

Mack.....FRONT AXLES.....

CAPACITY — NOMENCLATURE — DETAIL SPECIFICATION
(CAPACITIES AT GROUND)

REFERENCE SHOULD BE MADE TO DATA BOOK FOR MODEL APPLICATION



9,000 LBS.

MODELS:

FA 534

FA 5341 (NO BRAKES)

NO BRAKES—CUSTOMER RESPONSIBILITY

DETAIL SPECIFICATIONS:

MAKE MACK
Type Reversed-Elliott, Drop-Forged I-Beam
Size (Beam Center)
Height 3³¹/₈"
Flange Width 2³/₄"
Web Thickness 1/2"
Spring Centers 34¹/₂" (F, U, R, MB)
33¹/₂" (DM)
Spring Width 3¹/₂" (F, U, R, DM)
3" (MB)
Pivot Centers 67¹/₈"

STEERING KNUCKLES:

Material Chromium Molybdenum alloy steel,
heat treated
Thrust Spherical Seat, Tapered, Ball or Roller Bearing
Location Bottom of Knuckle Pin
Upper Knuckle Pin Bushing Needle Bearings

SPINDLE DIAMETER:

Inner Bearing 2¹/₈"
Outer Bearing 1¹/₂"

WHEEL BEARINGS:

Inner Tapered Roller, Single Row (2)
Outer Tapered Roller, Single Row (2)

STEERING KNUCKLE PIN:

Material Manganese Steel, heat treated
Type Tapered
Diameter Top 1¹/₄"—Bottom 1¹/₂"
Side Rake 8°

(BRAKES)-FA 534 ONLY

Type Internal Expanding, Inclosed
Actuation Air Vac. Hyd.
Diameter 16¹/₄" 15"
Width 3" 2¹/₂"
Lining Thickness 1/2" 3/8"
Lining Area, Both Wheels 204 sq. in. 166 sq. in.
Wheel Cylinder Diameter 1³/₈"

BRAKE CHAMBERS:

Make Bendix-Westinghouse
Effective Area 16 sq. in.

Slack Adjusters:

Make Bendix-Westinghouse
Length 5"
Type Worm and Gear

10,500 LBS.

MODELS:

FA 535

FAL 535
(ALUMINUM BRAKES)*
FA 5351 (NO BRAKES)

NO BRAKES—CUSTOMER RESPONSIBILITY

DETAIL SPECIFICATIONS:

MAKE MACK
Type Reversed-Elliott, Drop-Forged I-Beam
Size (Beam Center)
Height 3³¹/₈"
Flange Width 2³/₄"
Web Thickness 1/2"
Spring Centers 34¹/₂" (F, U, R, MB)
33¹/₂" (DM)
Spring Width 3¹/₂" (F, U, R, DM)
3" (MB)
Pivot Centers 67¹/₈"

STEERING KNUCKLES:

Material Chromium-Molybdenum Alloy Steel,
Heat Treated
Thrust Spherical Seat, Tapered, Ball or Roller Bearing
Location Bottom of Knuckle Pin
Upper Knuckle Pin Bushing Needle Bearings

SPINDLE DIAMETER:

Inner Bearing 2¹/₂"
Outer Bearing 1⁵/₈"

WHEEL BEARINGS:

Inner Tapered Roller, Single Row (2)
Outer Tapered Roller, Single Row (2)

STEERING KNUCKLE PIN:

Material Manganese Steel, Heat Treated
Type Tapered
Diameter Top 1¹/₄"—Bottom 1¹/₂"
Side Rake 7°

(BRAKES)-FA 535 Air & Hyd., FAL 535 Air Only

Type Internal Expanding, Inclosed
Actuation Air Hyd.
Diameter 16¹/₄" 16"
Width 4" 4"
Lining Thickness 3/4" 3/8"
Lining Area, Both Wheels 276 sq. in. 270 sq. in.
Wheel Cylinder Diameter 1¹/₂"

BRAKE CHAMBERS:

Make Bendix-Westinghouse
Effective Area 16 sq. in.-20 sq. in.*

* Aluminum Brake Chamber Brackets, Spiders and Shoes

Slack Adjusters:

Make Bendix-Westinghouse
Length 5¹/₂"-4¹/₂"*
Type Worm and Gear

12,000 LBS.

MODELS:

FA 532

FAL 532
(ALUMINUM BRAKES)*
FA 5321 (NO BRAKES)

NO BRAKES—CUSTOMER RESPONSIBILITY

DETAIL SPECIFICATIONS:

MAKE MACK
Type Reversed-Elliott, Drop-Forged I-Beam
Size (Beam Center)
Height 3³/₄"
Flange Width 3¹/₄"
Web Thickness 5/8"
Spring Centers 34¹/₂" (F, U, R, MB)
33¹/₂" (DM)
Spring Width 3¹/₂" (F, U, R, DM)
3" (MB)
Pivot Centers 67¹/₈"

STEERING KNUCKLES:

Material Chromium-Molybdenum Alloy Steel,
Heat Treated
Thrust Spherical Seat, Tapered, Ball or Roller Bearing
Location Bottom of Knuckle Pin
Upper Knuckle Pin Bushing Needle Bearings

SPINDLE DIAMETER:

Inner Bearing 2⁵/₈"
Outer Bearing 1³/₄"

WHEEL BEARINGS:

Inner Tapered Roller, Single Row (2)
Outer Tapered Roller, Single Row (2)

STEERING KNUCKLE PIN:

Material Manganese Steel, Heat Treated
Type Tapered
Diameter Top 1³/₈"—Bottom 1³/₈"
Side Rake 7°

(BRAKES)-FA 532-& FAL 532 ONLY

Actuation Air
Diameter 16¹/₂"
Width 4"
Lining Thickness 3/4"
Lining Area (Both Wheels) 276 sq. in.
Drum Material Alloy Cast Iron
Brake Chambers, Effective Area 16 sq. in.
* Aluminum Brake Chamber Brackets, Spiders and Shoes

Slack Adjusters:

Length 5¹/₂"

FRONT AXLES

16,000 LBS.

MODELS:

FA 600

FA 6001 (NO BRAKES)

NO BRAKES—CUSTOMER RESPONSIBILITY

DETAIL SPECIFICATIONS:

MAKE **MACK**

Type Reversed Elliott, Drop-Forged I-Beam
Size (Beam Center) 4 1/4"
Height 3 1/4"
Flange Width 5/8"
Web Thickness 3 1/2" (R)
Spring Centers 33 1/2" (DM)

Spring Width 3 1/2"
Pivot Centers 70 1/8"

STEERING KNUCKLE:

Thrust Bearing Anti-Friction, Top Mounted

STEERING KNUCKLES:

Material Chromium Molybdenum Alloy Steel, Heat Treated
Thrust Adjustable Tapered Roller Bearing
Location Top of Knuckle Pin

SPINDLE DIAMETER:

Inner Bearing 3"
Outer Bearing 2 1/8"

WHEEL BEARINGS:

Inner Tapered Roller, Single Row (2)
Outer Tapered Roller, Single Row (2)

STEERING KNUCKLE PIN:

Type Tapered
Diameter Top 1 3/4"—Bottom 2 1/2"
Side Rake 3 1/2"

(BRAKES)-FA 600 ONLY

Actuation Air
Diameter 17 1/4"
Width 5"
Lining Thickness 3/4"
Lining Area, Both Wheels 355 sq. in.

BRAKE CHAMBERS:

Make Bendix-Westinghouse
Effective Area 20 sq. in.

Slack Adjusters:

Make Bendix-Westinghouse
Type Worm and Gear
Length 5 1/2"

MODELS:

FA 601

FA 6011 (NO BRAKES)

NO BRAKES—CUSTOMER RESPONSIBILITY

DETAIL SPECIFICATIONS:

MAKE **MACK**

Type Reversed Elliott, Drop-Forged I-Beam
Size (Beam Center) 4 1/4"
Height 3 1/4"
Flange Width 5/8"
Web Thickness 3 1/2" (R)
Spring Centers 33 1/2"
Spring Width 3 1/2"
Pivot Centers 65 3/4"

STEERING KNUCKLES:

Material Chromium Molybdenum Alloy Steel, Heat Treated
Thrust Adjustable Tapered Roller Bearing
Location Top of Steering Knuckle Pin

SPINDLE DIAMETER:

Inner Bearing 3"
Outer Bearing 2 1/8"

WHEEL BEARINGS:

Inner Tapered Roller, Single Row (2)
Outer Tapered Roller, Single Row (2)

STEERING KNUCKLE PIN:

Material Manganese Steel, Heat Treated
Type Tapered
Diameter Top 1 3/4"—Bottom 2 1/2"
Bushing Length Upper 2 3/4"—Lower 2 3/4"
Side Rake 3 1/2"

(BRAKES)-FA 601 ONLY

Type Internal Expanding, Inclosed
Actuation Air
Diameter 17 1/4"
Width 5"
Lining Thickness 3/4"
Lining Area, Both Wheels 355 sq. in.

BRAKE CHAMBERS:

Make Bendix-Westinghouse
Effective Area 20 sq. in.

Slack Adjusters:

Make Bendix-Westinghouse
Type Worm and Gear
Length 5 1/2"

18,000 LBS.

MODELS:

FA 604

FA 6041 (NO BRAKES)

NO BRAKES—CUSTOMER RESPONSIBILITY

DETAIL SPECIFICATIONS:

MAKE **ROCKWELL STD. CORP.**

Type Reversed Elliott, Drop-Forged, I-Beam
Size (Beam Center) 4 1/2" (Straight Section)
Height 4 1/4"
Flange Width 5/8"
Web Thickness 3 1/2"
Spring Centers 33 1/2"
Spring Width 3 1/2"
Pivot Centers 66 3/4"

STEERING KNUCKLE:

Thrust Bearing Anti-Friction, Mounted Between Axle Eye and Lower Knuckle Boss

SPINDLE DIAMETER:

Inner Bearing 3"
Outer Bearing 2-1/5"

WHEEL BEARINGS:

Inner Tapered Roller, Single Row (2)
Outer Tapered Roller, Single Row (2)

STEERING KNUCKLE PIN:

Type Straight
Diameter Top 2"—Bottom 2"
Side Rake 5"—30"

(BRAKES)-FA 604 ONLY

Brakes Air
Actuation Stopmaster Brakes
Diameter 15"
Width 4"
Thickness 3/4" (Tapered)
Area, Total 247 sq. in.
Number 4 Per Axle
Effective Area 9 sq. in.
Wedge Angle 12°

FRONT AXLES

18,000 LBS. (Con't)

MODELS:

FA 6042

FA 6043 (NO BRAKES)

NO BRAKES—CUSTOMER RESPONSIBILITY

DETAIL SPECIFICATIONS:

MAKE **ROCKWELL STD. CORP.**
Type Reversed Elliott, Drop-Forged I-Beam
Size (Beam Center)
Height $4\frac{5}{16}$ "
Flange Width $4\frac{1}{4}$ "
Web Thickness $\frac{7}{16}$ "
Spring Centers $34\frac{1}{2}$ " (MB, F)
Spring Width $33\frac{1}{2}$ " (DM)
Pivot Centers $3\frac{1}{2}$ " (F, DM)
Pivot Centers $69\frac{1}{4}$ "

STEERING KNUCKLE:

Thrust Bearing Anti-Friction, Mounted Between
Axle Eye and Lower Knuckle Boss

SPINDLE DIAMETER:

Inner Bearing 3"
Outer Bearing 2-1/5"

WHEEL BEARINGS:

Inner Tapered Roller, Single Row (2)
Outer Tapered Roller, Single Row (2)

STEERING KNUCKLE PIN:

Type Straight
Diameter Top 2"—Bottom 2"
Side Rake 5°—30°

(BRAKES)-FA 6042 ONLY

Brakes Air
Actuation Stopmaster, Air Operated
Diameter 15"
Width 4"
Thickness $\frac{3}{4}$ " (Tapered)
Area, Total 247 sq. in.
Number 4 per axle
Effective Area 9 sq. in.
Wedge Angle 12°

MODELS:

FAS 605

DETAIL SPECIFICATIONS:

MAKE **ROCKWELL STD. CORP.**
Type Single Reduction
Size (Beam Center) (Banjo) Bowl-Centered Type
Cast Steel 7/16" Wall (with Ends
of 5-3/16" Diameter x 15/16" Wall)
Carrier CRS130 Rockwell Std. R-140
Ratios 6.83, 7.40
Spring Centers $33\frac{1}{2}$ "
Spring Width $3\frac{1}{2}$ "

SPINDLE DIAMETER:

Inner Bearing $4\frac{1}{2}$ "
Outer Bearing 4"

WHEEL BEARINGS:

Inner Tapered Roller, Single Row (2)
Outer Tapered Roller, Single Row (2)

STEERING KNUCKLE PIN:

Type Straight
Diameter 2-47/100
Side Rake 0°

AXLE SHAFTS:

Type Splined, Both Ends
Material Carbon Steel
Minimum Diameter 2-3/25"
No. Splines 23 Inner, 12 Outer
Type Splines Involute
Spline Diameter 2 1/4" Inner, 2 3/4" Outer
Oil Capacity 35 Pints

BRAKES:

Brakes Air
Actuation Stopmaster, Air Operated
Diameter 17 1/4"
Width 4"
Thickness 3/4" Tapered Block
Area, Total 284 sq. in.
Number 2 Per Axle
Effective Area 12 sq. in.
Wedge Angle 12°

20,000 LBS.

MODELS:

FA 700

FA 701*

(ON & OFF HIGHWAY) DETAIL SPECIFICATIONS:

MAKE **MACK**
Type Reversed Elliott, Drop-Forged I-Beam
Size (Beam Center)
Height $5\frac{1}{4}$ "
Flange Width $3\frac{1}{4}$ "
Web Thickness $\frac{5}{8}$ "
Spring Centers $36\frac{1}{8}$ " (3" Spring)
Spring Width $37\frac{1}{8}$ " (4" Spring)
Pivot Centers $33\frac{1}{2}$ "* (DM)
Pivot Centers 3", 4" and $(3\frac{1}{2})$ "* (DM)
Pivot Centers $73\frac{1}{2}$ "* (DM)

STEERING KNUCKLE:

Thrust Bearing Anti-Friction, Top Mounted

SPINDLE DIAMETER:

Inner Bearing $3\frac{1}{8}$ "
Outer Bearing $2\frac{1}{8}$ "

WHEEL BEARINGS:

Inner Tapered Roller, Single Row (2)
Outer Tapered Roller, Single Row (2)

STEERING KNUCKLE PIN:

Type Tapered
Diameter Top $1\frac{3}{4}$ "—Bottom $2\frac{1}{2}$ "
Side Rake $3\frac{1}{2}$ °

BRAKES:

Brakes Air
Diameter 17 1/4"
Width 5"
Thickness 3/4"
Area, Total 355 sq. in.

BRAKE CHAMBERS:

Make Bendix-Westinghouse
Effective Area 20 sq. in.
Slack Adjusters:
Make Mack-Bendix-Westinghouse*
Type Worm and Gear
Length $5\frac{1}{2}$ "

FRONT AXLES

25,000 LBS.

MODELS:
FA 801

(OFF HIGHWAY)

DETAIL SPECIFICATIONS:

MAKE **MACK**
Type Reversed Elliott, Drop-Forged I-Beam
Size (Beam Center)
Height 5¼"
Flange Width 4"
Web Thickness 1"
Spring Centers 45½"
Spring Width 4"

STEERING KNUCKLE:

Thrust Bearing Anti-Friction, Top Mounted

SPINDLE DIAMETER:

Inner Bearing 4"
Outer Bearing 3½"

WHEEL BEARINGS:

Inner Tapered Roller, Single Row (2)
Outer Tapered Roller, Single Row (2)

STEERING KNUCKLE PIN:

Type Tapered
Diameter Top 2"—Bottom 2½"
Side Rake 3½°

BRAKES:

Type 2 Shoe, Internal Expanding
Actuation Air
Diameter 17¼"
Width 5"
Thickness 3/4"
Area, Total 355 sq. in.

BRAKE CHAMBERS:

Make Bendix-Westinghouse
Effective Area 20 sq. in.

Slack Adjusters:

Make Mack
Type Worm and Gear
Length 7"

32,000 LBS.

MODELS:
FA 900
FA 901*

(OFF HIGHWAY)

DETAIL SPECIFICATIONS:

MAKE **MACK**
Type Reversed Elliott, Tube Center Welded
to Cast Ends
Size (Beam Center)
Circular Tube 7" O.D.
Wall Thickness 3/4"
Spring Centers 37½"
45½"
Spring Width 4"

STEERING KNUCKLE:

Thrust Bearing Adjustable Tapered Roller,
Single Row

SPINDLE DIAMETER:

Inner Bearing 4"
Outer Bearing 3½"

WHEEL BEARINGS:

Inner Tapered Roller, Single Row (2)
Outer Tapered Roller, Single Row (2)

STEERING KNUCKLE PIN:

Type Tapered
Diameter Top 2½"—Bottom 2½"
Side Rake 3½°

BRAKES:

Brakes Air
Diameter 18"
Width 5"
Thickness 3/4"
Area, Total 352 sq. in.

BRAKE CHAMBERS:

Make Bendix-Westinghouse
Effective Area 30 sq. in.

Slack Adjusters:

Make Bendix-Westinghouse
Type Worm and Gear
Length 7"

65,000 LBS.

MODELS:
FA 1000
FA 1002

(OFF HIGHWAY)

DETAIL SPECIFICATIONS:

MAKE **MACK**
Type Tube Center Welded to Elliott Cast Ends
Size (Beam Center)
Seamless Tube 9½" O.D. (FA 1000)
10" O.D. (FA 1002)
Wall Thickness 1-3/25" (FA 1000)
1½" (FA 1002)
Spring Centers 45½" (FA 1000)
56½" (FA 1002)
Spring Width 5"

STEERING KNUCKLE:

Thrust Bearing Adjustable Tapered Roller,
Single Row

SPINDLE DIAMETER:

Inner Bearing 5¼" (FA 1000)
6" (FA 1002)
Outer Bearing 3½"

WHEEL BEARINGS:

Inner Tapered Roller, Single Row
Outer Tapered Roller, Single Row

STEERING KNUCKLE PIN:

Type Tapered
Diameter Top 3-3/5"—Bottom 3"
Side Rake 3°—30°

BRAKES:

Brakes Rockwell-Standard,
Air Over Hydraulic
Actuation Hydraulic Master Cylinder
Actuated by Roto-Chamber
(Frame Mounted)
Diameter 26"
Width 5"
Thickness 3/4"
Area, Total 544 sq. in.
Master Cylinder Warner
Stroke 1¾"
Diameter 2½"

WHEEL CYLINDER AND WEDGE:

Diameter 1¾"
Stroke 7/8"
Wedge Angle 15°

MACK TRUCKS, INC.

ALLENTOWN, PA.

"Truck Capital of the World"