

# CASTER ANGLE AND KINEMATIC TRAIL

## Problem

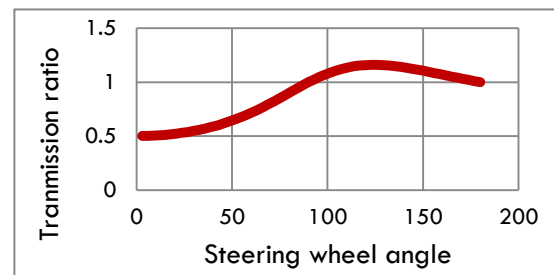
Too much effort to turn the steering wheel

## Cause analysis

Wrong caster angle and kinematic trail

|                      | Design goal | Measured on left wheel | Measured on right wheel |
|----------------------|-------------|------------------------|-------------------------|
| Caster Angle (°)     | 5.75        | 6.5                    | 7.5                     |
| Kinematic trail (mm) | 19          | 30                     | 35                      |

Non constant velocity column system

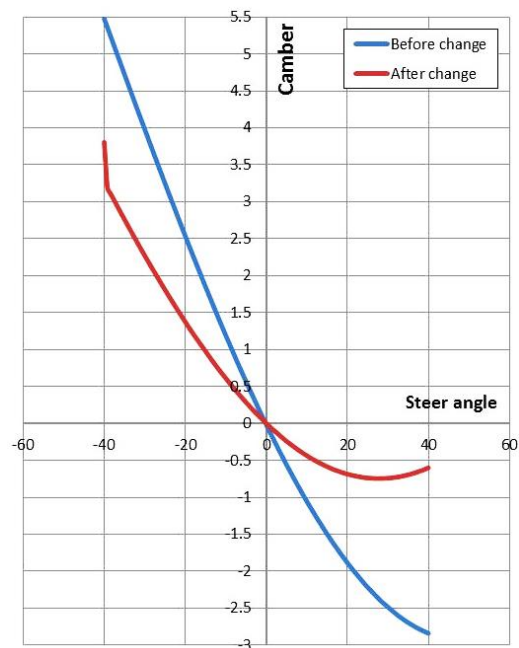


## Solution

New lower wishbones

- Caster angle :  $3.1^\circ$
- Kinematic trail : 14mm

New steering column kinematic



IMPACT ON CAMBER CHANGE WHEN STEERING

## Tests

Lower effort necessary to drive

Stable direction