

# 516 FRONT WHEEL DRIVE TOURING CAR GEARBOX



The 516 gearbox is a high performance front wheel drive touring car gearbox that was 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 an Xtrac cassette type plate unit with a choice of ramp angles, plate and preload settings. (quick change diff cassette is easy to remove)
- 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 29.8kg (65.5lb)\*

## THE GEARBOX OFFERS THE FOLLOWING 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?

The value of Xtrac's competitive advantage is well recognised by the champions and one make series who already rely on their expertise, in addition to individual teams running on modest budgets. Success is summarised by Xtrac's watchwords:

### QUALITY

To maintain their position as the leading supplier of high performance transmissions, Xtrac operate a continuous re-investment policy.

### PERFORMANCE

Supplying championships such as IRL, BTCC, GRAND-AM, FIA Super 2000, Formula Le Mans and most recently, Brazilian Stockcar and Argentina's TC2000, Xtrac's track record speaks for itself.

### RELIABILITY

Xtrac's advanced engineering solutions keep their customers ahead of the competition in the most grueling endurance events – from Dakar to Daytona and from Monte Carlo to Le Mans – all the way to the chequered flag.



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\*Approximate only, see Notes Document for details.

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