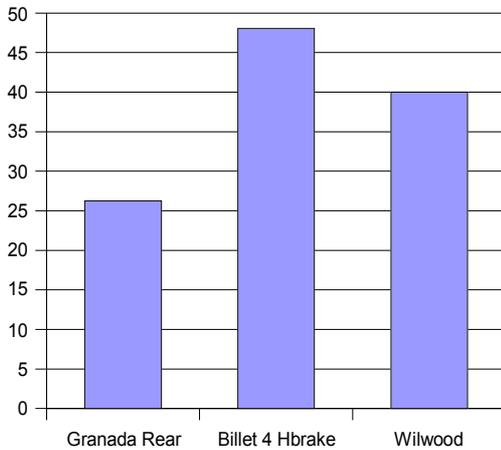


The basic caliper and pad data is as follows;

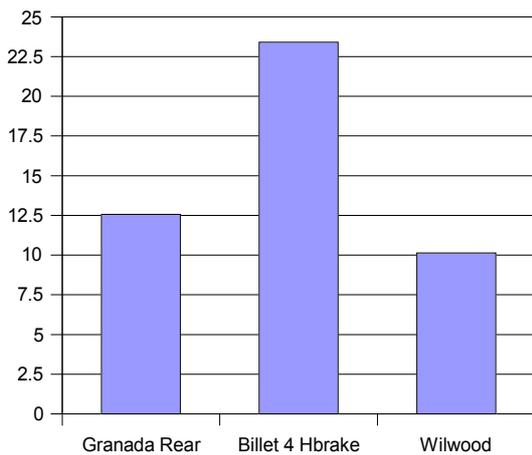
Rears		Pistons	Dia .mm	Piston Area cm ² each side	Pad Area cm ² each side
Ford	Granada Rear	1	40	12.57	26.2
Hispec	Billet 4 Hbrake	4	38.6	23.4	48.0
Wilwood	Wilwood Hbrake	4	25.4	10.13	40.0

Although the Wilwood (Powerlite) has four pistons, its combined piston area (per side) is smaller than the single piston Granada (same as Cosworth). Also, the Granada pad area (same as Cosworth) is very small compared to the others. These factors are the main influence on the results.

Rear Pad Area cm²

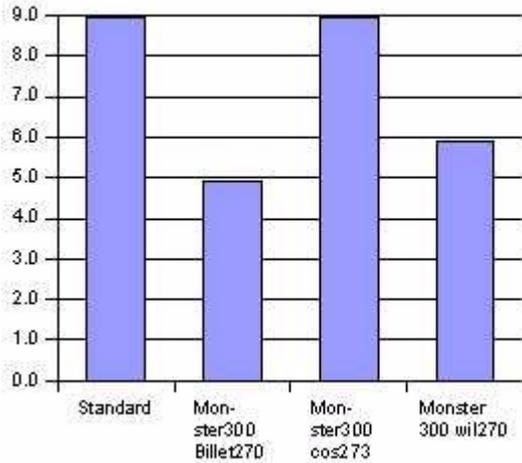


Rear Piston Area cm²

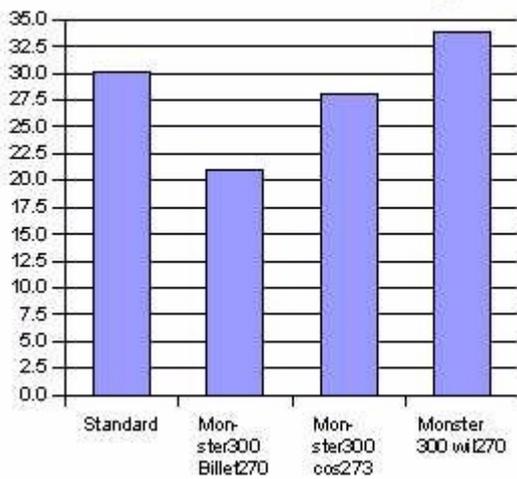


What I did for comparison purposes, was to establish the point where both front and rear lock simultaneously, and calculate the balance bar adjustment, pedal effort, and energy dissipation at the pads at a speed of 60mph. (In practice you always want to lock the fronts first, but this will do for the comparison).

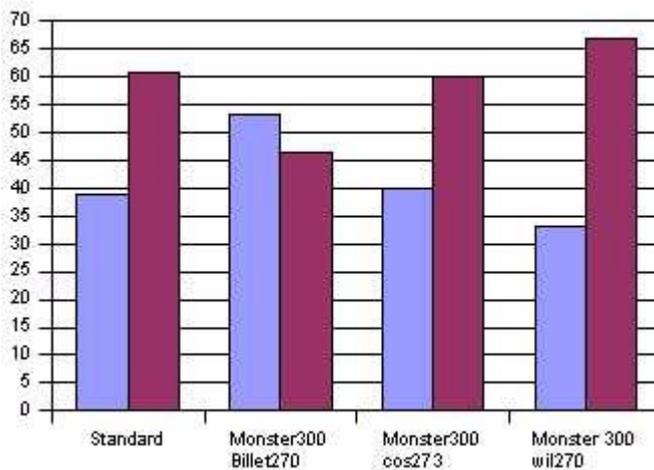
Rear Pad Dissipation W/mm²



Pedal effort kg



Balance Bar % Front/Rear



Only the Hispec caliper gives a significant reduction in pedal effort, while the Wilwood gives an increase. The pad dissipation is no improvement on standard for the Cosworth rear due to same low pad area.

The pedal pressure is actually higher for the Wilwood, as the balance bar is moved toward the rear, the effort needed for the front increases too.