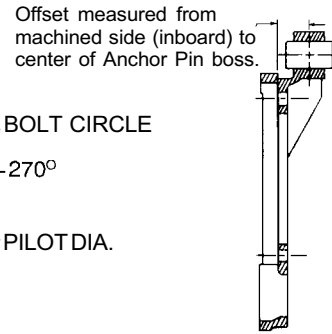
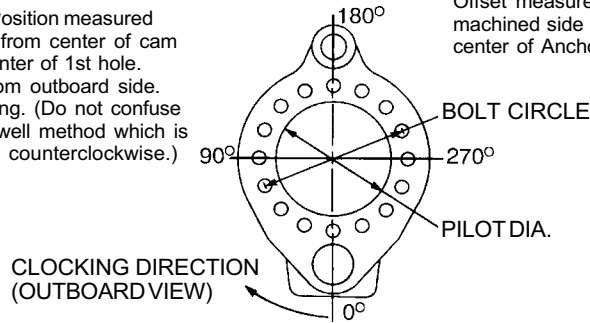


BRAKE SPIDERS

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.)



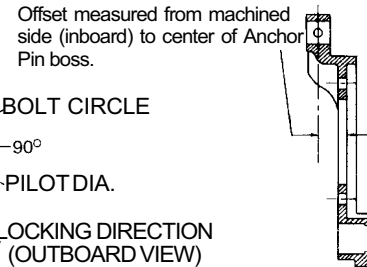
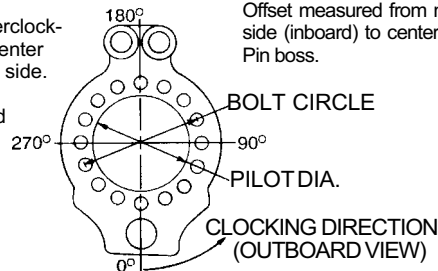
| Part No. | Casting No. | Pilot Dia. | Bolt Circle | Mounting Hole Clocking Sequence in Degrees | (No.) & Size of Holes | Offset | Replaces |
|--------------|-------------|------------|-------------|---|----------------------------|--------|---------------|
| L1635 | 68400 | 5-3/4" | 7-3/4" | 0°,22.5°,45°,67.5°,90°,112.5°,135°,157.5°,180°,202.5°,225°,247.5°,270°,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 |

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.)





| 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. |

Spiders

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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

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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
8

ANCHOR PINS BUSHINGS

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

Anchor
Pin
Bushings
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| | 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 |

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

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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:
Rockwell 2205-P-1004



**FELTS, ANCHOR PIN
L109**

Replaces:
Eaton X-6-562
Fruehauf 219295
GM 5239215
Mack 102-SM-11
Rockwell 5-X-180, 5-X-640
SFA409100
Trailmobile 7-25-2
Used with L110

L333

Replaces:
Mack 41AX167
**Used with L334
Used with L182 or
L182X Anchor Pins**

Locks,
Retainers
& Seals

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**RETAINERS, ANCHOR PIN FELT
L110**

1-1/4" ID x 1-23/32" OD
x 1/8" HGT
Zinc Plated

Replaces:
Eaton B-1211
Fruehauf 219296
GM 5239216
Mack 342-SQ-26
Rockwell 1205-K-193
SFA403101
Trailmobile 7-18-1
Used with L109

L334

1-1/4" ID x
1-23/32" OD x
1/4" HGT

Zinc Plate
Replaces:
Mack 35AX697
**Used with L333
Used with L182 or
L182X Anchor Pins**



**ANCHOR PIN SEAL
L105**

1-1/4" ID x 1-11/16" OD

Replaces:
L110 Retainer
Used on Popular Axles