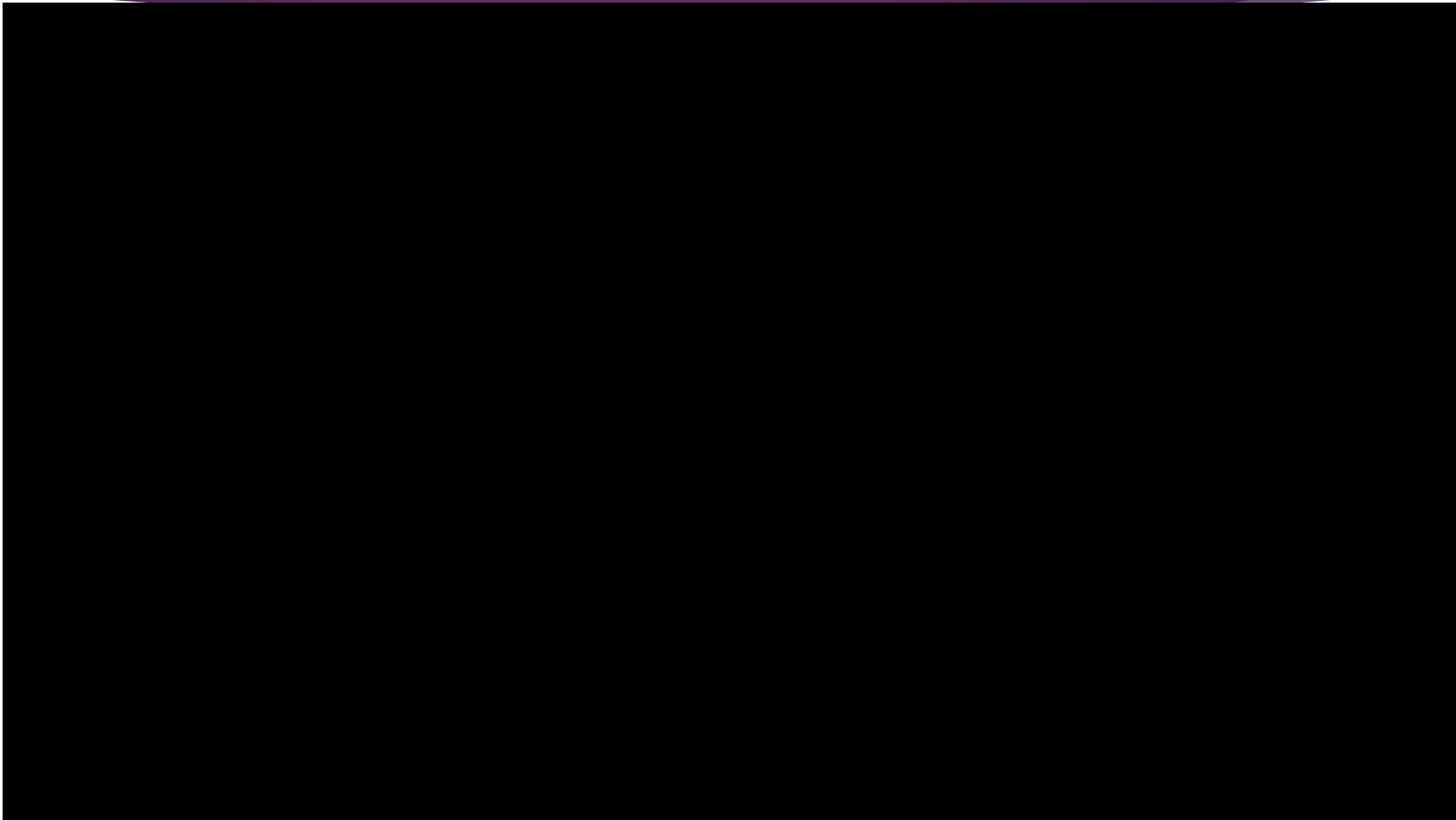


# GMC Air Suspension

PRESENTATION BY JEFF SIRUM FROM ALEX SIRUM GMC MOTORHOMES

# Original Design – GMC Air Suspension



# Air Suspension Components

- ▶ Our GMC Motorhomes were designed with a unique, automatic leveling, load adjustable air suspension system that can also be manually set, when parking, to self-level the coach.
- ▶ The suspension system was designed by GM engineers and tested on the GM proving grounds to provide the best ride and handling of any motorhome of that era
- ▶ The system components include an air compressor, valves and controls to operate air springs.
- ▶ We commonly call the air springs “air bags”...but do not confuse them with the collision protection air bags that are installed in modern vehicles for passenger safety in collisions.
- ▶ The original factory air bags are no longer being manufactured by Firestone for our coaches. Therefore, several different replacement systems have been engineered to use currently available air bags.

# Original Design – GMC Air Suspension





# Dual Bag System – Sirum Design

- ▶ Uses two currently available Firestone air bags
- ▶ A swinging steel plate controls centering and locates air bags
- ▶ This design allows the two wheels on each side to operate together in tandem to allow the bogies to step over bumps as the original system does
- ▶ Same suspension travel as original air bags
- ▶ Same operating air pressure as original
- ▶ Same handling and suspension feel as original design system
- ▶ Same load carrying capacity as original
- ▶ Installation kit includes air bag isolation valve, distribution block and filler extension for independent filler on side of coach.

# Dual Bag System – Sirum Design



Dual Bag Configuration



Complete installation Kit



# Dual Bag System – Sirum Design



Steel swing plate



Distribution block and valve

# Dual Bag System – Sirum Design



Standard Firestone Air Bag



Filler Valve on side of coach



# Alex Designed Single Bag System

- ▶ This replacement system uses one single air bag on each side of coach
- ▶ Adapters are provided to make this a direct, bolt-in replacement for the original air bag
- ▶ Easiest replacement system for DIY's – Do it yourselves!
- ▶ Shorter suspension travel than original bags provides firmer ride and handling.
- ▶ Slightly larger diameter than original bags
- ▶ Same load carrying capacity as original system
- ▶ Single air connection allows you to connect original air line.

# Alex Designed Single Bag System





# Alex Designed Single Bag System





# Sullivan Designed Single Bag System

- ▶ The “Sully” system uses one single air bag on each side of coach
- ▶ Adapters are provided to make this a direct, bolt-in replacement for the original air bag
- ▶ Uses readily available Firestone bags
- ▶ Single air connection allows you to connect original air line
- ▶ Somewhat larger diameter than original bags
- ▶ Greater load carrying capacity than original system...perfect for coaches with a hot tub or with a Harley riding on the back!
- ▶ Operates at much lower air pressure than original system
- ▶ Same ride height and suspension travel as original system
- ▶ The ride may be softer than original

# Sullivan Designed Single Bag System



# Sullivan Designed Single Bag System

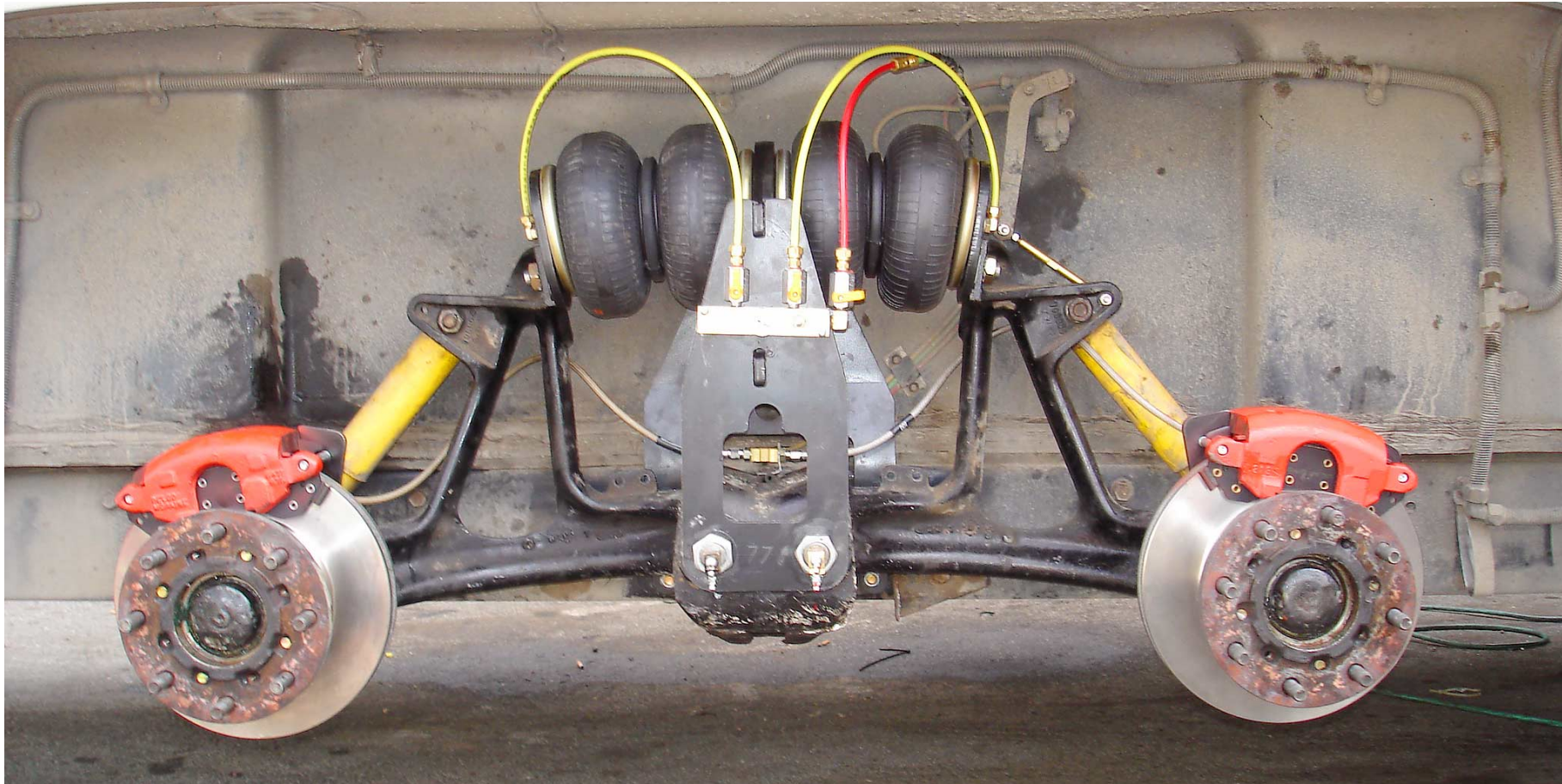




# Quadra-Bag California Designed System

- ▶ This system uses a separate air bag for each wheel position.
- ▶ Isolation plate between the two bags on each side does not move and stops the compound swivel action of the bogie, providing a firmer ride and handling
- ▶ Same approximate diameter as original
- ▶ Higher operating air pressure than original
- ▶ Readily available Firestone air bags
- ▶ Installation kit includes isolation valve, distribution block and filler valve
- ▶ Having separate air bag for each wheel may allow one bag to fail and the other bag on that side could hold up the coach temporarily if the wheel is removed and arm supported

# Quadra-Bag California Designed System





# Original GMC Air Suspension Compressor



Original factory GMC compressor is no longer manufactured. Some can be rebuilt.



# Air Suspension Compressor



- New Replacement air compressor is manufactured by Firestone
- Has larger capacity than original GMC compressor
- Can quickly level your coach





# Air Suspension Control Parts



Automatic Height Control Valve



Adjustable Height Control Links



## Air bag Isolation Valve Kit

- ▶ Allows individual air bags to be filled manually
- ▶ When valve is closed air remains in air bag
- ▶ Useful in event of failure of compressor or controls





# Air Suspension Maintenance

- ▶ If it is necessary to replace one air bag, then replace air bags on both sides of coach with the same replacement unit.
- ▶ Keep track of air bag installation date...air bag life expectancy is approximately 10 years.
- ▶ Some may last longer depending on exposure to the elements and UV sunlight.
- ▶ Keep air suspension system, air bags, valves and hoses, free of debris and corrosion.
- ▶ Do not apply oils, solvents, tire black, or “Armorall” type protectants



GMC Motorhomes International

**Thank you!**

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