

Montreal – Vehicle Weights & Dimensions Task Force

Tom Parrott - TBU ENGINEERING MANAGER

EVOLVING TECHNOLOGY



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**RSSplus™**

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## **RSSplus™ : Designed Specifically For The North American Market**

- Incorporated customer requirements
  - Installation, testing and diagnosis similar to current ABS
  - Supports **both spring and air ride suspensions**
  - SAE recommended diagnostics using ToolBox PC software or simple blink codes
  - On-board data recording for effective fleet management
  - Instant fleet notification of stability events with popular telematic devices



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## **Spring Deflection Sensor**



- **ENCODER TECHNOLOGY – NO WEAR OF SENSOR ELEMENTS**
- **BAYONET CONNECTOR – PROVEN SEAL TECHNOLOGY**
- **ADJUSTABLE LINKAGE AND MOUNTING BRACKET**

## Deflector Sensor Installation



Meritor WABCO Trailer RSS Diagnostics

Diagnostics Sign-off Tests System Tools Help

ECU Information

System Name	Trailer TCS Plus	Production Date	03/14/2008
Part Number	4801070000	Configuration	4S/2M
Serial Number	286010019200	Odometer	0.0
Software Version	UE000314	Trip Reading	0.0
Diagnostic ID	0B.21.01.00	Next Service	0

Faults

Existing **Yes**

Warning Lamp

ABS **On**

Power

Voltage **12.7**

Source  Permanent  Stop Light

Wheel Speed

c	0
d	0
e	0
f	0

Air Pressures

Supply	119.6	Service Brake Demand	122.5
Brake Side 1	119.8	Bellows - Main Axle	15.7
Brake Side 2	119.6	Bellows - Steering Axle	N/A

Message Center:

## RSSplus Parameter Screen

**RSS System Parameters**

Vehicle Type  
 Semi trailer  
 Drawbar trailer  
 Single axle trailer

Number of Axles  
 1  2  3  4  5

Axle Definition

Axle	1	2	3	4	5
Sensor c-d	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sensor e-f	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lift Axle 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3rd Modulator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lift Axle 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
As Tag Axle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Modular Mounting  
 Facing Forward

SLAC  
 Optional Stoplight Activation Cable Installed

ABS System  
 2S/2M  4S/2M  
 4S/3M  4S/2M+TM

Suspension  
 Mechanical suspension  
 Air suspension

Next Close

## Spring Suspension Calibration

**RSS LSV Parameters**

Trailer Data

Manufacturer: Meritor WABCO  
 Type: Test Trailer  
 Vehicle ID: Number 2  
 Production Date (week/year): 36 / 2008

Brake Pressures

	UNLADEN			LADEN			Distance sensor lever length (mm)		
	Control pressure PM (psi)	Axle load (kg)	Suspension path (mm)	Control pressure PM (psi)	Axle load (kg)	Suspension path (mm)			
1	500	0	100	4000	150	10	25	95	100
2	500	0	0.0	4000	0	0.0	0.0	0.0	0
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0

Previous Next Close

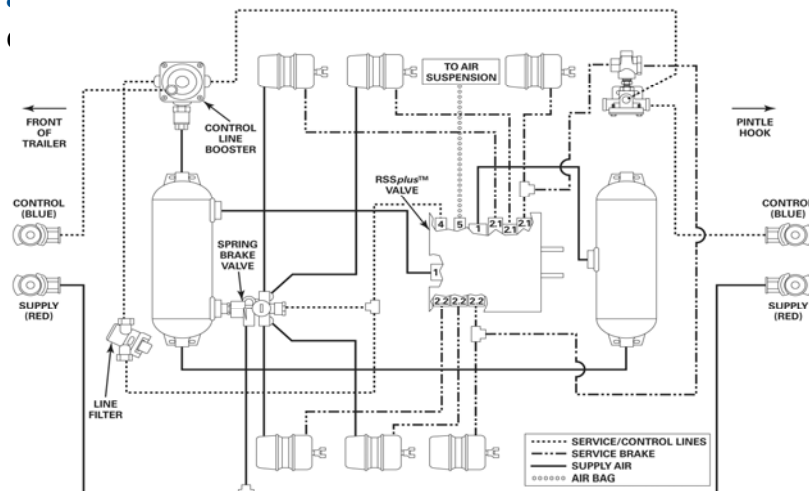
## Applications

- Configurations 2S/2M\*, 4S/2M, 4S/2M+1
    - 4S2M+1 adds one modulator valve, under development to support full trailers.
  - Vans, Reefer Units, Tankers, Flat Beds, Hazardous Material Haulers, B-Trains. Retrofit program in place.
- \*2S/2M (S = Sensor, M = Modulator)



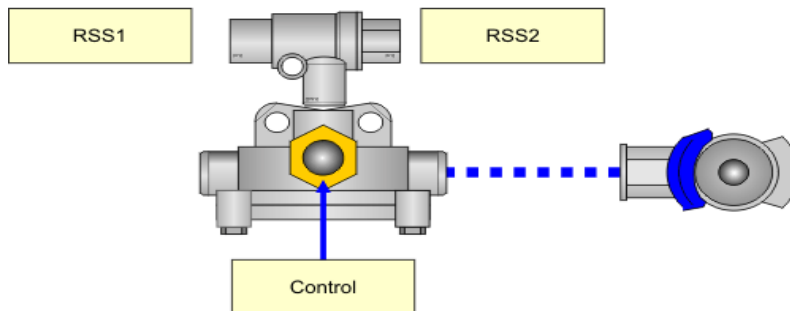
## P5 Valve for LCV Applications

B-TRAIN LEAD TRAILER P5 PNEUMATIC APPLICATION NUMBER 2



## P5 SIMPLIFIED

9430990100  
320100



## RSS*plus* STOP LIGHT ACTIVATION



- POWER CABLE OPTION.
- ACTIVATES BRAKE LIGHTS DURING AN RSS EVENT.
- USES PLC MESSAGE TO MODULE THAT CONNECTS CONSTANT POWER TO STOP LIGHT CIRCUIT.

## Technology Presentation

# LIFT AXLE VALVE

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## LIFT AXLE VALVE

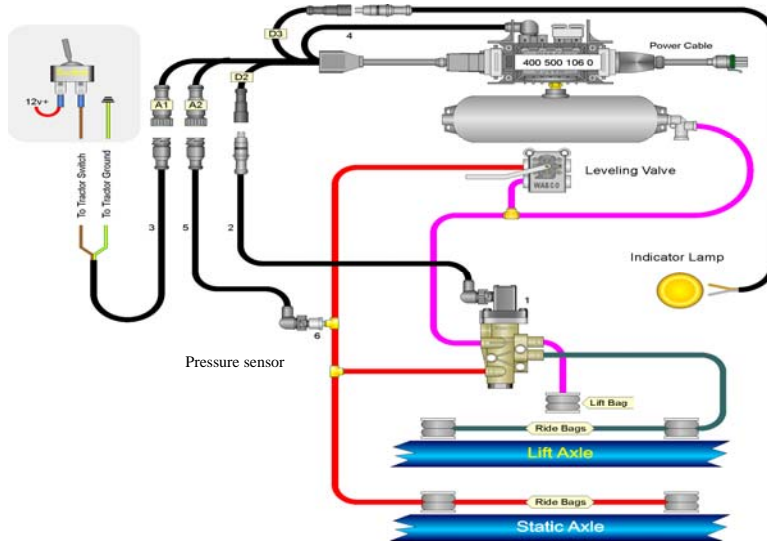
- Controlled by ABS system based on defined weight level, switch input and vehicle speed.
- Integrated bracket for secure mounting.
- Bayonet connector for quick and sealed connection.
- High flow rate for bag fill and exhaust timing..



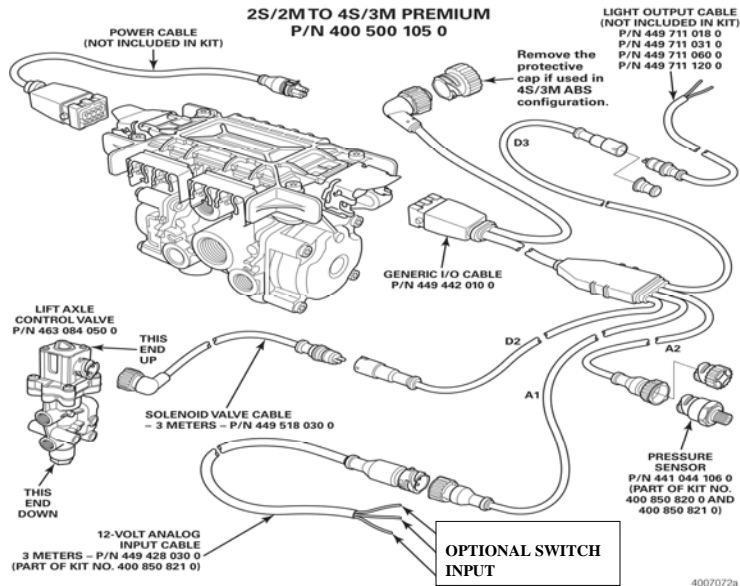


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# LAV INSTALLATION



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**Technology Presentation**

**Thank You!**

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