



MACK

DETAIL SPECIFICATIONS

Rear Axle

MAKE: MACK

Axle Model **S522R**
Capacity 52,000 [23 587 kg]
Creep Rating, Pounds..... 70,000 [31 700 kg]

NOTE: Axle creep rating does not take into account the suspension creep rating which may be different. Check with the suspension supplier to be sure the suspension creep rating meets your application needs.

Gross Combination Weight Rating:

w/Std. CRDPC150 - CRD151 Up to: 150,000 lbs. [68 182 kg]
w/Opt. CRDP202 - CRD203 Up to: 180,000 lbs. [81 818 kg]

See MackTraQ for specific GVW/GCW ratings per Carrier Application Guidelines. Failure to follow these guidelines may void Mack's Carrier Warranty.

Carriers

Type

Standard..... Dual Reduction Top Mounted with Inter-Axle Power Divider & 4 Pinion Closed Differential
Optional..... Air Assisted Inter-Axle Power Divider Lockout
Optional (CRD1501-1511 CRD2021-2031) Interwheel Power Divider
Optional. Driver Controlled, Air Assisted Interwheel Differential Lock, available on Front Rear, Rear Rear or Both Rears

Standard..... Iron - CRDPC150 - CRD151
Available Ratios:

3.11*; 3.25*; 3.40*; 3.56*; 3.79; 3.98; 4.19; 4.50*; 4.80; 5.04; .
5.31; 5.66; (* are not available with Inter-wheel Power Divider)

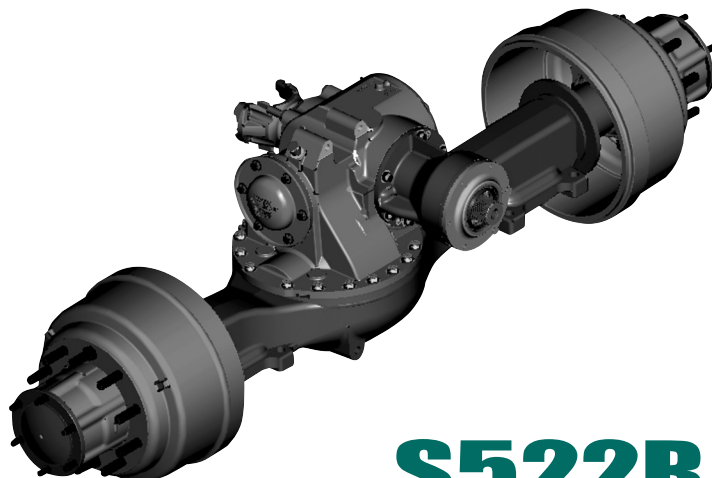
Due to application variations (engine power/torque, transmission, tire size and duty cycle) some ratios may not be acceptable for GCW/GVW ratings listed.

Optional..... Iron - CRDP202 - CRD203
Available Ratios:

3.63; 3.94; 4.35; 4.73; 5.02; 5.46; 5.95; 6.41; 7.08; 8.37

Due to application variations (engine power/torque, transmission, tire size and duty cycle) some ratios may not be acceptable for GCW/GVW ratings listed.

Oil Capacity, pints..... Carrier Bowl, each 26 [12.3L]
Bevel gear compartment, each carrier
(150/151, 1501/1511)..... 8 [3.8L]
(202/203, 2021/2031)..... 8.5 [4.0L]



S522R

52,000 LBS [23 587 kg]

Inter-Axle Power Divider	1.0 [0.5L]
(150/1501)	1.0 [0.5L]
(202/2021)	1.5 [0.7L]
Drain Plugs.....	Magnetic
Axle Housing, Type	Cast Ductile Iron with Forged Spindles Pressed Into Housing
Spindle	Induction Hardened Inner Journal
Diameter.....	Inner Bearing 3.75" [95 mm] Outer Bearing 3.25" [83 mm] Spindle Bore 2.67" [68 mm]
Axle Shafts, Type	Integral Flange
Material.....	Induction Hardened Chromium Molybdenum Steel
Body Diameter	1.890" [48 mm]
Diameter over Splines.....	2.200" [56 mm]
Splines, No. & Type	43-Involute
Brakes.....	Service Brake
Type.....	"S" Cam
Actuation	Air
Lining Size, Diameter.....	16.5" [419 mm]
Width	7" [178 mm]
Lining Thickness	0.86" [22 mm]
Lining Area, Total.....	1,012 in ² [6 529 cm ²]
Chamber Size—Sq. In. Per Wheel	1 @ 30 [194 cm ²]
Slack Adjuster Length	5.5"- 6" [140-152 mm]
Brake Adjustment.....	Self Adjusting
Parking Emergency Brake	Spring Loaded Chamber
Auxiliary Spring Brake	
Type	Spring Loaded Chambers (Double Diaphragm Type)
Spring Release.....	Mechanical
No. of Units	Four (One Unit per Wheel)

Mack mRIDE 52

Product Specifications		
Weight Rating (Pounds)	52,000	
Load Distribution	50 / 50	
Spring type	Parabolic	Multileaf
Width of Spring	2.95 in. (75mm)	
Number of Leaves	3	11
Leaf Thickness	2 @ 1.93 in. (49mm) 1 @ 2.17 in. (55mm)	11 @ 1.02 in. (26mm)
PID Code	1861630	1861631
Deflection Rate (lbs./in)	23,500	17,700
Weight-Conventional Cab ¹	1568	1828
Weight-Cab-Over ¹	1482	1780
Creep Rating (Pounds)	60,000	60,000
Spring height	6.65 in. (169mm)	9.21 in. (234mm)
Rear Shock Absorber	4 standard	
Available Mack Axles	S522R (PID code 2681030)	
V-Rod Tube (OD x Wall thickness)	2.28 in. (58mm) x 0.20 in. (5mm)	
Lower Torque Rod Tube (OD x Wall thickness)	1.89 in. (48mm) x 0.20 in. (5mm) –Left - Adjustable	
	1.97 in. (50mm) x 0.20 in. (5mm) –Right - Fixed	
Axle Spacing	54 in. (1370)	
Suspension Jounce (metal to metal)	3.94 in. (100mm)	
Available Models	GU7 & GU8, TD, MRU, LEU	
1. Includes torque rods, brackets but no crossmembers		

Mack mRIDE 52

Suspension Ride Heights

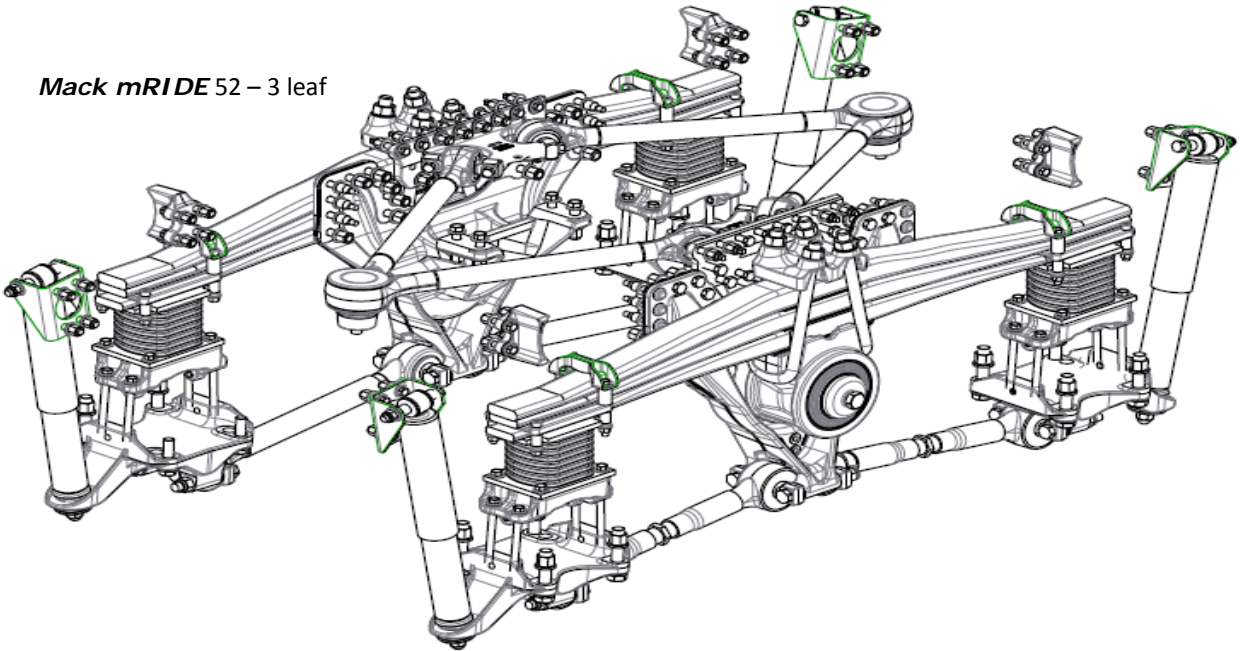
	GU7, GU8 & TD *		MRU & LEU **	
# of leaves	3 leaf	11 leaf	3 leaf	11 leaf
Weight ratings (lbs.)	52,000		52,000	
Ride height chassis only***	11.9"	11.9"	12.3"	12.3"
Ride height full load***	10.7"	10.5"	11.1"	10.9"

* GU7, GU8 & TD Ride Heights Based on 11.8in (300mm) frame height

** MRU & LEU Ride Heights Based on 13.37in (340mm) frame height

*** Centerline of Rear Axle to Bottom of Frame

Mack mRIDE 52 – 3 leaf



Mack mRIDE 52 – 11 leaf

