- XK120 engine and transmission, with modifications for 205 HP (from 160-180) factory cars 220HP with Weber carburetors and special camshaft.
- Tubular frame designed by William Heynes, for light weight and stiffness.
- Aluminum body designed by Malcolm Sayer, aerodynamic, and light (some factory cars had special thin gauge aluminum for further weight savings)
- Dual A-arm front suspension with torsion-bar springs and gas filled shock absorbers.
- Live axle rear suspension
- Later cars after mid-1953 had four-wheel disc brakes.
- Drivability with high performance.