



[MarkNet Home](#)  
[KLR650](#)  
[Homepage](#)  
[Computer Stuff](#)  
[Contact](#)

[Links](#)

[Miscellaneous Info](#)

[Grease 101](#)

[Technical Articles](#)

[A1 Brochure](#)

[Conversions](#)

[KLR650 FAQ](#)

**Forms**

[Maintenance Log](#)  
[Shim Record Chart](#)

**Pictures**

[Corbin Saddle](#)

**Procedures in PDF**

**Procedures**

[12v Waterproof Outlet](#)  
[Acerbis Disk Installation](#)  
[Balancer Adjustment](#)  
[Brake Pads](#)  
[Cam Chain Timing](#)  
[Carb Rain T-Mod](#)  
[Decalifornication](#)  
[Doohickey Upgrade](#)  
[Easy Lift](#)  
[Fork Oil Change](#)  
[Horn Upgrade](#)  
[Hydraulic Clutch](#)  
[JC Whitney Trunk](#)  
[Oil Screen Cleaning](#)  
[Radiator Cooling Mod](#)

This is a hobby website dedicated to the Kawasaki KLR650 motorcycle. I make no claim concerning the accuracy of the procedures, nor do I guarantee the success of any work done using them. All users of the material found here are advised that there is no real or implied warranty associated in any way with the website content, and that all content available here is for use at your own risk.

Copyright © 2001 Mark's KLR Pages

All Rights Reserved

No copying or other redistribution by any method will be permitted without my express written permission.

## INTAKE & EXHAUST VALVE SHIM TABLES

These images were scanned at 300dpi, and resized to 1024x768 (+/-). I know they're large, but for clarity this was the best way to go. I'd rather have the extra size, than make an error because a fuzzy number was misread.

**Exhaust Valve Clearance Adjustment Chart**

|                        |             | PRESENT SHIM                                    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------------------------|-------------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| PART NUMBER (12037 --) |             | 001   | 002  | 003  | 004  | 005  | 006  | 007  | 008  | 009  | 010  | 011  | 012  | 013  | 014  | 015  | 016  | 017  | 018  | 019  | 020  | 021  | 022  | 023  | 024  | 025  |
| THICKNESS (mm)         |             | 2.00  | 2.05 | 2.10 | 2.15 | 2.20 | 2.25 | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |
| VALVE CLEARANCE (mm)   | 0.00 ~ 0.02 |   |      |      |      | 2.00 | 2.05 | 2.10 | 2.15 | 2.20 | 2.25 | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 |
|                        | 0.03 ~ 0.07 |   |      |      | 2.00 | 2.05 | 2.10 | 2.15 | 2.20 | 2.25 | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 |
|                        | 0.08 ~ 0.12 |   |      | 2.00 | 2.05 | 2.10 | 2.15 | 2.20 | 2.25 | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 |
|                        | 0.13 ~ 0.14 |   | 2.00 | 2.05 | 2.10 | 2.15 | 2.20 | 2.25 | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 |
|                        | 0.15 ~ 0.25 | <b>SPECIFIED CLEARANCE / NO CHANGE REQUIRED</b> |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|                        | 0.26 ~ 0.27 |   | 2.05 | 2.10 | 2.15 | 2.20 | 2.25 | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |
|                        | 0.28 ~ 0.32 |   | 2.10 | 2.15 | 2.20 | 2.25 | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |
|                        | 0.33 ~ 0.37 |   | 2.15 | 2.20 | 2.25 | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |
|                        | 0.38 ~ 0.42 |   | 2.20 | 2.25 | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |
|                        | 0.43 ~ 0.47 |   | 2.25 | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |
|                        | 0.48 ~ 0.52 |   | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |
|                        | 0.53 ~ 0.57 |   | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |
|                        | 0.58 ~ 0.62 |   | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |      |
|                        | 0.63 ~ 0.67 |   | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |      |      |
|                        | 0.68 ~ 0.72 |   | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |      |      |      |
| 0.73 ~ 0.77            |             | 2.55  | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |      |      |      |      |      |
| 0.78 ~ 0.82            |             | 2.60  | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |      |      |      |      |      |      |
| 0.83 ~ 0.87            |             | 2.65  | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 0.88 ~ 0.92            |             | 2.70  | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 0.93 ~ 0.97            |             | 2.75  | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

**Exhaust Valve**

1. Measure the clearance (when engine cold).  
2. Check present shim size.

- Ramp Loading
- Safety Switch Bypass
- Shark Fin Installation
- Shim Storage Box
- Shim Value Table
- SuperBrace
- Swingarm Maint
- Torque Values
- Tube Valve Tools
- TWC Acc Fuse Kit
- TWC Fuse Relocation Kit
- Valve Adjustment
- Vista-Cruise Lock
- Water Pump Seals
- Wheel Alignment



|             |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|
| 0.98 ~ 1.02 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |
| 1.03 ~ 1.07 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |
| 1.08 ~ 1.12 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |
| 1.13 ~ 1.17 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |
| 1.18 ~ 1.22 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |
| 1.23 ~ 1.27 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |
| 1.28 ~ 1.32 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |
| 1.33 ~ 1.37 | 3.15 | 3.20 |      |      |      |      |      |      |      |
| 1.38 ~ 1.45 | 3.20 |      |      |      |      |      |      |      |      |

INSTALL

282104

3. Match clearance in vertical column with present shim size in horizontal column.
4. The shim specified where the lines intersect is the one that will give you the proper clearance.

**"NOTE"**

oIf there is no clearance, select a shim which is several sizes smaller and then measure the clearance.

**Inlet Valve Clearance Adjustment Chart**

| PART NUMBER (12037 --) | PRESENT SHIM                                    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------------------------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                        | 001   | 002  | 003  | 004  | 005  | 006  | 007  | 008  | 009  | 010  | 011  | 012  | 013  | 014  | 015  | 016  | 017  | 018  | 019  | 020  | 021  | 022  | 023  | 024  | 025  |
| THICKNESS (mm)         | 2.00  | 2.05 | 2.10 | 2.15 | 2.20 | 2.25 | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |
| 0.00 ~ 0.02            |   |      |      | 2.00 | 2.05 | 2.10 | 2.15 | 2.20 | 2.25 | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 |
| 0.03 ~ 0.07            |   |      | 2.00 | 2.05 | 2.10 | 2.15 | 2.20 | 2.25 | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 |
| 0.08 ~ 0.09            | 2.00  | 2.05 | 2.10 | 2.15 | 2.20 | 2.25 | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 |      |
| 0.10 ~ 0.20            | <b>SPECIFIED CLEARANCE / NO CHANGE REQUIRED</b> |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 0.21 ~ 0.22            | 2.05  | 2.10 | 2.15 | 2.20 | 2.25 | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |
| 0.23 ~ 0.27            | 2.10  | 2.15 | 2.20 | 2.25 | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |
| 0.28 ~ 0.32            | 2.15  | 2.20 | 2.25 | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |
| 0.33 ~ 0.37            | 2.20  | 2.25 | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |
| 0.38 ~ 0.42            | 2.25  | 2.30 | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |
| 0.43 ~ 0.47            | 2.30  | 2.35 | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |
| 0.48 ~ 0.52            | 2.35  | 2.40 | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |      |
| 0.53 ~ 0.57            | 2.40  | 2.45 | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |      |      |
| 0.58 ~ 0.62            | 2.45  | 2.50 | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |      |      |      |
| 0.63 ~ 0.67            | 2.50  | 2.55 | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |      |      |      |      |
| 0.68 ~ 0.72            | 2.55  | 2.60 | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |      |      |      |      |      |
| 0.73 ~ 0.77            | 2.60  | 2.65 | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |      |      |      |      |      |      |
| 0.78 ~ 0.82            | 2.65  | 2.70 | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 0.83 ~ 0.87            | 2.70  | 2.75 | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 0.88 ~ 0.92            | 2.75  | 2.80 | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 0.93 ~ 0.97            | 2.80  | 2.85 | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 0.98 ~ 1.02            | 2.85  | 2.90 | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 1.03 ~ 1.07            | 2.90  | 2.95 | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 1.08 ~ 1.12            | 2.95  | 3.00 | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 1.13 ~ 1.17            | 3.00  | 3.05 | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 1.18 ~ 1.22            | 3.05  | 3.10 | 3.15 | 3.20 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 1.23 ~ 1.27            | 3.10  | 3.15 | 3.20 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 1.28 ~ 1.32            | 3.15  | 3.20 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 1.33 ~ 1.37            | 3.20  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

INSTALL THE SHIM OF THIS THICKNESS (mm)

Inlet Valve

1. Measure the clearance (when engine cold).
2. Check present shim size.
3. Match clearance in vertical column with present shim size in horizontal column.
4. The shim specified where the lines intersect is the one that will give you the proper clearance.

**"NOTE"**

oIf there is no clearance, select a shim which is several sizes smaller and then measure the clearance.

