

Dana® Spicer® DSP40 Tandem Axle

# Dare to Compare 40,000 lb. Tandem Axles:

*Dana® Spicer® vs. Meritor®*



**SPICER®**

Drivetrain Products



Dana® Spicer® DSP40 vs. Meritor® MT40-14x

# Dana® Spicer® DSP40 Tandem Axle

Dependable and durable, Spicer 40,000 lb. tandem axles have billions of miles of proven performance and give you what you want – *More time on the road.*

Provides consistent protection against impact and spin-out events

Industry proven performance & reliability

Tandem Axle Features	Dana® Spicer® DSP40	Meritor® *MT40-14x	Comments
Special Premium Process "Hypoid" Gearing	✓ Strong 15.4" [391mm] Diameter "Hypoid" Gearing with Premium Process Pinions	15.3" [389mm] Diameter with Mixed Amboid & Hypoid Design Depending on Ratio	DSP40 Provides Same Fit-up for Brackets and Inter-axle for ALL Ratios.
Preferred Ratio Offering	✓ 18 Ratios from 2.64-6.50 Including New 3.42 for MX Engines	18 Ratios from 2.47-7.17 - Does Not Offer 3.42	Offers Most Popular Ratios with Appropriate Steps for Applications
Welded Inter-axle Differential Case	✓ Added Strength and Durability	Uses One-Piece Steel Case From an OEM Proprietary Axle Design	DSP Design has Billions of Miles of Proven Performance
Ring Gear Thrust Bolt	✓ Protects Against Damaging Effects on Impact Loads	Protects Rear Amboid 2.47 - 4.11 Ratios Only	DSP40 Provides Consistent Protection Against Impact Events
Thick & Robust Carrier to Housing Joint	✓ Premium Attachment System for Better Retention Under Load	Standard Bolted Joint	DSP40 Design Protects Against Leaks Better Than Thin Flange Bolted Designs
Exclusive Micro-Lip™ Seal and Slinger System	✓ Keeps Lube In and Contamination Out in Forward and Reverse Operation	Uni-directional, Unitised and Loose Sleeve Seal Designs	DSP40 uses Bi-directional Seal Design to Improve Performance
Patented No-Maintenance Axle Housing Breather	✓ Unrestricted Air-flow Design Eliminates Clogging	New Vertical Mount Hose and Internal Spring -	Dana Patented Breather Proven in Over 4 Million Axles
Lightweight Iron Carrier Design (Includes Axle Shafts)	✓ Light Weight Tandem at 1243 lbs.	Weight Not Published but Estimated at 1259 lbs.	Spicer DSP40 is Estimated to be 16 Pounds Lighter
16 Bolt Rigid Ring Gear Mounting (16 mm diameter)	✓ High Clamp Load for Reliable Performance	12 Bolts (16mm)	DSP40 has High Clampload with 25% More Fasteners
"Straddle-Mount" 3 Bearing Pinion Support System	✓ Less Deflection - Increased Pinion Gear and Bearing System Life	2 Bearings "Overhung" Design	DSP40 uses Premium Bearings and 33% More Bearings Per Pinion
Wide Helical Gear with 2 Bronze Shaft Bushings	✓ Increased Strength with Less Wear for Longer Life	Uses Needle Rollers in Helical Gear	DSP Design has Billions of Miles of Proven Performance
Patented "Wheel-Diff" Lube System	✓ Protects Against Wheel Spin-Out	Splash Only	DSP40 has Forced Lube Flow to the Wheel Differential
Patented Power Divider Unit "Flow-Thru" Lube System	✓ Forced Lube System (Std.) That Protects Against IAD Spin-out	Splash Only with Lube Reservoir	DSP40 has Forced Lube Flow to the Inter-axle Differential
Dana Spicer Service and Support	✓ An Experienced and Professional Team Dedicated to Keeping Your Business Moving Forward	No	Dana Spicer Provides Broad Professional Customer Support Before, During and After the Sale
Higher Standard Torque and Horsepower Rating without Torque Control Limits	✓ Approval up to 1850 lb-ft and 600 HP	Up to 1650 lb-ft	DSH40 Tandem Available for Even Higher GCW and Torque Ratings.
Higher Torque Rating with Engine Controls Enabled	Approval up to 1850 lb-ft and 600 HP	Selected Applications up to 2050 lb-ft	MT40-14x Higher Approved Ratings are Not Published.
Fast Ratio Offering for Low RPM Engine Operation at Higher Speeds	2.64:1 Ratio	✓ 2.47:1 Ratio	2.47 Ratio is Not Fully Proven to Achieve Long-term Drivetrain Reliability & Performance
Minimize Joint Working Angles in Problematic Suspensions	Standard Configuration for Most Air-Ride Suspensions	✓ Amboid Design can Reduce Inter-Axle Driveline Angularity for Certain Ratios Only	Dana Offers Optional DST40 Tandem to Reduce Driveline Angles

\* Based on May 2010 Available Information per SP-0907 10-08 & SP-1084 3-10

Learn more about Dana® Spicer® 40,000 lb. tandem axle solutions at [www.dana.com](http://www.dana.com).

# Dana® Spicer® DSP40 Tandem Axle

The Dana® Spicer® DSP40 tandem axle offers the best value available. In addition to the quality construction and rugged durability you've come to expect from Dana, the DSP40 offers many additional value-added benefits.

Offers premium Carrier to Housing attachment system for improved robustness under load

Increased strength for less wear and longer life

Premium road-tested features for trusted long haul reliability

Tandem Axle Features	Dana® Spicer® DSP40	Meritor® *MT40-14x	Comments
<b>Available Options:</b>			
500,000 Miles - No Initial Drain	✓ First with Spicer Lube Approval	With Approved Synthetic Lube	DSP40 was Developed Spicer Approved Lubes
High Efficiency Lube Pump	✓ Patented On-Demand Pump Saves Fuel	Old Pump Design - Always Pumping	DSP40 Avoids Additional Heat or Horsepower Loss
Wheel Differential Lock With Large Clutch & Curvic Teeth	✓ Maximum Traction & Durability in Adverse Driving Conditions	Forward Axle Only	DSP40 Diff-Lock Option is Available for Both Axles
LMS Hub System	✓ Eliminates Bearing Adjustment & Extends Wheel-end Life	Not Published	Dana LMS Hubs are Designed to Work with Standard 'R' - Series Spindles
Housings	Wide-Track Axles and Various Wall Thicknesses Available	Wide-Track Axles and Various Wall Thicknesses Available	
Lightweight Aluminum Carrier	Not Available - Light-Weight Iron Carrier Only	Not Available - Standard Iron Carrier Only	Use Dana S23-170D & S21-060B for 400 Pound Savings in 6x2 Vehicle Configuration.

\* Based on May 2010 Available Information per SP-0907 10-08 & SP-1084 3-10

The DSP40 is backed by an experienced industry team.  
**Dana® Spicer® Service & Support**



## Dana Service and Support

For superior drivetrain solutions and technical support, you can depend on Dana. Through a unique combination of under-the-vehicle knowledge and advanced electronic tools, our experts can respond to customer sales and service requests quickly and help you make the most efficient use of your vehicles.

Find out about warranty coverage, parts and vehicle specifications, repair strategies, and more from an experienced team dedicated to keeping your business moving forward. For more information and assistance, contact the Dana Call Center at 1-877-777-5360.

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