

HINTS AND TIPS ON —SERVICE—

For **BSA** *and* **ARIEL** *Dealers*

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SET-UP INSTRUCTIONS FOR "A65 AND A50"

BE SURE TO READ THE BSA INSTRUCTION MANUAL THAT IS IN THE
TOOL BOX WITH THE NEW MOTORCYCLE

The following is a complete list of set-up instructions covering the A65 and A50 BSA Twin Cylinder Motorcycles. If you follow these instructions and take each step in its proper order, you will have no difficulty in setting up new machines both correctly and quickly.

REMOVING THE MOTORCYCLE FROM THE CASE:

NOTE: Make sure the case is RIGHT SIDE UP before starting to disassemble. The TOP has stenciled markings on it. The bottom does not.

1. Remove the top boards with a nail puller or pinch bar.
2. Remove the top packing and loose parts around the motorcycle.
3. Remove one side of the case and the motorcycle and remaining loose parts. Double check all the wrappings to be sure no small parts are discarded. Save the TEST CARD in case you want to report a shortage or damage in shipment.
4. The ignition keys and steering lock keys are in the tool roll.

INSTALLING THE CENTER STAND:

1. Remove the pivot rod from the stand.
2. Place stand in position and tap rod through stand and frame lugs.
3. Place washer over end of rod and install cotter pin in end of rod.
4. Assemble center stand return spring.

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INSTALLING THE FORKS:

The next step in setting up your machine is to install the forks.

1. Place a block under the engine and put machine on the center stand.
2. Check to see that both cones in the steering head are seated correctly in the frame. If they are on an angle, tap lightly with a plastic hammer until they seat properly.
3. Wipe out all old grease from the cones on the frame and forks. Clean the fork legs making sure there is no excelsior or dirt inside the fork shafts.
4. Fill top cone of the frame and bottom cone of the forks with fresh grease.
5. Clean ball bearings (which are found in the bag of small parts) by rolling them in a clean rag. NOTE: There are several methods for determining the correct number of balls to use, but since different models take different number of balls the general rule covering all BSA steeringhead cones is "fill the cone completely with balls, and then remove one."
6. Slide complete front fork with stem through the frame steering head. Be careful not to disturb the fork system.
7. Assemble top bearing cone -- painted steering head dust cap and steering stem adjusting sleeve on the fork stem.
8. Tighten steering stem adjusting sleeve until there is a heavy "drag" as the forks steering assembly is swung from side to side.
9. Assemble the front fork top yoke in position.
10. Assemble the Front Fork Cover Complete.
11. Pour 6½ oz. of #20 - BSA motorcycle oil in each fork shaft. Assemble and tighten fork tube washers, nuts and steering stem adjusting sleeve caps. (A heavier grade of oil may be required depending on weight of rider or riders.)
12. Assemble and tighten the two bottom yoke pinch bolts.

INSTALL THE STEERING DAMPER ASSEMBLY NEXT:

1. Slip the small spring over the rod and drop it through the hole in the chrome cover nut.

2. Place the large fibre washer, bracket, star washer, and nut on the bottom of the rod in that order.
3. Attach the bracket to the frame, placing the thick washer between the frame cross piece and the bracket.
4. Assemble steering damper wheel and rod.

INSTALL THE FRONT FENDER AND WHEEL:

1. Assemble the front mudguard in the forks. The rear braces can be installed after the fender is in place.
2. Place the brake drum in the wheel, install lock nut and slip wheel in position. Install bottom fork caps, being careful not to strip the threads on the four bolts.
3. Remove the block from under the engine.

INSTALLING THE HANDLEBARS - ATTACHING THE CABLES:

1. Attach the handlebars and tighten the four mounting bolts after centering the bars and adjusting for desired "drop".
2. Attach throttle and clutch cables.
3. Attach speedo. cable to the speedo. head.
4. Attach front brake cable which may be found among the loose parts.
5. Assemble top fork yoke cover.

SEAT:

1. The seat may now be fitted to the machine. The front of the seat is held on by two hooks, which hook onto a rod mounted on the frame.
2. Screw the support bolts into their lugs in the frame.
3. Slip the hooks onto the rod and bolt the back of the seat in place.

KICKSTAND, PIPES, MUFFLERS, AND FOOT PEGS:

The bracket for the kickstand is welded to the frame.

1. Bolt the stand leg and connect the spring to both pieces.
2. Mount the foot pegs at their desired height, making sure they are even on both sides. This can easily be determined by sighting from the rear of the motorcycle.

3. Mount the left pipe, slipping the finned ring over the cylinder ends first.
4. Mount the right pipe, including the finned ring. Make sure both pipes are tapped into the cylinders as far as they will go.
5. Tighten pinch bolts when rings are slid in position against the cylinders.
6. Slide the mufflers on the pipes.
7. Slide the rear foot pegs through the holes in the brackets on the mufflers and bolt them to the lugs on the frame.
8. Tighten the pinch bolts on the front of the mufflers.

REAR BRAKE, SHIFT LEVER, AND KICKSTARTER:

The rear brake lever may now be installed:

1. Slip the large return spring over the shaft on the left hand side.
2. Tap the brake lever onto the splined shaft and tighten the pinch bolt on each side.
3. Slip the return spring onto the frame and the brake assembly.
4. Connect the stop light spring to the brake arm and the switch.
5. Tap the foot shift lever onto its splined shaft and tighten the pinch bolt.
6. Slide the kickstarter onto its shaft and tap the locking pin into the hole provided for it. Screw the nut on the pin and tighten it.

SPARK PLUGS, PUMP, TOOLS:

1. Remove the plastic plugs from the spark plug holes and install the spark plugs.
2. Attach the small copper end on the mag leads, making sure that the pointed prongs are inserted into the copper wire and not just in the insulation.
3. Insert the leads in the plastic quick detachable plug connectors and attach them to the spark plugs.

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4. Snap the tire pump into its mount under the seat on the right hand side.
5. Put the tools, Instruction Manual, and other literature in the tool box.

BATTERY:

NOTE: If the machine is to be sold within a few days, the battery should be charged. If not, do not charge the battery now.

To Charge The Battery:

1. Remove the battery from the machine.
2. Fill with dry charge fluid (the battery is dry charged at the Factory).
3. Read the instructions for bringing the battery into service on the red Lucas Card that is with the Instruction Manual.
4. Replace it in the machine and connect the leads.

FINAL CHECK:

It is the duty of the Dealer to see that every nut, bolt and screw is tight and correctly installed before the motorcycle leaves his Shop. You will have only yourself to blame if the customer comes back and complains of rattles, missing nuts, excessive vibration, and splits and breaks caused by vibration. 90% of all vibration problems can be traced to loose engine bolts.

Don't take it for granted that the Factory has done everything right. Check everything for yourself.

STARTING THE MOTORCYCLE:

Make sure that there is no packing material in the air intake before trying to start the machine. Fill the oil tank, primary drive, gearbox and front fork, *leaving cap off oil tank. After engine is started, make sure oil return is pumping into the tank. Replace the tank cap and your machine is completed.

- * IMPORTANT: See instructions on OIL TANK - PRIMARY DRIVE, GEARBOX and FRONT FORK OIL LEVELS on pages 19-26-27-36 in the Instruction Manual. Oil Capacities are shown on page 5 and in Service Bulletin No. 120.

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