

**Crimping** The method of permanently sealing the diaphragm or bellows to the bead plate.

**Air Inlet** Provides the diaphragm with air.

**Combination Stud** Acts as a fixing stud and air inlet.

**Top Plate** Connects the airspring to the vehicle chassis.

**Fixing Studs** Secures the airspring to the vehicle chassis.

**Bumper** Solid rubber safety device to prevent excessive damage to the vehicle and suspension in the event of a sudden loss of pressure.

**Outer Cover** An outer cover of calendered rubber (passed through a number of vertical rollers to ensure uniform thickness).

**Second Ply** Fabric reinforced rubber with the same bias angle laid opposite to the first ply.

**First Ply** One ply fabric reinforced rubber cords at a specific bias angle.

**Inner Layer** An inner layer of calendered rubber (passed through a number of vertical rollers to ensure uniform thickness).

**Piston** Provides lower mounting arrangement for the airspring in the form of tapered holes or studs. (Made from aluminium, steel or composite material).

## Quality Assurance

### Air Spring Assembly type (Rolling Lobe)

Rolling lobe air springs have a low natural frequency and high degree of lateral flexibility. They also give high spring deflection or lift by means of length change without the need to change the diameter.

**Air Inlet** Provides the bellows with air.

**Threaded hole**

**Outer Cover** An outer cover of calendered rubber (passed through a number of vertical rollers to ensure uniform thickness).

**Second Ply** Fabric reinforced rubber with the same bias angle laid opposite to the first ply.

**First Ply** One ply fabric reinforced rubber cords at a specific bias angle.

**Inner Layer** An inner layer of calendered rubber (passed through a number of vertical rollers to ensure uniform thickness).

**Bumper** Solid rubber safety device to prevent excessive damage to the vehicle and suspension in the event of a sudden loss of pressure.

**Girdle Hoop** Specially designed ring made from aluminium or reinforced wire, moulded into the unit between the convolutions to provide lateral stability.

**Bottom Plate** On convoluted type only. Connects the airspring to the vehicle chassis.

### Convoluted Type

Convoluted air springs are characterised by a favourable height to spring deflection ratio. (with this type of air spring a relatively high deflection can be achieved with the smallest amount of overall height). Usually found in double or triple configuration.

### Manufactured using high quality steam process

Our air springs are produced by a superior manufacturing process which is a reliable steam production method. This method ensures extended service life, durability and constant quality to the rubber diaphragms.

Blacktech air springs are exclusively available from

**JURATEK**

