



Installation Instructions Throttle Shaft Kit

1. After removing the throttle body from the main body, the first step is to remove all components that are attached to the throttle shafts. This would include any fast idle levers on the primary shaft, secondary pump cam bracket and any connecting linkage between the primary and secondary shafts.
2. Original throttle shaft screws are staked after installation to prevent loosening. It will be necessary to remove all staking. With a small hand file or similar device, remove all staking from the threads protruding below the throttle shaft. These screws are brass and material can be removed fairly quick.
3. Remove the throttle plate screws. **CAUTION:** If any resistance is felt when removing the throttle plate screw, turn it back in and remove additional material from the thread side. Without all the staking removed these brass screws are very soft and can easily break off.
4. Once all the screws have been removed as well as the throttle plates you can now remove the throttle shafts. **CAUTION:** Both throttle shafts have return springs which must be unloaded to successfully remove the throttle shafts. The secondary return spring is indexed to a "V" shaped perch on the secondary lever. Carefully lift up on the spring end, move it toward the center of the carburetor to allow it to relieve the tension. For the primary shaft it will be necessary to pull the spring end forward, increasing the spring tension to dislodge it from the notch when removing the primary shaft.
5. Install the new throttle shafts in the reverse order of removal. You will have to leave the primary throttle return spring tensioned. The secondary spring does not require tensioning initially.
6. Install the throttle plates, #172 are the primary plates, #173 are the secondary plates. The correct positioning is with the stamped number facing down and positioned to the center of the throttle body.
7. Using a thread locking sealant (i.e., Loctite #242 [blue] or Loctite #271 [red]) applied to the threads, install all four throttle plate screws in the primary shaft. Turn in the screws until tight, note the plates must be flush with the throttle shaft, then loosen each screw approximately ½ turn. Open the throttle, then release allowing the throttle shaft to snap shut. This will help center the plates in the bore. Lightly tap the plates in the bore. Lightly tap the leading edge of the plates with a small nut driver or a socket set extension to help lightly seat the plates further into the throttle bore.
8. Prior to tightening, hold the throttle body up to a light source, look at the plates just installed (from the top-side of the throttle body) to be certain the light around the plates is fairly uniform. This is a visual confirmation that the plates are squared up.
9. Prior to tightening the throttle plate screws, move the throttle shaft back and forth laterally so that you can position the throttle shaft in the middle of the side-to-side movement.
10. Tighten the throttle plate screws uniformly.
11. Open the throttle (it will be tight the first time because the plates were tapped into place) and allow to snap shut with spring tension a couple of times.
12. Again, look for the uniform light around the throttle plates to ensure they are positioned properly in the bore. It also helps to use the stamped plate numbers to be certain the alignment is correct.
13. Repeat the same process with the secondary throttle shaft. Only difference is to first position the throttle plates in the bores, start the throttle plate screws (with thread sealer applied) then tension the spring. Otherwise, everything is a repeat of the primary shaft.
14. Reinstall all the previously removed throttle shaft attachments.
15. Install the secondary connecting link provided (goes on the outside of the throttle levers, engage the secondary side then the primary), washer and cotter pin.
16. With the primary idle speed screw, turn the throttle body upside down open the throttle plates until there is approximately .040" of the transfer slot exposed below the bottom edge of the plates. This is a good baseline setting for the idle speed.
17. Reinstall the throttle body to the main body, using the proper gasket. Only six throttle body screws are required. The center two screws are missing by design. This is to prevent exposure with an open plenum intake manifold. The six end screws are more than adequate to seal the two castings.