

LIMITED SLIP

Reproduction parts include the 'S' type diff side plate, essential when using the Hardy Spicer type coupling, and the studs that fit the output shaft flange. A bonus is that Mini Spares also produce the 'S' side plate with the extra 'ear' for use in rod-change type gear boxes, making use of LSD's in rod-change boxes a great deal easier.



22G419

'S' Diff side plate - state whether for remote or rod type gear box.

22A1139

Output flange stud.

Mini Spares are the main stockist of the excellent Tran-X Limited Slip differential. Basically a clutch type diff it is a 1950's idea incorporating 1990's technology and is much more refined than previous plate type diffs. Fine engineering and design allows variations in static pre-load, percentage torque transfer, and acceleration/deceleration action to be made. This facilitates tuning of the diff to suit individual requirements and applications - be it road, rally or race. Unlike most other diff units, the Tran-X diff can be fitted with the minimum of casing modifications. All components necessary to fit an LSD unit are stocked, as is a wide range of crown wheels and pinions giving final drive ratios from 3.44 to 4.67.

It is highly recommended to use a full track, steel cage bearing when using the LSD unit. These provide better location of the diff in the housing. An information sheet on how a limited slip differential works and specific settings data is available on request.



C-AJJ3387

Tarmac/race setting Limited slip.

C-AJJ3387A

Rally/autocross setting Limited Slip.

C-AJJ3387B

Road setting Limited Slip.

C-BTA1262

Hardy Spicer coupling type output shaft.

C-BTA1263

Inboard CV joint type output shaft.

C-BTA123

Spacer washer for C-BTA1262.

CCN122

Retaining circlip for C-BTA1262.

DIFF RATIOS AVAILABLE FOR L.S.D.

SEMI-HELICAL

C-BTA1250 3.44 Crown wheel & pinion
C-BTA1248 3.76 Crown wheel & pinion
C-BTA1252 3.9 Crown wheel & pinion
C-BTA1246 4.1 Crown wheel & pinion
C-BTA1251 4.23 Crown wheel & pinion
C-BTA1249 4.3 Crown wheel & pinion
C-BTA1253 4.67 Crown wheel & pinion

DIFF RATIOS AVAILABLE FOR STANDARD DIFF ASSEMBLY

HELICAL TYPE

PRE A' PLUS GEARS

Ratio	Crown	Whl Teeth	Pinon Teeth
3.647	22G340	62	22A399 17
3.444	22A411	62	22A413 18
3.765	22A401	64	22A399 17
3.938	22G340	63	22G338 16
4.133	22G101	62	22G99 15
4.267	22G370	64	22G99 15
4.350	22G443	65	22G99 15

A' PLUS GEARS

Ratio	Crown	Whl Teeth	Pinon Teeth
3.647	DAM4162	62	DAM4137 17
3.765	DAM4779	64	DAM4131 17
3.444	DAM3216	62	DAM2679 18
3.938	DAM3216	63	DAM3218 16
3.105	DAM6327	59	DAM2808 19
3.210	DAM2806	61	DAM2808 19
2.950	DAM5925	59	DAM5927 20
4.133	DAM3645	65	DAM3647 15

The crown wheels are usually stamped with the part number and often the number of teeth for that crown and pinion, (ie 22A411 will be marked with that number and 18/62). The pinions are not marked in anyway, but note some crown wheels and pinions have the same number of teeth, but the tooth pitch and overall diameters vary. It is absolutely imperative that the correct pair of gears are used to avoid considerable damage.

DIFF RATIOS AVAILABLE FOR STANDARD DIFF ASSEMBLY SEMI HELICAL

JK-4.3CWP

4.3 Crown wheel and pinion.

JK-4.5CWP

4.5 Crown wheel and pinion - straight cut only.

JK-4.6CWP

4.67 Crown wheel and pinion.

CROSS-PIN DIFF.



The ultimate in reliability for street and race use. Twice the strength of a stock differential. Contains four spider gears and two cross pins. The greater number of gears means greater reliability since each gear only takes on 1/4 of the load instead of 1/2. The outer cage is also made from billet steel instead of cast. The cross-pin differentials also use stock crown wheels and outputs shafts (not included).

C-AJJ3385

Road-Duty Cross-Pin Bullet differential assembly

