

# UNORTHODOX



## RACING

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# 220910602 contains a crank pulley: underdrive stock belt layout (Tuner S) Part# 2209106. Check that the part number matches the number on the sticker 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# 01.09.304.0\_ for 1990-94 2.0L Models Only.
- Accessory pulley: alternator (Ultra A) Part# 01.09.306.0\_ for 1995-99 Turbo Models Only.
- Accessory pulley: power steering (Ultra A) Part# 01.09.406.0\_ for 1995-99 Turbo Models Only.
- Accessory pulley: water pump (Ultra A) Part# 01.09.504.0\_ for 1990-94 2.0L Models Only.
- Accessory pulley: water pump (Ultra A) Part# 01.09.506.0\_ for 1995-99 Turbo Models Only.
- Adjustable cam gears (Ultra T) Part# 05.09.004.0\_ (Except 95-99 NA or 95-96 Turbo) (One pair of cam gears).
- Adjustable cam gear (Ultra T) Part# 05.09.014.0\_ 1995-96 Turbo Models Exhaust Cam Gear Only (One single cam gear).
- Aluminum flywheel (Ultra L) Part# 06.09.104.00 1990-04/92 2WD Turbo.
- Aluminum flywheel (Ultra L) Part# 06.09.106.00 05/92-1999 2WD Turbo.
- Aluminum flywheel (Ultra L) Part# 06.09.114.00 1990-04/92 AWD Turbo.
- Aluminum flywheel (Ultra L) Part# 06.09.116.00 05/92-1999 AWD Turbo.
- Performance clutch kits (Ultra G) available for all models, kits include pressure plate, disc, required bearings and an alignment tool.
  - Stage 1: Full faced Kevlar disc holds 20-40% more power than the stock clutch (Available in solid or sprung hub disc).
    - Designed for stock to mildly modified cars with no forced induction or nitrous and limited track use.
  - Stage 1: Windowed Kevlar disc holds 40-60% more power than the stock clutch (Available in solid or sprung hub disc).
    - Designed for mildly modified cars with up to 6 psi or boost or up to 50HP shot of nitrous and some track use.
  - Stage 2: Six (6) puck disc holds 60-80% more power than the stock clutch (Available in solid or sprung hub disc).
    - Designed for mild - highly modified cars with up to 15 psi or boost or up to 100HP shot of nitrous and track use.
  - Stage 2: Four (4) puck disc holds 80-120+% more power than the stock clutch (Available in solid or sprung hub disc).
    - Designed for highly modified cars with up to 25 psi or boost or up to 200HP shot of nitrous and major track use.

## Installation Instructions

### **1990-94 All, 1995-99 Turbo Only: Eclipse / Laser / Talon / 1992-96 Elantra 1.8L**

- **Notice:** These installation instructions are not a replacement for the factory manual; some factory specified tools may be required for removal of the original parts.
- Loosen the lug nuts on the driver's side front wheel.
- Raise the driver's side front of vehicle and secure with a jack / safety stand.
- Remove the drivers side front wheel and remove the plastic wheel well shroud.
- Loosen the crankshaft pulley bolts but do not remove yet.
- Loosen and remove all accessory belts except the power steering belt. Loosen A/C tensioner bracket enough to allow clearance for removal and installation of the accessory belt.
- Remove the original crankshaft pulley.
- Install the new underdrive pulley. Lightly coat the inner bore and back section of pulley, which contacts the crankshaft, and tighten the four bolts, see the 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 crankshaft, as damage to both will occur voiding the warranty.** In the rare case that a pulley is tight clean crank snout (as they can get slightly rusty) with emery cloth until pulley slides on as stated. The dowel pin used to locate the pulley may be of the split variety, if it has spread it may not allow the pulley to mount, just tap with a hammer until split is even and pulley mounts.
- Install the new accessory belts in the reverse order, see the necessary new belt sizes below.
- Tighten the belts to factory tension specifications (Do not over tighten belts as damage to the pulley will occur voiding the warranty).
- The maximum HP gains from the pulley/s can be expected within 5-7 days of driving, once the computer has recalibrated fully and taken advantage of the engines lighter rotational weight.

### Crankshaft Pulley Bolts Torque Specification

- 14-22 ft-lbs. / 168-264 in-lbs. / 19-30 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)

- Alternator & Water Pump Belt : 1990-94 Gates K040365 (37 1/8" or 945MM), alternate size use Gates K040355 (36 1/8" or 920MM)  
w/Hahn Racecraft Super 16G or 20G kits use Gates K040388 (39 3/8" or 1000MM)  
1995-99 Turbo Gates K040384 (38 7/8" or 985MM)
- Air Conditioning Belt: 1990-94 Gates K040378 (38.5" or 980MM)  
w/Hahn Racecraft Super 16G/20G kits use Gates K040388 (39 3/8" or 1000MM)  
1995-99 Gates K040365 (37 1/8" or 945MM)

\* 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!

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For technical assistance before, during or after installation please feel free to contact our technical support line at 631-586-9525 ext. 12 (Monday-Friday 10AM to 6PM EST)

## **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.

We sometimes make mistakes, as do our authorized dealers, even customers can order the wrong parts. **DO NOT USE, MODIFY, INSTALL, TRIAL ASSEMBLE, MARK, NICK, DROP, SCRATCH OR BALANCE ANY PART UNTIL YOU FIRST CHECK FOR ANY DAMAGE AND THE PART IS CORRECT FOR YOUR APPLICATION.** Shortages must be reported within five (5) business days of receipt. Damage must be reported immediately, no exceptions. For any shortages or damage please contact Unorthodox Racing Inc or your authorized reseller immediately upon receipt of the shipment. Any parts not purchased directly from Unorthodox Racing Inc, must be processed through the authorized reseller from which you purchased the product. E-Store order return claims must be received within 30 days of the invoice date in order to receive a full credit of the purchase price (less the shipping & handling cost). Any returns after 30 days will be assessed a 30% re-stock fee. If you need to return parts purchased from a dealer you must make your claim for return through that dealer. If you purchased items directly from Unorthodox Racing Inc., discontinued and blow out items are final sale only, please contact our customer service department, they will issue you a "RETURN MERCHANDISE AUTHORIZATION" number (RMA#). For any returns write this RMA number on the outside of the box so that our receiving/shipping department or the authorized resellers receiving/shipping department can expedite the claim. **THE RETURNED PARTS MUST BE IN RESALEABLE CONDITION; THAT IS, IN THE SAME CONDITION YOU RECEIVED THEM. IT IS YOUR RESPONSIBILITY TO CAREFULLY PACKAGE ANY RETURNS TO AVOID SHIPPING DAMAGE, INSURANCE IS HIGHLY RECOMMENDED. CREDIT WILL NOT BE ISSUED FOR DAMAGED GOODS.**

**PLEASE CALL IF YOU HAVE ANY QUESTIONS OR DO NOT UNDERSTAND THIS WARNING!** Refer to our catalog for other terms and conditions. We appreciate your business. The purpose of this warning is to avoid any problems or hard feelings. We will bend over backwards to help you.

[www.unorthodoxracing.com](http://www.unorthodoxracing.com)