

C4 Vette Brakes

	Front	Rear	Notes	
Rotor Size	12.10	11.61	in	C4rotor=14lbs, drumhub=6lbs 20.0 lbs
Caliper	C4 Vette	'01 Blazer		Front caliper=6lbs 6.0 lbs
Piston #1 dia (in)	38.0 1.496	1.890	in	Total weight (unsprung) 26.0 lbs
Piston #2 dia (in)	38.0 1.496	0.000		
Piston #3 dia (in)	0.0			
Caliper Piston Area (Acal)	3.515	2.806	sqin	
Pad Height	1.560	1.560	in	
Pad Area sqin	7.000		sqin	
Pad CoF (μ)	0.350	0.350		
Mast Cylinder Size	1.000		in	
MC Area (Amc)	0.785		sqin	
Ped Ratio	6.8			Use manual pedal hole
Inches of Vacuum (Vac)	17.0		in	
Booster Size (inches)	9.500		in	Diaphragm diameter
Single=1/Double=2	1			Single booster
Booster Force	504.954		lbf	$F=A*Vac*0.493*Eff$
Booster Efficiency	85%			
Leg Force (Fleg)	100.000		lbs	
Total Line Pressure (Pline)	1370.757	1370.757	psi	$P=(Fleg*PedRatio)/Amc)+Fbstr$
Caliper Clamping Force	9637.696	7691.369	lbf	$F=P*A$ (both wheels)
Rear Proportioning	44%			
Adjusted Clamping Force	9637.696	4307.167		
Effective Rotor Radius ®	5.270	5.025	in	$r=(Drtr/2)-(1/2pad\ height)$
Brake Torque	8888.366	3787.615		$T=2\mu*Pline*Acal*r$
Brake Bias	70.1%	29.9%		*Based on rotor torque
Increase over stock Olds (Fr only)	9.9%			*Assume stock=8086 lb.ft.