

# Standard

# Parts

# Manual

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# CRA45 Model

# Rotators

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This manual applies to Serial Numbers through B180680

**Caution: Please pay particular attention to the safety information included in this manual. File this manual for future reference.**

# WARRANTY

Long Reach warrants its new lift truck products for one hundred eighty (180) days from the date of delivery to the original user. This warranty is limited to the replacement of such parts as Long Reach shall inspect and find, at its sole discretion, to be defective in workmanship or material.

Long Reach products are warranted only if Long Reach's applicable installation and use instructions have been carefully followed. This warranty does not extend to problems resulting from normal or accelerated wear, unauthorized alterations, improper installation, abuse, or lack of proper maintenance. Prior written authorization must be obtained for repairs other than the removal of defective parts and replacement with parts supplied by Long Reach.

It is specifically agreed that the liability of Long Reach under all guarantees or warranties, either expressed or implied, is strictly limited to those terms as hereinbefore provided. Long Reach assumes no responsibility for loss, damage, or injury, either direct or consequential, including that based on strict liability, resulting from or occasioned by possession or use of its products.

On equipment of other than Long Reach manufacture, but supplied by it either as a separate unit or as an integral part of one of its products, the warranty of the original manufacturer shall apply. *There are no warranties that extend beyond those stated on the face of this agreement.*

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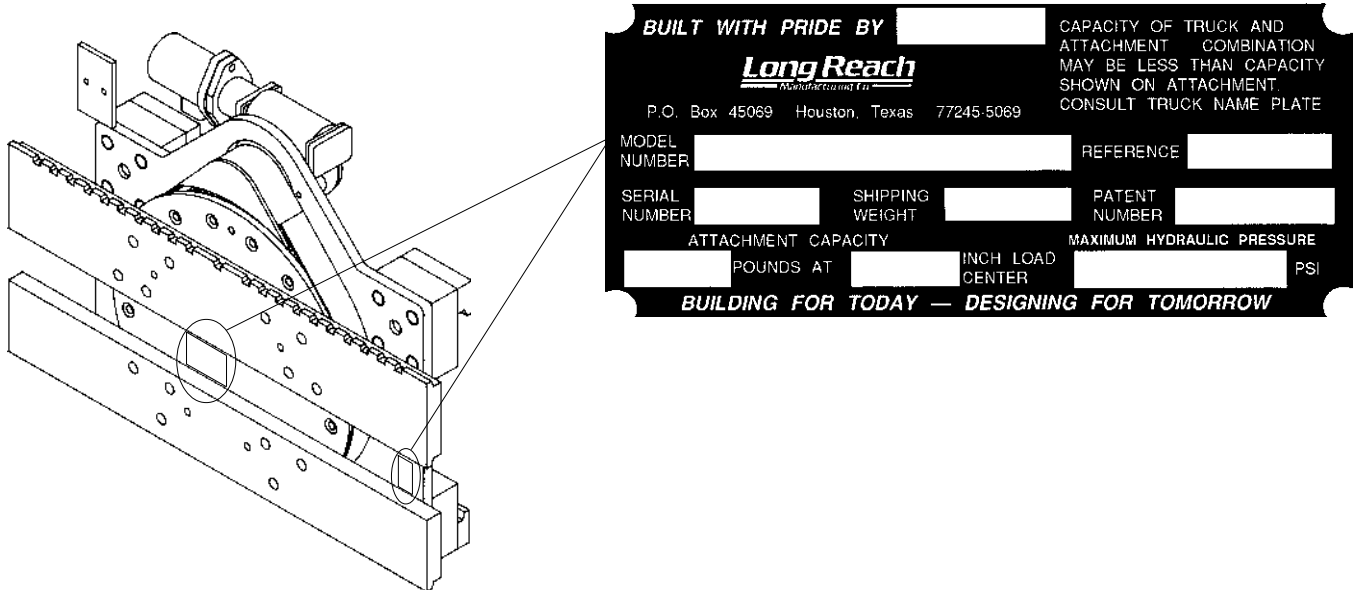
## CRA-45 ROTATOR

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# HOW TO USE THIS MANUAL

This manual is intended for those seeking replacement parts information on all standard 4,500 pound capacity Long Reach Rotating Carriages. It also contains sections on operation and safety.

When you receive your attachment, locate the Long Reach nameplate (See graphic below) and record the model number, serial number, and date received in the space provided on the bottom of the next page. If the name plate is missing, look for the serial number stamped directly into the metal at the original location.



# HOW TO ORDER SERVICE PARTS

To obtain fast, efficient service when ordering repair parts for your Long Reach attachment, please include the model and serial number with all correspondence.

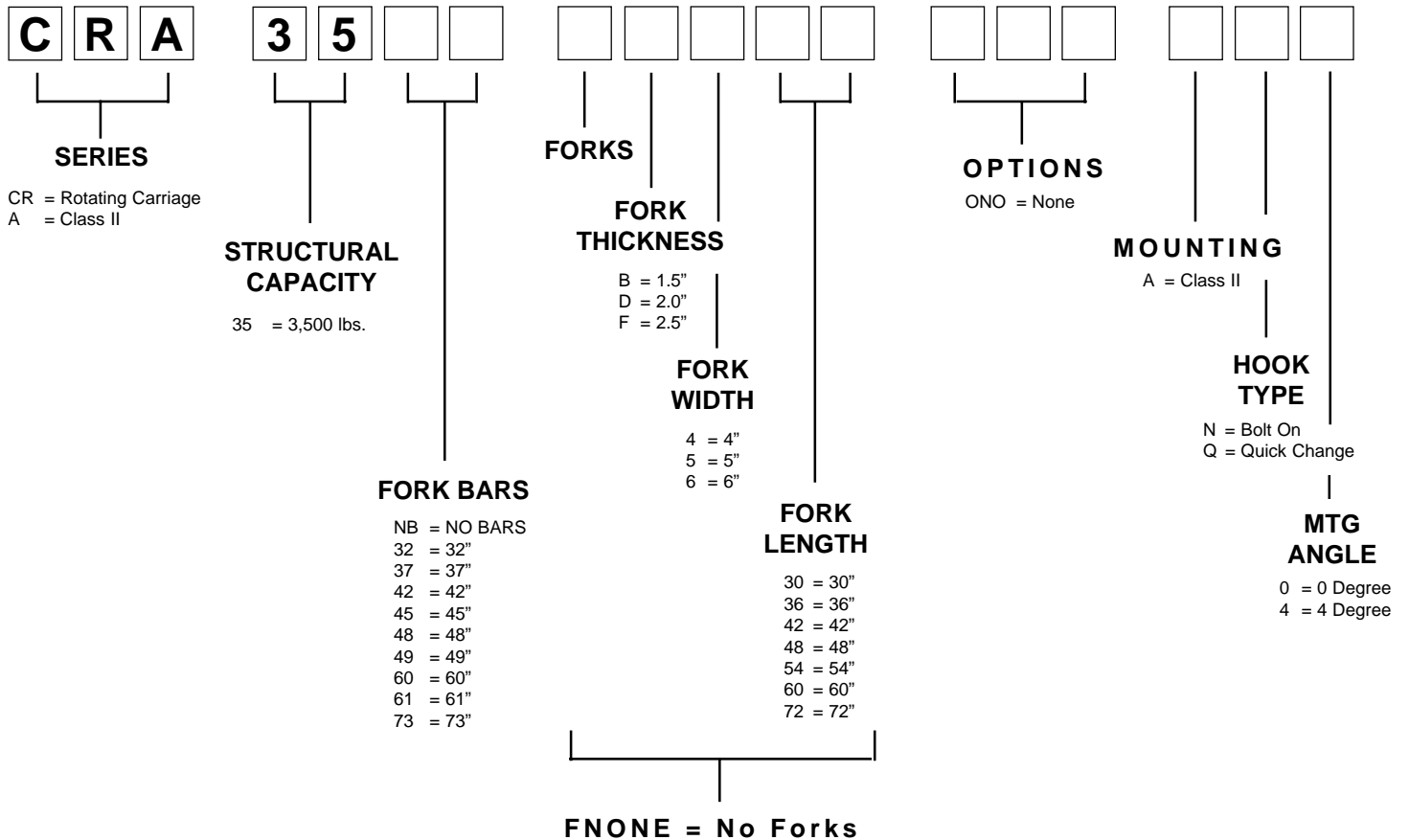
Customers: Long Reach parts are available through authorized lift truck dealers. To order, contact the lift truck dealer of your choice.

Lift Truck Dealers: To order parts, contact:

**Long Reach Manufacturing**  
**12300 Amelia Drive**  
**Houston, TX 77045**  
**Telephone: (800) 231-3273**  
**Fax: (713) 433-9710**

# MODEL NUMBER INFORMATION

Long Reach's model numbers are designed to describe how an attachment is equipped. The guide below illustrates the information that is represented in an 18-digit model number.



Referring to the previous page, locate the serial number name plate and enter the information in the spaces provided below.

**Model Number:**

**Serial Number:** (First letter designates year - ie: A = 1991, B = 1992, C = 1993 ...)

**Date Recieved:** (MM - DD - YY)

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# SAFETY INFORMATION

## User's Safety Tips Safety is Everyone's Responsibility

Whether you are new on the job or a seasoned veteran, these safety tips may prevent injury to you, to others, or to the materials you are handling. Always be alert, watch out for others, and follow these suggestions:

### Safety starts with common sense.

1. Never stand on top of material being raised, lowered, or transported.
2. Never use the attachment or its load to support a man-carrying device.
3. Never position an attachment or load over people.
4. Never leave an attachment or load in an elevated position.
5. Never stand in front of or beside an attachment that is being operated. Never allow another person to approach an attachment that is being operated.
6. Always operate an attachment from the operator's seat, never while standing next to the lift truck.
7. Never reach through the mast of the truck. Keep all parts of the body within the driver's compartment.
8. Do not allow riders on the truck at any time.
9. Never leave a lift truck unattended without lowering the load to the floor, setting the brake, and turning the truck off.
10. Never transport a load that impedes full vision forward. Use reverse.
11. Watch for pedestrians when transporting. Sudden stops can dislodge all or part of a load.

### Load Handling.

1. All operators must be trained and qualified.
2. Never overload the attachment. Refer to the attachment nameplate for the rated capacity of the attachment. Refer to the nameplate of the truck for the net working capacity of the truck and attachment. Observe the lower of the two capacities. The attachment capacity is the structural rating of the attachment and should not be exceeded. Net working capacity is the truck manufacturer's rating of the truck/attachment combination.
3. Never use a load to support or move another object. Doing so can easily exceed the holding capacity of the attachment, causing loss of the load.
4. Never lift, lower, side shift, pivot, rotate, or tilt loads while traveling. Repositioning loads while traveling affects the stability of the truck and may impede vision or clearances.
5. Never speed or race a lift truck. High speed adversely affects the stability and steering of the lift truck.
6. Do not use an attachment to open or close boxcar doors. Doing so can severely damage the attachment and cause loss of warranty. Using damaged roll clamp pads can cause severe paper damage.
7. Do not carry loose items or rolls on top of a load.
8. Never allow anyone under a load or under the carriage.
9. Never use chains, cables, or other devices in conjunction with an attachment.
10. Report all damaged or faulty equipment. Do not operate a lift truck or an attachment until repairs have been made.
11. Never clamp wood, skids, pallets, or any other incompatible load with an attachment.
12. Do not carry more than one paper roll with a roll clamp unless the clamp is specifically designed for multiple rolls.

# SAFETY INFORMATION

13. Travel slowly around corners. Sound horn on blind corners. Be careful of tail swing and overhead clearances. Watch in all directions. Avoid sudden stops.
14. Do not exceed the specified maximum operating pressure for the attachment. To do so can severely damage the attachment and cause loss of warranty.

## Load Positioning

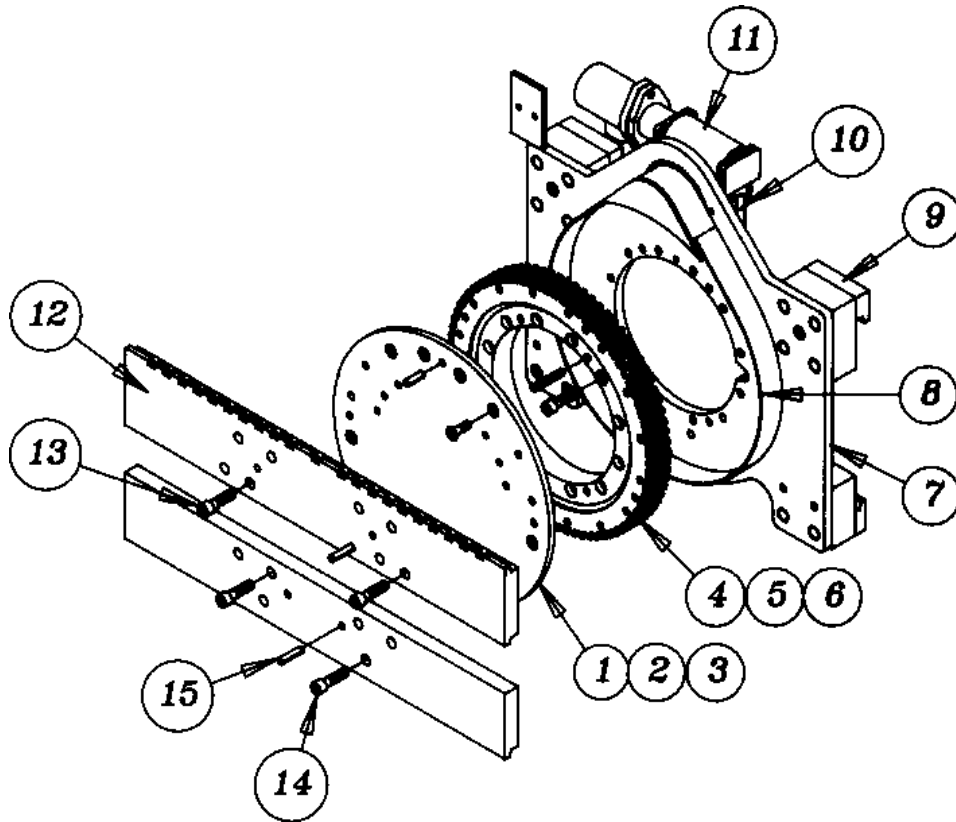
1. Always carry loads as close to the floor as possible, consistent with the surface being traversed. Scraping or bumping the floor surface with the load or the attachment can severely damage the attachment and cause product damage. The mast should be tilted backward.
2. Always keep the load positioned as close as possible to the horizontal center of the lift truck.
3. Always back down ramps or inclines. Driving forward down a ramp or incline with a clamped load will lessen the stability of the truck.
4. Do not cross dock boards or dock levelers with the attachment or carriage fully lowered. Ramming the front or rear of the attachment against a dock board can cause severe damage.
5. Always check loads to be handled. If they are broken, unbalanced, loose, or too heavy, advise a supervisor or properly correct the situation prior to handling.
6. Limit lift truck movement to a minimum when high stacking. Limit sideshift movement to a minimum when high stacking.
7. Always be observant when high stacking. Look for poorly stacked loads, overhead obstacles, broken cartons, or damaged products in the stack.
8. Always carry cylindrically shaped loads in the vertical position, not the horizontal.
9. Always clamp a paper roll with the contact pads of the paper roll clamp, not the arm or arm base.
10. Never rotate a load that is off center to the centerline of rotation. Severe damage to the rotator could result.
11. Always position the short arm pad of a paper roll clamp close to the roll before clamping to prevent lateral movement of the roll while the roll is clamped.
12. Always check the attachment for proper fit and engagement of the truck carriage.

# PRESSURE AND FLOW REQUIREMENTS

Long Reach attachments have been designed to operate within specific limits. Operating pressures above the stipulated maximum may cause structural damage to the clamp and may result in loss of warranty. Hydraulic flow less than the recommended rates, or the use of small I.D. hoses may reduce operating speed. Higher flow can result in excessive heat buildup, erratic operation and damage to the truck/attachment hydraulic system.

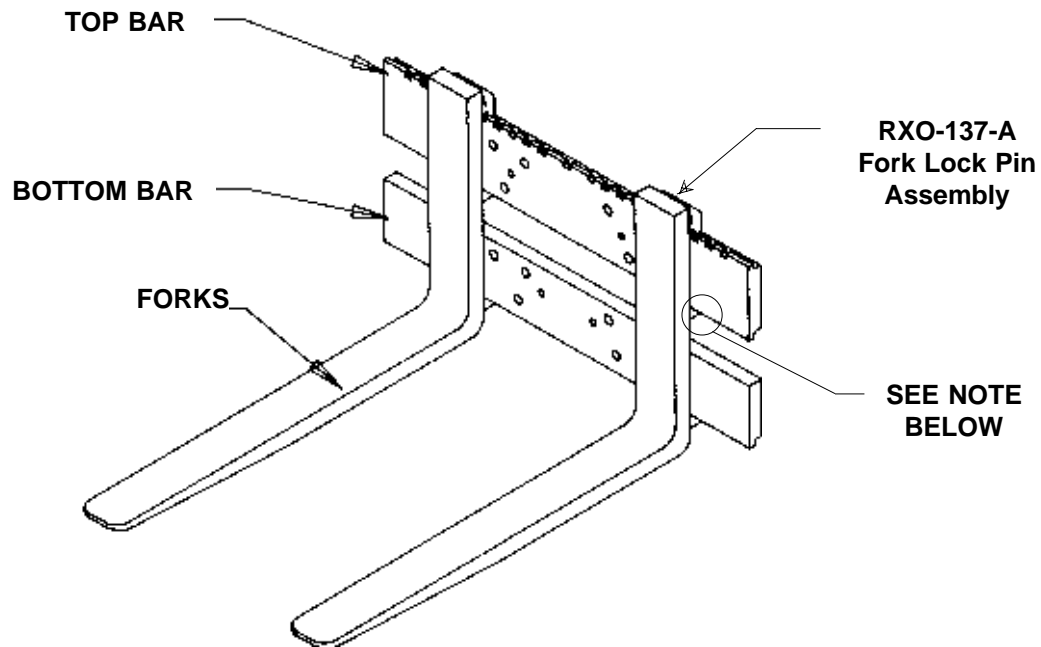
12 GPM - Recommended Flow  
2,000 PSI - Maximum Pressure

# COMPLETE ASSEMBLY



NO.	DESCRIPTION	QTY.	PART NUMBER
1.	Front Plate	1	FPL-0022-CRNFM
2.	Cap Screws	—	—
	a. with Fork Bars	8	AB-38
	b. without Fork Bars	16	AB-38
3.	Roll Pin	4	ED-25
4.	Bearing	1	G-284-D-P
5.	Cap Screw	12	AA-38
6.	Roll Pin	4	ED-10
7.	Back Plate Assembly	1	BPL-0195-CRNFM
8.	Seal	1	KB-58-60
9.	Hook Mounting	—	<b>Page 10</b>
10.	Grease Line	1	HSY-0045-CRNTM
11.	Motor/Reducer Assembly	1	<b>Page 11</b>
12.	Fork Bars	—	<b>Page 9</b>
13.	Cap Screw	6	A-51
14.	Cap Screw	8	A-55
15.	Roll Pin	4	ED-25

# FORK BARS AND FORKS



## TOP BARS

WIDTH	QTY.	PART NUMBER
32"	1	RFB-0016-CRNFM
37"	1	RFB-0001-CRNFM
42"	1	RFB-0004-CRNFM
45"	1	RFB-0033-CRNFM
48"	1	RFB-0019-CRNFM

## BOTTOM BARS

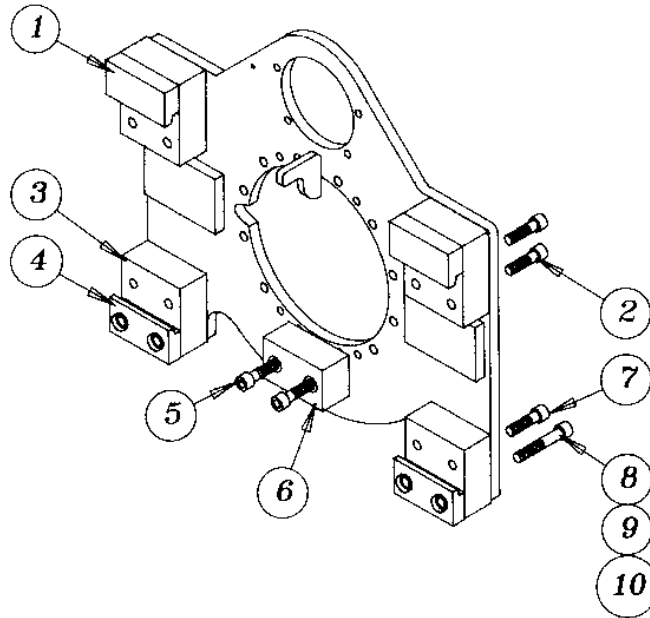
WIDTH	QTY.	PART NUMBER
32"	1	RFB-0018-CRNFM
37"	1	RFB-0003-CRNFM
42"	1	RFB-0006-CRNFM
45"	1	RFB-0035-CRNFM
48"	1	RFB-0021-CRNFM

## FORKS

WIDTH	QTY.	PART NUMBER
1.5" x 4" x 30"	2	GFA-0614-CRNTM
1.5" x 4" x 36"	2	GFA-0187-CRNTM
1.5" x 4" x 42"	2	GFA-0022-CRNFM
1.5" x 4" x 48"	2	GFA-0023-CRNFM

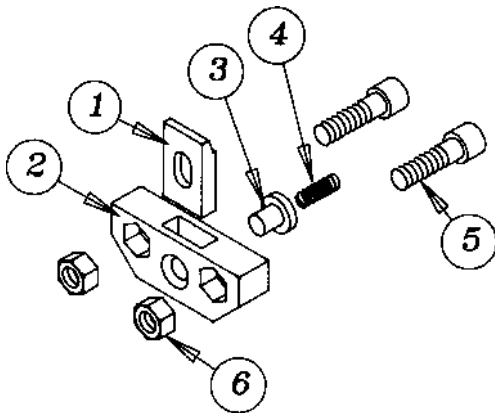
**NOTE:** A three-clip mounting is required on rotator forks. If a rotator is ordered without forks, Long Reach will include the 3<sup>rd</sup> clip for customer-supplied forks. This clip must be included for safe operation.

# MOUNTING



NO.	DESCRIPTION	QTY.	AN0	AQ0	AN4	AQ4
1.	Top Hook	2	HKS-0012-CRNFM	HKS-0012-CRNFM	HKS-0033-CRNFM	HKS-0033-CRNFM
2.	Capscrew	8	AA-38	AA-38	AA-38	AA-38
3.	Bottom Spacer	2	SPS-0016-CRNFM	SPS-0016-CRNFM	SPS-0056-CRNFM	SPS-0056-CRNFM
4.	Bottom Hook	2	XO-209	QCHA-CR *	XO-209	QCHA-CR *
5.	Capscrew	2	AA-39	AA-39	AA-85	AA-85
6.	Center Spacer	1	SPS-0017-CRNCM	SPS-0017-CRNFM	SPS-0055-CRNFM	SPS-0055-CRNFM
7.	Capscrew	4	AA-39	AA-39	AA-85	AA-85
8.	Capscrew	4	A-240	*	A-72	*
9.	Nut	4	C-11	*	C-11	*
10.	Lockwasher	4	DAB-12	-	DAB-12	-

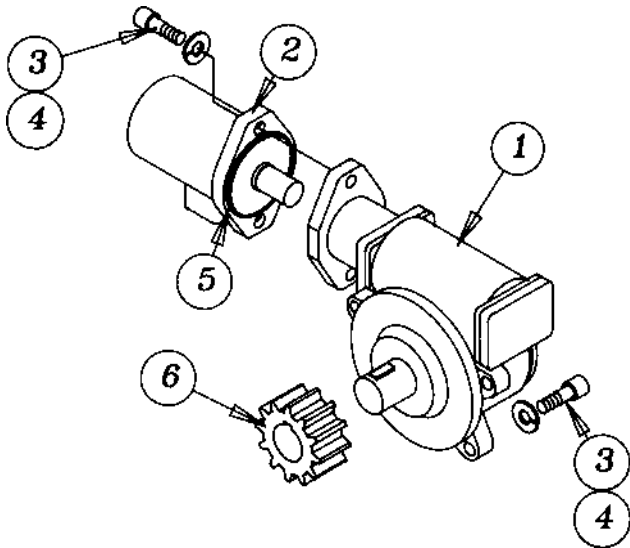
\* **NOTE:** QCHA-CR is a complete kit. Parts may be ordered individually. See below.



### QUICK CHANGE HOOK KIT

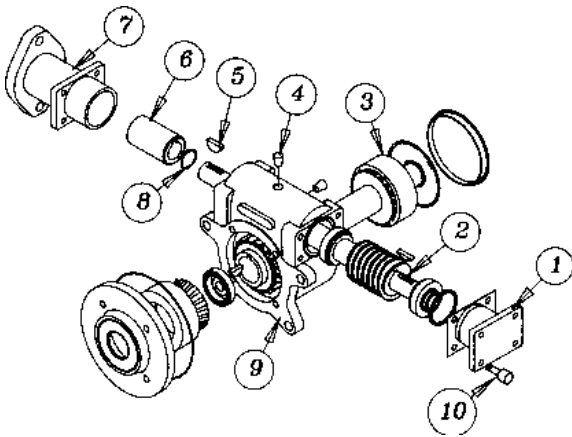
NO.	DESCRIPTION	QTY.	PART NUMBER
1.	Slide Plate	2	RXO-202
2.	Hook Body	2	RXO-201
3.	Button	2	RXO-203
4.	Spring	2	N-235
5.	Capscrew 0° Mounting	4	A-236
	Capscrew 4° Mounting	4	A-73
6.	Nut	4	C-11

# DRIVE ASSEMBLY



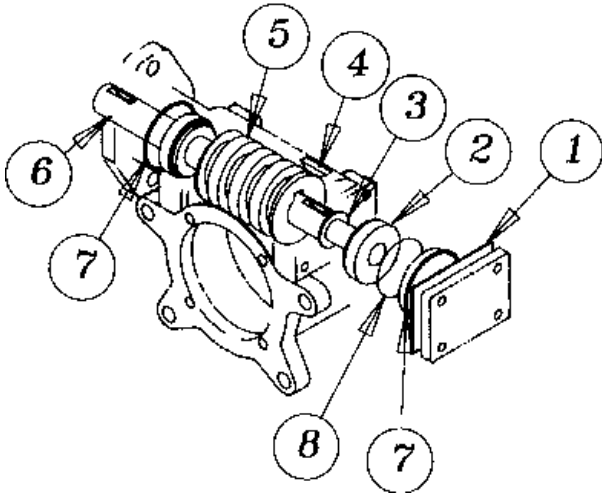
NO.	DESCRIPTION	QTY.	PART NUMBER
1.	Reducer Assembly	1	GC-43 (See Below)
2.	Motor	1	L-296FR
3.	Capscrew	6	A-52
4.	Lockwasher	6	D-6
5.	O Ring	1	K-61
6.	Pinion Gear	1	GC-24
	Motor Seal Kit	-	L-296-1

# REDUCER ASSEMBLY



NO.	DESCRIPTION	QTY.	PART NUMBER
1.	End Cap	1	GC-43-2
2.	Input Shaft Assembly	1	<b>Page 12</b>
3.	Output Shaft Assembly	1	<b>Page 12</b>
4.	Plug	3	HF-3
5.	Woodruff Key	1	EB-8
6.	Coupling	1	GC-43-11
7.	Motor Adapter Flange	1	GC-43-3
8.	Snap Ring	1	GC-43-6
9.	Housing	1	GC-43-1
10.	Capscrew	8	A-33
-	Complete Assembly	-	GC-43
-	Seal Kit	-	GC-43-SK

# INPUT SHAFT ASSEMBLY

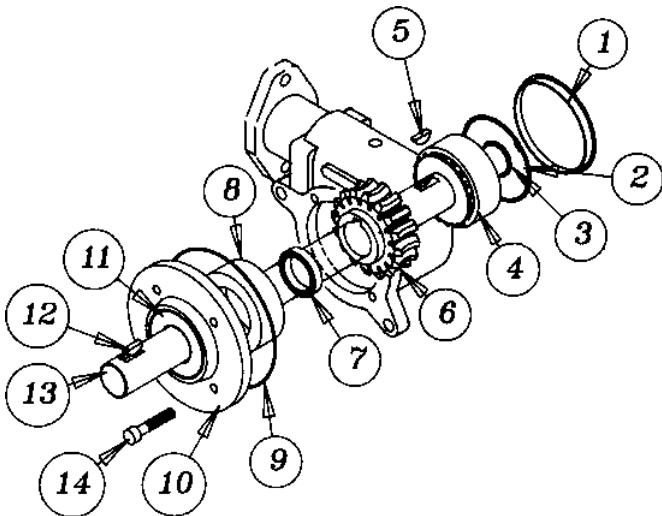


NO.	DESCRIPTION	QTY.	PART NUMBER
1.	Shim/Gasket †	*	GC-43-10
2.	Bearing	2	GC-43-4/5
3.	Snap Ring	1	GC-25-7
4.	Woodruff Key	1	GC-43-9
5.	Worm Gear	1	GC-43-16
6.	Input Shaft	1	GC-43-7
7.	O Ring †	2	K-221
8.	Shim (.005 Thick)	*	GC-43-12

\* As Required

† **NOTE:** Included in Seal Kit GC-43-SK.

# OUTPUT SHAFT ASSEMBLY



NO.	DESCRIPTION	QTY.	PART NUMBER
1.	Cap	1	GC-21-11
2.	Snap Ring	1	GC-21-13
3.	Snap Ring	1	GC-28-4
4.	Bearing	1	GC-43-18
5.	Woodruff Key	1	GC-43-8
6.	Gear	1	GC-43-15
7.	Spacer	1	GC-28-2
8.	Bearing	1	G-288/289
9.	O Ring †	1	K-173
10.	Adapter Plate	1	GC-28-1
11.	Seal †	1	GC-21-3
12.	Woodruff Key	1	EB-17
13.	Output Shaft	1	GC-25-1
14.	Capscrew	4	GC-28-3

† **NOTE:** Included in Seal Kit GC-43-SK.

# RECOMMENDED SPARE PARTS

DESCRIPTION	PART NO.	NO. OF UNITS	
		1 - 5	6 - 10
Reducer Assembly (R.H.)	GC-43	0	1
• Seal Kit	GC-43-SK	1	2
Hydraulic Motor	L-296FR	0	1
• Seal Kit	L-296-1	1	2
Fork Lock Pin Assembly	RXO-137-A	2	4



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