



## DETAIL SPECIFICATIONS

### Rear Axle

#### MAKE: MACK

**Axle Model**.....**S402R**  
**Capacity, Pounds**.....40,000 [18 100 kg]  
**Axle Creep Rating**..... Pounds.60,000 [27 200 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/Opt. CRDPC125 - CRD126 Up to:..... 125,000 lbs. [56 818 kg]  
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

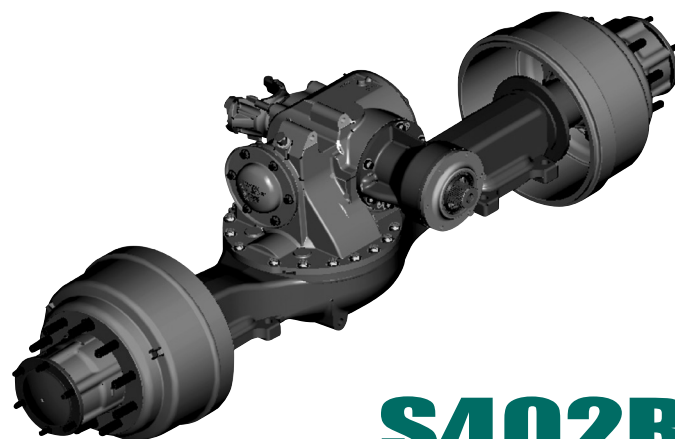
**Type**  
**Standard** ..... Dual Reduction Top Mounted with Inter-Axle Power Divider & 4 Pinion Closed Differential  
**Optional** ..... Air assisted Inter-Axle Power Divider Lockout  
**Optional** (CRD1501-1511, CRD2021-2031) Interwheel Power Divider  
**Optional** ..... Driver Controlled, Air Assisted Interwheel Differential Lock, available on Front Rear, Rear Rear or Both Rears is only available on CRD125/126 and CRD150/151  
**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 - CRDPC125 - CRD126  
**Available Ratios:**  
2.54; 2.66; 2.83  
**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  
(125/126)..... 8 [3.8L]  
(150/151, 1501/1511) ..... 8 [3.8L]  
(202/203, 2021/2031) ..... 8.5 [4.0L]



## S402R

40,000 LBS [18 100 kg]

#### Inter-Axle Power Divider

(125)..... 1.0 [0.5L]  
(150/1501)..... 1.0 [0.5L]  
(202/2021)..... 1.5 [0.7L]  
**Drain Plugs** ..... Magnetic

**Axle Housing, Type**.... Fabricated Steel with Forged Spindle Ends  
..... Welded to Housing Shell

**Spindle** ..... Induction Hardened Inner Journal  
**Diameter** ..... Inner Bearing 3.75" [95 mm]  
..... Outer Bearing 3.25" [83 mm]  
..... Spindle Bore 2.52" [64 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, Number & 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**.....880 in<sup>2</sup> [5 677 cm<sup>2</sup>]  
**Chamber Size—Sq. In. Per Wheel**..... 1 @ 30 [194 cm<sup>2</sup>]  
**Slack Adjuster Length**..... 5.5" to 6" [140 to 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:**  
**Two** (one unit per wheel on forward axle),  
four units available  
• Tractor—Cam Brakes w/front axle rating of  
12,000 lbs. [5 400 kg] or less  
**Four** (one unit per wheel)  
• Tractor—Cam Brakes w/front axle rating greater than  
12,000 lbs. [5 400 kg]  
• Truck—Cam Brakes

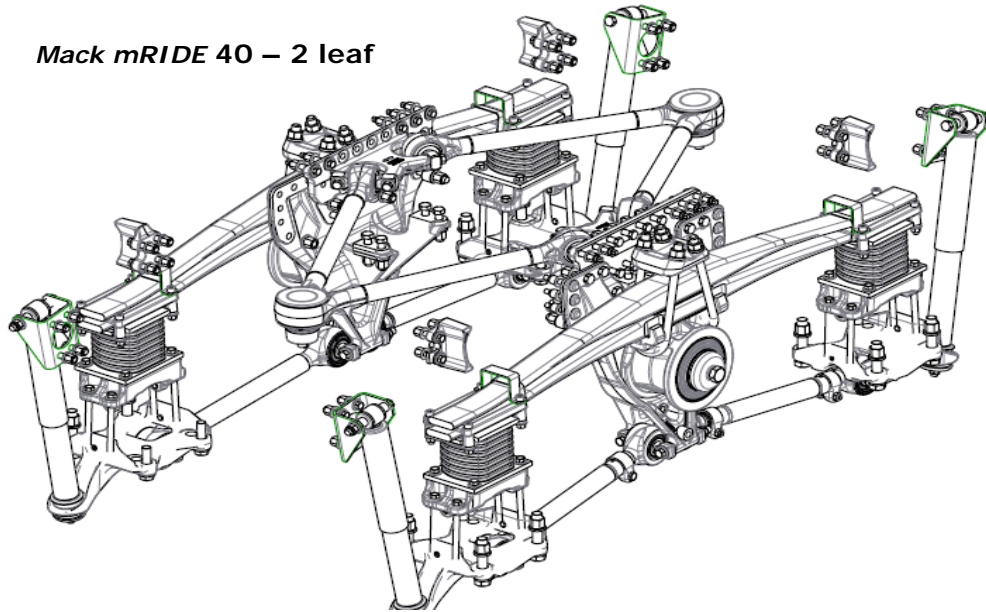
# Mack mRIDE 40

Product Specifications				
Weight Rating (Pounds)	40,000			
Load Distribution	50 / 50			
Spring type	Parabolic			
Width of Spring	2.95 in. (75mm)			
Number of Leaves <sup>1</sup>	5-Tractor Normal Ride	2-Tractor Stiffer Than Normal Ride	2-Truck Normal Ride	3- Truck Stiffer Than Normal Ride
Leaf Thickness	5 @ 1.25 in. (31.8mm)	1 @ 2.01 in. (51mm) 1 @ 2.46 in. (63mm)	1 @ 2.01 in. (51mm) 1 @ 2.46 in. (63mm)	2 @ 1.61 in. (41mm) 1 @ 2.17 in. (55mm)
PID Code	1861601	1861602	1861603	1861604
Deflection Rate (lbs./in)	8,550	19,500	19,500	21,700
Weight-Conventional Cab <sup>2</sup>	1424	1297	1297	1441
Weight-Cab-Over <sup>2</sup>	1424	1267	1267	1441
Creep Rating (Pounds)	55,000	55,000	55,000	60,000
Spring height	6.65 in. (169mm)	4.64 in. (118mm)	4.64 in. (118mm)	5.63 in. (143mm)
Rear Shock Absorber	4 standard	4 standard	4 standard	4 standard
Available Mack Axles	S402R (PID code 2681031)			
V-Rod Tube (OD x Wall thickness)	1.89 in. (48mm) x 0.20 in. (5mm)			
Lower Torque Rod Tube (OD x Wall thickness)	1.89 in. (48mm) x 0.20 in. (5mm) –Left - Adjustable			
	1.89 in. (48mm) x 0.20 in. (5mm) –Right - Fixed			
Axle Spacing	54 in.			
Suspension Jounce (metal to metal)	3.94 in. (100mm)			
Available Models	CHU, GU7 & GU8, TD, MRU <sup>3</sup> , LEU <sup>3</sup>			
1. Use Normal Ride for Typical Highway Applications. Use Stiffer than Normal Ride for Irregular Terrain and Higher Center of Gravity Situations. 2. Includes torque rods, brackets but no crossmembers 3. Cab Over Models Get 2 Leaf or 3 Leaf as a Truck Only				

# Mack mRIDE 40

Suspension Ride Heights						
	CHU, GU7, GU8 & TD *				MRU & LEU **	
# of Leaves	5 Leaf Tractor	2 Leaf Tractor	2 Leaf Truck	3 Leaf Truck	2 Leaf Truck	3 Leaf Truck
Weight Ratings (lbs.)	40,000				40,000	
Ride Height Chassis Only***	11.9"	10.9"	10.9"	11.1"	11.3"	11.5"
Ride Height Full Load***	10.0"	10.0"	10.0"	9.9"	10.4"	10.3"
* CHU, 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 40 – 2 leaf**



**Mack mRIDE 40 - 3 leaf  
(5 leaf also available)**

