FROG PEDAL DISASSEMBLY

The modular design of Frog pedals permits full disassembly and reassembly of the pedals using only two tools (2.5mm hex key, and an 8mm socket). To disassemble, first remove the two hex head screws from the pedal body. Once the screws have been removed, gently separate the two half-bodies of the pedal by carefully prying them apart, starting at the spindle hole opening. Lift the two halves away from the spindle.

To service the bearings, remove the 8mm nut at the end of the spindle and slide the bearings from the spindle. Speedplay recommends using a high quality, waterproof grease for lubrication. **IMPORTANT - Never use a spray-type or liquid lubricant on pedal bearings.** (Both the grease and grease injector gun for Speedplay pedals are available from Speedplay).

FROG PEDAL REASSEMBLY

AWARNING Be sure to reinstall the Right body halves back on the Right spindle and the Left body halves on the Left spindle. If you accidently switch the bodies and spindle so that the Left body halves are on the right spindle and the Right body halves are on the left spindle you will not be able to release from the pedals by twisting your feet outwards and serious injury may result. TIP: By servicing the pedals one at a time this mistake cannot occur.

Place the O-ring (grease it too) on the spindle, then the needle bearing, followed by the cartridge bearing, and then the locknut.

AWARNING
Tighten the spindle nut securely to ensure the pedal remains firmly fastened to the spindle after reassembly. Once the nut is mounted, install the plastic spacer over the nut and install the spindle assembly into the body halves. Be sure to install the body halves marked "L" on the Left spindle and the body halves marked "R" on the Right spindle or the pedals will not release the cleat once engaged. When reassembling the body halves, be sure to use a latex or silicone-type gasket sealer applied thinly on the flat edges between the body halves. The gasket sealer is required to prevent contamination of the bearing compartment from water or solvents. Install and tighten Frog body screws.

AWARNING Maximum Frog body screw torque is 1.7 Nm / 15 inch pounds. Do not over tighten Frog body screws. **AWARNING** Tighten 8mm locknut securely to 3.6 Nm / 32 inch pounds.

HAND

OVER

INSTRUCTIONS

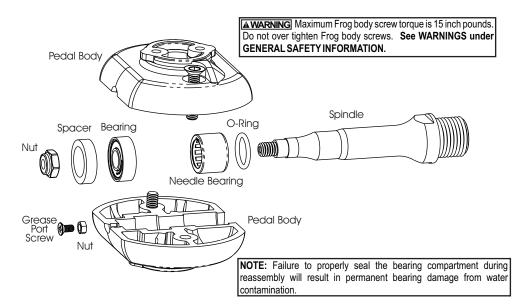
TO CUSTOM

四刀

FROG
PEDAL SYSTEM

IMPORTANT
FAILURE TO FOLLOW THESE
INSTRUCTIONS AND WARNING
STATEMENTS BEFORE ASSEMBLING
AND USING THIS SYSTEM MAY
RESULT IN SERIOUS PERSONAL INJURY





AWARNING Be sure to keep the Left Body halves with the left spindle and the Right body halves with the right spindle.

INSTRUCTIONS FOR PEDAL BEARING LUBRICATION USING THE BUILT-IN GREASEPORT

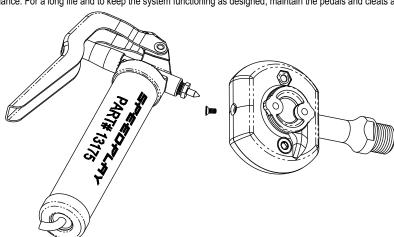
NOTE: Always use a high quality WATERPROOF BEARING GREASE. Never use a liquid spray lubricant or oil on Speedplay Pedal bearings. Speedplay recommends that the Frog Pedal bearings be greased with a grease gun at least every 2000 miles or every three months. Pedals should be lubricated immediately after riding in wet, rainy or unusually dusty conditions.

NOTE: Speedplay Frog 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.
- 3. Pump gun slowly while turning Frog Pedal body slowly until clean grease is visible at spindle end of pedal body.
- 4. Wipe off excess grease and reinstall Grease-Port Screw.

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 Tube (part #13560) are available from Speedplay retailers or call Speedplay at 1-800-468-6694.

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.

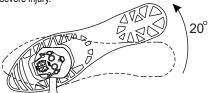


GENERAL SAFETY INFORMATION

AWARNING TO AVOID SERIOUS INJURIES:

- Bicycle dealers -- be sure to give all instructions and warranty information to end customer.
- 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. Riding bicycles is an inherently dangerous activity. Clipless Pedals are not for beginner riders.
- 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 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 toll free at 1-800-4686694 (PST).
- Before mounting Speedplay Cleats to any shoe, make sure that the brand and model of shoe selected is compatible with Speedplay Cleats. Not all shoes are compatible with Speedplay Cleats. Using Speedplay Cleats with shoes that are not compatible could cause the Pedal System to disengage unexpectedly and cause a fall that could result in severe injury. See Speedplay's Frog Shoe Compatibility Guide to check for shoe compatibility or contact Speedplay by phone toll free (1-800-468-6694) or see www.speedplay.com for Speedplay's Frog Shoe Compatibility Guide for the most current information on shoe compatibility.
- Only use Speedplay mounting hardware with Speedplay Cleats. See Speedplay Frog Shoe Compatibility Guide.
- 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 Frog 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. Over-tightening Speedplay Frog mounting screws prevents the cleats from operating properly, can affect engagement and retention, and can cause the cleat to break, which can lead to a fall that can result in severe injury.
- Speedplay Frog Cleats require routine lubrication and cleaning to prevent serious injury while riding. See Instructions for Routine Frog Cleat Maintenance and Routine Frog Pedal Bearing Lubrication. Keep all Pedal and Cleat parts clean of debris and properly lubricated in order to ensure proper engagement and release. Speedplay Frog Pedals require the Cleat to be lubricated routinely with a dry-type lubricant. Frog 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. 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, all riders 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 Frog 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 Frog Pedals is achieved by an outward twist of the heel. Frog pedals are not designed to release inward. Speedplay Pedals are not designed to release automatically at times such as when falling off the bicycle. 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.



AWARNING

Disengaging Frog Pedals

Release from the Frog pedal is achieved by an outward twist of the heel. Frog pedals are not designed to release inward.

BASIC FEATURES OF FROG PEDALS

Frog pedals allow cyclists to locate their pedals by "feel", eliminating the need to first look down to see the position of the pedal. Frog pedals do not use engagement springs, hence, they disengage instantly without effort. The G3 Frog Cleat's open architecture is self-cleaning, which prevents clogging with dirt or mud.

RIDING A FREE-ROTATION CLIPLESS PEDAL SYSTEM

The advantages of riding floating pedals are numerous, and most riders adapt to free rotation pedals very quickly. It is not unusual, however, for the transition to floating pedals from a fixed system to take one or two weeks before feeling completely comfortable.

BASIC OPERATION

Speedplay Frog Series 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 condition. The following technique is the easiest method for engaging Frog pedals:

Step One: Step onto the pedal with the ball of your foot and align the front "chute" of the cleat over the top of the pedal.

Step Two: Begin to pedal downward until you are in the lower half of the pedal stroke.

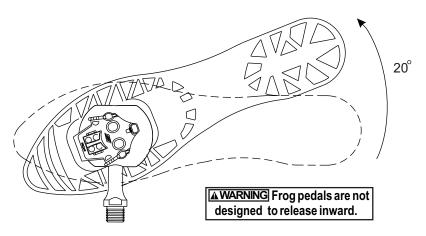
<u>AWARNING</u> Attempting to engage clipless pedals prior to reaching the lower half of the pedal stroke may cause the pedal to flip and prevent engagement.

Step Three: Engage the pedal system's locking mechanism with a forward nudge and a twist. Adding a slight twist of the foot during entry reduces the effort required to engage and also clears any mud or debris from the cleat.

Step Four: Pedal release is accomplished only by turning your heel 20 degrees outwards while lifting your foot upwards.

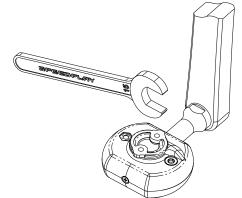
AWARNING Frog Pedals are not designed to release automatically at times such as when falling off the bicycle.

AWARNING Frog pedals are not designed to release inward.



PEDAL MOUNTING INSTRUCTIONS

To install Frog pedals, take special care to install the RIGHT pedal in the RIGHT crank arm and the LEFT pedal in the LEFT crank arm (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 cranks and/or the wrench flats on your pedals.



STEPS FOR ATTACHING FROG CLEATS TO SHOES

G3 FROG CLEATS fit shoes with a two-slot SPD-type mounting pattern, including road shoes.

Step One: Be sure the cantilever latch is in position beneath the cleat. Be sure the word "FRONT", printed on the cleat body, is pointed toward the toe-end of the shoe. There is no difference between Left and Right G3 FROG CLEATS.

Step Two: Grease the threads and heads of the 5X9mm mounting screws before installation to prevent them from seizing over time from rust.

ACAUTION Use only Speedplay brand screws as other brands of mounting screws are not compatible with G3 Frog Cleats.

Step Three: Position the cleat under the ball of the foot. Thread the mounting screws into place until they just hold the cleat against the shoe sole in order to make the inward rotation adjustment described in Step Four.

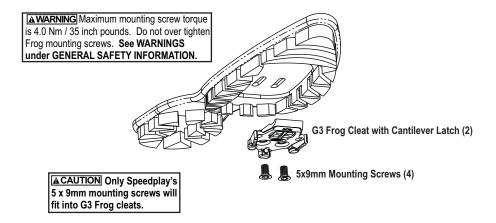
Step Four: Adjusting inward cleat rotation will allow the cleat to offer some inward float and will prevent the heel of the shoe from rubbing against the crankarm when pedaling. To adjust inward cleat rotation, position the front of the cleat so that it angles slightly toward the outside of the shoe. With the right pedal securely attached to the crankarm, engage the right shoe, with cleat attached, to the right pedal. Next, rotate the heel of the shoe toward the crankarm until the rear of the cleat contacts the inward rotation stop on the pedal body. Continue to rotate the shoe inward until the heel of the shoe just clears the crankarm without touching. This action will rotate the cleat on the shoe sole to the desired position. Repeat these steps to adjust the inward rotation of the left cleat on the left shoe.

Step Five: Once each cleat is positioned correctly, tighten the two mounting screws on each shoe securely (3.4 - 4.0 Nm / 30-35 inch pounds torque) with a 4mm hex wrench.

Frog Cantilever Latch Shim (Use if needed)

Once the G3 cleat is securely mounted to the shoe with Speedplay's mounting screws tightened to 4 Nm / 35 inch pounds, the flat area of the cantilever latch must be flush with the G3 cleat's flat surface to ensure proper engagement. The raised curved portion at the rear of the cantilever latch should protrude slightly above the cleat's flat surface by approximately 1mm (about the thickness of a dime). Over time or with certain shoe models, the engagement edge of the cantilever latch may not protrude high enough to sufficiently engage the crown of the pedal. Insufficient latch engagement may result in inadvertent pedal disengagement while riding, which could result in loss of control or a fall.

Proper latch function can be ensured by installing the optional Cantilever Latch Shim (supplied with each set of cleats) on the underside of the cleat as shown. Installation of this Shim is required if the cantilever latch does not sufficiently protrude and engage the pedal. Once the Shim has been attached to the cleat as shown, install cleat assembly onto the shoe with mounting screws. Visually inspect each cleat to ensure that the raised curved portion of the cantilever latch is protruding adequately above the cleat's flat surface. Before riding, first test the cleat's security on the pedal by engaging and disengaging each pedal with the respective shoe. Once properly installed, the Shim will ensure that engagement of the pedal and cleat function properly.



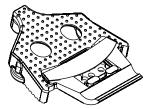
Frog Cantilever Latch Shim (Use if needed)







Cantilever Latch Shim







Correct Height of Cantilever Latch

ADJUSTING FORE-AFT PLAY IN THE G3 FROG CLEAT

ACAUTION G3 Frog Cleats are factory set at .25mm fore-aft gap setting for optimum performance and it is recommended that you DO NOT adjust cleats prior to initial use. G3 Frog Cleats are designed so that if noticeable fore-aft play develops from wear between the pedal and cleat, the G3 Frog Cleat can be adjusted with a setscrew located at the rear of the cleat. The setscrew can be adjusted with a 2mm hex key. To ease adjustment of the setscrew, heat the screw with a soldering gun to 300°F to loosen the bond of the Loctite on the screw threads.

ACAUTION DO NOT adjust the setscrew tightly against the top of the pedal or the pedal will not engage the cleat.

ACAUTION G3 Frog Cleats require a minimum of .25 mm (the width of a business card) of fore-aft play when engaged to the pedal in order to function. When adjusting the setscrew, only turn the screw a few degrees at a time until the .25mm minimum clearance is reached.

Tips For Riding In Mud

For best results when riding Frog pedals in mud or wet sand, it is important to keep the cleat and pedal contact areas lubricated with a lightweight, dry-type lubricant. A slight twisting motion of the foot is required while engaging the pedal to clear debris from the Frog cleat and ease entry.

ROUTINE FROG SERIES CLEAT MAINTENANCE

Frog Pedals require that the Frog 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. Wet lubricants (oil, WD-40 etc.) are not recommended as they attract dirt which accelerates wear.

NOTE: Damage as a result of lack of lubrication or improper installation is not covered by Speedplay's warranty policy.

ROUTINE FROG SERIES PEDAL MAINTENANCE

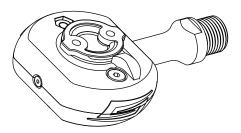
NOTE: Always use a high quality WATERPROOF BEARING GREASE on the pedal bearings. Never use a liquid spray lubricant or oil on Speedplay Pedal bearings. Speedplay recommends that the Frog Pedal bearings be greased with a grease gun at least every 2000 miles or every three months. Grease bearings more frequently if used in unusually wet or dusty conditions.

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

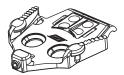
NOTE: <u>Damage due to the lack of lubrication is not covered by Speedplay's warranty policy.</u> Speedplay Grease Guns and Grease are available from Speedplay retailers or call Speedplay at 1-800-468-6694.

If you have any questions or concerns about the maintenance of Frog Cleats or whether your Frog Cleats should be replaced, call Speedplay toll free at 1-800-468-6694 (PST).

Checklist Of Parts



Pedals (1 Left, 1 Right)



G3 Cleats (2)



Cantilever Latch Shim (2)



5 x 9 mm Mounting Screws (4)

<u>ACAUTION</u> Only Speedplay's 5 x 9mm mounting screws will fit into G3 Frog 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.

Rev. 2011.06.23Web