

PWJDM Ruckus/Zoomer Frame Extension

Installation Guide

This install will take ~2-3 hours depending on how familiar you are with your bike and tools.

Read these instructions before you begin to make sure you have the proper tools to get the job done, especially the grinding. Keep the stock bolts, they will be re-used.

Notes:

- If you are using a stock handlebar, you may need a longer throttle and brake cable. We chose to leave these parts out of the kit because we've never heard of anyone using the stock handlebars.
- We have already thread locked and torqued the main extension. It will be very difficult to take apart so we don't recommend that you disassemble it.

Double check to make sure you have all these components.

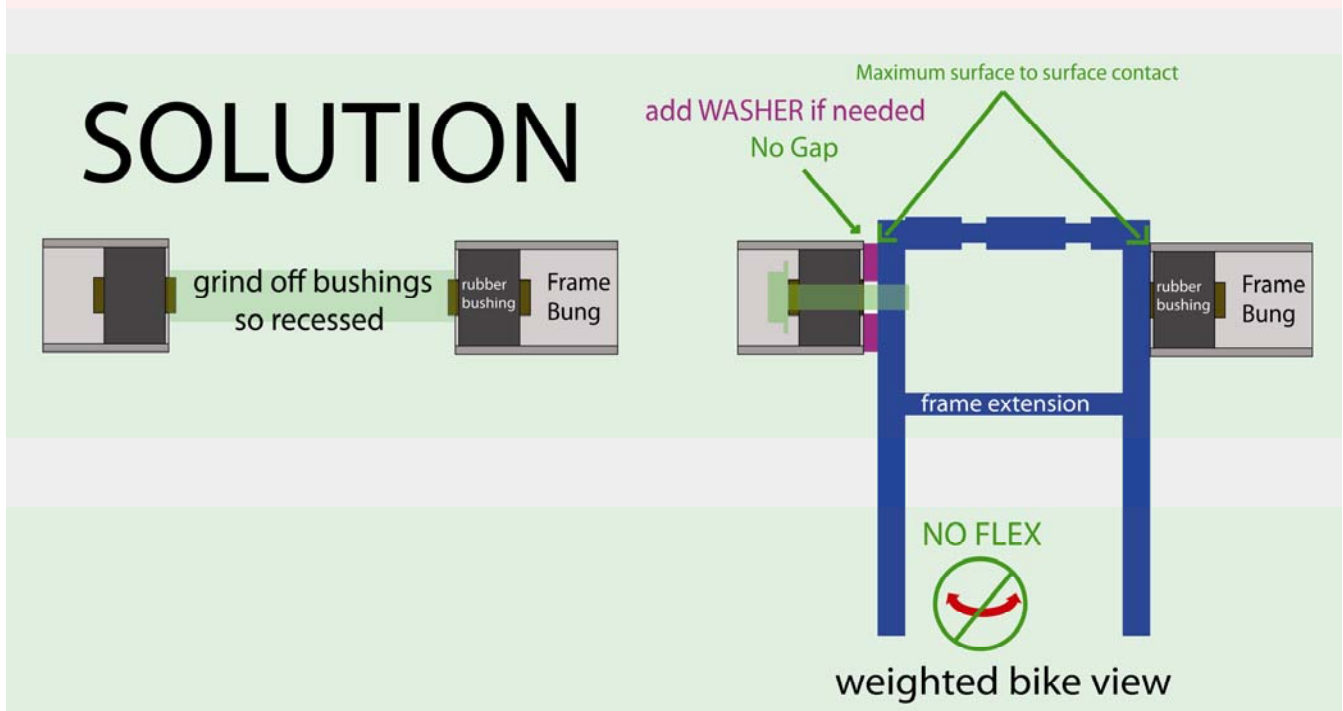
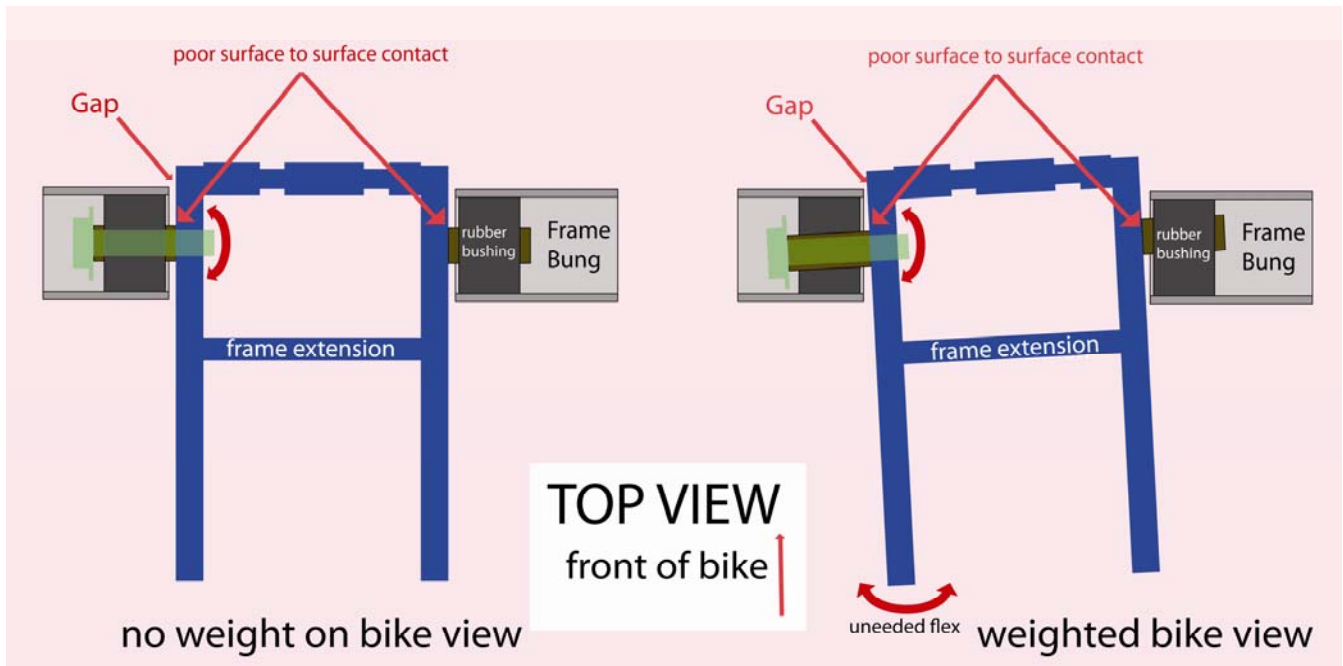
ITEM#	QTY	COMPONENT DESCRIPTION
1	1	PWJDM Frame Extension
2	1	PWJDM Shock Pivot Extension Bracket
3	1	M10x50mm Button head bolt (mounts shock pivot bracket to frame)
4	1	M10x35mm Button head bolt (for shock eye)
5	1	Extended Fuel line
6	1	Install manual

1. Remove the engine and stock steel pivot

- a. We need to get the frame away from the engine so you need to detach everything including:
 - i. Brake cable
 - ii. Throttle cable
 - iii. Fuel hose
 - iv. PVC hose
 - v. All electrical connections between the front frame and engine
 - vi. Carb electrical cabling
 - vii. Coolant hose
 - viii. Electrical ground wire
 - ix. Rear shock
- b. Put the bike on its center stand and have something (gallon cans, cement block, wood beams, books, etc) supporting the front aluminum frame up because it will drop otherwise when you unbolt the engine.
- c. Remove the 2 bolts located in the frame bungs that the engine pivots on.
- d. Remove the black steel pivot brace on the engine (the new frame extension will bolt directly to the engine case later).
- e. Separate the engine from the frame.

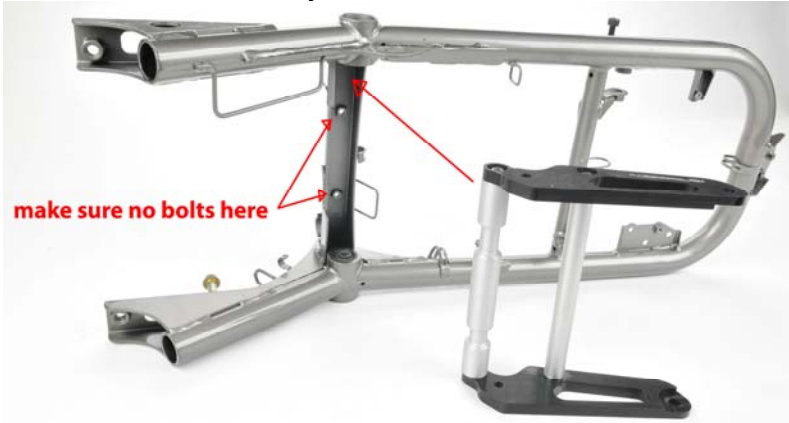
2. Prepping the frame (highly recommended) See diagram on next page.

- a. If you look inside the frame where the engine was bolted up, you will see there are ~1/2" diameter steel pivot bushings.
- b. No matter what frame extension you use, this is a weak point that allows flex and ultimately a rear wheel that is not perfectly vertical because the small diameter of the steel bushing is what contacts the sides of the frame extension.
- c. We recommend you grind off enough of the steel bushing so the sides of the frame extension are in full contact with the steel frame and not the bushings. Use a disc grinder, Dremel, files, or whatever means are necessary to grind only the portion within the rubber bushings down.
- d. We find stock frames vary in dimension. If there is a large gap after grinding with the frame extension mounted, insert the largest diameter washer/washers that can fill the gap/gaps to maximize the surface contact area.



3. Installing the frame extension

- a. Make sure there are no bolts in the Ruckus frame crossmember; they might not allow the frame extension to fit in all the way.



- b. Bolt in the frame extension using the stock bolts.

4. Bolt on the shock pivot extension bracket and the shock. Some medium strength (blue) threadlock is useful here.



5. Reconnect everything

6. Ride baby, ride!

