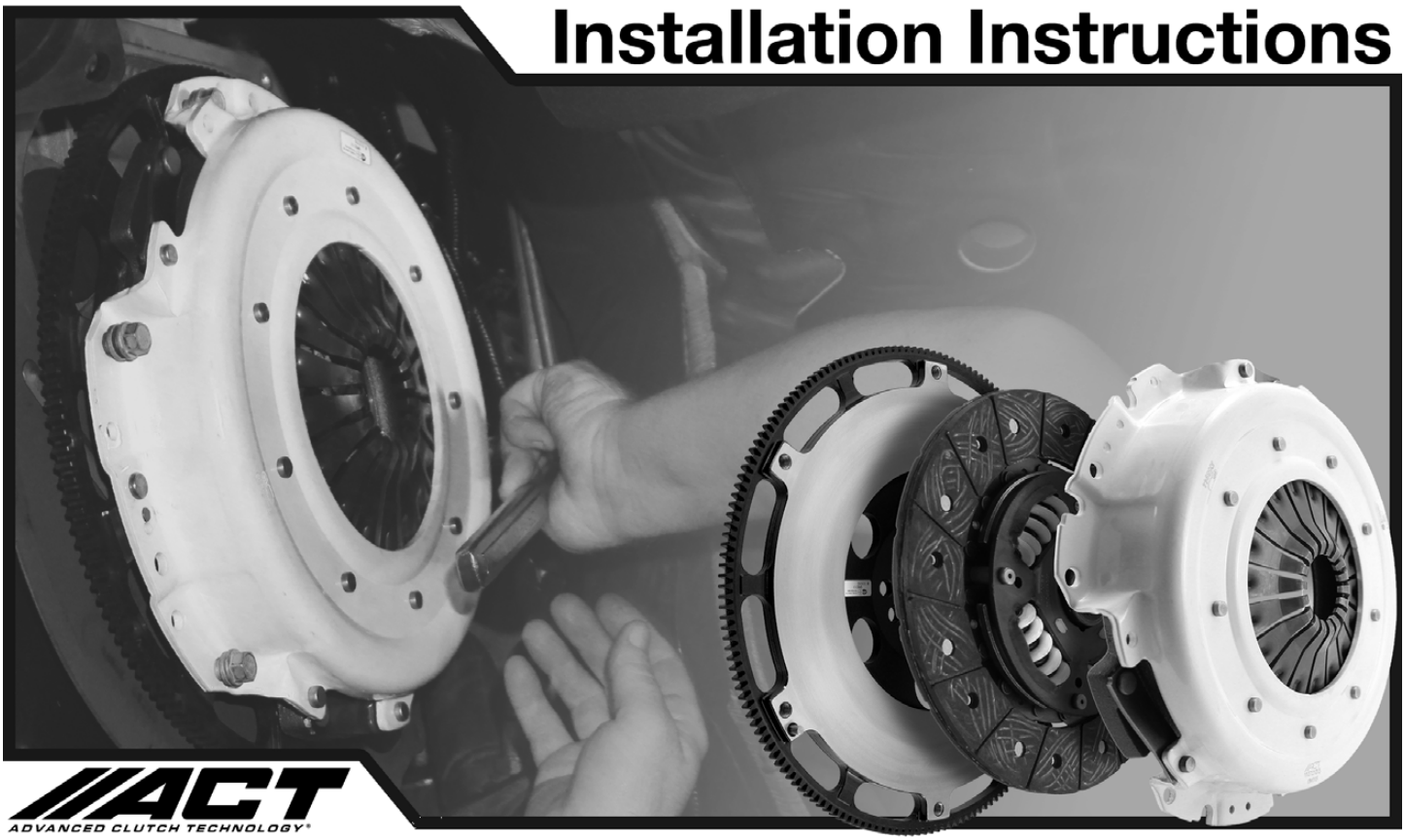
Installation Instructions



ADVANCED CLUTCH TECHNOLOGY®

ENGLISH INSTRUCTIONS

⚠WARNING Warning Symbols
How can you reduce the risk of personal injury to yourself or others and ensure the proper performance of your new clutch? Answers to such questions are contained in comments highlighted by the warning triangle symbol. These comments should be read and observed. Failure to do so may lead to serious injury, death or clutch failure.

⚠WARNING Failure to follow the vehicle manufacturer's installation procedures and specifications as the primary source of information and ACT's installation instructions as a secondary source may lead to serious injury, death or clutch failure. Installation should only be performed by an experienced, knowledgeable technician.

This is a high performance product. With the additional performance gained from this product, you may experience additional wear or potential failure to the other vehicle components, such as (but not limited to) tire wear, twisted axles or input shaft, broken transmission or differential gears and even pedal assembly or engagement system damage.

⚠WARNING Failure to properly install and utilize ACT's performance products in conformance with the vehicle manufacturer's and ACT's instructions may cause loss of vehicle control, damage or possible bodily injury or death. Always operate your vehicle within the performance guidelines of the vehicle manufacturer and in conformance with the instructions set forth in the owner's manual. It is your responsibility as the vehicle owner and modifier to ensure that all components are in proper working condition and maintained in conformance with the vehicle manufacturer's instructions to handle the increase in performance.

⚠WARNING Always ensure components are correct for the proposed application prior to installation. Consult your ACT catalog or supplier, as installing a clutch to the wrong application will void the warranty and may lead to loss of vehicle control, damage or possible bodily injury or death.

The new clutch components may look different from the previous parts produced from another manufacturer. Pressure plate must fit on locating dowels, where applicable, for proper centering. Rotating pressure plate may be necessary to line up offset dowels. Slide disc on transmission shaft to ensure proper fit onto input shaft. Verify correct fit of release bearing and pilot bearing (if applicable). Any modifications to the pressure plate or disc will void the SFI Certification and warranty.

Prior to installation, a thorough inspection of the existing clutch and operating system must be performed. If you are unable to determine the condition of the old clutch and operating system or are unable to confirm the absence of any of the issues discuss, seek professional advice and inspection prior to installing a new clutch. Failure to do so may void the warranty and may lead to possible damage or bodily injury or death.

Recognizing that every vehicle and clutch design is different, the inspection of the existing clutch and operating system will vary and should include, but is not limited to, the following:

1. Check hydraulic system, bearing free travel, clutch cable, oil leaks, rear main seal and transmission seal. Inspect releaser guide tube, release fork, pivot stud and cross-shaft bushings for wear. Inspect the flywheel for cracks. Any of these potential issues must be corrected before installing a new ACT clutch.

2. Inspect friction face of the flywheel to ensure it is in working condition. If abnormal wear, or deformation by heat is found, the flywheel must be replaced or resurfaced to avoid malfunction. However, flywheel resurfacing should only be performed by a professional. Use proper step height when resurfacing flywheel as this is critical to the function of the clutch. Pressure plate locating dowels must be properly installed.

⚠WARNING To avoid the potential for catastrophic failure, replace flywheel if any cracks are present.

3. Clean the flywheel and pressure plate surfaces with solvent or detergent. Clutch slippage or chatter can be caused by a dirty or oily surface.

PRESSURE PLATE INSTALLATION INSTRUCTIONS

Once the inspection is complete and you have determined that there are no issues or problems with the existing clutch or operating system, installation of the new clutch can be accomplished as follows (note: every vehicle and clutch design is different and may vary):

1. Lightly grease the splines of the disc and slide the new disc on the input shaft to ensure fit and smooth travel, and wipe off any excess grease. Replace pilot bearing/bushing, and apply a light coat of motor oil to bushings, or high temperature bearing grease to needle-type bearings.

2. Use an alignment tool to center the disc against the flywheel. Manually tighten pressure plate bolts using a star or diagonal pattern. ACT recommends using metric grade 10.9 (SAE grade 8) or stronger fasteners. The use of high temperature thread-locking compound is recommended for performance applications. Tightening torque specifications will vary with bolt size and grade. The following torque specifications are recommended by ACT for new pressure plate bolts with the corresponding sizes using metric grade 10.9 or SAE grade 8 bolts:

7 mm x 1.0 . . . . . 15 ft-lbs / 20Nm	**5/16 x 18 . . . . . 29 ft-lbs / 39Nm**
8 mm x 1.0 . . . . . 25 ft-lbs / 34Nm	**5/16 x 24 . . . . . 29 ft-lbs / 39Nm**
8 mm x 1.25 . . . . . 26 ft-lbs / 35Nm	**3/8 x 16 . . . . . 45 ft-lbs / 61Nm**
10 mm x 1.25 . . . . . 50 ft-lbs / 68Nm	**3/8 x 24 . . . . . 48 ft-lbs / 65Nm**
10 mm x 1.5 . . . . . 50 ft-lbs / 68Nm	

If you choose factory standard bolts and are unsure of the grade of fastener, use the factory recommended torque values.

3. Lightly lubricate the release bearing inside diameter and the mating surfaces between the fork and releaser. Lubricate the clutch linkage as recommended by the vehicle manufacturer.

4. Make sure all bellhousing dowels are in correct position and tighten bellhousing bolts.

Any misalignment will result in premature clutch failure. Correctly support the transmission during installation. Neglecting to do so may cause clutch damage and premature failure.

5. Adjust the clutch release system by following the vehicle manufacturer's procedures and specifications. Recommended break-in for ACT Street discs is 300-500 miles of mild street driving. Avoid driving habits that would allow excessive slipping or overheating of the clutch.

⚠WARNING Failure to properly break-in the ACT Street discs may result in clutch damage and premature failure.

FLYWHEEL INSTALLATION INSTRUCTIONS

1. Inspect the flywheel packaging and marked part number to be sure the item is the correct flywheel for your application. Verify that all dowels are in place and that the SFI Certification sticker and serial number are on the part.

Any modifications to the flywheel will void the SFI Certification and warranty.

2. If required, install a new pilot bearing into the flywheel. This must be pressed in by applying force to the outer bearing (race only).

3. Line up the flywheel to the hole pattern and install new factory flywheel bolts using thread-locking compound for extra assurance. For some applications, bolts are provided. Always consult the factory service manual for proper torque specifications.

For racing applications, consider using the highest strength fasteners available. Consult your bolt supplier or expert engine builder for recommended torque specifications.

4. Replace clutch components using ACT pressure plate installation instructions.

TECHNICAL INFORMATION

1. Racing
ACT certifies many clutches and flywheels to SFI specifications for racing purposes. Check product packaging and product labels to determine if a product is SFI-certified. For your safety, always operate within recommended RPM limits set by the automobile manufacturer, do not overheat the clutch and conform to all rules set by the sanctioning organization. For high RPM applications, a bellhousing scatter shield should always be used to minimize chances of personal injury.

Racing is inherently dangerous. ACT accepts no responsibility, of any kind, for parts used for racing applications. ACT only certifies that certain parts conform to SFI specifications.

2. Release Point Adjustment — Hydraulic System
On some applications, the clutch pedal engagement point may be closer to the floor than with the stock clutch. For many vehicles, the engagement point can be changed by adjusting the master cylinder push rod. This adjustment is made by screwing the push rod further into the master cylinder to allow for earlier actuation. Never preload the master cylinder. Pedal travel may also be increased by adjusting the pedal stop, where equipped. Most vehicle service manuals include instructions and adjustment specifications. Aftermarket clutch pedals, floor mats or carpeting may hinder full pedal travel, affecting proper clutch function.

3. Flywheel Resurfacing
Flywheel resurfacing must be performed by a competent professional using proper machinery.

A smooth and flat flywheel surface is critical to proper clutch operation and longevity. It is extremely important to maintain the proper step in the flywheel. Rebalancing the flywheel, following resurfacing, is also recommended. Maintaining balance of the flywheel will insure that the engine will stay smooth and can reach high RPM without damage to the engine.

4. Frequently Asked Questions (FAQs) and Technical Bulletins:
For an updated list of FAQs and Technical Bulletins, please visit our website.

5. Disc Thickness and Allowable Wear
The majority of our discs measure 8mm thick when compressed. The allowable wear for most discs is approximately 2mm of material (compressed disc thickness of 6mm).

6. SFI Re-certification
If inspection and recertification to SFI specifications is required for the clutch or flywheel please call for quotation and RGA (Returned Goods Authorization) number prior to sending the parts.

LIMITED RETAIL WARRANTY

ACT warrants all automotive products to be free of defects in materials and workmanship for normal use and service for a period from retail purchase. Written notice must be immediately given to ACT within the warranty period. We require a copy of the purchase receipt showing the unit was purchased from an Authorized Dealer to verify the product is under warranty. Products purchased used do not carry a warranty. This warranty is to the original purchaser and is non-transferable.

ACT reserves the right to examine any part returned for warranty claim to determine, to ACT's satisfaction, whether the material or workmanship of the part does not conform to this limited warranty. ACT's obligation under this warranty shall be limited to repairing, replacing, or crediting, at its option, any part which is deemed covered by ACT. No labor, lift or storage charges will be reimbursed for any reason. Damage to ACT's parts resulting from misuse, improper use, or abuse shall void this limited warranty. Failure to follow ACT's installation instructions and the vehicle manufacturer's installation procedures and specifications shall void this limited warranty.

ACT undertakes no responsibility for the quality of the goods except as otherwise provided in this contract. ACT assumes no responsibility that the goods will be fit for any particular purpose for which you may be buying these goods, except as otherwise provided in the contract. ACT shall not be liable for any damage or injury to persons or property resulting from improper installation or misuse of any part subject to this warranty.