

WORN SHOCKS AND BRAKES CAN WEAR DOWN TIRES

BE AWARE OF WEAR INDICATORS AND THEIR POSSIBLE CAUSES:



CENTRE WEAR

Centre wear is typically due to over-inflation. The maximum inflation pressure, listed on the tire, is for when the vehicle is fully loaded. Centre wear may also be caused by mounting oversized tires onto narrow rims.



SHOULDER WEAR

Shoulder wear is often the result of low tire pressure, overloading the vehicle, or the use of undersized tires.



CAMBER WEAR

Camber wear occurs when the tire is not properly vertically aligned properly with the surface of the road. Camber wear can be caused by a weak, broken, or incorrect spring. Excessive negative camber typically results in inside edge wear. Excessive positive camber typically results in outside edge wear.



HIGH-SPEED FEATHERING

Heavy shoulder wear (typically feathered tread front to rear) can be caused by hard driving. Inspect anti-sway bar end links and springs for wear. A performance tire, or one with a stiffer side wall, can reduce high speed feathering of tires.



BRAKE SKID / FLAT SPOT WEAR

When a tire slides across the road surface, it will scuff away the tread in one area. This generally happens as a result of the brakes locking up due to brake malfunction or the driver aggressively applying the brakes in an emergency situation. Flat spotting can also occur if the tire has been standing in oil, fuel or chemicals, or if the belts of the tire have shifted internally.



CUPPED WEAR

Cupped or scalloped dips appearing around the surface of the tread could indicate loose, worn, or sometimes bent suspension parts. Worn shock absorbers or unbalanced tires/wheels/brake rotors can also cause cupping, but the cupping would typically present a more concentric pattern.



TOE WEAR

Toe wear occurs when the tire is not aligned parallel to the centre-line of the vehicle. Basically, the tire may point "Toe In" or "Toe Out." Since toe can cause rapid wear, it is considered the most important alignment angle. Excessive toe results in a "saw-toothed" pattern of wear across the tread surface.

CLAIMS DUE TO INCORRECT FITTING PROCESS



INCORRECT ALIGNMENT

Shock absorbers damaged by lack of wheel alignment.



WRONG CARTRIDGE TORQUE

Damage to the cartridge because of excessive/not enough tightening of the torque of the upper nut that fastens to the suspension column.



USE OF INCORRECT TOOLING

The use of the right tool in the assembly and dismantling process is one of the most important factors to guarantee the perfect operation of the new components of the suspension system when it is installed on the vehicle.



WRONG TIGHTENING TORQUE

Shock absorbers damaged due to the release of the circlip.



WRONG FITTING OF TOP MOUNTING KIT

Breakdowns caused by poor installation of the cartridge.

CLAIMS DUE TO INCORRECT USE OR WRONG APPLICATION



SHOCK ABSORBER BREAKAGE DUE TO EXTREME IMPACTS

This type of failure occurs when the shock is exposed to compression forces for which it has not been designed. This can happen in off-road and other environments when the wheel hits a large rock or completes a jump. Structural damage that can occur includes bending or breaking of the piston rod, broken mounts, a bent or broken housing, and breakage of internal components.



BUSHINGS DAMAGED DUE TO OVERWEIGHT

Damage to the rubber of the shock absorber bushings. Bushing subject to overloading.



PNEUMATIC SPRING DAMAGED DUE TO WRONG USE

This breakdown occurs when the rubber in the pneumatic spring of the load-compensating shock absorbers is damaged, producing a crack resulting in air loss that puts the compensation system out of action.

CLAIMS RELATED TO THE USE OF WORN-OUT MOUNTING KITS AND PROTECTION KITS



STEERING PROBLEMS DUE TO WORN-OUT TOP MOUNTINGS

When mounting kits are worn-out, road holding, steering and handling are compromised, increasing the noise and vibrations in the cabin.



CHECKING THE STATUS OF THE TOP MOUNTING KIT (MONROE® MOUNTING KITS).



OIL LEAKAGE DUE TO WORN-OUT PROTECTION KIT

Checking the shock absorber protection kits.