



DUAL RATE SPRING KIT FOR WALKER EVANS VELOCITY SHOCKS

• APPLICATION: POLARIS RZR XP 4 TURBO S (2018-2020) *4 SEATER MODELS

PART NUMBER: K30-PL1025-0



KIT INCLUDES:

- (2) FRONT MAIN SPRINGS
- (2) FRONT PROGRESSIVE TENDER SPRINGS
- (2) FRONT BILLET CROSS OVER RINGS
- (2) REAR MAIN SPRINGS
- (2) REAR TENDER SPRINGS
- (2) REAR BILLET CROSS OVER RINGS
- (4) TUNED BY ZBROZ RACING RESERVOIR DECALS

TOOLS NEEDED:

- FLOOR JACK OR LIFT
- 5/16" PUNCH
- 15MM WRENCH/15MM SOCKET
- 18MM WRENCH/18MM SOCKET
- FLATHEAD SCREWDRIVER
- RUBBER Mallet
- STRUT/SPRING COMPRESSOR



RECOMMENDED STRUT/SPRING COMPRESSOR
*BUY OR RENT AT LOCAL AUTO PARTS STORE

WITH INSTALLATION OF THIS ZBROZ RACING DUAL RATE SPRING KIT, YOU CAN EXPECT A 1"- 2" GAIN IN RIDE HEIGHT.

BY FOLLOWING THESE INSTRUCTIONS YOUR RZR WILL BE SETUP TO OUR ZBROZ RACING GENERAL RECREATION RIDE SETTINGS IN RIDE HEIGHT AND CROSSOVER POINT TO ENGAGE MAIN SPRINGS.

THIS DUAL RATE SPRING KIT CAN BE INSTALLED WITH SHOCKS ON YOUR POLARIS RZR XP TURBO S USING A FLOOR JACK OR LIFT. SELECT FLAT INSTALL LOCATION. IF USING FLOOR JACK, ALWAYS MAKE SURE TO BLOCK TIRES - WORK SAFELY!

***IF REMOVING SHOCKS TO INSTALL THIS SPRING KIT, BACK OFF PRE-LOAD RINGS ON ALL SHOCKS BEFORE REMOVING. USE A SOLID MOUNTED VICE FOR INSTALLATION.**

FOLLOW THESE STEPS FIRST:

- IF REMOVING SHOCKS, LABEL EACH SHOCK (FRONT DRIVER, FRONT PASSENGER, ETC.) SO THAT YOU HAVE NO INSTALLATION PROBLEMS WITH THE PIGGYBACK RESERVOIRS POSITIONING/CLOCKING.
- MEASURE CURRENT RIDE HEIGHT. MARK SPOT AT FRONT CENTER FRAME POINT AND BACK CENTER FRAME POINT. MEASURE DISTANCE TO GROUND LEVEL. *WRITE DOWN THESE MEASUREMENTS FOR BEFORE AND AFTER INSTALLATION NOTES.
- CLEAN SHOCKS! REMOVE ALL DIRT AND MUD FROM THREADED SHOCK BODIES, SHAFT, BUMP STOP AND PIGGYBACK RESERVOIRS.
- RAISE RZR USING A FLOOR JACK OR LIFT. IF USING FLOOR JACK, ALWAYS MAKE SURE TO BLOCK TIRES - WORK SAFELY!
- REMOVE TIRES

IF YOU HAVE ANY QUESTIONS, PLEASE CALL 435-753-7774 MONDAY THRU FRIDAY 8:00AM - 5:00PM
INSTALLATION VIDEO AVAILABLE ON ZBROZ RACING YOUTUBE CHANNEL



REAR SHOCKS SPRING KIT INSTALL: ***SPRING COMPRESSOR REQUIRED**

1. DISCONNECT 1 SIDE OF THE SWAY BAR AT LINK ROD. THIS MAKES REMOVING AND INSTALLING LOWER SHOCK MOUNT BOLTS EASIER.
**LEAVE SWAY BAR DISCONNECTED UNTIL YOU HAVE INSTALLED SPRING KIT ON BOTH REAR SHOCKS.*
2. USE FLATHEAD SCREWDRIVER TO WEDGE BUMP STOP UP A FEW INCHES TO ALLOW REMOVAL OF OEM LOWER SPRING RETAINER.
3. BACK OEM PRE-LOAD RING ALL THE WAY TO TOP OF THREADED SHOCK BODY.
- USE 5/16" PUNCH OR SIMILAR TOOL TO BACK PRE-LOAD RING. ONCE LOOSE, YOU SHOULD BE ABLE TO SPIN COUNTER CLOCKWISE BY HAND. SPIN PRE-LOAD RING ALL THE WAY TO TOP OF THREADED SHOCK BODY.
- IF DIFFICULT TO SPIN PRE-LOAD RING, USE ANY LUBRICATION AND RAG TO COMPLETELY CLEAN OUT THREADS OF SHOCK BODY.
4. DISCONNECT LOWER SHOCK MOUNT BOLT FROM TRAILING ARM. SWING LOWER SHOCK OUTWARD.
5. USE SPRING COMPRESSOR TO COMPRESS OEM MAIN SPRING. TAKE EXTRA CAUTION WHEN HANDLING COMPRESSED MAIN SPRING. PUSH UP ON SPRING STACK TO REMOVE OEM LOWER SPRING RETAINER.
**PERSUADE OEM LOWER SPRING RETAINER WITH RUBBER Mallet IF IT IS STUCK OR NOT COMING LOOSE.*
6. REMOVE OEM SPRING STACK CAREFULLY - REMEMBER OEM MAIN SPRING IS BEING COMPRESSED WITH SPRING COMPRESSOR.
**KEEP AND REUSE OEM SPRING DIVIDER, OEM LOWER SPRING RETAINER AND OEM ROCK GUARD. DISCARD OEM SPRINGS.*
7. INSTALL REAR BILLET CROSS OVER RING TO THREADED SHOCK BODY. THIS IS A 2 PIECE BILLET CROSS OVER RING DESIGN. REMOVE ALLEN SCREWS, POSITION EACH HALF AT CENTER POINT OF THREADED SHOCK BODY AND INSTALL SCREWS. MAKE SURE BILLET CROSS OVER RING SPINS FREELY AND IS NOT CROSS THREADING. ***DO NOT TIGHTEN ALLEN SCREWS, YOU WILL NEED TO SET CROSS OVER POINT ONCE SPRING STACK PRE-LOAD HAS BEEN SET TO ZERO.**
8. INSTALL REAR SPRING KIT IN FOLLOWING ORDER. ***YOU WILL NOT USE SPRING COMPRESSOR TO INSTALL THIS ZBROZ RACING SPRING KIT.**
 1. REAR TENDER SPRING **INSTALL TIGHTER COILS TOWARDS TOP TOO ALLOW ROOM FOR BILLET CROSS OVER RING ADJUSTMENT.*
 2. OEM SPRING DIVIDER **LONG END POINTING DOWN TOWARDS SHAFT*
 3. REAR MAIN SPRING
 4. OEM LOWER SPRING RETAINER
 5. OEM ROCK GUARD
9. RECONNECT LOWER SHOCK TO TRAILING ARM AND TIGHTEN LOWER SHOCK MOUNT BOLT.
10. ZERO OUT THE PRE-LOAD BY SPINNING OEM PRE-LOAD RING CLOCKWISE UNTIL SPRING STACK IS SECURE FROM MOVEMENT. THEN APPLY 4 ADDITIONAL "FULL CLOCKWISE ROTATIONS/TURNS" OF PRE-LOAD RING - USE 5/16" PUNCH OR SIMILAR TOOL.
**MEASURE FROM TOP OF PRE-LOAD RING TO TOP OF THREADED SHOCK BODY FOR REFERENCE WHEN INSTALLING OTHER REAR SHOCK.*
11. SET REAR SHOCK BILLET CROSS OVER RING. **THIS IS OUR RECOMMENDED STARTING POINT.*
- POSITION BOTTOM EDGE OF BILLET CROSS OVER RING TO BE SPACED 4 1/2" (4.50") FROM INSIDE LIP OF OEM SPRING DIVIDER.
12. SET REAR WALKER EVANS COMPRESSION CLICKER KNOBS TO MID RANGE. ADJUST TO DESIRED CLICKER SETTING AFTER A FEW RIDES.
13. REPEAT STEPS TO INSTALL OTHER REAR SHOCK. CONFIRM MEASUREMENT FROM TOP OF PRE-LOAD RING TO TOP OF THREADED SHOCK BODY ARE THE SAME ON BOTH REAR SHOCKS. RECONNECT SWAY BAR LINK ROD. INSTALL TIRES AND TORQUE LUG NUTS.



FRONT SHOCKS SPRING KIT INSTALL: ***SPRING COMPRESSOR REQUIRED**

1. DISCONNECT AND REMOVE FRONT SWAY. THE PROGRESSIVE PERFORMANCE OF THIS ZBROZ RACING SPRING KIT WILL NO LONGER REQUIRE SWAY BAR ASSISTANCE IN MOST APPLICATIONS.
**IF RACING APPLICATION, TEST DRIVE WITH AND WITHOUT FRONT SWAY BAR CONNECTED TO DETERMINE IF YOU NEED IT.*
2. USE FLATHEAD SCREWDRIVER TO WEDGE BUMP STOP UP A FEW INCHES TO ALLOW REMOVAL OF OEM LOWER SPRING RETAINER.
3. BACK OEM PRE-LOAD RING ALL THE WAY TO TOP OF THREADED SHOCK BODY.
- USE 5/16" PUNCH OR SIMILAR TOOL TO BACK PRE-LOAD RING. ONCE LOOSE, YOU SHOULD BE ABLE TO SPIN COUNTER CLOCKWISE BY HAND. SPIN PRE-LOAD RING ALL THE WAY TO TOP OF THREADED SHOCK BODY.
- IF DIFFICULT TO SPIN PRE-LOAD RING, USE ANY LUBRICATION AND RAG TO COMPLETELY CLEAN OUT THREADS OF SHOCK BODY.
4. DISCONNECT LOWER SHOCK MOUNT BOLT FROM A-ARM. SWING LOWER SHOCK OUTWARD.
5. USE SPRING COMPRESSOR TO COMPRESS OEM MAIN SPRING. TAKE EXTRA CAUTION WHEN HANDLING COMPRESSED MAIN SPRING. PUSH UP ON SPRING STACK TO REMOVE OEM LOWER SPRING RETAINER.
**PERSUADE OEM LOWER SPRING RETAINER WITH RUBBER Mallet IF IT IS STUCK OR NOT COMING LOOSE.*
6. REMOVE OEM SPRING STACK CAREFULLY - REMEMBER OEM MAIN SPRING IS BEING COMPRESSED WITH SPRING COMPRESSOR.
**KEEP AND REUSE OEM SPRING DIVIDER AND OEM LOWER SPRING RETAINER. DISCARD OEM SPRINGS.*
7. INSTALL FRONT BILLET CROSS OVER RING TO THREADED SHOCK BODY. THIS IS A 2 PIECE BILLET CROSS OVER RING DESIGN. REMOVE ALLEN SCREWS, POSITION EACH HALF AT CENTER POINT OF THREADED SHOCK BODY AND INSTALL SCREWS. MAKE SURE BILLET CROSS OVER RING SPINS FREELY AND IS NOT CROSS THREADING. ***DO NOT TIGHTEN ALLEN SCREWS, YOU WILL NEED TO SET CROSS OVER POINT ONCE SPRING STACK PRE-LOAD HAS BEEN SET TO ZERO.**
8. INSTALL FRONT SPRING KIT IN FOLLOWING ORDER. ***YOU WILL NOT USE SPRING COMPRESSOR TO INSTALL THIS ZBROZ RACING SPRING KIT.**
 1. FRONT TENDER SPRING **INSTALL TIGHTER COILS TOWARDS TOP TOO ALLOW ROOM FOR BILLET CROSS OVER RING ADJUSTMENT.*
 2. OEM SPRING DIVIDER **LONG END POINTING DOWN TOWARDS SHAFT*
 3. FRONT MAIN SPRING
 4. OEM LOWER SPRING RETAINER
9. RECONNECT LOWER SHOCK TO A-ARM ARM AND TIGHTEN LOWER SHOCK MOUNT BOLT.
10. ZERO OUT THE PRE-LOAD BY SPINNING OEM PRE-LOAD RING CLOCKWISE UNTIL SPRING STACK IS SECURE FROM MOVEMENT. THEN APPLY 4 ADDITIONAL "FULL CLOCKWISE ROTATIONS/TURNS" OF PRE-LOAD RING - USE 5/16" PUNCH OR SIMILAR TOOL.
**MEASURE FROM TOP OF PRE-LOAD RING TO TOP OF THREADED SHOCK BODY FOR REFERENCE WHEN INSTALLING OTHER FRONT SHOCK.*
11. SET FRONT SHOCK BILLET CROSS OVER RING. **THIS IS OUR RECOMMENDED STARTING POINT.*
- POSITION BOTTOM EDGE OF BILLET CROSS OVER RING TO BE SPACED 1" (1.0") FROM INSIDE LIP OF OEM SPRING DIVIDER.
12. SET FRONT WALKER EVANS COMPRESSION CLICKER KNOBS TO MID RANGE. ADJUST TO DESIRED CLICKER SETTING AFTER A FEW RIDES.
13. REPEAT STEPS TO INSTALL OTHER FRONT SHOCK. CONFIRM MEASUREMENT FROM TOP OF PRE-LOAD RING TO TOP OF THREADED SHOCK BODY ARE THE SAME ON BOTH FRONT SHOCKS. RECONNECT SWAY BAR LINK ROD. INSTALL TIRES AND TORQUE LUG NUTS.

CHECK RIDE HEIGHT MEASUREMENT: *RZR WILL NEED TO BE RAISED WITH LIFT OR FLOOR JACK - DO NOT REMOVE TIRES.

1. DRIVE RZR AROUND TO SETTLE SPRING KIT. COAST TO STOP, DO NOT APPLY BRAKE TO ENSURE SPRING KIT IS NATURALLY SETTLED. ZBROZ RACING RECOMMENDS SAME RIDE HEIGHT MEASUREMENT FRONT CENTER FRAME POINT TO GROUND AS REAR CENTER FRAME POINT TO GROUND. *WHEN YOU MAKE ADJUSTMENTS TO PRE-LOAD, YOU WILL NEED TO MAKE ADJUSTMENTS TO YOUR CROSS OVER SETTING.
 - IF RIDE HEIGHT IS TOO TALL AT FRONT OR REAR: SPIN OEM PRE-LOAD RINGS 1 TO 2 FULL COUNTER CLOCKWISE ROTATIONS AT A TIME THEN REPEAT STEP 1.
 - IF RIDE HEIGHT IS TOO LOW AT FRONT OR REAR: SPIN OEM PRE-LOAD RINGS 1 TO 2 FULL CLOCKWISE ROTATIONS AT A TIME THEN REPEAT STEP 1.
2. ONCE RIDE HEIGHT IS ADJUSTED, SECURE PRE-LOAD BY SPINNING OEM UPPER PRE-LOAD RING CLOCKWISE UNTIL CONTACTING OEM LOWER PRE-LOAD RING. USE FLATHEAD SCREWDRIVER AND RUBBER Mallet TO TIGHTEN OEM UPPER PRE-LOAD RING TO OEM LOWER PRE-LOAD RING.

WHEN TO ADJUST CROSS OVER SETTING: *RZR CAN BE ON GROUND, NO LIFT OR FLOOR JACK REQUIRED.

1. DRIVE RZR AROUND TO SETTLE SPRING KIT. COAST TO STOP, DO NOT APPLY BRAKE TO ENSURE SPRING KIT IS NATURALLY SETTLED. *WHEN YOU MAKE ADJUSTMENTS TO PRE-LOAD, YOU WILL NEED TO MAKE ADJUSTMENTS TO YOUR CROSS OVER SETTING.
 - IF G-OUT OR BOTTOMING: MOVE CROSS OVER RING CLOSER TO THE OEM SPRING DIVIDER TO ENGAGE MAIN SPRING FASTER. *THIS IS A FINE ADJUSTMENT, SPIN CROSS OVER RING 1 TO 2 FULL CLOCKWISE ROTATIONS AT A TIME THEN TEST RIDE.
 - IF RIDE IS TOO STIFF: MOVE CROSS OVER RING AWAY FROM OEM SPRING DIVIDER TO ENGAGE MAIN SPRING SLOWER. *THIS IS A FINE ADJUSTMENT, SPIN CROSS OVER RING 1 TO 2 FULL COUNTER CLOCKWISE ROTATIONS AT A TIME THEN TEST RIDE.

