

'516' FRONT WHEEL DRIVE TOURING CAR GEARBOX

The 516 gearbox is a high performance front wheel drive touring car gearbox that has been designed specifically for the World Touring Car Championship.

The 516 makes use of reduced center distance F1 derived gear ratios to minimise the size and weight of the gearbox and to minimize inertia. The gearchange system incorporates the latest polynomial barrel track design and low inertia gearchange rack to improve gearchange response and driver feel.

The low positioning of the gear cluster enables easy removal from the car under the chassis rail, and lowers the centre of gravity. The gear cluster is fully exposed when removed from the gearbox allowing quick inspection, and easy access for ratio changes.



Specification

- 300Nm (221lbf ft) maximum input torque capacity.*
- 6 speeds with sequential gearchange selection.
- Suits installations with gearbox on L.H. side.
- Aluminum L169 castings, with 'O'-Ring face sealing.
- Lubrication is via single stage eccentric lobe pump, configured for use with an external cooler.
- Differential is a Xtrac cassette type plate unit with a choice of ramp angles, plate and preload settings.
- Differential pre load is externally adjustable while installed in the gearbox.
- Bell crank actuated low inertia gearchange rack reduces wear and improves gearchange.
- Xtrac 'Pin pawl' ratchet and pawl gearchange assembly with low inertia polynomial barrel.
- Left hand output flange is integral with the differential, to suit GI 82 size tripod joint.
- Clutch release slave cylinder (AP CP3859-1250).
- Gearbox weight is approximately 30.5 kg (67.0lb).*

Gearbox Benefits

- Light, positive sequential gearchange.
- Easily removable cluster for ratio changes.
- Easily removable differential with externally adjustable differential pre load.
- Cost effective, reliable, lightweight solution.

Options Summary

- Cross shaft assembly.
- Super polished gear ratios (Xtrem Process).
- Internally re-circulating oil pump system.
- In car gear lever.
- Gearchange potentiometer, mounting and display

Why choose Xtrac?

Quality

- Strict quality assurance procedures are carried out at every stage of manufacture
- Steels manufactured to Xtrac's own specifications.
- Every unit dynamically test run prior to dispatch.

Performance

- Xtrac's advanced engineering solutions keep our customers ahead of the competition
- Xtrac's in-house manufacture provides rapid response.
- Our processes and procedures are continually monitored and evolved to increase efficiency.

Reliability

To finish first, first you have to finish... Xtrac's track record speaks for itself:

- 26 Formula One World Championships
- 20 CART Championships • 15 Indy 500 Victories
- 21 Touring Car Championships • 23 World Rally Championships
- 10 Le Mans/Daytona 24 Hour Victories
- 14 Dakar Rally Victories
- 5 NHRA Drag Racing Championships
- 8 AMA MX/SX Championships

