

TRS 9.5 Ruckus / Zoomer Frame Extension Installation Guide.

To install your exhaust please use these following steps.

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 have never heard of anyone using the stock handlebars. We have already thread locked and torqued the main extension. It will be exceedingly difficult to take apart, so we don't recommend that you disassemble it.

ITEM #	QTY	COMPONENT DESCRIPTION
7	1	TRS 9.5 FRAME EXTENSION (GLOSS BLACK)
2	1	TRS SHOCK MOUNT 2 SETTINGS (GLOSS BLACK)
3	2	M10X1.25 NYLOCK FOR FRAME EXTENSION (White Nylock)
4	1	M10X1.5 SOCKET CAP STAINLESS BOLT (FOR SHOCK)
5	5	M10 WASHER
6	1	M10X1.5 NYLOCK FOR SHOCK (Blue Nylock)
7	1	3 feet of 3/16 Helix fuel line
8	2	M6 Beauty Washers BLACK
9	2	M6 x 20mm Socket cap
10	2	M8 Stainless Washers

Double check to make sure you have all these component	ts.
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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:

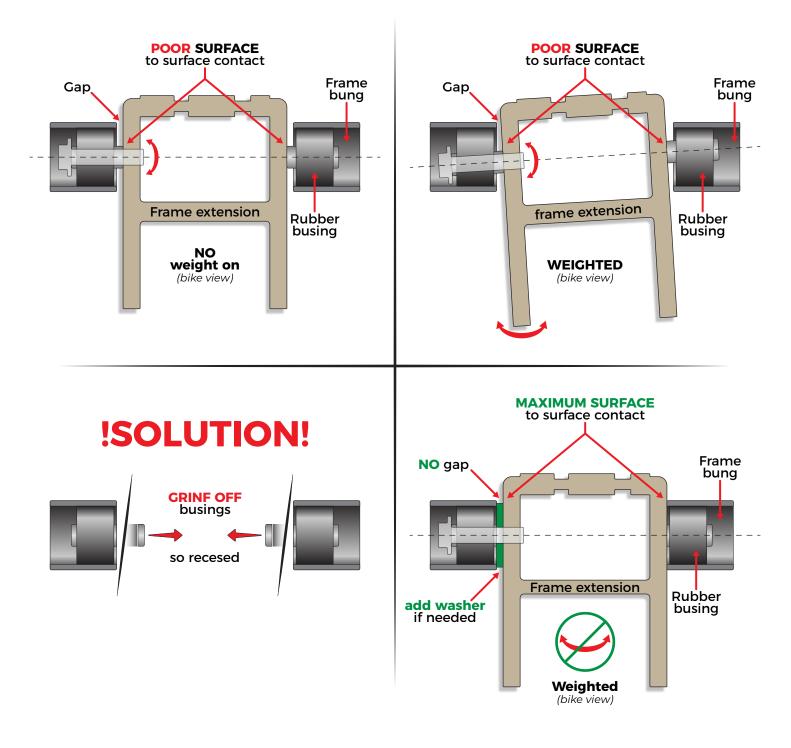
- *I. brake cable*
- //. throttle cable
- ///. fuel hose
- IV. PVC hose
- $\ensuremath{\mathcal{V}}$ all electrical connections between the front frame and engine
- VI. carb electrical cabling
- VII. coolant hose
- VIII. electrical ground wire
- IX. rear shock
- **b.** Put the bike on its center stand and have something (gallon cans, cement block, wood beams, books, etc) supporting the front aluminum frame up because it will drop other wise 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 1 or 2 of the provided 10mm diameter washer/washers that can fill the gap / gaps to maximize the surface contact area on each side. Normally we only need to insert 1.







TOP VIEW (front of bike)







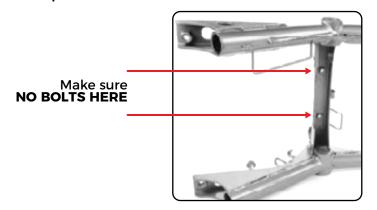
See washer placement in below picture. To the right. >>>

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 and supplied m10x1.25 nylon lock nuts.



c. Bolt top part to frame crossbar.
Use supplied M6x20 socket caps. Put M8 washer under beauty Washers.
See picture below.





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

5.There are 2 setting on the shock mount the one facing towards front of scooter allows the shock to sit more at an angle for a lower stance. The Thick Zinc washer goes on left outside of shock. Thin Stainless Washer goes on right side of bracket. Make sure everything is tight. See Pictures Below.

Depending on the shock brand's offset you can mount shock to left or right side of the shock arm. Most common is to mount it on the right side as on the picture on the left.







6. Reconnect everything. Using the supplied extended gas line.

7. Remove old brake cable (Take pics if needed to remember how it was placed) and install new brake cable. Must have lowered Handlebars for stock throttle cable to work.

