



Technical Bulletin: Retrofitting Graphtech Acousti-Phonic Preamp to a Parker Fly

The procedure described below is of moderate difficulty for a trained professional instrument repair person. If you are unfamiliar with basic electronic repair or minor woodworking on an instrument, it is advisable to bring this document to a local instrument technician of your choice to perform this modification.

Most Parker models feature a stereo preamp that allows the stereo splitting of the Piezo and Magnetic pick-up systems. Parker has used a few different assemblies over the years. Models produced from 1993-2002 (Pre-Refined Fly models) used an earlier generation Fishman Power chip assembly which used a series of PCB ribbons for its connections. This system was replaced in 2002 with a later generation Fishman power chip (Refined Fly models) that was wired point to point, and featured a slightly different control layout. These different versions can easily be identified by checking the existing wiring and control layout.



Pre-refined Fly

CONTROLS: Master Volume, Mag volume, Mag tone, Piezo volume, Piezo tone (concentrically stacked).

OUTPUT: Stereo output, with a red switch that allows you to select true stereo output (mag to tip, piezo to ring) or summed output (for using a single amp and getting both piezo and mag through a mono cable)



Refined Fly

CONTROLS: Mag volume, mag tone, piezo volume, coil-tap (push/pull pot)
3-Way switch: Neck/ both/ bridge

OUTPUT: Jack: Smart Switch - if you're using a stereo cable, you get stereo (mag/piezo) output. If you're using a mono cable, you get blended output

This system was again replaced with the Graphtech Acousti-Phonic preamp system in late 2011, though the control layout did not change. The Graphtech Acousti-Phonic preamp system is modular in design, and Graphtech offers a variety of options to suit most wiring needs. (Important for Parker models produced before 2002)

Parker Guitars wholly recommends the Graphtech Acousti-Phonic system for all retro-fit needs, due to their easy availability (available directly from Graphtech, or through any Graphtech dealer), and ease of installation and use. The updated Graphtech Parker saddles with this system are of superior design to previous versions, being part of their String Saver series of saddles and offer the following benefits: increased sustain, improved midrange depth, super lubricating, improves tuning and are corrosion resistant.

This guide includes available diagrams for Pre-Refined Fly models, and Refined Fly models as a point of reference. (Alternate versions for Dimarzio and Seymour Duncan equipped models are included to account for different magnetic wire colors) The current Parker Graphtech Acousti-Phonic wiring diagram is also in this guide. For information on alternate wiring concepts using the Graphtech Acousti-Phonic preamp, please contact Graphtech directly. (www.graphtech.com)

Other Parker models featuring stereo piezo/mag functionality can also use the Graphtech system as a retrofit option. (Nitefly's, P-Series import models, ect) A variety of control layouts have existed over the years, though the Graphtech Acousti-Phonic modification will still work. If extra holes are present on the instrument, Graphtech offers a piezo dark/light switch kit between the preamp chip and piezo volume potentiometer that can utilize this position. Some past import models have used Wilkinson piezo saddles- Graphtech offers direct replacements of these saddles made of their string saver material.

The major difference in Parker Fly models produced after 2002 was the removal of Piezo Tone, though the Graphtech system can accommodate a Piezo tone as an add on. See last page of this document for wiring modification to add piezo tone to the Graphtech Acousti-Phonic system

SUPPLIES AND TOOLS

The following Graphtech parts are available directly from Graphtech at Graphtech.com or through any Graphtech dealer. Other parts are common electric guitar parts are available wherever electric guitar parts are sold.

1. GHOST PICK UPS PARKER (6PCS) **Product #: PN-8011-00**
2. Acousti-Phonic Intelligent pre-amp EQ'd for guitar **Product # BD-0240-00**
3. Acoustic Volume Cable Assembly (Vi-Y-Gn harness, connects volume pot and mag system to pre-amp) **Product # BE-5002-00**
4. Battery Connector (connects 9v to pre-amp) **Product # BE-0204-00**
5. Quick Switch for mag/both/acoustic **Product # PE-0111-00** (switch is for cavity w/ ¼" diameter hole in guitar- may require slight modification for proper installation fit.
6. Stereo Output Jack Cable Assembly (R-W-Bu harness, connects jack to pre-amp) **Product # BE-5003-00**
7. Switchcraft Stereo Switched Output Jack **Product # BD-0103-01**
8. Qty 2 500k Audio taper potentiometers (for retrofitting an Early pre-refined Parker that utilized that used The original ribbon style assembly and generation 1 Fishman Power chip. If retrofitting a Refined Fly that is wired point 2 point with the updated Fishman Power chip, the existing potentiometers will work.
9. Qty 1 250k stacked potentiometer. If retrofitting a Refined Fly that is wired point 2 point with the updated Fishman Power chip, the existing potentiometers will suffice.
10. Qty 1 Switchcraft 3 way toggle for magnetic pick-ups. If retrofitting a refined fly that is wired point 2 point, the existing switch will work.
11. .022mf capacitor for stacked 250k tone pot (if missing from the instrument being worked on)
12. If retrofitting a pre 2002 Fly model and would like to keep a Piezo tone pot- an additional 250k tone pot and .047uF capacitor

OUTPUT JACKS

For output jacks, Parker historically used a 4 terminal stereo jack. Prior installation technique called for a modified long barrel stereo barrel jack to fit the existing jack cavity. This modification involved grinding some of the tip of the jack off to fit the older round jack cover/plate.

During retrofit, you may use the existing jack in most instances though if replacing the jack is required a standard stereo barrel jack can be modified to fit. Because of slight variances by production run as to the appropriate length to cut, we recommend measuring the existing jack and using that as your reference for this procedure.

As an alternate option, a regularly available 4 terminal stereo jack will work just fine- the suggested Graphtech stereo jack is indicated as an option in the **SUPPLIES AND TOOLS** section. You will need to use a dremel to widen the existing cavity for this installation. The jack can then be firmly held in place by any output jack plate of your choosing. Current Fly models use this method to ease service in the field and to eliminate this portion of the modification process.

UPDATE 8/28/12: The Fishman Switchjack Endpin Jack is designed for acoustics, but fits the existing routes in Parker Fly models well and requires minimal to no modification.

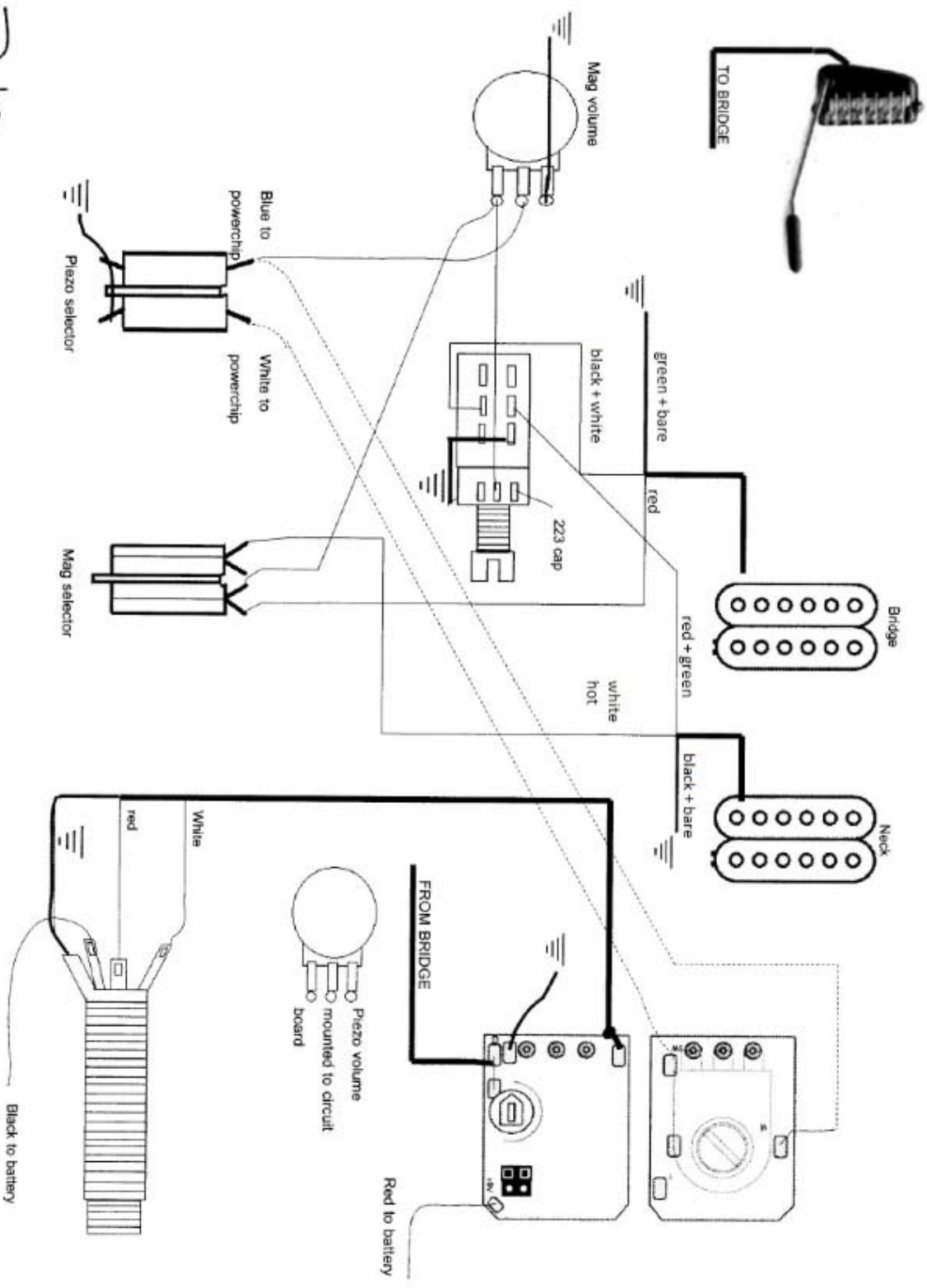
OTHER PARKER MODELS

Other Parker models featuring stereo piezo/mag functionality can also use the Graphtech system as a retrofit option. (Nitefly's, P-Series import models, ect) A variety of control layouts have existed over the years, though the Graphtech Acousti-Phonic modification will still work. If extra holes are present on the instrument, Graphtech offers a piezo dark/light switch kit between the preamp chip and piezo volume potentiometer that can utilize this position. Some past import models have used Wilkinson piezo saddles- Graphtech offers direct replacements of these saddles made of their string saver material.

Original diagrams are not all available for discontinued Parker models at present, though the Graphtech kit will work as a direct replacement. See Graphtech.com for alternate and custom wiring options.

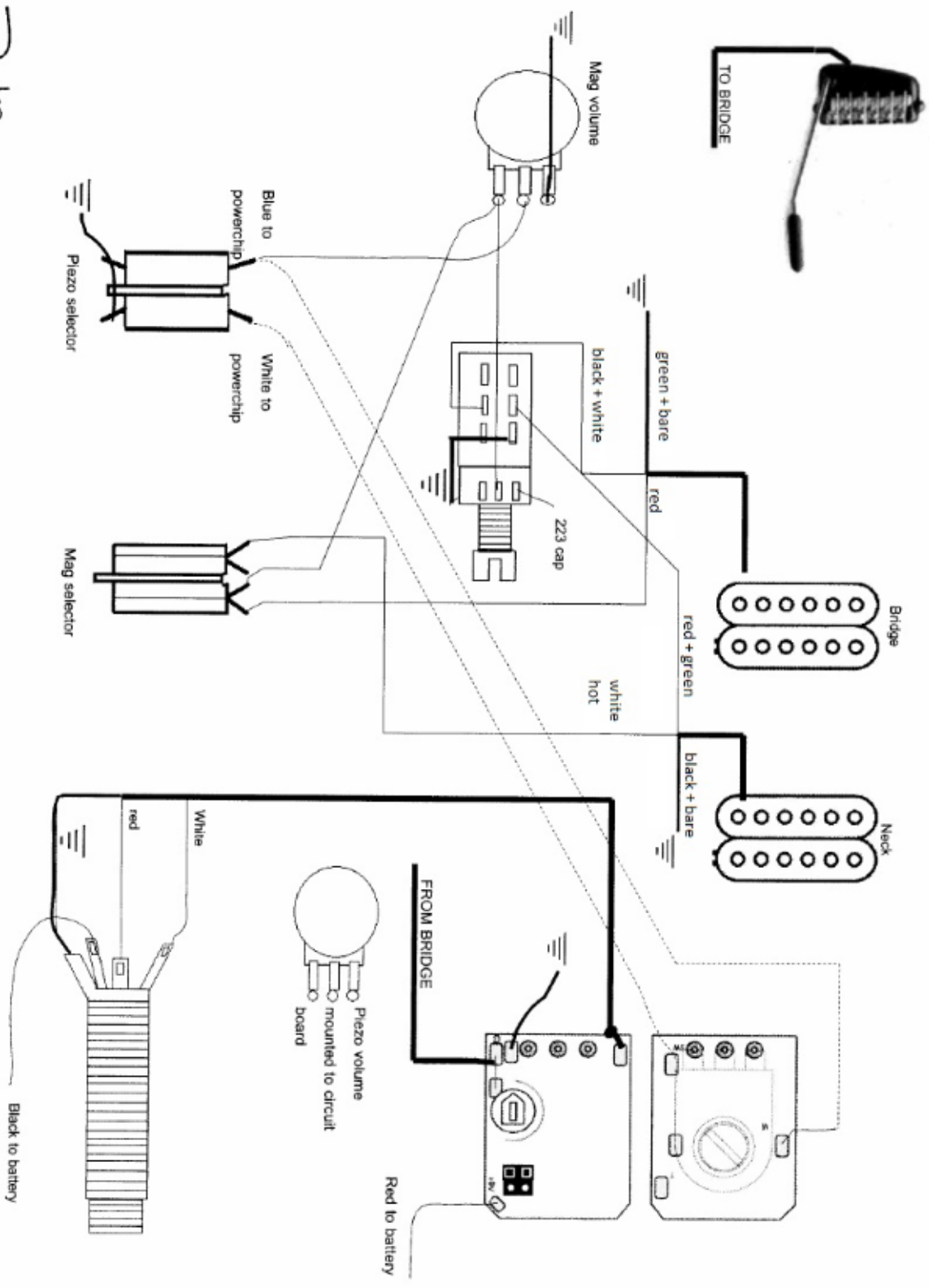
WIRING DIAGRAMS

The following pages are available Parker Fly wiring diagrams throughout the years. Slight variance may have occurred over time, though the following diagrams indicate the typical wiring configurations found on each model.



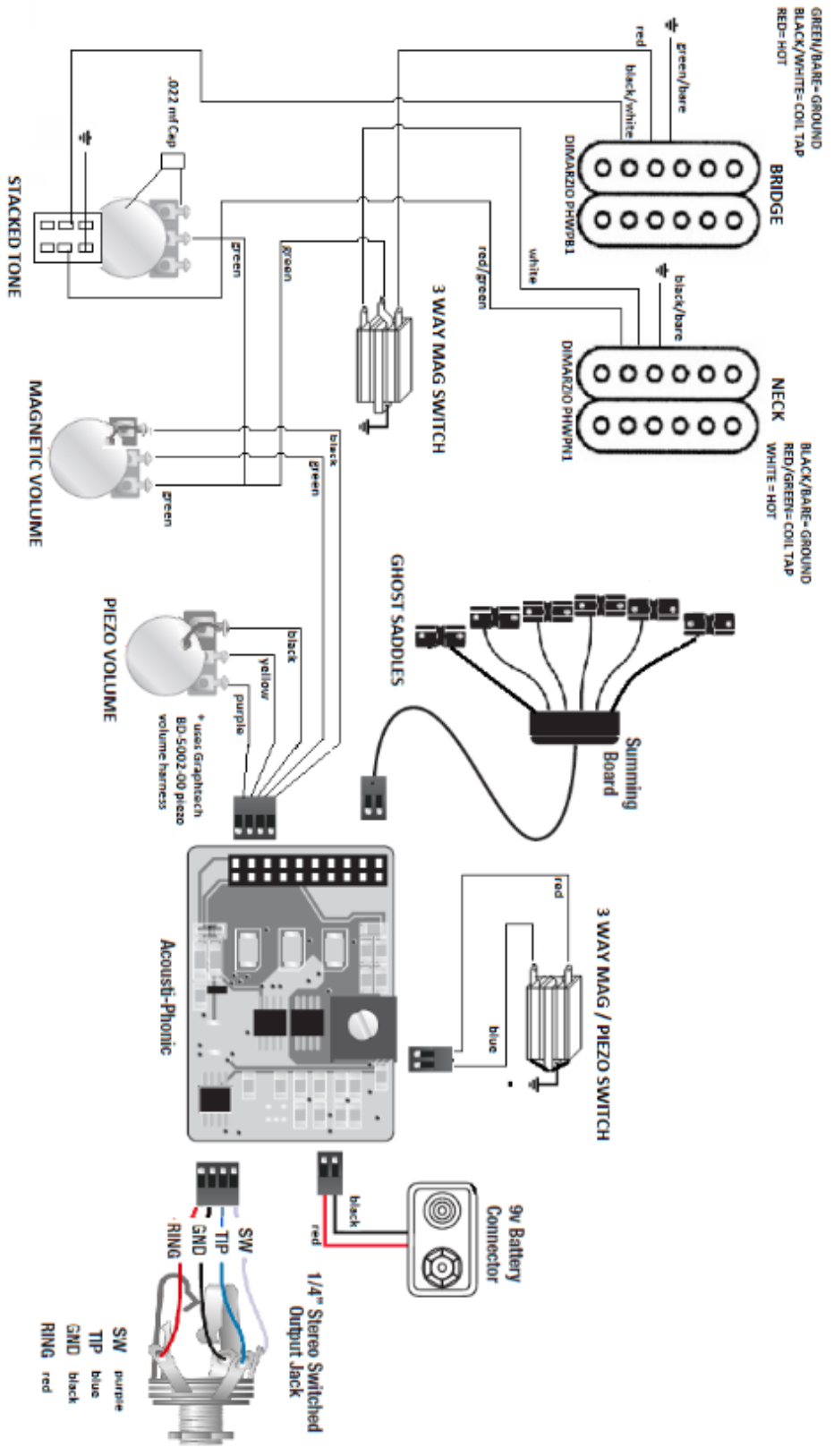
Parker
[GUITARIST]

Fly Seymour Duncan HH w/ Fishman Piezo



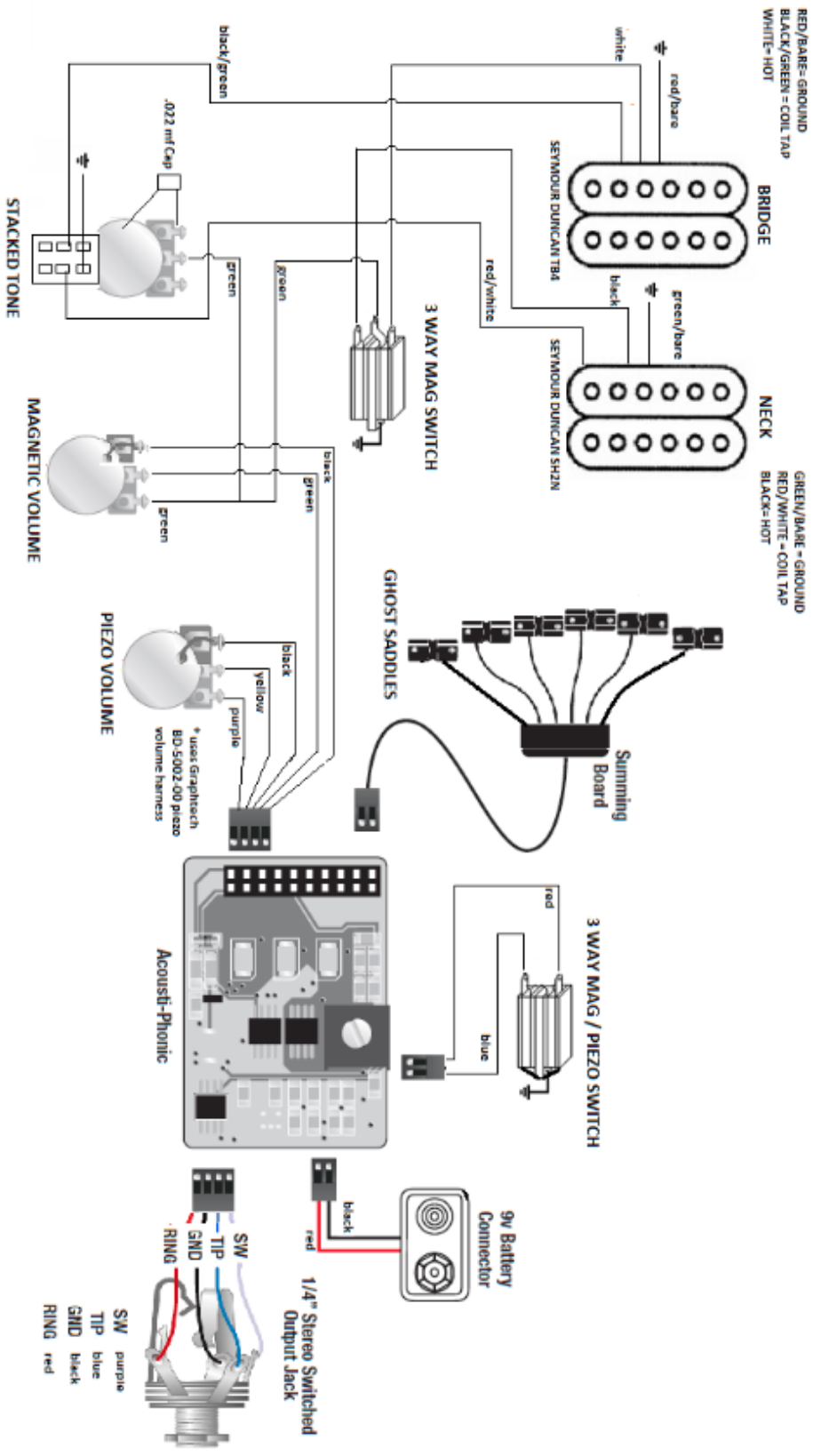
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Fly Seymour Duncan HH w/ Fishman Piezo



Parker
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Parker Fly Deluxe / Classic w/ GraphTech Acousti-Phonic Preamp



Parker
 GOLFERS

Parker Fly Mojo w/ Graphtech Acousti-Phonic Preamp

To add a Piezo Tone option to your Graphtech equipped Parker, follow the below diagram.

