

cover, and is reinforced by highstrength synthetic nylon and polyester. This flex member is fitted with rust-resistant retainers at each end. The upper retainer is equipped with an air fitting, and both retainers have protruding bolts for mounting. The retainers and the flexible bag member can be easily replaced in the event of damage.

During operation, air pressure inside the flex member exerts internal force in an axial direction to produce a stroke for lifting and support. In addition, air pressure in the air springs serves as an energy absorbing medium to provide superior vibration isolation, load leveling, and height control. There are internal rubber stops (bumpers) inside the air spring assembly to support the coach if there is an air spring failure or loss of air. These bumpers also prevent damage to the chassis under structure from large suspension deflections.

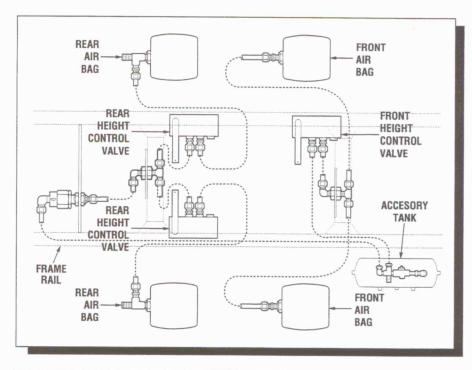


Figure 3-1 Air Spring Piping

## Ride Height Adjustment

The ride height adjustment valve is the central control of the suspension system, and meters the air pressure automatically to and from air springs controlling the vehicle ride height.

As the vehicle is loaded, the actuating lever arm moves from the neutral position to the up (intake) position. As it opens, the air valve allows air to pass into the air springs. When air fills the springs and the vehicle reaches normal ride height (at 100 psi), the actuating lever arm returns to the neutral position.

As a load is removed from the vehicle, the actuating lever arm moves from its neutral position to the down (exhaust) position. Opening the exhaust valve, exhausts air from the springs. When enough air is exhausted to bring the vehicle to normal riding height, the actuation lever arm returns to the neutral position.

Your vehicle is equipped with a Neway® rear suspension. Use the following procedure for ride height adjustment:

- Before beginning adjustment procedures the vehicle must be in an unladen condition.
- 2. Disconnect linkage at lower brackets.
- 3. Push the control arms to "up" position to raise the vehicle.



Improper ride height adjustment can affect handling.





Jack stands must be of sufficient strength to support the vehicle.

- 4. When the vehicle reaches the proper ride height, position jack stands on each side between the frame rail and ground.
  - Proper ride height is the distance between the center line of the axle beam and the bottom of the frame rail The ride height for your Neway® suspension is 7.5".
- 5. Push the control arm to "down" position lowering the vehicle and deflating all air from air springs and vehicle system. Recheck for proper ride height. Note that you must support the frame rail at the proper ride height.
- 6. Move the valve control arm to a 45° "down" position for 10-15 seconds.
- 7. Return the control arm slowly to the center position and insert a wood locating pin into the nylon block and bracket on the height control valve. Then loosen the 1/4" lock nuts located on the nylon block. This will allow the control arm to oscillate approximately +/- 1". Reconnect the linkage to the lower brackets. If a wood locating pin is not available, another pin or small pointed object may be used.
- 8. Re-tighten the 1/4" lock nuts at the nylon blocks to 5 ft lb
- 9. The height control valve may be used as an improvised jack if the linkage is disconnected from the lower bracket. Remove the wood locating pins that were inserted in step 7 and push the control arm to the "up" position to raise vehicle and remove jack stands.
- 10. Push the control arm to the "down" position, completely exhausting the air from the air springs.
- 11. Reconnect lower linkage. The suspension system will return to and maintain the proper ride height.

## Air Spring Replacement

Before starting air spring replacement, read the "Jacking Precautions" section on page I-11



## **CAUTION**

When front suspension components require removal the vehicle must be elevated by a jack until the suspension is relieved of all stress. Place jacks under the frame rail only. Do not place jacks under a body component or assembly. Use jack stands to secure the vehicle after adequate height is achieved. Jack stands must be of sufficient strength to support the vehicle.

1. Support the chassis body by placing jack stands under the frame rail. The axle must also be supported either by the wheels or with a jack.



## **CAUTION**

The coach must be supported high enough off the ground to ensure the air bags are not resting on their internal stops.