

Mikuni SE Cruise Control Adapter Installation Instructions

Part I

- Step 1 Disconnect battery ground
- Step 2 Shut off fuel line & plug
- Step 3 Remove stock air cleaner assembly. This kit only works with the Screaming Eagle Air Cleaner and Breather Kit (Part # 29543-99 for Evo, or part # 29440-99 for Twin Cam)
- Step 4 Loosen throttle cables and remove carburetor
- Step 5 With dowel pin punch, remove dowel pin (Part #41) and return lever assembly and spring
- (Parts # 42-45)
- Step 6 Mark existing throttle shaft (Part #46) with a marker in line with dowel pin holes for alignment purposes (Refer to mark in figure 3)
- Step 7 Tap carb. vent brass plug inwards until flush with body (Refer to figure 3A)
- Step 8 Modify spring (Part #45) by bending U-shaped tang over 90 degrees, so it loops around roll pin after roll pin is installed. Place tang in a vise and carefully bend. **Do not use pliers or anything sharp that could nick tang**
- Step 9 Start new dowel pin in topside of cruise lever (Refer to figure 1A). Do not push dowel pin past opening of shaft hole
- Step 10 Coat back surface with anti-seize lube (Refer to figure 1B)
- Step 11 Place modified spring onto cruise lever register with tang hooked around dowel pin (Refer to figure 2)
- Step 12 Hold throttle slide closed by turning throttle lever (Part #32) upward
- Step 13 Start assembly by placing spring against carburetor body in position illustrated in figure 3.
- Note position of cruise lever and spring tang (Figure 3B)
- Step 14 Start winding lever assembly 180 degrees clockwise while continuing to hold the carburetor slide closed. (For end position of cruise lever, refer to figure 4)
- Step 15 Line up dowel pin with throttle shaft mark and insert alignment nail through the bottom hole. Carefully tap dowel pin through until flush with bottom exit hole. **Make sure spring is seated properly**
- Step 16 Cruise lever is now installed. Open and close carburetor using cruise lever. **Make sure the lever has complete free movement and no interference with any mechanism**
- Step 17 **The rear cylinder head will need to be shaved slightly.** (Twin Cam)
Remove bottom right corner by breather hole (Refer to figure 7). Grind off the casting flash from surface of hole to 1.250 inches back. The goal is to obtain a minimum of .025 clearance between head and cruise snap end throughout throttle range
- Step 18 Refer to service manual for cruise control cable adjustment/cable lash initialization

Kit Includes:

- (1) Cruise Lever
- (1) Cable Bracket
- (1) Dowel Pin - 1.250 long
- (1) 5mm x 35 Screw
- (1) Spacer
- (1) Star Washer
- (1) E-Clip
- (1) Alignment Nail
- (1) Set of Instructions

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Cable Bracket Installation - Part II

- Step 1 Lay carburetor face down on air cleaner side. Remove top right carburetor screw
- Step 2 Install screw supplied in this kit in the following order: screw, star washer, cable bracket, then spacer (Refer to figure 5). Use Loctite. Make sure to center vent notch (Refer to figure 6)
- Step 3 Insert existing cruise cable through cable bracket, lock in place with E-clip, and
snapcable
- end over pin on end of new cruise lever (Refer to figure 6). For pre '98 application, use supplied bolt with Loctite to secure it.
- Step 4 Remount carb., cables, choke and vacuum line. Make sure fuel line does not touch cable. Open and close carburetor using cruise lever. Make sure the lever has complete free movement and no interference with any mechanism.

Air Cleaner Bracket Modification - Part III

For Reference to earlier brackets, not for current 1 piece factory units

- Step 1 Remove support bracket
- Step 2 Cut bracket at notches (Refer to figure 8)
- Step 3 Re-install modified bracket pieces swapping the left and right sides of the original
bracket
- assembly (Refer to figure 9). Hand tighten
- Step 4 Using a straightedge, scribe a line through centers of vent holes (See figure 10). Measure up 2.25 inches and scribe another line across backplate. Measure 5/16" from outside edge of backplate on the left and right side. These are the spots for redrilling mount holes. Use 1/4" drill bit and counter sink.
- Step 5 Align pre-drilled air cleaner backplate to the new support brackets. Tighten using previously removed screws
- Step 6 Check for shimming/spacing of breather brackets

The installation procedure should be performed by a professional mechanic. S&M Cycles claims no responsibility or liability due to installation or improper use of cruise control device or any situation arising thereafter.

Return spring modification

**Use existing return spring part#45
bend U-shaped tang over 90 degrees so it loops
around roll pin after roll pin is installed. We
recommend placing tang in a vise and
carefully bending. DO NOT USE PLIERS
or anything sharp that would nick tang**

Cable holder Installation On Mikuni 45 Models,

There is no vac. nipple on 45's to locate the bracket so just measure from body to center of hole about .375 in. and tighten down bracket using top right hole. use blue loctite to keep bracket secure.