



Suspension System Components

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Brookhaven College

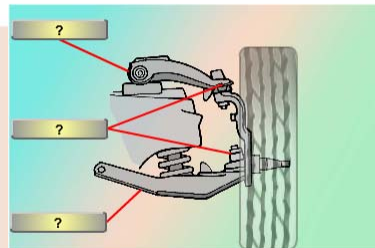
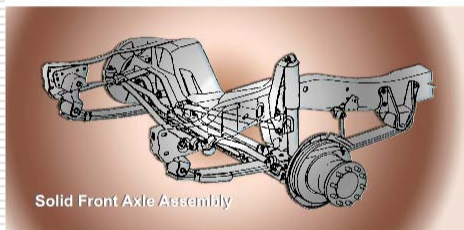


Components of the Suspension

- | | |
|--|--|
| <input type="checkbox"/> Leaf springs | <input type="checkbox"/> Tie rod ends |
| <input type="checkbox"/> Coil springs | <input type="checkbox"/> Stabilizer bars |
| <input type="checkbox"/> Torsion bars | <input type="checkbox"/> Shock absorbers |
| <input type="checkbox"/> Air springs | <input type="checkbox"/> Bushings |
| <input type="checkbox"/> I Beams | <input type="checkbox"/> Track bars |
| <input type="checkbox"/> MacPherson Struts | <input type="checkbox"/> Panhard bars |
| <input type="checkbox"/> Control arms | <input type="checkbox"/> Spindles |
| <input type="checkbox"/> Tie rods | <input type="checkbox"/> Knuckles |
-



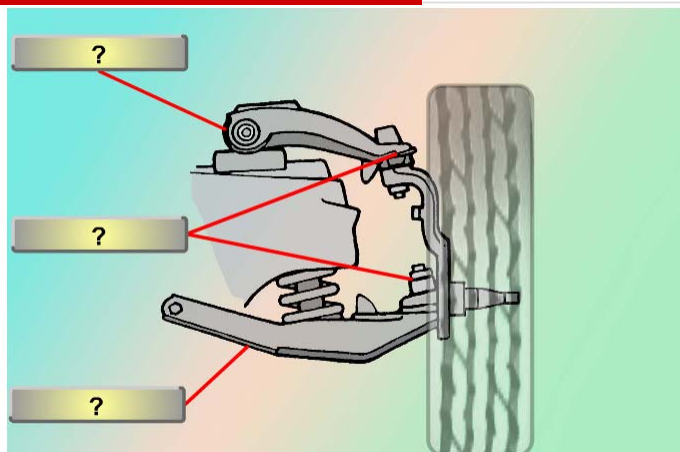
Front Suspension Types



4-2



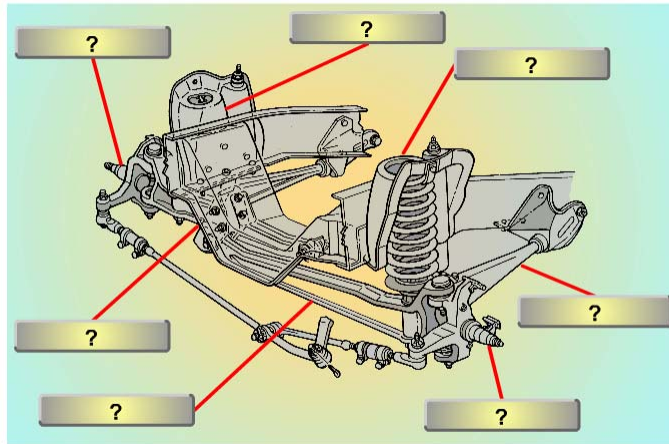
SLA (short/long arm)



4-3



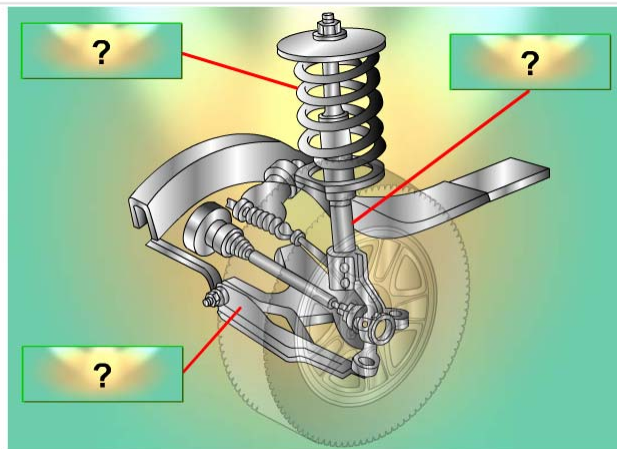
Twin I Beam



4-4



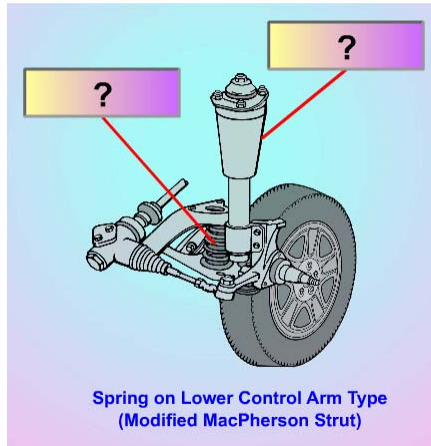
MacPherson Strut



4-6



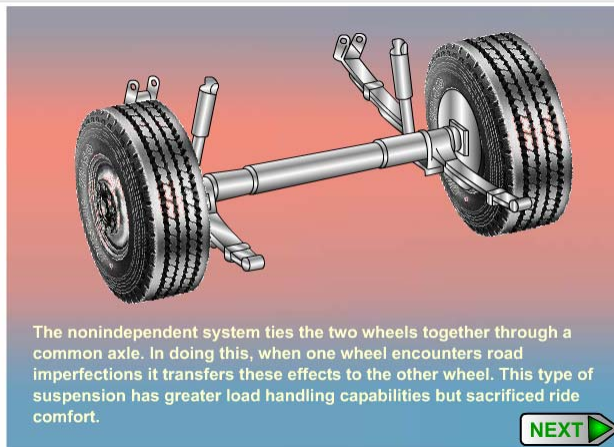
Modified MacPherson Strut



4-7



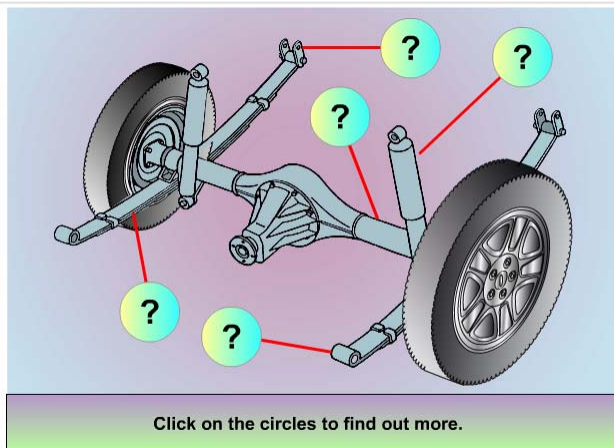
Rear Suspension Types



4-8



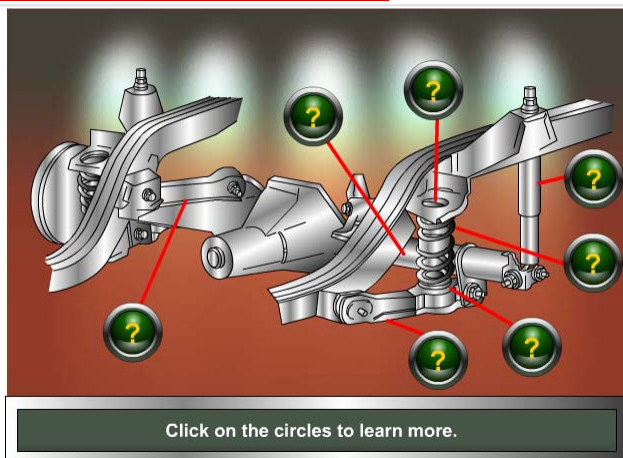
Leaf Spring



4-9



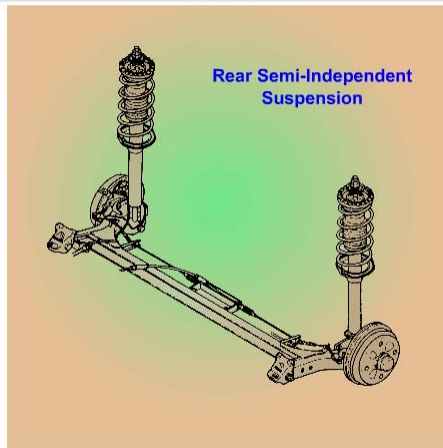
Coil Spring



4-10



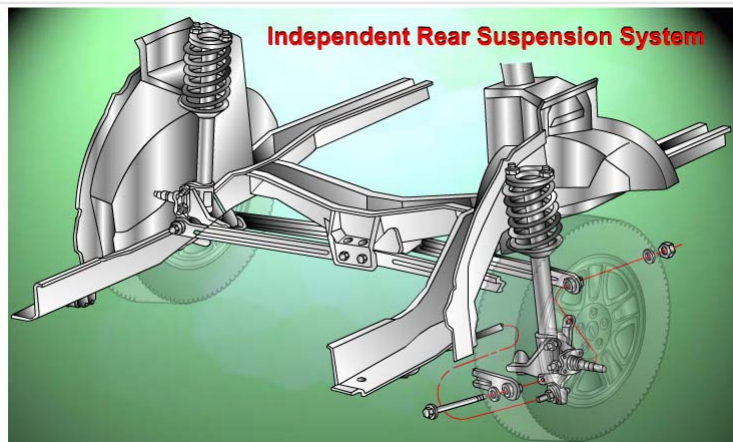
Semi-Independent



4-11



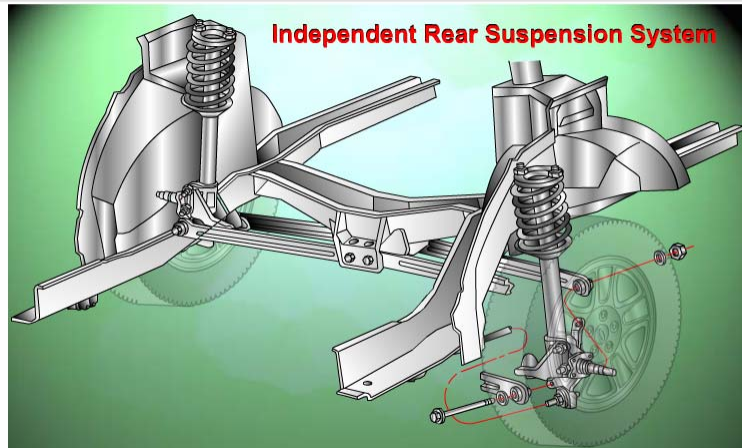
MacPherson Strut



4-12,4-13



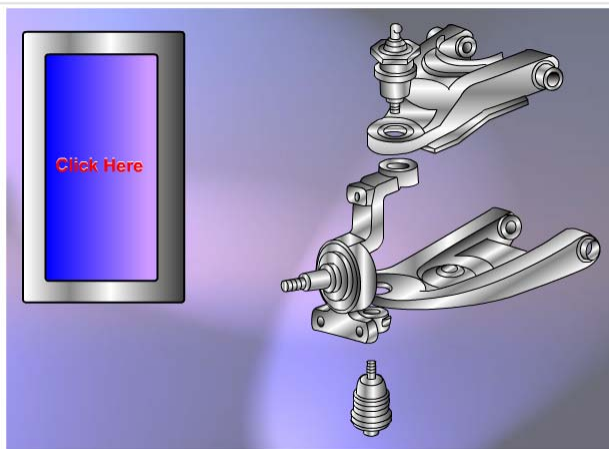
Independent



4-12,4-13



Control Arm ("A" arm) Ball Joints



4-14



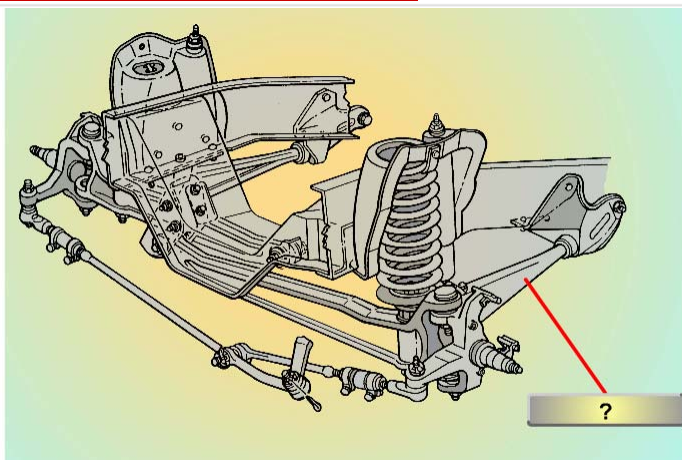
Toe Links



4-15



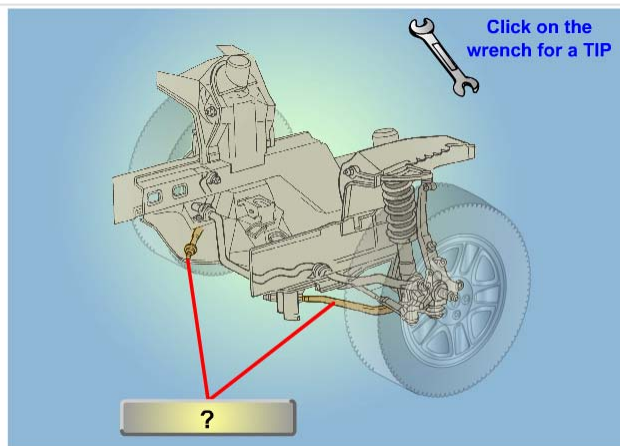
Radius Arms



4-16



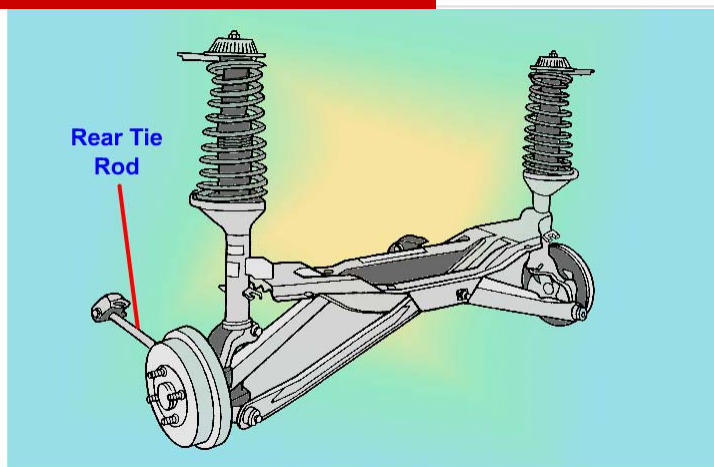
Strut Rods



4-17



Tie Rods (rear)

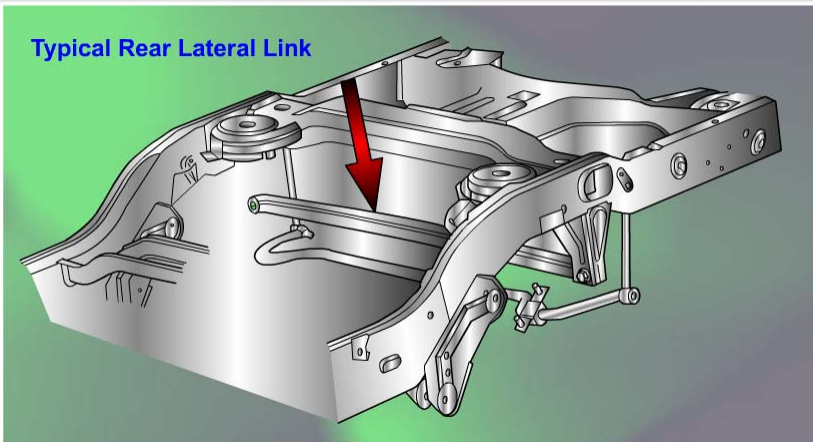


4-18



Lateral link, Watts linkage, and Track Bar

Typical Rear Lateral Link

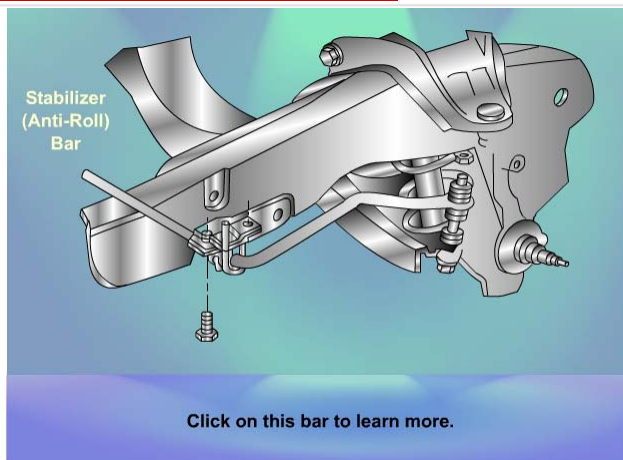


4-19



Stabilizer Bar

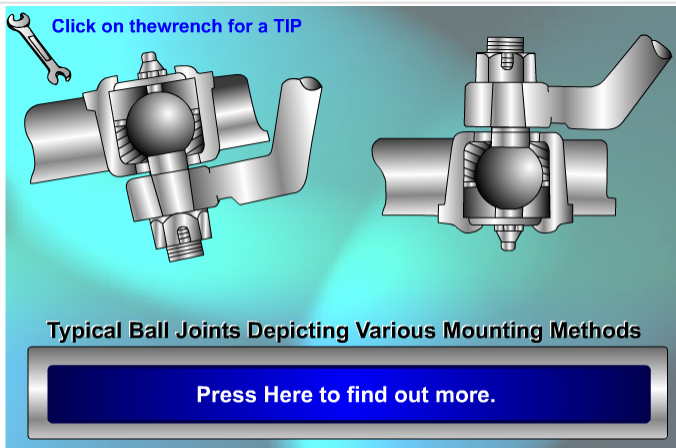
Stabilizer
(Anti-Roll)
Bar



4-20



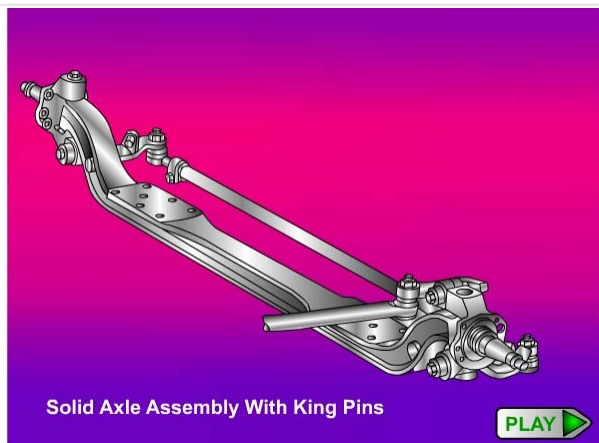
Ball Joints



4-20



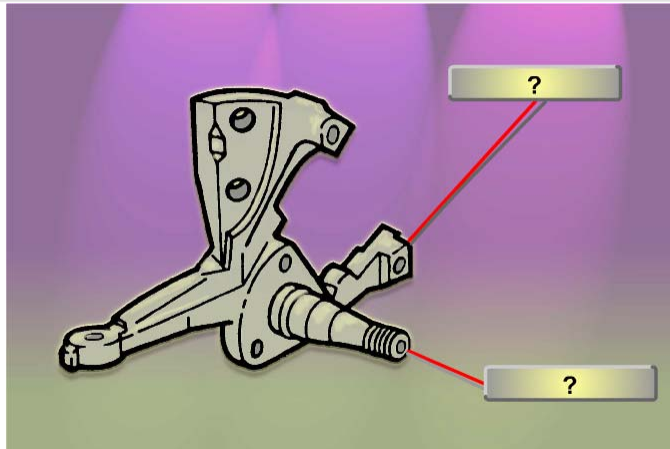
King Pin



4-22



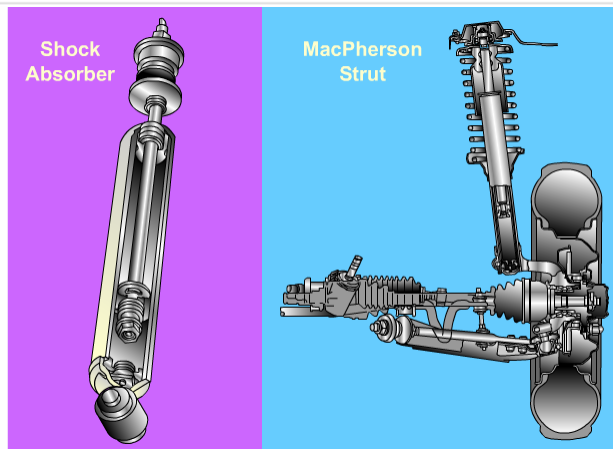
Spindles



4-23

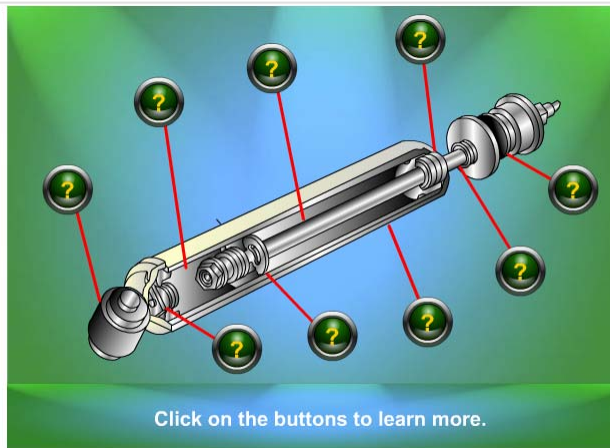


Shock Absorbers





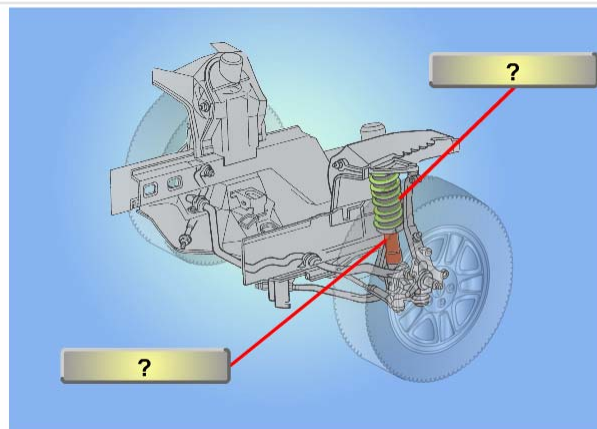
Shocks



4-24



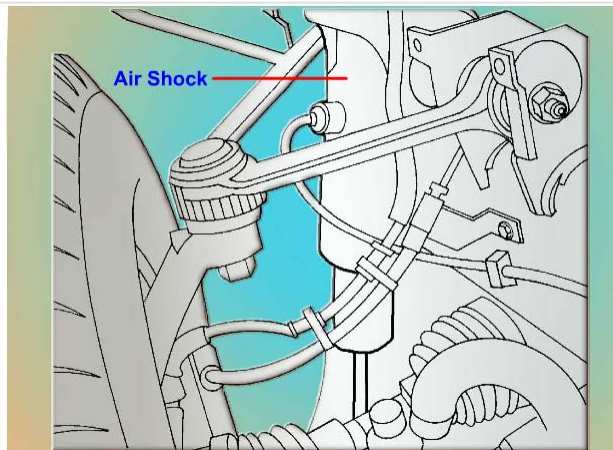
Coil Over Shock



4-26



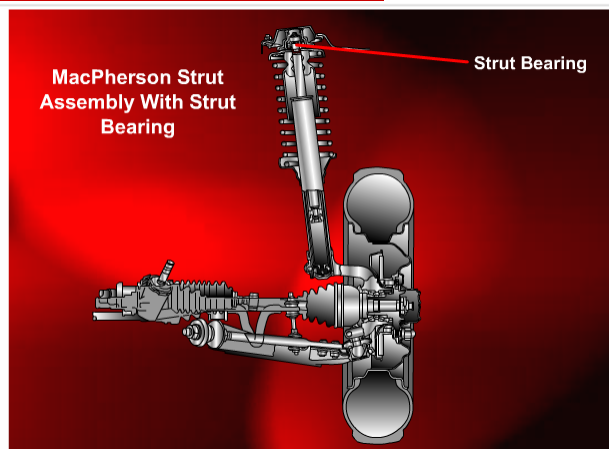
Air Shocks



4-27



MacPherson Struts



4-28



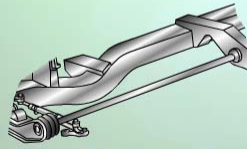
Springs



Leaf Spring



Coil Spring



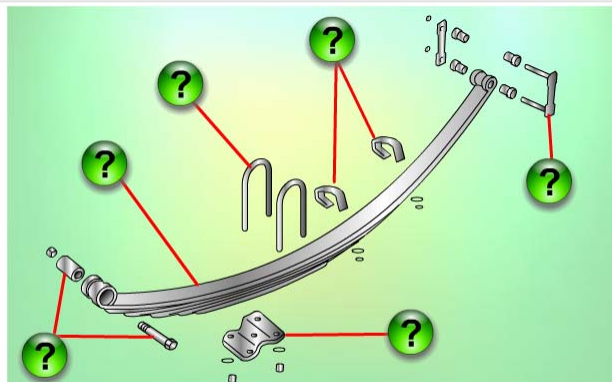
Torsion Bar



Air Spring



Leaf Springs

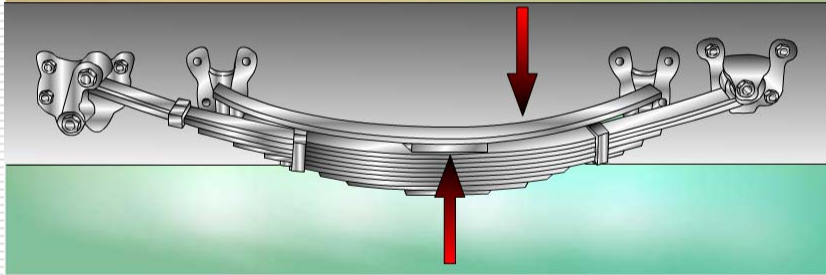


For more information click on the circles.



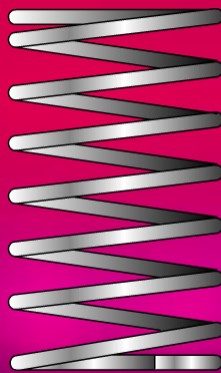
Helper Springs

Typical Helper Spring Located on Top of a Leaf Spring Assembly



Coil Springs

Typical
Standard
Coil Spring

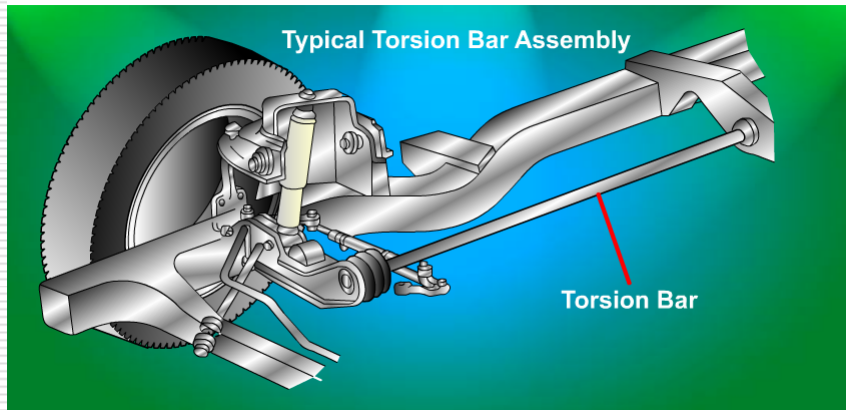


Typical
Variable
Rate Coil
Spring
(Should be
installed with
the tight coils
up as depicted
here)

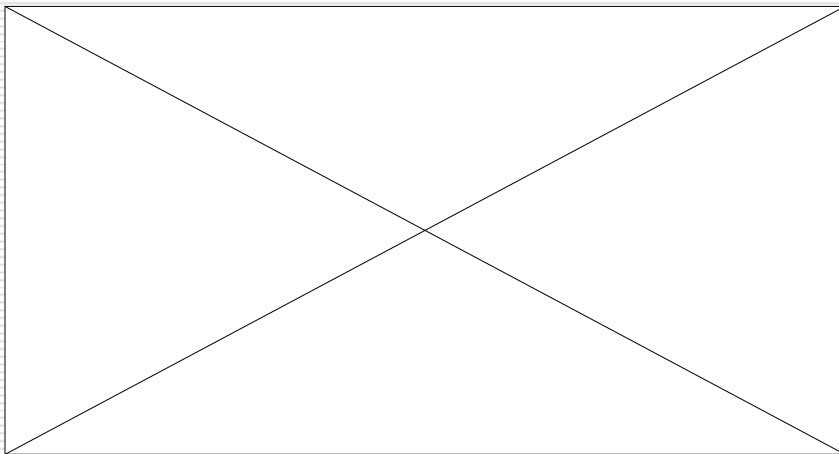




Torsion Bars



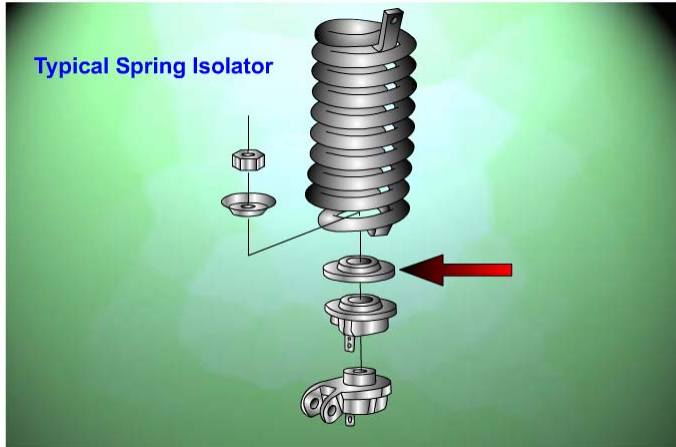
Air Springs





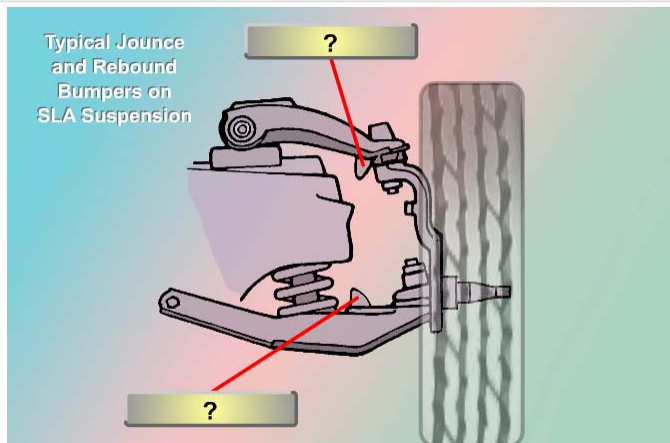
Spring Isolators

Typical Spring Isolator



Jounce Dampeners

Typical Jounce and Rebound Bumpers on SLA Suspension





Bushings

