range of torque values**

Simple, Efficient "Built-in Protection"

The Carlyle Johnson MAXITORQ® Overload Release Clutch is designed to protect a machine and its products against damage resulting from accidental overloading of the mechanism. This type of clutch promises freedom from costly shutdowns, resulting in substantial savings to the user.

When overload occurs, the clutch automatically disengages, preventing damage to the machine. When the jammed condition has been cleared, the clutch can be reengaged and the machine is again in operation.

The overload release clutch is specifically recommended for applications where the nature of the overload will be a heavy shock, or a sudden applied load of a magnitude substantially greater than the normal driving load. In the disengaged position, the discs are "free floating" resulting in positive neutral with a minimum of 1% of stated torque being transferred with no ratcheting. Typical applications include packaging machinery, glass bottle, making, textile machines, hand wheel release, book binding machines, bottle filling, labeling equipment and conveyor lines.

Complete Overload Release Package

Carlyle Johnson can furnish the overload release clutch with ring type drive cup and hub adapters as a complete package designed for your application.

Overload release-type driving ring cup connects the overload release clutch with either the driven or driving member.

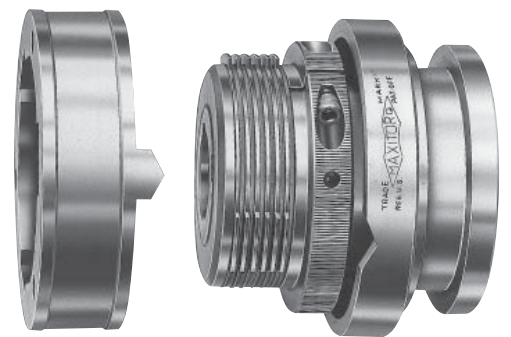
All working surfaces of the ring cups are heat-treated. Because of the unusual cam construction, it is recommended that we furnish over load release-type driving ring cups as well as the clutch. The hub or cut-off coupling type adapter is furnished by the user, or is available through the factory to suite installation requirements.

MOR Standard CAMS



ORI inverted CAM type

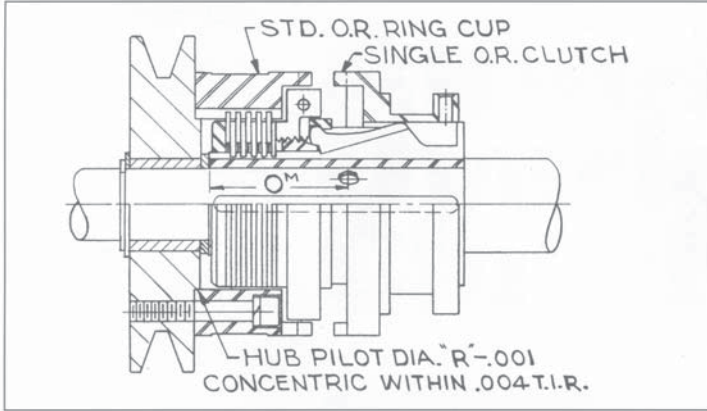
For single registration enabling registering two shafts to a specific relationship.



Shifters

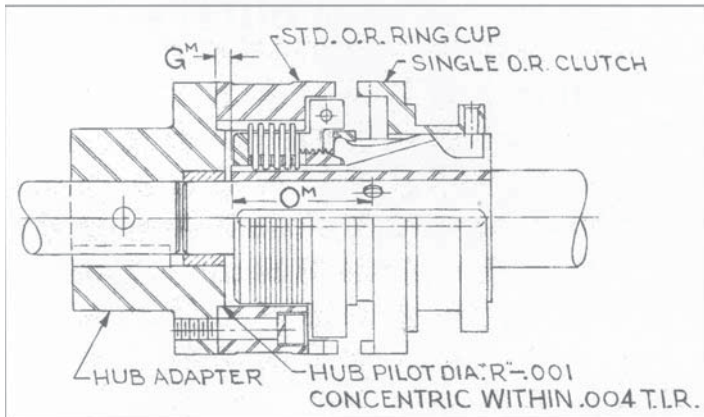
Special overload release shifters are available for clutch sized 20 through 26. Shoes and studs are available for all sizes including 27 and 28 for riveting into shifter yokes designed by the customer. The user can, if desired, incorporate a limit switch in the power input line. This switch is operated in conjunction with the clutch shifter sleeve to open the circuit when the clutch is released by an overload. Maxitorq® Overload Release Clutches may be used on a continuous shaft, or as a cut-off coupling type for connecting two shafts.

Typical Pulley Type Application



The pulley is used to support the ring type driving cup. The clutch is keyed to the shaft and positioned with reference to the pulley. A dardelet self-locking full dog point set screw is provided to secure the clutch position.

Typical Cut-off Type Application



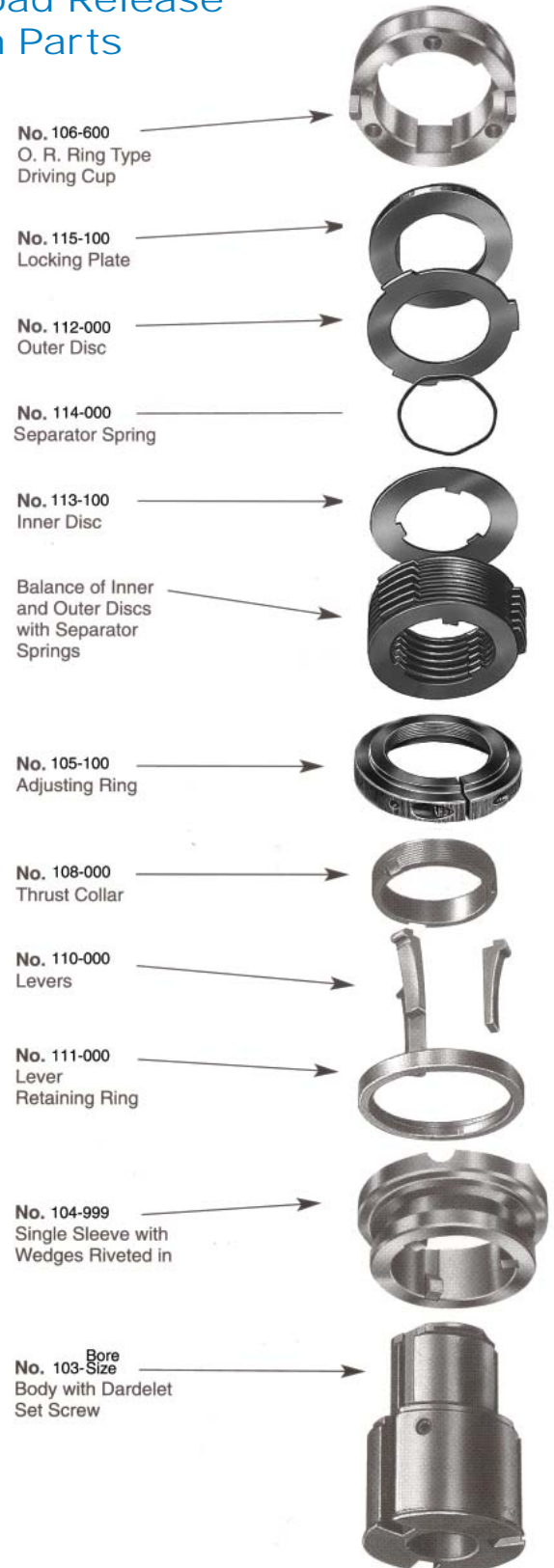
The hub adapter is keyed and pinned to one shaft. This hub adapter has an internal bronze bearing to align the two shafts. The standard overload release ring cup is piloted on and bolted to the hub adapter. The clutch is keyed to the shaft and positioned with reference to the hub adapter. A dardelet self-locking full dog point set screw is provided to secure the clutch position.

Note: Maxitorq® Clutches and brakes as furnished can run dry or in oil. We specifically recommend Series A oils. If high great loading or worm and wheels are adjacent to the clutch and indicate extreme pressure additives that would reduce clutch torque, placed contact Carlyle Johnson for recommendations.

Replacement Parts

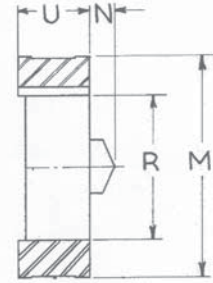
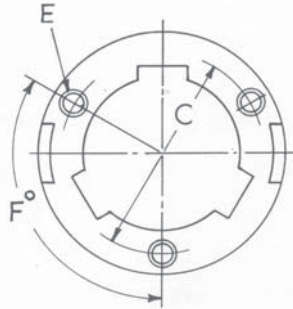
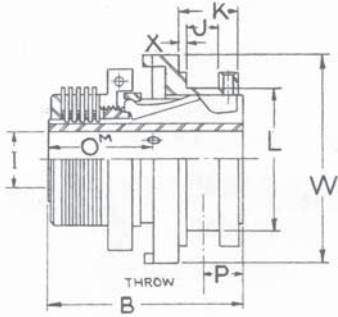
Every MAXITORQ® clutch, brake or torque limiter is designed to permit rapid, easy replacement of normal wear parts, without the use of special tools. Parts may be obtained for any Maxitorq product by specifying the part number, clutch size and serial number.

Overload Release Clutch Parts



Clutch Assembly

O.R. Ring Type Driving Cup



SPECIFICATIONS MOR and ORI

Model	Torque Adjustment Range (lb. ft.)	Dynamic Torque (lb. ft.)	Axial Sleeve Pressure lbs.	Bore		Keyway (in.)	A	B	Throw D	J	K	L	O ^M	P	W	X
				Min. (in.)	Max. (in.)											
MOR0021	20 - 40	13	20	3/4	7/8	3/16 x 3/32	2.594	3.000	.375	.500	.938	3.125	1.641	.625	3.125	.125
MOR0022	40 - 80	27	30	1	1 1/8	3/16 x 3/32	3.188	3.469	.438	.500	1.063	2.625	1.938	.703	3.625	.172
MOR0023	80 - 160	53	30	1 1/4	1 3/8	1/4 x 1/8	3.938	4.031	.531	.625	1.234	3.250	2.266	.797	4.625	.188
MOR0024	140 - 280	92	40	1 1/2	1 5/8	5/16 x 5/32	4.250	4.031	.531	.625	1.234	3.563	2.266	.797	5.000	.188
MOR0025	240 - 380	158	60	1 3/4	1 7/8	3/8 x 3/16	4.938	4.813	.609	.750	1.438	4.063	2.719	.953	5.875	.203
MOR0026	400 - 800	263	80	2	2 1/4	7/16 x 7/32	5.469	5.000	.609	.750	1.438	4.625	2.906	.953	6.625	.203
MOR0027	800 - 1600	525	105	2 1/2	2 3/4	9/16 x 9/32	7.594	6.344	.875	.812	1.750	6.500	3.750	1.125	9.125	.313
MOR0028	1200 - 2400	788	150	3 3/4	3	9/16 x 9/32	8.625	6.563	.875	.812	1.750	7.500	3.989	1.125	10.125	.313

NOTE: Dardelet self-locking full dog point set screw must bottom in spotted hole in shaft, 5/16 set screw requires 7/32 hole 1/8 deep in customer's shaft; 5/16" hole 1/8" deep.

O.R. RING TYPE DRIVING CUP - SPECIFICATIONS

Ring Cup	C Bolt Circle	No. Thru Holes	E Drilled Holes	Cap Screw Size	F	G ^M	M	N	R Ring I.D.	U
MOR0021-106-600	2.563	3	.266	1/4	120°	3/16	3.125 3.123	.344	2.017 2.015	1.031
MOR0022-106-600	3.063	3	.266	1/4	120°	3/16	3.625 3.623	.344	2.517 2.515	1.156
MOR0023-106-600	3.313	3	.344	5/16	120°	5/32	4.625 4.623	.469	3.267 3.265	1.313
MOR0024-106-600	4.438	3	.344	5/16	120°	5/32	5.125 5.123	.469	3.767 3.765	1.313
MOR0025-106-600	5.313	4	.406	3/8	90°	3/16	6.125 6.123	.578	4.517 4.515	1.594
MOR0026-106-600	6.250	6	.406	3/8	60°	3/16	7.125 7.120	.594	5.517 5.515	1.781
MOR0027-106-600	8.063	6	.531	1/2	60°	3/16	9.125 9.120	.813	7.017 7.015	2.188
MOR0028-106-600	9.063	6	.531	1/2	60°	1/4	10.125 10.120	.813	8.017 8.015	2.438



THE CARLYLE JOHNSON MACHINE COMPANY, LLC

291 Boston Turnpike • P O Box 9546 • Bolton, Connecticut 06043-9546
 (860) 643-1531 • FAX (860) 646-2645 • TOLL FREE (888) 629-4867 • www.cjmco.com

