

'213' Adjustable Negative Pre-Load Differential (ANPD)

Xtrac have designed and developed a new differential for the Porsche 911 GT3R, as used by Dick Barbour and tested by Porsche at Weissach. We are able to offer this unit direct to customers for use in the 911 GT3R.

The '213' Differential is an adjustable Negative Pre-load Differential (ANPD). Under light acceleration or deceleration levels the Differential will remain open, but as the torque transmitted increases, the force separating the side gears will increase overcoming the negative pre-load effect of the Belleville springs and lock up the friction discs and plates.

The characteristics of the differential can be tuned by changing either the ramp angles on the side gear rings, or adjusting the amount of negative pre-load via the adjuster plates. The adjustment can be carried out either on the bench or in the car.

A small machining modification is required to allow the unit to fit into the existing Porsche casing. Xtrac can modify the casing or supply details for customers to carry out the machining themselves.

Specification

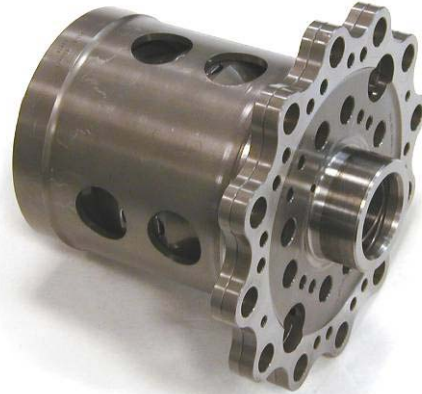
- Most components are manufactured in Xtrac's own grade of steel (X36C). Highly stressed components are also shot peened.
- Side gear thrust can be also used to lock the differential.
- 8 Friction Faces.
- Torque sensitive locking characteristics, using Salisbury type ramp components.
- Externally adjustable Negative preload.

The differential offers the following benefits

- Cost effective, reliable solution.
- Under light acceleration or deceleration levels the Differential will remain open, but over a set torque level lock torque is generated.
- The cut in point is adjustable.

Options Summary

- Xtrac can modify the casing and fit the differential.
- Case modifications and parts allow for external adjustment.



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 evolve to increase efficiency.

Reliability

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

- 24 Formula One World Championships
- 20 CART Championships
- 9 Indy 500 Victories
- 20 British Touring Car Championships
- 17 World Rally Championships
- 7 Le Mans/Daytona 24 Hour Victories
- 10 Dakar Rally Victories
- 3 NHRA Drag Racing Championships
- 4 AMA MX/SX Championships

Further information is available on this product from:

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