



Desmoquattro Valve Adjustment Shim Calculations

Bike: ST4s - BBG
Owner: Vinnie
Mileage: 51,825
Date: 8/28/2020
Heads and valves cleaned and lapped

Conversion charts	Value	Converted
Metric to English	0.100	0.004
English to Metric	0.004	0.102

inch
mm

Ducati rec	Required for calculations Input recommended shim clearance (LT) All clearances in mm		Intake Opener shim	Intake Closer shim
opn.05mm-.18mm clsr.15mm-.25mm			0.100	0.100
opn.05mm-.23mm clsr.10mm-.20mm	Exhaust Opener shim	Exhaust Closer shim	0.150	0.100

Ducati Spec (mm)	Intake	Opener	0.050	0.160	Exhaust	Opener	0.050	0.160
		Closer	0.100	0.160		Closer	0.100	0.160

Vertical cylinder exhaust valve Left	Input values in blank cells			Calculated information		
		Unloaded Gap	Loaded Gap		Opener shim	Closer shim
	STEP 1			Result of step 1		
	Measured gap values	0.076	0.152	Actual GAP values	0.076	0.076
	STEP 2	Opener shim	Closer shim	Recommended shim	2.83	3.18
	Current shim size	2.900	3.200			
STEP 3	Opener shim	Closer shim	Estimated clearance with new shim installed	0.08	0.08	
Actual shim used	2.900	3.200	Result of step 4	0.076	0.076	
STEP 4	Unloaded Gap	Loaded Gap	New actual gap			
Measured gap values	0.076	0.152				
Vertical cylinder exhaust valve Right	Input values in blank cells			Calculated information		
	STEP 1	Unloaded Gap	Loaded Gap	Result of step 1		
	Measured gap values	0.127	0.203	Actual GAP values	0.127	0.076
	STEP 2	Opener shim	Closer shim	Recommended shim	2.98	3.23
	Current shim size	3.000	3.250			
STEP 3	Opener shim	Closer shim	Estimated clearance with new shim installed	0.13	0.08	
Actual shim used	3.000	3.250	Result of step 4	0.127	0.076	
STEP 4	Unloaded Gap	Loaded Gap	New actual gap			
Measured gap values	0.127	0.203				
Vertical cylinder intake valve Left	Input values in blank cells			Calculated information		
	STEP 1	Unloaded Gap	Loaded Gap	Result of step 1		
	Measured gap values	0.102	0.203	Actual GAP values	0.102	0.101
	STEP 2	Opener shim	Closer shim	Recommended shim	3.032	2.981
	Current shim size	3.030	2.980			
STEP 3	Opener shim	Closer shim	Estimated clearance with new shim installed	0.102	0.101	
Actual shim used	3.030	2.980	Result of step 4	0.102	0.101	
STEP 4	Unloaded Gap	Loaded Gap	New actual gap			
Measured gap values	0.102	0.203				
Vertical cylinder intake valve Right	Input values in blank cells			Calculated information		
	STEP 1	Unloaded Gap	Loaded Gap	Result of step 1		
	Measured gap values	0.102	0.203	Actual GAP values	0.102	0.101
	STEP 2	Opener shim	Closer shim	Recommended shim	2.97	2.95
	Current shim size	2.972	2.950			
STEP 3	Opener shim	Closer shim	Estimated clearance with new shim installed	0.10	0.10	
Actual shim used	2.970	2.950	Result of step 4	0.102	0.101	
STEP 4	Unloaded Gap	Loaded Gap	New actual gap			
Measured gap values	0.102	0.203				



Desmoquatro Valve Adjustment Shim Calculations

Bike: ST4s - BBG
 Owner: Vinnie

Mileage: 51,825
 Date: 8/28/2020

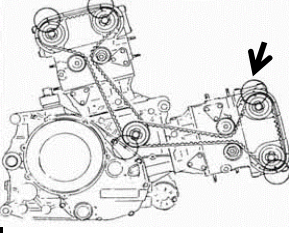
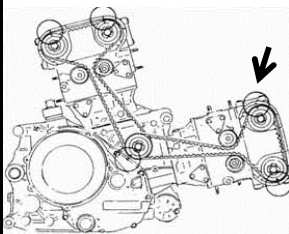
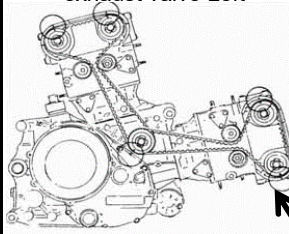
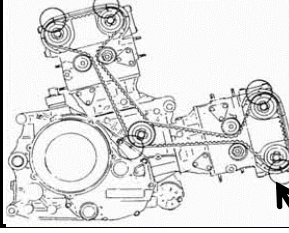
Heads and valves cleaned and lapped

Conversion charts	Value	Converted
Metric to English	0.100	0.004
English to Metric	0.004	0.102

inch
mm

Ducati rec opn.05mm-.18mm clr.15mm-.25mm opn.05mm-.23mm clr.10mm-.20mm	Required for calculations Input recommended shim clearance (LT) All clearances in mm	Intake Opener shim	Intake Closer shim
		0.100	0.100
		0.150	0.100

Ducati Spec (mm)	Intake	Opener	0.050	0.160	Exhaust	Opener	0.050	0.160
		Closer	0.100	0.160		Closer	0.100	0.160

		Input values in blank cells			Calculated information		
Horizontal cylinder intake valve Left 	STEP 1	Unloaded Gap	Loaded Gap	Result of step 1	Opener shim	Closer shim	
	Measured gap values	0.076	0.152	Actual GAP values	0.076	0.076	
	STEP 2	Opener shim	Closer shim	Recommended shim	3.05	2.99	
	Current shim size	3.070	3.010	Estimated clearance with new shim installed	0.08	0.08	
	STEP 3	Opener shim	Closer shim	Result of step 4	0.076	0.076	
Actual shim used	3.070	3.010	New actual gap	0.076	0.076		
STEP 4	Unloaded Gap	Loaded Gap					
Measured gap values	0.076	0.152					
Horizontal cylinder intake valve Right 	STEP 1	Unloaded Gap	Loaded Gap	Result of step 1	Opener shim	Closer shim	
	Measured gap values	0.076	0.178	Actual GAP values	0.076	0.102	
	STEP 2	Opener shim	Closer shim	Recommended shim	3.05	3.00	
	Current shim size	3.072	3.000	Estimated clearance with new shim installed	0.08	0.10	
	STEP 3	Opener shim	Closer shim	Result of step 4	0.076	0.102	
Actual shim used	3.072	3.000	New actual gap	0.076	0.102		
STEP 4	Unloaded Gap	Loaded Gap					
Measured gap values	0.076	0.178					
Horizontal cylinder exhaust valve Left 	STEP 1	Unloaded Gap	Loaded Gap	Result of step 1	Opener shim	Closer shim	
	Measured gap values	0.127	0.254	Actual GAP values	0.127	0.127	
	STEP 2	Opener shim	Closer shim	Recommended shim	2.741	3.267	
	Current shim size	2.764	3.240	Estimated clearance with new shim installed	0.041	0.127	
	STEP 3	Opener shim	Closer shim	Result of step 4	0.127	0.127	
Actual shim used	2.850	3.240	New actual gap	0.127	0.127		
STEP 4	Unloaded Gap	Loaded Gap					
Measured gap values	0.127	0.254					
Horizontal cylinder exhaust valve Right 	STEP 1	Unloaded Gap	Loaded Gap	Result of step 1	Opener shim	Closer shim	
	Measured gap values	0.152	0.229	Actual GAP values	0.152	0.077	
	STEP 2	Opener shim	Closer shim	Recommended shim	2.76	3.20	
	Current shim size	2.759	3.220	Estimated clearance with new shim installed	0.15	0.08	
	STEP 3	Opener shim	Closer shim	Result of step 4	0.152	0.102	
Actual shim used	2.759	3.220	New actual gap	0.152	0.102		
STEP 4	Unloaded Gap	Loaded Gap					
Measured gap values	0.152	0.254					