

HSR Choke Cable Installation Tips:

The HSR series carburetors use one of two possible choke cables: the stock Harley-Davidson cable (1990 and later) or the Mikuni cable. Mikuni designed the HSR to accept the Harley cable to save you money and because the stock cable works well. The Mikuni cable is furnished for those installations that do not start with an installed stock CV carburetor.

The majority of HSR42/45 installations use the Harley cable. Installation is simple when the installation instructions are followed, step by step. Those steps are:

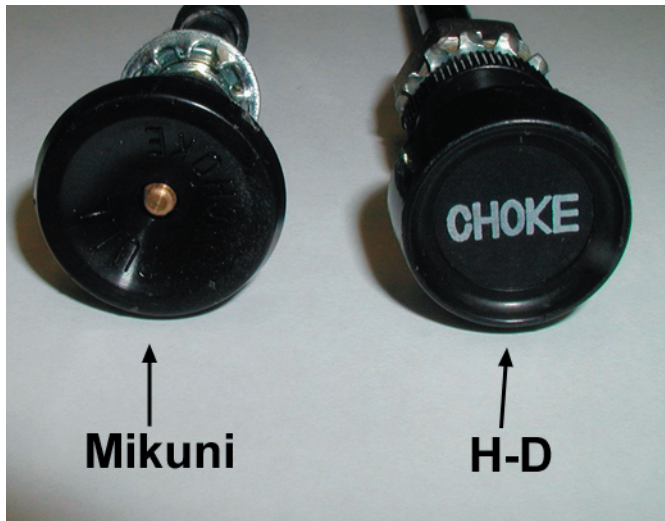
- Remove the stock Harley choke cable assembly.
- Remove the spring and plunger from the stock cable.
- Remove the Mikuni "Starter Nut" from the HSR.
- Remove the Mikuni spring and plunger from the HSR.
- Install the Mikuni spring and plunger on the Harley choke cable.
- Install the Harley choke cable with the fitted Mikuni spring and plunger into the HSR carburetor.
- DO NOT use the Mikuni Starter Nut; discard it.
- DO NOT use the Harley spring or plunger; discard them.

Note: If you do not have installation instructions, you may download them from the www.mikuni.com website in the "manuals" section.

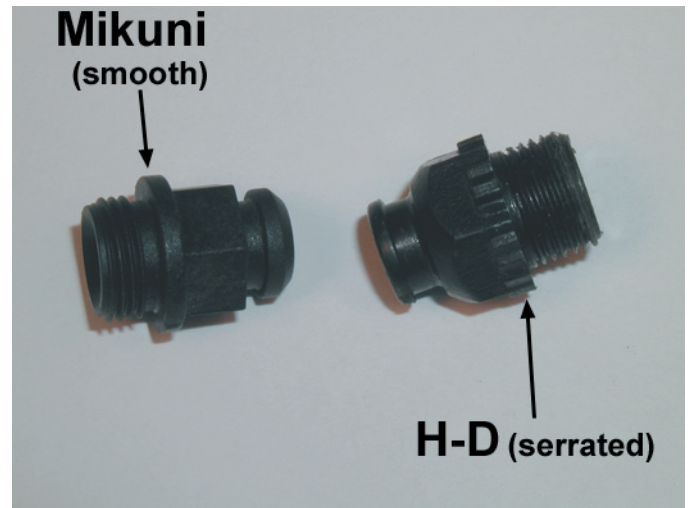
If the Mikuni Starter Nut is fitted to the Harley cable, the choke plunger is held off its seat and the choke is open all the time. If the Harley spring and plunger are used, the plunger does not seal and the choke is open all the time. The result, in both cases, is very poor fuel mileage (30 mpg or less).

Another possible cause of poor mileage, rough idle and fouled spark plugs is incorrect cable routing. The stock Harley choke cable is very stiff and may not be fully seated in the metal elbow at the carburetor end of its run. This condition is easily corrected.

On occasion, one of these errors may have been made by someone else at another location. The unfortunate mechanic who inherits the task of correcting the rich condition, poor idle and poor fuel mileage may have no clue as to the mismatch of parts. For this reason, we include the photos and text to help you discover if your installation is correct.

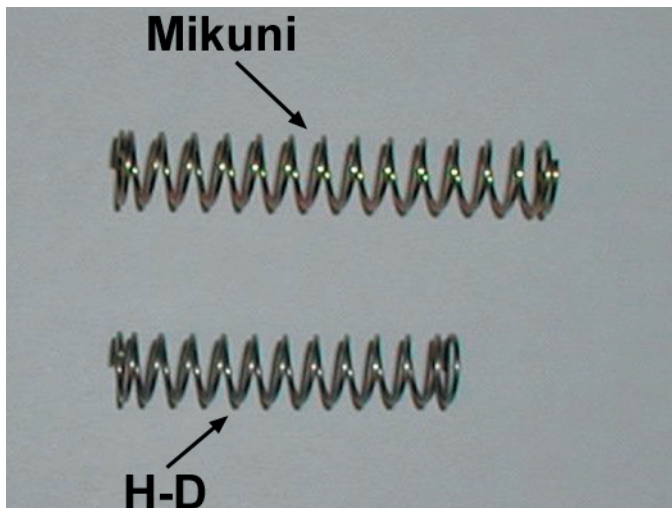


The Mikuni choke cable is on the left, the Harley on the right. Harley's choke cable has the word "CHOKE" in white on the face of the knob. The Mikuni cable has a small brass bump in the center of the face of the knob.

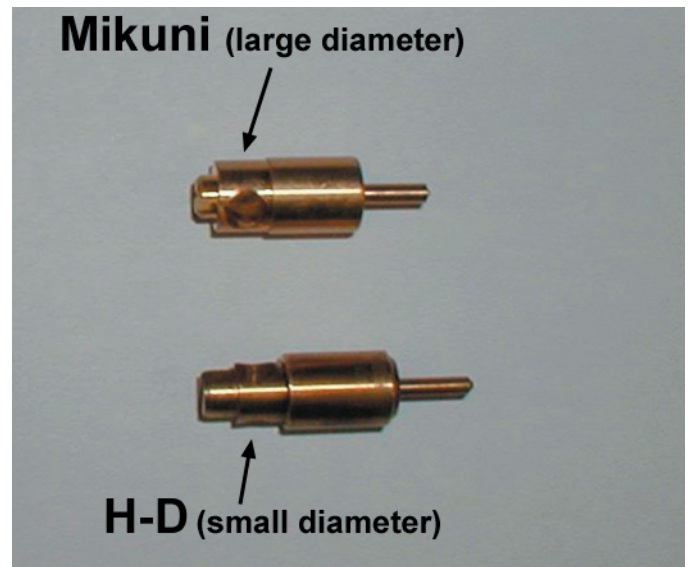


The Mikuni "Starter Nut" is on the left, Harley's on the right. The Mikuni nut has a smaller hole where the cable fits and must not be used with the Harley choke cable.

The Harley nut is larger and has serrations on its outer diameter.

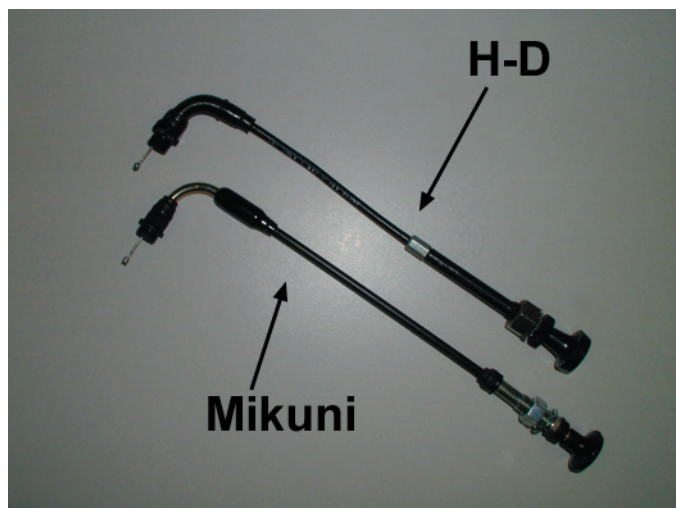


The Mikuni "Spring, Starter Plunger" is at the top, the Harley spring on the bottom. The Mikuni spring is longer and stiffer than the Harley part.



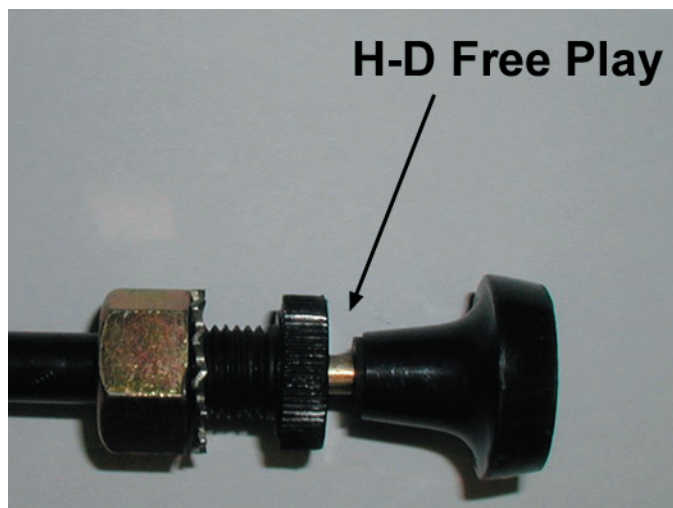
There are three different diameters along the length of each plunger. The middle diameter of the Mikuni plunger is only slightly smaller than the largest diameter. The Harley plunger has a much smaller middle section.

The Mikuni "Starter Plunger" and the Harley plunger are different and must not be interchanged. While they are very similar and both slide into the HSR carburetor, the Harley plunger does not work in the HSR. The Harley plunger does not seal in the Mikuni and causes a severe rich condition.



Mikuni and Harley choke cables are different:

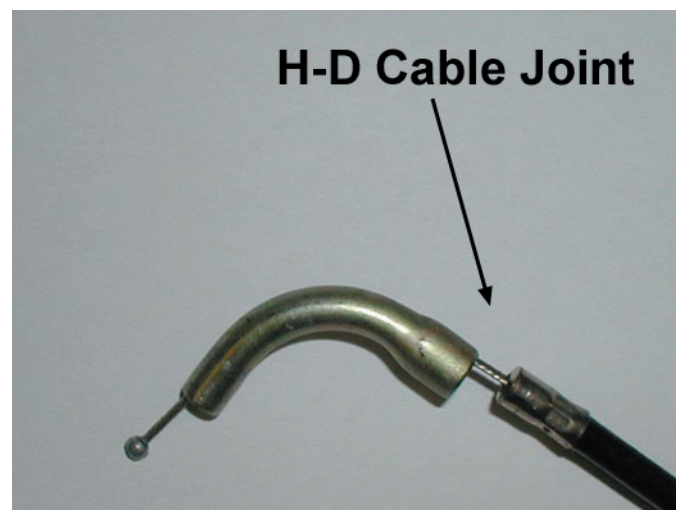
- Mikuni's threaded section is steel; Harley's is plastic
- Mikuni's cable has an adjuster (under the rubber boot)
- Mikuni's metal elbow is exposed, Harley's is covered.
- Mikuni's cable has a detent to hold it open.
- Harley's cable has a friction adjuster to hold it open.
- The flexible portion of Mikuni's cable is longer.
- Mikuni's choke knob is black with a small brass center.



There must be some free play in the choke cable to ensure that the choke plunger is bottoming (sealing). Any amount of free play is okay, but there must be some.

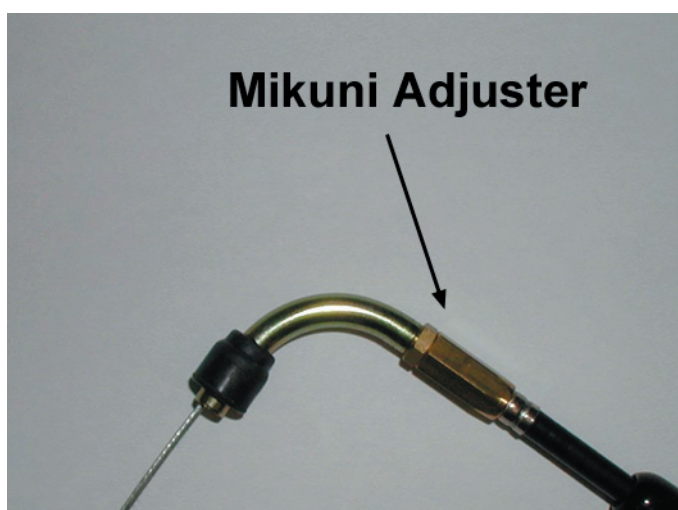
H-D: Check free play by slightly loosening the friction nut. Then, slide the knob in and out to check free play.

Mikuni: If there is no free play, use the adjuster under the rubber boot near the carburetor.



It is possible that the Harley cable end may not completely bottom in the socket formed in the metal elbow (at the carburetor end of the cable). If the cable is not bottomed, the starter plunger does not bottom and does not seal. Poor mileage and a rough idle results.

The fix is to re-route the cable so that it can bottom. A simple 'wiggle' may be enough to get the cable completely seated.



Mikuni's cable adjuster is covered by a rubber boot which must be slide down the cable to gain access to the adjuster. There must be some free play in the cable. Any amount will do but there must be some to ensure that the choke plunger is fully bottomed.