



THE STANDARD IN ENGINEERING EXCELLENCE



11 Brandywine Dr, Deer Park, NY 11729 - Ph: (631) 586-9525 Fx: (631) 586-2599 Em: info@unorthodoxracing.com

Thank you and congratulations on your purchase of the finest performance products available today.
We appreciate your feedback, good or bad, about the quality and performance of this product.
Our goal is 100% customer satisfaction and your feedback is very important in achieving this goal!

- This pulley kit Part# 02121090_ contains a crank pulley: underdrive stock belt layout (Ultra S) Part# 0212109. Check that the part number matches the number engraved on the back of the pulley. If the part numbers or quantity of parts do not match, do not install them and call the dealer you purchased the parts from or call our tech line direct.

Other Fine Unorthodox Racing Products Available For Your Vehicle

- Accessory pulley: alternator (Ultra A) Part# 01.12.307.0_ (VVTi & VVTLi Engines).
- Accessory pulley: water pump (Ultra A) Part# 01.12.509.0_ (VVTLi Engines Only).
- Aluminum flywheel (Ultra L) Part# 06.12.109.00.
- Performance clutch kits (Ultra G) available for all models, kits include pressure plate, disc, required bearings and an alignment tool.
 - Full faced Kevlar disc holds 30% more power than the stock clutch (Solid or sprung hub disc). (Street Sport) For stock to slightly modified cars.
 - Windowed Kevlar disc holds 45% more power than the stock clutch (Solid or sprung hub disc). (Sport Mod) For slightly to moderately modified cars.
 - Four or Six (6) paddle Ceramic disc holds 80% or Feramic discs holds 110% more power than the stock clutch (Solid or sprung hub disc). Ceramic (Sport Pro) for moderately to heavily modified cars and Feramic (Race Pro) is designed for heavily to race modified cars.

Installation Instructions

1998-02 Toyota & Pontiac VVTi & VVTLi 1.8L DOHC 16V Engines

- **Notice:** These instructions are not a replacement for the factory manual; factory specified tools maybe required for removal of the original parts.
- Open the hood to gain access to the engine compartment.
- Loosen the lug nuts on the front passenger side wheel but do not remove yet.
- Raise front passenger side of the car and place jack/safety stands on passenger and driver side frame rails and remove the front passenger side wheel.
- Unbolt and remove the plastic shroud assembly covering the pulley, it is part of the right side under car shroud and needs to be completely removed.
- Loosen the original crankshaft pulley bolt but do not remove yet.
 - Manual Transmission: Have helper put car in gear and hold the brake pedal firmly, the bolt is very tight and will require significant force to loosen.
 - Automatic transmission: Follow the crank pulley removal procedure/s specified in the factory manual.
- Loosen the accessory belt by using a 19MM wrench to turn the automatic belt tensioner.
- **Underdrive crank pulley must have steel sleeve on rear of pulley that engine oil seal rides, otherwise do not install underdrive crank pulley as a major oil leak or serious engine damage could occur.**
- Install the underdrive pulley, lightly coat the inner bore of the new pulley with ant-seize compound and tighten the crankshaft pulley bolt, see torque specification below. Make sure that the crank snout edge has no burrs, if no burrs are present pulley will slip on easily and seat properly. **Do not force pulley onto crank shaft as damage to both will occur voiding the warranty.** In the rare case that a pulley fit is too tight, clean crank snout (as they can get slightly rusty/corroded) with emery cloth until pulley slides on as stated.
- Install the new accessory belt, the use 19MM wrench to set automatic tensioner see necessary new belt size below.
- Re-install the remaining components in the reverse order.
- Raise the vehicle and remove jack / safety stands and then lower the vehicle back down.
- The maximum HP gains will occur in 5-7 days of installation, once the computer recalibrates to take advantage of the engines lighter rotational weight.

Crank Pulley Bolt Torque Specifications

- 102 ft-lbs. / 1044 in-lbs. / 118 NM

New Belt Sizes (The belt sizes used may vary slightly. We recommend the use of Gates Brand belts, belt sizing varies slightly among belt manufacturers)

- Celica GTS / Matrix & Vibe VVTLi Belt – Use Gates K060760 (76.5" or 1945MM)
- Celica / Corolla VVTi Belt – With Air Conditioning: Use Gates K060735 (74 1/8" or 1885MM), alternate belt size K060730 (73.5" or 1865MM)
Without Air Conditioning: Use Gates K060594 (60" or 1525MM).
- MR2 Spyder VVTi Belt – Use Gates K060650 (65.5" or 1665MM)

* If a different size belt/s work better on your vehicle please let us know the manufacturer and size of each belt/s used.
You can contact us by phone or e-mail through our web page. Thank You!

**For technical assistance please contact our technical support line at 631-586-9525 ext. 12
(Monday-Friday 10AM to 6PM EST)**

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THE UNORTHODOX PLEDGE

Unorthodox Racing, Inc. warrants the quality of the products it designs and manufactures to be free of defects in material and workmanship for one year from date of purchase for pulleys, cam gears and aluminum flywheels and 90 days from date of purchase for all stages of clutches. This limited warranty is extended only to the individual purchaser who has purchased our product from an authorized reseller and may not be transferred or assigned. A list of authorized resellers is available on our web site or can be obtained by calling our main offices. This limited warranty applies to any product, which, after careful inspection by Unorthodox Racing Inc., after receipt of the product/s from our authorized reseller, is found to have a defect in either material or workmanship. **UNORTHODOX RACING, INC. PARTS, USED IN COMPETITION OF ANY KIND, SANCTIONED OR UNSANCTIONED, ARE SOLD "AS IS" WITHOUT ANY WARRANTY WHATSOEVER.** Any modifications to the pulley/pulleys will void any and all warranties and will not be exchanged. Before installation, check new car warranty. Unorthodox Racing, Inc. is not responsible for voiding any original manufacturer warranty. All warranty claims must be returned to Unorthodox Racing or your authorized reseller, you must return the product and sales receipt, at your own expense, accompanied by a letter stating the reason for the claim. **PLEASE REFER TO THE PARAGRAPH BELOW FOR THE PROPER RETURN PROCEDURES.** Any claims for pulleys, cam gears or flywheels must be received no later than one year after the date of purchase. Any claims for clutches must be received no later than 90 days from the date of purchase. If all the above procedures are followed, and the product is found to be defective in either material or workmanship, Unorthodox Racing, Inc. shall either repair or replace the product, at its sole discretion, and at its sole cost. This limited warranty does not cover or apply to any personal injury, labor charges, or any other incidental costs or damages caused by the defective product. **THIS LIMITED WARRANTY IS THE ONLY EXPRESS WARRANTY, WHICH APPLIES TO UNORTHODOX RACING PRODUCTS AND IS EXPRESSLY GIVEN IN LIEU OF ANY OTHER WARRANTY EXPRESSED OR IMPLIED, INCLUDING THAT OF MERCHANTABILITY. ANY IMPLIED WARRANTY INCLUDING THAT OF MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE IS HEREBY LIMITED BY THE SAME TERMS AND TIME LIMITATIONS SET FORTH IN THIS LIMITED EXPRESS WARRANTY AND OTHERWISE EXCLUDED.** You may have rights under either state or federal law, including laws governing warranties, which you should consult. EXCEPT FOR THOSE OBLIGATIONS ASSUMED HEREIN, UNORTHODOX RACING, INC. ASSUMES NO OTHER OBLIGATIONS IN CONNECTION WITH THE SALE OF ITS PRODUCTS.

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