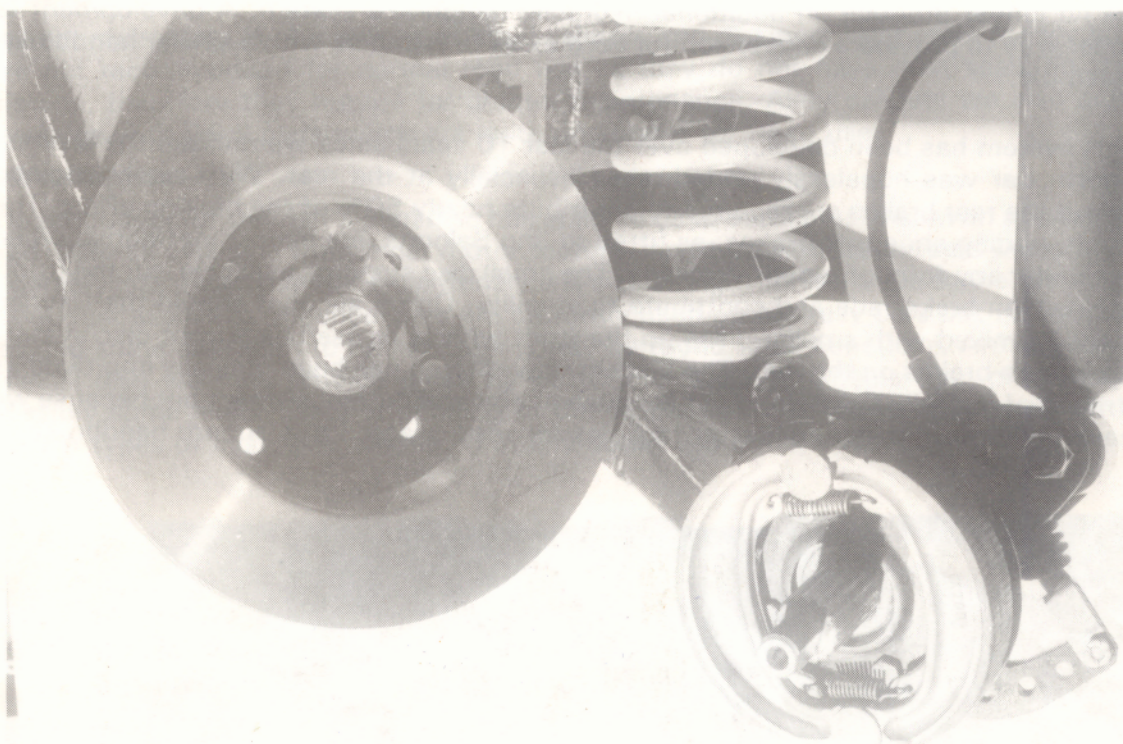


DAVRIAN DISC SYSTEM



Shown is a Davrian Rear Trailing Arm with the Caliper mount (Caliper omitted for clarity)

The handbrake shoes operate in the middle of the disc in an integral drum. Shoes, springs, cams, cables and levers are all provided.

Illustrated is the Davrian Gas Shock Absorber.

10.2" Discs should be used on all 4 wheels, and not mixed in any way.

The pivots and Caliper Mountings have to be welded on. This would normally be provided free of charge with Davrian Suspension. Allow extra £20 for converting customers' arms and strengthening.
Carriage is £8 (2 x Securicor)

Front Brakes (same discs) is a simple bolt-up assembly.

Caliper Brackets

supplied are bolted to the front stub axles with 3/8" bolts. Drill out 5/16" holes previously used to hold back plates. Care should be taken to ensure adequate radial clearance on disc (40 thou "). Check clearance on pads. Shims may be required in order to ensure disc runs central in caliper. Rear brackets need to be welded electrically. Ensure clearances as before.

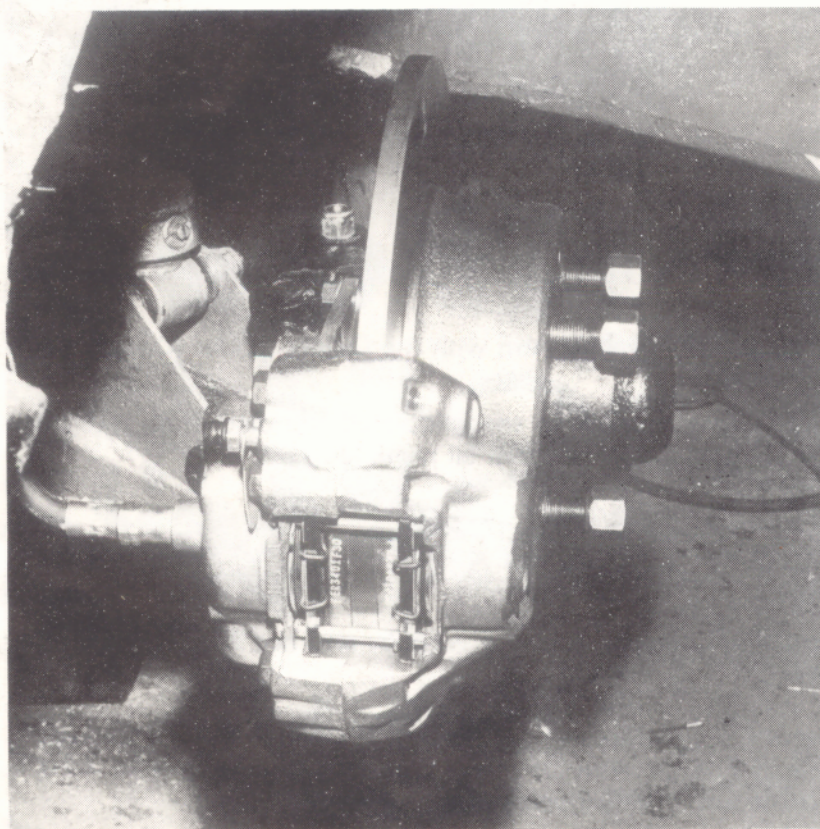
Road Adjustment

First set bearing with bias towards front brakes, then test brakes for locking (on the straight). Should front brakes lock, adjust towards rear until all brakes lock up at operating speeds, then adjust to front (approx. 1 turn) and retest. Ensure lock nuts are tightened.

Hand Brakes

are not required on cars fitted with dual hydraulics for circuit racing or hill climbs. The system now developed by Davrian is a pair of shoes operating in a small drum located in the centre of the disc, thus the operation of the caliper pads is completely independent. This system is similar to that used by Porsche and Volvo with larger diameter wheels. As far as we know it is the only system of its type operating within 13" diameter wheels, certainly as produced in this country. The system is so effective that we no longer produce an additional hydraulic handbrake system. A development is under way to provide a conversion for Ford axles to rear disc with a similar handbrake assembly.

This system has been developed over the last 10 years since we realised the **Davrian Sports Car** was hopelessly underbraked especially at the rear. With a rear-engined layout the rear brakes are required to contribute nearly 50% of the braking effort. The single leading shoe rear brakes, as fitted to Imp Saloons, are almost ineffective when put under any form of repetitive usage. The small disc systems available, for the front, only lessen brake fade and contribute to stability. On no account should the Davrian discs be mixed with smaller discs on the front wheels or used as a front disc system with drum brakes on the rear. The system now offered has been radically improved as a result of our rally experience not because of any greater requirement but because we have built into the system better facilities for road usage. i.e. a superb handbrake.



FRONT DISC AND SUSPENSION

Illustrated is DAVRIAN'S own specially made disc fitted with steel caliper for road use.

Modified Pedal Assembly and Balance Bar (Dual Circuit, Front & Rear)

For Sports Cars and Saloons not using a conventional Imp petrol tank the brake pedal is extended and the balance bar assembly is mounted on the top of the plate. The adjustment is then easily accessible. With conventional saloon petrol tanks the pair of Master Cylinders has to be squeezed into the front part of the plate and adjustment has to be made in the pedal foot well. Adjustment is made, front to rear, by rotating the balance bar so that the bearing moves across its housing. When the bearing is nearest the front Master Cylinder most braking effort will be on that system, and vice versa. Side play between bearing housing and clevises should only be sufficient to allow bar to lock in housing, should one hydraulic circuit fail.

Discs Specially Made for Davrian

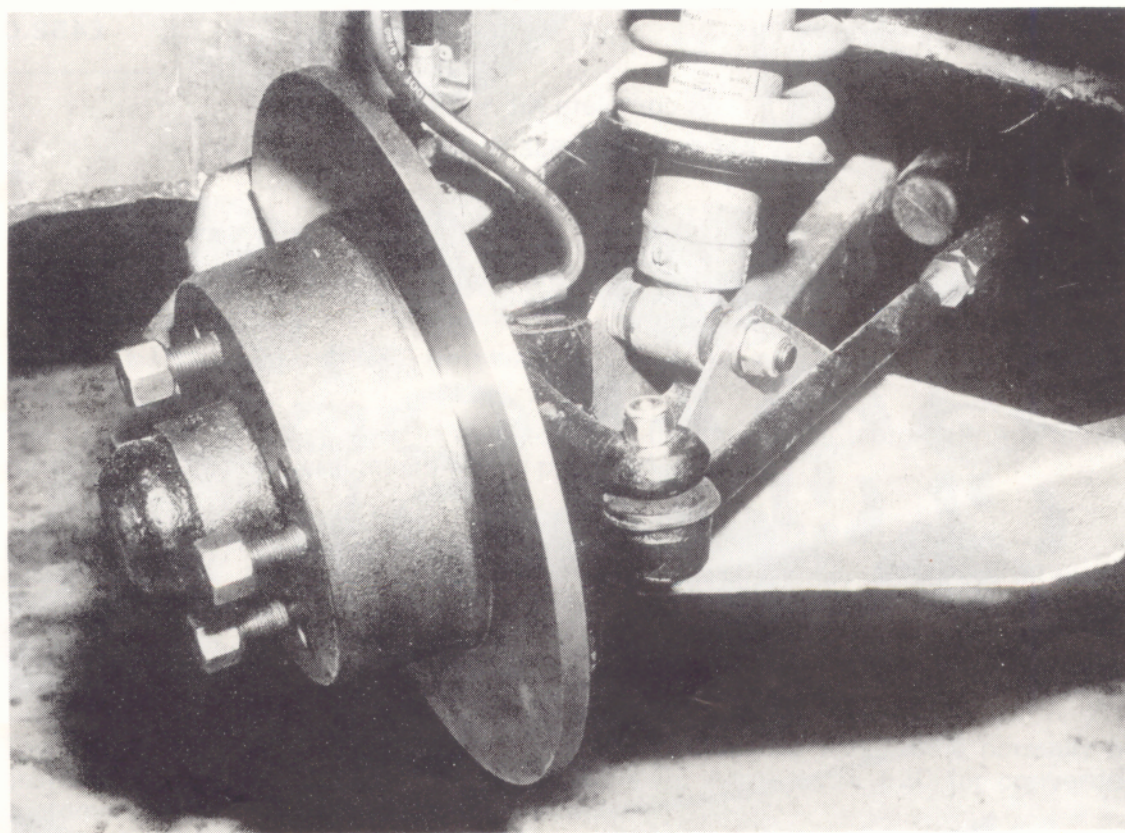
are the largest diameter that can be fitted in the average 13" wheel. They fit straight over the Imp hubs like a conventional drum, needing no special studs or location devices. The discs can be cross drilled and machined in order to reduce weight slightly but mainly so that the mass of the disc heats up closer to operating temperature on the first hard application. The cross drilling also allows excess heat to dissipate more easily. This is only recommended for Track and Hillclimb cars and should on no account be undertaken by customers.

Alloy Calipers

are approximately $\frac{1}{3}$ the weight of steel calipers and dissipate heat more readily but are not recommended for normal road use as they do not have dust seals on the pistons, therefore they require far greater maintenance. Alloy calipers are also only available with DS II pads which are quite unsuitable for Road use.

Steel Calipers

the production of Davrian's own disc has enabled us to use a steel disc with a range of pad material available from most motor factors. Apart from these calipers being considerably less expensive their maintenance is also straight-forward due to the fact they have dust seals etc. Steel calipers are currently used on our rally cars but for tarmac rallying some alteration to brake ducting may be found to be beneficial. Although the special disc we now provide gives far better clearance to wheels than previously, possibly some minor filling or grinding of the caliper castings may be necessary with certain types of cast alloy wheels. If in any doubt use a thin spacer.



The Chrysler Imp kingpin carrier and hub is fitted to the DAVRIAN specially fabricated swinging arm.

DAVRIAN DISC BRAKES

4 WHEEL DISC CONVERSION - Steel Calipers - ROAD GOING SPECIFICATION

For existing Davrian Imps and Derivatives with Imp or Davrian Suspension. i.e. swing axles and trailing arms. These brakes can only be used with 13" wheels.

The Discs are specially made for Davrian and are not obtainable from any other source.

	Each		
Brake Discs 10.2"	22.00	4 No.	88.00
Calipers 14LF1	28.00	4 No.	112.00
Mounting brackets	6.00	4 No.	24.00
Master cylinders and threaded push rods	10.00	2 No.	20.00
Adjustable balance bar	24.00	1 No.	24.00
Pedal assembly conversion - on exchange (allow extra £15 if using Imp petrol tank)	18.00	1 No.	18.00
Fluid reservoir - 3 way	6.00	1 No.	6.00
Handbrake assembly including shoes, springs, cams, levers, cables etc.	63.00	1 No.	63.00
			£355.00

As complete Kit = £350

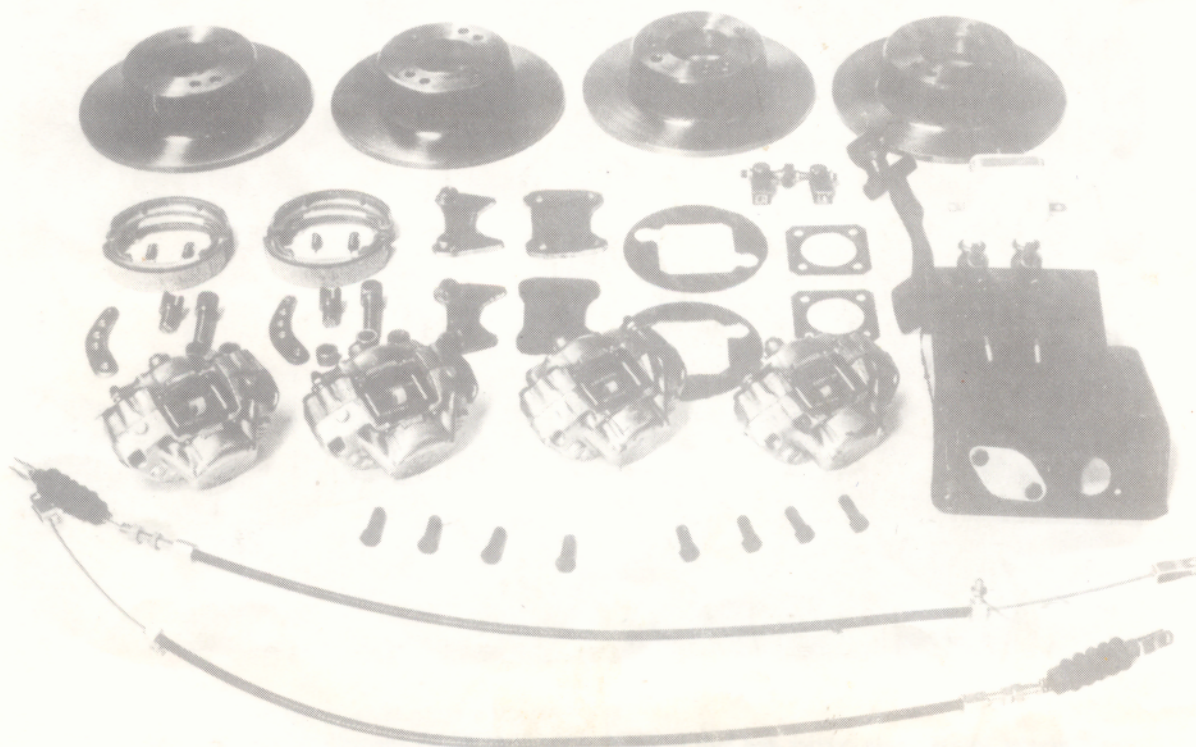
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4 WHEEL DISC CONVERSION - Alloy Calipers - RACING ONLY

Brake discs 10.2"	22.00	4 No.	88.00
Lightening and cross drilling	12.00	4 No.	48.00
Mounting brackets	6.00	4 No.	24.00
Master cylinders and threaded push rods	10.00	2 No.	20.00
Pedal assembly conversion - on exchange	18.00	1 No.	18.00
Adjustable balance bar	24.00	1 No.	24.00
Fluid reservoir - 3 way	6.00	1 No.	6.00
Calipers D14 R	pair 105.00	pair	105.00
AR 111	pair 125.00	pair	125.00
			£458.00

As complete Kit = £450

ALL PRICES SUBJECT TO V.A.T.



PRICES SUBJECT TO REVISION WITHOUT NOTICE (due to suppliers' price fluctuations).