

DODGE RAM

Transmission Throttle Pressure Adjustment Procedure

Before you begin:

My intention here is to show Dodge Ram truck owners with the automatic transmission how to properly adjust the shift points of their transmission. These pictures are from my 1999 Ram 1500 with the 5.9 liter V-8 engine.

When I bought my truck, I quickly decided I didn't like the factory set shift points. It shifted too soon under light and medium throttle...and passing gear/kickdown required a lot of gas pedal to achieve. My desire was to have the 1-2 shift and the 2-3 shift occur at a higher road speed/ engine rpm and to have a more sensitive kickdown. In my case, this was accomplished by adjusting the transmission throttle pressure cable only 1/4" (0.25 inches).

What is the throttle pressure cable? Between the throttle linkage and the driver's side of the transmission there is a cable that causes a valve inside the transmission to move in relation to throttle position (gas pedal position). This cable is also referred to as the Throttle Valve (T.V.) cable.

What does it do? The T.V. cable moves the throttle valve in the transmission.....which in turn controls THREE things: 1) the transmission line pressure and 2) the transmission shift timing and 3) the transmission kickdown (or passing gear). Many people mistakenly believe it only performs function number three.

Very important:

- More throttle opening = HIGHER line pressure and LATER, FIRMER shifts.
- Less throttle opening = LOWER line pressure and EARLIER, SOFTER shifts.
- WOT (Wide Open Throttle) = MAXIMUM line pressure and FIRM shifts at the engine redline.

This picture shows the location of the throttle pressure cable adjustment



Here's a close up of the bracket and adjustment mechanism.

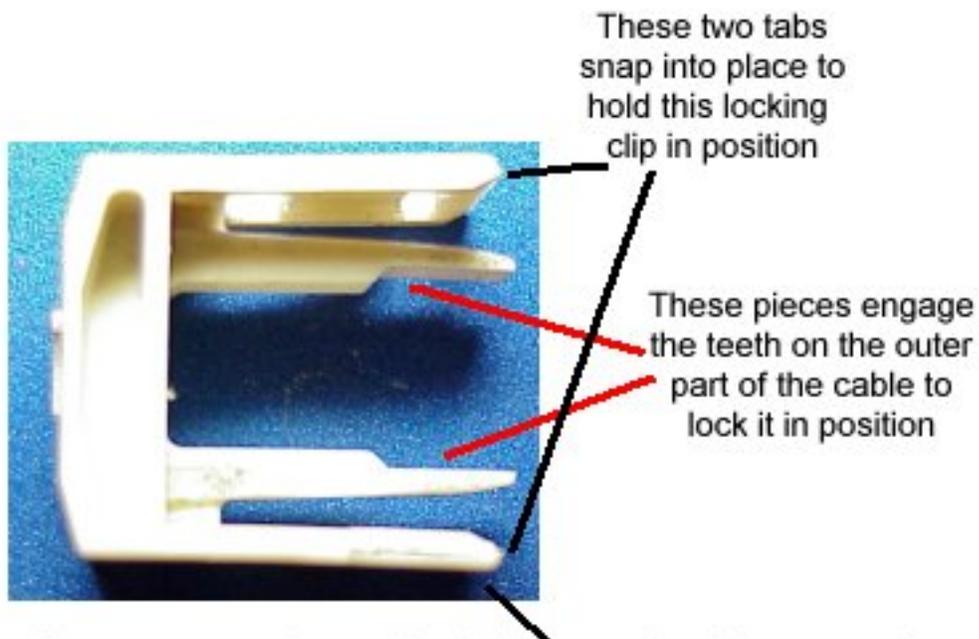


Another close up showing the locking clip partially removed.



Here's what the locking clip actually looks like:

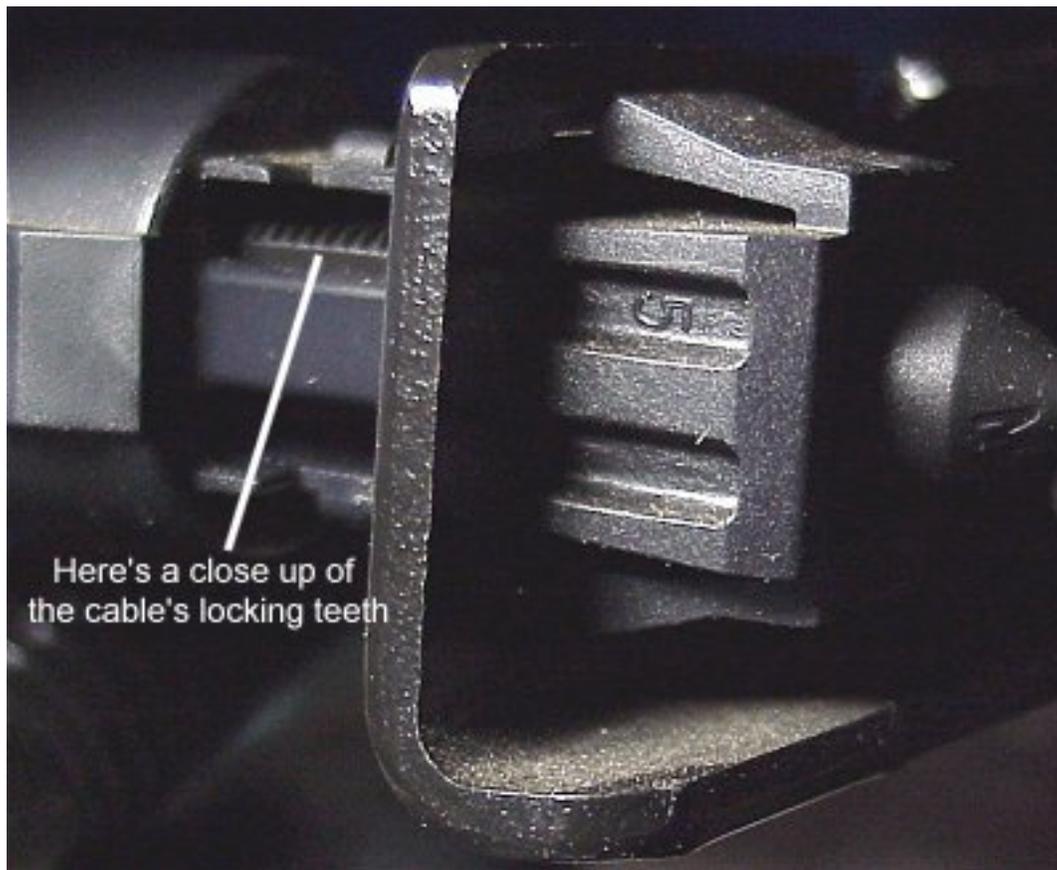
When removing this clip, be aware that it is plastic and be careful that you don't break the tabs off when prying on them.



To remove, gently pry this tab downward and the upper tab upward approximately 1/8" ...at which point this locking clip will slide off the cable.



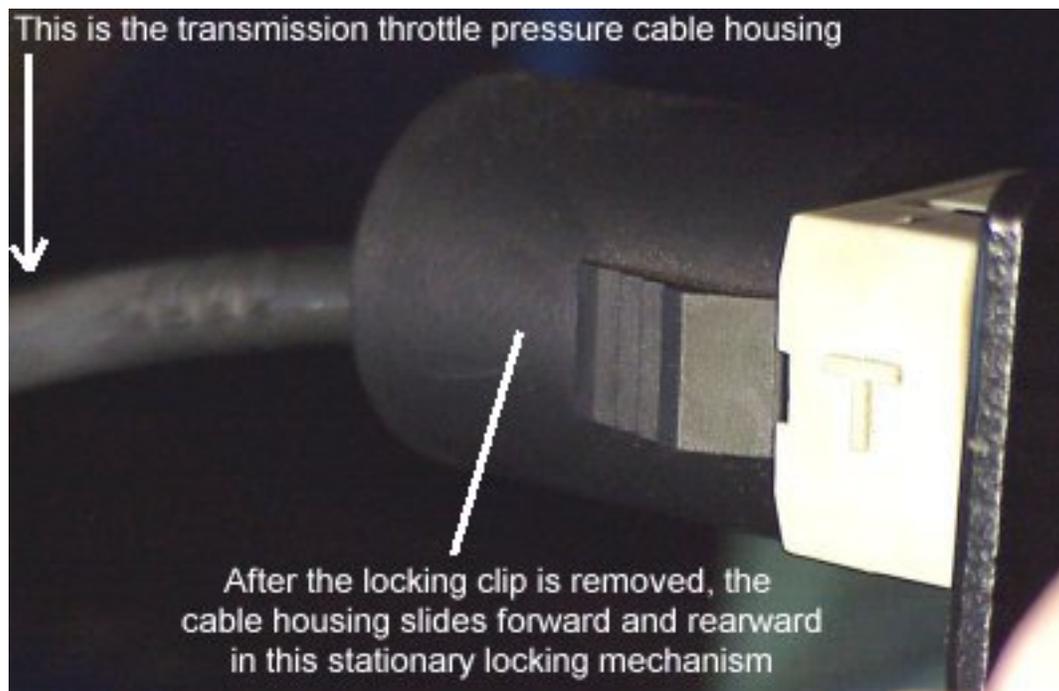
Here's a different view that better shows the inner locking teeth that keep the cable in position



For LATER, FIRMER shifts, slide the cable housing further OUT of (rearward) the locking mechanism. Attempting to make the shifts too late and firm will result in undesirably harsh shifts under light throttle.

For EARLIER, SOFTER shifts, slide the cable housing further INTO (forward) the locking mechanism. Attempting to make the shifts too early will result in excessive transmission slippage during shifts, especially at medium and heavy throttle.

WARNING: Going too far in either direction will cause trouble!!



BEFORE you begin, make note of the cable position so you have that as the stock reference point.

Make your adjustments in small increments of about 1/8" (0.125")

At a fixed throttle position...say 1/4 throttle....every 1/8" of cable adjustment will change the shift points by a few miles per hour. At a greater throttle opening...say 3/4 throttle... that same 1/8" of cable adjustment will make more of a difference.

When you're finished adjusting, replace the locking clip and road test it. Pay close attention to the light and medium throttle shift firmness and timing.