	697-02 (Renault)	697-04 (Lotus)	my engine	my engine w/ raised pistons		
Piston type	Flat	Raised	Flat	Raised		
Published Compression Ratio	8.6	10.25	-	-		
Bore (mm)	76	76	76	76		
Stroke (mm)	81	81	81	81		
Head Thickness (mm)	80.65	80.65	79.58	79.58	1.07	
Head gasket thickness (mm)	1.27	1.27	1.27	1.27	0.040 head gasket shim	
Head gasket diameter (mm)	78.74	78.74	79.5	79.5		
Swept volume (cc)	367.5	367.5	367.5	367.5		
Total Displacement (cc)	*1469.8*	*1469.8*	*1469.8*	*1469.8*		
Raised piston volume (cc)	0	8.62	0	8.62		
Head Gasket Volume (cc)	6.2	6.2	6.3	6.3		
Head Volume (cc)	42.16	42.16	38.50	38.50		
Combustion volume (cc)	48.35	39.72	44.80	36.18		
Calculated compression ratio	8.60	10.25	9.20	11.16		
Volume lost in skim (cc)			-3.66			
Assumptions: Published compression ratios are accurate (and I wrote down the right ones) Renault and Lotus heads have the same volume if they have the same thickness (i.e. not skimmed) ~~The top edge of the piston exactly meets the bottom of the head gasket~~ (confirmed on my engine) My installed flat-top pistons aren't anything special, like being a flat-top raised piston						

	697-02 (Renault)	697-04 (Lotus)	my engine	my engine w/ raised pistons		
Piston type	Flat	Raised	Flat	Raised		
Published Compression Ratio	7.6	10.25	-	-		
Bore (mm)	76	76	76	76		
Stroke (mm)	81	81	81	81		
Head Thickness (mm)	80.65	80.65	79.58	79.58		
Head gasket thickness (mm)	1.27	1.27	1.27	1.27		
Head gasket diameter (mm)	78.74	78.74	79.5	79.5		
Swept volume (cc)	367.5	367.5	367.5	367.5		
Total Displacement (cc)	*1469.8*	*1469.8*	*1469.8*	*1469.8*		
Raised piston volume (cc)	0	15.95	0	15.95		
Head Gasket Volume (cc)	6.2	6.2	6.3	6.3		
Head Volume (cc)	49.49	49.49	38.50	38.50		
Combustion volume (cc)	55.67	39.72	44.80	28.85		
Calculated compression ratio	7.60	10.25	9.20	13.73		
Assumptions: Published compression ratios are accurate Renault and Lotus heads have the same volume if they have the same thickness (i.e. not skimmed) The top edge of the piston exactly meets the bottom of the head gasket My installed flat-top pistons aren't anything special, like being a flat-top raised piston						

	697-02 (Renault)	697-04 (Lotus)	my engine	my engine w/ raised pistons		
Piston type	Flat	Raised	Flat	Raised		
Published Compression Ratio	7.6	10.25	-	-		
Bore (mm)	76	76	76	76		
Stroke (mm)	81	81	81	81		
Head Thickness (mm)	80.65	80.65	79.58	79.58		
Head gasket thickness (mm)	1.27	1.27	1.27	1.27		
Head gasket diameter (mm)	78.74	78.74	79.5	79.5		
Swept volume (cc)	367.5	367.5	367.5	367.5		
Total Displacement (cc)	*1469.8*	*1469.8*	*1469.8*	*1469.8*		
Raised piston volume (cc)	0	15.95	0	15.95		
Head Gasket Volume (cc)	6.2	6.2	6.3	6.3		
Head Volume (cc)	55.67	55.67	38.50	38.50		
Combustion volume (cc)	55.67	39.72	44.80	28.85		
Calculated compression ratio	-	-	9.20	13.73		
Assumptions: Published compression ratios are accurate Renault and Lotus heads have the same volume if they have the same thickness (i.e. not skimmed) The top edge of the piston exactly meets the bottom of the head gasket My installed flat-top pistons aren't anything special, like being a flat-top raised piston						

				Per Manual		My Engine
		Main Bearing Cap #				
		Rod Bearing Cap # (centerpunched)		Clutch		Clutch
				1		Unmarked
				1		**1 (4)**
				2		**4**
				2		**2 (3)**
				3		**3**
				3		**3 (2)**
				4		**2**
				4		**4 (1)**
				5		**1**
				Timing Chain		Timing Chain