**PRODUCT INFORMATION** 

PID Code:1861516Description:MACK TWIN YModel:CHU, CXU

The Mack Twin Y<sup>™</sup> is a completely new proprietary highway air suspension that focuses on customer deliverables. Those deliverables include ride and handling, lighter weight, low maintenance, and increased tire life. It will initially be released for use with Mack rear axles on the Pinnacle (CHU and CXU) tractors in a 6x4 configuration in both day cabs and sleepers. Tractor axle spacing on the 6x4 is available in 52" and 60". This suspension (PID code 1861516) is an available option effective with the March, 2013 MACKTRAQ release version 5.7.0.3.

The Mack Twin Y is a trailing arm style suspension featuring two stamped high strength steel blades which clamp the top and bottom surfaces of the axle. They contain four bushings at the top and bottom axle seats, thus providing a mechanical advantage to prevent axle windup from braking and tractive forces which are present in any typical trailing leaf spring air suspension.



The Mack Twin Y blades are joined to the axle with both upper and lower axle seats to eliminate suspension windup which significantly improves traction and braking control. The axle seats are clamped to the axle housing by Huck U-bolts on either side and never need re-torquing. Bushings located in the upper and lower axle seats control the roll rate and dampen the windup transmitted to the chassis to deliver easy handling and a comfortable ride.



The information in this brochure was accurate as of the date of the publication and pertains to the current version of Mack's sales tool. Mack Trucks, Inc. reserves the right to make changes in specifications, equipment or design, or to discontinue models or options without prior notice. If you see information you believe to be incorrect or incomplete, please call Sales Engineering at (800) TNT-MACK.

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**PRODUCT INFORMATION** 

The Mack Twin Y vertical load rides completely on the air springs and is not dependent on the steel blades to provide vertical load; which is another major difference between the Mack Twin Y and any other trailing leaf spring air suspension. In a leaf style air suspension, braking and tractive forces create windup that deflect the main spring member and cause rotation of the axle and create changes to the pinion angle (main contributor to driveline vibrations). The suspension windup is what causes the sprung mass of the vehicle to rise during acceleration or drop during braking.

Mack Twin Y blades are stiff in the vertical and fore / aft directions and flex in a lateral direction (green lines). The system doesn't work against itself because the forces between the trailing blades and torque rods are allowed to act independently. This is what provides the Mack Twin Y suspension with exceptional ride and handling characteristics and longer tire life.



Mack Twin Y	TANDEM AXLE
SPECIFICATIONS	
Capacity (lbs.)	40,000
Available Truck Models	CHU and CXU 6x4
Suspension Type	Mack Twin Y Blade – Air (PID code 1861516)
Available Mack Axles	Mack S38R, S40
Maximum GCWR (lbs.)	160,000
Maximum Engine Torque	2050 ft. lbs.
Number of Blades	8
Torque Rods	Тwo
Rear Shock Absorbers	4
Ground Clearance *	11.2″
Axle Spacing, in.	52" and 60"
Frame Rails (Web x Thickness)	10.47" x .24" / 10.47" x .28" / 10.47" x .32" / 11.81" x .37"
Ride Height **	8.3" w/ 10.47" Frame Web / 7.6" w/11.81" Frame Web
Suspension Travel	6"
Weight (lbs.)	644
*Suspension Ground Clearance calculated with 295/75R22.5 tires **Ride Height is constant in air suspension in laden and unladen conditions	

**Product Features** 

- Lighter Weight
- Tandem axle suspension is 300 pounds lighter than Mack AL-401
- Ride and Handling is Best In Class
- Low Maintenance
- Extended Tire Life
- Tire wear reduced by up to 25%
- Ground Clearance (comparable to current Maxlite)
- · Electronic air pressure sensor

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