



Installation Procedures

MKIV Caliper Piston Sizing

This tutorial is provided as a courtesy by ECS Tuning.

Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times to eliminate the possibility of personal injury or improper service which could damage the vehicle or compromise its safety.

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VW MKIV		Rotor Info					Caliper Info					BIAS				System Torque	
		Front Dia.		Rear Dia.		Effective Radius	Effective Radius	Piston Area (mm²)		Brake Torque (N·mm)		% distribution		Ratio	Delta	torque	diff
		Major	Minor	Major	Minor	Radius	Radius	Front	Rear	Front	Rear	Front	Rear	(F/R)	Stock		
OE Rear	OE Front / OE Rear	288.0	164.0	117.2	232.0	148.0	97.3	2205.0	1133.5	2.584E+05	1.103E+05	70.1%	29.9%	2.3	0.0%	3.7E+05	0.0%
	TT Upgrade	312.0	185.0	128.2	232.0	148.0	97.3	2205.0	1133.5	2.828E+05	1.103E+05	71.9%	28.1%	2.6	2.7%	3.9E+05	6.6%
	ECS Stage 1	332.0	210.0	138.9	232.0	148.0	97.3	2205.0	1133.5	3.063E+05	1.103E+05	73.5%	26.5%	2.8	4.9%	4.2E+05	13.0%
	ECS Stage 2v1	312.0	185.0	128.2	232.0	148.0	97.3	2273.0	1133.5	2.915E+05	1.103E+05	72.6%	27.4%	2.6	3.5%	4.0E+05	9.0%
	ECS Stage 2v2	332.0	235.0	143.8	232.0	148.0	97.3	2273.0	1133.5	3.269E+05	1.103E+05	74.8%	25.2%	3.0	6.7%	4.4E+05	18.6%
	ECS Stage 3	321.0	193.0	132.4	232.0	148.0	97.3	2402.1	1133.5	3.181E+05	1.103E+05	74.3%	25.7%	2.9	6.0%	4.3E+05	16.2%
Golf / Jetta IV	ECS Stage 4	352.0	231.0	148.9	232.0	148.0	97.3	2273.0	1133.5	3.383E+05	1.103E+05	75.4%	24.6%	3.1	7.6%	4.5E+05	21.7%
	ECS Stage 5	358.0	226.0	149.7	232.0	148.0	97.3	2747.5	1133.5	4.113E+05	1.103E+05	78.9%	21.1%	3.7	12.5%	5.2E+05	41.5%



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