Overview

This publication provides identification information for Meritor, Meritor WABCO and Gabriel products. Product pictures and drawings, identification tag locations and model nomenclatures are provided.

How to Obtain Maintenance and Service Information

On the Web
Visit the DriveTrain Plus™ by ArvinMeritor Tech Library at drivetrainplus.com to easily access product and service information. The Library also offers an interactive and printable Literature Order Form.

ArvinMeritor’s Customer Service Center
Call ArvinMeritor’s Customer Service Center at 800-535-5560.

Technical Electronic Library on CD
The DriveTrain Plus™ by ArvinMeritor Technical Electronic Library on CD contains product and service information for most Meritor and Meritor WABCO products. The cost is $20. Specify TP-9853.
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  Model Nomenclature
  Model Nomenclature

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  Model Nomenclature

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  Identification
  Model Nomenclature
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  Identification
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  Identification
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  Model Nomenclature

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  Sensor with Molded Socket
  Pneumatic ABS for Trucks, Tractors and Buses
  Identification

35 ABS Valve Package — Rear Axle
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  ABS Valve Package — Front Axle
  ABS Modulator Valve

36 Automatic Traction Control Valve
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  Identification

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  Sensor with Molded Socket
  In-Line Filter Valve
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45 Identification
  Modulator Assembly
  Sensor with Molded Socket
  Pneumatic ABS for Trucks, Tractors and Buses
  Identification

46 ABS Valve Package — Rear Axle
  ABS/ATC Valve Package — Rear Axle
  ABS Valve Package — Front Axle
  ABS Modulator Valve

47 Automatic Traction Control Valve
  Straight Sensor
  Right Angle (90°) Sensor
  Air Dryers
  Identification

48 Air Compressors

49 Air Brake System Valves

50 Single or Dual Circuit Foot Valve and Pedal
  Hand-Operated Valves

51 Leveling Valves
Automatic Slack Adjusters

Identification

The part number is located on the side of the slack adjuster.

Meritor uses either black, red, yellow, green or blue to color-code an automatic slack adjuster’s internal piston actuator piston according to brake type and air chamber size.

Meritor uses a mylar tag on the body of the current-design slack adjuster to identify the color of the internal actuator piston. A color-coded tie wrap was used on previous-design slack adjusters.
1 Brakes

Four-Piston Quadraulic™ Disc Brake Caliper

An assembly number is located on the side of the four-piston Quadraulic™ disc brake caliper.
**Cam Brakes**

**Identification**

A model number tag for the brake assembly is located on the camshaft tube. An example of a part number for a 16.5 Q Plus™ brake is QP1 1657 1234X.

For bus and coach, the brakes are identified by a three-letter code on the axle identification plate.

In addition to the model number tag on the cam tube, a brake shoe label is attached to the brake shoe web. This label provides information on brake type, lining material and service parts replacement number.

The brake shoe lining also contains identification. The information that exists on the edge code of the lining is listed in the following order:

- Meritor stamped logo
- Lining mix designation
- Friction code
- Friction Material Standards Institute (FMSI) number, four to eight spaces
- Block type
- Meritor part number, last four digits
- Word drawing engineering change letter
- Julian date, four or five characters

**Identifying Q Plus™ LX500 and MX500 Brakes**

**NOTE:** Do not remove the identification tag from the camshaft bracket during the extended maintenance period.

You can identify Q Plus™ LX500 and MX500 cam brakes by checking the identification tags affixed to the brake.

1. A brake shoe tag identifies the brake as Q Plus™.
2. An additional identification tag imprinted with “SEE MERITOR MAINTENANCE MANUAL MM-96173 FOR LUBE INFO.” which is affixed to the brake chamber bracket over the top of the plugged grease hole, identifies the brake as a Q Plus™ LX500 or MX500 brake.
3. Q Plus™ LX500 and MX500 brakes and Meritor automatic slack adjusters do not have grease fittings.

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**MERITOR SERVICE PARTS, SHOE AND LINING ASSEMBLY, PART NUMBER**

<table>
<thead>
<tr>
<th>Meritor Brand Designation (MA = Meritor R = Rockwell)</th>
<th>Replacement Material Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>S MA 212 4707 QP</td>
<td>S MA 212 4707 QP</td>
</tr>
</tbody>
</table>

**EXAMPLE:** MERITOR MA212 FF 4707 ANC 0133 D-159 53076
1 Brakes

Cam Brakes

Q Plus™ Components

FM51 NO. 4707
PLUS-SHAPED HOLES (+)
STAMPED IN TABLE

28 RIVET HOLES
IN TABLE

STAMPED ON WEB
SHOE TAG
16.5" X 7" Q PLUS™ SHOE

Q Series Components

FM51 NO. 4515G
PLUS-SHAPED HOLES (+)
STAMPED IN TABLE

32 RIVET HOLES
IN TABLE

STAMPED ON WEB
SHOE TAG
16.5" X 7" Q SHOE

Cam Tip to Tip = 4.25"
1.18 DIA.
INCREASED LIFT
16.5" Q PLUS™ CAMSHAFT (1.5" DIA.-28 SPLINES)

Cam Tip to Tip = 4.22"
1.378 DIA.
INCREASED LIFT
16.5" Q CAMSHAFT (1.5" DIA.-10 OR 28 SPLINES)

FMSI NO. 4702
USED WITH SPIDER

16 RIVET HOLES IN TABLE

STAMPED ON WEB
15" X 4" Q PLUS™ SHOE

FMSI NO. 1308
USED WITH BACKING PLATE

14 RIVET HOLES
IN TABLE

STAMPED ON WEB
15" X 4" Q SHOE

Cam Tip to Tip = 3.38"
0.998 DIA.
INCREASED LIFT
15" Q PLUS™ CAMSHAFT (1.5" DIA.-28 SPLINES)

Cam Tip to Tip = 3.25"
1.164 DIA.
INCREASED LIFT
15" Q CAMSHAFT (1.25" DIA.-10 OR 24 SPLINES)

Camshafts
Q Plus™
Q Series

Shoes
Q Plus™
Q Series

Return Springs
Heavy-duty (blue)
Standard

Meritor TP-03167
Cam Brakes

Model Nomenclature

Q Plus™ Cam Brakes
Model Numbers and Designations

Letters other than these are for older Q design (not Q Plus™)

P = Plus
L = LX500
V = VX500
Q = Quick Change
S = Stamped Spider
K = Integral Knuckle
C = Cast Plus™

XX 1657 1234

Specification Number

Place holder needed for 16508 brakes

Brake Size
1540 = 15" x 4"
1550 = 15" x 5"
1560 = 15" x 6"
1570 = 15" x 7"
1586 = 15" x 8.6"
1655 = 16-1/2" x 5"
1656 = 16-1/2" x 6"
1657 = 16-1/2" x 7"
1658 = 16-1/2" x 8"
16586 = 16-1/2" x 8.6"

1 = With Manual Slack (Export Only)
2 = With Automatic Slack
3 = With Manual Slack and Air Chamber
4 = With Automatic Slack and Air Chamber
5 = Less Slack but with Air Chamber Supplied
H = Heavy-Duty Features
T = TracLoc™ Feature
W = Wear Sensor Installed

NOTE: For other Meritor brake models, please consult your Meritor sales or service manager.
1 Brakes

Air Disc Brakes

Meritor air disc brakes are identified by a model number tag attached to the grease fitting on the brake caliper assembly. An example of a part number for a Meritor air disc brake is ADB-1560-1.

DiscPlus™ air disc brakes are identified by a model number tag attached to the top surface of the caliper. An example of a part number for a DiscPlus™ air disc brake is DX 195 1234.

To identify a DXP 195 air release and hydraulic release parking disc brake, refer to the tag located on the chamber bracket.

Model Nomenclature

DiscPlus™ Air Disc Brakes

Model Numbers and Designations

<table>
<thead>
<tr>
<th>D</th>
<th>X</th>
<th>195</th>
<th>1234</th>
</tr>
</thead>
<tbody>
<tr>
<td>DXP</td>
<td>195</td>
<td>19.5”</td>
<td>22.5”</td>
</tr>
</tbody>
</table>

Customer Part No.

DXP 195-2001

99YK214

4004136a

CUSTOMER SPECIFICATION

NOMINAL 60 SQ. IN. LINING AREA

ADB-1560-1

FRONT, DRIVE AND TRAILER BRAKE
MODEL CODE WITH VENTED DISC

Single axles to 23,000 G.A.W.R.
Single trailer axles to 32,000 G.A.W.R.
Tandem trailer axles to 46,000 G.A.W.R.
Front axles to 20,000 G.A.W.R.

CUSTOMER SPECIFICATION

NOMINAL 40 SQ. IN. LINING AREA

ADB-1540-1

FRONT BRAKE MODEL CODE
WITH SOLID DISC TO 12,000 G.A.W.R.

AIR DISC BRAKE

NOMINAL 15” DIA. ROTOR

4004237c

MERITOR AIR DISC BRAKES

4004146a

4001534a

4004146a

4001534a

4004136a

4004146a

4004136a

4004146a

4004136a

4004146a

4004136a

4004146a

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4004136a
Wedge Brakes

Identification
Wedge brakes are identified by a model number tag that is typically attached to the camshaft tube or dust shield of the brake assembly. An example of a part number for a wedge brake is RSA 1540 1234.

In addition to the model number tag on the cam tube, a brake shoe label is attached to the brake shoe web. This label provides information on the brake type, lining material and service parts replacement number.

For bus and coach, the brakes can be identified by a code on the axle identification plate.

Model Nomenclature

RDA BRAKE

C = COACH
D = DOUBLE ACTUATED
MERITOR STOPMASTER® WEDGE BRAKE

59733-RDC-18

59733-RDC-18

MERITOR SERVICE PARTS, SHOE AND LINING ASSEMBLY, PART NUMBER
MERITOR LINING MATERIAL DESIGNATION

The Meritor brake warranty does not cover the cost of any repairs to a covered product that might result from the use of non-genuine Meritor parts. See Pub. SP9260.

Shoe

Brake Type Designation

Friction Mix

Brake T ype Designation

Meritor Brand Designation
(MA = Meritor R = Rockwell)

Shoe

BRAKES

MA212

REPLACE WITH:
S MA 212 4707 QP

S MA 212 4707 QP

LINING:
FMSI

Friction Mix

LINING DESIGNATION

RDA-15 70

R = MERITOR (ROCKWELL)
S = SINGLE AIR CHAMBER
D = DUAL AIR CHAMBERS
A = AIR-ACTUATED
H = HYDRAULIC-ACTUATED

BRAKE DIAMETER
15 = 15"
12-1/4 = 12.25"
12 = 12"

BRAKE WIDTH
40 = 4.0"
50 = 5.0"
60 = 6.0"
70 = 7.0"
Identification

To identify a clutch, refer to the identification and serial numbers located on the front of the clutch cover. Refer to these numbers when you replace parts.
Model Nomenclature

<table>
<thead>
<tr>
<th>CLUTCH SPECIFICATION NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>H</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Cover</td>
</tr>
<tr>
<td>Series</td>
</tr>
<tr>
<td>M — Medium Duty</td>
</tr>
<tr>
<td>Size</td>
</tr>
<tr>
<td>15 — 15-1/2&quot;</td>
</tr>
<tr>
<td>Spindle Size</td>
</tr>
<tr>
<td>Options</td>
</tr>
<tr>
<td>E — Greaseable Bearing (Free Travel LTD)</td>
</tr>
<tr>
<td>F — Dual Grease (Free Travel LTD)</td>
</tr>
<tr>
<td>G — Sealed Bearing (Free Travel LTD)</td>
</tr>
<tr>
<td>H — 600 HP/Hi Torque Engine (Greaseable)</td>
</tr>
<tr>
<td>N — Greaseable Bearing and Co-Axial</td>
</tr>
<tr>
<td>S — Sealed Extended Lube Bearing</td>
</tr>
<tr>
<td>T — Two-Stage (Greaseable)</td>
</tr>
<tr>
<td>U — 600 HP/Hi Torque Engine (Dual Grease Fitting for Mack)</td>
</tr>
<tr>
<td>W — 600 HP/Hi Torque Engine (Sealed Ext. Lube)</td>
</tr>
<tr>
<td>X — Two Stage (Sealed Extended Lube)</td>
</tr>
<tr>
<td>Y — Hi Hysteresis/DD-S50 (Sealed Extended Lube)</td>
</tr>
<tr>
<td>Z — Dual Grease Housing (Mack LTD)</td>
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</tbody>
</table>

Requires special flywheel damper opening of 10-1/8".

REPLACEMENT CLUTCH ASSEMBLY PART NUMBER

<table>
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<th>REPLACEMENT CLUTCH ASSEMBLY PART NUMBER</th>
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<tbody>
<tr>
<td>R</td>
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<td>---</td>
</tr>
<tr>
<td>Meritor Designation</td>
</tr>
<tr>
<td>Size</td>
</tr>
<tr>
<td>15 — 15-1/2&quot;</td>
</tr>
<tr>
<td>Facing Type</td>
</tr>
<tr>
<td>2 — Flat Flywheel (No longer available)/Dual grease fitting</td>
</tr>
<tr>
<td>3 — Hi Torque Dual Grease Fitting</td>
</tr>
<tr>
<td>5 — Molded Organic Disc (except Hi Torque LTD clutches which are ceramic)</td>
</tr>
<tr>
<td>Options</td>
</tr>
<tr>
<td>4 — 8 Spring Two-Stage Dampened Disc</td>
</tr>
<tr>
<td>5 — Single Plate</td>
</tr>
<tr>
<td>6 — Standard LTD 7 Spring Dampened Disc (available as ceramic disc only)</td>
</tr>
<tr>
<td>7 — Lite Pedal LTD 7 Spring Dampened Disc (available as ceramic disc only)</td>
</tr>
<tr>
<td>8 — Two-Stage (Free Travel LTD) (available as ceramic disc only)</td>
</tr>
</tbody>
</table>

All orders should refer to the replacement part number.

Requires special flywheel damper opening of 10-1/8".
3 Drivelines

Identification
Meritor driveline components are identified by the following markings on the component.
- Logo stamped on the part
- Balance bosses
- Forging part number which identifies the driveline series

Meritor Driveline Series

<table>
<thead>
<tr>
<th></th>
<th>16N</th>
<th>17N</th>
<th>176N</th>
<th>18N</th>
<th>25W*</th>
<th>28N*</th>
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</thead>
<tbody>
<tr>
<td>58WB</td>
<td></td>
<td></td>
<td></td>
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<td>62N</td>
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<td>72N</td>
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</table>

* RPL25 and RPL20 do not follow the above convention and utilize their own unique numbering system.

Yoke Identification

<table>
<thead>
<tr>
<th>X Across Earwork</th>
<th>Y Between Earwork</th>
<th>Z Bearing Diameter</th>
<th>Series</th>
<th>Type</th>
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<tbody>
<tr>
<td>2.19&quot;</td>
<td>1.44&quot;</td>
<td>0.97&quot;</td>
<td>16N</td>
<td>Inside Snap Ring</td>
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<tr>
<td>2.38&quot;</td>
<td>1.06&quot;</td>
<td>0.94&quot;</td>
<td>10N</td>
<td>Outside Snap Ring</td>
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<tr>
<td>3.47&quot;</td>
<td>1.06&quot;</td>
<td>1.06&quot;</td>
<td>131N</td>
<td>Inside Snap Ring</td>
</tr>
<tr>
<td>3.56&quot;</td>
<td>1.19&quot;</td>
<td>1.06&quot;</td>
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<td>Outside Snap Ring</td>
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<td>3.88&quot;</td>
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<td>1.06&quot;</td>
<td>135N</td>
<td>Inside Snap Ring</td>
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<tr>
<td>4.44&quot;</td>
<td>1.19&quot;</td>
<td>1.06&quot;</td>
<td>141N</td>
<td>Outside Snap Ring</td>
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<td>3.13&quot;</td>
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<td>1.38&quot;</td>
<td>148N</td>
<td>Thrust Plate</td>
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<td>148N</td>
<td>Thrust Plate</td>
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<td>1.38&quot;</td>
<td>1.38&quot;</td>
<td>148N</td>
<td>Thrust Plate</td>
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<td>5.25&quot;</td>
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<td>1.38&quot;</td>
<td>155N</td>
<td>Thrust Plate</td>
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<td>155N</td>
<td>Thrust Plate</td>
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<td>5.31&quot;</td>
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<td>15N</td>
<td>Cover Plate</td>
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<td>6.05&quot;</td>
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<td>1.94&quot;</td>
<td>16N</td>
<td>Cover Plate</td>
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<td>7.00&quot;</td>
<td>1.94&quot;</td>
<td>1.94&quot;</td>
<td>18N</td>
<td>Cover Plate</td>
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<td>7.55&quot;</td>
<td>1.94&quot;</td>
<td>1.94&quot;</td>
<td>176N</td>
<td>Cover Plate</td>
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<tr>
<td>5.19&quot;</td>
<td>1.84&quot;</td>
<td>1.84&quot;</td>
<td>17N</td>
<td>Cover Plate</td>
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<tr>
<td>6.06&quot;</td>
<td>1.84&quot;</td>
<td>1.84&quot;</td>
<td>176N</td>
<td>Cover Plate</td>
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<td>7.89&quot;</td>
<td>2.50&quot;</td>
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<td>95N</td>
<td>Cover Plate</td>
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<td>2.06&quot;</td>
<td>2.06&quot;</td>
<td>20RPL</td>
<td>Wing/Outside Snap Ring</td>
</tr>
<tr>
<td>8.33&quot;</td>
<td>2.06&quot;</td>
<td>2.06&quot;</td>
<td>25RPL</td>
<td>Wing/Outside Snap Ring</td>
</tr>
</tbody>
</table>
3 Drivelines

Identification

**U-Bolt and Strap and Bolt**

<table>
<thead>
<tr>
<th>X</th>
<th>Z</th>
<th>Between Lugs</th>
<th>Bearing Diameter</th>
<th>Series</th>
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</thead>
<tbody>
<tr>
<td>3.22&quot;</td>
<td>1.06&quot;</td>
<td>3.63&quot;</td>
<td>1.19&quot;</td>
<td>131N</td>
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**Wing Bearing**

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**RPL Driveline**

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<td>8.38&quot;</td>
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</table>
4 Front Axles

Front Non-Drive Steer Axles

Identification

The axle build information and assembly date for Meritor front non-drive steer axles is on the axle identification tag.

The identification tag is fastened to the center of the beam at the front surface. The axle assembly date is located in either the lower right-hand or left-hand corner of the tag.

The Julian method is used to indicate the axle assembly date. The first two digits indicate the year, and the last three digits indicate the day of the year.

In the following example, 01 is the year 2001 and 327 refers to November 22.

To identify the model number, refer to the identification plate on the front of the beam. Use the complete model number to obtain parts.
Front Non-Drive Steer Axles

Model Nomenclature

**Meritor Identification**

- **Basic Capacity**
  - A: 5,000 lbs
  - C: 10,000 lbs
  - E: 12,000-13,200 lbs
  - G: 14,600 lbs
  - U: 16,000-20,000 lbs
  - LX: 30,000 lbs
  - U: 28,000-30,000 lbs

- **Basic Series**
  - F - 981 - L X - 122

- **Brake Usage**
  - Specification Number

**Number Design Variation**

- 0: Tapered King Pin
- 1: Straight King Pin
- 2: Special Tie Rods
- 3: 5" Drop from Center of Spindle to Pad
- 4: 5" Drop from Center of Spindle to Pad and Special Tie Rods
- 5: Special Wheel Ends
- 6: Double Drop Beam

**Beam, King Pin, Bushing Variation**

- 1: Forged I-Beam, Straight King Pins
- 2: Forged I-Beam, Tapered King Pins
- 3: Forged I-Beam, Alloy Material
- 4: Forged I-Beam, Straight King Pins
- 5: Tubular Axle Beam
- 6: Lightweight Axle Beam
- 7: Center-Point Design
- 8: Easy Steer™ Design

**Major Variation**

- 0: Pre-FMVSS-121 Design
- 1: Straight Sealed King Pin and New Tie Rod Assembly
- 2: Sealed King Pin Construction
- 3: Larger Axle Beam and Knuckles
- 4: Easy Steer™ Design
- 5: Tubular Axle Beam
- 6: Lightweight Axle Beam
- 7: Center-Point™ Design
- 8: Easy Steer Plus™

**Major Design Variation**

- A: Conventional Knuckle
- B: Integral Tie Rod Arm
- C: Integral Tie Rod Arm and Torque Plate
- D: Integral Tie Rod Arm, Spider and 86 mm Unitized Hub
- E: Conventional Knuckle, 58 mm Unitized Spindle
- F: Forged I-Beam, Straight King Pins
- G: Air Disc Brake
- H: Wedge Brake (Single Air Chamber)
- J: DuraPark® Hydraulic Drum
- K: DiscPlus™ Air Disc

**KPI Drop (inches)**

- M = Meritor
- F = Front
- S = Non-Drive Steer Axle
- GAWR = Gross Axle Weight Rating
- Ref: Target Market

**Manufacturing Location**

- N = N.A.
- S = S.A.
- E = Europe
- A = Australia/Asia

**Brake Type**

- B = Reaction Beam
- C = Air Disc Brake
- D = Wedge Brake (Dual Air Chambers)
- E = Wedge Brake (Dual Hydraulic Cylinders)
- G = DuraPark® Hydraulic
- H = Quadraulic Disc
- K = DiscPlus™ Air Disc

- L = Q Plus™ Cam Brake
- M = None
- P = "P" Series Cam Brake
- Q = "Q" Series Cam Brake
- R = Cast Plus™ Brake
- S = Wedge Brake (Single Air Chamber)
- T = "T" Series Cam Brake
- W = "V" Series Cam Brake
- Z = Non-Meritor Brake
4 Front Axles

Front Drive Steer Axles

Identification
The axle build information and assembly date for Meritor front drive steer axles are on the axle identification tag. The identification tag is fastened to the front side of the axle housing.

Model Nomenclature
Meritor heavy-duty front drive steer axle models manufactured before 1989 were identified as shown in the figure below.

<table>
<thead>
<tr>
<th>FDS-1805-SAX-60</th>
<th>10.59</th>
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<tbody>
<tr>
<td>Carrier Ratio</td>
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<tr>
<td>Customer Specification Number</td>
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<tr>
<td>Brake Type</td>
<td></td>
</tr>
<tr>
<td>Basic Capacity</td>
<td></td>
</tr>
<tr>
<td>Front Drive Steer Axle</td>
<td>4003376c</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Customer Specification Number</th>
<th>10.59</th>
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<tbody>
<tr>
<td>Front Drive Steer Axle</td>
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<thead>
<tr>
<th>Basic Capacity</th>
<th>10.59</th>
</tr>
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<tbody>
<tr>
<td>Front Drive Steer Axle</td>
<td>4003376c</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Front Drive Steer Axle</th>
<th>4003376c</th>
</tr>
</thead>
</table>

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<table>
<thead>
<tr>
<th>Model Nomenclature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDS-1805-SAX-60</td>
<td>Heavy-Duty Front Drive Steer Axle</td>
</tr>
<tr>
<td>10.59</td>
<td>Carrier Ratio</td>
</tr>
<tr>
<td>Customer Specification Number</td>
<td></td>
</tr>
<tr>
<td>Brake Type</td>
<td></td>
</tr>
<tr>
<td>Basic Capacity</td>
<td></td>
</tr>
<tr>
<td>Front Drive Steer Axle</td>
<td>4003376c</td>
</tr>
</tbody>
</table>
Front Drive Steer Axles

Medium-duty front drive steer axle models are identified by a letter and number system. The letters and numbers give important information about the specific axle model.

**Model Nomenclature**

- **Axle Model Type**: S = Single Rear (Solo), X = Front Drive Steer, D = Fwd Rear w/IAD, N = Fwd Rear less IAD, P = Fwd Rear w/Pump, R = Rear Rear, T = Tandem Drive, C = Coach, H = High Entry

- **Relative Gearing**: 0 = No Gearing, 1 = 292/347, 2 = 337/387, 3 = TBD, 4 = 381/432, 5 = 415/432, 6 = 432/457, 7 = 457, 8 = 460/498

- **HSG Wall**: 0 = Cast, 1 = TBD, 2 = 0.31 in. (8 mm), 3 = 0.37/0.39 in. (9.5/10.0 mm), 4 = 0.43 in. (11 mm), 5 = 0.50/0.51 in. (12.7/13.0 mm), 6 = 0.56 in. (14.3 mm), 7 = TBD, 8 = 0.63 in. (16 mm)

- **Carrier Variation**: A = Aluminum, D = Ductile, M = Ductile Rear, Amboid, N = No Carrier, R = Ductile Front Drive Axle Carrier, Right Hand, T = Ductile Tarma

- **Ratio 1**

- **Ratio 2**

- **MFG Location**: N = North America, S = South America, E = Europe, A = Australia/Asia/Africa

- **Relative Gearing**: 0 = No Gearing, 1 = 292/347, 2 = 337/387, 3 = TBD, 4 = 381/432, 5 = 415/432, 6 = 432/457, 7 = 457, 8 = 460/498

- **Carrier Type**: 0 = No Carrier, 1 = Single Speed, 2 = Two Speed, 3 = Helical Double Reduction, 4 = Salisbury, 5 = Planetary Double Reduction, 6 = Hub Reduction, 7 = Portal, 9 = Single Speed With Torque Output

- **Specification Number**: Includes TRACK, PARKING BRAKE, TELMA, OTHER

- **Brake Type**: B = "B" Frame Brake, C = Air Disc Brake, D = Wedge Brake, Dual Air Chambers, E = Wedge Brake, Single Hydraulic Cylinder, G = DualPak Hydraulic Drum, H = QualHydric Disc, K = Disc Plus™ Air Disc, L = D Plus Cam Brake, N = None, P = P Series Cam Brake, Q = Q Series Cam Brake, R = Cast Plus™ Brake, S = Wedge Brake, Single Air Chamber, T = T Series Cam Brake, W = W Series Cam Brake
4 Front Axles

Front Drive Steer Axles

Current heavy-duty front drive steer axle models are identified by a letter and number system. The letters and numbers give important information about the specific axle model. The first seven positions of the designations identify a basic axle model. The second group of letters and numbers identify particular specifications.

Model Nomenclature

- **Front Drive Steer Axle**
- **Nominal Axle Load Rating (GAWR)** in Thousands of Pounds
- **Gearing Type**
  - 1 — Single Speed
  - 2 — Helical Double-Reduction
  - 5 — Planetary Double-Reduction
  - 6 — Hub Reduction
- **Manufacturing Location**
  - B — Brazil
  - C — Europe (CVC)
  - M — Europe (Maudslay)
  - N — U.S.A.
- **Main Differential Next Type**
  - B — Special Differential
  - C — Driver-Controlled Differential Lock
  - F — Standard Differential
  - H — High Traction Differential
  - N — NoBuilt-In Differential
- **Brake Type**
  - B — Hydraulic Disc Brake
  - D — RDA Wedge Brake (Dual Air Chambers)
  - E — RDH Wedge Brake (Single Hydraulic Cylinder)
  - F — RDH Wedge Brake (Single Hydraulic Cylinder)
  - H — Hydraulic Drum Brake
  - L — Q Plus™ Cam Brake
  - N — None
  - Q — Q Series Cam Brake
  - S — Wedge Brake (Single Air Chamber)
- **Carry Ratio**
- **Axle Specification Number**
  - Identifies specific customer configuration, variations from the original base axle design. Refer to the Bill of Materials for specification details.
- **Hub Type**
  - A — Aluminum
  - C — Cast Spoke Wheel
  - F — Ferrous
  - N — None

*NOTE:* This position will be used to designate hub only until more than three digits are required to designate axle specification.

NOTE: If a complete axle designation is not required, use the first seven positions of the model designation to identify the basic axle model.

**EXAMPLES OF BASIC AXLE MODELS:**
- **RF-23-180:** Front Drive, 23,000 lb. (10,500 kg) GAWR, Single Speed, 19.62 inch (498 mm) Ring Gear, 185 Carrier Model.
- **RF-21-355:** Front Drive, 21,000 lb. (9,526 kg) GAWR, Helical Double-Reduction, 11 inch (279 mm) Ring Gear, 355 Carrier Model (Formerly R-255).
Single, Tandem and Tridem Rear Drive Axles

Identification

An identification tag is riveted on the axle housing or on the differential carrier. Use the model number and the ratio number marked on the identification tag and the number on the carrier to order replacement parts.

**AXLE IDENTIFICATION TAG INFORMATION**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Customer No.</th>
<th>Serial No.</th>
<th>Plant</th>
<th>Ratio</th>
</tr>
</thead>
</table>

**LOCATION OF THE IDENTIFICATION TAG, OR STAMP NUMBER, FOR THE AXLES. LOCATION IS DETERMINED FROM THE LEFT DRIVER SIDE LOOKING TOWARD THE FRONT OF THE VEHICLE.**

A — FRONT ENGINE DRIVE — RIGHT REAR, NEXT TO COVER
B — REAR ENGINE DRIVE — LEFT OR RIGHT REAR, NEXT TO DRIVE UNIT
### 5 Rear Axles

#### Single, Tandem and Tridem Rear Drive Axles

**Model Nomenclature**

| **GAWR** | 
|---|---|
| x = GAWR (000) Pounds or Tonnes (dependent on mfg. location) |

| **AXLE MODEL TYPE** | 
|---|---|
| M = Meritor |

| **RELATIVE GEARING SIZE OR SERIES** | 
|---|---|
| 0 = No Gearing |
| 1 = 292/347 |
| 2 = 337/387 |
| 3 = TBD |
| 4 = 381/432 |
| 5 = 415/432 |
| 6 = 432/457 |
| 7 = 457 |
| 8 = 460/498 |

| **HOUSING WALL** | 
|---|---|
| 0 = Cast |
| 1 = TBD |
| 2 = 0.31 in. (8 mm) |
| 3 = 0.37/0.39 in. (9.5/10.0 mm) |
| 4 = 0.43 in. (11 mm) |
| 5 = 0.50/0.51 in. (12.7/13.0 mm) |
| 6 = 0.56 in. (14.3 mm) |
| 7 = TBD |
| 8 = 0.63 in. (16 mm) |
| 9 = TBD |

| **CARRIER VARIATION** | 
|---|---|
| A = Aluminum |
| D = Ductile |
| M = Ductile Rear (Amboid) |
| N = No Carrier |
| R = Ductile Front Drive Axle Carrier (Right Hand) |
| T = Ductile Telma |

| **MFG LOCATION** | 
|---|---|
| N = North America |
| S = South America |
| E = Europe |
| A = Australia/Asia/Africa |

| **SPEC NUMBER** | 
|---|---|
| Includes: TRACK, PARKING BRAKE, OTHER |

| **BRAKE TYPE** | 
|---|---|
| B = "B" Frame Brake |
| C = Air Disc Brake |
| D = Wedge Brake (Dual Air Chambers) |
| E = Wedge Brake (Dual Hydraulic Cylinders) |
| F = Wedge Brake (Single Hydraulic Cylinder) |
| G = DuraPark Hydraulic Drum |
| H = Quadratic Disc |
| K = Disc Plus Air Disc |
| L = Q Plus™ Cam Brake |
| N = None |
| P = "P" Series Cam Brake |
| Q = "Q" Series Cam Brake |
| R = Cast Plus™ Brake |
| S = Wedge Brake (Single Air Chamber) |
| T = "T" Series Cam Brake |
| W = "W" Series Cam Brake |

| **AXLE TYPE** | 
|---|---|
| 0 = No Carrier |
| 1 = Single Speed |
| 2 = Two Speed |
| 3 = Helical Dbl Red |
| 4 = Salisbury |
| 5 = Planetary Dbl Red |
| 6 = Hub Reduction |
| 7 = Portal |
| 9 = Single Speed with Torque Output Limited Engine |

The diagram illustrates the various model components and their specifications, including wheel end/brake attachment/differential, housing wall, carrier variation, MFG location, and specific numbers.
Single, Tandem and Tridem Rear Drive Axles

Model Nomenclature

### GEARING TYPE
- 1 = Single Speed
- 2 = Two Speed
- 3 = Helical Double-Reduction
- 4 = Satisfactory Single Speed
- 5 = Planetary Double-Reduction
- 6 = Hub Reduction

### MAIN DIFFERENTIAL NEST TYPE
- B = Special Differential
- C = Driver Controlled Differential Lock
- F = Standard Differential
- H = High Torque Differential
- N = No-Spin

### NOMINAL AXLE LOAD RATING (GAWR)
In thousands of pounds. Individual forward and rear axles of a tandem set (Q, N, P, R) are rated as single axles. A tandem set (T) is rated as the combination of the two axles and a tridem set (Z) as the combination of the three axles.

### MANUFACTURING LOCATION
- A = Australia
- B = Brazil (Braseixos)
- C = India
- D = Mexico (Dirona)
- E = Europe (C.V.C.)
- M = Europe (Maudslay)
- N = U.S.A.

### CARRIER TYPE
Carrier size. Larger numbers indicate a higher GCW rated carrier; i.e., larger ring gear, etc. (Also refer to Tridem Axle Note 2 below)

### AXLE SPECIFICATION NUMBER
Identifies specific customer axle configurations (variations from the original axle design). For information about the variation, refer to the Bill of Materials for that specific axle model.

### HUB TYPE
- A = Aluminum
- C = Cast Spoke Wheel
- F = Ferrous
- N = None
*NOTE: This position will be used to designate hub only until more than three digits are required to designate axle specification.

### AXLE DESIGN VARIATION
Indicates axle design level or variation, (e.g., RS 23 161 has a thicker wall housing than the RS 23 160). For information about the variation, refer to the Bill of Materials for that specific axle model. (Also refer to Tridem Axle Note 2 below.)

### BRAKE TYPE
- B = Reaction Beam Disc Brake (B-Frame)
- C = Air Disc Brake
- D = Wedge Brake (Dual Air Chambers)
- E = Wedge Brake (Single Hydraulic Cylinder)
- F = Wedge Brake (Single-Hydraulic Cylinder)
- G = DuraPark Hydraulic Drum
- H = Quadraulic Disc
- K = Disc Plus Air Disc
- L = Q Plus™ Cam Brake
- N = None
- P = "W" Series Cam Brake
- Q = "Q" Series Cam Brake
- R = Cast Plus™ Brake
- S = Wedge Brake (Single Air Chamber)
- T = "W" Series Cam Brake
- W = "W" Series Cam Brake

### Notes:
1. For a Tridem Drive Axle Set (Z), the number in the sixth position designates the carrier in the non-side. The number in the seventh position designates the carriers in the second and third axles.

2. If a complete axle designation is not required, use the first seven positions of the model designation to identify the basic axle model.

---

**Example:**

RR 20 1 4 5 N C Q F* 123

- **RR:** Rear Axle
- **20:** Model Number
- **1:** Gearing Type (Single Speed)
- **4:** Main Differential Nest Type (Special Differential)
- **5:** Nominal Axle Load Rating (GAWR)
- **N:** Axle Type (Single Rear Drive Axle)
- **C:** Carrier Type
- **Q:** Manufacturing Location
- **F:** HUB Type
- **123:** AXLE SPECIFICATION NUMBER

---

**Tridem Axle Note 2:**

Indicates carrier only. For information about the variation, refer to the Bill of Materials for that specific axe model.

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**Tridem Axle Note 3:**

Indicates complete set only. For information about the variation, refer to the Bill of Materials for that specific axe model.
6 Bus and Coach Axles

Bus and Coach Non-Drive Axles

Identification
The front axle identification plate is located on the axle center.

- Identification Number
- 17101 WX-69
- FH 945 L X 3

Brake Usage
Specification Variation
Front Axle Identification Number
Bus and Coach Drive Axles

Identification

An identification tag is located on the axle housing or differential carrier.

Model Nomenclature

Bus and Coach Axles
### Bus and Coach Drive Axles

#### Model Nomenclature

**RC-23-160 SERIES**

<table>
<thead>
<tr>
<th>Gearing Type</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Single Speed</td>
</tr>
<tr>
<td>2</td>
<td>Two Speed</td>
</tr>
<tr>
<td>3</td>
<td>Helical Double Reduction</td>
</tr>
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<td>4</td>
<td>Salisbury Single Speed</td>
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<tr>
<td>5</td>
<td>Planetary Double Reduction</td>
</tr>
<tr>
<td>6</td>
<td>Hub Reduction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Manufacturing Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Australia</td>
</tr>
<tr>
<td>B</td>
<td>Brazil (Braseixos)</td>
</tr>
<tr>
<td>C</td>
<td>India</td>
</tr>
<tr>
<td>D</td>
<td>Mexico (Dinora)</td>
</tr>
<tr>
<td>E</td>
<td>Europe (C.V.C.)</td>
</tr>
<tr>
<td>M</td>
<td>Europe (Maudslay)</td>
</tr>
<tr>
<td>N</td>
<td>U.S.A.</td>
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</table>

<table>
<thead>
<tr>
<th>Main Differential Nest Type</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>B</td>
<td>Special Differential</td>
</tr>
<tr>
<td>C</td>
<td>Driver-Controlled Differential Lock</td>
</tr>
<tr>
<td>F</td>
<td>Standard Differential</td>
</tr>
<tr>
<td>H</td>
<td>High Traction® Differential</td>
</tr>
<tr>
<td>N</td>
<td>NoSPIN®</td>
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<tr>
<td>R</td>
<td>Rigid Axle-Less Carrier</td>
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</table>

<table>
<thead>
<tr>
<th>Nominal Axle Load Rating (GAWR)</th>
<th>In thousands of pounds</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Axle Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Single Rear Drive Axle, Coach</td>
</tr>
<tr>
<td>D</td>
<td>Forward-Rear Axle of a Drive Tandem with Inter-Axle Differential</td>
</tr>
<tr>
<td>N</td>
<td>Forward-Rear Axle of a Drive Tandem or Tridem without Inter-Axle Differential</td>
</tr>
<tr>
<td>P</td>
<td>Rear-Rear Axle of a Drive Tandem with Inter-Axle Differential and Pump</td>
</tr>
<tr>
<td>R</td>
<td>Single Rear Drive Axle</td>
</tr>
<tr>
<td>T</td>
<td>Tandem Drive Axle Set</td>
</tr>
<tr>
<td>Z</td>
<td>Tridem Drive Axle Set</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Hub Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Aluminum</td>
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<tr>
<td>C</td>
<td>Cast Spoke Wheel</td>
</tr>
<tr>
<td>F</td>
<td>Ferrous</td>
</tr>
<tr>
<td>N</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Brake Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Air Disc Brake</td>
</tr>
<tr>
<td>D</td>
<td>RDA Stopmaster® Wedge Brake (Dual Air Chambers)</td>
</tr>
<tr>
<td>E</td>
<td>RSH Stopmaster® Wedge Brake (Dual Hydraulic Cylinders)</td>
</tr>
<tr>
<td>F</td>
<td>RSH Stopmaster® Wedge Brake (Single Hydraulic Cylinder)</td>
</tr>
<tr>
<td>L</td>
<td>Q Plus™ Cam Brake</td>
</tr>
<tr>
<td>N</td>
<td>None</td>
</tr>
<tr>
<td>P</td>
<td>P Series Cam Brake</td>
</tr>
<tr>
<td>Q</td>
<td>Series Cam Brake</td>
</tr>
<tr>
<td>R</td>
<td>Cast Plus® Cam Brake</td>
</tr>
<tr>
<td>S</td>
<td>RSA Stopmaster® Wedge Brake (Single Air Chamber)</td>
</tr>
<tr>
<td>T</td>
<td>T Series Cam Brake</td>
</tr>
<tr>
<td>W</td>
<td>W Series Cam Brake</td>
</tr>
</tbody>
</table>

| Axle Specification Number | Identifies specific customer axle configurations (variations from the original axle design). For information about the variation, see the Bill of Materials for that specific axle model. |

<table>
<thead>
<tr>
<th>Carrier Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Carrier axle, larger numbers indicate a higher GCW-rated carrier.</td>
</tr>
</tbody>
</table>

| Axle Design Variation | Indicates axle design level or variation. |

*NOTE:* This position will be used to designate hub only until more than three digits are required to designate axle specification.
7 Trailer Air Suspension Systems

RideStar™ RHP

Identification
The identification tag is located on the roadside of the suspension near the pin release handle.

Model Nomenclature
The model number on the identification tag provides suspension and axle information.

Model Number Example
RHP11 TN 1805

Suspension Model
Sequence Number: Can be cross referenced to the Bill of Material.
Axle Model
Sequence Number: Can be cross referenced to the Bill of Material.

Suspension Capacity
Nominal Ride Height
Model Number
Serial Number

For Suspension Nominal Ride Height (NRH), refer to the NRH value indicated on this label. For the actual ride height value, refer to the vehicle/trailer manufacturer’s specification.
7  Trailer Air Suspension Systems

RideStar™ RFS Series

Identification
An identification tag is located on the rear of the roadside trailing arm.

![Identification Tag Diagram]
RideStar™ RFS Series

Model Nomenclature

**Suspension Type**
- FS = Fabricated Suspension
- IS = Independent Suspension
- (ISAS, IRS, IRDS, MiR, MiF, etc.)
- AL = AirLeaf (Front)
- CM = Composite Spring
- SM = Suspension Mechanical Trailer (SMT)
- FL = FlexAir
- XL = FlexAir Lite
- HP = RideStar™ Highway Parallelogram (RHP)
- FA = Four Airbags, Four Links
- TA = Two Airbags, Four Links
- LM = Low Floor Module (Front)

**Position or Location**
- T = Trailer Top Slung
- U = Trailer Under Slung
- F = Front Axle — Non-Drive
- D = Front Axle — Drive
- R = Rear Axle — Drive
- S = Steerable Rear Axle — Non-Drive
- E = Steerable Rear Axle — Drive
- A = Tag Axle

**Axle or Suspension Capacity (000s)**
- 14 = 14,000 lbs.
- 15 = 15,000 lbs.
- 23 = 23,000 lbs.

**Brake Type**
- S = Wedge (Single Air Chamber)
- D = Wedge (Dual Air Chambers)
- E = Wedge (Dual Hydraulic)
- F = Wedge (Single Hydraulic)
- W = W Series Cam
- P = P Series Cam
- Q = Q Series Cam
- T = T Series Cam
- L = Q Plus™ Cam
- R = Cast Plus™
- C = Air Disc
- N = None

**Units**
- E (English — lbs; in.)
- M (Metric — kg; mm)

**Ride Height**
- English Units: 14 = 14” ride height...
- Metric Units (last unit truncated): 43 = 430 ... 439 mm
- (details can be found in BOM)

**Sequence Number**
- Can be cross-referenced to the bill of material

**Optional Suffix**
- Axle Ratio 1 and Axle Ratio 2
8 Trailer Axles

Identification

All of the information necessary to identify a particular trailer axle is indicated on the trailer axle identification tag. Located at the center of the axle beam, this ID tag is stamped with the axle model number, serial number and date of manufacture.

The model number is composed of letters and digits, for example, TN-4670-Q-2020. This number is used to identify the axle assembly when ordering replacement parts.

The serial number is composed of letters and digits, for example, KNA-38050685. This number can be used to identify a particular trailer axle, and the material and components used to build the axle.

The date of manufacture is indicated by a Julian date, for example, 27693. The first three digits (276) indicate the 276th day of the year, or October 3. The last two digits (93) indicate the year, or 1993.
## Model Nomenclature

### CURRENT PRODUCTION MODEL NUMBERS

<table>
<thead>
<tr>
<th>Beam Capacity</th>
<th>Design Variation</th>
<th>Brake Diameter</th>
<th>Brake Width</th>
<th>Beam Type</th>
<th>Axle Components</th>
<th>Modification</th>
<th>FMVSS121 Brake Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>22,500 lbs.</td>
<td>C = Crank</td>
<td>12.25&quot; (31 cm)</td>
<td>12&quot; or 8.625&quot; (22 cm)</td>
<td>T = Tubular</td>
<td></td>
<td></td>
<td>O = With certification</td>
</tr>
<tr>
<td>11,340 kg</td>
<td>D = Drop</td>
<td>15&quot; (38 cm)</td>
<td>8&quot; or 8.625&quot; (22 cm)</td>
<td></td>
<td>C = Cam</td>
<td>1 = Single wheel</td>
<td></td>
</tr>
<tr>
<td>25,000 lbs.</td>
<td>Blank = Straight</td>
<td>16.5&quot; (42 cm)</td>
<td>6&quot; or 8&quot; (15 cm)</td>
<td></td>
<td>L = Q Plus™</td>
<td>2 = Intermodal</td>
<td></td>
</tr>
<tr>
<td>13,608</td>
<td></td>
<td></td>
<td>7&quot; or 7.5&quot; (18-19 cm)</td>
<td></td>
<td>QH = Q with hub installed</td>
<td>3 = Bolted on brakes</td>
<td></td>
</tr>
<tr>
<td>30,000 lbs</td>
<td></td>
<td></td>
<td>9&quot; (22 cm)</td>
<td></td>
<td>QW = Q with wheel installed</td>
<td>4 = Manual bearing adjustment</td>
<td></td>
</tr>
<tr>
<td>13,040 kg</td>
<td></td>
<td></td>
<td>0 = No brakes</td>
<td></td>
<td>L = Cam brake</td>
<td>6 = Positive bearing adjustment</td>
<td></td>
</tr>
<tr>
<td>30,000 lbs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>LH = Q Plus™ with hub installed</td>
<td>9 = 0.75&quot; nominal wall axles</td>
<td></td>
</tr>
<tr>
<td>25,000 lbs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>LW = Q Plus™ with wheel installed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11,340 kg</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>RDA = Stopmaster wedge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20,000 lbs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D = Air disc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9,072 kg</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DW = Air disc with hub installed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13,608 kg</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>RDA = Air disc with wheel installed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Crank or drop axle beam capacity is 20,000 lbs. (9072 kg). Disregard rating indicated by second letter of model number.
2. Denotes either brake drum or brake rotor diameter.
3. Denotes either brake shoe width or disc brake pad size (60 square inches)
4. Denotes either 7" on 16.5" diameter brakes or 7.5" on 12.25" diameter brakes.
5. Sequential number specifying unique model/axle information, such as camshaft length, spider model, lining material, track, etc.
9 Transmissions

FreedomLine®

Identification
An identification plate is installed on the left side of the FreedomLine® transmissions.

Model Nomenclature

<table>
<thead>
<tr>
<th>M</th>
<th>0</th>
<th>16</th>
<th>Z</th>
<th>12</th>
<th>A</th>
<th>A</th>
<th>16</th>
<th>002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meritor</td>
<td>Vehicle Manufacturer</td>
<td>Transmission Model Number</td>
<td>Torque Rating (lb-ft)</td>
<td>Ratio</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O = Overdrive</td>
<td>Specification</td>
<td>13 = 1350</td>
<td>A = Fully Automated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No letter = Direct Drive</td>
<td>14 = 1450</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 = 1550</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 = 1650</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Z = FreedomLine®

- O = Overdrive
- No letter = Direct Drive
- 13 = 1350
- 14 = 1450
- 15 = 1550
- 16 = 1650

A = Fully Automated
Identification

An identification plate is installed on the right side of the platform “G” transmissions.

Model Nomenclature

Progressive torque is an engine feature that requires a Torq-2 transmission. In models not featuring progressive torque, this number will be the same as the torque rating.

Detroit Diesel Corporation
10 Transfer Cases

Identification

An identification tag is located on the front cover.
Model Nomenclature

**M - TC - 4 - Z - 13 - G - 5 - 100 - 100 - 205**

- **M**: Meritor
- **TC**: Transfer Case
- **4**: Number of Shafts
- **Z**: Nominal Input Torque Rating in High Range (by 1,000 lb-ft)
- **13**: Optional Features Not Included as Standard Equipment (Up to Three Characters)
- **G**: Grey Iron
- **5**: Specification Number
- **100**: Low Ratio
- **100**: High Ratio
- **205**: Transfer Case Number

**M - TC - x - x - xx - x - xxx - 123 - xxxx - xxxx**

- **M**: Meritor
- **TC**: Transfer Case
- **x**: Number of Shafts
- **x**: Nominal Input Torque Rating (by 1,000 lb-ft)
- **xx**: Optional Features Not Included as Standard Equipment (Up to Three Characters)
- **x**: Housing Material
- **xxx**: Specification Number
- **123**: Low Ratio
- **xxxx**: High Ratio

**Number of Shafts**
- 1 = Single-Speed Design
- 2 = Two-Speed Design
- 3 = Three-Shaft Design
- 4 = Four-Shaft Design

**Housing Material**
- G = Grey Iron
- D = Ductile Iron
- A = Aluminum

**Optional Features**
- D = Declutch/PTO
- F = Differential
- L = Lubrication Pump
- S = Speed Sensor
- B = Brake
11 Meritor WABCO Components

NOTE: For a complete listing of all Meritor WABCO systems and components, including Roll Stability Control (RSC) for trucks and tractors and Roll Stability Support (RSS) for trailers, please visit the website at www.meritorwabco.com

Enhanced Easy-Stop™ Trailer ABS

The Meritor WABCO Easy-Stop™ Trailer ABS is an electronic, self-monitoring system that works with standard air brakes.

NOTE: S = Sensors
M = Modulator Valves

There is a specific ECU/valve assembly for each Easy-Stop™ Trailer ABS configuration.

- For 2S/1M Basic, the assembly consists of an ECU and a single modulator valve assembly.
- For 2S/2M Standard and 2S/2M, 4S/2M and 4S/3M Premium, the assembly consists of an ECU and a dual modulator valve assembly. The valve portion of the ECU/dual modulator valve assembly contains two separate modulator valves that share common control and exhaust ports. The 2S/2M Standard valve has only two sensor outlets and cannot be upgraded.

For Standard and Premium assemblies, the ECU and modulator valve may be individually replaced.

A 4S/3M configuration consists of an ECU/dual modulator valve assembly and one external ABS modulator valve.

Identification

To identify Enhanced Easy-Stop™, check the identification tag on the Electronic Control Unit (ECU). The part numbers for Enhanced Easy-Stop™ systems are shown below.

- 400 500 101 0 (2S/1M Basic for standard trailers)
- 400 500 104 0 (2S/1M Basic for dollies and steerables)
- 400 500 102 0 (2S/2M Standard)
- 400 500 103 0 (2S/2M, 4S/2M and 4S/3M Premium)

External Modulator Valve
Sensor with Molded Socket

In-Line Filter Valve
Removes most contaminate particles from the trailer air brake system. Approved for use on all trailer applications for both control and supply lines.

Reverse Detection Module

Hydraulic Anti-Lock Braking Systems (ABS)
Meritor WABCO Hydraulic ABS is an electronic wheel-speed monitoring and control system used on medium-duty trucks, buses and motor home chassis equipped with a hydraulic brake system.
There are two systems available, C and D version hydraulic ABS. D version ECUs are available in both cab- and frame-mounted versions.

PLC DataMaster™ Trailer Data Extraction Module
11 Meritor WABCO Components

Identification

The hydraulic ABS version installed on the vehicle may be determined by looking at the ECU. The C version system ECUs are larger than the D version ECUs. If the ECU is easily visible, look at the part number identification tag. The D version ECUs will have a D designation printed on the tag. There is no letter designation on C version ECUs.

Pneumatic ABS for Trucks, Tractors and Buses

Meritor WABCO pneumatic ABS is an electronic system that monitors and controls wheel speed during braking for trucks, tractors and buses. The system works with standard air brake systems. Pneumatic ABS ECUs are available for cab- or frame-mounted applications. Basic and universal ECUs are cab-mounted.

Identification

The ABS version is marked on the ECU.
ABS Valve Package — Rear Axle
The valve package provides an alternative to separate valve installation by combining a service brake relay valve with two ABS modulator valves.

ABS Valve Package — Front Axle
The valve package provides an alternative to separate valve installation by combining a quick release valve with two ABS modulator valves.

ABS/ATC Valve Package — Rear Axle
The valve package provides an alternative to separate valve installation by combining a service brake relay valve with two ABS modulator valves and one ATC valve.

ABS Modulator Valve

Also available with open-style connectors.
11 Meritor WABCO Components

Automatic Traction Control Valve

Also available with open-style connector.

PRODUCT IDENTIFICATION ON VALVE BODY

4004370a

Straight Sensor

4004371a

Right Angle (90°) Sensor

4004371a

Air Dryers

Identification

Alphabetical designations of the System Saver Series family of air dryers have specific meanings:

- P indicates an external purge tank is used for desiccant regeneration
- U indicates discharge line — unloaded compressor
- E indicates a Holset-style compressor function
- G indicates integral governor for air compressor control
- UP indicates discharge line — unloaded compressor (with external purge tank)

System Saver 1200/1800:
System regeneration valve assembly on side of dryer

System Saver 1200E:
Tubing and banjo fitting at front of dryer

System Saver 1200P/1800UP:
Uses dedicated purge tank. Port 22 drilled and tapped

System Saver 1200U/1800U:
Small regeneration hole visible in back of Port 1 when fitting is removed. No spring in turbo cut-off valve assembly

System Saver 1200UP/1800UP:
Port 22 drilled and tapped. Small regeneration hole is visible at back of Port 1 when fitting is removed. No spring in turbo cut-off valve assembly. Dedicated purge tank
The air dryer base is the same for both the 1200 and 1800 Series air dryers; however, the 1800 Series canister is 3.2-inches taller than the 1200. This larger canister contains 50% more desiccant, which makes the 1800 ideal for applications calling for frequent starts, stops and long compressor cycles.

Air Compressors

The Meritor WABCO System Saver 318 air compressor provides and maintains air under pressure to operate devices in the air brake and auxiliary air systems of a vehicle. It consists of two major subassemblies: Cylinder head and crankcase/cylinder block. The System Saver 318 air compressor is used on Mack engines and is available in non-through drive and through drive versions. The through drive version is required to run hydraulic power steering pumps.
Air Brake System Valves

Meritor WABCO provides a complete line of air brake valves. Please visit the website at www.meritorwabco.com for complete information.
11 Meritor WABCO Components

Single or Dual Circuit Foot Valve and Pedal

Hand-Operated Valves
Trailor Brake Control Valves

Park Brake Valve

IR2 Valve

Figure 11.26
Figure 11.27
Figure 11.28
Figure 11.29
Figure 11.30
Figure 11.31
11 Meritor WABCO Components

Leveling Valves

![Diagram of Cab Leveling Valve](image1)

- **CAB LEVELING VALVE**
  - Control Lever
  - Vertical Linkage
  - Delivery Port
  - Supply Port
  - Exhaust Area
  - Delivery Port
  - Pilot Port
  - Product Identification on Valve Body

![Diagram of Chassis Leveling Valve](image2)

- **CHASSIS LEVELING VALVE**
  - Control Lever
  - Vertical Linkage
  - Delivery Port
  - Delivery Port
  - Supply Port
  - Exhaust Area
  - Delivery Port
  - Pilot Port
  - Product Identification on Valve Body
Identification
Shocks absorbers are identified by the following.

- The Gabriel logo, older products do not have the Gabriel stamp.
- The country of origin, either Canada or South Africa.
- A date code.