



Sniper Adjustable Progressive Linkage Instructions

Tools Needed: Needle-nosed pliers

Overview: The Holley Sniper EFI System comes shipped from the manufacturer with primary and secondary throttle plates that open at the same time. This is an ideal situation for many applications where streetability or traction control is not an issue. For other situations, however, a throttle linkage setup that progressively opens the throttle blades, starting with the primaries, and then adding the secondaries, provides a better driving experience. Fortunately, switching to progressive linkage is easy, as outlined in these instructions.

We recommend that you read through the entire instructions before opening the link and proceeding with the installation.



Original Sniper Linkage

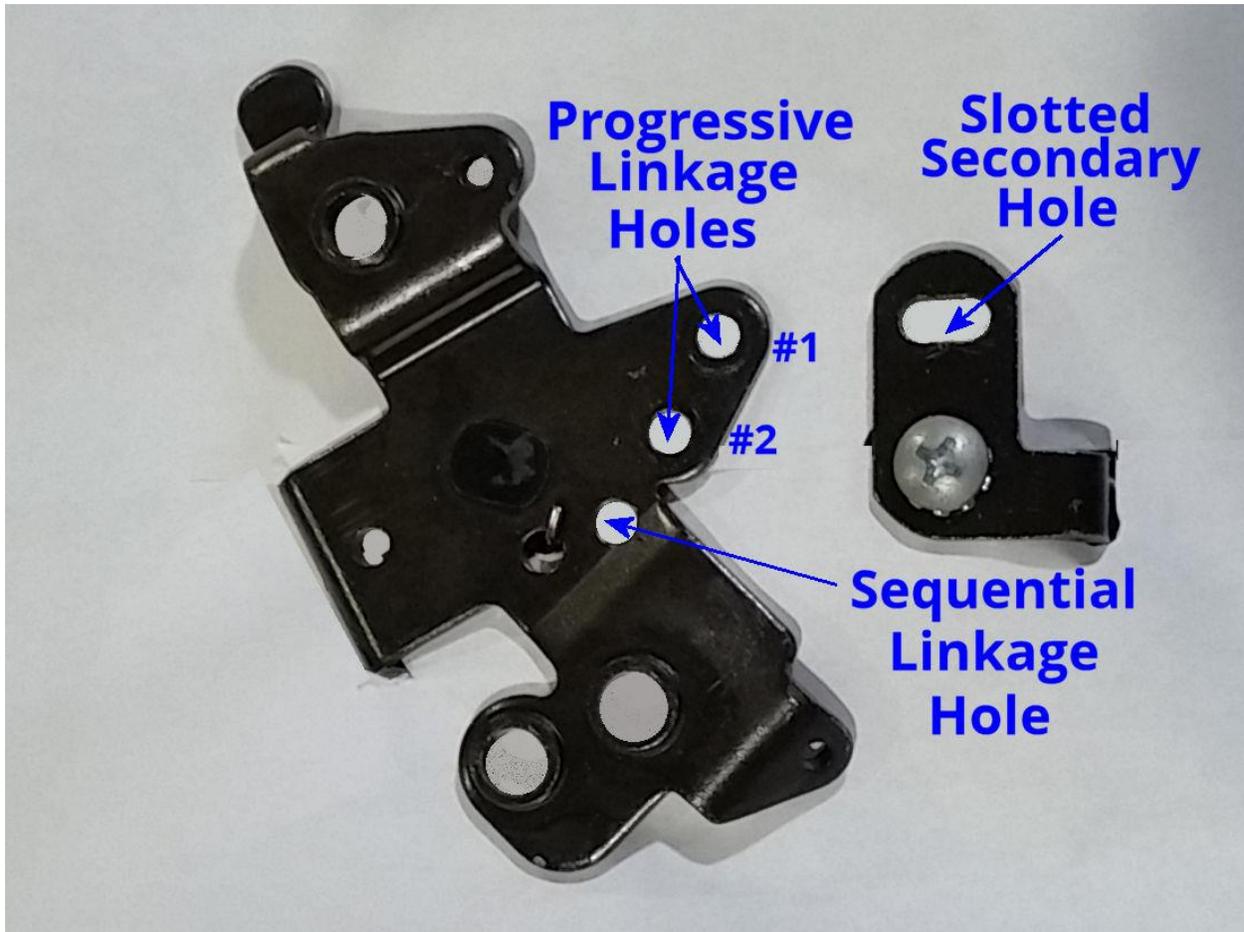


Progressive Sniper Linkage

1. Installing The Link

A. The original linkage connects the sequential linkage hole in the primary lever to the slotted hole in the secondary lever as shown in the image on the left. The link is held in place by a small cotter pin behind the secondary lever. Remove the cotter pin and the washer that is behind the linkage.

B. Set aside the original link and washer. You may want to retain this in the event you wish to revert to the original linkage configuration.



Detailed View of Primary and Secondary Linkage Levers

C. Unlike the original link, the adjustable progressive link has two holes and two cotter pins. Refer to the included instructions for details. A washer is to be placed on each side of the throttle lever on both the primary and secondary side. We recommend starting by making the lever as short as possible to fit in the space between the secondary slotted hole and the #1 progressive linkage hole. This will result in a secondary opening of approximately 40%, and both the primary and secondary will be at 100% at the far limit of throttle motion. At this point, you can try various combinations of lengths and the #1 and #2 hole to get a secondary response that best suits your needs.



D. With the progressive link in place and adjusted, ensure washers are on both sides of the clevis pin and are secured with two new cotter pins. Ensure that the pins are bent adequately so that they will not fall out.

2. Identifying the Secondary Opening Point

For the next step you will need to turn the power on to the Sniper unit and place the handheld controller in a position where you can monitor the throttle position number.

Gradually open the throttle linkage by rotating the primary lever until the secondary linkage begins to open. Note the exact TPS percentage where the secondary linkage first begins to open. You will need this number to complete the setup.

Note: If you continue to open the primary linkage you may notice that the number does not go to 100%. This is to be expected and does not affect the performance of the Sniper EFI System. What is important is that both the primary and the secondary butterflies open completely vertical. If either the primary or the secondary do not go to 100% at the limit of throttle travel you should consider adjusting the length so this occurs. In some rare cases it may be helpful to grind a bit of the primary lever away if it interferes with complete throttle opening.

3. ECU Configuration

The easiest way to proceed with configuration is using the Sniper EFI System handheld. Note that this requires handheld firmware 1.1.7 and ECU firmware 1.1.1 (or higher.) Most systems shipped after March 2018 have the appropriate firmware on both the handheld and ECU. If you are not sure what you have, or if you need to upgrade, we've got great instructions at this link:

<https://goo.gl/srw1pr> BE SURE TO SAVE A COPY OF YOUR CONFIGURATION BEFORE YOU UPGRADE YOUR FIRMWARE. Your current configuration will be lost in the upgrade process.

To complete the ECU configuration, use the handheld LCD display and navigate to Tuning > System > Sniper Setup and set the following parameters:

Progressive TBI Linkage: Enabled

Primary/Secondary TPS Switch: TPS percent identified in step 2, above.

At this point you are ready to enjoy the new, more manageable response of your progressive Sniper EFI System throttle body linkage!

Final Note: If you are using ported vacuum to advance your distributor then this link is going to render that inoperable. Ported vacuum is vacuum that is present only after the throttle blades are open slightly. Because Holley chose to implement the ported vacuum on the secondaries (instead of the primaries) this progressive link is likely going to put the vacuum advance at a point where it is ineffective. If you're reading this going "Ported WHaaa??" then you can probably just ignore this note.