

# Crank Pulley for 10th Gen Civic Type-R

2021-06-2/

PHP-ENG-100

Thank you for purchasing this PERRIN product for your car! Installation should only be performed by persons experienced with installation of aftermarket performance parts and proper operation of high performance vehicles. If vehicle needs to be raised off the ground, the installer must use proper jacks, jack-stands and/or a professional vehicle hoist for safety of the installer and to protect property. If the vehicle is lifted improperly, serious injury or death may occur! Please read through all instructions before performing any portion of installation. If you have any questions, please contact our tech department. We can be reached in any of the following methods:

Email <u>Tech@PERRIN.com</u>
Instant Chat off the main page of <u>www.PERRIN.com</u>
Or simply call our tech team at 503-693-1702

WARNING: This product can expose you to chemicals including Lead which is known to the State of California to cause cancer birth defects or other reproductive harm. For more information, go to <a href="https://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

### **GENERAL MODIFICATION NOTE**

Modifications to any vehicle can change the handling and performance. As with any vehicle extreme care must be used to prevent loss of control or roll-over during sharp turns or abrupt maneuvers. Always wear seat belts, and drive safely, recognizing that reduced speeds and specialized driving techniques may be required. Failure to drive a vehicle safely may result in serious injury or death. Do not drive a vehicle unless you are familiar with its unique handling characteristics and are confident of your ability to maintain control under all driving conditions. Some modifications (and combinations of modifications) are not recommended and may not be permitted in your state or country. Consult the owner's manual, service manual, instructions accompanying these products, and local laws before purchasing and installing these modifications. You are responsible for the legality and safety of the vehicle you modify using these components.



### **SPECIAL NOTES:**

- A proper Honda Crank Pulley Removal Tool (50mm hex with offset 1/2" drive) is required for the installation of this part. These can be purchased online from many retailers for under \$20. Do NOT try to remove or install pulley without this tool.
- We highly recommend a 3/4" impact gun or a 30" long 1/2" breaker bar with cheater bar to remove OEM crank pulley bolt. This bolt is extremely tight, and the larger impact gun or longer breaker bar makes this easier to remove.
- Right side wheel is removed in pictures to add additional detail to these instructions, but not required for installation.

#### Parts Included with the Crank Pulley:

(1) PERRIN Crank Pulley

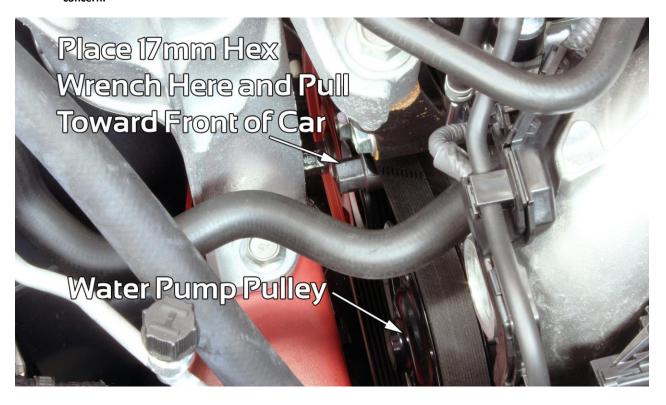


## **Remove OEM Crank Pulley:**

- 1. Remove aluminum splash guard from chassis. There are (2) threaded fasteners located at the front and (6) half-turn fasteners around the edge securing it. Once removed, slide guard back towards the rear of car to remove.
- 2. Remove plastic splash guard from chassis. To help identify the fasteners see steps below:
  - a. (2) Bolts on front section, (4) bolts on rear section and (1) in center of rear.
  - b. (3) plastic fasteners in each wheel well.
  - c. (13) plastic fasteners that are located across the rest of the splash guard.



3. Open hood and locate hex shape feature on belt tensioner (right side of motor). Place 17mm wrench onto hex of belt tensioner and pull forward to relieve belt tension. Slide belt off water pump pulley, then slowly push tensioner back to resting position. NOTE: The wrench used may rest against motor mount when belt is removed from the water pump pulley. Use proper care to prevent pinching your hand in between the wrench and the mount hand while pushing toward back of the car. The wrench resting there is not of any other concern.



1. Install Honda Crank Pulley Removal tool into crank pulley and rotate engine around until tool rests on frame rail as shown. **NOTE: Most tools will** rest against frame rail, but if your tool appears it will rest against the wire harness (visible in pictures below), be sure to move the harness out of the way or costly damage WILL occur if you tighten the crank pulley with the tool resting on the harness!



- 4. Using a 3/4" impact gun or long breaker bar (with cheater bar), remove bolt (standard counter-clockwise rotation).
- 5. Slide crank pulley off nose of crank, making sure not to lose key as it slides off.



## **Install PERRIN Crank Pulley:**

- 2. Carefully install PERRIN Crank Pulley onto nose of crank.
- 3. Rotate pulley around until both keyways line up and re-install OEM key into keyway as shown. **NOTE: Make sure key does not stick out past the face where the bolt tightens up to.**



- 4. Apply a small amount of engine oil to threads and washer surfaces of bolt.
- 5. Hand tighten crank pulley bolt until bolt stops.
- 6. Install Honda Crank Pulley Tool into PERRIN Crank Pulley and rotate engine clockwise until the tool rests on the frame rail. **NOTE: Take note of**wire harness on frame rail and make sure the tool rests NEXT to the harness, not on top of it. Costly damage WILL occur if you
  tighten the crank pulley with the tool resting on the harness!
- 7. Tighten crank pulley bolt using one of 2 methods:
  - a. Using a proper sized torque wrench, tighten bolt to 181 ft-lbs of torque.
  - **b.** Using a proper sized torque wrench, tighten bolt to 14 ft-lbs. Then using a long breaker bar (with cheater bar), rotate bolt clockwise an additional 90 degrees.
- 8. Rotate engine counterclockwise enough to remove the crank pulley tool.
- 9. Place belt around crank pulley same as it was before removal, then in engine bay, pull tensioner back to the front of the car, and slide belt over water pump pulley. Push tensioner back to its resting position.
- 10. Start engine and check that accessory belt is running true on all pulleys and that PERRIN Crank pulley is not wobbling. If pulley is wobbling check for damage on key and keyway during installation. If found, repair or replace damaged parts and re-install pulley.
- 11. Reinstall plastic splash guard and aluminum splash guard opposite of how they were removed in previous steps.

Questions, Comments and Suggestions Contact: <a href="Tech@PERRIN.com"><u>Tech@PERRIN.com</u></a>
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