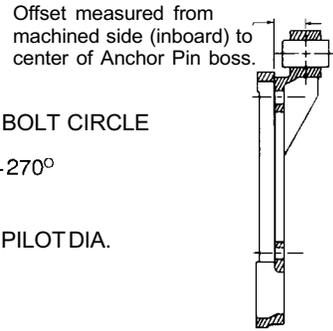
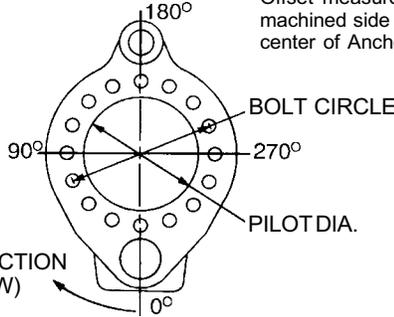


BRAKE SPIDERS

EATON DRIVE AXLE SPIDERS



Clocking Position measured clockwise from center of cam bore to center of 1st hole. Viewed from outboard side. See drawing. (Do not confuse with Rockwell method which is measured counterclockwise.)



CLOCKING DIRECTION (OUTBOARD VIEW)

Part No.	Casting No.	Pilot Dia.	Bolt Circle	Mounting Hole Clocking Sequence in Degrees	(No.) & Size of Holes	Offset	Replaces
L1635	68400	5-3/4"	7-3/4"	0°, 22.5°, 45°, 67.5°, 90°, 112.5°, 135°, 157.5°, 180°, 202.5°, 225°, 247.5°, 270°, 292.5°, 315°, 337.5°	(16)-19/32"	1.313"	Eaton 68436
L1638	70540	5-7/8"	7-1/8"	30°, 90°, 150°, 210°, 270°, 330°	(4) 19/32" (2) 9/16"-12	.906"	Eaton 74706
L1636	79900	6-3/4"	8-1/4"	0°, 22.5°, 45°, 67.5°, 90°, 112.5°, 135°, 157.5°, 180°, 202.5°, 225°, 247.5°, 270°, 292.5°, 315°, 337.5°	(16) 21/32"	1.750"	Eaton 79935
L1637	74700	7-3/16"	8-1/8"	18°, 54°, 90°, 126°, 162°, 198°, 234°, 270°, 306°, 342°	(8) 17/32" (2) 1/2"-13	1.750"	Eaton 74704
L1639	72100	7-3/16"	8-1/8"	15°, 50°, 88°, 127°, 165°, 200°, 235°, 270°, 305°, 340°	(10) 17/32"	2.812"	Eaton 1000495
L1640	72100	7-3/16"	8-1/8"	20°, 55°, 90°, 125°, 160°, 195°, 233°, 272°, 310°, 345°	(10) 17/32"	2.812"	Eaton 1000496

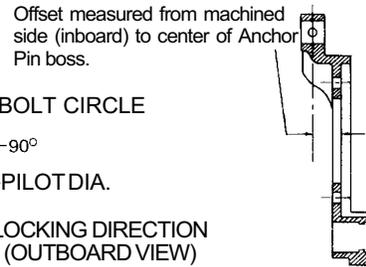
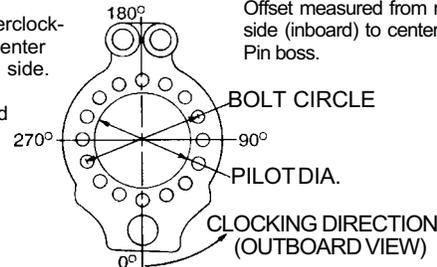
ROCKWELL DRIVE AXLE SPIDERS

Spiders

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Clocking Position measured counterclockwise from center of cam bore to center of 1st hole. Viewed from outboard side. See drawing. (Do not confuse with Eaton method which is measured clockwise.)



CLOCKING DIRECTION (OUTBOARD VIEW)

Part No.	Casting No.	Pilot Dia.	Bolt Circle	Mounting Hole Clocking Sequence in Degrees	(No.) & Size of Holes.	Offset	Replaces
L1665	4211-G-2269 4211-Z-1196	5-3/4"	7-3/4"	0°, 22.5°, 45°, 67.5°, 90°, 112.5°, 135°, 157.5°, 180°, 202.5°, 225°, 247.5°, 270°, 292.5°, 315°, 337.5°	(16) 19/32"	1.312"	Rockwell A4-3211-A-1197 A-3211-N-1210 A-3711-V-1270 Leland L1663
L1666	4211-L-2508	6-5/16"	8-3/8"	8.5°, 53.5°, 98.5°, 143.5°, 188.5°, 233.5°, 278.5°, 323.5°	(8) 21/32"	2.500"	Rockwell A6-3211-D-2838 A-3211-G-4167
L1668	4211-L-2508	6-5/16"	8-3/8"	36.5°, 81.5°, 126.5°, 171.5°, 216.5°, 261.5°, 306.5°, 351.5°	(8) 21/32"	2.500"	Rockwell A6-3211-E-2839 A-3211-H-4168
L1664	4211-Z-3406	6-3/4"	8-1/4"	0°, 22.5°, 45°, 67.5°, 90°, 112.5°, 135°, 157.5°, 180°, 202.5°, 225°, 247.5°, 270°, 292.5°, 315°, 337.5°	(16) 21/32"	1.750"	Rockwell A3-3211-M-2847 A-3211-X-3820 A-3211-P-3448



Note: 16 hole versions replaces 8 hole versions listed under "Replaces" column.

BRAKE SPIDERS

	Leland No.	Replaces	Note
 <p>5-5/8" Pilot Dia. 6-5/8" Bolt Circle</p>	L438	Dana M12WS131-X SFA 200999-002 SFA 200999-012	Used on 12-1/4" Brakes Bolt Holes 17/32" diameter, Cam Bushing Installed. Cast ID 200101.
 <p>5-5/8" Pilot Dia. 6-5/8" Bolt Circle</p>	L517	Brown & Clark 10946 Dana M16WS135-X Eaton B-1593-1 Rockwell A-3211-A-883 SFA 200999-010 Trailmobile 7-A1-3	Adjustable Spider with 17/32" bolt holes for 16-1/2" Brake. Features an adjustable anchor pin housing which provides for: A. Ease of anchor pin removal and replacement. B. Positive locking of anchor pin. C. Allows Adjustment for wear instead of expensive brake spider replacement. D. Prevents bending of spider caused by driving out frozen anchor pins. E. Nylon Bushing Installed.

SPIDER FLANGES

SPIDER FLANGE

For Tubular Axles
Also Replaces 8 Hole Flanges



Leland No.	Replaces	I.D. Bore	Pilot Dia.	Bolt Circle	No. Holes	Holes Dia.	Size and Type Brake
L441	Dana M16TF112 Eaton B-1323-1 SFA 102102-002	5"	5-5/8"	6-5/8"	16	1/2"	16-1/2" Diameter Brake 5" Diameter Axle

BRAKE FLANGE ATTACHING PARTS

BOLT, LOCK WASHER & NUT

For Brake Spider Mounting

L219

For original equipment with 1/2" Spider Holes
1-5/8" length under head



L519

For original equipment with 17/32" Spider Holes
Used with L517 Spider
1-13/16" length under head



BRAKE SPIDER LOCK & SET SCREWS

BRAKE ANCHOR PIN LOCK SCREW

L168

Replaces:
Eaton B-1213
Fruehauf 219297 & 254253
Rockwell S-265-D
SFA 400103
Trailmobile 7-78-1



BRAKE SHOE ROLLER PIN SET SCREW

L145

Replaces:
Eaton B-1217
Fruehauf 102570
GM 192451
Rockwell 1199-B-626
SFA 400101
Trailmobile 7-34-2



ABS SENSOR BRACKETS FOR HENDRICKSON INTRAAX BRAKE SYSTEMS

L3227

Replaces:
Hendrickson S-21070
3" Lg. x 3-1/16" W. O/A
For HP Spindle Type
Includes 2 bolts, nuts and washers for mounting to brake spider.



L3226

Replaces:
Hendrickson S-21064
3-7/8" Lg. x 3-3/32" W. O/A.
For HN Spindle Type
Includes 2 bolts, nuts and washers for mounting to brake spider.



ANCHOR PINS

ANCHOR PINS ARE LISTED BY O.D. THEN LENGTH

	Leland No.	OD	Length	Replaces	Note
	L2368	1"	2-1/4"	Dana M10WJ151 SFA 203113-001	For Std. Forge 12-1/4" "U" Series & Dana 12-1/4" FC Brakes
	L1756	1"	2-9/16"	Rockwell 1259-C-263	For Rockwell "T" Series w/16-1/4" backing plate-mounted brakes. Concentric Type
	L1368	1"	2-3/4"	Dana M10WJ108 Dexter 056-011-00 SFA 203108	Used on Dana & Std. Forge 12-1/4" Brakes with Pressed Steel Shoes
	L728	1"	6-3/16"	Dana 12054 Dana M10HP103 SFA 203105-003 SFA UB-2253-3	Concentric Type Used on Dana & Std. Forge 12-1/4" Brakes with Cast Shoes
	L1277	1"	6"	Dana M10WJ117 SFA 203110	Used on Dana & Std. Forge 12-1/4" Brakes to convert from Cast to Pressed Steel Shoe.
	L445 (Disc.)	1"	6-7/16"	SFA UB-3003	Eccentric Type Used on Std. Forge 12-1/4" Brakes.
	L2996	1-1/8"	2-1/4"	Bendix 2258199	Bendix Brazil 16-1/2" x 7 (Ford rear) Use w/L2992 Shoe. Mounting Ears each have one flat edge.
	L1416	1-1/4"	2-7/32"	Dana M10WJ105 Rockwell 1259-N-274	Used on Rockwell 16-1/2" "Q" Series Brake. 1" ear diameter.
	L2952	1-1/4"	2-11/32"	Rockwell 1259-V-308	Use with L2951 Brake Shoe

Anchor Pins

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ANCHOR PINS

ANCHOR PINS ARE LISTED BY O.D. THEN LENGTH

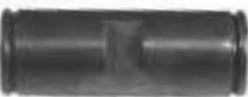
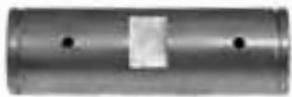
	Leland No.	OD	Length	Replaces	Note
	L1585	1-1/4"	2-1/4"	Dana M10WJ108 SFA 203112-001	Used on Std. Forge 16-1/2" "U" Series Brake
	L2364	1-1/4"	2-3/8"	Fruehauf ACF-003378-001	Used on Fruehauf New Design "XEM" Series Brakes. Do not Confuse with L1416
	L1496	1-1/4"	2-3/8"	Fruehauf ACF-009909-001	Used on Fruehauf Early Design "XEM" Series Brakes.
 Use with L239 Pin & L594 Bushing	L238	1-1/4"	2-1/2"	Fruehauf 578322 Rockwell 1259-N-170 Trailmobile 7-12-32	For Pressed Steel Shoes. For Bushed Pressed Steel Shoes Use L416
	L3032	1-1/4"	2-1/2"	Fruehauf ACF00266800X	For converting 16-1/2" Fruehauf XEM 3rd Design Brakes to Rockwell "Q" Series
	L1683 (Disc.) Use L788	1-1/4"	2-9/16"	Wagner FC-31983	For Wagner 15" Rear Brakes
	L2930	1-1/4"	2-11/16"	Rockwell 1259-X-1012	Used on Rockwell 15" x 4" Single Web "Q" Steering Axle Brake. Use L2946 Nut 3/4"-16 Washer.
	L3208	1-1/4"	2-11/16"	Eaton 811340, 809508	Used on 16-1/2"x7" Eaton ES-165-7M "Extended Svc" HD "P" Type Brake. Use w/L3207 Shoe.
	L1736	1-1/4"	2-3/4"	Rockwell 1259-B-262	Used on Rockwell "T" Series with 15" backing Plate Mounted Brakes

Anchor Pins

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ANCHOR PINS

ANCHOR PINS ARE LISTED BY O.D. THEN LENGTH

	Leland No.	OD	Length	Replaces	Note
	L788	1-1/4"	2-3/4"	Dana M10HP102 Rockwell 1259-J-218	Used on Late Model Axles with "Floating" Anchor Pin
	L152	1-1/4"	2-7/8"	Fruehauf 330673 GM 2295423 Navistar 126403 R1 Rockwell 1759-M-13 Trailmobile 7-12-28	Use Locking Screw L168
	L321	1-1/4"	2-7/8"	Same application as L152 Except has 1/2" Square Drive Hole for Easier Removal.	
	L130	1-1/4"	3-3/8"	Fruehauf 244848	
	L470	1-1/4"	3-7/16"	GM 2411895 Rockwell 1259-L-194	For GM Bus Models 5301, 5302, 5303 & 5304. Includes Lock Rings & Bolt
	L3023	1-1/4"	3-9/16"	Eaton 810316	Used with L3017 cast brake shoe
	L113	1-1/4"	3-3/4"	Eaton B-1223-1 Fruehauf 219162 Navistar 56104-R1 Rockwell 1259-L-90, 1259-R-252 SFA 203100-001 Trailmobile 7-12-1 Dana M10HP100	For Cash and Bushed Pressed Steel Shoes.
	L114	1-1/4"	3-3/4"	ACF Brill 559520 Eaton B-1223-2 Rockwell 1269-G-163 SFA 203100-002	Same as L113 Except Drilled for Lubrication
	L103	1-1/4"	4-3/8"	ACF Brill 285993 GM 2030115 White 819640	For Front Bus Brakes.

Anchor
Pins
8

ANCHOR PINS

ANCHOR PINS ARE LISTED BY O.D. THEN LENGTH

	Leland No.	OD	Length	Replaces	Note
	L182X	1-1/4"	5-13/16"	Mack 34QD127 & 34QD150	For Mack Trucks
	L182	1-1/4"	6-1/4"	Mack 34QD141	For Mack Trucks
	L2987	1-1/2"	2-1/4"	Bendix 2251254	Bendix Brazil 15"x4" (Ford front) Use w/L2982 Brake Shoe, one per brake assembly.
	L1209	1-1/2"	5-1/16"	Eaton B-1705	For Eaton 12-1/4" Single Anchor Pin Brakes. Use SA1201 Nut. 1" - 14 Thd.

Anchor Pins

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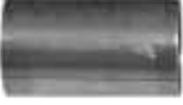
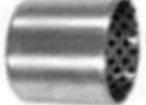
ANCHOR PIN PRESS

L1948

Remove Rusted Anchor Pins without Bending Spiders
Replaces: OTC 7081

ANCHOR PIN BUSHINGS

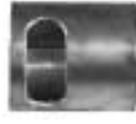
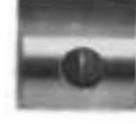
BUSHINGS ARE LISTED BY I.D. THEN O.D.

	Leland No.	ID	OD	Length	Replaces	Note
	L425	1"	1-1/16"	1-3/4"	Dana 12020 SFA 405100	Used on Cast Brake Shoes
	L1373	1"	1-1/8"	1-7/16"	Dana M10WJ183 SFA 405131	Used on Late Model 12-1/4" Brakes with Pressed Steel Shoes
	L2995	1-1/8"	1-1/4"	1-7/16"	Bendix 2258191	For Bendix Brazil 16-1/2" x 7" Rear Brakes on Ford Applications.
	L136	1-1/4"	1-3/8"	1/2"	Fruehauf 253396	Use with L130 Anchor Pin
	L112	1-1/4"	1-3/8"	45/64"	Dana M16HD102 Eaton B-1993-2 Fruehauf 219299 Navistar 56098RI Rockwell 1225-F-266 SFA 405101 Trailmobile 7-22-3	Used in Cast & Bushed Brake Shoes.
	L183	1-1/4"	1-3/8"	1-1/4"	Mack 80AX395	Graphite Impregnated Used with L182 Anchor Pin
	L3024	1-1/4"	1-7/16"	3/4"	Eaton 809068	ES-165-7H Severe Duty Cast Brake

Anchor
Pin
Bushings
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ANCHOR PINS BUSHINGS

BUSHINGS ARE LISTED BY I.D. THEN O.D.

	Leland No.	ID	OD	Length	Replaces	Note
	L888	1-1/4"	1-3/8"	1-29/64"	Rockwell 1225-B-496	Used with "Floating" Anchor Pins.
	L1498	1-1/4"	1-3/8"	1-29/64"	Dana M16HD101 Eaton 820184 Rockwell 1225-B-496	Stainless Steel Version of L888
	L594	1-1/4"	1-3/8"	1-15/32"	Fruehauf AXA-000068 GM 2434296 Rockwell 1225-A-443	Off Center Slot For LATE MODEL Fruehauf & Rockwell Axles
	L595	1-1/4"	1-3/8"	1-15/32"	Rockwell 1225-G-449	Slot in Center for Rockwell Axles
	L501 (Disc.)	1-1/4"	1-3/8"	2-7/32"	Mack 80AX358	Graphite Impregnated, Use with L182X Anchor Pin
	L147 (Disc.)	1-1/4"	1-1/2"	1-1/8"	Eaton 10505 GM 289321 Navistar (IH) 56837H Rockwell 15015	
	L566	1-1/4"	1-1/2"	1-15/32"	GM 2396539 Rockwell 1225-X-440	Used on GM Buses

Anchor
Pin
Bushings
8

LOCKS, FELTS, RETAINERS & SEALS

LOCK, ROLLER PIN L118 for 3/4" Dia.

.042" Thick
Replaces:
Fruehauf253395
SFA214102
Rockwell 1229-M-1105



LOCK, ANCHOR PIN L1370 for 1" Dia.

.042" Thick
Replaces:
SFA214107

LOCK, ANCHOR PIN L397 for 1 1/4" Dia.

.050" Thick
Same Applications as L111.
Can be used on all 1-1/4" Brake Shoe Anchor Pins with grooves.

LOCK, ANCHOR PIN L331 for 1-1/4" Dia.

.093" Thick
Replaces:
Mack 97AX19 and 97AX75
Rockwell 1229-D-2942
Used with L182 or L182X Anchor Pins.

LOCK, ANCHOR PIN L1670 for 1-3/8" Dia.

.050" Thick
Replaces:
Wagner FC-031926
Used on Wagner Front Brakes.



LOCK, ANCHOR PIN L111 for 1-1/4" Dia.

.080" Thick
Replaces:
Eaton B-1214
Fruehauf 219156
GM 652443 & 2423359
Rockwell 1218-M-13
SFA214100
Trailmobile 7-33-3



LOCK, ANCHOR PIN L455

.093" Thick
Replaces:
SFA403104
Used with L728 Anchor Pin.

FOR ROCKWELL "T" SERIES L1755

7/8" ID
.093" Thick
Replaces:
Rockwell 1229-M-221
Use with L1756 Anchor Pin

Anchor
Pin
Locks
8



ANCHOR PIN ADAPTER L336

3/4" Lg. x 5/8"—18 Thread
Replaces:
Mack 49AX50
Use with L182 pin



LOCK, ANCHOR PIN L239

5/16" OD x 1-3/4" Lg.
Replaces:
Eaton B-1552
Fruehauf 578323
Rockwell 1199-E-1695
Trailmobile
Use with L238 Anchor Pin



LOCK, ANCHOR PIN L3025

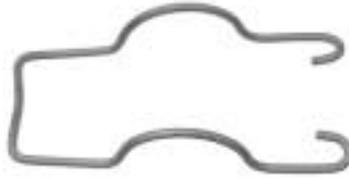
5/8" Lg. —5/16"-24 Thread
Replaces:
Eaton 810392

LOCKS, FELTS, RETAINERS & SEALS

**RETAINER FOR STD.
FORGE 16-1/2" "U" BRAKE
L1586**

6-5/8" Lg. x 3/16" Wire Dia.

Replaces:
SFA208110



**WASHERS, ANCHOR PIN
L889**

1-17/64" ID x 1-7/8" OD x
1/16" Thk.

Replaces:
Rockwell 1229-Q-433
1229-B-1848

**RETAINER FOR STD.
FORGE 12-1/4" "U" BRAKE
L2367**

5" Lg. x 3/16" Wire Dia.

Replaces:
SFA208111



L1369

1" ID x 1-1/2" OD x
1/32" Thk.

Replaces:
SFA403147



Anchor
Pin
Locks

8

**NUT, ANCHOR PIN FOR
ROCKWELL "T" SERIES
L1752**

3/4"—16

Replaces:
Rockwell N-112-1



**ANCHOR PIN WASHER
FOR ROCKWELL "T"
SERIES
L1751**

3/4" ID x 1-3/8" OD x
1/8" Thk.

Replaces:
Rockwell 1229-V-1556



**ANCHOR PIN WASHER
FOR ROCKWELL "Q"
SERIES 15" x 4" BRAKE
L2933**

25/32" ID x 1-1/4" OD x
1/8" Thk.

Replaces:
Rockwell 1229-V-1504



**ANCHOR PIN LOCK FOR
ROCKWELL P & T SERIES
L1758**

For 1" Dia. Pin

Replaces:
Rockwell 1229-B-2498



W110



W451

**ANCHOR PIN LOCK NUT
FOR WAGNER 15"
FRONT BRAKES**

W110 (Discontinued)

Use **W451**
3/4"-16 Thd.



**ANCHOR PIN LOCK NUT
FOR ROCKWELL "Q"
SERIES 15" X 4" BRAKE
L2946**

3/4" -16 Thd., 1-1/8" HEX,
21/32" Ht.

Replaces:
Rockwell NL-112-1

LOCKS, FELTS, RETAINERS & SEALS



**JAM NUT,
ANCHOR PIN
L509**
3/4" - 16, 1-1/8" x
27/64"
Replaces:
Finished Hex Nut
SFA402101
Used with L1277



**LINKS,
ANCHOR PIN
L1278**
1" Dia. Holes
Replaces:
SFA999197
Use with L1277

L1284
.875 Dia. Holes
Replaces:
SFA999100
**Use with L445
and L728**



**LOCK WASHER,
ANCHOR PIN
L1287**
3/4" ID x 1-1/4" OD x
3/16" Thick
Replaces:
SFA403103
Used with L1277



**ANCHOR PIN WEAR PLATE
FOR ROCKWELL "Q"
SERIES 15" X 4" BRAKE
L2934**
15/16" Dia. Holes, 4" Lg. x
1-3/4" W.
Replaces:
Rockwell2205-P-1004



**FELTS, ANCHOR PIN
L109**
Replaces:
EatonX-6-562
Fruehauf219295
GM5239215
Mack102-SM-11
Rockwell5-X-180, 5-X-640
SFA409100
Trailmobile7-25-2
Used with L110

L333
Replaces:
Mack41AX167
**Used with L334
Used with L182 or
L182X Anchor Pins**

Locks,
Retainers
& Seals

8



**RETAINERS, ANCHOR PIN FELT
L110**
1-1/4" ID x 1-23/32" OD
x 1/8" HGT
Zinc Plated
Replaces:
EatonB-1211
Fruehauf219296
GM5239216
Mack342-SQ-26
Rockwell1205-K-193
SFA403101
Trailmobile7-18-1
Used with L109

L334
1-1/4" ID x
1-23/32" OD x
1/4" HGT
Zinc Plate
Replaces:
Mack35AX697
**Used with L333
Used with L182 or
L182X Anchor Pins**



**ANCHOR PIN SEAL
L105**
1-1/4" ID x 1-11/16" OD
Replaces:
L110Retainer
Used on Popular Axles