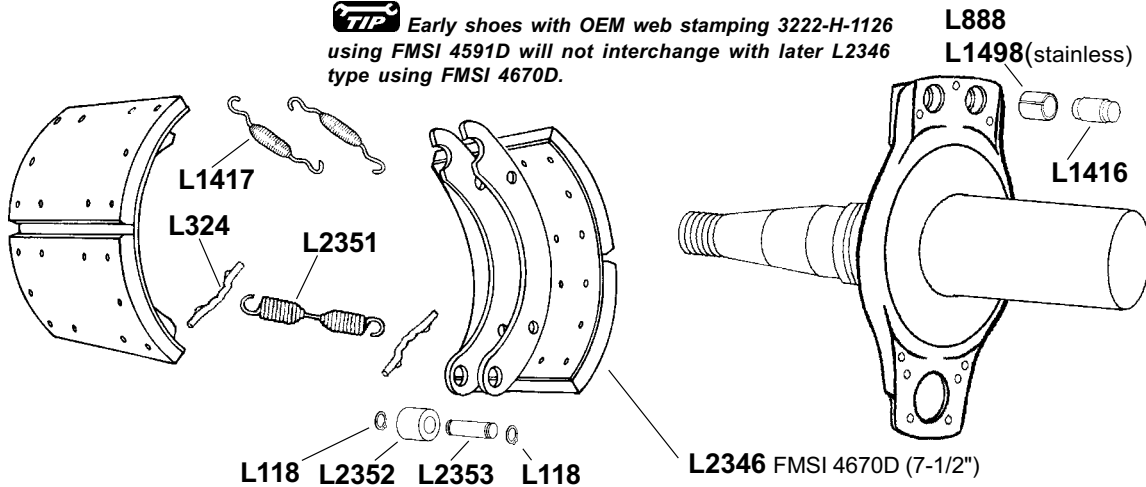


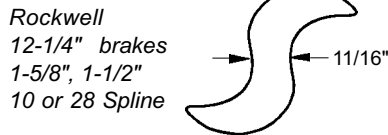
LELAND REPLACEMENT PARTS FOR  
**ROCKWELL**  
 12-1/4" x 7-1/2" "Q" SERIES BRAKE

**TIP** Early shoes with OEM web stamping 3222-H-1126 using FMSI 4591D will not interchange with later L2346 type using FMSI 4670D.

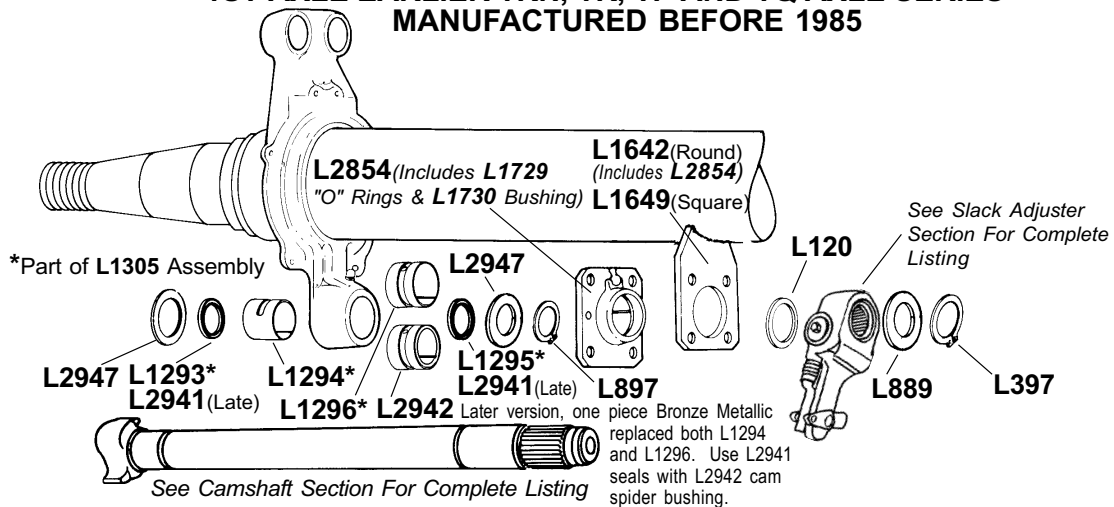


Brake Repair Kit: **K154**  
 Camshaft: Standard thin small S-head

**CAMSHAFT IDENTIFICATION**



**1ST AXLE EARLIER TKN, TK, TP AND TQ AXLE SERIES  
 MANUFACTURED BEFORE 1985**

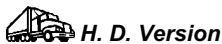


Cam Repair Kits with L1305:

- K74 Wheel
- K53 Wheel
- K97 Axle
- K269 Wheel, includes L2854
- K270 Axle, includes L2854

with L2942:

- K489 Axle, includes L2854
- K289 Wheel, includes L2854
- K290 Wheel, excludes L2854
- K319 Wheel, excludes L2854



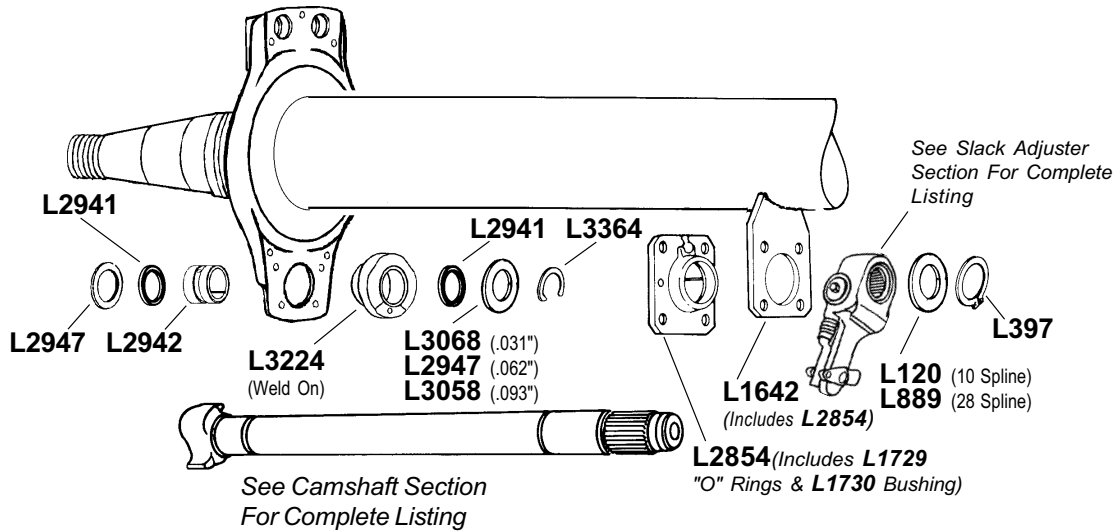
Schematic  
Diagram  
Charts  
**4**

**ROCKWELL**

# ROCKWELL

## 12-1/4" x 7-1/2" "Q" SERIES BRAKE LATE "TK", "TQ" AND "TN" AXLES

EARLY SERIES USING BOTH WELD ON FABRICATED BRAKE SPIDER  
AND CAM SPIDER BOSS MANUFACTURED FROM '85 TO MID '90



Schematic  
Diagram  
Charts

4

ROCKWELL

Cam Repair Kits with L2942:

- K489** Axle, includes L2854
- K289** Wheel, includes L2854
- K290** Wheel, excludes L2854
- K319** Wheel, excludes L2854

### **TIP** INSTALLATION OF L3224 WELD ON RETAINER.

Note the location of the grease fitting prior to removal of the existing unit from the spider. Use caution in removal of retainer to prevent warping the spider housing. Remove weld residue. Place and align the L3224. Secure with a clamping device. Weld in four equally distanced locations using AWS E70S3 or E70S6 electrodes. Each weld should extend approximately 3/16" x 3/8".

### INSTALLATION OF L2942 BRONZE SINTERED METALLIC BUSHING AND L2941 GREASE SEALS.

Remove the existing bushing using the LBT4032 driver tool. Clean the bore surface using Emery cloth. Install the L2942 into the center of the bore, aligning one of the grease holes with the grease fitting channel in the spider bushing retainer. Using the LBT4032 tool, carefully install the L2941 seals with the lip of each (open side with garter spring visible) facing inboard, toward the slack adjuster. The seal edge should touch the bushing edge when installation is complete. Avoid direct hammer or otherwise contact resulting in damage to the metal surfaces of the seal.

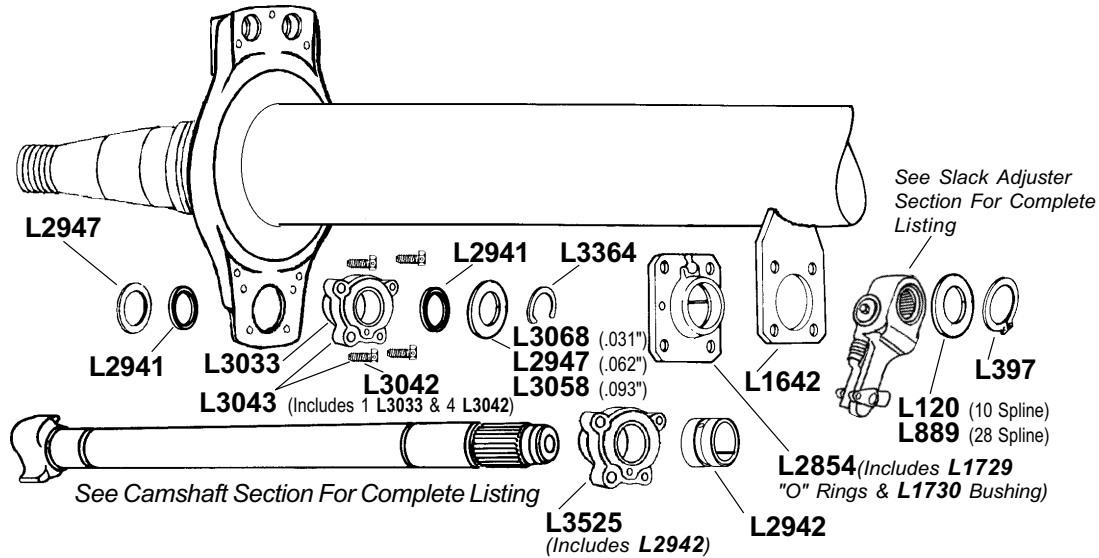
# ROCKWELL

## 12-1/4" x 7-1/2" "Q" SERIES BRAKE LATE "TK", "TQ" AND "TN" AXLES

LATER SERIES USING WELD ON FABRICATED BRAKE SPIDER WITH BOLT ON  
TYPE CAM BUSHING BRACKET MANUFACTURED FROM MID '90 ON

Schematic  
Diagram  
Charts

4



**L3033 has 1-5/8" bore, non-rebushable.**  
**L3525 has 2" bore with L2942 pressed in.**

Cam Repair Kits  
with L3043

**K363** Axle, includes L2854  
**K313** Wheel, includes L2854  
**K490** Axle, includes L2854, also  
services H.D. forged spiders  
**K491** Wheel, excludes L2854

with L2942:

**K489** Axle, includes L2854  
**K289** Wheel, includes L2854  
**K290** Wheel, excludes L2854  
**K319** Wheel, excludes L2854

with L3525:

**K511** Axle, includes L2854  
**K512** Wheel, includes L2854  
**K510** Wheel, excludes L2854



### INSTALLATION OF L3033 OR L3525 BUSHING RETAINER.

Unbolt and remove the retainer from the spider. After removal, if servicing L3525, remove seals and sleeve bushing. Install new L2942 bushing using tool from LBT4032 set. For either type retainer, carefully install the L2941 seals flush, with the lip of each (open side with garter spring visible) facing inboard toward the slack adjuster. Align the screw holes of the new retainer to the correct position on the spider. Insert the retainer assembly into the spider, using a C-clamp with backing if necessary. Install the L3042 screws and hand tighten. Proceed to torque the screws in increments to a final reading of 30 to 40 lb.-ft. Fill the unit with multipurpose grease slowly until grease begins to seep through the seal lip edges. Wipe away excess grease.

ROCKWELL

# BRAKE REPAIR KITS

## ROCKWELL

### K154

For Rockwell 12-1/4" "Q" Series Brake

Contains:

- 4 Pcs. – L118 Lock Ring
- 2 Pcs. – L324 Return Spring Pin
- 2 Pcs. – L1416 Anchor Pin
- 2 Pcs. – L1417 Shoe Retainer Spring
- 2 Pcs. – L1498 Anchor Pin Spider Bushing
- 1 Pc. – L2351 Shoe Return Spring
- 2 Pcs. – L2352 Roller
- 2 Pcs. – L2353 Roller Pin



Contains parts to service one wheel.

Schematic  
Diagram  
Charts

4

## CAM REPAIR KITS

### K74

Minor Kit for 12-1/4" x 7-1/2" Series Brake with 1-5/8" Cam using Sleeved Bushing Assembly

Contains:

- 1 Pc. – L120 Spacer Washer
- 1 Pc. – L397 Lock Ring
- 1 Pc. – L889 Washer
- 1 Pc. – L897 Lock Ring
- 1 Pc. – L1305 Spider Bushing Assembly
- 2 Pcs. – L2947 Spacer Washer



Contains parts to service one wheel.

### K97

Axle Kit for 12-1/4" x 7-1/2" Series Brake with 1-5/8" Cam using Sleeved Bushing Assembly

Contains:

- 2 Pcs. – L120 Spacer Washer
- 2 Pcs. – L397 Lock Ring
- 2 Pcs. – L889 Spacer Washer
- 2 Pcs. – L897 Lock Ring
- 2 Pcs. – L1305 Spider Bushing Assembly
- 4 Pcs. – L1729 "O" Ring
- 2 Pcs. – L1730 Cam Bushing
- 4 Pcs. – L2947 Spacer Washer



Contains parts to service one axle.

Use **K53** to service One Wheel End

ROCKWELL

# CAM REPAIR KITS

## ROCKWELL

### K270

#### Major Axle Kit for "12-1/4" x 7-1/2" Series Brake with 1-5/8" Cam using Sleeved Bushing Assembly

Contains:

- 2 Pcs. - L120 Spacer Washer
- 2 Pcs. - L397 Lock Ring
- 2 Pcs. - L889 Spacer Washer
- 2 Pcs. - L897 Lock Ring
- 2 Pcs. - L1293 Seal
- 2 Pcs. - L1294 Outer Bushing
- 2 Pcs. - L1295 Seal
- 2 Pcs. - L1296 Inner Bushing
- 2 Pcs. - L2854 Camshaft Bracket Assembly
- 4 Pcs. - L2947 Spacer Washers

Contains parts to service one axle.  
Use **K269** to service One Wheel End



Schematic  
Diagram  
Charts

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### K290

#### For Late 12-1/4" x 7-1/2" Series Brake with 1-5/8" Cam using Press in Metallic Bushing

Contains:

- 1 Pc. - L120 Washer
- 1 Pc. - L397 Lock Ring
- 1 Pc. - L889 Spacer Washer
- 1 Pc. - L897 Lock Ring
- 2 Pcs. - L2941 Seal
- 1 Pc. - L2942 Camshaft Spider Bushing
- 2 Pcs. - L2947 Spacer Washer

Contains parts to service one wheel.  
For Major kit use K289.



### K319

#### For Late 12-1/4" x 7-1/2" Series Brake with 1-5/8" Cam using Press in Metallic Bushing

Contains:

- 1 Pc. - L120 Washer
- 1 Pc. - L397 Lock Ring
- 1 Pc. - L889 Spacer Washer
- 2 Pcs. - L2941 Camshaft Seal
- 1 Pc. - L2942 Camshaft Spider Bushing
- 1 Pc. - L2944 Camshaft Spacer
- 1 Pc. - L2945 Spacer Washer
- 1 Pc. - L2947 Spacer Washer
- 1 Pc. - L3057 Camshaft Washer
- 1 Pc. - L3058 Spacer Washer
- 1 Pc. - L3068 Spacer Washer
- 1 Pc. - L3364 Lock Ring

Contains parts to service one wheel.  
Some applications will not use all parts.



ROCKWELL

 H. D. Version

# CAM REPAIR KITS

## ROCKWELL

### K363

#### Axle Kit for Late 12-1/4" x 7-1/2" Series Brake with 1-5/8" Cam using Bolt on Spider Bracket Bushing

Contents:

- 2 Pcs. - L120 Cam Bracket Washer
- 2 Pcs. - L397 Spline End Lock Ring
- 2 Pcs. - L889 Spline End Washer
- 2 Pcs. - L2854 Camshaft Bracket Assembly
- 4 Pcs. - L2941 Seal
- 2 Pcs. - L3033 Bracket Bushing
- 8 Pcs. - L3042 Self Tapping Screw
- 2 Pcs. - L3057 Cam Head Washer
- 2 Pcs. - L3058 Inboard Spider Washer
- 2 Pcs. - L3364 Spider End Lock Ring



Schematic  
Diagram  
Charts

4

Use **K313** to service One Wheel End

### K489

#### For Rockwell/Meritor 12-1/4" and 16-1/2" Trailer Axle Brakes using Rebushable Bolted or Weld on Spider Bracket or Forged Spider

Contents:

- 2 Pcs. - L120 Cam Bracket Washer
- 2 Pcs. - L397 Lock Ring
- 4 Pcs. - L889 Spline End Washer
- 2 Pcs. - L897 Lock Ring
- 2 Pcs. - L2854 Cam Bracket Assembly
- 4 Pcs. - L2941 Spider Seal
- 2 Pcs. - L2942 Camshaft Spider Bushing
- 4 Pcs. - L2947 Spacer Washer
- 2 Pcs. - L3364 Spider End Lock Ring



Use **K289** to service One Wheel End

### K490

#### Major Axle Kit for Rockwell/Meritor 12-1/4" and 16-1/2" Trailer Axle Brakes with Heavy Duty Forged Brake Spiders

Contents:

- 2 Pcs. - L120 Cam Bracket Washer
- 2 Pcs. - L331 H.D. Lock Ring
- 4 Pcs. - L889 Spline End Washer
- 2 Pcs. - L897 Lock Ring
- 2 Pcs. - L2854 Cam Bracket Assembly
- 4 Pcs. - L2941 Spider Seal
- 2 Pcs. - L2942 Camshaft Spider Bushing
- 2 Pcs. - L2944 Camshaft Spacer
- 2 Pcs. - L2945 Cam Head Spacer Washer
- 4 Pcs. - L2947 Spacer Washer
- 2 Pcs. - L3364 Spider End Lock Ring



Similar to **K313** (wheel end) and **K363** (axle) except includes additional parts to service Heavy Duty Forged Spider axles.

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# CAM REPAIR KITS

## ROCKWELL

### K491

#### Minor Kit for Rockwell/Meritor 12-1/4" and 16-1/2" Trailer Axle Brakes using Bolt on Non Rebushable Spider Bracket on Fabricated Spider

Contents:

- 2 Pcs. - L2941 Spider Seal
- 1 Pc. - L3033 Bracket Bushing
- 4 Pcs. - L3042 Self Tapping Screw
- 1 Pc. - L3057 Cam Head Washer
- 1 Pc. - L3058 Inboard Spider Washer
- 1 Pc. - L3364 Spider End Lock Ring



Serves one wheel.

Also part of **K313** and **K363**.

Schematic  
Diagram  
Charts

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### K510

#### Minor Kit for Rockwell/Meritor 12-1/4" and 16-1/2" Trailer Axle Brakes using Bolt on Rebushable Spider Bracket on Fabricated Spider

Contents:

- 2 Pcs. - L2941 Spider Seal
- 4 Pcs. - L3042 Self Tapping Screw
- 1 Pc. - L3057 Cam Head Washer
- 1 Pc. - L3058 Inboard Spider Washer
- 1 Pc. - L3364 Spider End Lock Ring
- 1 Pc. - L3525 Bracket with pressed L2942 Bushing



Serves one wheel.

### K511

#### Major Axle Kit for Rockwell/Meritor 12-1/4" and 16-1/2" Trailer Axle Brakes using Bolt on Rebushable Spider Bracket on Fabricated Spider

Contents:

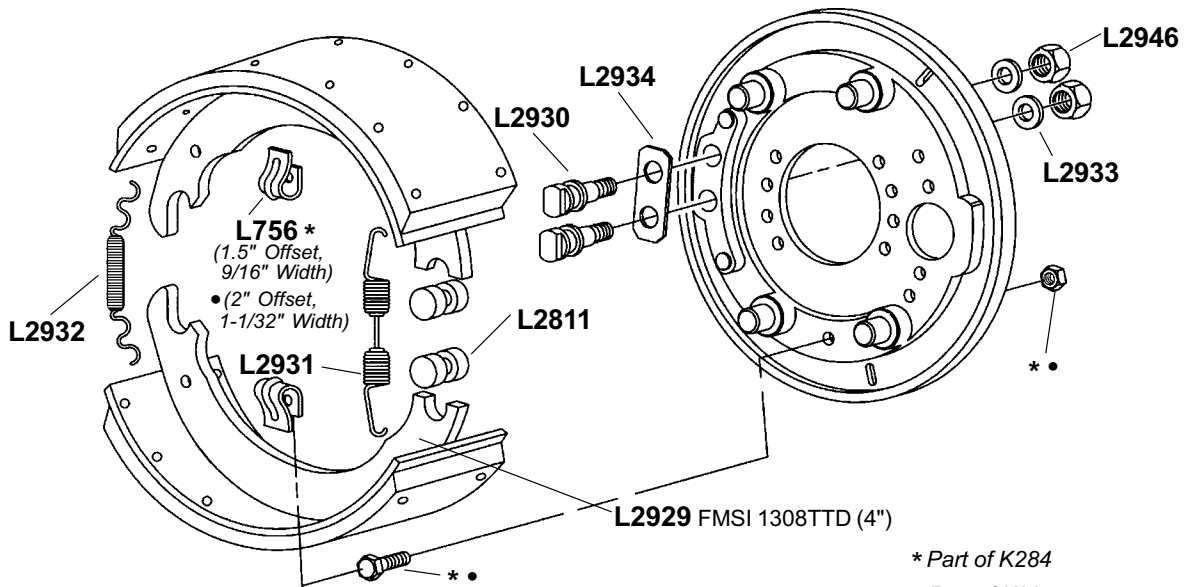
- 2 Pcs. - L120 Cam Bracket Washer
- 2 Pcs. - L397 Spline End Lock Ring
- 2 Pcs. - L889 Spline End Washer
- 2 Pcs. - L2854 Cam Bracket Assembly
- 4 Pcs. - L2941 Spider Seal
- 8 Pcs. - L3042 Self Tapping Screw
- 2 Pcs. - L3057 Cam Head Washer
- 2 Pcs. - L3058 Inboard Spider Washer
- 2 Pcs. - L3364 Spider End Lock Ring
- 2 Pcs. - L3525 Bracket with pressed L2942 Bushing



Use **K512** to service One Wheel End

ROCKWELL

LELAND REPLACEMENT PARTS FOR  
**ROCKWELL**  
**"Q" SERIES 15" x 4"**  
**SINGLE WEB STEERING AXLE BRAKE**

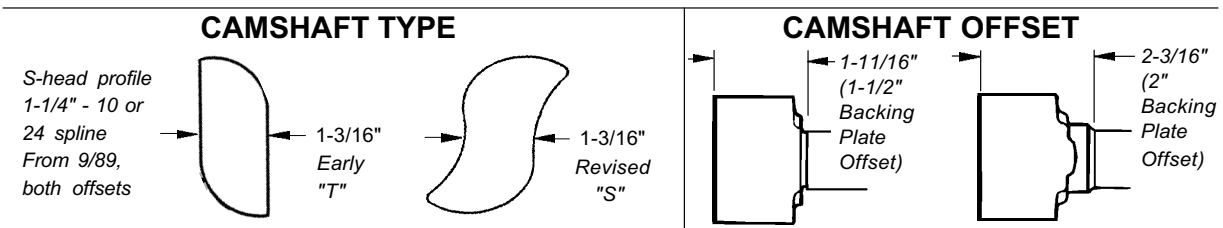


Schematic  
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Brake Repair Kits: **K282**  
**K283**  
 Camshafts: 1-1/4" - 10 or 24 spline

Shoe Hold Down Kits: **K284** (1.5" Offset)  
**K287** (2" Offset)

\* Part of K284  
 • Part of K287



**TIP** CONVERSIONS: "T" SERIES TO "Q" SERIES

This brake is not directly interchangeable with the 15" x 4" Type "2" "T" series brake with 1-1/4" camshafts. This is due to design and dimensional differences in anchor pins, backing plates, etc.

Conversion from 15" "T" Type 2 to "Q" requires changing backing plates in addition to other hardware. Earlier "T" head type camshafts should also be changed to later revised S-head profile types. In many cases a retrofit may not be available for an axle model or if available, may be cost prohibitive. The axle or brake assembly (on spider) tag I.D. are needed to determine if a conversion is possible.

**"Q" SERIES, EARLY VS LATE DESIGN BRAKE SHOES**

Early design OEM shoes 3722-Q-1837 (web stamping 3222-N-1834) were later altered with the shoe table relocated approximately 1" closer to the anchor end. The redesigned OEM version is A-3222-F-1982 (web stamped 3222-D-1980). The late design shoe was accompanied by a revised brake return spring and camshaft S-head profile. The L2929 brake shoe, camshafts and L2931 return spring are of late design specifications.

1. The L2929 brake shoe is interchangeable with the early design. Do not mix shoe types on a wheel or axle. Retrofit must include both the revised L2931 return springs and revised S-head profile LH/RH camshafts.
2. Early design shoes can use revised L2931 return springs and revised S-Head profile LH/RH camshafts in combination only. Do not mix early and late components on a wheel or axle.

Combining early and late design components on a wheel or axle may result in noise, pulling or other brake problems.

**15" X 4" "Q" SERIES TO 15" X 4" "Q PLUS"**

Retrofit to "Q Plus" involves major changes from backing plates, cam brackets and hardware to "Q Plus" style spiders cam brackets and hardware. Conversion in most cases is cost prohibitive and in some applications not possible.

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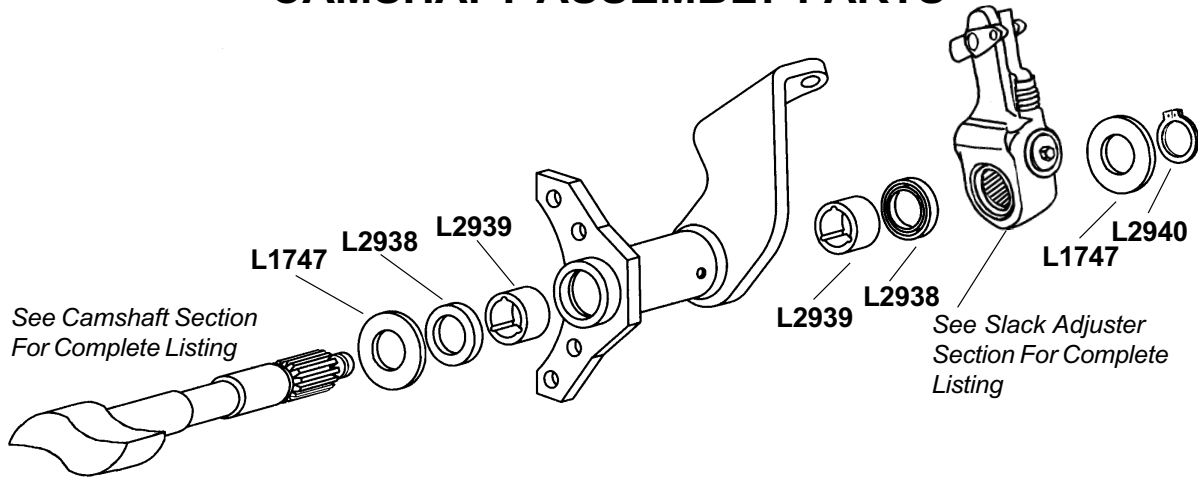
# ROCKWELL

## "Q" SERIES 15" x 4"

### SINGLE WEB STEERING AXLE BRAKE CAMSHAFT ASSEMBLY PARTS

Schematic  
Diagram  
Charts

**4**



See Camshaft Section  
For Complete Listing

See Slack Adjuster  
Section For Complete  
Listing

Cam Repair Kit: **K285 Axle**

## BRAKE REPAIR KITS - ROCKWELL

### K282

**Minor Repair Kit for Rockwell "Q" Series  
15" x 4" Single Web Steering Axle Brake**

Contains:

- 2 Pcs. - L2811 Roller
- 1 Pc. - L2931 Return Spring
- 1 Pc. - L2932 Retainer Spring

Contains parts to service one wheel.  
For major overhaul use K283



### K283

**Major Repair Kit for Rockwell "Q" Series  
15" x 4" Single Web Steering Axle Brake**

Contains:

- 2 Pcs. - L2811 Roller
- 2 Pcs. - L2930 Anchor Pin
- 1 Pc. - L2931 Return Spring
- 1 Pc. - L2932 Retainer Spring
- 2 Pcs. - L2933 Anchor Pin Washer
- 1 Pc. - L2934 Anchor Pin Plate
- 1 Pc. - L2946 Anchor Pin Lock Nut

Contains parts to service one wheel.  
For minor repair Kit use K282



# BRAKE REPAIR KITS

## ROCKWELL

### **K284** Brake Shoe Hold-Down Kit For Rockwell "Q" Series 15" x 4" Single Web Steering Axle Brake with 1-1/2" Spider Offset

Contains parts to service one wheel.  
For 2" spider offset use K287.



### **K287** Brake Shoe Hold-Down Kit For Rockwell "Q" Series 15" x 4" Single Web Steering Axle Brake with 2" Spider Offset

Contains parts to service one wheel.  
For 1-1/2" spider offset use K284.



Schematic  
Diagram  
Charts

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## CAM BUSHING KIT

### ROCKWELL

### **K285** Cam Bushing Kit for Rockwell "Q" Series 15" x 4" Single Web Steering Axle Brake

Contains:

4 Pcs. - L1747	Washer
4 Pcs. - L2938	Seal
4 Pcs. - L2939	Bushing
2 Pcs. - L2940	Lock Ring

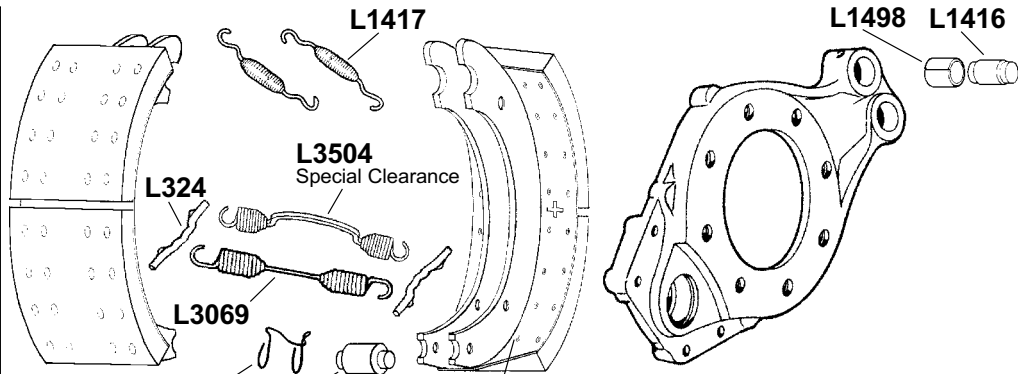
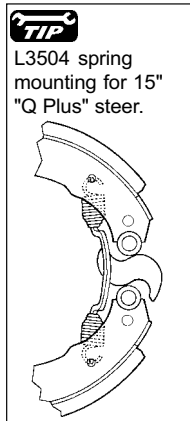
Contains parts to service one axle.



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# LELAND REPLACEMENT PARTS FOR ROCKWELL 15" "Q PLUS" SERIES DRIVE AND STEER AXLE BRAKES

Schematic  
Diagram  
Charts  
**4**

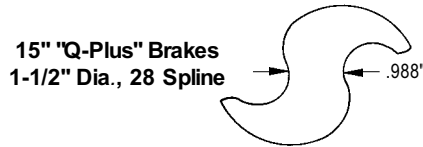


- L1417**
- L324**
- L3069**
- L1537**
- L149** (1-1/4" Dia.)
- L1533** (Knurled, 1-1/4" Dia.)
- L3070** FMSI 4702D (4") Steer Axle
- L3237** FMSI 4703D (5") Steer Axle, 19.5" Wheels
- L3220** FMSI 4704D (6") Drive and Steer Axle
- L3238** FMSI 4705D (7") Drive Axle
- L3239** FMSI 4710D (8-5/8") Drive Axle, 19.5" Wheels

Brake Repair Kits with L3069 Standard Return Spring  
**K318** with L149 Smooth Rollers  
**K318K** with L1533 Knurled Rollers

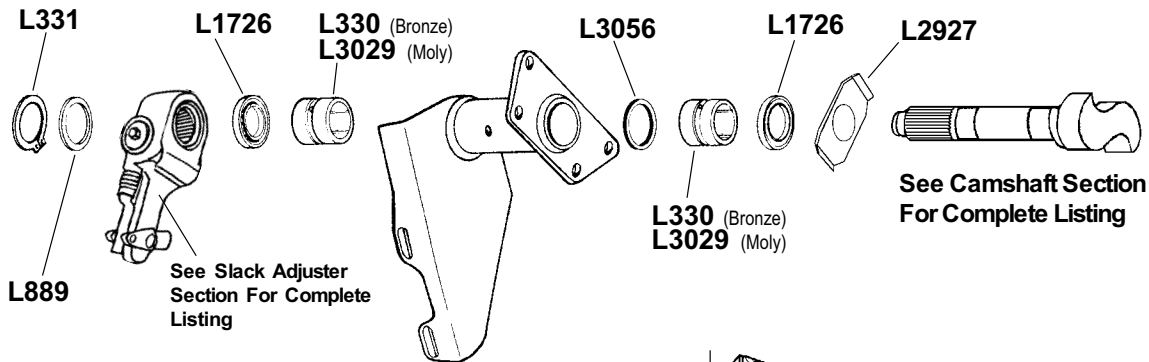
Brake Repair Kits with L3504 Special Clearance Spring  
**K504** with L149 Smooth Rollers  
**K504K** with L1533 Knurled Rollers

## ROCKWELL 15" "Q-PLUS" CAMSHAFT IDENTIFICATION



### **TIP** CONVERSION TO 15" x 4" "Q PLUS"

This brake is not directly interchangeable with the single shoe web 15" x 4" "Q" or "T" series brakes. Retrofit to "Q Plus" involves major changes from backing plates, cam brackets and hardware to "Q Plus" style spiders cam brackets, cams and hardware. Conversion in most cases is cost prohibitive and for some applications not possible.



Cam Repair Kits:

- K81** - Axle, with L3029 Molydisulfide bushings.
- K48** - Wheel, with L3029 Molydisulfide bushings.



Heavy Duty Version:

- K351** - Axle, with L330 Bronze bushings
- K365** - Wheel, with L330 Bronze bushings

ROCKWELL

# BRAKE REPAIR KITS

## ROCKWELL

### K318

#### For Rockwell 15" "Q-Plus" Axle

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Retainer Spring
- 2 Pcs. - L1498 Anchor Pin Bushing
- 2 Pcs. - L1537 Roller Retainer
- 1 Pcs. - L3069 H.D. Return Spring

Contains parts to service one wheel.

**K318K** Uses L1533 Knurled Roller in place of L149.



### K318K

#### For Rockwell 15" "Q-Plus" Axle

Contains:

- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Retainer Spring
- 2 Pcs. - L1498 Anchor Pin Bushing
- 2 Pcs. - L1533 Knurled Roller
- 2 Pcs. - L1537 Roller Retainer
- 1 Pcs. - L3069 H.D. Return Spring

Contains parts to service one wheel.



Schematic  
Diagram  
Charts

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### K504

#### For Rockwell 15" Q-Plus Steer Axle using Special Clearance Return Spring and L149 Smooth Cam Roller

Contains:

- 2 Pcs. - L149 Smooth Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Retainer Spring
- 2 Pcs. - L1498 Anchor Pin Bushing
- 2 Pcs. - L1537 Roller Retainer
- 1 Pc. - L3504 Return Spring

Contains parts to service one wheel.

Same as K318 except L3504 spring replaces L3069 spring.



### K504K

#### For 15" Q-Plus Steer Axle using Special Clearance Return Spring and L1533 Knurled Cam Roller

Contains:

- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Retainer Spring
- 2 Pcs. - L1498 Anchor Pin Bushing
- 2 Pcs. - L1533 Knurled Roller
- 2 Pcs. - L1537 Roller Retainer
- 1 Pc. - L3504 Return Spring

Contains parts to service one wheel.

Same as K318K except L3504 spring replaces L3069 spring.



ROCKWELL

# CAM REPAIR KITS

## ROCKWELL

### K81

#### Axle Cam Kit For Rockwell "P" or "Q" Drive or Steer Axle 1-1/2"-10 or 28 Spline Cams

Contains:

- 2 Pcs. - L137 Lock Ring
- 2 Pcs. - L192 Spacer Washer
- 2 Pcs. - L193 Spacer Washer
- 4 Pcs. - L329 Neoprene Seal
- 2 Pcs. - L331 Lock Ring
- 2 Pcs. - L889 Spacer Washer
- 2 Pcs. - L2900 Snap Ring
- 2 Pcs. - L2926 Washer
- 2 Pcs. - L2927 Washer
- 4 Pcs. - L3029 Bushing



Contains parts to service one axle.

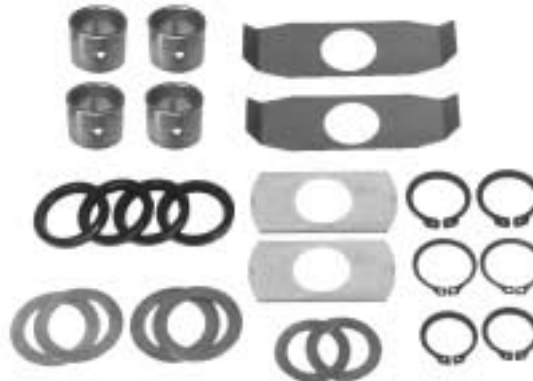
For one wheel end kit, use **K48**.

### K351

#### Axle Cam Kit For Rockwell 15" "Q Plus" Drive or Steer Axle (Also services other Rockwell Drive and Steer Applications)

Contents:

- 2 Pcs. - L137 Lock Ring
- 2 Pcs. - L192 Spacer Washer
- 2 Pcs. - L193 Spacer Washer
- 4 Pcs. - L329 Cam Seal
- 4 Pcs. - L330 Bronze Bushing
- 2 Pcs. - L331 H.D. Lock Ring
- 2 Pcs. - L889 Spline Washer
- 2 Pcs. - L2900 H.D. Lock Ring
- 2 Pcs. - L2926 Cam Head Washer
- 2 Pcs. - L2927 Cam Head Washer



Use **K365** to service One Wheel End



Heavy Duty Version

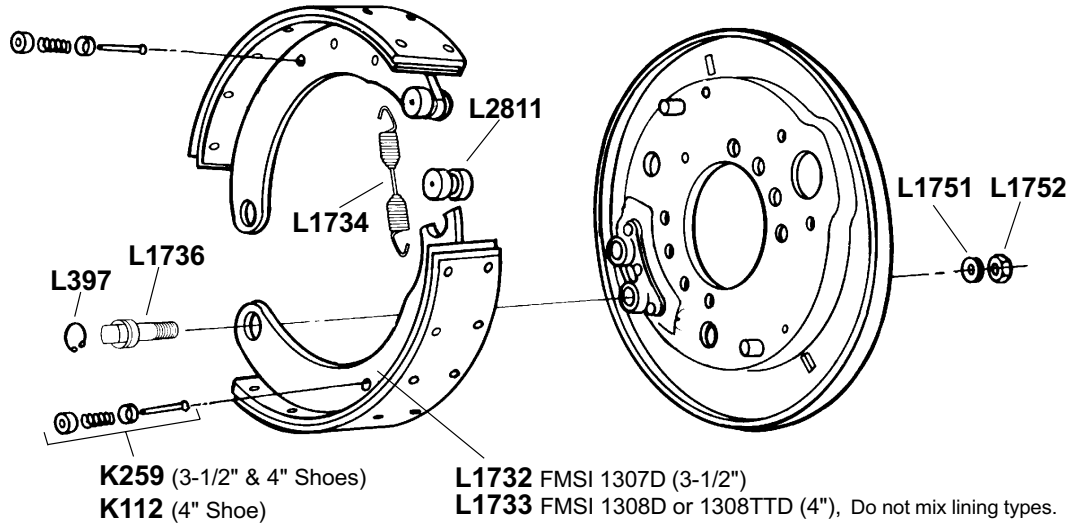
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**ROCKWELL**

# ROCKWELL

## 15" "T" SERIES STEERING AXLE BRAKE TYPE 2 WITH 1-1/4" DIA. CAMS



Schematic  
Diagram  
Charts  
**4**

Brake Repair Kits: **K259** (Hold Down)  
**K260** (Major)  
**K265** (Minor)

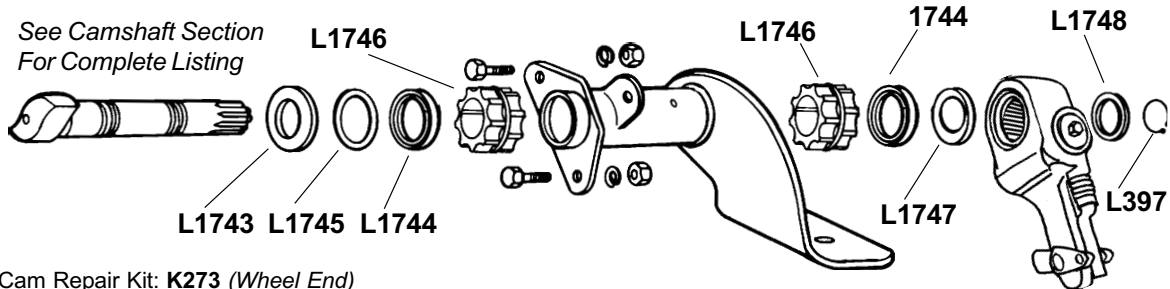
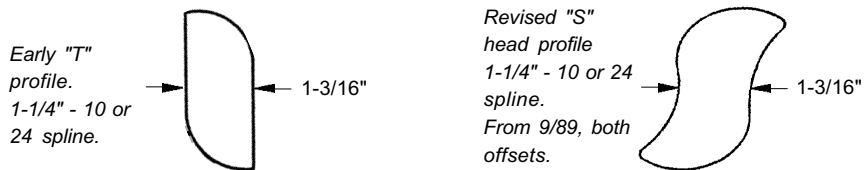
Shoe Hold Down Kits: **K112** (4" Shoe)  
**K259** (3-1/2" & 4" Shoes)

Camshafts: "T" style cam head, 1-1/2" - 10 spline

### **TTP** CONVERSION: 15" "T" SERIES TO "Q" SERIES

This brake is not directly interchangeable with the 15" x 4" "Q" series brake with 1-1/4" camshafts. Conversion from 15" "T" Type 2 to "Q" requires changing backing plates, cam brackets and hardware. Earlier "T" head camshafts should be retrofitted to later S-head profile types.

### CAMSHAFT TYPE



Cam Repair Kit: **K273** (Wheel End)

See Slack Adjuster  
Section For Complete  
Listing

**R  
O  
C  
K  
W  
E  
L  
L**

# BRAKE REPAIR KITS

## ROCKWELL

### K260

**For Rockwell "T" Series 15"  
Steering Axle Brake, Types 1 & 2**

Contains:

- 2 Pcs. - K259 Hold Down Assembly
- 2 Pcs. - L397 Lock Ring
- 1 Pcs. - L1734 Return Spring
- 2 Pcs. - L1736 Anchor Pin
- 2 Pcs. - L1751 Washer
- 2 Pcs. - L1752 Anchor Pin Nut
- 2 Pcs. - L2811 Roller

Contains parts to service one wheel.  
For minor repair kit use K265.



### K265

**Minor Repair Kit For Rockwell "T" Series  
15" Steering Axle Brake, Types 1 & 2**

Contains:

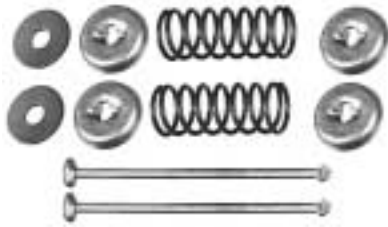
- 2 Pcs. - K259 Hold Down Assembly
- 2 Pcs. - L397 Lock Ring
- 1 Pcs. - L1734 Return Spring
- 2 Pcs. - L2811 Roller

Contains parts to service one wheel.  
For major overhaul use K260.

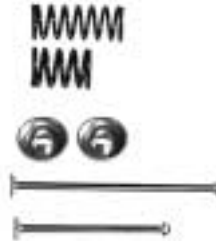


**K112 Brake Shoe Hold-Down Kit  
For Rockwell "T" Series 15"  
Steering Axle Brake, with 4" Shoe**

Contains 2" length pins.



**K259 Brake Shoe Hold-Down Kit  
For Rockwell "T" Series 15"  
Steering Axle Brake, Types 1 & 2  
Two Required Per Wheel**



## CAM BUSHING KIT

### ROCKWELL

### K273

**For Rockwell 15" "T" Series  
Using 1 1/4" Cams**

Contains:

- 2 Pcs. - L1746 Bushing
- 2 Pcs. - L1744 Seal
- 1 Pc. - L397 Anchor Pin Lock Ring
- 3 Pcs. - L1743 Washer
- 1 Pc. - L1747 Washer
- 1 Pc. - L1748 Spacer Washer
- 1 Pc. - L1745 Washer

Contains parts to service one wheel.

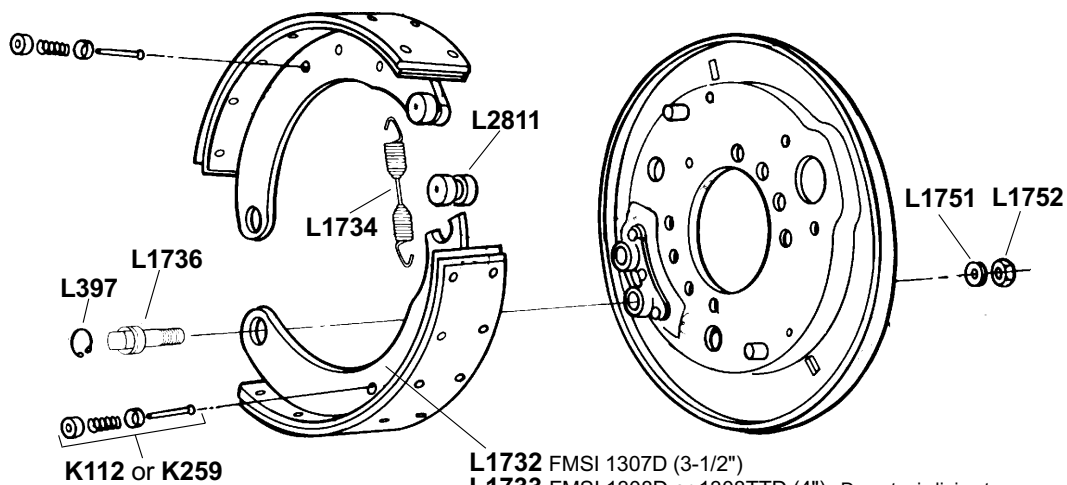


Schematic  
Diagram  
Charts

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ROCKWELL

LELAND REPLACEMENT PARTS FOR  
**ROCKWELL**  
**15" "T" SERIES STEERING AXLE BRAKE**  
**TYPE 1 WITH 1-1/2" DIA. CAMS**



Schematic  
 Diagram  
 Charts  
**4**

Brake Repair Kits: **K260** (Major)  
**K265** (Minor)

Camshafts: "T" style cam head, 1-1/2" - 10 spline

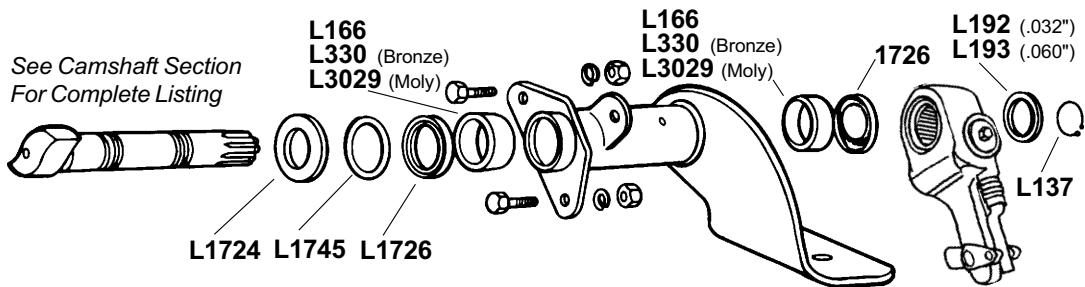
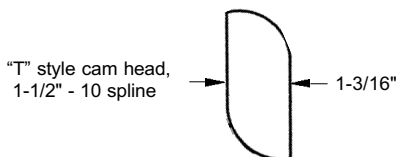
Shoe Hold Down Kits: **K112** (4" wide shoe)

**K259** (3-1/2" & 4" wide shoe)

**TIP** **CONVERSION:**  
**15" X 4" "T" TYPE 1 SERIES TO "Q" SERIES**

This brake is not directly interchangeable with the 15" x 4" "Q" series brake with 1-1/4" camshafts or 15" x 4" "Q-Plus" series brake with 1-1/2" camshafts. Conversion from 15" "T" Type 1 to "Q" requires changing backing plates, camshafts, cam brackets and other hardware. Conversion to 15" "Q-Plus" requires changing backing plates to spiders and other above mentioned parts. For both cases retro-fit parts may not be available or economically feasible.

**CAMSHAFT TYPE**



Cam Repair Kit: **K272** (Wheel End)

See Slack Adjuster  
 Section For Complete  
 Listing

**ROCKWELL**

# BRAKE REPAIR KITS

## ROCKWELL

### K260

**For Rockwell "T" Series 15" Steering Axle Brake, Types 1 & 2**

Contains:

- 2 Pcs. - K259 Hold Down Assembly
- 2 Pcs. - L397 Lock Ring
- 1 Pcs. - L1734 Return Spring
- 2 Pcs. - L1736 Anchor Pin
- 2 Pcs. - L1751 Washer
- 2 Pcs. - L1752 Anchor Pin Nut
- 2 Pcs. - L2811 Roller



Contains parts to service one wheel.  
For minor repair kit use K265.

### K265

**Minor Repair Kit For Rockwell "T" Series 15" Steering Axle Brake, Types 1 & 2**

Contains 2" Length Pins

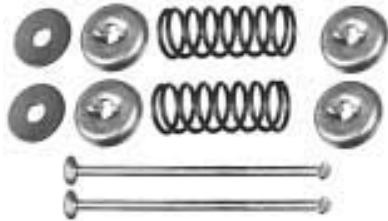
Contains:

- 2 Pcs. - K259 Hold Down Assembly
- 2 Pcs. - L397 Lock Ring
- 1 Pcs. - L1734 Return Spring
- 2 Pcs. - L2811 Roller

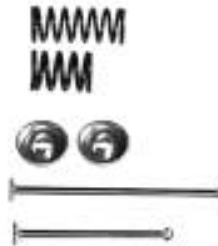


Contains parts to service one wheel.  
For major overhaul use K260.

**K112 Brake Shoe Hold-Down Kit For Rockwell "T" Series 15" Steering Axle Brake, with 4" Shoe**



**K259 Brake Shoe Hold-Down Kit For Rockwell "T" Series 15" Steering Axle Brake, Types 1 & 2 Two Required Per Wheel**



## CAM BUSHING KIT

### ROCKWELL

### K272

**For Rockwell 15" "T" Series Using 1-1/2" Cams**

Contains:

- 1 Pc. - L137 Lock Ring
- 1 Pcs. - L192 Spacer Washer
- 1 Pc. - L193 Spacer Washer
- 1 Pc. - L1724 Spacer Washer
- 2 Pcs. - L1726 Seal
- 1 Pc. - L1745 Spacer Washer
- 1 Pc. - L1753 Spacer Washer
- 2 Pcs. - L3029 Spider Bushing



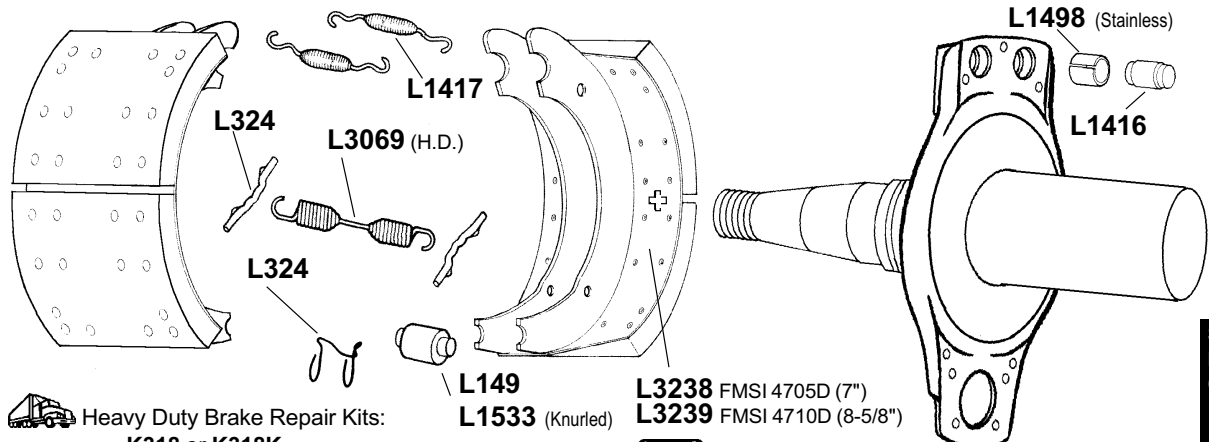
Contains parts to service one wheel.

Schematic  
Diagram  
Charts

4

ROCKWELL

LELAND REPLACEMENT PARTS FOR  
**ROCKWELL**  
**15" "Q PLUS" TRAILER AXLE BRAKES**



Heavy Duty Brake Repair Kits:  
**K318 or K318K**

Camshafts: 1-1/2"-28 spline "Q Plus" types.

**L3238** FMSI 4705D (7")  
**L3239** FMSI 4710D (8-5/8")

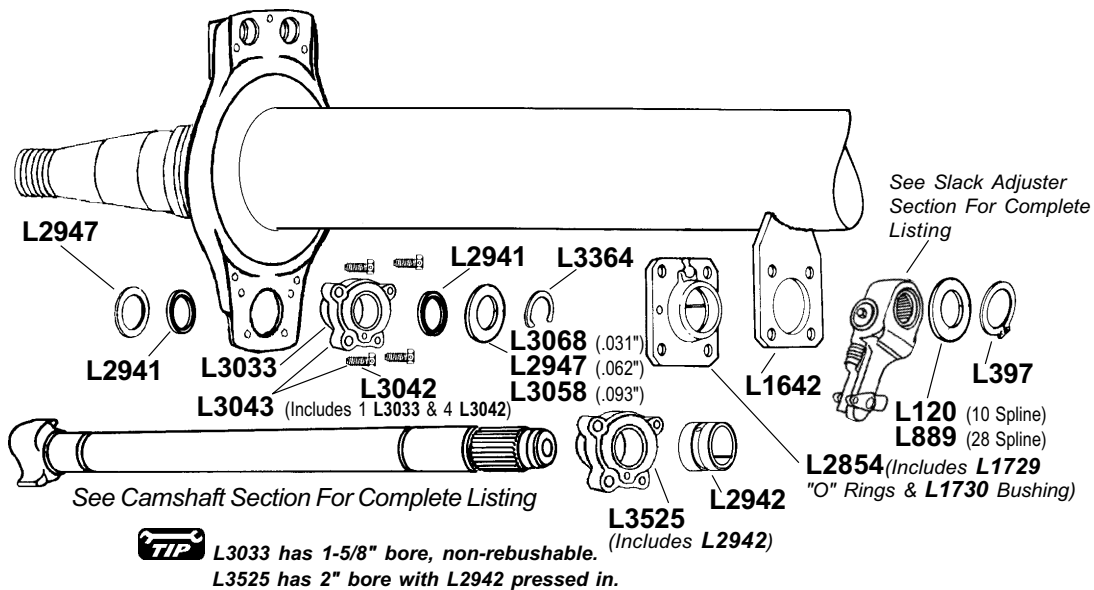
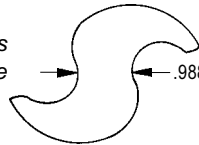
**OEM version shoe has "Q Plus" stamped on web and a Plus sign + stamped through the table.**

Schematic  
 Diagram  
 Charts

**4**

**CAMSHAFT TYPE**

15" "Q Plus" Brakes  
 1-1/2" Dia., 28 spline



See Camshaft Section For Complete Listing

See Slack Adjuster  
 Section For Complete  
 Listing

**L3033 has 1-5/8" bore, non-rebushable.**  
**L3525 has 2" bore with L2942 pressed in.**

Cam Repair Kits  
 with L3043

- K363** Axle, includes L2854
- K313** Wheel, includes L2854
- K490** Axle, includes L2854, also services H.D. forged spiders
- K491** Wheel, excludes L2854

with L2942:

- K489** Axle, includes L2854
- K289** Wheel, includes L2854
- K290** Wheel, excludes L2854
- K319** Wheel, excludes L2854

with L3525:

- K511** Axle, includes L2854
- K512** Wheel, includes L2854
- K510** Wheel, excludes L2854

**INSTALLATION OF L3033 OR L3525 BUSHING RETAINER.**

Unbolt and remove the retainer from the spider. After removal, if servicing L3525, remove seals and sleeve bushing. Install new L2942 bushing using tool from LBT4032 set. For either type retainer, carefully install the L2941 seals flush, with the lip of each (open side with garter spring visible) facing inboard toward the slack adjuster. Align the screw holes of the new retainer to the correct position on the spider. Insert the retainer assembly into the spider, using a C-clamp with backing if necessary. Install the L3042 screws and hand tighten. Proceed to torque the screws in increments to a final reading of 30 to 40 lb.-ft. Fill the unit with multipurpose grease slowly until grease begins to seep through the seal lip edges. Wipe away excess grease.

**H. D. Version**

**ROCKWELL**

# BRAKE REPAIR KITS

## ROCKWELL

### K318

#### For Rockwell 15" "Q-Plus" Axle

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Retainer Spring
- 2 Pcs. - L1498 Anchor Pin Bushing
- 2 Pcs. - L1537 Roller Retainer
- 1 Pcs. - L3069 H.D. Return Spring



Contains parts to service one wheel.

Schematic  
Diagram  
Charts

4

### K318K

#### For Rockwell 15" "Q-Plus" Axle

Contains:

- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Retainer Spring
- 2 Pcs. - L1498 Anchor Pin Bushing
- 2 Pcs. - L1533 Knurled Roller
- 2 Pcs. - L1537 Roller Retainer
- 1 Pcs. - L3069 H.D. Return Spring



Contains parts to service one wheel.

ROCKWELL

## CAM REPAIR KITS

### K363

#### For Rockwell 15" "Q-Plus" Series Axles with 1-5/8" Cam using Bolt on Spider Bracket Bushing

Contents:

- 2 Pcs. - L120 Cam Bracket Washer
- 2 Pcs. - L397 Spline End Lock Ring
- 2 Pcs. - L889 Spline End Washer
- 2 Pcs. - L2854 Camshaft Bracket Assembly
- 4 Pcs. - L2941 Seal
- 2 Pcs. - L3033 Bracket Bushing
- 4 Pcs. - L3042 Self Tapping Screw
- 2 Pcs. - L3057 Cam Head Washer
- 2 Pcs. - L3058 Inboard Spider Washer
- 2 Pcs. - L3364 Spider End Lock Ring



Use **K313** to service One Wheel End

# CAM REPAIR KITS

## ROCKWELL

### K290

**For Late 15" "Q-Plus" Series Brake with  
1-5/8" Cam using Press in Metallic Bushing**

Contains:

- 1 Pc. - L120 Washer
- 1 Pc. - L397 Lock Ring
- 1 Pc. - L889 Spacer Washer
- 1 Pc. - L897 Lock Ring
- 2 Pcs. - L2941 Seal
- 1 Pc. - L2942 Camshaft Spider Bushing
- 2 Pcs. - L2947 Spacer Washer



Contains parts to service one wheel.  
For Major kit use K289.

Schematic  
Diagram  
Charts

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### K319

**For Late 15" "Q-Plus" Series Brake with  
1-5/8" Cam using Press in Metallic Bushing**

Contains:

- 1 Pc. - L120 Washer
- 1 Pc. - L397 Lock Ring
- 1 Pc. - L889 Spacer Washer
- 2 Pcs. - L2941 Camshaft Seal
- 1 Pc. - L2942 Camshaft Spider Bushing
- 1 Pc. - L2944 Camshaft Spacer
- 1 Pc. - L2945 Spacer Washer
- 1 Pc. - L2947 Spacer Washer
- 1 Pc. - L3057 Camshaft Washer
- 1 Pc. - L3058 Spacer Washer
- 1 Pc. - L3068 Spacer Washer
- 1 Pc. - L3364 Lock Ring



Contains parts to service one wheel.  
Some applications will not use all parts.

ROCKWELL

### K489

**For Rockwell/Meritor 15" Trailer Axle  
Brakes using Rebushable Bolted or Weld  
on Spider Bracket or Forged Spider**

Contents:

- 2 Pcs. - L120 Cam Bracket Washer
- 2 Pcs. - L397 Lock Ring
- 4 Pcs. - L889 Spline End Washer
- 2 Pcs. - L897 Lock Ring
- 2 Pcs. - L2854 Cam Bracket Assembly
- 4 Pcs. - L2941 Spider Seal
- 2 Pcs. - L2942 Camshaft Spider Bushing
- 4 Pcs. - L2947 Spacer Washer
- 2 Pcs. - L3364 Spider End Lock Ring



Use **K289** to service One Wheel End

# CAM REPAIR KITS

## ROCKWELL

### K491

#### Minor Kit for Rockwell/Meritor 15" "Q-Plus" Trailer Axle Brakes using Bolt on Non Rebushable Spider Bracket on Fabricated Spider

Contents:

- 2 Pcs. - L2941 Spider Seal
- 1 Pc. - L3033 Bracket Bushing
- 4 Pcs. - L3042 Self Tapping Screw
- 1 Pc. - L3057 Cam Head Washer
- 1 Pc. - L3058 Inboard Spider Washer
- 1 Pc. - L3364 Spider End Lock Ring

Serves one wheel.

Also part of **K313** and **K363**.



### K510

#### Minor Kit for Rockwell/Meritor 15" "Q-Plus" Trailer Axle Brakes using Bolt on Rebushable Spider Bracket on Fabricated Spider

Contents:

- 2 Pcs. - L2941 Spider Seal
- 4 Pcs. - L3042 Self Tapping Screw
- 1 Pc. - L3057 Cam Head Washer
- 1 Pc. - L3058 Inboard Spider Washer
- 1 Pc. - L3364 Spider End Lock Ring
- 1 Pc. - L3525 Bracket with pressed L2942 Bushing

Serves one wheel.



### K511

#### Major Axle Kit for Rockwell/Meritor 15" "Q-Plus" Trailer Axle Brakes using Bolt on Rebushable Spider Bracket on Fabricated Spider

Contents:

- 2 Pcs. - L120 Cam Bracket Washer
- 2 Pcs. - L397 Spline End Lock Ring
- 2 Pcs. - L889 Spline End Washer
- 2 Pcs. - L2854 Cam Bracket Assembly
- 4 Pcs. - L2941 Spider Seal
- 8 Pcs. - L3042 Self Tapping Screw
- 2 Pcs. - L3057 Cam Head Washer
- 2 Pcs. - L3058 Inboard Spider Washer
- 2 Pcs. - L3364 Spider End Lock Ring
- 2 Pcs. - L3525 Bracket with pressed L2942 Bushing

Use **K512** to service One Wheel End



### K490

#### Major Axle Kit for Rockwell/Meritor 15" "Q-Plus" Trailer Axle Brakes with Heavy Duty Forged Brake Spiders

- 2 Pcs. - L120 Cam Bracket Washer
- 2 Pcs. - L331 H.D. Lock Ring
- 4 Pcs. - L889 Spline End Washer
- 2 Pcs. - L897 Lock Ring
- 2 Pcs. - L2854 Cam Bracket Assembly
- 4 Pcs. - L2941 Spider Seal
- 2 Pcs. - L2942 Camshaft Spider Bushing
- 2 Pcs. - L2944 Camshaft Spacer
- 2 Pcs. - L2945 Cam Head Spacer Washer
- 4 Pcs. - L2947 Spacer Washer
- 2 Pcs. - L3364 Spider End Lock Ring

Similar to **K313** (wheel end) and **K363** (axle) except includes additional parts to service Heavy Duty Forged Spider axles.

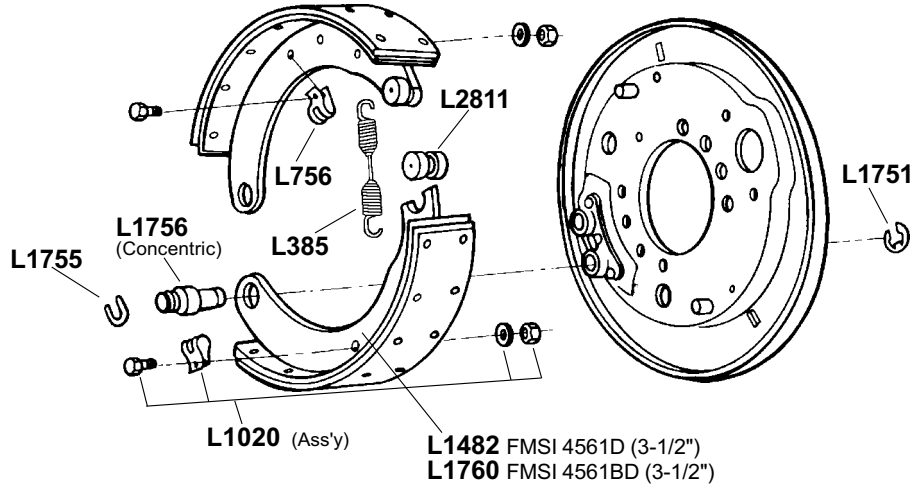


Schematic  
Diagram  
Charts

4

ROCKWELL

LELAND REPLACEMENT PARTS FOR  
**ROCKWELL**  
**16-1/4" "T" SERIES STEERING AXLE BRAKE**  
**WITH 1-1/2" DIA. CAMS**



Schematic  
 Diagram  
 Charts  
**4**

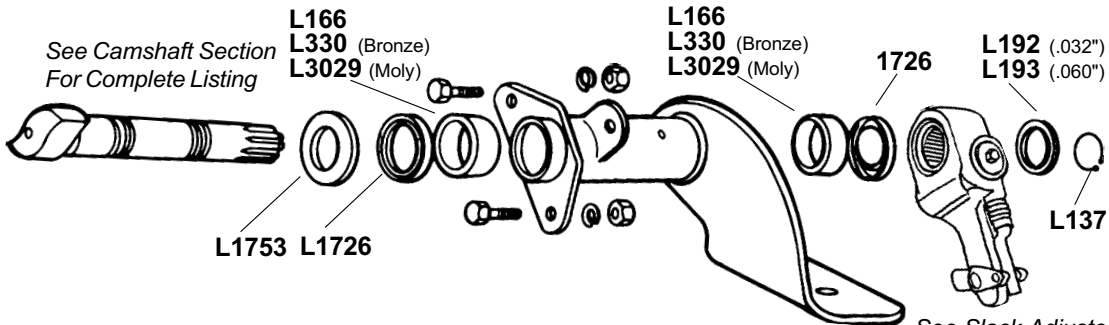
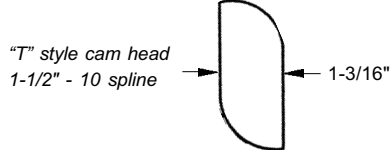
Brake Repair Kits: **K286** (Major)  
**K362** (Minor)

Camshafts: "T" style cam head, 1-1/2" - 10 spline

**TIP** **CONVERSION: EARLY TO LATER SERIES FMSI 4561D SHOES**

Early style shoe 3722-K-167 with 3722-C-159 web stamping can be retrofitted with L1482 brake shoes and K286 brake repair kits. Using all the same type L1482 shoes on an axle for retrofit is recommended.

**CAMSHAFT TYPE**



Cam Repair Kit: **K272** (Wheel End)

See Slack Adjuster  
 Section For Complete  
 Listing

**ROCKWELL**

## BRAKE REPAIR KITS ROCKWELL

### K286

#### Major Repair Kit For Rockwell "T" Series, 16-1/4" Steering Axle Brake Using 1-1/2" Cam

Contains:

- 1 Pc. - L385 Return Spring
- 2 Pcs. - L1020 Hold Down Assembly
- 2 Pcs. - L1755 Anchor Pin Lock
- 2 Pcs. - L1756 Anchor Pin
- 2 Pcs. - L1758 Anchor Pin Lock
- 2 Pcs. - L2811 Roller



Contains parts to service one wheel.

Schematic  
Diagram  
Charts

**4**

### K362

#### Minor Repair Kit For Rockwell "T" Series, 16-1/4" Steering Axle Brake Using 1-1/2" Cam

Contains:

- 1 Pc. - L385 Return Spring
- 2 Pcs. - L1020 Hold Down Assembly
- 2 Pcs. - L1755 Anchor Pin Lock
- 2 Pcs. - L1758 Anchor Pin Lock
- 2 Pcs. - L2811 Roller



Contains parts to service one wheel.

## CAM BUSHING KIT ROCKWELL

### K272

#### For Rockwell 16-1/4" "T" Series Using 1-1/2" Cams

Contains:

- 1 Pc. - L137 Lock Ring
- 1 Pcs. - L192 Spacer Washer
- 1 Pc. - L193 Spacer Washer
- 1 Pc. - L1724 Spacer Washer
- 2 Pcs. - L1726 Seal
- 1 Pc. - L1745 Spacer Washer
- 1 Pc. - L1753 Spacer Washer
- 2 Pcs. - L3029 Spider Bushing

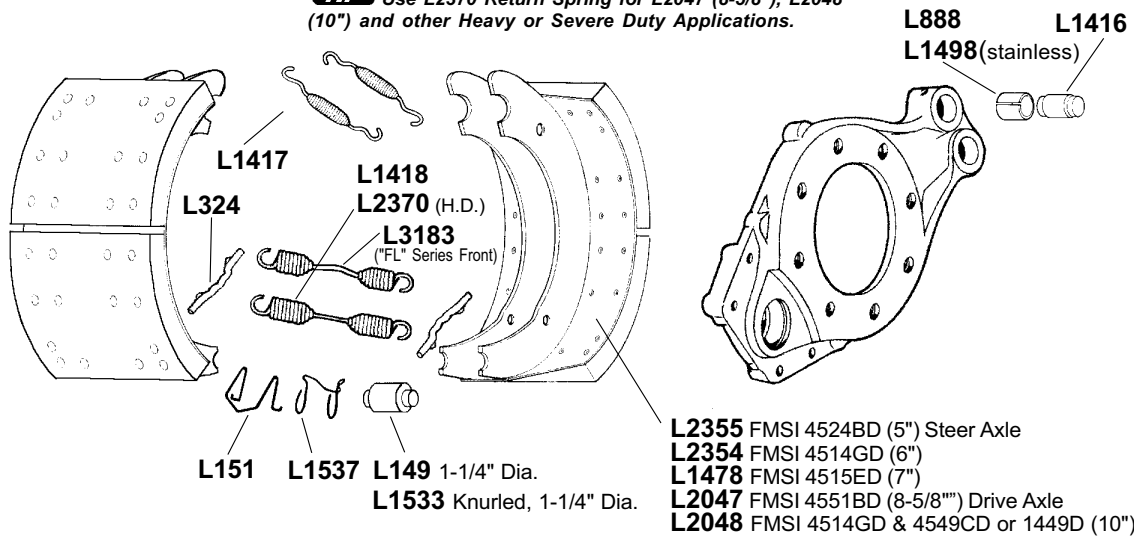


Contains parts to service one wheel.

**ROCKWELL**

LELAND REPLACEMENT PARTS FOR  
**ROCKWELL**  
**16-1/2" "Q" SERIES SELF CONTAINED  
 DRIVE AND STEER AXLE BRAKES**

**TIP** Use L2370 Return Spring for L2047 (8-5/8"), L2048 (10") and other Heavy or Severe Duty Applications.



Schematic  
 Diagram  
 Charts  
**4**

**Brake Repair Kits:**

Standard Duty Major Versions:

- K70**
- K117**
- K306**
- K366 "FL" Series Front Axle**

Standard Duty Minor Versions:

- K70A**
- K303, K303K**
- K380**



Heavy Duty Major Versions:

- K128 - Recommended**
- K128K**
- K329**
- K332**



Heavy Duty Minor Versions:

- K128A**
- K304, K304K**
- K320**
- K370**



*For special clearance 5" and 6" steer axles shoes, see page 142.*

Camshafts: 1-1/2"-10 or 28 Spline Standard S-head profile  
 or 1-1/2"-28 spline "Q Plus" S-head profile types.

**TIP "Q-PLUS" CAM AND BRAKE RETROFITS AND CONVERSIONS.**

"Q-Plus" camshafts are OEM supplied on 16-1/2" brake drive and steer axles for both standard "Q" and "Q-Plus" brakes. Earlier standard profile cams can be retrofitted in pairs per axle.  
**DO NOT MIX TYPES ON AN AXLE.**

To convert standard 16-1/2" x 7" "Q" to "Q-Plus" type, remove "Q" shoes, cams and hardware. Replace cam bushings and hardware with K48, K81, K351 or K365 components. Install "Q-Plus" type LH and RH camshafts if not present or worn. Attach "Q-Plus" type lined shoes and hardware kits. (ie: L4707Q23 (7") and K128).

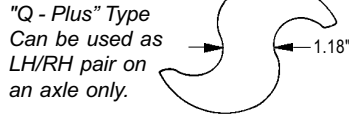
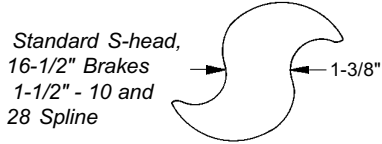


**H. D. Version**

**ROCKWELL**

LELAND REPLACEMENT PARTS FOR  
**ROCKWELL**  
**16-1/2" "Q" SERIES SELF CONTAINED**  
**DRIVE AND STEER AXLE BRAKES**

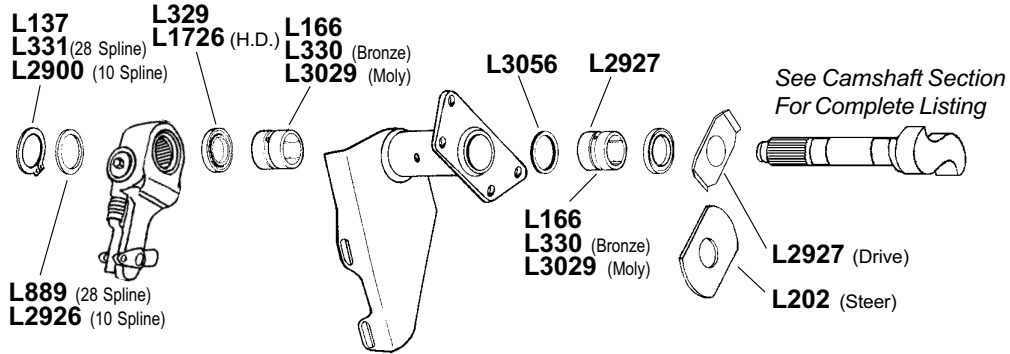
**CAMSHAFT IDENTIFICATION**



"Q - Plus" Type, Aftermarket  
 version may have slightly lesser  
 distance across "S" pocket. This  
 will not affect performance when  
 used opposite an OEM version.

Schematic  
 Diagram  
 Charts

**4**



Cam Repair Kits with L3029 Molydisulfide bushings  
**K81** - Axle, Drive or Steer  
**K48** - Wheel End, Drive or Steer

Heavy Duty Versions with  
 L330 Bronze Bushings  
**K351** - Axle  
**K365** - Wheel End

**BRAKE REPAIR KITS**  
**STANDARD DUTY**

**K70**

**Major Repair Kit For Rockwell 16-1/2"**  
**"Q" Series Brake**

- Contains:
- 2 Pcs. - L149 Roller
  - 2 Pcs. - L324 Return Spring Pin
  - 2 Pcs. - L1416 Anchor Pin
  - 2 Pcs. - L1417 Shoe Retainer Spring
  - 1 Pc. - L1418 Shoe Return Spring
  - 2 Pcs. - L1498 Anchor Pin Spider Bushing
  - 2 Pcs. - L1537 Roller Retainer

Contains parts to service one wheel.  
 Same as K117 except: uses L149 rollers in place of L1533  
 knurled rollers



**ROCKWELL**

# BRAKE REPAIR KITS

## ROCKWELL

### STANDARD DUTY

#### K117

##### Major Repair Kit For Rockwell 16-1/2" "Q" Series Brake

Kit Contains:

- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Shoe Retainer Spring
- 1 Pcs. - L1418 Shoe Return Spring
- 2 Pcs. - L1498 Anchor Pin Spider Bushing
- 2 Pcs. - L1533 Knurled Roller
- 2 Pcs. - L1537 Roller Retainer

Contains parts to service one wheel.

Same as K70 except: uses L1533 knurled rollers in place of L149 Rollers.



Schematic  
Diagram  
Charts

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#### K306

##### Major Repair Kit For Rockwell 16-1/2" "Q" Series Brake

Kit Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L888 Anchor Pin Bushing
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Retainer Spring
- 1 Pc. - L1418 Return Spring
- 2 Pcs. - L1537 Roller Retainer

Contains parts to service one wheel.

Same as K70 except L1498 is replaced by L888.



#### K366

##### Major Repair Kit For Rockwell 16-1/2" "FL" Series Front Axle Brake

Contents:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Retainer Spring
- 2 Pcs. - L1498 Anchor Pin Bushing
- 2 Pcs. - L1537 Roller Retainer
- 1 Pc. - L3183 Return Spring

Contains parts to service one wheel



ROCKWELL

# BRAKE REPAIR KITS

## ROCKWELL

### STANDARD DUTY

#### K70A

##### Minor Repair Kit For Rockwell 16-1/2" "Q" Series Brake

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Shoe Retainer Spring
- 1 Pc. - L1418 Shoe Return Spring
- 2 Pcs. - L1537 Roller Retainer



Contains parts to service one wheel.

Same as K70 except: does not contain L1498 anchor pin bushings.

#### K303

##### Minor Repair Kit For Rockwell 16-1/2" "Q" Series Brake

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1417 Retainer Spring
- 1 Pc. - L1418 Return Spring
- 2 Pcs. - L1537 Roller Retainer



Contains parts to service one wheel.

Same as K70 except does not contain L1416 anchor pins and L1498 anchor pin bushings.

#### K303K

Kit Contains:

- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1417 Retainer Spring
- 1 Pc. - L1418 Return Spring
- 2 Pcs. - L1533 Knurled Roller
- 2 Pcs. - L1537 Roller Retainer



Contains parts to service one wheel.

Same as K117 except does not contain L1416 anchor pins and L1498 anchor pin bushings.

### HEAVY DUTY

#### K128

##### Major Repair Kit For Rockwell 16-1/2" "Q" Series Brake

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Retainer Spring
- 2 Pcs. - L1498 Anchor Pin Bushing
- 2 Pcs. - L1537 Roller Retainer
- 1 Pc. - L2370 HD Return Spring



Contains parts to service one wheel.

Schematic  
Diagram  
Charts

4

ROCKWELL

# BRAKE REPAIR KITS

## ROCKWELL

### HEAVY DUTY

#### K128K

##### Major Repair Kit For Rockwell 16-1/2" "Q" Series Brake

Contains:

- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Shoe Retainer Spring
- 2 Pcs. - L1498 Anchor Pin Spider Bushing
- 2 Pcs. - L1533 Knurled Roller
- 2 Pcs. - L1537 Roller Retainer
- 1 Pc. - L2370 Shoe Return Spring

Contains parts to service one wheel.

Same as K128 except L149 roller is replaced by L1533 knurled roller.



Schematic  
Diagram  
Charts

4

#### K329

##### Major Repair Kit For Rockwell 16-1/2" "Q" Series Brake

Contains:

- 2 Pcs. - L151 Roller Retainer
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L888 Anchor Pin Spider Bushing
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Shoe Retainer Spring
- 2 Pcs. - L1533 Knurled Roller
- 1 Pc. - L2370 Shoe Return Spring

Contains parts to service one wheel.

Same as K128K except L1537 is replaced by L151 and L1498 is replaced by L888.



#### K332

##### Major Repair Kit For Rockwell 16-1/2" "Q" Series Brake


Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L151 Roller Retainer
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L888 Anchor Pin Spider Bushing
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Shoe Retainer Spring
- 1 Pc. - L2370 Shoe Return Spring

Contains parts to service one wheel.

Same as K128K except L1537 is replaced by L151 and L1498 is replaced by L888.



 H. D. Version

# BRAKE REPAIR KITS

ROCKWELL

HEAVY DUTY

## K128A

### Minor Repair Kit For Rockwell 16-1/2" "Q" Series Brake

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Shoe Retainer Spring
- 2 Pcs. - L1537 Roller Retainer
- 1 Pc. - L2370 HD Return Spring

Contains parts to service one wheel.  
Same as K128 except does not contain  
L1498 anchor pin bushings.



Schematic  
Diagram  
Charts

4

## K304

### Minor Repair Kit For Rockwell 16-1/2" "Q" Series Brake

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1417 Retainer Spring
- 2 Pcs. - L1537 Roller Retainer
- 1 Pc. - L2370 H.D. Return Spring

Contains parts to service one wheel.  
Same as K128 except does not contain  
L1416 anchor pins and L1498 anchor pin bushings.



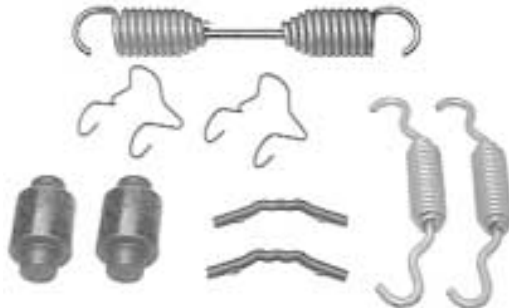
## K304K

### Minor Repair Kit For Rockwell 16-1/2" "Q" Series Brake

Kit Contains:

- 2 Pcs. - L1533 Knurled Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1417 Retainer Spring
- 2 Pcs. - L1533 Knurled Roller
- 2 Pcs. - L1537 Roller Retainer
- 1 Pc. - L2370 H.D. Return Spring

Contains parts to service one wheel.  
Same as K304 except L149 roller is replaced by  
L1533 knurled roller.



ROCKWELL

 H. D. Version

# BRAKE REPAIR KITS

## ROCKWELL HEAVY DUTY

### K370

#### Minor Repair Kit For Rockwell 16-1/2" "Q" Series Brake

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L1417 Shoe Retainer Spring
- 1 Pc. - L2370 Shoe Return Spring



Contains parts to service one wheel.

### K320

#### Minor Repair Kit For Rockwell 16-1/2" "Q" Series Brake

Contains:

- 2 Pcs. - L1417 Retainer Spring
- 1 Pc. - L2370 H.D. Return Spring



Contains parts to service one wheel.

Schematic  
Diagram  
Charts

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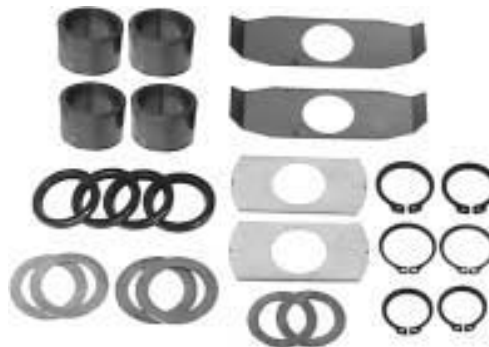
## CAM REPAIR KITS

### K81

#### Axle Cam Kit For Rockwell "Q" Drive or Steer Axle 1-1/2"-10 or 28 Spline Cams

Contains:

- 2 Pcs. - L137 Lock Ring
- 2 Pcs. - L192 Spacer Washer
- 2 Pcs. - L193 Spacer Washer
- 4 Pcs. - L329 Neoprene Seal
- 2 Pcs. - L331 Lock Ring
- 2 Pcs. - L889 Spacer Washer
- 2 Pcs. - L2900 Snap Ring
- 2 Pcs. - L2926 Washer
- 2 Pcs. - L2927 Washer
- 4 Pcs. - L3029 Bushing



Contains parts to service one axle.

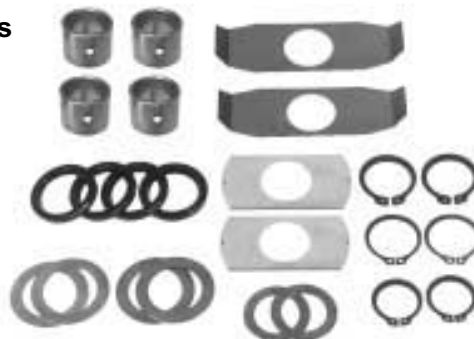
For one wheel end kit, use **K48**.

### K351

#### Axle Cam Kit For Rockwell "Q" or "Q-Plus" Drive or Steer Axle 1-1/2"-10 or 28 Spline Cams

Contents:

- 2 Pcs. - L137 Lock Ring
- 2 Pcs. - L192 Spacer Washer
- 2 Pcs. - L193 Spacer Washer
- 4 Pcs. - L329 Cam Seal
- 4 Pcs. - L330 Bronze Bushing
- 2 Pcs. - L331 H.D. Lock Ring
- 2 Pcs. - L889 Spline Washer
- 2 Pcs. - L2900 H.D. Lock Ring
- 2 Pcs. - L2926 Cam Head Washer
- 2 Pcs. - L2927 Cam Head Washer



Use **K365** to service One Wheel End

ROCKWELL

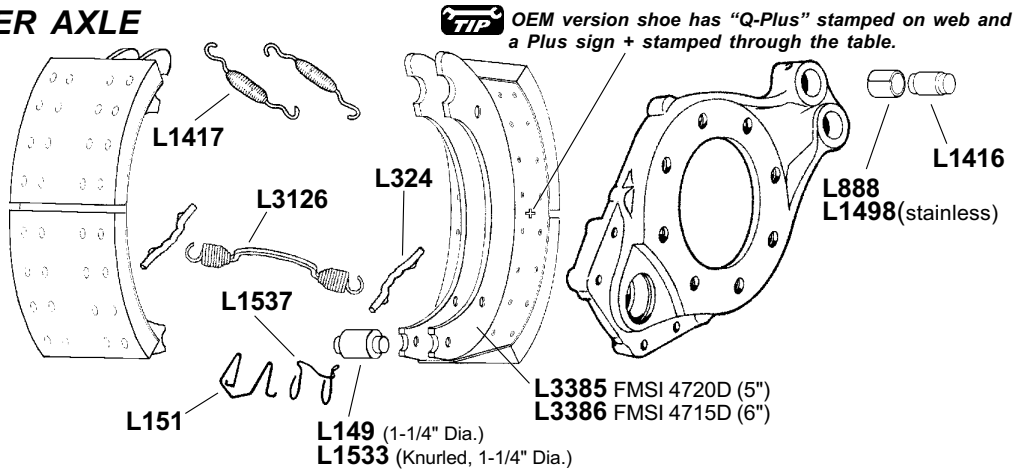


LELAND REPLACEMENT PARTS FOR  
**ROCKWELL**  
 16-1/2" "Q-PLUS" SERIES  
 STEER AND DRIVE AXLE BRAKES

Schematic  
 Diagram  
 Charts  
**4**

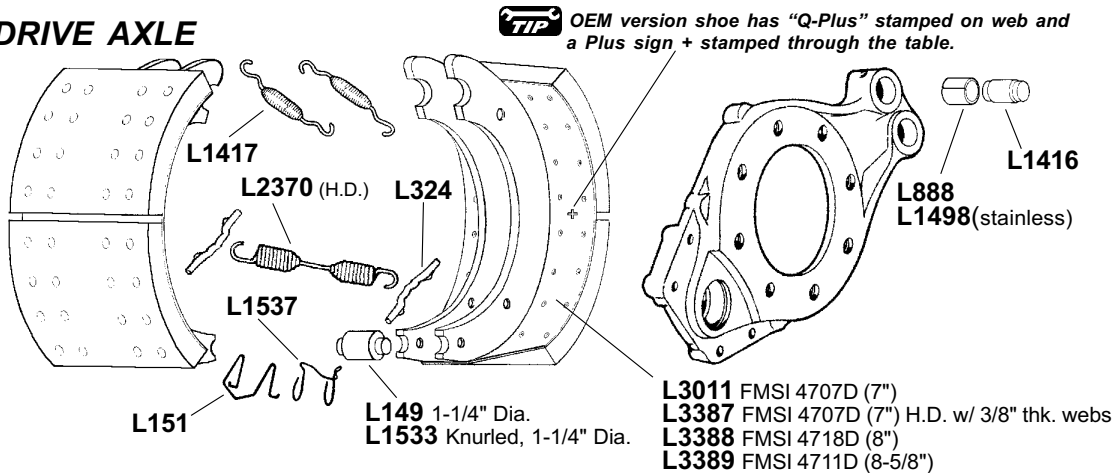
**ROCKWELL**

**STEER AXLE**



Brake Repair Kits: **K334** with L149 Smooth Rollers. Camshafts: 1-1/2"-28 spline "Q Plus" S-head profile types.  
**K334K** with L1533 Knurled Rollers.

**DRIVE AXLE**



**TIP** The L2370 H.D. return spring contained in all kits is manufactured from SAE Music Wire, shot peened for added strength, cycle life and resistance to extreme temperature ranges. A high amount of spring force advertised by suppliers is not a total factor in determining spring quality and often can be the opposite. The L2370 is used and recommended for this application due to increased shoe weight and brake applications from the FMSI 4707D extended wear blocks.

Brake Repair Kits:

Heavy Duty Major Versions:

**K128** - Recommended      **K329**  
**K128K**                              **K332**

Heavy Duty Minor Versions:

**K128A**                              **K304K**                              **K370**  
**K304**                                      **K320**

Camshafts: 1-1/2"-28 spline "Q-Plus" S-head profile types.

LELAND REPLACEMENT PARTS FOR  
**ROCKWELL**  
**16-1/2" "Q-PLUS" SERIES**  
**SELF CONTAINED DRIVE AXLE BRAKE**

**TIP** **Q-PLUS" CAM AND BRAKE RETROFITS AND CONVERSIONS.**

FOR RETURN FROM "Q-PLUS" TO STANDARD "Q"

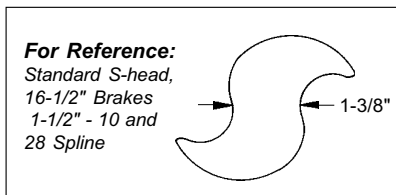
Later style "Q-Plus" type cams can be retained in LH/RH pairs on an axle or tandem for use with Standard type "Q" brake shoes.

DO NOT MIX TYPES ON AN AXLE.

Remove and inspect camshafts. Replace if damaged or worn. Install new bushings, seals and other hardware using K48, K81, K351 or K365 components. Attach L1478 type lined brake shoes and K70 or K128 brake repair kits.

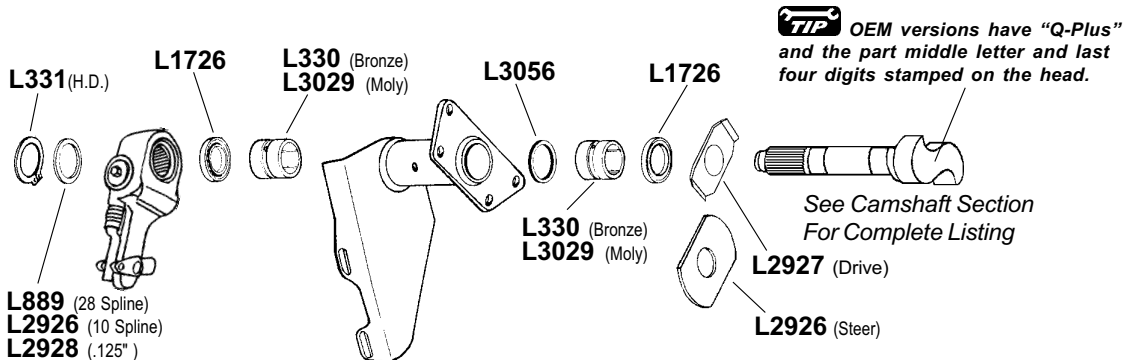
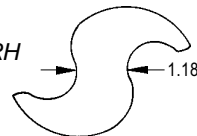
Schematic  
 Diagram  
 Charts

**4**



**ROCKWELL 16-1/2"**  
**CAMSHAFT IDENTIFICATION**

"Q - Plus" Type  
 Must be used as LH/RH  
 pair on an axle



Cam Repair Kits: Drive or Steer Axles

**K81** - Axle, Drive or Steer with L3029 Molydisulfide bushings.

**K48** - Wheel End, Drive or Steer with L3029 Molydisulfide bushings.



Heavy Duty Cam Repair Kits: **K351** - Axle, Drive or Steer with L330 Bronze bushings.

**K365** - Wheel End, Drive or Steer with L330 Bronze bushings.



**H. D. Version**

**ROCKWELL**

# BRAKE REPAIR KITS

## ROCKWELL

### MAJOR REPAIR KITS

#### K334

##### Major Repair Kit

For Rockwell 16-1/2" x 5" or 6"  
"Q" Steering Axle using "Q-Plus" Camshafts  
and Special Clearance Return Spring

Contents:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L1537 Roller Retainer
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Retainer Spring
- 2 Pcs. - L1498 Anchor Pin Bushing
- 1 Pc. - L3126 Return Spring

Contains parts to service one wheel



#### K334K

##### Major Repair Kit

For Rockwell 16-1/2" x 5" or 6"  
"Q" Steering Axle using "Q-Plus" Camshafts  
and Special Clearance Return Spring

Contents:

- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Retainer Spring
- 2 Pcs. - L1498 Anchor Pin Bushing
- 2 Pcs. - L1533 Knurled Roller
- 2 Pcs. - L1537 Roller Retainer
- 1 Pc. - L3126 Return Spring

Contains parts to service one wheel



### HEAVY DUTY

#### K128

Major Repair Kit For Rockwell 16-1/2"  
"Q-Plus" Self Contained Drive Axle Brake

Contents:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Retainer Spring
- 2 Pcs. - L1498 Anchor Pin Bushing
- 2 Pcs. - L1537 Roller Retainer
- 1 Pc. - L2370 HD Return Spring

Contains parts to service one wheel.



#### K128K

Major Repair Kit For Rockwell 16-1/2"  
"Q-Plus" Self Contained Drive Axle Brake

Contents:

- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Shoe Retainer Spring
- 2 Pcs. - L1498 Anchor Pin Spider Bushing
- 2 Pcs. - L1533 Knurled Roller
- 2 Pcs. - L1537 Roller Retainer
- 1 Pc. - L2370 Shoe Return Spring

Contains parts to service one wheel. Same as K128 except L149 roller is replaced by L1533 knurled roller.



Schematic  
Diagram  
Charts

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ROCKWELL

# BRAKE REPAIR KITS

## ROCKWELL

### HEAVY DUTY

#### MAJOR REPAIR KITS

### K329

#### Major Repair Kit For Rockwell 16-1/2" "Q-Plus" Self Contained Drive Axle Brake

Contains:

- 2 Pcs. - L151 Roller Retainer
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L888 Anchor Pin Spider Bushing
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Shoe Retainer Spring
- 2 Pcs. - L1533 Knurled Roller
- 1 Pc. - L2370 Shoe Return Spring



Schematic  
Diagram  
Charts

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Contains parts to service one wheel.

Same as K128K except L1537 is replaced by L151 and L1498 is replaced by L888.

### K332

#### Major Repair Kit For Rockwell 16-1/2" "Q-Plus" Self Contained Drive Axle Brake

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L151 Roller Retainer
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L888 Anchor Pin Spider Bushing
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Shoe Retainer Spring
- 1 Pc. - L2370 Shoe Return Spring



Contains parts to service one wheel.

Same as K128 except L1537 is replaced by L151 and L1498 is replaced by L888.

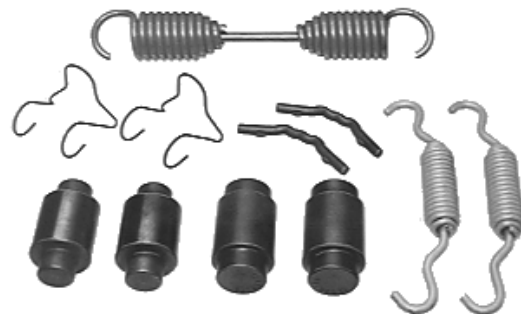
#### MINOR REPAIR KITS

### K128A

#### Minor Repair Kit For Rockwell 16-1/2" "Q-Plus" Self Contained Drive Axle Brake

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Shoe Retainer Spring
- 2 Pcs. - L1537 Roller Retainer
- 1 Pc. - L2370 HD Return Spring



Contains parts to service one wheel.

Same as K128 except does not contain L1498 anchor pin bushings.

ROCKWELL

 H. D. Version

# BRAKE REPAIR KITS

## ROCKWELL

### HEAVY DUTY

#### MINOR REPAIR KITS

### K304

#### Minor Repair Kit For Rockwell 16-1/2" "Q-Plus" Self Contained Drive Axle Brake

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1417 Retainer Spring
- 2 Pcs. - L1537 Roller Retainer
- 1 Pc. - L2370 H.D. Return Spring

Contains parts to service one wheel.  
Same as K128 except does not contain  
L1416 anchor pins and L1498 anchor pin bushings.



### K304K

#### Minor Repair Kit For Rockwell 16-1/2" "Q-Plus" Self Contained Drive Axle Brake

Contains:

- 2 Pcs. - L1533 Knurled Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1417 Retainer Spring
- 2 Pcs. - L1533 Knurled Roller
- 2 Pcs. - L1537 Roller Retainer
- 1 Pc. - L2370 H.D. Return Spring

Contains parts to service one wheel.  
Same as K304 except L149 roller is replaced by  
L1533 knurled roller.



### K370

#### Minor Repair Kit For Rockwell 16-1/2" "Q-Plus" Self Contained Drive Axle Brake

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L1417 Retainer Springs
- 1 Pc. - L2370 H.D. Return Spring

Contains parts to service one wheel.



### K320

#### Minor Repair Kit For Rockwell 16-1/2" "Q-Plus" Self Contained Drive Axle Brake

Contains:

- 2 Pcs. - L1417 Retainer Spring
- 1 Pc. - L2370 H.D. Return Spring

Contains parts to service one wheel.



Schematic  
Diagram  
Charts

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ROCKWELL



Heavy Duty Version

# CAM REPAIR KITS

## ROCKWELL

### K81

#### Axle Cam Kit For Rockwell "Q" Drive or Steer Axle 1-1/2"-10 or 28 Spline Cams

Contains:

- 2 Pcs. - L137 Lock Ring
- 2 Pcs. - L192 Spacer Washer
- 2 Pcs. - L193 Spacer Washer
- 4 Pcs. - L329 Neoprene Seal
- 2 Pcs. - L331 Lock Ring
- 2 Pcs. - L889 Spacer Washer
- 2 Pcs. - L2900 Snap Ring
- 2 Pcs. - L2926 Washer
- 2 Pcs. - L2927 Washer
- 4 Pcs. - L3029 Bushing

Contains parts to service one axle.

For one wheel end kit, use **K48**.



Schematic  
Diagram  
Charts

**4**

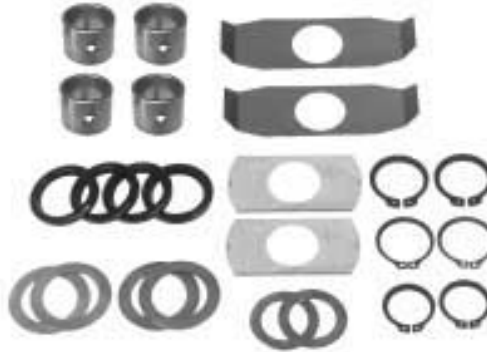
### K351

#### Axle Cam Kit For Rockwell "Q" or "Q-Plus" Drive or Steer Axle 1-1/2"-10 or 28 Spline Cams

Contents:

- 2 Pcs. - L137 Lock Ring
- 2 Pcs. - L192 Spacer Washer
- 2 Pcs. - L193 Spacer Washer
- 4 Pcs. - L329 Cam Seal
- 4 Pcs. - L330 Bronze Bushing
- 2 Pcs. - L331 H.D. Lock Ring
- 2 Pcs. - L889 Spline Washer
- 2 Pcs. - L2900 H.D. Lock Ring
- 2 Pcs. - L2926 Cam Head Washer
- 2 Pcs. - L2927 Cam Head Washer

Use **K365** to service One Wheel End



ROCKWELL

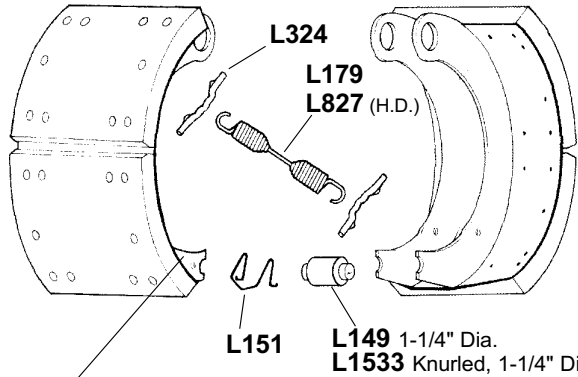
Heavy Duty Version

LELAND REPLACEMENT PARTS FOR  
**ROCKWELL**  
**16-1/2" "P" SERIES**  
**SELF CONTAINED BRAKE**

Schematic  
 Diagram  
 Charts  
**4**

**ROCKWELL**

**TIP** Early version brake uses L152 anchor pins, L168 anchor pin lock bolts and L595 anchor pin bushings. Late version brake uses L788 anchor pins and L888 or L1498 pin bushings. See kit section for complete content details on Brake and Cam Repair kits.



- L1643 FMSI 4549CD (4")
- L1644 FMSI 4524BD (5")
- L1288 FMSI 4514GD (6")
- L1289 FMSI 4515ED (7")
- L2395 FMSI 4625AD (7")
- L2663 FMSI 4644AD (8", RH)
- L2664 FMSI 4644AD (8", LH)

**Brake Repair Kits:**

Standard Duty:

- K44A - Early
- K59 - Early w/ anchor pin felts.
- K60 - Late

Heavy Duty :

- K44B - Early
- K44 - Early
- K115 - Early w/ knurled rollers.
- K45 - Late
- K109 - Late
- K116 - Late w/ knurled rollers.

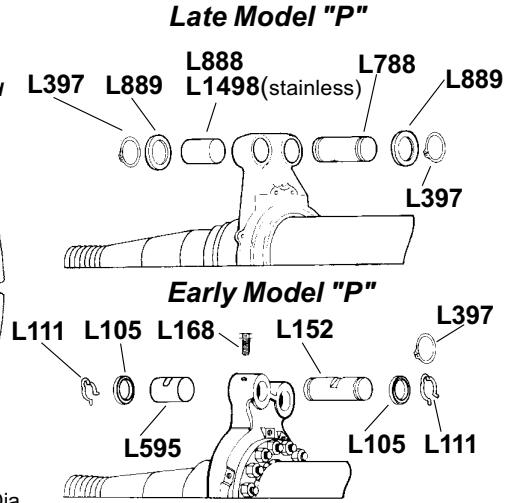
Camshafts: 1-1/2"-10 or 28 Spline Standard S-head profile

**TIP** **BRAKE AND CAM RETROFITS AND CONVERSIONS.**

Later style "Q-Plus" type cams can be used in LH/RH pairs on an axle or tandem with standard type "P" OR "Q" brake shoes. Do not mix cam types.

To convert 16-1/2" x 7" "P" type brakes to "Q" type brakes remove brake shoes, cams and hardware. Replace cam assembly bushings and hardware with K48/K81 or K351/K365 cam repair kit components. Inspect camshafts and replace if necessary. Attach the appropriate width "Q" brake shoes using K70, K128 or similar Leland application brake hardware kit.

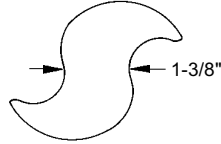
To convert 16-1/2" x 7" "P" type brakes to "Q Plus" type brakes remove brake shoes, cams and hardware. Replace cam assembly bushings and hardware with K48/K81 or K351/K365 cam repair kit components. Install "Q-Plus" type LH and RH 28 spline camshafts. Add 28 spline slack adjusters, if necessary. Attach "Q-Plus" type lined brake shoes using K128 brake kit components.



LELAND REPLACEMENT PARTS FOR  
**ROCKWELL**  
 16-1/2" "P" SERIES  
 SELF CONTAINED BRAKE

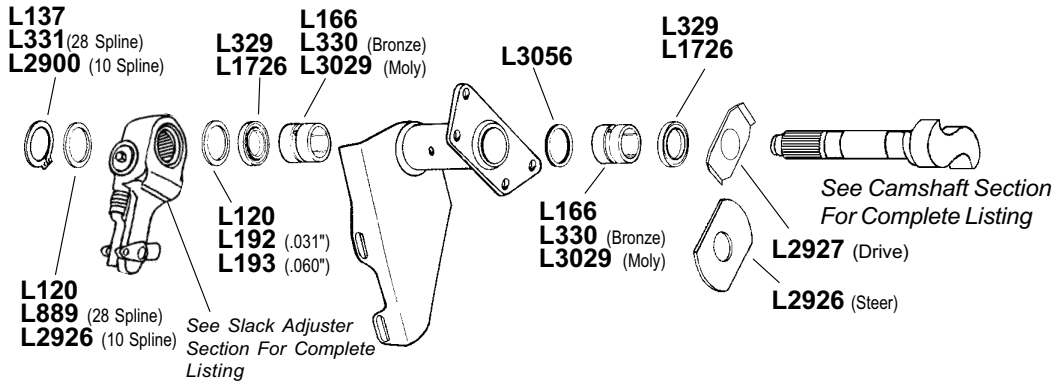
**CAMSHAFT IDENTIFICATION**

Standard S-head,  
 16-1/2" Brakes  
 1-1/2" - 10 and  
 28 Spline





Schematic  
 Diagram  
 Charts

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Cam Repair Kits with L3029 Molydisulfide bushings  
**K81** - Axle, Drive or Steer  
**K48** - Wheel End, Drive or Steer

 Heavy Duty Versions with  
 L330 Bronze Bushings  
**K351** - Axle  
**K365** - Wheel End

 **H. D. Version**

**ROCKWELL**

# BRAKE REPAIR KITS

## ROCKWELL

### STANDARD DUTY

#### K44A

For Rockwell Early Model  
16-1/2" "P" Brake

Contains:

- 4 Pcs. - L105 Neoprene Seal
- 2 Pcs. - L149 Roller
- 2 Pcs. - L151 Roller Retainer
- 2 Pcs. - L152 Anchor Pin
- 1 Pc. - L179 Return Spring
- 2 Pcs. - L324 Return Spring Pin
- 4 Pcs. - L397 Lock Ring

Contains parts to service one wheel.



Schematic  
Diagram  
Charts

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#### K59

For Rockwell Early Model  
16-1/2" "P" Brake

Contains:

- 4 Pcs. - L109 Anchor Pin Felt
- 4 Pcs. - L110 Felt Retainer
- 2 Pcs. - L149 Roller
- 2 Pcs. - L151 Roller Retainer
- 2 Pcs. - L152 Anchor Pin
- 1 Pc. - L179 Return Spring
- 2 Pcs. - L324 Return Spring Pin
- 4 Pcs. - L397 Anchor Pin Lock Ring

Contains parts to service one wheel.



ROCKWELL

#### K60

For Rockwell Late Model  
16-1/2" "P" Brake

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L151 Roller Retainer
- 1 Pc. - L179 Shoe Return Spring
- 2 Pcs. - L324 Return Spring Pin
- 4 Pcs. - L397 Anchor Pin Lock Ring
- 2 Pcs. - L788 Anchor Pin
- 4 Pcs. - L889 Anchor Pin Washer

Contains parts to service one wheel.



 H. D. Version

# BRAKE REPAIR KITS

## ROCKWELL HEAVY DUTY

### **K44B** For Rockwell Early Model 16-1/2" "P" Brake

Contains:

- 4 Pcs. - L105 Neoprene Seal
- 2 Pcs. - L149 Roller
- 2 Pcs. - L151 Roller Retainer
- 2 Pcs. - L152 Anchor Pin
- 2 Pcs. - L324 Return Spring Pin
- 4 Pcs. - L397 Anchor Pin Lock Ring
- 1 Pc. - L827 Shoe Return Spring

Contains parts to service one wheel.



Schematic  
Diagram  
Charts

**4**

### **K44** For Rockwell Early Model 16-1/2" "P" Brake

Contains:

- 4 Pcs. - L105 Neoprene Seal
- 4 Pcs. - L111 Anchor Pin Lock
- 2 Pcs. - L149 Roller
- 2 Pcs. - L151 Roller Retainer
- 2 Pcs. - L152 Anchor Pin
- 2 Pcs. - L168 Anchor Pin Lock Screw
- 2 Pcs. - L324 Return Spring Pin
- 4 Pcs. - L397 Lock Ring
- 1 Pc. - L827 Return Spring

Contains parts to service one wheel.



### **K115** For Rockwell Early Model 16-1/2" "P" Brake

Kit Contains:

- 4 Pcs. - L105 Neoprene Seal
- 2 Pcs. - L151 Roller Retainer
- 2 Pcs. - L152 Anchor Pin
- 2 Pcs. - L168 Anchor Pin Lock Screw
- 2 Pcs. - L324 Return Spring Pin
- 4 Pcs. - L397 Lock Ring
- 1 Pc. - L827 Return Spring
- 2 Pcs. - L1533 Knurled Roller

Contains parts to service one wheel.



**ROCKWELL**

 H. D. Version

# BRAKE REPAIR KITS

## ROCKWELL

### HEAVY DUTY

#### K45

##### For Rockwell Late Model 16-1/2" "P" Brake

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L151 Roller Retainer
- 2 Pcs. - L324 Return Spring Pin
- 4 Pcs. - L397 Anchor Pin Lock Ring
- 2 Pcs. - L788 Anchor Pin
- 1 Pc. - L827 Shoe Return Spring
- 2 Pcs. - L888 Anchor Pin Spider Bushing
- 4 Pcs. - L889 Anchor Pin Washer

Contains parts to service one wheel end.



Schematic  
Diagram  
Charts

4

#### K109

##### For Rockwell Late Model 16-1/2" "P" Brake

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L151 Roller Retainer
- 2 Pcs. - L324 Return Spring Pin
- 4 Pcs. - L397 Anchor Pin Lock Ring
- 2 Pcs. - L788 Anchor Pin
- 1 Pc. - L827 Return Spring
- 4 Pcs. - L889 Anchor Pin Washer

Contains parts to service one wheel.



#### K116

##### For Rockwell Late Model 16-1/2" "P" Brake

Contains:

- 2 Pcs. - L151 Roller Retainer
- 2 Pcs. - L324 Return Spring Pin
- 4 Pcs. - L397 Anchor Pin Lock Ring
- 2 Pcs. - L788 Anchor Pin
- 1 Pc. - L827 Shoe Return Spring
- 2 Pcs. - L888 Anchor Pin Spider Bushing
- 4 Pcs. - L889 Anchor Pin Washer
- 2 Pcs. - L1533 Knurled Roller

Contains parts to service one wheel.



ROCKWELL

 H. D. Version

# CAM REPAIR KITS

## ROCKWELL

### K81

#### Axle Cam Kit For Rockwell "P" or "Q" Drive or Steer Axle 1-1/2"-10 or 28 Spline Cams

Contains:

- 2 Pcs. - L137 Lock Ring
- 2 Pcs. - L192 Spacer Washer
- 2 Pcs. - L193 Spacer Washer
- 4 Pcs. - L329 Neoprene Seal
- 2 Pcs. - L331 Lock Ring
- 2 Pcs. - L889 Spacer Washer
- 2 Pcs. - L2900 Snap Ring
- 2 Pcs. - L2926 Washer
- 2 Pcs. - L2927 Washer
- 4 Pcs. - L3029 Bushing



Contains parts to service one axle.

For one wheel end kit, use **K48**.

Schematic  
Diagram  
Charts

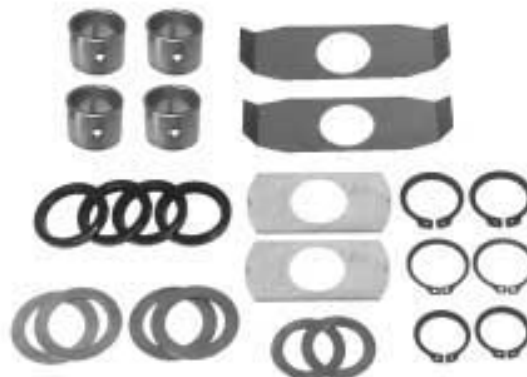
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### K351

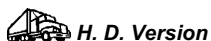
#### Axle Cam Kit For Rockwell "P", "Q" & "Q Plus" Drive or Steer Axle 1-1/2"-10 or 28 Spline Cams

Contents:

- 2 Pcs. - L137 Lock Ring
- 2 Pcs. - L192 Spacer Washer
- 2 Pcs. - L193 Spacer Washer
- 4 Pcs. - L329 Cam Seal
- 4 Pcs. - L330 Bronze Bushing
- 2 Pcs. - L331 H.D. Lock Ring
- 2 Pcs. - L889 Spline Washer
- 2 Pcs. - L2900 H.D. Lock Ring
- 2 Pcs. - L2926 Cam Head Washer
- 2 Pcs. - L2927 Cam Head Washer



Use **K365** to service One Wheel End

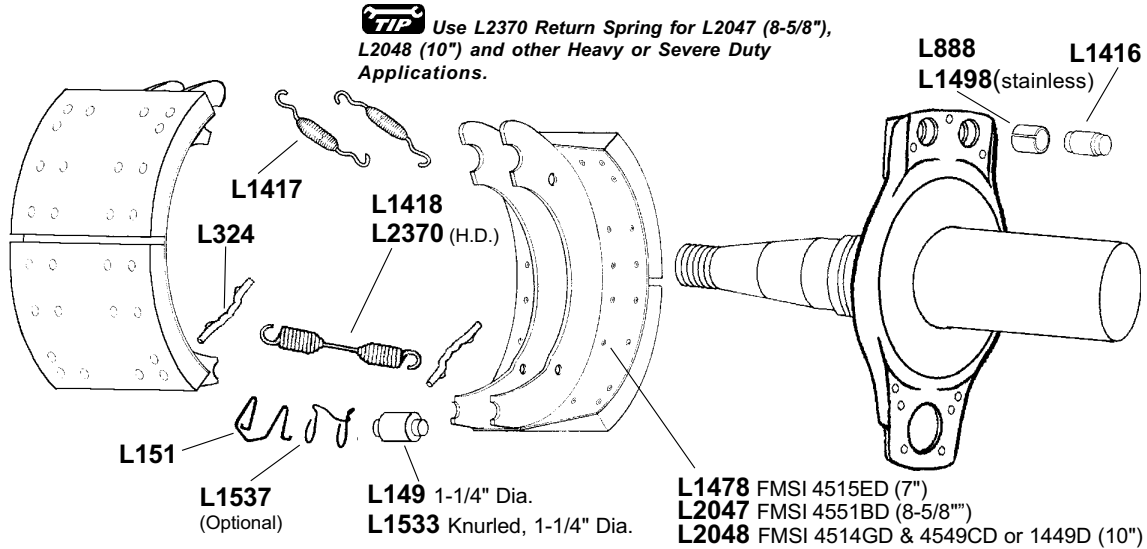


ROCKWELL

# ROCKWELL

## 16-1/2" "Q" SERIES LATE 4000/6000 "R" AND "T" SERIES TRAILER AXLE BRAKES

Schematic  
Diagram  
Charts  
**4**



**Brake Repair Kits:**

**Standard Duty Major Versions:**

- K70** - Recommended
- K117**
- K306**

**Standard Duty Minor Versions:**

- K70A**
- K303**
- K303K** Knurled Rollers
- K380**



**Heavy Duty Major Versions:**

- K128** - Recommended
- K128K**
- K329**
- K332**



**Heavy Duty Minor Versions:**

- K128A**
- K304, K304K**
- K320**
- K370**

Camshafts: 1-1/2"-10 or 28 Spline Standard S-head profile or 1-1/2"-28 spline "Q Plus" S-head profile types.



**Q-PLUS" CAM AND BRAKE RETROFITS AND CONVERSIONS.**

Later style "Q-Plus" type cams can be used in LH/RH pairs on an axle or tandem with standard type "Q" brake shoes. Do not mix types on an axle. Use L2944 (K319) spacer to adapt "Q Plus" type cams to early spiders with a narrow spider (boss) housing.

To convert standard 16-1/2" x 7" "Q" brakes to "Q Plus" brakes remove "Q" shoes, cams and hardware. Replace cam assembly bushings and hardware with the appropriate cam repair kit components. Install "Q-Plus" type LH and RH camshafts. Attach L3011 lined brake shoes with K128 brake kit parts.



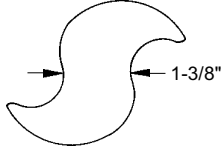
**H. D. Version**

# ROCKWELL

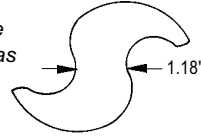
## 16-1/2" "Q" SERIES LATE 4000/6000 "R" AND "T" SERIES TRAILER AXLE BRAKES

### CAMSHAFT IDENTIFICATION

Standard S-head,  
16-1/2" Brakes  
1-1/2" - 10 and  
28 Spline



"Q-Plus" Type  
Can be used as  
LH/RH pair on  
an axle only.



### 1ST AXLE: EARLIER "R" AND "T" SERIES AXLES WITH 1-5/8" CAMSHAFT MANUFACTURED BEFORE 1985

Schematic  
Diagram  
Charts

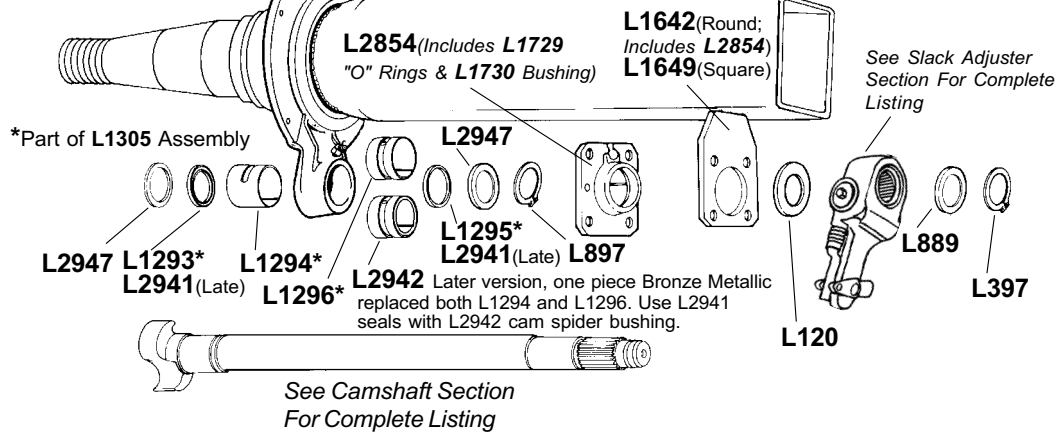
**4**



"R" Series = Rectangular 4" x 6" axle, also referred to as 4000/6000 Series axle.

"T" Series = Tubular 5" round axle.

See Axle Identification Section for additional information.



Cam Repair Kits:

- K74 Wheel
- K53 Wheel
- K97 Axle
- K269 Wheel, includes L2854
- K270 Axle, includes L2854

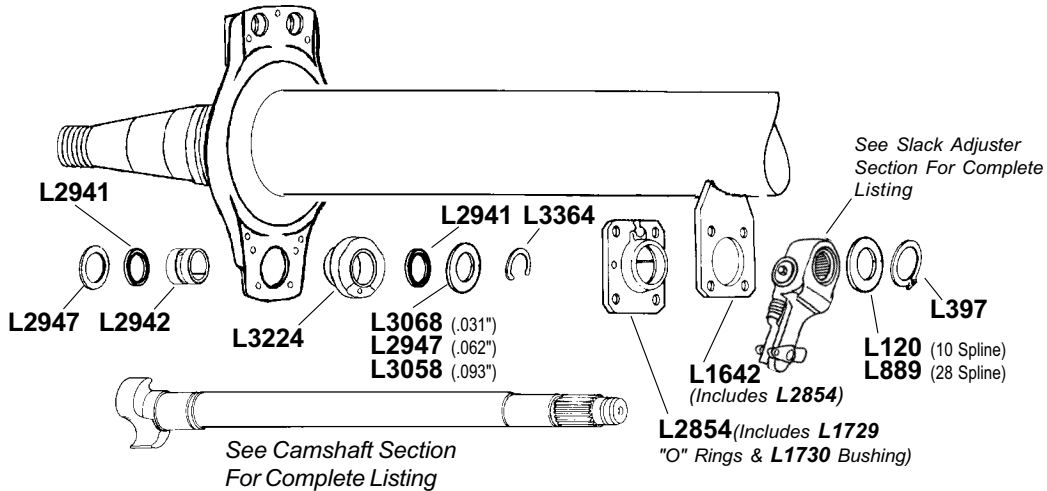
**ROCKWELL**

# ROCKWELL

## 16-1/2" "Q" SERIES LATE 4000/6000 "R" AND "T" SERIES TRAILER AXLE BRAKES

EARLY SERIES USING BOTH WELD ON FABRICATED BRAKE SPIDER AND CAM SPIDER BOSS MANUFACTURED FROM '85 TO MID '90

Schematic  
Diagram  
Charts  
**4**



Cam Repair Kits:

- K489 Axle, includes L2854
- K289 Wheel, includes L2854
- K290 Wheel, excludes L2854
- K319 Wheel, excludes L2944

**ROCKWELL**

### INSTALLATION OF L3224 WELD ON RETAINER.

Note the location of the grease fitting prior to removal of the existing unit from the spider. Use caution in removal of retainer to prevent warping the spider housing. Remove weld residue. Place and align the L3224. Secure with a clamping device. Weld in four equally distanced locations using AWS E70S3 or E70S6 electrodes. Each weld should extend approximately 3/16" x 3/8".

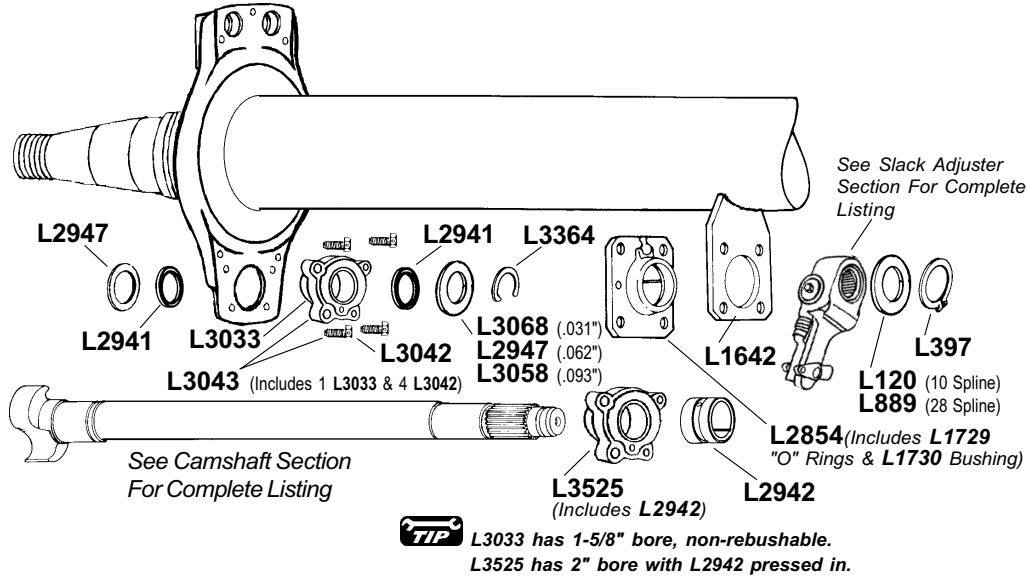
### INSTALLATION OF L2942 BRONZE SINTERED METALLIC BUSHING AND L2941 GREASE SEALS.

Remove the existing bushing using the LBT4032 driver tool. Clean the bore surface using Emery cloth. Install the L2942 into the center of the bore, aligning one of the grease holes with the grease fitting channel in the spider bushing retainer. Carefully install the L2941 seals with the lip of each (open side with garter spring visible) facing inboard, toward the slack adjuster. The seal edge should touch the bushing edge when installation is complete. Avoid direct hammering or other contact which will result in damage to the metal surfaces of the seal.

# ROCKWELL

## 16-1/2" "Q" SERIES LATE 4000/6000 "R" AND "T" SERIES TRAILER AXLE BRAKES

LATER SERIES USING WELD ON FABRICATED BRAKE SPIDER WITH BOLT ON TYPE CAM BUSHING BRACKET MANUFACTURED FROM MID '90 ON



Schematic  
Diagram  
Charts  
**4**

**ROCKWELL**

Cam Repair Kits  
with L3043

- K363 Axle, includes L2854
- K313 Wheel, includes L2854
- K490 Axle, includes L2854, also services H.D. forged spiders
- K491 Wheel, excludes L2854

with L2942:

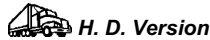
- K489 Axle, includes L2854
- K289 Wheel, includes L2854
- K290 Wheel, excludes L2854
- K319 Wheel, excludes L2854

with L3525:

- K511 Axle, includes L2854
- K512 Wheel, includes L2854
- K510 Wheel, excludes L2854

**TIP** **INSTALLATION OF L3033 OR L3525 BUSHING RETAINER.**

Unbolt and remove the retainer from the spider. After removal, if servicing L3525, remove seals and sleeve bushing. Install new L2942 bushing using tool from LBT4032 set. For either type retainer, carefully install the L2941 seals flush, with the lip of each (open side with garter spring visible) facing inboard toward the slack adjuster. Align the screw holes of the new retainer to the correct position on the spider. Insert the retainer assembly into the spider, using a C-clamp with backing if necessary. Install the L3042 screws and hand tighten. Proceed to torque the screws in increments to a final reading of 30 to 40 lb.-ft. Fill the unit with multipurpose grease slowly until grease begins to seep through the seal lip edges. Wipe away excess grease.



# BRAKE REPAIR KITS

## ROCKWELL

### STANDARD DUTY - MAJOR REPAIR KITS

#### K70

##### Major Repair Kit For Rockwell 16-1/2" "Q" Series Brake

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Shoe Retainer Spring
- 1 Pc. - L1418 Shoe Return Spring
- 2 Pcs. - L1498 Anchor Pin Spider Bushing
- 2 Pcs. - L1537 Roller Retainer



Contains parts to service one wheel.

Same as K117 except: uses L149 rollers in place of L1533 knurled rollers

#### K117

##### Major Repair Kit For Rockwell 16-1/2" "Q" Series Brake

Kit Contains:

- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Shoe Retainer Spring
- 1 Pc. - L1418 Shoe Return Spring
- 2 Pcs. - L1498 Anchor Pin Spider Bushing
- 2 Pcs. - L1533 Knurled Roller
- 2 Pcs. - L1537 Roller Retainer



Contains parts to service one wheel.

Same as K70 except: uses L1533 knurled rollers in place of L149 Rollers.

#### K306

##### Major Repair Kit For Rockwell 16-1/2" "Q" Series Brake

Kit Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L888 Anchor Pin Bushing
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Retainer Spring
- 1 Pc. - L1418 Return Spring
- 2 Pcs. - L1537 Roller Retainer



Contains parts to service one wheel.

Same as K70 except L1498 is replaced by L888.

Schematic  
Diagram  
Charts

4

ROCKWELL

# BRAKE REPAIR KITS

## ROCKWELL

### STANDARD DUTY - MINOR REPAIR KITS

#### K70A

##### Minor Repair Kit For Rockwell 16-1/2" "Q" Series Brake

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Shoe Retainer Spring
- 1 Pc. - L1418 Shoe Return Spring
- 2 Pcs. - L1537 Roller Retainer

Contains parts to service one wheel.

Same as K70 except: does not contain L1498 anchor pin bushings.



Schematic  
Diagram  
Charts

4

#### K303

##### Minor Repair Kit For Rockwell 16-1/2" "Q" Series Brake

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1417 Retainer Spring
- 1 Pc. - L1418 Return Spring
- 2 Pcs. - L1537 Roller Retainer

Contains parts to service one wheel.

Same as K70 except does not contain L1416 anchor pins and L1498 anchor pin bushings.



#### K303K

##### Minor Repair Kit For Rockwell 16-1/2" "Q" Series Brake

Contains:

- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1417 Retainer Spring
- 1 Pc. - L1418 Return Spring
- 2 Pcs. - L1533 Knurled Roller
- 2 Pcs. - L1537 Roller Retainer

Contains parts to service one wheel.

Same as K117 except does not contain L1416 anchor pins and L1498 anchor pin bushings.



#### K380

##### Minor Kit For 16-1/2" "Q" Series Brakes

Contents:

- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1417 Retainer Spring
- 1 Pc. - L1418 Return Spring
- 2 Pcs. - L1537 Roller Retainer

Contains parts to service one wheel.



ROCKWELL

# BRAKE REPAIR KITS

## ROCKWELL

### HEAVY DUTY - MAJOR REPAIR KITS

#### K128

##### Major Repair Kit For Rockwell 16-1/2" "Q" Series Brake

- Contains:
- 2 Pcs. - L149 Roller
  - 2 Pcs. - L324 Return Spring Pin
  - 2 Pcs. - L1416 Anchor Pin
  - 2 Pcs. - L1417 Retainer Spring
  - 2 Pcs. - L1498 Anchor Pin Bushing
  - 2 Pcs. - L1537 Roller Retainer
  - 1 Pcs. - L2370 HD Return Spring



Contains parts to service one wheel.

#### K128K

##### Major Repair Kit For Rockwell 16-1/2" "Q" Series Brake

- Contains:
- 2 Pcs. - L324 Return Spring Pin
  - 2 Pcs. - L1416 Anchor Pin
  - 2 Pcs. - L1417 Shoe Retainer Spring
  - 2 Pcs. - L1498 Anchor Pin Spider Bushing
  - 2 Pcs. - L1533 Knurled Roller
  - 2 Pcs. - L1537 Roller Retainer
  - 1 Pcs. - L2370 Shoe Return Spring



Contains parts to service one wheel.  
Same as K128 except L149 roller is replaced by L1533 knurled roller.

#### K329

##### Major Repair Kit For Rockwell 16-1/2" "Q" Series Brake

- Contains:
- 2 Pcs. - L151 Roller Retainer
  - 2 Pcs. - L324 Return Spring Pin
  - 2 Pcs. - L888 Anchor Pin Spider Bushing
  - 2 Pcs. - L1416 Anchor Pin
  - 2 Pcs. - L1417 Shoe Retainer Spring
  - 2 Pcs. - L1533 Knurled Roller
  - 1 Pcs. - L2370 Shoe Return Spring



Contains parts to service one wheel.  
Same as K128K except L1537 is replaced by L151 and L1498 is replaced by L888.

#### K332

##### Major Repair Kit For Rockwell 16-1/2" "Q" Series Brake

- Contains:
- 2 Pcs. - L149 Roller
  - 2 Pcs. - L151 Roller Retainer
  - 2 Pcs. - L324 Return Spring Pin
  - 2 Pcs. - L888 Anchor Pin Spider Bushing
  - 2 Pcs. - L1416 Anchor Pin
  - 2 Pcs. - L1417 Shoe Retainer Spring
  - 1 Pcs. - L2370 Shoe Return Spring



Contains parts to service one wheel.  
Same as K128 except L1537 is replaced by L151 and L1498 is replaced by L888.

Schematic  
Diagram  
Charts

4

ROCKWELL

# BRAKE REPAIR KITS

## ROCKWELL

### HEAVY DUTY - MINOR REPAIR KITS

#### **K128A**

##### **Minor Repair Kit For Rockwell 16-1/2" "Q" Series Brake**

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Shoe Retainer Spring
- 2 Pcs. - L1537 Roller Retainer
- 1 Pc. - L2370 HD Return Spring

Contains parts to service one wheel.

Same as K128 except does not contain L1498 anchor pin bushings.



Schematic  
Diagram  
Charts

**4**

#### **K304**

##### **Minor Repair Kit For Rockwell 16-1/2" "Q" Series Brake**

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1417 Retainer Spring
- 2 Pcs. - L1537 Roller Retainer
- 1 Pc. - L2370 H.D. Return Spring

Contains parts to service one wheel.

Same as K128 except does not contain L1416 anchor pins and L1498 anchor pin bushings.



#### **K304K**

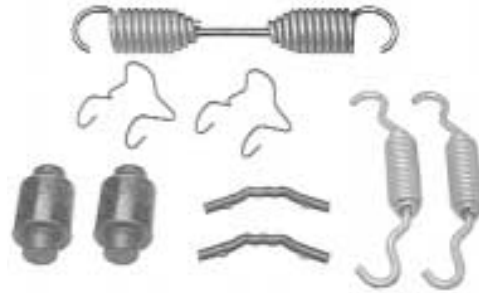
##### **Minor Repair Kit For Rockwell 16-1/2" "Q" Series Brake**

Contains:

- 2 Pcs. - L1533 Knurled Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1417 Retainer Spring
- 2 Pcs. - L1533 Knurled Roller
- 2 Pcs. - L1537 Roller Retainer
- 1 Pc. - L2370 H.D. Return Spring

Contains parts to service one wheel.

Same as K304 except L149 roller is replaced by L1533 knurled roller.



#### **K320**

##### **Minor Repair Kit For Rockwell 16-1/2" "Q" Series Brake**

Contains:

- 2 Pcs. - L1417 Retainer Spring
- 1 Pc. - L2370 H.D. Return Spring

Contains parts to service one wheel.



#### **K370**

##### **Minor Repair Kit For Rockwell 16-1/2" "Q" Series Brake with HD Return Spring**

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L1417 Shoe Retainer Spring
- 1 Pc. - L2370 Shoe Return Spring

Contains parts to service one wheel.



**ROCKWELL**



# CAM REPAIR KITS

## ROCKWELL

### K74

#### Minor Kit for "R" & "T" Series Axles with 1-5/8" Cam using Sleeved Bushing Assembly

Contains:

- 1 Pc. - L120 Spacer Washer
- 1 Pc. - L397 Lock Ring
- 1 Pc. - L889 Washer
- 1 Pc. - L897 Lock Ring
- 1 Pc. - L1305 Spider Bushing Assembly
- 2 Pcs. - L2947 Spacer Washer



Contains parts to service one wheel.

Schematic  
Diagram  
Charts  
**4**

### K97

#### Axle Kit for "R" & "T" Series Axles with 1-5/8" Cam using Sleeved Bushing Assembly

Contains:

- 2 Pcs. - L120 Spacer Washer
- 2 Pcs. - L397 Lock Ring
- 2 Pcs. - L889 Spacer Washer
- 2 Pcs. - L897 Lock Ring
- 2 Pcs. - L1305 Spider Bushing Assembly
- 4 Pcs. - L1729 "O" Ring
- 2 Pcs. - L1730 Cam Bushing
- 4 Pcs. - L2947 Spacer Washer



Contains parts to service one axle.

For one axle end kit, use **K53**.

**ROCKWELL**

### K270

#### Major Axle Kit for "R" & "T" Series Axles with 1-5/8" Cam using Sleeved Bushing Assembly

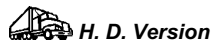
Contains:

- 2 Pcs. - L120 Spacer Washer
- 2 Pcs. - L397 Lock Ring
- 2 Pcs. - L889 Spacer Washer
- 2 Pcs. - L897 Lock Ring
- 2 Pcs. - L1293 Seal
- 2 Pcs. - L1294 Outer Bushing
- 2 Pcs. - L1295 Seal
- 2 Pcs. - L1296 Inner Bushing
- 2 Pcs. - L2854 Camshaft Bracket Assembly
- 4 Pcs. - L2947 Spacer Washer



Contains parts to service one axle.

Use **K269** to service One Wheel End



# CAM REPAIR KITS

## ROCKWELL

### K290

**Late "R" & "T" Series  
Axles with 1-5/8" Cam  
using Press in Metallic Bushing**

Contains:

- 1 Pc. - L120 Washer
- 1 Pc. - L397 Lock Ring
- 1 Pc. - L889 Spacer Washer
- 1 Pc. - L897 Lock Ring
- 2 Pcs. - L2941 Seal
- 1 Pc. - L2942 Camshaft Spider Bushing
- 2 Pcs. - L2947 Spacer Washer



Contains parts to service one wheel.  
For Major kit use K289.

Schematic  
Diagram  
Charts

**4**

### K319

**For Late "R" & "T" Series Axles with 1-5/8"  
Cam using Press in Metallic Bushing  
or conversion to "Q-Plus" Brakes**

Contains:

- 1 Pc. - L120 Washer
- 1 Pc. - L397 Lock Ring
- 1 Pc. - L889 Spacer Washer
- 2 Pcs. - L2941 Camshaft Seal
- 1 Pc. - L2942 Camshaft Spider Bushing
- 1 Pc. - L2944 Camshaft Spacer
- 1 Pc. - L2945 Spacer Washer
- 1 Pc. - L2947 Spacer Washer
- 1 Pc. - L3057 Camshaft Washer
- 1 Pc. - L3058 Spacer Washer
- 1 Pc. - L3068 Spacer Washer
- 1 Pc. - L3364 Lock Ring



Contains parts to service one wheel.  
Some applications will not use all parts.

### K363

**Axle Kit for Late "R" & "T"  
Series Axles with 1-5/8" Cam  
using Bolt on Spider Bracket Bushing**

Contents:

- 2 Pcs. - L120 Cam Bracket Washer
- 2 Pcs. - L397 Spline End Lock Ring
- 2 Pcs. - L889 Spline End Washer
- 2 Pcs. - L2854 Camshaft Bracket Assembly
- 4 Pcs. - L2941 Seal
- 2 Pcs. - L3033 Bracket Bushing
- 8 Pcs. - L3042 Self Tapping Screw
- 2 Pcs. - L3057 Cam Head Washer
- 2 Pcs. - L3058 Inboard Spider Washer
- 2 Pcs. - L3364 Spider End Lock Ring



Use **K313** to service One Wheel End

# CAM REPAIR KITS

## ROCKWELL

### K489

**For Rockwell/Meritor 12-1/4" and 16-1/2" Trailer Axle Brakes using Rebushable Bolted or Weld on Spider Bracket or Forged Spider**

Contents:

- 2 Pcs. - L120 Cam Bracket Washer
- 2 Pcs. - L397 Lock Ring
- 2 Pcs. - L889 Spline End Washer
- 2 Pcs. - L897 Lock Ring
- 2 Pcs. - L2854 Cam Bracket Assembly
- 4 Pcs. - L2941 Spider Seal
- 2 Pcs. - L2942 Camshaft Spider Bushing
- 4 Pcs. - L2947 Spacer Washer
- 2 Pcs. - L3364 Spider End Lock Ring



Use **K289** to service One Wheel End

### K490

**Major Axle Kit for Rockwell/Meritor 12-1/4" and 16-1/2" Trailer Axle Brakes with Heavy Duty Forged Brake Spiders**

Contents:

- 2 Pcs. - L120 Cam Bracket Washer
- 2 Pcs. - L331 H.D. Lock Ring
- 2 Pcs. - L889 Spline End Washer
- 2 Pcs. - L897 Lock Ring
- 2 Pcs. - L2854 Cam Bracket Assembly
- 4 Pcs. - L2941 Spider Seal
- 2 Pcs. - L2942 Camshaft Spider Bushing
- 2 Pcs. - L2944 Camshaft Spacer
- 2 Pcs. - L2945 Cam Head Spacer Washer
- 4 Pcs. - L2947 Spacer Washer
- 2 Pcs. - L3364 Spider End Lock Ring



Similar to **K313** (wheel end) and **K363** (axle) except includes additional parts to service Heavy Duty Forged Spider axles.

### K491

**Minor Kit for Rockwell/Meritor 12-1/4" and 16-1/2" Trailer Axle Brakes using Bolt on Non Rebushable Spider Bracket on Fabricated Spider**

Contents:

- 2 Pcs. - L2941 Spider Seal
- 1 Pc. - L3033 Bracket Bushing
- 4 Pcs. - L3042 Self Tapping Screw
- 1 Pc. - L3057 Cam Head Washer
- 1 Pc. - L3058 Inboard Spider Washer
- 1 Pc. - L3364 Spider End Lock Ring



Serves one wheel.

Also part of **K313** and **K363**.

Schematic  
Diagram  
Charts

4

ROCKWELL

# CAM REPAIR KITS

## ROCKWELL

### K510

**Minor Kit for Rockwell/Meritor 12-1/4" and 16-1/2" Trailer Axle Brakes using Bolt on Rebushable Spider Bracket on Fabricated Spider**



Contents:

- 4 Pcs. - L3042 Self Tapping Screw
- 1 Pc. - L3057 Cam Head Washer
- 1 Pc. - L3058 Inboard Spider Washer
- 1 Pc. - L3364 Spider End Lock Ring
- 1 Pc. - L3525 Bracket with pressed L2942 Bushing

Serves one wheel.

Schematic  
Diagram  
Charts

4

### K511

**Major Axle Kit for Rockwell/Meritor 12-1/4" and 16-1/2" Trailer Axle Brakes using Bolt on Rebushable Spider Bracket on Fabricated Spider**



Contents:

- 2 Pcs. - L120 Cam Bracket Washer
- 2 Pcs. - L397 Spline End Lock Ring
- 2 Pcs. - L889 Spline End Washer
- 2 Pcs. - L2854 Cam Bracket Assembly
- 4 Pcs. - L2941 Spider Seal
- 8 Pcs. - L3042 Self Tapping Screw
- 2 Pcs. - L3057 Cam Head Washer
- 2 Pcs. - L3058 Inboard Spider Washer
- 2 Pcs. - L3364 Spider End Lock Ring
- 2 Pcs. - L3525 Bracket with pressed L2942 Bushing

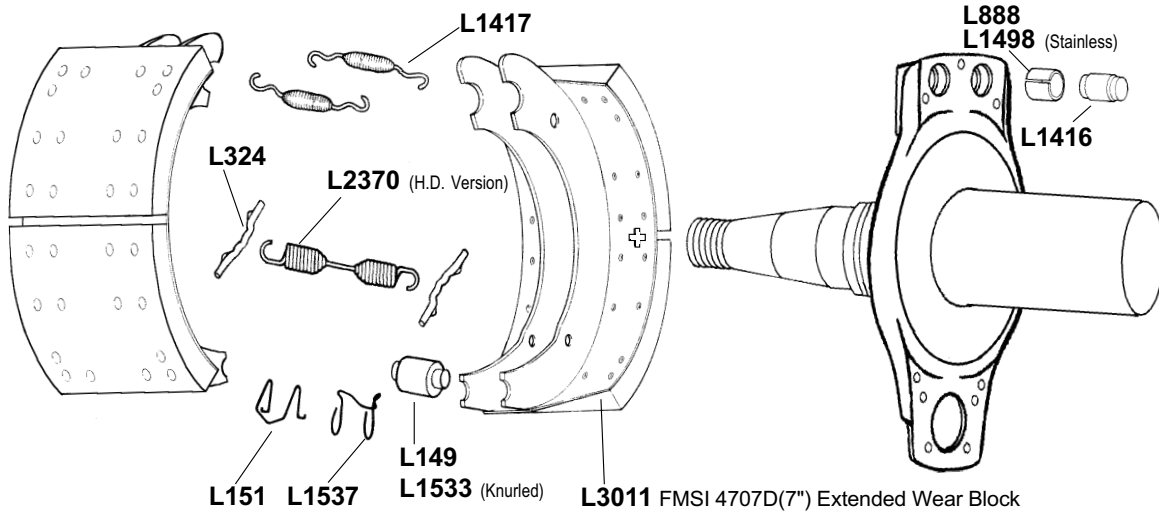
Use **K512** to service One Wheel End

**ROCKWELL**

# ROCKWELL

## 16-1/2" "Q-PLUS" TRAILER AXLE BRAKES FOR LATE "T" SERIES AND RETROFIT OF EARLIER SERIES


Schematic  
Diagram  
Charts  
**4**



**L3011** FMSI 4707D(7") Extended Wear Block  
**TIP** OEM version shoe has "Q Plus" stamped on web and a Plus sign + stamped through the table.

**TIP** The L2370 H.D. return spring contained in all kits is manufactured from SAE Music Wire, shot peened for added strength, cycle life and resistance to extreme temperature ranges. A high amount of spring force advertised by suppliers is not a total factor in determining spring quality and often can be the opposite. The L2370 is used and recommended for this application due to increased shoe weight and brake applications from the FMSI 4707D extended wear blocks.

**Brake Repair Kits:**

-  Heavy Duty, Heavy Duty Major Versions:  
**K128** - Recommended  
**K329**  
**K332**
-  Heavy Duty, Heavy Duty Minor Versions:  
**K128A**  
**K304, 304K**  
**K320**  
**K370**

Camshafts: 1-1/2"-28 spline "Q Plus" S-head profile types.

**TIP** **"Q-PLUS" CAM AND BRAKE CONVERSIONS.**

To convert standard 16-1/2" x 7" "Q" brakes to "Q Plus" brakes remove "Q" shoes, cams and hardware. Replace cam assembly bushings and hardware with the appropriate cam kit components. Install "Q-Plus" type LH and RH camshafts on all axles. Earlier axles previously using cams for a narrow (boss) spider housing require adding the L2944 adapter spacer to accommodate the 2" bearing surface length to the lock groove of the "Q Plus" cam.

Attach L3011 lined brake shoes with K128 brake parts.

 **H. D. Version**

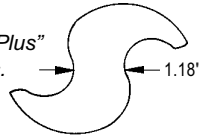
**ROCKWELL**

# ROCKWELL

## 16-1/2" "Q-PLUS" TRAILER AXLE BRAKES FOR LATE "T" SERIES AND RETROFIT OF EARLIER SERIES

### CAMSHAFT TYPE

1-1/2"-28 spline "Q Plus"  
S-head profile types.

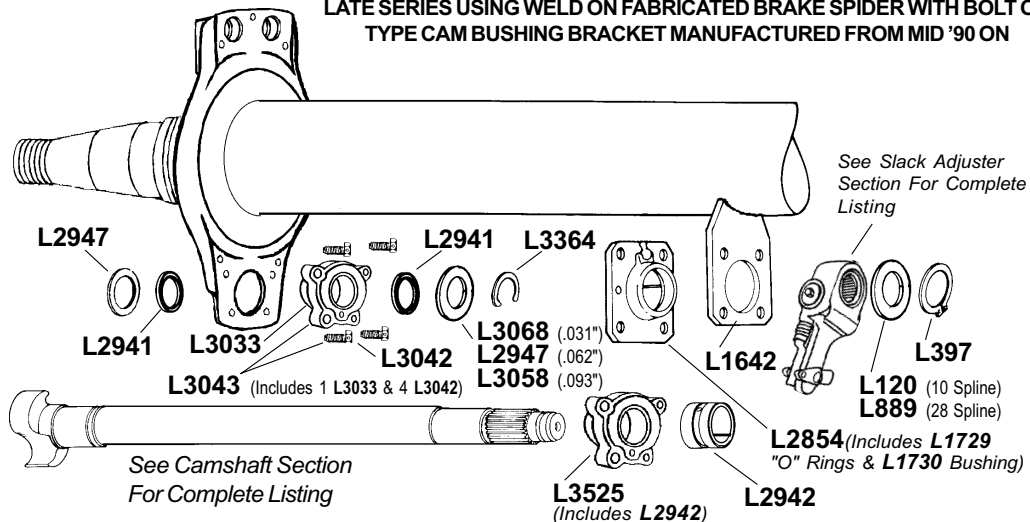


"Q - Plus" Type, Aftermarket version may have slightly lesser distance across "S" pocket. This will not affect performance when used opposite an OEM version.

LATE SERIES USING WELD ON FABRICATED BRAKE SPIDER WITH BOLT ON TYPE CAM BUSHING BRACKET MANUFACTURED FROM MID '90 ON

Schematic  
Diagram  
Charts

4



See Camshaft Section  
For Complete Listing

See Slack Adjuster  
Section For Complete  
Listing



L3033 has 1-5/8" bore, non-rebushable.  
L3525 has 2" bore with L2942 pressed in.

Cam Repair Kits  
with L3043

- K363 Axle, includes L2854
- K313 Wheel, includes L2854
- K490 Axle, includes L2854, also services H.D. forged spiders
- K491 Wheel, excludes L2854

with L2942:

- K489 Axle, includes L2854
- K289 Wheel, includes L2854
- K290 Wheel, excludes L2854, See page 205
- K319 Wheel, excludes L2854, See page 205

with L3525:

- K511 Axle, includes L2854
- K512 Wheel, includes L2854
- K510 Wheel, excludes L2854

### **TIP** INSTALLATION OF L3033 OR L3525 BUSHING RETAINER.

Unbolt and remove the retainer from the spider. After removal, if servicing L3525, remove seals and sleeve bushing. Install new L2942 bushing using tool from LBT4032 set. For either type retainer, carefully install the L2941 seals flush, with the lip of each (open side with garter spring visible) facing inboard toward the slack adjuster. Align the screw holes of the new retainer to the correct position on the spider. Insert the retainer assembly into the spider, using a C-clamp with backing if necessary. Install the L3042 screws and hand tighten. Proceed to torque the screws in increments to a final reading of 30 to 40 lb.-ft. Fill the unit with multipurpose grease slowly until grease begins to seep through the seal lip edges. Wipe away excess grease.



H. D. Version

ROCKWELL

# BRAKE REPAIR KITS

## ROCKWELL

### HEAVY DUTY - MAJOR REPAIR KITS

#### K128

##### Major Repair Kit For Rockwell 16-1/2" "Q" Series Brake

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Retainer Spring
- 2 Pcs. - L1498 Anchor Pin Bushing
- 2 Pcs. - L1537 Roller Retainer
- 1 Pcs. - L2370 HD Return Spring

Contains parts to service one wheel.



Schematic  
Diagram  
Charts

4

#### K128K

##### Major Repair Kit For Rockwell 16-1/2" "Q" Series Brake

Contains:

- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Shoe Retainer Spring
- 2 Pcs. - L1498 Anchor Pin Spider Bushing
- 2 Pcs. - L1533 Knurled Roller
- 2 Pcs. - L1537 Roller Retainer
- 1 Pcs. - L2370 Shoe Return Spring

Contains parts to service one wheel.

Same as K128 except L149 roller is replaced by L1533 knurled roller.



#### K329

##### Major Repair Kit For Rockwell 16-1/2" "Q" Series Brake

Contains:

- 2 Pcs. - L151 Roller Retainer
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L888 Anchor Pin Spider Bushing
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Shoe Retainer Spring
- 2 Pcs. - L1533 Knurled Roller
- 1 Pcs. - L2370 Shoe Return Spring

Contains parts to service one wheel.

Same as K128K except L1537 is replaced by L151 and L1498 is replaced by L888.



#### K332

##### Major Repair Kit For Rockwell 16-1/2" "Q" Series Brake

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L151 Roller Retainer
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L888 Anchor Pin Spider Bushing
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Shoe Retainer Spring
- 1 Pcs. - L2370 Shoe Return Spring

Contains parts to service one wheel.

Same as K128 except L1537 is replaced by L151 and L1498 is replaced by L888.



ROCKWELL

# BRAKE REPAIR KITS

## ROCKWELL

### HEAVY DUTY - MINOR REPAIR KITS

#### **K128A**

##### **Minor Repair Kit For Rockwell 16-1/2" "Q" Series Brake**

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1416 Anchor Pin
- 2 Pcs. - L1417 Shoe Retainer Spring
- 2 Pcs. - L1537 Roller Retainer
- 1 Pc. - L2370 HD Return Spring

Contains parts to service one wheel.

Same as K128 except does not contain L1498 anchor pin bushings.



Schematic  
Diagram  
Charts

**4**

#### **K304**

##### **Minor Repair Kit For Rockwell 16-1/2" "Q" Series Brake**

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1417 Retainer Spring
- 2 Pcs. - L1537 Roller Retainer
- 1 Pc. - L2370 H.D. Return Spring

Contains parts to service one wheel.

Same as K128 except does not contain L1416 anchor pins and L1498 anchor pin bushings.



#### **K304K**

##### **Minor Repair Kit For Rockwell 16-1/2" "Q" Series Brake**

Contains:

- 2 Pcs. - L1533 Knurled Roller
- 2 Pcs. - L324 Return Spring Pin
- 2 Pcs. - L1417 Retainer Spring
- 2 Pcs. - L1533 Knurled Roller
- 2 Pcs. - L1537 Roller Retainer
- 1 Pc. - L2370 H.D. Return Spring

Contains parts to service one wheel.

Same as K304 except L149 roller is replaced by L1533 knurled roller.



#### **K320**

##### **Minor Repair Kit For Rockwell 16-1/2" "Q" Series Brake**

Contains:

- 2 Pcs. - L1417 Retainer Spring
- 1 Pc. - L2370 H.D. Return Spring

Contains parts to service one wheel.



#### **K370**

##### **Minor Repair Kit For Rockwell 16-1/2" "Q" Series Brake with HD Return Spring**

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L1417 Shoe Retainer Spring
- 1 Pc. - L2370 Shoe Return Spring

Contains parts to service one wheel.



**ROCKWELL**

# CAM REPAIR KITS

## ROCKWELL

### K363

#### Axle Kit for Late "R" & "T" Series Axles with 1-5/8" Cam using Bolt on Spider Bracket Bushing

Contents:

- 2 Pcs. - L120 Cam Bracket Washer
- 2 Pcs. - L397 Spline End Lock Ring
- 2 Pcs. - L889 Spline End Washer
- 2 Pcs. - L2854 Camshaft Bracket Assembly
- 4 Pcs. - L2941 Seal
- 2 Pcs. - L3033 Bracket Bushing
- 8 Pcs. - L3042 Self Tapping Screw
- 2 Pcs. - L3057 Cam Head Washer
- 2 Pcs. - L3058 Inboard Spider Washer
- 2 Pcs. - L3364 Spider End Lock Ring



Use **K313** to service One Wheel End

Schematic  
Diagram  
Charts

4

ROCKWELL

### K489

#### For Rockwell/Meritor 12-1/4" and 16-1/2" Trailer Axle Brakes using Rebushable Bolted or Weld on Spider Bracket or Forged Spider

Contents:

- 2 Pcs. - L120 Cam Bracket Washer
- 2 Pcs. - L397 Lock Ring
- 2 Pcs. - L889 Spline End Washer
- 2 Pcs. - L897 Lock Ring
- 2 Pcs. - L2854 Cam Bracket Assembly
- 4 Pcs. - L2941 Spider Seal
- 2 Pcs. - L2942 Camshaft Spider Bushing
- 4 Pcs. - L2947 Spacer Washer
- 2 Pcs. - L3364 Spider End Lock Ring



Use **K289** to service One Wheel End

### K490

#### Major Axle Kit for Rockwell/Meritor 12-1/4" and 16-1/2" Trailer Axle Brakes with Heavy Duty Forged Brake Spiders

Contents:

- 2 Pcs. - L120 Cam Bracket Washer
- 2 Pcs. - L331 H.D. Lock Ring
- 2 Pcs. - L889 Spline End Washer
- 2 Pcs. - L897 Lock Ring
- 2 Pcs. - L2854 Cam Bracket Assembly
- 4 Pcs. - L2941 Spider Seal
- 2 Pcs. - L2942 Camshaft Spider Bushing
- 2 Pcs. - L2944 Camshaft Spacer
- 2 Pcs. - L2945 Cam Head Spacer Washer
- 4 Pcs. - L2947 Spacer Washer
- 2 Pcs. - L3364 Spider End Lock Ring



Similar to **K313** (wheel end) and **K363** (axle) except includes additional parts to service Heavy Duty Forged Spider axles.

# CAM REPAIR KITS

## ROCKWELL

### K491

#### Minor Kit for Rockwell/Meritor 12-1/4" and 16-1/2" Trailer Axle Brakes using Bolt on Non Rebushable Spider Bracket on Fabricated Spider

Contents:

- 2 Pcs. - L2941 Spider Seal
- 1 Pc. - L3033 Bracket Bushing
- 4 Pcs. - L3042 Self Tapping Screw
- 1 Pc. - L3057 Cam Head Washer
- 1 Pc. - L3058 Inboard Spider Washer
- 1 Pc. - L3364 Spider End Lock Ring

Serves one wheel.

Also part of **K313** and **K363**.



Schematic  
Diagram  
Charts

4

### K510

#### Minor Kit for Rockwell/Meritor 12-1/4" and 16-1/2" Trailer Axle Brakes using Bolt on Rebushable Spider Bracket on Fabricated Spider

Contents:

- 2 Pcs. - L2941 Spider Seal
- 4 Pcs. - L3042 Self Tapping Screw
- 1 Pc. - L3057 Cam Head Washer
- 1 Pc. - L3058 Inboard Spider Washer
- 1 Pc. - L3364 Spider End Lock Ring
- 1 Pc. - L3525 Bracket with pressed L2942 Bushing

Serves one wheel.



### K511

#### Major Axle Kit for Rockwell/Meritor 12-1/4" and 16-1/2" Trailer Axle Brakes using Bolt on Rebushable Spider Bracket on Fabricated Spider

Contents:

- 2 Pcs. - L120 Cam Bracket Washer
- 2 Pcs. - L397 Spline End Lock Ring
- 2 Pcs. - L889 Spline End Washer
- 2 Pcs. - L2854 Cam Bracket Assembly
- 4 Pcs. - L2941 Spider Seal
- 8 Pcs. - L3042 Self Tapping Screw
- 2 Pcs. - L3057 Cam Head Washer
- 2 Pcs. - L3058 Inboard Spider Washer
- 2 Pcs. - L3364 Spider End Lock Ring
- 2 Pcs. - L3525 Bracket with pressed L2942 Bushing



Use **K512** to service One Wheel End

ROCKWELL

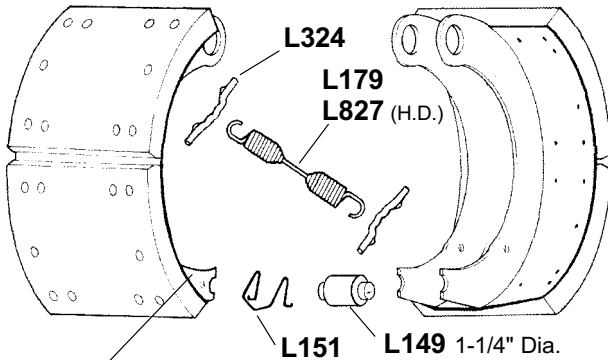
# ROCKWELL

## 16-1/2" "P" SERIES TRAILER AXLE BRAKES FOR EARLY R" AND "T" AXLES WITH 1-1/2" CAMS

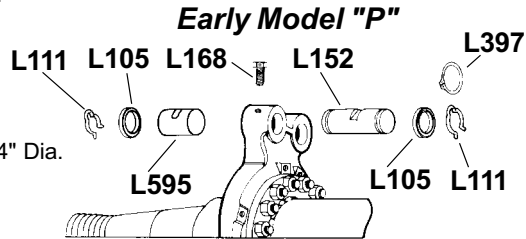
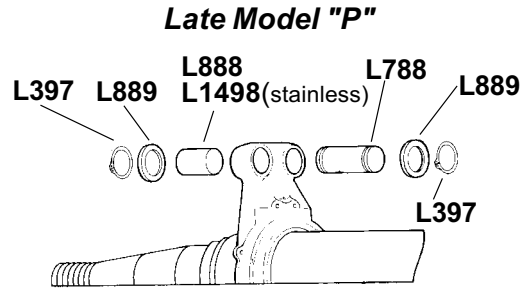
**TIP** Early version brake uses L152 anchor pins, L168 anchor pin lock bolts and L595 anchor pin bushings. Late version brake uses L788 anchor pins and L888 or L1498 pin bushings. Parts for each version are interchangeable. See kit section for complete content details on Brake and Cam Repair kits.

Schematic  
Diagram  
Charts

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- L1643 (4")
- L1644 (5")
- L1289 (7")
- L2395 (7") 1/4" RIVET
- L2663 (8") FORD
- L2664 (8")
- L1041 (10")



**Brake Repair Kits:**

**Standard Duty:**

- K44A - Early
- K59 - Early w/ anchor pin felts.
- K60 - Late



**Heavy Duty :**

- K44B - Early
- K44 - Early
- K115 - Early w/ knurled rollers.
- K45 - Late
- K109 - Late
- K116 - Late w/ knurled rollers.

Camshafts: 1-1/2"-10 or 28 Spline, Standard S-head profile



**"P" to "Q" BRAKE CONVERSION**

To convert 16-1/2" x 7" "P" type brakes to "Q" type brakes remove brake shoes, cams and hardware. Replace cam assembly bushings and hardware with the appropriate Leland cam repair kit components. Inspect camshafts and replace if necessary. Attach the appropriate width "Q" brake shoes using K70, K128 or similar Leland application brake hardware kit.

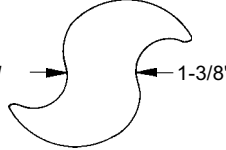
ROCKWELL

# ROCKWELL

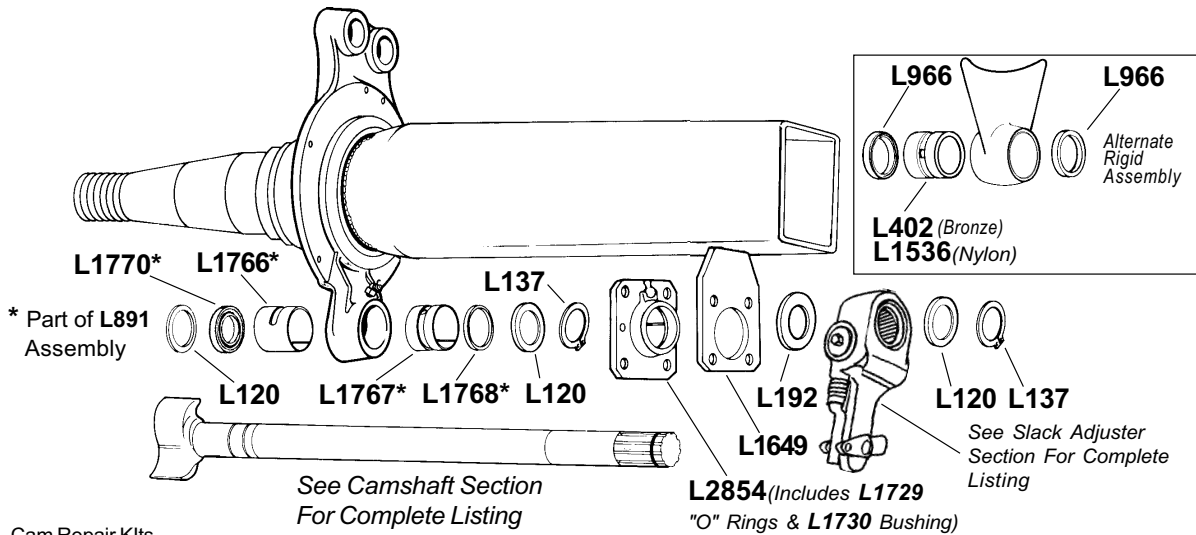
## 16-1/2" "P" SERIES TRAILER AXLE BRAKES FOR EARLY "R" AND "T" AXLES WITH 1-1/2" CAMS

### CAMSHAFT IDENTIFICATION

1-1/2"-10 Spline  
Standard S-head  
profile



### EARLY "R" SERIES 4" x 6" AXLE WITH 1-1/2" CAM



Cam Repair Kits

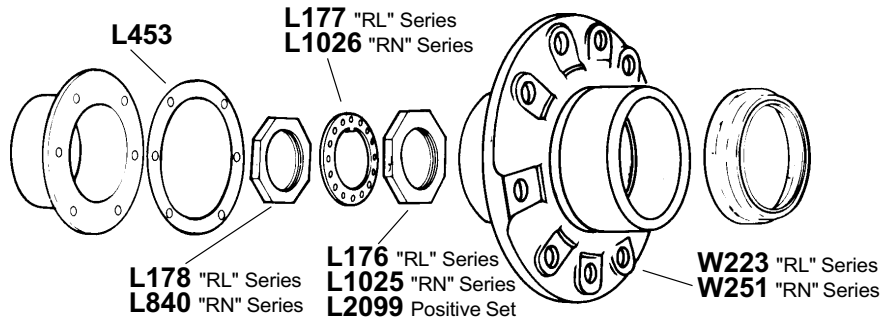
- K148 - Wheel End
- K149 - Wheel End
- K268 - Wheel End, includes L2854
- K368 - Axle, includes L2854



Heavy Duty - Late Version

- K333 - Wheel End, includes L402 Bronze Bushing, used in place of L1766 and L1767.

### WHEEL HUB & AXLE ASSEMBLY PARTS



H. D. Version

Schematic  
Diagram  
Charts

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ROCKWELL

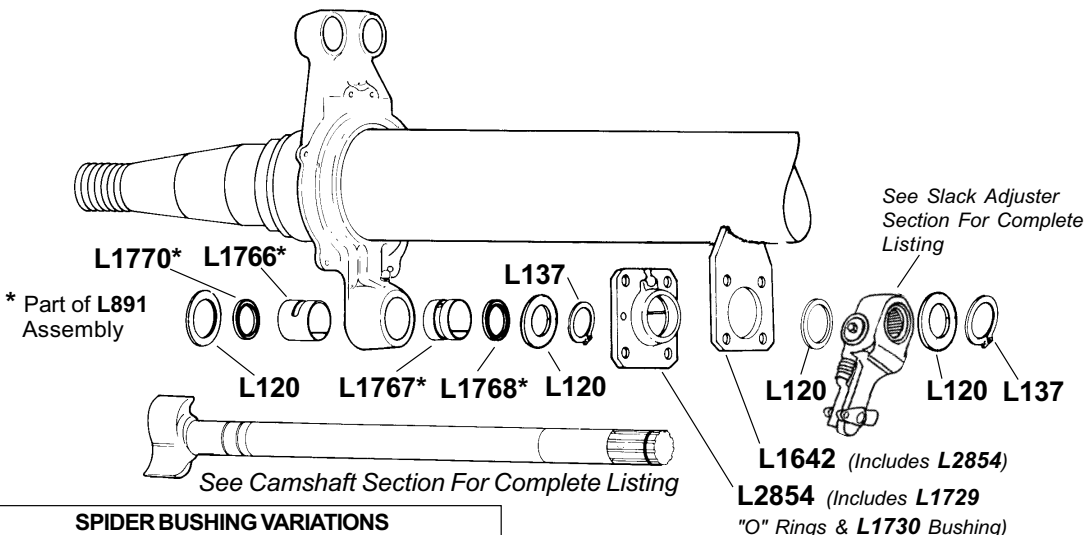
# ROCKWELL

## 16-1/2" "P" SERIES TRAILER AXLE BRAKES FOR EARLY R" AND "T" AXLES WITH 1-1/2" CAMS

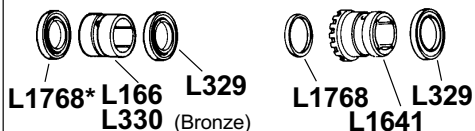
### EARLY "T" SERIES 5" ROUND AXLE WITH 1-1/2" CAM

Schematic Diagram Charts

4



#### SPIDER BUSHING VARIATIONS



#### Cam Repair Kits

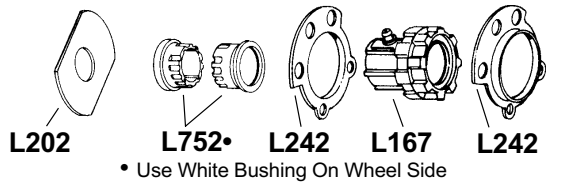
- K148 - Wheel End
- K149 - Wheel End
- K268 - Wheel End, includes L2854
- K368 - Axle, includes L2854



#### Heavy Duty - Late Version

- K333 - Wheel End, includes L402 Bronze Bushing, used in place of L1766 and L1767.

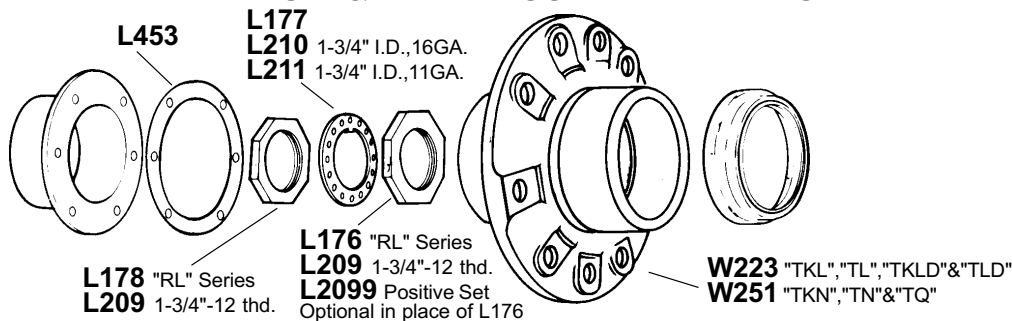
#### EARLY MODEL



#### Early models:

- K51 - Wheel End, Early Model 2 pc. L752 Spider Bushing
- K152 - Wheel End, 1 pc. "Green" L1641 Spider Bushing
- K150 - Wheel End, 1 pc. "White" L166 Spider Bushing

### WHEEL HUB & AXLE ASSEMBLY PARTS



# BRAKE REPAIR KITS

## ROCKWELL

### STANDARD DUTY

#### K44A

##### For Rockwell Early Model 16-1/2" "P" Brake

Contains:

- 4 Pcs. - L105 Neoprene Seal
- 2 Pcs. - L149 Roller
- 2 Pcs. - L151 Roller Retainer
- 2 Pcs. - L152 Anchor Pin
- 1 Pc. - L179 Return Spring
- 2 Pcs. - L324 Return Spring Pin
- 4 Pcs. - L397 Lock Ring

Contains parts to service one wheel.



Schematic  
Diagram  
Charts

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#### K59

##### For Rockwell Early Model 16-1/2" "P" Brake

Contains:

- 4 Pcs. - L109 Anchor Pin Felt
- 4 Pcs. - L110 Felt Retainer
- 2 Pcs. - L149 Roller
- 2 Pcs. - L151 Roller Retainer
- 2 Pcs. - L152 Anchor Pin
- 1 Pc. - L179 Return Spring
- 2 Pcs. - L324 Return Spring Pin
- 4 Pcs. - L397 Anchor Pin Lock Ring

Contains parts to service one wheel.



#### K60

##### For Rockwell Late Model 16-1/2" "P" Brake

Contains:

- 2 Pcs. - L149 Roller
- 2 Pcs. - L151 Roller Retainer
- 1 Pc. - L179 Shoe Return Spring
- 2 Pcs. - L324 Return Spring Pin
- 4 Pcs. - L397 Anchor Pin Lock Ring
- 2 Pcs. - L788 Anchor Pin
- 4 Pcs. - L889 Anchor Pin Washer

Contains parts to service one wheel.



ROCKWELL

# BRAKE REPAIR KITS

## ROCKWELL HEAVY DUTY

### K44B

#### For Rockwell Early Model 16-1/2" "P" Brake

Contains:

- 4 Pcs. - L105 Neoprene Seal
- 2 Pcs. - L149 Roller
- 2 Pcs. - L151 Roller Retainer
- 2 Pcs. - L152 Anchor Pin
- 2 Pcs. - L324 Return Spring Pin
- 4 Pcs. - L397 Anchor Pin Lock Ring
- 1 Pc. - L827 Shoe Return Spring

Contains parts to service one wheel.



Schematic  
Diagram  
Charts

4

### K44

#### For Rockwell Early Model 16-1/2" "P" Brake

Contains:

- 4 Pcs. - L105 Neoprene Seal
- 4 Pcs. - L111 Anchor Pin Lock
- 2 Pcs. - L149 Roller
- 2 Pcs. - L151 Roller Retainer
- 2 Pcs. - L152 Anchor Pin
- 2 Pcs. - L168 Anchor Pin Lock Screw
- 2 Pcs. - L324 Return Spring Pin
- 4 Pcs. - L397 Lock Ring
- 1 Pc. - L827 Return Spring

Contains parts to service one wheel.



ROCKWELL

### K115

#### For Rockwell Early Model 16-1/2" "P" Brake

Kit Contains:

- 4 Pcs. - L105 Neoprene Seal
- 2 Pcs. - L151 Roller Retainer
- 2 Pcs. - L152 Anchor Pin
- 2 Pcs. - L168 Anchor Pin Lock Screw
- 2 Pcs. - L324 Return Spring Pin
- 4 Pcs. - L397 Lock Ring
- 1 Pc. - L827 Return Spring
- 2 Pcs. - L1533 Knurled Roller

Contains parts to service one wheel.



 H. D. Version

# BRAKE REPAIR KITS

## ROCKWELL HEAVY DUTY

### **K45** For Rockwell Late Model 16-1/2" "P" Brake

Contains:

- |        |   |      |                           |
|--------|---|------|---------------------------|
| 2 Pcs. | - | L149 | Roller                    |
| 2 Pcs. | - | L151 | Roller Retainer           |
| 2 Pcs. | - | L324 | Return Spring Pin         |
| 4 Pcs. | - | L397 | Anchor Pin Lock Ring      |
| 2 Pcs. | - | L788 | Anchor Pin                |
| 1 Pc.  | - | L827 | Shoe Return Spring        |
| 2 Pcs. | - | L888 | Anchor Pin Spider Bushing |
| 4 Pcs. | - | L889 | Anchor Pin Washer         |

Contains parts to service one wheel end.



Schematic  
Diagram  
Charts

**4**

### **K109** For Rockwell Late Model 16-1/2" "P" Brake

Contains:

- |        |   |      |                      |
|--------|---|------|----------------------|
| 2 Pcs. | - | L149 | Roller               |
| 2 Pcs. | - | L151 | Roller Retainer      |
| 2 Pcs. | - | L324 | Return Spring Pin    |
| 4 Pcs. | - | L397 | Anchor Pin Lock Ring |
| 2 Pcs. | - | L788 | Anchor Pin           |
| 1 Pc.  | - | L827 | Return Spring        |
| 4 Pcs. | - | L889 | Anchor Pin Washer    |

Contains parts to service one wheel.



### **K116** For Rockwell Late Model 16-1/2" "P" Brake

Contains:

- |        |   |       |                           |
|--------|---|-------|---------------------------|
| 2 Pcs. | - | L151  | Roller Retainer           |
| 2 Pcs. | - | L324  | Return Spring Pin         |
| 4 Pcs. | - | L397  | Anchor Pin Lock Ring      |
| 2 Pcs. | - | L788  | Anchor Pin                |
| 1 Pc.  | - | L827  | Shoe Return Spring        |
| 2 Pcs. | - | L888  | Anchor Pin Spider Bushing |
| 4 Pcs. | - | L889  | Anchor Pin Washer         |
| 2 Pcs. | - | L1533 | Knurled Roller            |

Contains parts to service one wheel.



**R  
O  
C  
K  
W  
E  
L  
L**

# CAM REPAIR KITS

ROCKWELL

LATE VERSIONS

## K148

For 16-1/2" "R" and "T" Series with 1-1/2" Cam and "Square" Cam Support Assembly

Contains:

- 4 Pcs. - L120 Spacer Washer
- 2 Pcs. - L137 Lock Ring
- 2 Pcs. - L1729 "O" Ring
- 1 Pc. - L1730 Cam Bushing
- 1 Pc. - L1767 Bushing
- 1 Pc. - L1768 Seal
- 1 Pc. - L1770 Seal

Contains parts to service one wheel.



## K149

For 16-1/2" "R" and "T" Series with 1-1/2" Cam and "Square" Cam Support Assembly

Contains:

- 4 Pcs. - L120 Spacer Washer
- 2 Pcs. - L137 Lock Ring
- 2 Pcs. - L1729 "O" Ring
- 1 Pc. - L1730 Cam Bushing
- 1 Pc. - L1766 Outer Bushing
- 1 Pc. - L1767 Inner Bushing
- 1 Pc. - L1768 Seal
- 1 Pc. - L1770 Seal

Contains parts to service one wheel.



## K333

Heavy Duty Kit for 16-1/2" "R" and "T" Series with 1-1/2" Cam and "Square" Cam Support Assembly

Contents:

- 4 Pcs. - L120 Spacer Washer
- 2 Pcs. - L137 Lock Ring
- 1 Pc. - L402 Bronze Spider Bushing
- 2 Pcs. - L1768 Quad Seal
- 2 Pcs. - L1770 Seal
- 1 Pc. - L2854 Cam Bracket Assembly

Contains parts to service one wheel.



## K368

Axle Kit for 16-1/2" "R" and "T" Series with 1-1/2" Cam and "Square" Cam Support Assembly

Contents:

- 8 Pcs. - L120 Spacer Washer
- 4 Pcs. - L137 Lock Ring
- 2 Pcs. - L1766 Outer Bushing
- 2 Pcs. - L1767 Inner Bushing
- 2 Pcs. - L1768 Quad Seal
- 2 Pcs. - L1770 Seal
- 2 Pcs. - L2854 Cam Bracket Assembly

Use **K268** to service One Wheel End



Schematic  
Diagram  
Charts

4

ROCKWELL

 H. D. Version

# CAM REPAIR KITS

## ROCKWELL

### EARLY VERSIONS

#### K51

**For 16-1/2" TK, TKD and TKL Series with 1-1/2" Cam and 2 Piece L752 Spider Bushing**

Contains:

- 2 Pcs. - L137 Lock Ring
- 1 Pc. - L167 Support Bushing
- 1 Pc. - L192 Spacer Washer
- 2 Pcs. - L193 Spacer Washer
- 1 Pc. - L202 "D" Washer
- 1 Pr. - L752 Spider Bushing

Contains parts to service one wheel.



#### K152

**For 16-1/2" "T" Series Using 1-Piece Green Spider Bushing with L1307 Cam Support Bushing**

Contains:

- 4 Pcs. - L120 Spacer Washer
- 2 Pcs. - L137 Lock Ring
- 1 Pc. - L329 Neoprene Seal
- 1 Pc. - L1641 Cam Bushing
- 2 Pcs. - L1729 "O" Ring
- 1 Pc. - L1730 Cam Bushing

Contains parts to service one wheel.



#### K150

**For 16-1/2" "T" Series Using 1-Piece Spider Bushing**

Contains:

- 2 Pcs. - L137 Lock Ring
- 1 Pc. - L192 Spacer Washer
- 3 Pcs. - L193 Spacer Washer
- 2 Pcs. - L329 Neoprene Seal
- 1 Pc. - L1536 Spider Bushing
- 2 Pcs. - L1729 "O" Ring
- 1 Pc. - L1730 Cam Bushing

Contains parts to service one wheel.



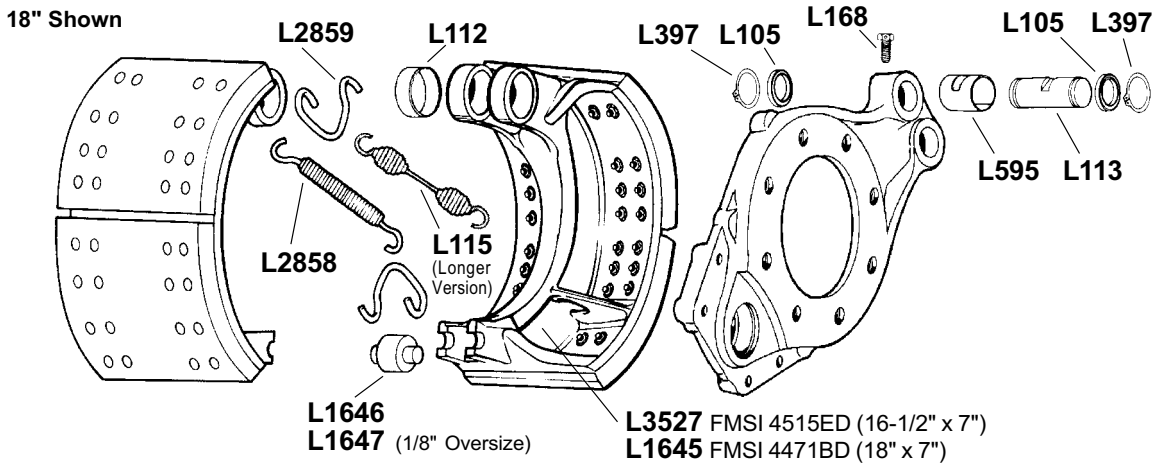
Schematic  
Diagram  
Charts

4

ROCKWELL

LELAND REPLACEMENT PARTS FOR  
**ROCKWELL**  
 16-1/2" & 18" X 7" CAST SELF-CONTAINED  
 TRACTOR BRAKE

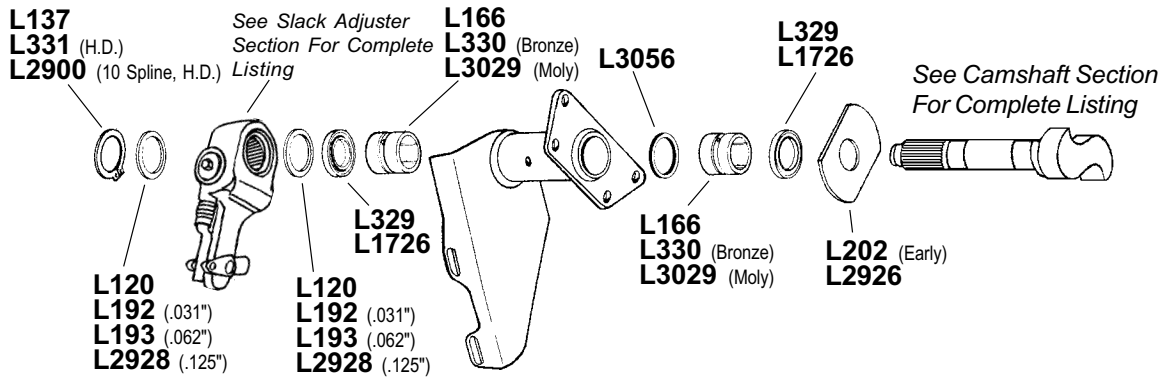
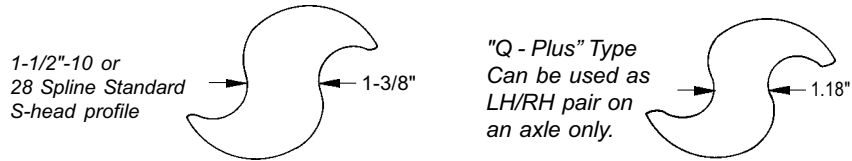
Schematic  
 Diagram  
 Charts  
**4**



Brake Repair Kits: **K274** - w/ "short" L2858 return spring  
**K281** - w/ "long" L115 return spring

**TIP** L1645 Brake Shoe uses the L2858 Return Spring and the L2859 Return Spring Retainer Clips contained in K274.

**ROCKWELL CAMSHAFT IDENTIFICATION**



Cam Repair Kits:

Nylon Bushings: (Earlier Models)  
**K48** - Wheel End, Drive or Steer  
**K81** - Axle, Drive or Steer



Heavy Duty Bronze Bushings (Truck)  
**K351** - Axle, Drive or Steer  
**K365** - Wheel End, Drive or Steer

# BRAKE REPAIR KITS

## ROCKWELL

### K274

#### For Rockwell 16-1/2" or 18" x 7" Tractor Brake Using Short Return Spring

Contains:

- 4 Pcs. - L105 Seal
- 4 Pcs. - L112 Anchor Pin Bushing
- 2 Pcs. - L113 Anchor Pin
- 2 Pcs. - L168 Anchor Pin Lock Screw
- 4 Pcs. - L397 Lock Ring
- 2 Pcs. - L595 Spider Bushing
- 2 Pcs. - L1646 Roller
- 1 Pc. - L2858 Return Spring
- 2 Pcs. - L2859 Attachment Clip Spring



Contains parts to service one wheel.

### K281

#### For Rockwell 18" x 7" Late-Style Cast Shoe Using Longer Return Spring

Contains:

- 4 Pcs. - L105 Neoprene Seal
- 4 Pcs. - L112 Anchor Pin Bushing
- 2 Pcs. - L113 Anchor Pin
- 1 Pc. - L115 Return Spring
- 2 Pcs. - L168 Anchor Pin Lock Screw
- 4 Pcs. - L397 Lock Ring
- 2 Pcs. - L595 Spider Bushing
- 2 Pcs. - L1646 Roller



Contains parts to service one wheel.

Schematic  
Diagram  
Charts

4

## CAM REPAIR KITS

### K81

#### Axle Cam Kit For Rockwell Drive and Steer Axle Brakes 1-1/2"-10 or 28 Spline Cams

Contains:

- 2 Pcs. - L137 Lock Ring
- 2 Pcs. - L192 Spacer Washer
- 2 Pcs. - L193 Spacer Washer
- 4 Pcs. - L329 Neoprene Seal
- 2 Pcs. - L331 Lock Ring
- 2 Pcs. - L889 Spacer Washer
- 2 Pcs. - L2900 Snap Ring
- 2 Pcs. - L2926 Washer
- 2 Pcs. - L2927 Washer
- 4 Pcs. - L3029 Bushing



Contains parts to service one axle.

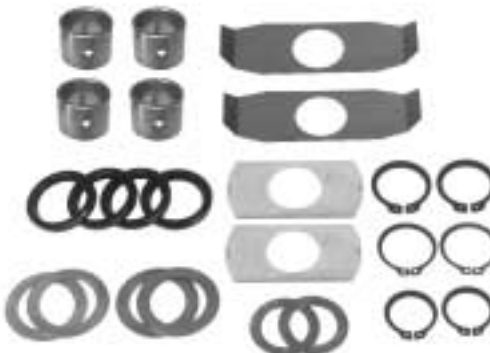
For one wheel end kit, use **K48**.

### K351

#### Axle Cam Kit For Rockwell Drive and Steer Axle Brakes 1-1/2"-10 or 28 Spline Cams

Contents:

- 2 Pcs. - L137 Lock Ring
- 2 Pcs. - L192 Spacer Washer
- 2 Pcs. - L193 Spacer Washer
- 4 Pcs. - L329 Cam Seal
- 4 Pcs. - L330 Bronze Bushing
- 2 Pcs. - L331 H.D. Lock Ring
- 2 Pcs. - L889 Spline Washer
- 2 Pcs. - L2900 H.D. Lock Ring
- 2 Pcs. - L2926 Cam Head Washer
- 2 Pcs. - L2927 Cam Head Washer



Use **K365** to service One Wheel End

ROCKWELL