



## **Installation Instructions for the Spears Racing Straight SV650 Race Clutch Cable (1999–2009 / Current Models)**

This is a custom straight-pull race clutch cable designed by Spears Racing. It eliminates the OEM performed metal bend at the clutch perch that causes binding and eventual failure. The result is smoother, longer-lasting operation and better feel—perfect for street bikes, track-day use, or full race setups. It works with stock handlebars or clip-ons. Important Notes Before Starting This routing is not the same as stock/OEM installation.

Thoroughly lubricate the entire cable before installing (a cable Luber tool + good cable lube works best).

Put a small amount of grease on the barrel end that inserts into the clutch lever perch.

Always check clearance on both sides while rotating the handlebars or clip-ons lock-to-lock. The straight design changes how the cable moves.

Critical: Confirm your push-rod clearance (see the official Suzuki SV650 service manual). Improper clearance can cause clutch drag or damage.

### **Step-by-Step Routing & Installation Remove the old cable**

Follow standard SV650 clutch cable removal: Loosen the adjuster at the lever and at the engine end.

Disconnect the cable from the clutch lever perch (slide it out through the notches).

Disconnect the lower end from the clutch actuator arm (you may need to remove the front sprocket cover and/or clutch release assembly—refer to your service manual

Pull the old cable out completely.

Route the new Straight Race Cable (this is the key difference) Start at the clutch perch on the left handlebar.

Run the cable straight across the front of the fork tubes and headstock (no looping around the side like stock).

Once the cable reaches the right side of the forks, turn the leading edge down and route it between the front and rear cylinders, passing under the coolant hoses.

Continue routing until it reaches the left side cover and the clutch actuator (where the cable attaches to the engine).



**Attach the cable ends Upper end:** Insert the Delrin-covered barrel into the clutch lever perch. Make sure the cable seats cleanly in the lever slot.

**Lower end:** Attach to the clutch actuator arm using the two 12 mm nuts (same as OEM—unlike many aftermarket cables that use 13/14 mm nuts). Secure it properly so the cable can move freely without binding.

**Reinstall any removed parts** Reinstall the clutch release assembly, sprocket cover, etc., in reverse order of removal.

Double-check that the cable is not pinched or rubbing anywhere (especially near the cylinders, coolant hoses, or steering head).

Adjust the clutch Set the proper free play at both the lever and engine-end adjusters (typically 10–15 mm of free play at the lever per the Suzuki manual).

Pump the lever a few times and re-check adjustment.

Final checks & test Rotate the bars lock-to-lock and verify no binding or contact.

Start the bike, check for smooth clutch operation in all gears, and ensure neutral finds easily.

Road-test carefully before any track use.

Quick Tips from Spears Racing The sliding black outer cover on this cable helps protect against heat and rubbing in tight areas or under race fairings.

If you have clip-ons, the straight design gives extra clearance and longevity compared to the stock bent cable.

Keep a spare 12 mm wrench handy for the lower adjuster.

If you run into any fitment questions or need photos of the exact routing on a finished bike, feel free to reply or reach out directly—Spears Racing is happy to help racers and builders get it right the first time.

Ride safe and enjoy the smoother pull!