

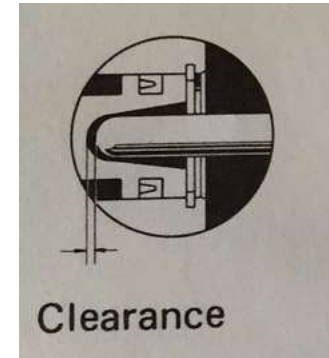
Brake Booster Installation Supplement

City Racer LLC

Section 1:

Checking Master Cylinder Side Push Rod Clearance

1. Per Toyota spec, the clearance between the booster's master cylinder side push rod and the master cylinder's piston should be between 0.1 to 0.5mm (0.004 to 0.02 inch)
2. The most accurate way to set the clearance is with an adjustment tool - Toyota SST 09737-00010 or aftermarket equivalent (search for "brake booster adjustment tool" on eBay or Amazon)



SST 09737-00010

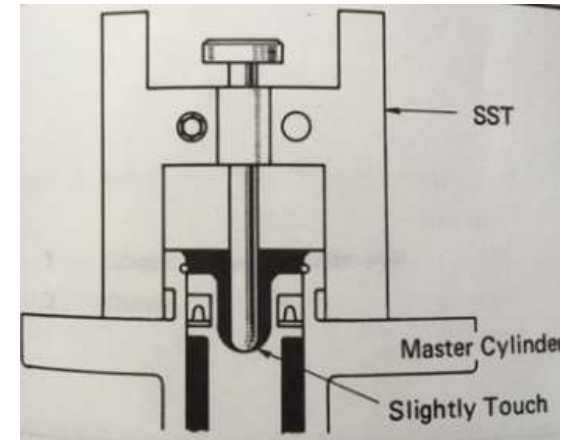


Aftermarket

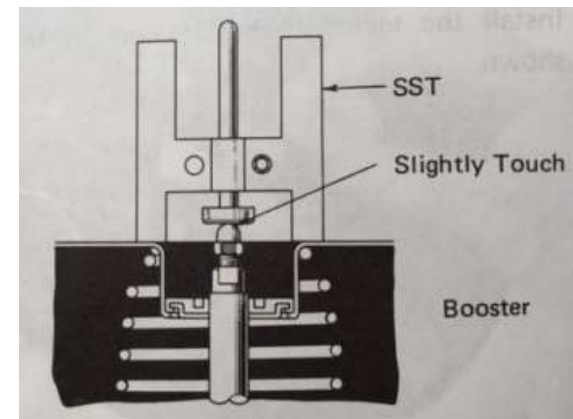


Section 1 (Continued): Checking Master Cylinder Side Push Rod Clearance

Set the tool on the master cylinder, and lower the pin until its tip comes in light contact with the piston.



Turn the tool upside down and set it on the booster. Then adjust the booster push rod length (see Section 2) until the rod end is in light contact with the pin head.



Section 1 (Continued): Checking Master Cylinder Side Push Rod Clearance

Alternate methods to set the clearance between the booster rod and the Master Cylinder (MC) piston without using a tool*:

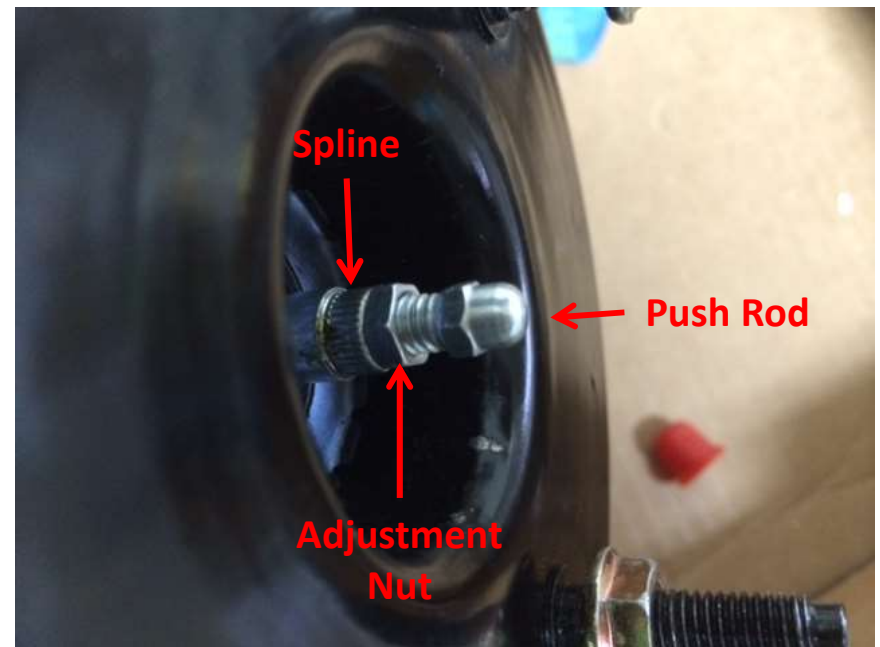
- 1) Remove the four nuts holding the MC to the Booster. Hold the MC in position with your hand. Have an assistant push on the pedal until the push rod moves the MC away from the booster. If the MC moves immediately, you have no gap. Shorten the push rod slightly until you can move the pedal slightly before the MC is pushed away from the booster
- 2) Use a ruler to measure: 1) The protrusion of the push rod beyond the booster shell 2) The depth of the MC cavity. The difference will be the clearance / gap. Refer to video aid in Section 2.

* Note: These methods are less accurate and may not always achieve the desired result

Section 2:

Adjusting Master Cylinder Side Push Rod Clearance

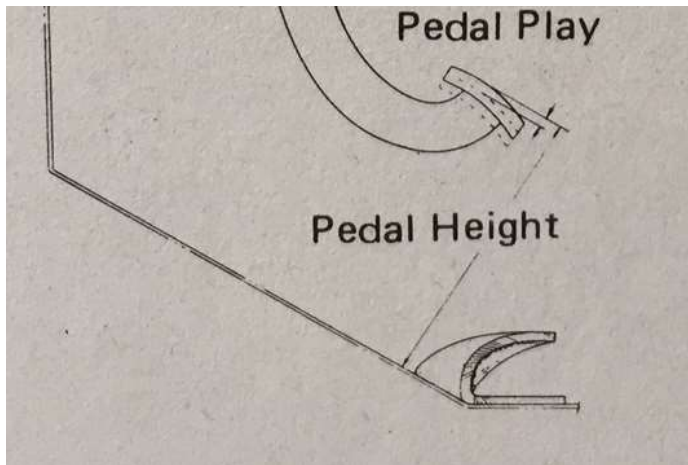
To adjust booster rod, hold the spline portion of the push rod with a plier or vice grip, and turn the adjustment nut to either lengthen or shorten the push rod.



Video aid (relevant section starts at the 30 minute mark):
<https://www.youtube.com/watch?v=rYYzPIGoxfY&t=1919s>

Section 3:

Checking Pedal Height and Play



Pedal Height

1. Adjusting the pedal height requires rotating the U-bolt on the booster's pedal rod either in or out. This can only be accomplished with the U-bolt disconnected from the pedal

Pedal Play

1. Stop the engine and depress the brake pedal several times until there is no more vacuum left in the booster
2. Press down the pedal with fingers until initial resistance is felt. The amount of play should be within **3 – 6 mm (0.12-0.23")**
3. If the pedal play is not in spec, adjust the pedal height so as to provide the proper amount of pedal play

Disclaimers

1. This document should be considered a complement and not a substitute to the Toyota or Haynes Service Manual.
2. Professional installation is recommended unless you have the aptitude to undertake such task.
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