

Brock's Performance • 4064 E. Patterson Road • Dayton, OH 45430 • Phone: 937-912-0054 • Fax: 937-912-0062

BMW S1000RR (10-19), HP4 (12-15), S1000R (14-20), AND S1000XR (15-19) HD CLUTCH SPRING KIT INSTALLATION INSTRUCTIONS

The HD Clutch Spring Kit is designed to increase the spring pressure at the clutch plates. Increased spring pressure is necessary for increased power applications to prevent clutch slippage while also increasing clutch life.

Check Package Contents:

The Package Contents Include:

- 1. Six (6) Heavy Duty Springs
- 2. Six (6) Spring Top Hats
- 3. Six (6) .025" Thick Shims
- 4. Six (6) .047" Thick Shims
- 5. Six (6) .062" Thick Shims
- 6. Six (6) .180" Aluminum Shim
- 7. Six (6) Clutch Spring Bolts
- 8. Six (6) Clutch Spring Studs

If your package contents differ, please contact Brock's Performance at 937-912-0054.

For additional installation support please refer to the OEM service manual.

Removal Instructions:

Note: Brock's Clutch Mod Kit (<u>#270591</u>) is required to be installed in conjunction with the HD Clutch Spring Kit.

- 1. Support the bike on a wheel stand or lift.
- 2. Remove clutch cover (fairing does not need to be removed).

Note: The clutch cover gasket is reusable. Take care to prevent damage. Replace as needed.

- 3. Remove six (6) OEM clutch springs, tops, and bolts (items will not be reused).
- 4. Remove the OEM pressure plate.
- 5. Remove six (6) OEM clutch springs studs (studs will not be reused).
- 6. Clean the inside of the clutch hub with brake cleaner to remove any oil from the clutch stud holes.







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Installation Instructions:

- 7. Install Brock's Clutch Mod Kit (<u>#270591</u>).
- Install the supplied Clutch Springs Studs. Torque to 15 lb-ft (20 N⋅m).
- 9. Install the OEM pressure plate.
- 10. Install the supplied Heavy Duty Springs, Shims (see table), Spring Top Hats, and bolts.
 - a. Install shims equally onto each spring
 - b. For max pressure and heavier riders use the .180" thick shim
 - c. The maximum total shim thickness is .180" per spring. Anything thicker than this will cause coil bind.
 - d. Use the maximum spring force for your comfort.
- 11. Torque the spring bolts evenly in a cross pattern to 6.5 lb-ft (9 $N \cdot m$).
- 12. Adjust the clutch freeplay.
 - a. Turn clutch lever adjuster (#1) all the way in.
 - Hold the push-piece (#2) and loosen the locknut (#3).
 - c. Hold the push-piece and turn in the adjuster (#4) just until it seats.
 - d. Hold the push-piece and turn the adjuster out ³/₄ of a turn.
 - e. Hold the push-piece and torque the locknut to 6.5 lb-ft (9 N⋅m).
 - f. Check that the push-piece can easily turn by hand.
 - g. Turn the clutch lever adjuster so the gap (**A**) is set to .020" to .040" (.5 to 1 mm) freeplay.
- 13. Install the clutch cover and gasket. Torque the bolts following the guidelines in the OEM service manual.





Shim Thickness	Additional Force per Spring (lbs.)	Force per Spring (lbs.)	Total Spring Force (lbs.)
No Shim	0	50	300
.025"	3	53	318
.047"	5	55	330
.062"	7	57	342
.025" + .062"	10	60	360
.180"	20	70	420

*** Maximum total shim thickness is .180". Anything thicker than this will cause coil bind and keep the clutch from disengaging.***

ALL BROCK'S PERFORMANCE PRODUCTS ARE DESIGNED FOR CLOSED-COURSE RACETRACK USE ONLY!

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