

INSTALLATION INSTRUCTIONS Progress Technology Competition Series 3 Rebound Adjustable Coilover Suspension System 90-93 Integra, Part Series 78.0101 94-01 Integra Type R, Part Series 78.1000 1988 Civic, Part series 78.1001 89-91 Honda Civic, Part series 78.1002 92-00 Honda Civic, 94-01 Acura Integra, Part series 78.1003 (4/18/2024)



Progress Technology Competition Series 2 Coilovers are designed to work with OEM style top hats. You can NOT use extended top hats with our system.

## WHO SHOULD INSTALL THIS PRODUCT?

Progress Technology products should only be installed by a qualified licensed mechanic experienced in the installation and removal of suspension components. Please read instructions from start to finish and verify all parts are in kit before beginning installation.

**NOTE**: These components are designed for **competition use**, and allow for suspension height adjustment from approximately 1.00" to 3.00" lower than stock height. Please note that knowledge in race preparation is necessary in order to obtain maximum performance for your specific application, and certain modifications may be required to insure proper function. Since these units have shorter compressed lengths than stock, tire clearance and suspension travel may need to be examined.

# **Important Installation Notes**

- 1) **NEVER** grab the chrome shock rod with pliers or any tools. Clamping the shock rod with tools will put nicks in the chrome finish and this will ruin the oil seal. Any markings on the shock rod will VOID your warranty!
- 2) Do **<u>NOT</u>** use an **impact wrench or air tools**. This will damage the top threads and may snap off the shock top. This will VOID your warranty!
- 3) DO NOT install this kit with aftermarket extended shock hats! This will limit suspension travel and will NOT function correctly! This kit has shorter shocks than OEM!

	Spring Rate Chart	
Part #	Front Spring	Rear Spring
78.0101.3525	9.0" x 350#	9.0" x 250#
78.0101.3535	9.0" x 350#	9.0" x 350#
78.0101.3545	9.0" x 350#	9.0" x 450#
78.0101.3555	9.0" x 350#	8.0" x 550#
78.0101.4535	9.0" x 450#	9.0" x 350#
78.0101.4545	9.0" x 450#	9.0" x 450#
78.0101.4555	9.0" x 450#	8.0" x 550#
78.0101.4565	9.0" x 450#	8.0" x 650#
78.0101.5545	8.0" x 550#	9.0" x 450#
78.0101.5555	8.0" x 550#	8.0" x 550#
78.0101.5565	8.0" x 550#	8.0" x 650#
78.0101.5580	8.0" x 550#	7.5" x 800#
78.0101.6565	8.0" x 650#	8.0" x 650#
78.0101.6580	8.0" x 650#	7.5" x 800#
78.1000.3525	10.0" x 350#	9.0" x 250#
78.1000.3535	10.0" x 350#	9.0" x 350#
78.1000.3545	10.0" x 350#	9.0" x 450#
78.1000.3555	10.0" x 350#	8.0" x 550#
78.1000.4535	9.0" x 450#	9.0" x 350#
78.1000.4545	9.0" x 450#	9.0" x 450#
78.1000.4555	9.0" x 450#	8.0" x 550#
78.1000.4565	9.0" x 450#	8.0" x 650#
78.1000.5545	8.0" x 550#	9.0" x 450#
78.1000.5555	8.0" x 550#	8.0" x 550#
78.1000.5565	8.0" x 550#	8.0" x 650#
78.1000.5580	8.0" x 550#	7.5" x 800#
78.1000.6565	8.0" x 650#	8.0" x 650#
78.1000.6580	8.0" x 650#	7.5" x 800#
78.1001.3525	9.0" x 350#	9.0" x 250#
78.1001.3535	9.0" x 350#	9.0" x 350#
78.1001.3545	9.0" x 350#	9.0" x 450#
78.1001.3555	9.0" x 350#	8.0" x 550#
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78.1001.5545	8.0" x 550#	9.0" x 450#
78.1001.5555	8.0" x 550#	8.0" x 550#
78.1001.5565	8.0" x 550#	8.0" x 650#
78.1001.5580	8.0" x 550#	7.5" x 800#
78.1001.6565	8.0" x 650#	8.0" x 650#

Spring Pate Chart

Part #	Front Spring	Rear Spring
78.1001.6580	8.0" x 650#	7.5" x 800#
78.1002.3525	9.0" x 350#	9.0" x 250#
78.1002.3535	9.0" x 350#	9.0" x 350#
78.1002.3545	9.0" x 350#	9.0" x 450#
78.1002.3555	9.0" x 350#	8.0" x 550#
78.1002.4535	9.0" x 450#	9.0" x 350#
78.1002.4545	9.0" x 450#	9.0" x 450#
78.1002.4555	9.0" x 450#	8.0" x 550#
78.1002.4565	9.0" x 450#	8.0" x 650#
78.1002.5545	8.0" x 550#	9.0" x 450#
78.1002.5555	8.0" x 550#	8.0" x 550#
78.1002.5565	8.0" x 550#	8.0" x 650#
78.1002.5580	8.0" x 550#	7.5" x 800#
78.1002.6565	8.0" x 650#	8.0" x 650#
78.1002.6580	8.0" x 650#	7.5" x 800#
78.1003.3525	10.0" x 350#	9.0" x 250#
78.1003.3535	10.0" x 350#	9.0" x 350#
78.1003.3545	10.0" x 350#	9.0" x 450#
78.1003.3555	10.0" x 350#	8.0" x 550#
78.1003.4535	9.0" x 450#	9.0" x 350#
78.1003.4545	9.0" x 450#	9.0" x 450#
78.1003.4555	9.0" x 450#	8.0" x 550#
78.1003.4565	9.0" x 450#	8.0" x 650#
78.1003.5545	8.0" x 550#	9.0" x 450#
78.1003.5555	8.0" x 550#	8.0" x 550#
78.1003.5565	8.0" x 550#	8.0" x 650#
78.1003.5580	8.0" x 550#	7.5" x 800#
78.1003.6565	8.0" x 650#	8.0" x 650#
78.1003.6580	8.0" x 650#	7.5" x 800#

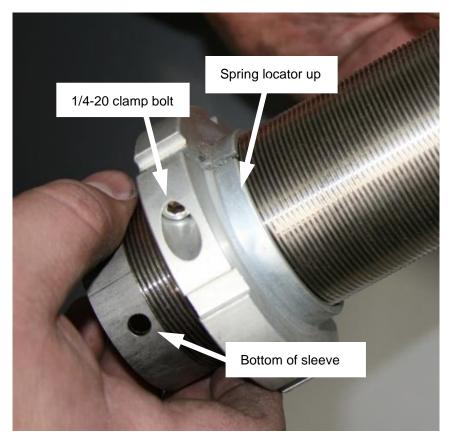
Spring Rate Chart, cont'd

# READ THESE INSTRUCTIONS COMPLETELY BEFORE STARTING YOUR INSTALLATION

- Park vehicle on a smooth, level concrete or asphalt surface. Set the parking brake and block the rear wheels. Raise the front of the vehicle using a floor jack and <u>support the frame with jack stands</u>. Remove front wheels and tires. Remove the bolts holding the front brake lines to the strut housing, and **note the manner in which** the brake lines are routed. (TIP: Take a picture with your phone). Remove the factory pinch bolt from the lower mounting fork, and then remove the lower mounting bolt from the shock mounting fork. Remove the fork from the lower end of the shock.
- 2. Remove the upper spring hat mounting bolts from under the hood. **DO NOT** remove the nut from the center shock absorber stud at this time. Remove the spring/shock assembly from the vehicle.

## Springs store energy and proper tools must be used to avoid injury.

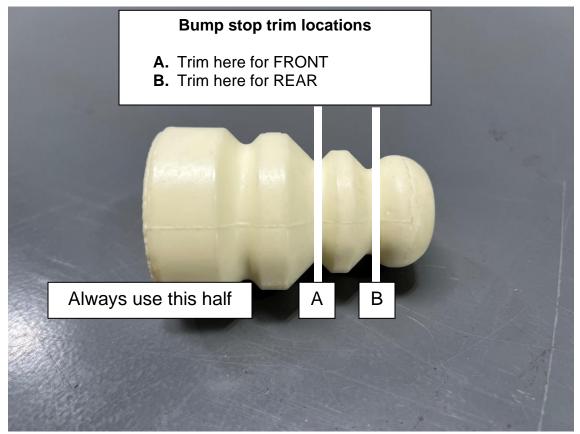
- 3. Using a McPherson strut type coil spring compressor, compress the spring far enough to allow the factory spring hat to rotate freely. Carefully remove the center nut from the spring hat and remove the spring hat from the shock. Carefully release the spring tension and remove the compressor. You will be re-using the factory spring hats from your old shock assemblies.
- 4. Thread the spring perch onto the threaded sleeve, near the bottom 1/3 of the threads. Make sure the collar is installed with the spring locator up. If the spring collar is too tight to easily rotate by hand, you may insert the flat blade of a screwdriver into the slot on the collar to ease installation. Do not force the screwdriver into the threads! Insert the 1/4-20 socket head clamp bolt loosely in the spring collar. (A)



5. Next, place the threaded sleeve over the shock body, with the hole in the sleeve body toward the bottom of the shock. The sleeve fits on the welded ring. Install the threaded sleeve's poly isolator over the shock and into the threaded sleeve, this will require some hand pressure to push into position. (B)



- **(B)**
- 6. Trim the bump stop that comes with the kit and use only the top part when assembling. (C)



Next, assemble the front springs (refer to spring rate chart) bump stop, bushings, steel sleeve, cup washers, polyurethane isolator, and factory (OEM) spring hat as shown in the Assembly Illustration. Do NOT use the factory rubber spring cushion! Install one of the M10-1.25 top nuts. Use an 8mm wrench on the flats of the shock rod and tighten the M10-1.25 jam nut firmly. (D) **Use hand tools only.** 



(D)

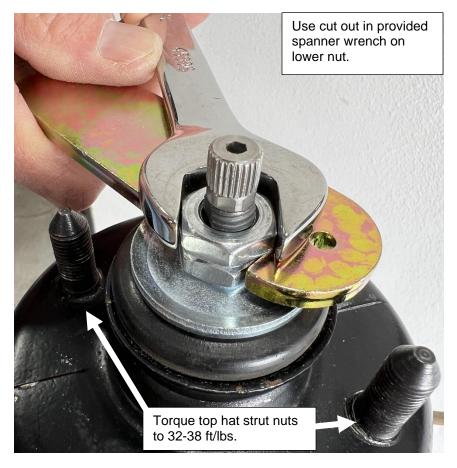
Raise the lower spring collar up to the spring, until the spring has approximately 1/8" free play between the upper and lower perches, then thread upward (*tighten*) the lower perch 8 to 10 full turns to load the spring. There are two spanner wrenches in the kit. The **smaller wrench** is used to hold the threaded sleeve (E) and keep it from turning. The **larger wrench** is used to turn the spring collar. (F)



(E)

(F)

- 9. Install the front coilover assembly back into the vehicle. Install the new brake line bracket onto the factory pinch bolt as shown in illustration and tighten securely. Route the brake line as originally noted, and use the M8 x 1.25 bolt, nut, and washers as shown in Assembly Itorquellustration to retain the brake line.
- 10. Repeat installation on the other side. Install wheels, torque the wheels to spec and lower the vehicle to the ground.
- 11. Torque the two top hat strut mount nuts to 32-38 ft/lbs. Tighten the bottom jam nut firmly. Install the second M10-1.25 jam nut and lock them firmly against the first top nut using the spanner and a wrench on top as shown. (G) **DO NOT use an impact wrench!**



- (G)
- 12. Place manual transmission in 1<sup>st</sup> gear, or auto transmission in park. Block front wheels. Raise rear of vehicle with a floor jack, <u>and support the frame with jack stands</u>. Remove rear wheels. Remove lower shock mounting bolt. Remove upper spring perch mounting bolts. **DO NOT** remove the nut from the center shock absorber stud at this time. Remove the spring/shock assembly from the vehicle.

## Springs store energy and proper tools must be used to avoid injury.

- 13. Using a McPherson strut type coil spring compressor, compress the spring far enough to allow the factory spring hat to rotate freely. Carefully remove the center nut from the spring hat and remove the spring hat from the shock. Carefully release the spring tension and remove the compressor.
- 14. Remove the factory cup washer, bushings, and sleeve from the center of the upper spring hat. Remove the factory spring isolator from the spring hat. You will be using only the factory spring hat.

- 15. Thread the spring perch onto the threaded sleeve, near the bottom 1/3 of the threads. Make sure the collar is installed with the spring locator up. If the spring collar is too tight to easily rotate by hand, you may insert the flat blade of a screwdriver into the slot on the collar to ease installation. Do not force the screwdriver into the threads! Insert the 1/4-20 socket head clamp bolt loosely in the spring collar. (A)
- 16. Next, place the threaded sleeve over the shock body, with the holes in the sleeve body toward the bottom of the shock. The sleeve should sit on the welded ring. Install the threaded sleeve's poly isolator over the shock and into the threaded sleeve, this will require some hand pressure to push into position. (B)
- 17. Trim the bump stop that comes with the kit and use only the top part when assembling. (C)
- 18. Next, assemble the rear springs (refer to spring rate chart) bump stop, bushings, steel sleeve, cup washers, polyurethane isolator, and factory (OEM) spring hat as shown in the Assembly Illustration. Do NOT use the factory rubber spring cushion! Install one of the M10-1.25 top nuts. Use an 8mm wrench on the flats of the shock rod and tighten the M10-1.25 jam nut firmly. (D) Use hand tools only.
- 19. Raise the lower spring collar up to the spring, until the spring has approximately 1/8" free play between the upper and lower perches, then thread upward (*tighten*) the lower perch 8 to 10 full turns to load the spring. There are two spanner wrenches in the kit. The smaller wrench is used to hold the threaded sleeve (E) and keep it from turning. The larger wrench is used to turn the spring collar. (F)
- 20. Tighten the perch nut using the 1/4-20 clamp bolt. (A)
- 21. Install the rear coilover assembly into the vehicle, using the M10 x 80mm bolts for the lower mounts. (H). On 1996-2000 models, the four clevis spacers shown in the Assembly Illustration will be necessary.

#### Note for #78.1000 & #78.1001

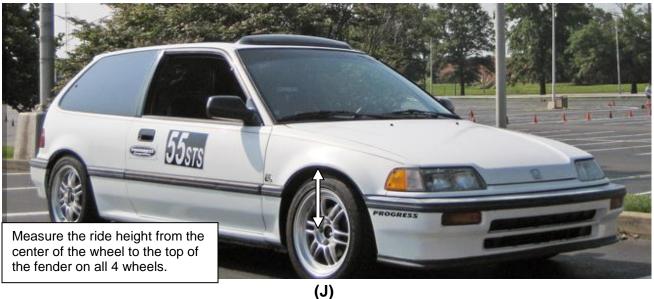
Integra Type R and 1988 Civic/CRX applications use the "loop-style" rear shock mounting as shown. The special (thick) washers are required, ONE per side. (I) The washers are zip-tied to the lower mounts.



22. Repeat installation on the other side. Install wheels, torque the wheels to spec and lower the vehicle to the ground.

- 23. Torque the two top hat strut mount nuts to 32-38 ft/lbs. Tighten the bottom jam nut firmly. Install the second M10-1.25 jam nut and lock them firmly against the first top nut using the spanner and a wrench on top as shown (G). DO NOT use an impact wrench!
- 24. Roll the vehicle back and forth several times to settle the suspension. You are now ready to set your ride heights.

## **Setting Ride Height**



- 25. Measure ride height as shown in the photo from center of the wheel to the top of the fender.
- 26. Determine the desired ride height. Ideal ride height range is between  $11 \frac{1}{2} 12 \frac{1}{2}$ , front and rear. Note that each full turn of the lower spring collar will result in approximately  $\frac{1}{8}$  of ride height change.
- 27. Ride height may be changed at each corner by raising the vehicle, removing the wheel, loosening the 1/4-20 socket head clamp bolt, and turning the spring collar. Remember to tighten the 1/4-20 clamp bolt hand tight after each adjustment.
- 28. Wheel alignment must be checked and adjusted after each change in ride height in order to maximize tire life and suspension performance.

## Note regarding spring free length:

In some instances, after a completed CS2/CS3 installation, the springs may not have sufficient free length to reach from perch to perch at full droop. This means with the vehicle lifted off the ground, as in vehicle service. This is dependent upon (higher) spring rate selections and ride height settings. This will not be an issue during driving circumstances.

Poly isolator installed in sleeve (B)	1/4-20 clamp bolt tightened after final ride height adjustment.	
Bump stop cut (C)	All four wheels torqued to factory specifications.	
M10-1.25 jam nuts, firmly tightened (G)		

#### CHECK INSTALLATION

#### Adjusting the shock damping force

Turn the knurled metal knob counter-clockwise (left) until it stops. This is FULL SOFT on the REBOUND (extension) setting. **Do not force the adjuster. Use only your fingers. No tools are needed**. There are 12 clicks going clockwise (to the right). See arrow below. Each 'click' adds more rebound damping. The adjustment knob will not change the compression setting.



# CS3/RA adjustment and tuning suggestions

**For daily drivers: Use settings 1 to 8.** 1 to 4 clicks is the softest ride. Add rebound for more ride control. You will likely prefer more front rebound than rear, as the front end has more mass and does more work: the acceleration, braking & turning. We suggest you try "split settings" like 6F/3R or 8F/4R.

With more aggressive driving and higher spring rates: Use settings 8-12. With spring rates exceeding 450#, you may want more rebound control. This will depend on your vehicle usage and road quality. Insufficient rebound (too soft) will feel floaty, and may bob around too much on bumpy and uneven pavement. If this is the case, add more damping until you are satisfied with the ride quality and vehicle control.

**Auto-crossers and track-day drivers: Use settings 8-12.** You will want to use the rebound settings to tune the balance and vehicle transition speed. More rebound control will speed up the chassis response. For a looser setup you can induce some rotation by adding more REAR rebound.

If you are working on **a drag-launch setup**, run the front end at or near FULL rebound (clockwise). This will help control weight transfer during the launch. The tight rebound setting will manage the wheel hop and minimize the tire chatter. The rear does NOT require a lot of rebound, so set it lighter so the car is manageable and compliant. This will make it easier to drive, and more stable on the big end.

Please call or email us with questions or comments. (714) 630-9017/ progress.tech@progressauto.com

#### Enjoy tuning your new CS3/RA system and Thank You for choosing Progress!

## **Maintaining Your Coilovers**

In order to simplify height adjustment and extend the life of the coil-over finishes, we suggest the following maintenance procedures for your PROGRESS Coil-over system.

- Occasionally, RINSE the coil-over units with FRESH WATER using the garden hose and a spray nozzle. Spray off the springs and suspension links as well. This will remove caked-on mud, grimy accumulation and salt. It's simple to do during a car wash, after an oil change, or a vehicle service at home.
- If you are having difficulty ADJUSTING the vehicle HEIGHT, review the use of the two spanners. Also SPRAY a light application of Boeshield T-9 © to lubricate the threaded sleeves and perch nuts. We suggest the use of this excellent dry lubricant/protectant product.
- PROTECT the coil-over bodies with regular applications of Boeshield T-9 ©. First RINSE OFF any caked-on grime and let the suspension DRY if possible per above. Then apply a liberal coating of Boeshield T-9 © to the strut housings, threaded sleeves and perch nuts. Allow it to DRY without wiping. The fluid will evaporate, leaving a protective layer of paraffin wax coating.
- More about BOESHIELD T-9 ©

Boeshield T-9 is a lubricant/protectant developed and licensed by BOEING for aircraft, marine, and automotive use. It is readily available at select retail stores and online. Visit www.Boeshield.com to learn more and find a dealer. We suggest the purchase of the 12 oz. aerosol spray can for ease of use and the best value.

NOTE: We do NOT suggest the use of Rust-free © as it is ACIDIC and will affect anodized coatings, paint, plastics and other automotive materials.



Thank you for choosing Progress products. For additional product and technical information, visit our website.

