## SYZR Pedal Disassembly

# Tools Needed: T-15 Torx Wrench, 8mm hex key, 8mm thin-walled Socket, T-10 Torx Wrench, and 15mm Open-end Wrench.

Step 1. Remove the pedal body dust cap with an 8mm hex key.

- Step 2. Slightly loosen the four (4) T-15 body screws that secure the Metal Body Plates to the pedal bodies. There are two (2) screws located on each side of the pedal body.
- Step 3. The entire spindle unit (containing Alloy Bearing Sleeve and bearings) can be removed from the pedal body by pulling the threaded end of the spindle away from the body.
- Step 4. To remove the Alloy Bearing Sleeve and internal bearings from the spindle, use a 8mm thin-walled socket to remove the nut from the end of the spindle.
- Step 5. Slide the Alloy Bearing Sleeve, Outer Dust Boot and "O" ring off of the spindle.

#### Lubrication and Reassembly

Use a high-quality, waterproof grease on bearings and use a new "O" ring (grease it too) when overhauling the SYZR Pedals. Speedplay recommends using a high quality, waterproof grease for lubrication. **IMPORTANT - Never use a spray-type or liquid lubricant on pedal bearings.** Any worn or damaged parts should be replaced. Reassembly is accomplished by reversing the order of the above instructions. **Be sure flats of sleeve fit into the corresponding flats on composite body** (See diagram).

#### NOTE: Damage due to the lack of lubrication is not covered by Speedplay's warranty policy.

Speedplay Grease Guns (part #13175) and replacement 3 oz. Grease Tubes (part #13560) are available from Speedplay retailers or call Speedplay. Speedplay Pedal Systems are high performance products. Like all high performance products, Speedplay Pedal Systems require care and maintenance.

Be sure to tighten the 8mm spindle nut to 4 Nm / 35 inch pounds to ensure the Alloy Sleeve and bearings remain firmly seated on the spindle. Be sure to tighten the T-15 body screws and 8mm hex dust caps securely to ensure the pedal bodies remain firmly fastened to the Alloy Bearing Sleeve.

securely to ensure the pedal bodies remain firmly fastened to the Alloy Bearing Sleeve. <u>AWARNING</u> TIGHTEN T-15 BODY SCREWS SECURELY (2.5 Nm / 22 inch pounds).

AWARNING TIGHTEN DUST CAP SECURELY (6 Nm / 55 inch pounds).

**WARNING** Be sure to overhaul one pedal at a time to keep the Left body components with the Left spindle and the Right body components with the Right spindle.

NOTE: Failure to properly seal the bearing compartment during reassembly will result in permanent bearing damage from water contamination, which is not covered by Speedplay's warranty policy.

**WARNING** Maximum SYZR body T-15 screw torque is 2.5 Nm / 22 inch pounds. Do not overtighten SYZR T-15 screws. See WARNINGS under "General Safety Information".





### Instructions For Pedal Bearing Lubrication Using the Built-In Grease Port

**NOTE:** Always use a high quality <u>Waterproof Bearing Grease</u>. Never use a liquid spray lubricant or oil on Speedplay Pedal bearings. Speedplay recommends that the SYZR Pedal bearings be greased with a grease gun at least every 2000 miles or every three months. Pedals should always be lubricated immediately after riding in wet, rainy or unusually dusty conditions.

NOTE: Speedplay SYZR Pedals require service if they either spin freely without the slight resistance of the protective "O" ring or if any grinding sensation is detected.

- 1. Remove the Grease-Port Screw with a #1 Phillips screwdriver.
- 2. Insert needle-type grease injector gun into grease port hole.
- Pump gun slowly while turning SYZR Pedal body slowly until clean grease is visible at spindle end of pedal body.
- 4. Wipe off excess grease and reinstall Grease-Port Screw.
- 5. Push the dust boot firmly against pedal bearing sleeve to ensure a watertight seal.

**NOTE:** <u>Damage due to the lack of lubrication is not covered by Speedplay's warranty policy.</u> Speedplay Grease Guns (part #13175) and replacement 3 oz. Grease Tubes (part #13560) are available from Speedplay retailers or call Speedplay. Speedplay Pedal Systems are high performance products. Like all high performance products, Speedplay Pedal Systems require care and maintenance. For a long life and to keep the system functioning as designed, maintain the pedals and cleats as recommended.



### **General Safety Information**

**AWARNING** To Avoid Serious Injuries:

Bicycle dealers -- be sure to give all instructions and warranty information to end customer.

- Pedals equipped with Titanium spindles have a rider weight limit of 185 pounds.
- Riding bicycles is an inherently dangerous activity. Clipless Pedals are not for beginner riders. All bicycle parts, both new and used, must be inspected carefully before use, and riders must exercise judgment as to the safety of each part. All bicycle components should be inspected for safety on a regular basis, preferably before each ride.
- Read all instructions carefully before using this product. Failure to follow these instructions and warning statements before assembling and using this system may result in severe injury. Improper mounting and/or use of this product can result in severe injury.
- Speedplay Pedals are not equipped with reflectors and are not intended for nighttime or other reduced visibility riding conditions. Do not expect Speedplay Pedals to improve your chances of being seen in conditions of darkness or reduced visibility. Always use a proper headlight and taillight when riding at any time of reduced visibility.
- If you have any doubts about your ability to correctly install Speedplay Pedals or Cleats, or if you are unsure about the extent of wear to any Speedplay Pedal or Cleat part, please return it to your dealer for proper installation or inspection, or call Speedplay at 001-858-453-4707(PST) or toll free at 1-800-468-6694 (PST). If you have any questions or concerns about issues such as shoe compatibility, operating the release mechanism, the intended use of the Pedals, or the maintenance of this product, call Speedplay.
- The LEFT and RIGHT SYZR Cleats are different. Be sure to install the Cleat marked "L" on the LEFT shoe and the Cleat marked "R" on the RIGHT shoe.
- ONLY use Speedplay proprietary mounting hardware with Speedplay Cleats.
- Always tighten the threaded screws or nuts on the Pedals and Cleats to the recommended torque settings for each part. See instructions for Pedal Mounting and Steps for Attaching SYZR Cleats to Shoes. Over-tightening a threaded part may cause serious damage to the part or prevent it from working properly. Under-tightening threaded parts can cause a part to become loose and fall out. Either under-tightening or over-tightening a threaded part can lead to a fall that can result in severe injury.
- Speedplay SYZR Cleats require routine lubrication and cleaning to prevent serious injury while riding. See
  Instructions for Routine SYZR Cleat Maintenance and Routine SYZR Pedal Maintenance. Keep all
  Pedal and Cleat parts clean of debris and properly lubricated in order to ensure proper engagement and
  release. Speedplay SYZR Pedals require the Cleat to be lubricated routinely with a dry-type lubricant. SYZR
  Pedals and Cleats wear out over time and must be replaced. To prevent serious injury while riding, be sure
  your entire bicycle is adequately maintained and that all components are correctly installed and adjusted.
- Never ride with Speedplay Pedals or Cleats that are improperly installed, modified or excessively worn. Remember to check the Cleats and Pedals periodically for wear. When parts exhibit noticeable "play" or are visibly worn, replace them immediately. <u>Never install cleats using any combination of new cleat parts</u> <u>and old cleat parts</u>. When replacing cleats, replace all used parts with new SYZR<sup>™</sup> Cleat parts. A loose, over-tightened, damaged, unlubricated, or worn part may cause the Pedal System to disengage unexpectedly and cause a fall that could result in severe injury.
- Before your first ride with these Pedals, you should engage and disengage each Pedal with one foot on the ground on a level, safe place until you are adept and comfortable with all operations of the Speedplay SYZR Pedal System. Whenever you ride at slow speed or whenever you are stopping, release your shoes from your Pedals beforehand so that you can quickly place your foot on the ground at any time. Disengaging from SYZR Pedals is achieved by an outward twist of the heel. Speedplay Pedals are not designed to release automatically at times such as when falling off the bicycle. You must twist your heels outward to unclip from the pedals. This is a safety measure to prevent you from losing balance and falling off the bicycle as a result of your feet becoming accidentally released from the Pedals.
- Failure to follow these warning statements and instructions before assembling and using this Pedal System may result in severe injury.

## **Basic Features of SYZR Pedals**

SYZR Pedals allow cyclists to locate their pedals by "feel", eliminating the need to first look down to see the position of the pedal. The large pedal platform gives you a suitable platform surface when riding whether or not you are clipped in. The SYZR's built-in spring-tension adjustment screws on the pedal body allow the effort required for engagement and disengagement to be fine-tuned to personal preference. A convenient built-in Grease Port in each pedal allows instant greasing of the pedals without requiring disassembly. Precision needle and cartridge bearings ensure low rolling resistance and long bearing life.

## **Basic Features of SYZR Cleats**

The SYZR Cleat's open architecture is self-cleaning, which minimizes clogging with dirt or mud. Nonrecentering free float is designed into the cleat base. Inward and outward float-limit screws located in the cleat allow micro-adjustment of the pedal's float range. SYZR Cleats are made of heat-treated alloy steel for maximum durability.

#### **Basic Operation**

Speedplay SYZR Pedals are dual-sided for convenient entry. Entry technique is simple to master, and combined with a little practice, ensures that pedal engagement can be performed instantly and effortlessly in any conditions. Use the following technique to engage and disengage from SYZR Pedals: **Step 1**. Place your foot on the top of the pedal.

Step 2. Push forward to engage the locking mechanism when the pedal is in the lower half of the pedal stroke.

**Step 3**. Pedal release is accomplished by turning your heel outward while lifting your foot upward. **WARNING** SYZR Pedals do not disengage automatically in the event of a fall. You must twist your heel outward to unclip from the pedal.



#### **Pedal Mounting Instructions**

To install SYZR Pedals, take special care to install the RIGHT pedal in the RIGHT crankarm and the LEFT pedal in the LEFT crankarm (Pedals are marked with either an "L" or an "R" on the spindle). Remember that the left spindle has left-hand threads. Tighten the pedals (28.2 Nm / 250 inch pounds torque) with a 15mm wrench. Keep in mind that applying too much torque may damage your crankarms and / or the wrench flats on your pedals.



### Steps for Attaching SYZR Cleats to Shoes

SYZR Cleats fit only shoes with a two-bolt recessed mounting pattern. SYZR Pedal Systems contain a Right and Left specific cleat for Right and Left shoes, respectively.

- Step 1. Select the Right SYZR Cleat (marked "R") for the Right shoe. Be sure the "R" letter stamped on the front of the cleat is pointed toward the toe-end of the shoe. These mounting procedures will be the same for mounting the Left SYZR Cleat (marked "L") to the Left shoe.
- Step 2. Grease the threads and heads of the 5X13.5mm mounting screws before installation to prevent corrosion over time due to moisture. Use only Speedplay proprietary screws as other brands of mounting screws are not compatible with SYZR Cleats.
- Step 3. Position the cleat under the ball of the foot with the Cleat Funnel Guides facing forward. Be sure the "R" and "L" letters stamped on the front of the cleat are oriented toward the toe-end of the shoe.
- Step 4. Once each cleat is positioned correctly, tighten the two mounting screws on each shoe securely (5 Nm / 44 inch pounds torque) with a 4mm hex wrench. Re-torque after one week and then check the torque from time to time to ensure that the cleat screws remain properly tightened.

**WARNING** Maximum mounting screw torque is 5 Nm / 44 inch pounds. Do not over-tighten SYZR mounting screws. See **WARNINGS** under "**General Safety Information**".

**WARNING** After the first few rides, SYZR cleat mounting screws should be re-tightened to make sure screws are securely tensioned to 5 Nm / 44 inch pounds.

SYZR Pedals are designed to fit recessed cleat style shoes. In order to function properly and perform as designed, the cleat must be recessed below the surface of the shoe tread. If the cleat is used on shoes that are excessively worn or if the cleat is not fully recessed, excessive and premature cleat wear will result



### Adjusting the Range of Float

The SYZR Pedal System provides a 10° range of float that can be easily and precisely adjusted for both heel-in float and heel-out float, and either direction can be adjusted independently of the other. Maximum float of 10° is provided by retracting both limit screws with a 2mm hex key. Minimum float is provided by tightening the limit screws. Less float can be obtained by tightening one or both of the limit screws until they both contact the float range indicator. Do not continue to tighten the screws once they contact the float range indicator or cleat damage may occur. If mud fills the adjustment screw head, remove the mud with a straightened paper clip or pick tool.

The front float limit screw controls heel-out float. The rear float limit screw controls heel-in float. Once the limit screw contacts the float range indicator, rotating your foot outward will open the pedal engagement mechanism and allow you to disengage from the pedal. The outward foot release angle from SYZR Pedals INCREASES when the float range is increased. The outward foot release angle of SYZR Pedals DECREASES when the float range is decreased. <u>AWARNING</u> Before your first ride with the SYZR Pedal System, separately engage the LEFT shoe

with cleat onto the LEFT Pedal and the RIGHT shoe with cleat onto the RIGHT Pedal. When the SYZR Cleats are mounted correctly, the SYZR Cleat should float in the SYZR Pedal with little resis-tance and should emit a crisp, audible snap when the cleat engages the pedal. <u>AWARNING</u> Speedplay SYZR Cleats must be properly mounted and adjusted or inadvertent re-

lease may occur causing a fall that could result in severe injury.

NOTE: When riding with SYZR Cleats adjusted with the float range fully open (for maximum rotational float), engagement may require angling the foot slightly in a toe-in direction. The slight toe-in foot angle will align the cleat for proper engagement.

# Adjusting Pedal Spring Tension for Safe Engagement & Disengagement

The SYZR Pedal System has a spring tension adjustment that allows the user to precisely adjust to personal preference the effort required to engage and disengage from the pedals. When adjusting spring tension, remember that spring tension affects the effort required for both engagement and disengagement. Be sure that you can safely engage and disengage the pedals before riding. Contaminants such as mud, sand and water, or lubricants affect the effort required for both entry and release. Contaminants make release harder, and lubricants make release easier. Be sure to adjust the spring tension to suit your riding conditions. It is recommended that you take a 2mm hex or T-10 Torx wrench along on your initial rides to allow tension to be tuned to personal preference and riding conditions.

AWARNING Be sure to adjust the Tension Adjustment Screw to your preferred release tension for guick and safe disengagement. If the Tension Adjustment Screw is over-tensioned requiring more force to disengage, the rider may be unable to quickly release causing a fall that could result in severe injury. Tightening the Tension Adjustment Screw in a clockwise direction with a T-10 Torx wrench / screwdriver or a 2mm hex key will increase tension of the engagement mechanism and require greater effort to engage and disengage the cleat. To decrease the amount of effort/force required to engage and disengage. loosen the Tension Adjustment Screw in a counter-clockwise direction to your preferred tension setting. The Tension Adjustment Screw must not be backed out beyond the threads of the Spring Nut. NEVER remove the Tension Adjustment Screws from the SYZR Pedals or damage to the pedal will result. Do not continue to tighten the Tension Adjustment Screws once they contact the Metal Body Plate or pedal damage may occur.

WARNING SYZR Pedals are not designed to be ridden using a toes-down foot orientation. Applying weight or force to the pedals in a toe-down foot position may unlock the engagement mechanism, particularly when spring tension is adjusted to a low setting. Always ride SYZR Pedals with your feet in a flat (horizontal to the ground) orientation to prevent inadvertent release from the pedals. The flat foot orientation is especially important when descending on bumpy surfaces or when pushing hard on the pedals.

NOTE: For best results when riding SYZR Pedals in mud or wet sand, it is important to keep the cleat and pedal contact areas lubricated with a lightweight, dry-type lubricant.

#### Routine SYZR Cleat Maintenance

SYZR Pedals require the SYZR Cleat and Pedal engagement edges to be lubricated routinely with Speedplay SP-LUBE (p/n 13800) or other dry-type (PTFE) lubricant, preferably every one or two rides. The SYZR Cleat's central pivot bushing requires routine lubrication to ensure optimum functionality and maximum durability. Additional maintenance is required when the cleats are used in wet conditions. After riding in wet conditions, brush off mud etc. and lubricate the cleats with any rust preventative lubricant. Then to prevent corrosion, store shoes in a well ventilated area and allow the cleats and shoes to properly air dry.

**WARNING** Never attempt to remove the four (4) roller inserts from the SYZR Cleat. The roller inserts are permanently installed and cannot be removed or replaced. Removing the roller inserts will cause irreparable damage to the SYZR Cleat.

NOTE: Damage as a result of lack of lubrication, improper installation, or removal of the roller inserts is not covered by Speedplay's warranty policy. NOTE: Remove mud and debris from the cleats after riding. After off road or wet use, brush mud or

dirt off the cleats and wipe them dry. Lube the cleat hub bushing (see image) with 1 or 2 drops of chain lube or similar rust preventative lubricant and store the shoes in an open air location. This service will protect the cleat parts from damage due to corrosion.



#### Routine SYZR Pedal Maintenance

**NOTE:** Always use a high quality <u>Waterproof Bearing Grease</u> on the pedal bearings. Never use a liquid spray lubricant or oil on Speedplay Pedal bearings. Speedplay recommends that the SYZR Pedal bearings be greased with a grease gun at least every 2000 miles or every three months. Grease bearings more frequently if used in unusually wet or dusty conditions.

NOTE: Speedplay SYZR Pedals require service if they either spin freely without the slight resistance of the protective "O" ring or if any grinding sensation is detected.

**NOTE:** <u>Damage due to the lack of lubrication is not covered by Speedplay's warranty policy.</u> Speedplay Grease Guns and Grease are available from Speedplay retailers or call Speedplay at 1-800-468-6694.

If you have any questions or concerns about the maintenance of SYZR Cleats or whether your SYZR Cleats should be replaced, call Speedplay.

#### SYZR Cleat Disassembly:

- 1. Remove the cleat from the shoe.
- Hold the Syzr Cleat in a gloved hand by the outside ring of the Silver Cleat Body Unit. A glove is required for hand protection from the sharp edges of the cleat.
- Using a 5mm Hex key or similar blunt tool, firmly press down alternately on both of the black plastic bosses of the Black Composite Central Hub that project through the Cleat Retainer Cap until the assembly comes apart.

The use of gloves is required when disassembling SYZR cleats to prevent injury to your hands when handling tools and cleats.

#### LIMITED (TWO YEAR) WARRANTY

This Speedplay product is warranted under normal usage against defects in workmanship and materials to the original purchaser for a period of two (2) years from the date of purchase free of charge provided the claim is made within thirty (30) days of the discovery of the defect and the following condition is met: The purchaser must obtain advance authorization by calling Speedplay at 800-468-6694 toll free or (858) 453-4707 before returning any product for warranty inspection. A Return Authorization (RA) number will be issued and must conspicuously appear on the outside of the product's packaging. The issuance of an RA number does not constitute acceptance of the claim. The determination of whether the claim is covered by this warranty is within the sole discretion of Speedplay, Inc. The part(s) requiring service or replacement must be returned to Speedplay, either by the purchaser or a Speedplay dealer. Insurance, handling and transportation charges for service shall be borne by the person desiring service. This warranty is limited to the repair or replacement of this product. Speedplay, at its option, will either repair or replace any defective parts.

For a warranty claim to be honored, the following information must accompany the returned product:

- a) A copy of the original dated receipt or other proof of retail purchase.
- b) A detailed description of the problem with the product along with the R.A. number.
- c) Identification of the shoe brand and model used in conjunction with the product.
- d) Estimate of product usage (in accumulated mileage).
- e) Your name, street address (no P.O. boxes) and phone number(s) where you may be reached.
- f) The product must be securely packaged and sent insured through a traceable shipper.

The repaired product or replacement will be returned to the purchaser or the Speedplay dealer usually within two weeks. Product furnished as replacement will continue to be covered under this warranty until two years after the date of original purchase.

Limits and exclusions: Not covered by warranty is damage resulting from normal wear and deterioration occurring from use, accidents, neglect, improper assembly, misuse, abuse, lack of reasonable or proper maintenance, corrosion, any damage resulting from causes other than defects in materials and workmanship; failure or loss by accident, alterations, repairs improperly performed, or replacement parts improperly installed, modifications not recommended or approved in writing by Speedplay, labor costs for removal, or compensation for inconvenience or loss of use while the product is being repaired or replaced. This warranty also does not cover cosmetic imperfections in the surface finish, or appearance of the product which were apparent or discoverable at the time of purchase, or damage during shipment of the product.

There are no warranties which extend beyond the face hereof. All warranties implied by state law, including the implied warranties of merchantability and fitness for a particular purpose, are expressly limited to the duration of the limited warranty set forth above. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. With the exception of any warranties implied by state law as hereby limited, the foregoing express limited warranty is exclusive and in lieu of all other warranties, guarantees, agreements and similar obligations of manufacturer or seller.

Speedplay is not liable for indirect or consequential damages in connection with the use of this product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

No person, independent representative, agent, distributor, dealer (including any Speedplay dealer) or company is authorized to change, modify or extend the terms of this warranty in any manner whatsoever. This warranty gives you specific legal rights; you may also have other rights which vary from state to state.