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SK code

# *SHOCK GOLD VALVE INSTALLATION – Kawasaki ZRX 1100/1200*

<IP SMGV S3609P.doc> **SMGV S3609P** P.Thede/MW © 9.17.12 5 pgs

**TOOLS REQUIRED:** Metric Micrometer, Calipers or a Metric Ruler, Torque Wrench, High Pressure Nitrogen (regulated) or dry air, High Pressure Gauge, Bench Grinder, Numbered Drill Set, Drill Motor, Safety Glasses. Sag Master (TSSM 01)

**PARTS REQUIRED:** Shock Fluid - Race Tech Ultra Slick US-1 Light, Loctite 271 (Red – High Strength).

**NOTE: Many riders will require a spring that is different than stock. Consult www.racetech.com or call Race Tech.**

***CAUTION: IF YOU ARE UNFAMILIAR WITH REBUILDING AND REVALVING A SHOCK ABSORBER, STOP!!! DO NOT PROCEED; SEEK OUT A QUALIFIED SUSPENSION TECHNICIAN.***

## *DISASSEMBLY*

1 ***Remove the shocks from the bike and clean them thoroughly.*** Back both compression and rebound adjustments out all the way. Measure and record the set length (installed length) of the spring. Remove the spring.

2 **Follow standard rebuild procedures as outlined in your maintenance manual. Use safety glasses.** ***Begin disassembly.*** Clamp the shock in a vise, remove the End Cap from the nitrogen Reservoir. It will be discarded so this can be done by drilling a 3/16" (4.7mm) hole in the cap, inserting a punch and prying it out. Remove the Valve Cap and the Valve Core. Remove the Bladder by first depressing the Bladder Cap about 10mm (7/16") to expose the circlip. You can place a socket over the valve stem and tap on the socket to avoid bending the stem. Remove the circlip (a TSCP 01 Clip Tool used aggressively to get behind the clip is the trick). The Bladder Cap and Bladder can be removed one of two ways; use compressed air to blow it out or use a TSCT 01 Bladder Removal Tool and gently draw it out.

3 ***Remove the end cap from the shock body.*** It is **pressed-on** and must be tapped off with a sharp chisel (a sharp wood chisel works great). Tap it off evenly.

4 Once removed, the seal head assembly must be depressed (special tool TSSS 03 makes it easy). This will expose the circlips (yes, ther are two clips on ZRXs). ***Remove the circlip(s)*** with the Clip Tool being careful not to damage the body.

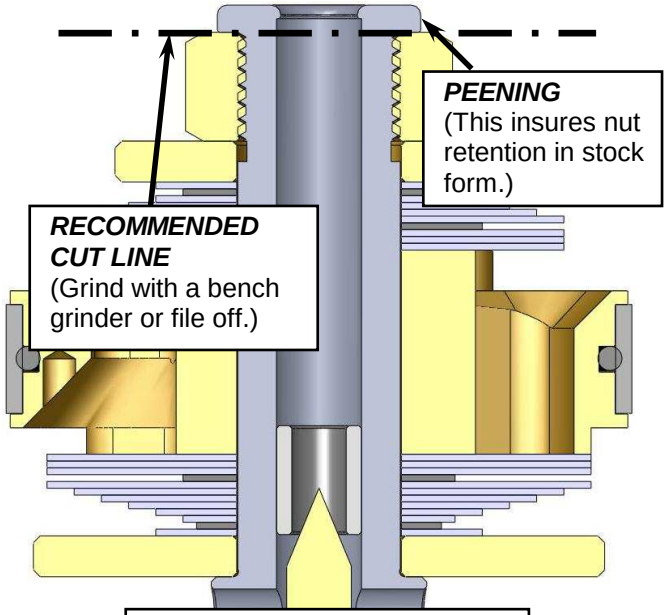
5 Next ***remove the shaft assembly*** from the body by gently tapping upward on the shaft eyelet with a plastic mallet. Pour out the old fluid and dispose of properly. Clean the body with solvent and set it aside to dry.

6 ***CAUTION: THIS NEXT STEP IS CRITICAL AND SHOULD ONLY BE DONE BY A QUALIFIED SUSPENSION TECHNICIAN. Remove the nut.*** On this KYB unit you must first grind or file off the peening on the end of the shaft. (figure 1) This peening is there to insure that the nut does not come off during use.

**Once you have the nut off, slightly chamfer and wire brush the end of the shaft. Check to be sure the threads are in good shape.**

7 ***Disassemble the valving stack,*** lay it out in the exact order and orientation that it comes off the shaft. Clean all the parts including the inside of the shock shaft where the rebound mechanism is. Blow it out using compressed air, being sure to wear safety glasses.

Clean and inspect all the parts including the seal, the shaft, shaft bushing, o-rings and the bottom-out bumper. **If the bottom-out bumper is cracked or worn, replace it.** NOTE: Parts are available from Race Tech. Grease the seal and reassemble the shaft up to the base plate. ***Install the new Special Base Plate.***




***KYB Nut Removal***
*figure 1*

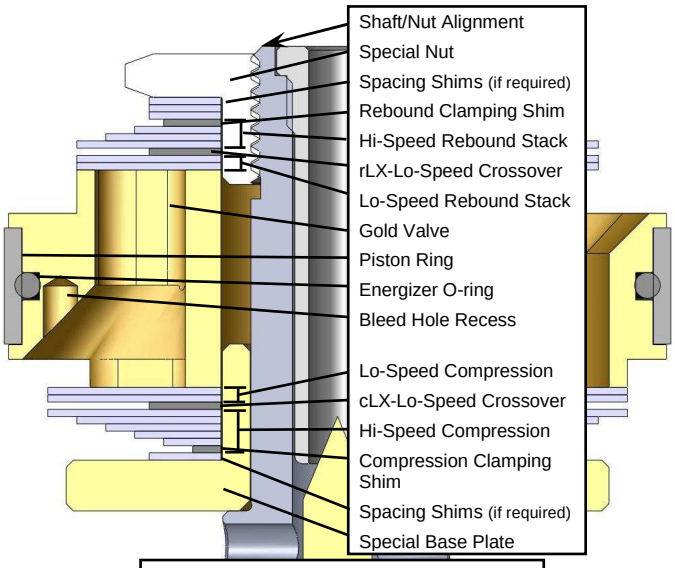
## *VALVING SELECTION*

9 **To obtain custom valving settings for your particular application log on to www.racetech.com, go to Digital Valving Search, insert your Access Code (printed on the top of the first page), input your personal specifications and print the custom setup information. If you do not have access to the web contact our Technical Support Hotline 951.279.6655 for recommendations. Note: The Access Code is good for one limited-time use.**

10 ***Build the Compression Valving Stack. You will either be building a single-stage or a two-stage compression stack.***

- A **Single-Stage Stack** is a combination of a Lo-Speed Stack and a Hi-Speed Stack with NO Lo-Speed Crossover (or just a Hi-Speed Stack).
- A **Two-Stage Stack** is a combination of a Lo-Speed Stack, Lo-Speed Crossover and a Hi-Speed Stack.

  First, install the Hi-Speed Compression Stack starting with the smallest diameter shim against the Base Plate. Next place the Crossover Shim (if required) and the Lo-Speed Compression Stack on the shaft.




***Gold Valve Cutaway***
*figure 2*

11 ***If required, drill the recommended bleed hole in the piston.*** Some bikes do not require a bleed hole. **IF YOUR APPLICATION DOES NOT REQUIRE A BLEED, IT WILL SAY "n/a".** If your application does require a bleed, drill the bleed hole starting from the pre-drilled side.

12 ***Check to see there are no burrs*** on the Gold Valve Shock Piston and the piston faces are flat. If required, surface the piston on a piece of plate glass with 320 grit (very fine) sandpaper (the piston is surfaced from the factory but check it every time you disassemble the valving.) **Install the Gold Valve on the shaft** with the large diameter ports facing down towards the compression stack.

13 ***Build the Rebound Stack.*** The Rebound Valving Stack is either Single-Stage or Two-Stage as with Compression. First, install the Lo-Speed Rebound Stack on the shaft. Then install the Lo-Speed Rebound Crossover Shim (if required) and then the Hi-Speed Rebound Stack starting with the largest shim and ending with the smallest diameter shim.

14 ***THIS NEXT STEP IS CRITICAL!!!! You must stack up the total valving thickness so there are enough threads for full nut engagement and you don't run out of thread. When completely assembled the top of the nut should be within 3mm (.12") from the end of the shaft.***

**** If you need to add to the thickness of the valving stack you can add shims just below the Special Nut. Be sure the shims are all larger in diameter than the clamping shim. If any of the shims or additional washers are smaller in diameter than the clamping shim it will decrease rebound damping. DO NOT PUT SHIMS BELOW THE COMPRESSION BASE PLATE!***

15 You MUST use the special replacement nut included in your ZRX Rear Shock Kit. ***Clean the threads thoroughly, use Loctite 271 and torque the nut to 20 ft-lbs (27.1 NM).*** **Check that the valve assembly cannot spin. This will double-check your total stack height.**

16 ***Install the new Piston Ring Energizer O-ring*** onto the Gold Valve Shock Piston. Do not re-use the stock o-ring. Be sure the o-ring sits all the way down into the groove and install the new piston ring.

## *REASSEMBLY*

17 ***Begin reassembling the shock.*** Make sure everything is clean. Clamp the shock body in the vise and fill the reservoir with the proper fluid. Install the bladder on the cap with the nitrogen valve core installed. ***Install the bladder assembly*** into the reservoir, making sure there is enough fluid in the reservoir so the fluid overflows as the bladder is inserted. (Piston Type Reservoirs do the same with the Reservoir Piston.) Push the cap down far enough to expose the circlip groove and ***install the circlip.*** Gently pressurize the reservoir bladder with 10 psi (0.7 bar) of air, no more. This will expand the bladder and push extra fluid through the compression adjuster valve. Leave the reservoir pressurized to 10 psi.

19 ***Fill the body*** most of the way with fluid. Install the shock shaft assembly into the body, holding the piston ring in place as you insert it into the fluid. The shaft should go into the body relatively easily. If it does not, the o-ring is probably incorrect, call Race Tech if this occurs.

***Bleed the bubbles*** past the piston by stroking the shock quickly and forcefully on compression and pulling up slowly on rebound. Quickly on compression to open the valving allowing the trapped air to get out. Slowly on rebound so bubbles won't form behind the piston as you pull the shaft up.

20 When you are done bleeding the shock **extend the shaft** almost all the way out (do not let it suck air through the rebound feed hole or you must start bleeding again). **Top off the shock** with fluid and **push the seal head down** the shaft and into the oil. Oil will overflow as the seal head goes down the shaft, until the seal head o-ring seals on the shock body. At this point, **keep pressure on the seal head** and depressurize the reservoir allowing the seal head to go into the shock body.

21 Push the seal head past the circlip grooves and ***install the circlip(s).*** Pressurize the reservoir with 20 psi (1.4 bar) to ***seat the seal head*** on the circlip. Visually check to see that it is seated properly and ***install the end cap*** with a plastic mallet. ***Pressurize the reservoir to the DVS recommended amount*** with nitrogen. Stroke the shock through its travel making sure it rebounds to full extension. If it does not, stop, disassemble and inspect the shock.

22 ***Adjust the spring preload*** to the recommended setting. ***Set the compression and rebound adjusters*** according to your DVS Setup Sheet.

23 ***Reinstall the shock*** on the bike taking care to service the joints and the swingarm pivot bearings. Suspension performance will suffer if the swingarm is binding.

24 Enjoy!

***Visit www.racetech.com, go to Digital Valving Search with your Access Code (from the top of page 1) for your personal computer calculated valving setup!***

***Sign up for Race Tech News for the latest developments at www.racetech.com.***

# *VALVING SELECTION – KAWASAKI ZRX1100/1200 - SMGV S3609P*

Welcome to the wonderful world of Gold Valving. **To obtain your personal Custom Suspension Settings:**

1. **Log on to our website at www.racetech.com**
2. **Go to Digital Valving Search (DVS)**
3. **Input your Access Code when prompted (your Code is printed on top of page 1 of these instructions)**
4. **Input your personal specifications**
5. **Print your Custom Suspension Setup and build the valving stacks**

**If you do not have access to the Internet contact our Technical Support Hotline 951.279.6655 for recommendations. Note: The Access Code is good for one bike, limited-time use.**

- **Single-Stage Valving Stacks are a combination of a Lo-Speed and a Hi-Speed Stack with NO Crossover (or just a Hi-Speed Stack).**
- **Two-Stage Valving Stacks are a combination of a Lo-Speed Stack on top of a Lo-Speed Crossover, placed on top of a Hi-Speed Stack.**

## *EXAMPLES of Two-Stage and Single-Stage:*

***COMPRESSION (two-stage)***

**If the Total Compression Valving Stack is cL2009, cLX1522 and cH129:**

Starting from the Gold Valve piston face

**Lo-Speed Compression Stack – cL2009**
(9) .20x34

**Lo-Speed Crossover – cLX1522**
(1) .15x22

**Hi-Speed Compression – cH129**
(1) .25x34
(1) .25x32
(1) .25x30
(1) .25x28
(1) .25x26
(1) .25x24
(1) .25x22
(1) .25x20
(1) .25x18

***REBOUND (single-stage)***

**If the Total Rebound Stack is rL2004 and rH167:**

Starting from the Gold Valve piston face

**Lo-Speed Rebound Stack – rL2004**
(4) .20x30

**Lo-Speed Crossover – rLX n/a**
Not used

**Hi-Speed Rebound – rH167**
(1) .30x30
(1) .30x28
(1) .30x26
(1) .30x24
(1) .30x22
(1) .30x20

***BLEED, EXTERNAL ADJUSTERS, SPRING RATE, and PRELOAD are all listed on the Digital Valving Search on www.racetech.com.*** (Double-check your Preload by measuring Static "Race" Sag when the shock is installed on the bike.)

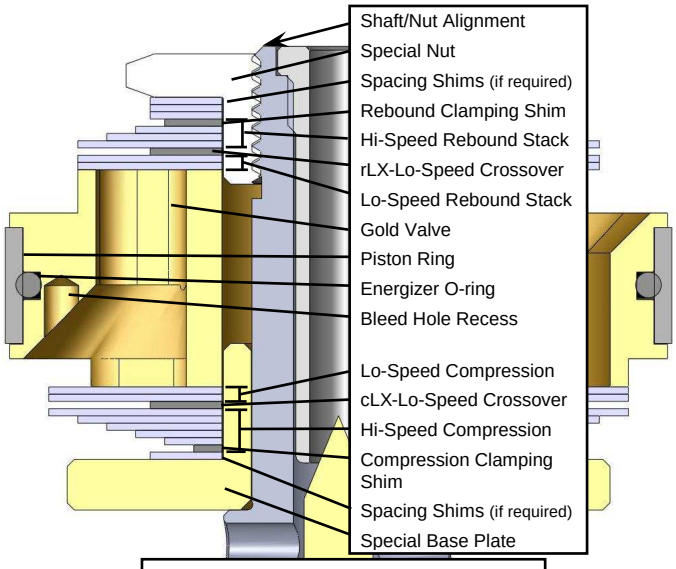
NOTE: All measurements are metric *(for inches divide by 25.4)*. The valving list starts at the piston face and goes towards the base plate. Valve specs are listed by (QUANTITY) THICKNESS x DIAMETER. Example: (2).20x40 means quantity two, 20 hundredths of a millimeter thick by 40 millimeters in diameter.

## *TUNING NOTES*

Damping is sensitive to vertical wheel velocity, not position in the stroke. Please feel free to use the compression damping adjuster. Please note that on some shocks it has very little affect. The closer to maximum damping *(full clockwise)* the more effect one click makes. In other words going from 3 to 2 out has a lot more effect than going from 14 to 13 out. If your valving needs to be stiffer internally, move to the right. This will increase damping.

Spring rate is dependent on rider weight (except for Supercross). Spring Rate, Preload and Lo-Speed Compression Damping all affect wallow and bottoming.

If you would like any assistance, please contact the Technical Support Hotline 951.279.6655.




***Gold Valve Cutaway***
*figure 2*

# *SHOCK GOLD VALVE CHART - 36mm (32/28) - KAWASAKI ZRX1100/1200*

<smgv chart LD 363228.doc> 6.24.11 © P Thede

COMPRESSION

***LO-SPEED COMPRESSION STACK*** ***STIFFER →***

| cL1001 | cL1002 | cL1003 | cL1004 | cL1005 | cL1006 | cL1007 | cL1008 | cL1009 | cL1010 |
|---|---|---|---|---|---|---|---|---|---|
| .10x32 | (2).10x32 | (3).10x32 | (4).10x32 | (5).10x32 | (6).10x32 | (7).10x32 | (8).10x32 | (9).10x32 | (10).10x32 |
| **cL1501** | **cL1502** | **cL1503** | **cL1504** | **cL1505** | **cL1506** | **cL1507** | **cL1508** | **cL1509** | **cL1510** |
| .15x32 | (2).15x32 | (3).15x32 | (4).15x32 | (5).15x32 | (6).15x32 | (7).15x32 | (8).15x32 | (9).15x32 | (10).15x32 |
| **cL2001** | **cL2002** | **cL2003** | **cL2004** | **cL2005** | **cL2006** | **cL2007** | **cL2008** | **cL2009** | **cL2010** |
| .20x32 | (2).20x32 | (3).20x32 | (4).20x32 | (5).20x32 | (6).20x32 | (7).20x32 | (8).20x32 | (9).20x32 | (10).20x32 |

***LO-SPEED COMPRESSION CROSSOVER*** ***STIFFER →***

| cLX1018 | cLX1020 | cLX1022 | cLX1024* |
|---|---|---|---|
| .10x18 | .10x20 | .10x22 | .10x24 |
| **cLX1518** | **cLX1520** | **cLX1522** | **cLX1524*** |
| .15x18 | .15x20 | .15x22 | .15x24 |

***HI-SPEED COMPRESSION STACK*** ***STIFFER →***

| cH121 | cH122 | cH123 | cH124 | cH125 | cH126 | cH127 | cH128 | cH129 | cH130 |
|---|---|---|---|---|---|---|---|---|---|
| .10x32 | .10x32 | .10x32 | .10x32 | .10x32 | .10x32 | .10x32 | .10x32 | (2).10x32 | (2).10x32 |
| .10x30 | .10x30 | .10x30 | .10x30 | .10x30 | .10x30 | .10x30 | (2).10x30 | (2).10x30 | (2).10x30 |
| .10x28 | .10x28 | .10x28 | .10x28 | .10x28 | .10x28 | (2).10x28 | (2).10x28 | (2).10x28 | (2).10x28 |
| .10x26 | .10x26 | .10x26 | .10x26 | .10x26 | (2).10x26 | (2).10x26 | (2).10x26 | (2).10x26 | (2).10x26 |
| .10x24 | .10x24 | .10x24 | .10x24 | (2).10x24 | (2).10x24 | (2).10x24 | (2).10x24 | (2).10x24 | (2).10x24 |
| .10x22 | .10x22 | .10x22 | (2).10x22 | (2).10x22 | (2).10x22 | (2).10x22 | (2).10x22 | (2).10x22 | (2).10x22 |
| .10x20 | .10x20 | (2).10x20 | (2).10x20 | (2).10x20 | (2).10x20 | (2).10x20 | (2).10x20 | (2).10x20 | (2).10x20 |
| .10x18 | (2).10x18 | (2).10x18 | (2).10x18 | (2).10x18 | (2).10x18 | (2).10x18 | (2).10x18 | (2).10x18 | (2).10x18 |
| .25x16 | .25x16 | .25x16 | .25x16 | .25x16 | .25x16 | .25x16 | .25x16 | .25x16 | |
| **cH131** | **cH132** | **cH133** | **cH134** | **cH135** | **cH136** | **cH137** | **cH138** | **cH139** | **cH140** |
| (2).10x32 | (2).10x32 | (2).10x32 | (2).10x32 | .15x32 | .15x32 | .15x32 | .15x32 | .15x32 | .15x32 |
| (2).10x30 | (2).10x30 | (2).10x30 | (2).10x30 | .15x30 | .15x30 | .15x30 | .15x30 | .15x30 | .15x30 |
| (2).10x28 | (2).10x28 | (2).10x28 | .15x28 | .15x28 | .15x28 | .15x28 | .15x28 | .15x28 | .20x28 |
| (2).10x26 | (2).10x26 | .15x26 | .15x26 | .15x26 | .15x26 | .15x26 | .15x26 | .20x26 | .20x26 |
| (2).10x24 | .15x24 | .15x24 | .15x24 | .15x24 | .15x24 | .15x24 | .20x24 | .20x24 | .20x24 |
| .15x22 | .15x22 | .15x22 | .15x22 | .15x22 | .15x22 | .20x22 | .20x22 | .20x22 | .20x22 |
| .15x20 | .15x20 | .15x20 | .15x20 | .15x20 | .20x20 | .20x20 | .20x20 | .20x20 | .20x20 |
| .25x18 | .25x18 | .25x18 | .25x18 | .25x18 | .25x18 | .25x18 | .25x18 | .25x18 | .25x18 |
| **cH141** | **cH142** | **cH143** | **cH144** | **cH145** | **cH146** | **cH147** | **cH148** | **cH149** | **cH150** |
| .15x32 | .20x32 | .20x32 | .20x32 | .20x32 | .20x32 | .20x32 | .20x32 | .25x32 | .25x32 |
| .20x30 | .20x30 | .20x30 | .20x30 | .20x30 | .20x30 | .20x30 | .25x30 | .25x30 | .25x30 |
| .20x28 | .20x28 | .20x28 | .20x28 | .20x28 | .20x28 | .25x28 | .25x28 | .25x28 | .25x28 |
| .20x26 | .20x26 | .20x26 | .20x26 | .20x26 | .25x26 | .25x26 | .25x26 | .25x26 | .25x26 |
| .20x24 | .20x24 | .20x24 | .20x24 | .25x24 | .25x24 | .25x24 | .25x24 | .25x24 | .25x24 |
| .20x22 | .20x22 | .20x22 | .25x22 | .25x22 | .25x22 | .25x22 | .25x22 | .25x22 | .25x22 |
| .20x20 | .20x20 | .25x20 | .25x20 | .25x20 | .25x20 | .25x20 | .25x20 | .25x20 | .30x20 |
| .25x18 | .25x18 | .25x18 | .25x18 | .25x18 | .25x18 | .25x18 | .25x18 | .25x18 | .25x18 |
| **cH151** | **cH152** | **cH153** | **cH154** | **cH155** | **cH156** | **cH157** | **cH158** | **cH159** | **cH160** |
| .25x32 | .25x32 | .25x32 | .25x32 | .25x32 | .30x32 | .25x32 | .25x32 | .25x32 | .25x32 |
| .25x30 | .25x30 | .25x30 | .25x30 | .30x30 | .30x30 | .25x30 | .25x30 | .25x30 | .30x30 |
| .25x28 | .25x28 | .25x28 | .30x28 | .30x28 | .30x28 | .25x28 | .25x28 | .30x28 | .30x28 |
| .25x26 | .25x26 | .30x26 | .30x26 | .30x26 | .30x26 | .25x26 | .30x26 | .30x26 | .30x26 |
| .25x24 | .30x24 | .30x24 | .30x24 | .30x24 | .30x24 | .30x24 | .30x24 | .30x24 | .30x24 |
| .30x22 | .30x22 | .30x22 | .30x22 | .30x22 | .30x22 | .30x22 | .30x22 | .30x22 | .30x22 |
| .30x20 | .30x20 | .30x20 | .30x20 | .30x20 | .30x20 | .30x20 | .30x20 | .30x20 | .30x20 |
| .25x18 | .25x18 | .25x18 | .25x18 | .25x18 | .25x18 | | | | |
| **cH161** | **cH162** | **cH163** | **cH164** | **cH165** | | | | | |
| .30x32 | .25x32 | .25x32 | .25x32 | .30x32 | | | | | |
| .30x30 | .25x30 | .25x30 | .30x30 | .30x30 | | | | | |
| .30x28 | .25x28 | .30x28 | .30x28 | .30x28 | | | | | |
| .30x26 | .30x26 | .30x26 | .30x26 | .30x26 | | | | | |
| .30x24 | .30x24 | .30x24 | .30x24 | .30x24 | | | | | |
| .30x22 | .30x22 | .30x22 | .30x22 | .30x22 | | | | | |
| .30x20 | | | | | | | | | |

<smgv chart LD 363228.doc> 6.24.11 © P Thede

REBOUND

***LO-SPEED REBOUND STACK*** ***SLOWER →***

| rL1001 | rL1002 | rL1003 | rL1004 | rL1005 | rL1006 | rL1007 | rL1008 | rL1009 | rL1010 |
|---|---|---|---|---|---|---|---|---|---|
| .10x28 | (2).10x28 | (3).10x28 | (4).10x28 | (5).10x28 | (6).10x28 | (7).10x28 | (8).10x28 | (9).10x28 | (10).10x28 |
| **rL1501** | **rL1502** | **rL1503** | **rL1504** | **rL1505** | **rL1506** | **rL1507** | **rL1508** | **rL1509** | **rL1510** |
| .15x28 | (2).15x28 | (3).15x28 | (4).15x28 | (5).15x28 | (6).15x28 | (7).15x28 | (8).15x28 | (9).15x28 | (10).15x28 |
| **rL2001** | **rL2002** | **rL2003** | **rL2004** | **rL2005** | **rL2006** | **rL2007** | **rL2008** | **rL2009** | **rL2010** |
| .20x28 | (2).20x28 | (3).20x28 | (4).20x28 | (5).20x28 | (6).20x28 | (7).20x28 | (8).20x28 | (9).20x28 | (10).20x28 |

***LO-SPEED REBOUND CROSSOVER*** ***SLOWER →***

| rLX1018* | rLX1020* | rLX1022* | rLX1024* |
|---|---|---|---|
| .10x18 | .10x20 | .10x22 | .10x24 |
| **rLX1518** | **rLX1520*** | **rLX1522*** | **rLX1524*** |
| .15x18 | .15x20 | .15x22 | .15x24 |

***HI-SPEED REBOUND STACK*** ***SLOWER →***

| | | | | | | rH137 | rH138 | rH139 | rH140 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | .10x28 | .10x28 | .10x28 | .10x28 |
| | | | | | | .10x26 | .10x26 | .10x26 | .10x26 |
| | | | | | | .10x24 | .10x24 | .10x24 | .10x24 |
| | | | | | | .10x22 | .10x22 | .10x22 | .15x22 |
| | | | | | | .10x20 | .10x20 | .15x20 | .15x20 |
| | | | | | | .10x18 | .15x18 | .15x18 | .15x18 |
| | | | | | | .25x16 | .25x16 | .25x16 | .25x16 |
| **rH141** | **rH142** | **rH143** | **rH144** | **rH145** | **rH146** | **rH147** | **rH148** | **rH149** | **rH150** |
| .10x28 | .10x28 | .10x28 | .10x28 | .10x28 | .15x28 | .15x28 | .15x28 | .15x28 | .15x28 |
| .10x26 | .10x26 | .10x26 | .10x26 | .15x26 | .15x26 | .15x26 | .15x26 | .15x26 | .20x26 |
| .10x24 | .10x24 | .10x24 | .15x24 | .15x24 | .15x24 | .15x24 | .15x24 | .20x24 | .20x24 |
| .10x22 | .10x22 | .15x22 | .15x22 | .15x22 | .15x22 | .15x22 | .20x22 | .20x22 | .20x22 |
| .10x20 | .15x20 | .15x20 | .15x20 | .15x20 | .15x20 | .20x20 | .20x20 | .20x20 | .20x20 |
| .25x18 | .25x18 | .25x18 | .25x18 | .25x18 | .25x18 | .25x18 | .25x18 | .25x18 | .25x18 |
| **rH151** | **rH152** | **rH153** | **rH154** | **rH155** | **rH156** | **rH157** | **rH158** | **rH159** | **rH160** |
| .20x28 | .20x28 | .20x28 | .20x28 | .20x28 | .25x28 | .25x28 | .25x28 | .25x28 | .25x28 |
| .20x26 | .20x26 | .20x26 | .20x26 | .25x26 | .25x26 | .25x26 | .25x26 | .25x26 | .25x26 |
| .20x24 | .20x24 | .20x24 | .25x24 | .25x24 | .25x24 | .25x24 | .25x24 | .30x24 | .25x24 |
| .20x22 | .20x22 | .25x22 | .25x22 | .25x22 | .25x22 | .25x22 | .30x22 | .30x22 | .25x22 |
| .20x20 | .25x20 | .25x20 | .25x20 | .25x20 | .25x20 | .30x20 | .30x20 | .30x20 | .30x20 |
| .25x18 | .25x18 | .25x18 | .25x18 | .25x18 | .25x18 | .25x18 | .25x18 | .25x18 | |
| **rH161** | **rH162** | **rH163** | **rH164** | **rH165** | **rH166** | **rH167** | **rH168** | **rH169** | **rH170** |
| .25x28 | .25x28 | .25x28 | .30x28 | .25x28 | .25x28 | .30x28 | .30x28 | .30x28 | (2).30x28 |
| .25x26 | .25x26 | .30x26 | .30x26 | .25x26 | .30x26 | .30x26 | .30x26 | (2).30x26 | (2).30x26 |
| .25x24 | .30x24 | .30x24 | .30x24 | .30x24 | .30x24 | .30x24 | (2).30x24 | (2).30x24 | (2).30x24 |
| .30x22 | .30x22 | .30x22 | .30x22 | (2).30x22 | (2).30x22 | (2).30x22 | (2).30x22 | (2).30x22 | (2).30x22 |
| .30x20 | .30x20 | .30x20 | .30x20 | | | | | | |

***BLEED HOLE (drill if required)*** ***SLOWER→***

| 2.2mm | 2.0mm | 1.8mm | 1.6mm | 1.5mm | 1.3mm | 1.2mm | 1.0mm |
|---|---|---|---|---|---|---|---|
| #44 | #47 | #50 | #52 | #53 | #55 | #56 | #60 |

* SHIMS NOT PROVIDED IN STANDARD KIT (Please Call) SHIM SIZING: (QUANTITY) THICKNESS x DIAMETER in mm (for inches divide by 25.4)