



## CB350 REAR SET INSTALLATION GUIDE

REVISION 1.0

Thank you for purchasing our CB350 rear set kit, We designed this kit to be a happy medium between a complete bolt on assembly and a universal rear set kit. Due to variations in years of all makes and models of Honda CB350's you as the final assembler will have to make some final modifications and adjustments. Please follow these instructions closely as they will guide you through the process (and hopefully make your life a lot easier).

- 1) Place the motorcycle in a secure position with the back wheel off the ground. Make sure the bike is safe to work on.
- 2) Remove rear passenger pegs, ensure that the mufflers (if applicable) are well supported.
- 3) Remove the rear drive chain.
- 4) Remove the shifter and brake assembly (Lever, rod, etc.).
- 5) Remove the rear wheel, rotate the brake arm 180 deg, this can be done without removal of the arm, just slide the drum out of the wheel and twist the arm in the clockwise direction until it goes past 90 – 100 deg and it should then fall at the 180 deg mark. (Pointing up instead of down) see figure 1

- 6) Re-install rear wheel, and rear drive chain
- 7) You will now need to modify the shifter arm. Cut the shifter arm 3" from the centre of the serrated spline. Mount the arm in a drill press and drill a hole in 1 of two locations, (or both if you want to experiment) one hole at 1 1/2 inches from centre or 2 1/8 inches from centre. Each hole will give you a different amount of travel for shifting. Racers generally prefer short travel while street riders tend to prefer a longer travel to help them find neutral easier, All said and done either position and anything in between should work fine. You can play with it until you have a feel that YOU are comfortable with. You can then reshape the remaining material to suit your desired look. See figure 2
- 8) Attach the left side foot rest with shifter lever to the CB350 bracket using the provided M12 bolt, Leave loose.
- 9) Attach the shifter arm to the engine. Pointing in the 12 o clock position see figure 2
- 10) Attach the left side bracket with foot rest to the motorcycle where the passenger peg would normally mount using the M10 X 1.5 X 30mm and the M6 X 1.0 X 30mm bolts provided as well as the M10 nylock nut. Tighten. Now tighten the foot rest bolt so the peg folds in the position you would like.
- 11) Take the short piece of threaded rod and thread on a jam nut on either end. Thread on two ball joints. Put the rod up to the motorcycle. You will notice the rod may be a little long, this is because of the differences in CB350's over the years.
- 12) Un-thread one ball joint and cut the rod to desired length thread on ball joint and install rod to the motorcycle. At this point both the shifter lever and the shifter arm should be at the same angle. Adjust if necessary. Check shifting and tighten the jam nuts.
- 13) Attach the right side foot rest with shifter lever to the CB350 bracket using the provided M12 bolt, Leave loose.
- 14) Attach the right side bracket with foot rest to the motorcycle where the passenger peg would normally mount using the M10 X 1.5 X 30mm and the M6 X 1.0 X 30mm bolts provided as well as the M10 nylock nut. Tighten. Now tighten the foot rest bolt so the peg folds in the position you would like. NOTE: in the plastic bag there is a small lever stop, install the lever stop underneath the M6 bolt. This stop will prevent the lever from travelling to high when the proper pre-load is adjusted on the brake.
- 15) Take the Long piece of threaded rod and thread on a jam nut on either end.

Thread on one ball joint. Put the rod up to the motorcycle. You will notice the rod may be a little long, this is because of the differences in CB350's over the years.

- 16) Install HEILM joint in between the clevis on the end of the brake arm, there are two stepped washers included that are machined to fit inside the arm holes to remove excess slack.
- 17) Attach the ball joint to the brake lever, pull the brake arm forward and then hold the rod up to the HEILM joint while pulling the rod tight as to hold the brake lever against its stop. Cut rod to desired length.
- 18) Remove the ball joint from the brake lever, install rod into the HEILM joint and then spin on the ball joint, attach ball joint to brake lever and adjust if necessary.
- 19) Check braking for proper function. Re check shifter for proper function.
- 20) Take motorcycle for a short test drive. Remove all mounting hardware and apply Loctite Red or equivalent compound to ensure nothing will loosen on the road.
- 21) Ride the hell out of it. Make any fine adjustments at this point in time.

#### Legal Stuff:

Although we at Middlesex Motorcycle Co. try to provide the very best products possible, we cannot control how they are used or modified on any vehicle, motorcycle or otherwise. Common sense should prevail and if a product is not functioning in a safe manner the installation should be revised and if a defective part is found it should be reported to us immediately. None of our kits are DOT approved or have passed any type of standard. Therefore it is the sole responsibility and liability of the person using this product if there is a result of injury, loss of revenue, loss of assets or death. By using this product you absolve Middlesex Motorcycle Co. of all liability, implied or otherwise. PLEASE TREAT MOTORCYCLES WITH RESPECT they are inherently dangerous and if something is not functioning correctly please do not hesitate to contact us for assistance or otherwise.

Figure 1 Brake Arm:

NOTE: The connection of the HEIM joint in this picture is not normal. We normally place the helm joint inside the brake arm, however in this case that did not provide enough clearance for the customers CB350, Therefore it was then moved to the outside, THIS IS NOT RECOMMENDED.



Shifter Arm Figure 2



Your kit should contain:

<b>PART</b>	<b>QTY</b>
M10 X 1.5 X 20MM (BUTTON HEAD)	2
M12 X 1.25 X 25MM (FINE THREAD)	2
M6 X 1.0 X 30MM (BUTTON HEAD)	2
M6 X 1.0 X 30MM (FLAT HEAD)	2
5/16 - 24 BOLT	1
5/16 - 24 BALL JOINT	3
5/16 - 24 HEIM JOINT	1
M10 X 1.5 NYLOCK NUTS	2
5/16 - 24 NYLOCK NUTS	4
5/16 - 24 JAM NUTS	4
5/16 – 24 THREADED ROD (LONG)	1
5/16 – 24 THREADED ROD (SHORT)	1
LEFT CB350 FOOTREST MOUNT	1
RIGHT CB350 FOOTREST MOUNT	1
FOOT PEG HINGE	2
FOOT PEG	2
NOSE PEG	2
LEFT CONTROL ARM	1
RIGHT CONTROL ARM	1
5/16 CLEVIS PIN	2
5/16 WASHER	2
1/8 COTTER PIN	2
STEPPED WASHERS	2
Brake Stop Pin	1

I certify that when this assembly left Middlesex Motorcycle Co. All the above parts were included in this package

\_\_\_\_\_  
Name

\_\_\_\_\_  
Date