



## **BMS LOWERING KIT INSTALLATION GUIDE** **(For Roadliner, Stratoliner & Raider Models)**

*It is recommended that any modifications to your vehicle be performed by a qualified technician.*

*Please read **ALL** of the instructions **BEFORE** beginning the installation.*

*Make sure all of your suspension components are the original O.E.M. parts prior to installing this kit.*

- 1) Place the motorcycle on a suitable stand or lift in the upright position. (Motorcycle lift is recommended.) Use straps to secure the motorcycle in its position.
- 2) Choose a point on the rear of the motorcycle to measure the distance from the bottom of the frame to the ground (or lift). Write this measurement down to refer to later. You will re-measure from the same point of the bike once completed to see how much you have lowered the bike.
- 3) Depending on what kind of exhaust system you have, it will be necessary to remove the exhaust to access the suspension bolts. Rear horn and rear brake master cylinder will also need to be removed in order to remove suspension bolts on step 6.
- 4) Using a floor jack, raise motorcycle to where the rear tire lightly touches the floor. Make sure that the lift is placed far enough forward to not block the rear suspension area. The suspension will be removed through the opening between rear tire and frame crossbar. (See figure A.)
- 5) Loosen suspension bolt. The front bolt is located behind the horn on the right side of bike. A 17mm socket is required. (See figure B.)
- 6) After removing the nut, walk around to the other side of your bike. Loosen rear motor mount bolt. At that point you can slide out the suspension bolt. (Adjust the height of the floor jack to relieve pressure on the bolts if needed.) (See figure C, D, and E.)
- 7) Left side: On the bottom of the swingarm loosen the nut that connects the suspension to the swingarm (17mm nut). Next, remove the bolt by raising swingarm until bolt clears frame.

- 8) After both the front and rear bolts are removed, then the entire suspension assembly can then be removed. (It may be necessary to adjust floor jack height to remove shock/suspension from the bottom of the motorcycle.) (See figure F.)
- 9) Please take note of orientation of shock assembly (improper re-installation may cause damage to unit, fenders & tires and will lower the bike more than it is designed for).
- 10) After the shock is removed, begin by removing stock dog bones. A 17mm wrench and socket is required.
- 11) Remove bolt and dog bones from shock assembly. The sleeves at the front and rear of the shock will also be replaced with the ones supplied in the lowering kit (shorter in length). (See figure G and H.)
- 12) Set BMS adjustable lowering links to shortest length to start. Reassemble shock assembly with new lowering links. There is an adjuster that's needs to face rear of shock for proper assembly. You will need to red loctite assembly bolt for the rear shock. (Do not tighten jam nuts.) (See figure I.)
- 13) After setting both links, bolt links to stock assembly using new hardware supplied (19mm nut & bolt, and shorter sleeves). Make sure that the rear suspension "T" block is reinstalled the exact same way it was removed. It does still fit if the "T" block is flipped accidentally. This will cause the bike to drop too low.
- 14) Reinstall shock into unit. Reinstall bolts, but do not tighten. Remove floor jack to check new ride height. Adjust height by turning adjusters on lowering links to desired height. (Make sure you do even amount of turns on both sides.) Measure height of bike at frame where you measured in step two every half turn. It is not recommended to lower the bike more than two inches. Remove shock assembly making sure not to turn adjusters. Tighten jam nuts. Reinstall shock assembly. (See figure J and K.)
- 15) After desired height is achieved, **make sure all nuts and bolts are tight and loctite applied if necessary.** Then reinstall the horn and exhaust, and ride on.

*For technical support or questions about this product, please contact BMS Choppers at 800-940-3000.*

**www.BMSChoppers.com – 800-940-3000**