## RESPONDAIR HEAVY-DUTY REAR AIR SUSPENSION



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### **PURPOSE-BUILT**

## **FOR FIRST** RESPONDERS

Developed specifically for fire and rescue vehicle applications, RespondAir™ is the first non-torquereactive suspension rated from 30,000 to 35,000-pound capacities, addressing the unique demands of modern fire apparatus through innovative engineering and robust structural components.

RespondAir™ is engineered for both single axle (30k-35k) and tandem axle (60k-70k) configurations, making it ideal for aerial trucks, rescue pumpers, tankers and other heavy-duty fire apparatus vehicles.



#### STABILITY & HANDLING

**DURABILITY & MAINTENANCE** 

The RespondAir™ uses a non-torque-reactive design to increase stability and remove unwanted chassis movement during braking and acceleration. The configuration minimizes axle movement and reduces stress on driveline components and vehicle occupants.

The RespondAir™ suspension directly addresses the most pressing

seamless tubing, and migratory self-healing coating to provide

**Severe Duty Bushings** - Link engineered the RespondAir™ with

increased surface area reduces the stress the rubber experiences,

diminishing maintenance requirements and extending service life.

Axle Connection - The elimination of U-bolt connections in

favor of optimally engineered weld-on axle brackets further

enhances long-term reliability of the suspension.

significantly larger, more durable natural rubber bushings, compared

to smaller bushings used by other suspension suppliers. The bushing's

maximum durability under extreme duty cycles.

needs with heavy-duty fire apparatus applications. The suspension is equipped with severe-duty bushings, high-strength cast components,

The suspension's V-Rod configuration provides superior lateral stability and reduced tail swing. The system integrates Link's proven 500 Series height control valves, offering the highest flow rates available for optimal leveling performance.

Non-Torque-Reactive Design - Optimized configuration minimizes suspension windup, frame rise, and torsion into the axle connection while increasing roll stiffness and reducing roll steer.



#### **EQUIPMENT PROTECTION**

Large Volume air springs isolate the chassis structure from excessive vibrations and impacts of the road. The air springs offer optimal protection to critical life-saving equipment, costly aerial components and sensitive electronic equipment. By reducing road vibration and impacts into the chassis the operator can both maintain their focus on the road and remain in control during tight maneuvers and highspeed lane changes.

The RespondAir™ is backed by an industry-leading 5 year warranty on structural components. The coverage demonstrates our commitment to providing fire departments with equipment that performs reliably when lives are on the line.





Specialty Suspensions

#### **Non-Torque Reactive Design**

- + Minimizes suspension windup, frame rise, & torsion into axle connection
- + Upper & lower arms control axle movement improving handling & roll stiffness
- + Allows welded axle adapter for no U-bolt maintenance
- + Reduces driveline vibration

#### V-Rod Configuration

- + Controls axle movement & resists unwanted rolling motion to provide uniform roll stability
- + Reduces rear truck tail wag

#### **Shock Absorbers**

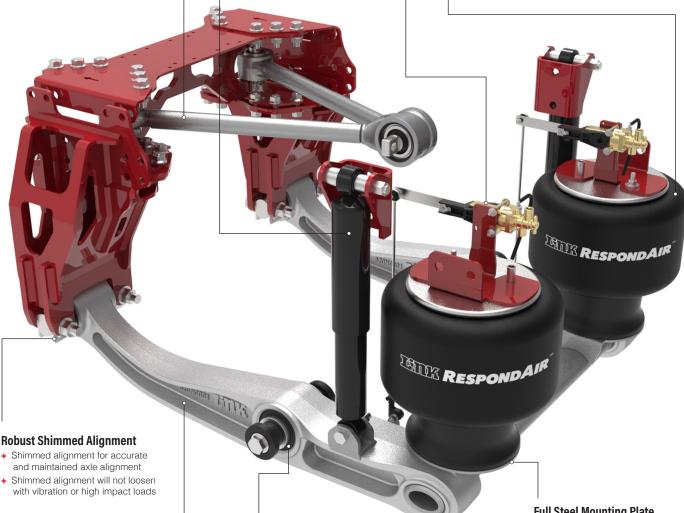
- + Protect air springs from overextension when the outriggers are used
- Packaged within the envelope of the tire for protection against damage
- + Limit jounce travel

#### **High Air Flow Height Control Valves**

- + The 500 series valve has the highest flow rate on the market to react quickly and maintain proper ride height during high speed maneuvers
- + Dual height control valves balance the chassis and allow the suspension to react quickly to uneven load

#### **Large Volume Air Springs**

- + Provide outstanding ride quality and equipment protection
- + Isolate the driver, firefighters, & equipment from road shock and excessive vibration



#### Cast Structural Beams

- + Utilizes premium high strength steel for durability & reliability
- + The lower control arms and torsion tube are permanently assembled
- The seamless high strength steel torsion tube provides optimized roll stability

#### **Severe Duty Bushings**

- + Large bushing cores ensure long service life & resistance to bushing walkout
- + Rubber is bonded to the inner metal to eliminate inner bushing friction
- + Bushings do not require lubrications

#### **Full Steel Mounting Plate**

+ The design fully supports and protects the air spring piston from road debris

#### **Anti-Corrosion Link-Koat®**

+ Migratory self-healing metal treatment provides maximum corrosion resistance

#### **Axle Availability Suspension Availability** Warranty

- + The RespondAir™ will be available through OEM partners late 2025
- + Fully integrates with main line axles such as Dana & Meritor
- + 5 year warranty on structural components
- + 2 year warranty on wear parts



Link develops and manufactures a variety of suspensions, suspension controls, and specialty products, engineered to address the unique needs of specialty vehicle markets. Link is tier-1 supplier whose primary products include cab, auxiliary and chassis suspensions, including heavy vocational, off-highway and air suspension management technologies.

Link manufacturing is IATF 16949 and ISO 14001: 2015 (EMS) certified with company locations in the United States and Canada.

#### **LINK® SUPPLIES SUSPENSION TO**



















#### **RESPONDAIR™ SPECIFICATION**

Product No.	Capacity	<b>Axle Configuration</b>	Ride Height	Axle Spread
RA-SA-30	<b>30,000</b> LBS	SINGLE	<b>8</b> IN - <b>15.5</b> IN	N/A
RA-SA-35	<b>35,000</b> LBS	SINGLE	<b>8</b> IN - <b>15.5</b> IN	N/A
RA-TD-60	<b>60,000</b> LBS	TANDEM	<b>8</b> IN - <b>15.5</b> IN	<b>52</b> IN - <b>72.5</b> IN
RA-TD-70	<b>70,000</b> LBS	TANDEM	8 IN - 15.5 IN	<b>52</b> IN - <b>72.5</b> IN

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