

**DUCATI 3 VALVE MOTOR -**  
**VALVE CLEARANCE MEASUREMENT AND ADJUSTMENT**  
**CALCULATIONS WORKSHEET DATE \_\_\_\_\_ MILEAGE \_\_\_\_\_**

created by Evan T DeWan at [ducatitoolrental.com](http://ducatitoolrental.com)

**HORIZONTAL CYLINDER**

**STEP 1** - Fill in the **DUCATI** Specified opening (block **B**) and closing (block **I**) clearances

		OPENING SHIM CLEARANCE									
		OPENING SHIM CLEARANCE (UNLOADED GAP) <b>A</b>	**DUCATI SPECIFIED OPENING SHIM CLEARANCE <b>B</b>	IF A GREATER THAN B SUBTRACT A-B to get C. <b>C</b>	OPENING SHIM MEASUREMENT <b>D</b>	NEW OPENING SHIM SIZE (E) C + D = E: <b>E</b>					
<b>HORIZONTAL CYLINDER</b>	<b>INTAKE</b>	LEFT OPENER	(-)	(=)	(+)	(=)	** NOTE: IF THE GAP MEASURED FOR THE OPENING OR CLOSING SHIMS IS WITHIN THE RANGE SPECIFIED BY THE SERVICE MANUAL, THEN THE SHIM IS GOOD AND DOESNT REQUIRE CHANGE OUT.				
		RIGHT OPENER	(-)	(=)	(+)	(=)					
		CLOSING SHIM MEASURED CLEARANCE (LOADED GAP) <b>F</b>	OPENING SHIM CLEARANCE (UNLOADED GAP) <b>A</b>	SUBTRACT F-A=H (H) is the actual closing rocker/shim clearance <b>H</b>	**DUCATI SPECIFIED CLOSING SHIM CLEARANCE <b>I</b>	IF (H) IS GREATER THAN (I) SUBTRACT: H - I = J <b>J</b>				CLOSING SHIM MEASUREMENT <b>K</b>	NEW CLOSING SHIM SIZE (L) J + K = L <b>L</b>
	LEFT CLOSER	(-)	(=)	(-)	(=)	(+)				(=)	
	RIGHT CLOSER	(-)	(=)	(-)	(=)	(+)				(=)	
<b>HORIZONTAL CYLINDER</b>	<b>EXHAUST</b>	OPENER	(-)	(=)	(+)	(=)	** NOTE: IF THE GAP MEASURED FOR THE OPENING OR CLOSING SHIMS IS WITHIN THE RANGE SPECIFIED BY THE SERVICE MANUAL, THEN THE SHIM IS GOOD AND DOESNT REQUIRE CHANGE OUT.				
		CLOSING SHIM MEASURED CLEARANCE (LOADED GAP) <b>F</b>	OPENING SHIM CLEARANCE (UNLOADED GAP) <b>A</b>	SUBTRACT F-A=H (H) is the actual closing rocker/shim clearance <b>H</b>	**DUCATI SPECIFIED CLOSING SHIM CLEARANCE <b>I</b>	IF (H) IS GREATER THAN (I) SUBTRACT: H - I = J <b>J</b>				CLOSING SHIM MEASUREMENT <b>K</b>	NEW CLOSING SHIM SIZE (L) J + K = L <b>L</b>
	CLOSER	(-)	(=)	(-)	(=)	(+)				(=)	

**VERTICAL CYLINDER**

		OPENING SHIM CLEARANCE									
		OPENING SHIM CLEARANCE (UNLOADED GAP) <b>A</b>	**DUCATI SPECIFIED OPENING SHIM CLEARANCE <b>B</b>	IF A GREATER THAN B SUBTRACT A-B to get C. <b>C</b>	OPENING SHIM MEASUREMENT <b>D</b>	NEW OPENING SHIM SIZE (E) C + D = E: <b>D+C=E</b>					
<b>VERTICAL CYLINDER</b>	<b>INTAKE</b>	LEFT OPENER	(-)	(=)	(+)	(=)	** NOTE: IF THE GAP MEASURED FOR THE OPENING OR CLOSING SHIMS IS WITHIN THE RANGE SPECIFIED BY THE SERVICE MANUAL, THEN THE SHIM IS GOOD AND DOESNT REQUIRE CHANGE OUT.				
		RIGHT OPENER	(-)	(=)	(+)	(=)					
		CLOSING SHIM MEASURED CLEARANCE (LOADED GAP) <b>F</b>	OPENING SHIM CLEARANCE (UNLOADED GAP) <b>A</b>	SUBTRACT F-A=H (H) is the actual closing rocker/shim clearance <b>H</b>	**DUCATI SPECIFIED CLOSING SHIM CLEARANCE <b>I</b>	IF (H) IS GREATER THAN (I) SUBTRACT: H - I = J <b>J</b>				CLOSING SHIM MEASUREMENT <b>K</b>	NEW CLOSING SHIM SIZE (L) J + K = L <b>L</b>
	LEFT CLOSER	(-)	(=)	(-)	(=)	(+)				(=)	
	RIGHT CLOSER	(-)	(=)	(-)	(=)	(+)				(=)	
<b>VERTICAL CYLINDER</b>	<b>EXHAUST</b>	OPENER	(-)	(=)	(+)	(=)	** NOTE: IF THE GAP MEASURED FOR THE OPENING OR CLOSING SHIMS IS WITHIN THE RANGE SPECIFIED BY THE SERVICE MANUAL, THEN THE SHIM IS GOOD AND DOESNT REQUIRE CHANGE OUT.				
		CLOSING SHIM MEASURED CLEARANCE (LOADED GAP) <b>F</b>	OPENING SHIM CLEARANCE (UNLOADED GAP) <b>A</b>	SUBTRACT F-A=H (H) is the actual closing rocker/shim clearance <b>H</b>	**DUCATI SPECIFIED CLOSING SHIM CLEARANCE <b>I</b>	IF (H) IS GREATER THAN (I) SUBTRACT: H - I = J <b>J</b>				CLOSING SHIM MEASUREMENT <b>K</b>	NEW CLOSING SHIM SIZE (L) J + K = L <b>L</b>
	CLOSER	(-)	(=)	(-)	(=)	(+)				(=)	

**ADDITIONAL MAINTENANCE ITEMS**

MILEAGE	DATE	DESCRIPTION	NOTES