



BMS RAKED TRIPLE TREES INSTALLATION GUIDE **(For Road Star Warrior Models)**

*It is recommended that any modifications to your vehicle be performed by a qualified tech.
Please read ALL of the instructions **BEFORE** beginning the installation.*

<p><u><i>Included In Kit:</i></u></p> <ul style="list-style-type: none"> • Upper Triple Tree • Lower Triple Tree • Handlebar Bushings • (1) Left Speedometer Bracket • (1) Right Speedometer Bracket • (2) Ignition Spacers • (2) 8x35mm Allen Bolt • (2) 6x10mm Buttonhead Allen Bolts • (4) 3/8-16x1 1/4" Buttonhead Allen Bolts • (2) 3/8-16x3/4" Allen Bolts 	<p><u><i>Tools Required:</i></u></p> <ul style="list-style-type: none"> • 19mm allen wrench / socket • 6mm allen wrench / socket • 5mm allen wrench / socket • 4mm allen wrench • 7/32 allen wrench • 5/16 allen wrench • 36mm socket • 19mm socket • 12mm socket • 10mm socket • 8mm socket • 10mm wrench • 14mm wrench • Spanner wrench • Motorcycle jack • Phillips screwdriver • Flat head screwdriver • Vice grips • Center punch • Hammer • 5/22 drill bit • 21/64 drill bit • Drill • Torque wrench • Press
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- 1) Secure the motorcycle on a stand or lift for safety prior to working on it.
- 2) Elevate the front wheel of the motorcycle off of the ground.
- 3) Take pictures of the throttle cable, clutch cable, brake line and electrical wires as reference to the routing for later use.
- 4) Remove the right and left side fork shield with a 5mm allen wrench to expose axle pinch bolt (*see picture A*).
- 5) Loosen pinch bolt with a 6mm allen wrench.
- 6) Remove the two front calipers by removing the two 12mm bolts on each caliper with a 12mm socket (*see picture B*).
- 7) Using a 10mm socket, remove the brake line clamps mounted on the fork reflectors on both sides of the bike (*see picture C*).
- 8) Using a 19mm allen wrench, remove the front axle and tire (*see picture D*).
- 9) Using a 10mm and 14mm open end wrench, remove the front fender by removing the four bolts (*see picture E*).
- 10) Using a 10mm socket, remove the brake line clamps mounted under the lower triple tree (3 bolts total) (*see picture F*).
- 11) Remove the master cylinder by using a 5mm allen wrench to remove the 2 bolts clamping the master cylinder on bars (*see picture G*). The entire front brake assembly, brake lines, master cylinder and calipers will be removed as one unit.
- 12) Make sure to disconnect the brake light electrical connector from the master cylinder.
- 13) Remove the headlight using a phillips screwdriver. Remove the two screws on each side of headlight. Next, lift from the bottom out and disconnect the headlight.
- 14) Using a 5mm allen wrench, remove the 4 bolts holding the tachometer in place. Next, use an 8mm

- wrench to remove 2 bolts inside headlight bucket (*see picture H and I*).
- 15) Disconnect the 4 plugs from the tachometer.
 - 16) Remove the headlight bucket using an 8mm allen wrench taking off 2 8mm bolts at the bottom of the headlight bucket (*see picture J*).
 - 17) Before removing all the wires, take a picture of the wire placement in the bucket for reassembly.
 - 18) Disconnect all the connectors in bucket. Pull the wires out of the headlight bucket thru the hole on the side. Put the wires to the side and out of the way.
 - 19) Using a 10mm wrench, remove 2 bolts holding headlight bracket on the lower triple tree.
 - 20) Using an 8mm wrench, remove the bolts that hold the turn signals to the fork legs (*see picture K*).
 - 21) Using a 10mm wrench and socket, loosen the turn signal clamp bolt (*see picture L*).
 - 22) Using a 6mm allen wrench, loosen the 4 fork leg pinch bolts on the lower triple tree (*see picture M*).
 - 23) Remove one fork leg at a time by loosening the 2 top triple tree pinch bolts with a 6mm allen wrench. Hold the fork leg while loosening bolts.
 - 24) Using a flathead screwdriver, carefully spread lower triple tree clamp, while carefully sliding fork leg down (*see picture N*). Repeat on other side.
 - 25) Using a 6mm allen wrench, remove the 2 bolts holding on the speedometer (*see picture O*).
 - 26) Using a phillips screwdriver, loosen 2 phillips screws from throttle tube housing. Remove the throttle tube.
 - 27) Remove the clutch cable from the clutch lever housing.
 - 28) Using a 19mm socket, remove the handlebar nuts from the bottom of top triple tree. Make sure you do not damage the tank in the process (*see picture P*).
 - 29) Remove the handlebars and risers. Make sure to grab the large washers from under the risers. Do not misplace the hardware. They will be reused.
 - 30) Using a 36mm socket, remove the top triple tree nut. Next, remove the triple tree (*see picture Q*).
 - 31) Clamp the top triple tree on a sturdy work bench upside down. Using a punch, mark the center of the ignition mount bolts (*see picture R*).
 - 32) Using a 5/22 drill bit, drill a pilot hole down the center of the bolt. Use the punch mark as a guide. Repeat the process on the second bolt.
 - 33) Using a 21/64 drill bit, drill down the pilot hole until the head of the bolt comes off (*see picture S and T*).
 - 34) Use vicegrips to remove the studs.
 - 35) Using red loctite and supplied 8mm bolts, install the stock ignition onto the new top triple tree (*see picture U*).
 - 36) Remove the spanner nut using a spanner wrench. Make sure to hold the bottom of the triple tree in place while removing the spanner nut. Once removed, the triple tree should slide right off (*see picture V and W*). Inspect steering stems, bearings and races. If damaged, replace.
 - 37) Use a press to remove the steering stem off of the stock lower triple tree (*see picture X*).
 - 38) Slide the stock steering stem into the lower triple tree from the bottom up (the top of lower triple tree has 2 threaded bolt holes on it).
 - 39) Slide the lower steering stem bearing onto the stem until it will not go any further by hand. Then turn it upside down onto press resting bearing on the two sturdy supports, one on each side of stem. Use a large socket to press with directly on to stem until bearing sits flat against the lower triple tree (*see picture Y*).
 - 40) Use red loctite and install two 3/8-16 x 3/4 long bolts into the top of the lower triple tree using 5/16 allen wrench. These 2 bolts are the new steering stops. **Without these, the front end will have no steering stop, causing the front end to turn all the way until the handlebars or triple trees make contact to the gas tank causing damage** (*see picture Z*).
 - 41) Make sure the bearings and races are properly greased with bearing grease. Reinstall the lower triple tree by sliding from the bottom up and placing the spanner nut on top (*see picture AA*).
 - 42) Torque the first steering stem nut to 37 ft lbs and the second to 2.9 ft lbs (*see picture BB*).
 - 43) Install the handlebar rubber grommet into the top triple tree (supplied with kit).
 - 44) Install the top triple tree, leaving the nut finger tight. Install the fork leg pinch bolts (four 3/8-16 x 1 1/4" buttonhead allen bolts). Leave the hardware loose.
 - 45) Install the handlebars using the stock hardware. Use a 19mm socket to torque down the riser nuts to 29 ft lbs.
 - 46) Reinstall the throttle tube using a phillips head screwdriver. Make sure to tighten the screws on the throttle housing.
 - 47) Reinstall the clutch cable.

- 48) Install the speedometer mounting bracket onto the bottom of the top triple tree using two 6mm x 10mm long buttonhead allens, a 4mm allen wrench and red loctite (supplied with kit) (*see picture CC*).
- 49) Install the fork legs making sure to place the right leg on the right side and left leg on the left side. When properly mounted, the caliper brackets will be facing towards the rear of the bike and the fender brackets will be on the inside between the fork legs (*see picture DD*).
- 50) To install the fork legs, use a flathead screwdriver to spread the lower triple tree clamp. Do not forget to reinstall the turn signals onto the fork legs in between the upper and lower triple trees. Raise the fork leg until bottom of fork leg cap is flushed with top of the upper triple tree (*see picture EE*). Tighten hardware with 7/32 allen wrench.
- 51) Referring to your picture, start reinstalling the wires and cables. Pay close attention to the routing of these wires and cables. Make sure they are run correctly.
- 52) Torque the top triple tree nut to 85 ft lbs using a 36mm socket.
- 53) Tighten the turn signal clamp bolt using 10mm socket and wrench.
- 54) Install the headlight bucket mounting bracket to the lower triple tree reusing stock hardware and a 10mm wrench. Torque the hardware to 7 ft lbs.
- 55) Using a 6mm allen wrench, reinstall the speedometer using the stock hardware. Torque the hardware to 7 ft lbs.
- 56) Using a 6mm wrench, reinstall the headlight bucket using the stock hardware. Before bolting down the headlight bucket, feed all the wires into the headlight bucket thru the big hole on the side, passing each connector one at a time.
- 57) Using an 8mm and 5mm allen wrench, reinstall the tachometer using stock hardware.
- 58) Reconnect all the electronic connections using the picture taken earlier as a reference.
- 59) Reinstall the headlight using the stock hardware and a phillips screwdriver.
- 60) Reinstall front fender using original hardware and a 10mm and 14mm wrench. When installing the front fender, the tabs on fender should be behind the forks. Torque the fender hardware to 11 ft lbs (*see picture FF*).
- 61) Reinstall the front rim and axle using 19mm allen wrench. Pay attention to the tire rotation. There is an arrow on the tire showing which way the tire spins. Torque the axle to 52 ft lbs.
- 62) Torque the front axle pinch bolt with a 6mm allen wrench to 17 ft lbs.
- 63) Reinstall the master cylinder using the stock hardware. The master cylinder clamp is directional. Make sure to install it with the arrow pointing up.
- 64) Using 5mm allen wrench, torque the master cylinder clamp bolts to 7 ft lbs. Don't forget to reconnect the brake light wires.
- 65) Route the brake lines and calipers to the proper side. The calipers should be mounted with bleeder nipple at the highest position on each side.
- 66) Reinstall the front caliper bolts using a 12mm socket. Torque them to 29 ft lbs.
- 67) Reinstall the brake line clamps and reflectors to the sides of the front fender using a 10mm wrench. Torque them to 7 ft lbs.
- 68) Reinstall the brake line 3-way splitter to the headlight mounting bracket using 10 mm wrench. Torque to 7 ft lbs.
- 69) Reinstall the fork leg shields, using the stock hardware and 5 mm allen wrench. Torque them to 9.4 ft lbs.
- 70) Go back and check all hardware making sure everything is tight and all electrical connectors are reconnected. Next, turn the ignition on and check the headlight and turn signals for proper operation. Pump the front brakes making sure the system works correctly. Tighten any loose hardware to specs.

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

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Our install guides provide a basic outline on the proper installation of our products. Further tuning and/or fitment may be required. BMS Choppers bears no responsibility on installation costs associated with this product.

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