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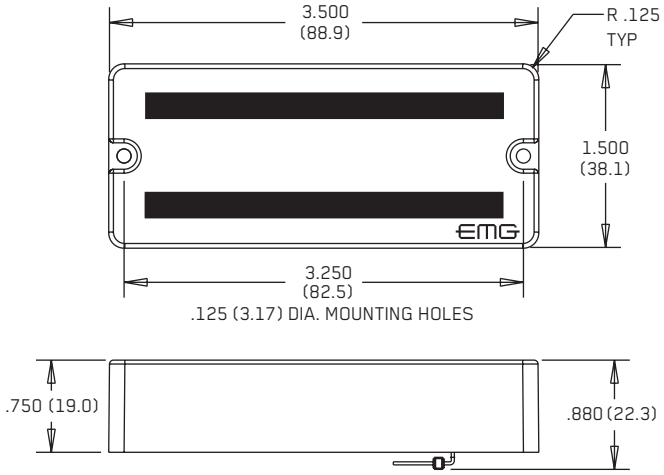
0230-0119rC
B136rE

MAXIMUM RECOMMENDED STRING WIDTH 2.50" (63.5)



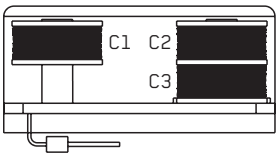
INSTALLATION INFORMATION
EMG MODEL: 707-TW

SPECIFICATIONS:

MODEL:	707-TW	Single-Coil	Dual-Coil
Logo Color	Copper		
Magnet Type*	C/S		
Resonant Frequency (KHz)		3.76	1.80
Output Voltage (Finger, Thumb)		1.00	2.00
Output Voltage (Thump)		3.00	4.50
Output Noise (60 Hz)		-107	-109
Output Impedance (Kohm)		10	10
Current @9V (Microamps)	160		
Battery Life (Hours)	1500		
Maximum Supply (Volts DC)	27		

* Magnet Type CS (Ceramic and Steel)

EMG-707-TW (SIDE VIEW)



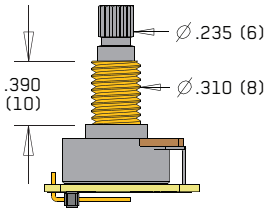
In Dual-coil mode, coils C1 and C2 are active.
In Single-coil mode, coils C2 andC3 are active.

INSTALLATION NOTES:

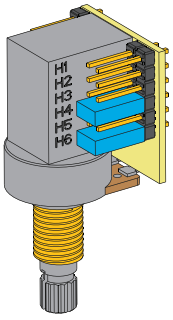
The EMG-707-TW has a variety of ways it can be wired into a guitar. The diagrams included are limited to the most popular because of space. The additon of the plug-on PC Board on the Push-Pull Pot adds further flexibility as you will see in the diagrams. We suggest you look fully at the installation diagrams included in this sheet along with the B245 Pickup Buss data sheet included in this package before beginning your installation. The Push-Pull Pot allows you 2 options as a volume control as well as 2 other options using the pot as a tone control. If you don't see a diagram that fits your instrument directly, or you want to do something completely different, contact our technical department and we'll create a diagram you can follow for your installation. Certain limitations apply...

INCLUDED WITH EACH PICKUP:

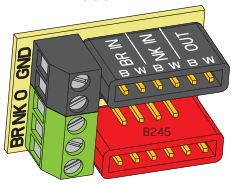
1 TONE CONTROL (25K)



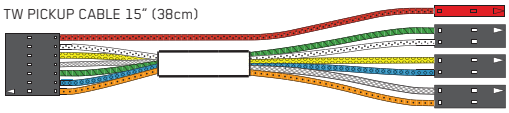
1 TW P/P SWITCH W/POT (25K)



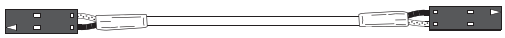
2 PICKUP IN/ OUT BATTERY BUSS



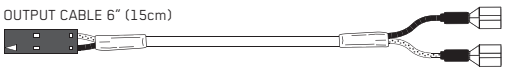
TW PICKUP CABLE 15" (38cm)



2 CONNECT CABLES 5.5" (14cm)

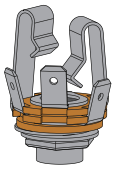


OUTPUT CABLE 6" (15cm)

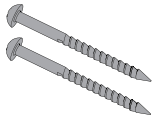


BATTERY CABLE 7" (18cm)

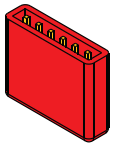
STEREO OUTPUT JACK



ADJUSTMENT SCREWS



BATTERY BUSS



WARRANTY

All EMG Pickups and accessories are warranted for a period of two years. This warranty does not cover failure due to improper installation, abuse or damage. If upon examination the pickup is determined to be defective, a replacement will be made. Warranty replacement products are covered by this same warranty. This warranty covers only those pickups and accessories sold by authorized EMG Dealers. This warranty is not transferable.

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General Notes:

Every attempt has been made to make this a solderless installation.
There are some instances where this is not possible;

1) If your instrument uses the long panel output jack and you had passive pickups you will need a new stereo output jack, the Switchcraft 152B is recommended. Soldering to the new jack will be required.
2) Some instruments may already have a battery holder installed, in that case soldering may be required.
3) Instruments with two pickups may need soldering to the selection switch in some installations.

Using the TW Push-Pull Switch

The Push-Pull Switch included with the TW Pickup allows you to choose between two internal pickups of the EMG-TW, single-coil and dual-coil. The Push-Pull Pot has two seperate sections: The Switch and the pot, described below.

Refer to Diagrams #1 and #2
The Push-Pull Switch section (DPDT) lets you choose between the single-coil sound and a dual-coil sound by pulling or pushing the pot shaft up or down. You have the option of having the single-coil sound in either the up or down position and vice-versa for the dual-coil sound.
Diagrams #1 and #2 show how to connect the TW Pickup cable to choose either option. Select the diagram that suits you and push the cable connectors onto the single line 6-pin header.
Simply turn over cable connectors 1 and 2 to change the wire order and this will choose between the two options.
Connector 3 remains the same for either choice.

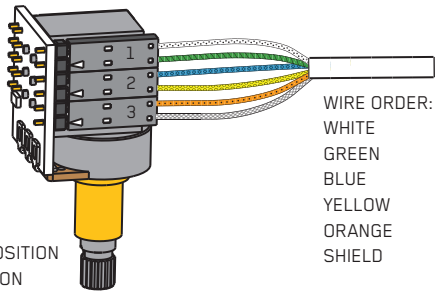


Diagram #1
HUMBUCKING ON: DOWN POSITION
SINGLE COIL ON: UP POSITION

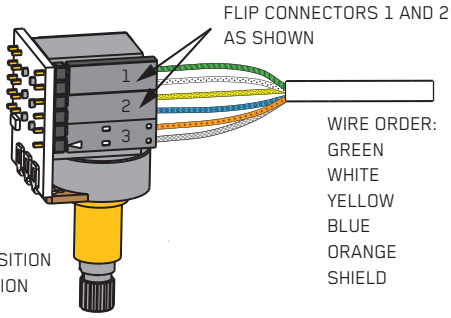


Diagram #2
SINGLE-COIL ON: DOWN POSITION
HUMBUCKING ON: UP POSITION

Diagram #3
PUSH / PULL POT USED AS
THE PICKUP VOLUME CONTROL

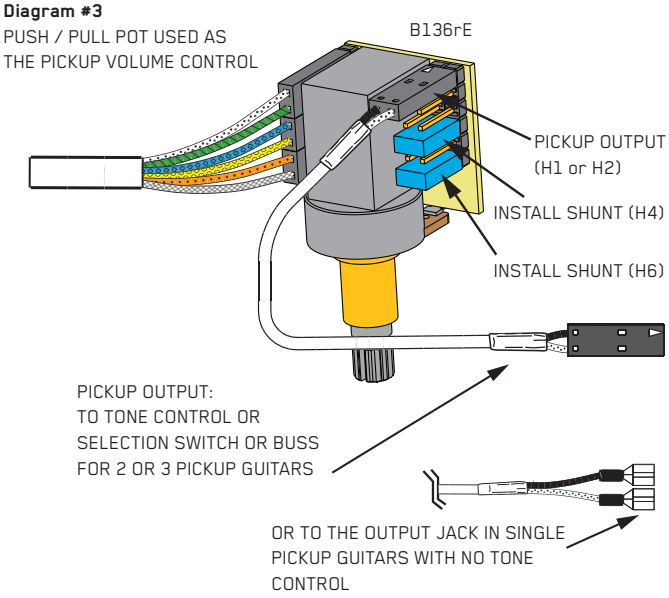
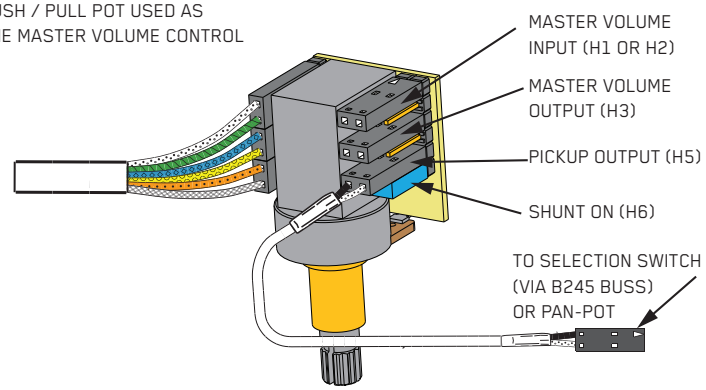


Diagram #4
PUSH / PULL POT USED AS
THE MASTER VOLUME CONTROL



Using the TW Push-Pull Pot Section

The Push-Pull Pot side of the EMG-TW allows you 4 different options:
1) Use the pot as a Master Volume for the Instrument
2) Use the pot as a Volume control for the TW Pickup
3) Use the pot as a Master Tone control for the Instrument
4) Use the pot as a Tone control for the TW pickup

On the PC Board there is a dual-line header with 6 pairs of pins. They are listed on the PC Board as H1 through H6. By using the the connections shown in Diagrams #3 through #6, you can choose any of the 4 options.

Using the Pot Section as:
1) The Pickup Volume control, or a Master Volume for the Instrument.
Refer to Diagrams #3 and #4
The pot section (25KA) can be used either as a Volume control for the pickup or, it can be used as the Master Volume for the guitar.
Diagrams #3 and #4 show how to connect either option.
Use the dual-line 12-pin header and push the cables on and install the shunts as needed onto the labeled headers H1 thru H6.

Use Diagram #3 if you have a single TW installed in your instrument, or have two or more pickups in your instrument and want to use the pot as the Volume control for the TW Pickup only.
Installing the shunts on positions H4 and H6 sends the pickup signal to the wiper of the 25K Pot, and the output of the 25K Pot is at position H1 or H2.

Diagram #4 allows you to use the 25K Pot independently of the pickup output. By taking the output of the pickup from position H5, the Volume control is now available to use as a Master Volume with H1 or H2 being the input to the Volume control. H1 and H2 positions are interchangeable.
Position H5, now the output of the pickup, would typically go to a selection switch or a pan-pot. Don't forget to install the shunt on H6.

Diagram #5
PP POT USED AS THE PICKUP
TONE CONTROL

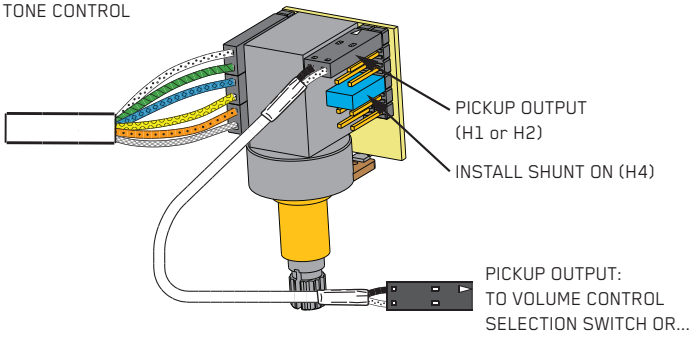
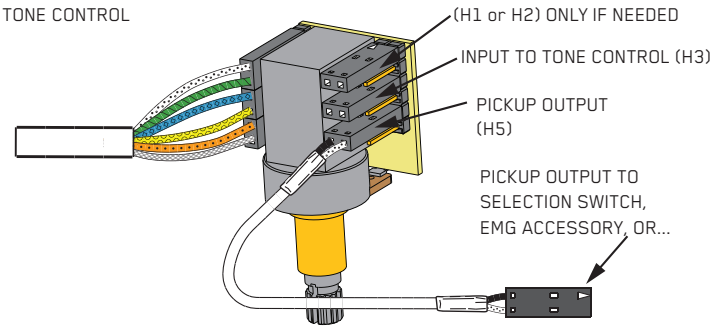


Diagram #6
PUSH-PULL POT USED AS A MASTER
TONE CONTROL



Using the Pot Section as:
2) The Pickup Tone control or as a Master Tone control for the instrument.
Refer to Diagrams #5 and #6
The pot section (25KA) can be used either as a Tone control
for the pickup or it can be used as a Master Tone control for the guitar.
Diagrams #5 and #6 show how to connect either option.
Use the dual-line header, push the cables on and install the shunts
as needed onto headers H1 thru H6.

Use Diagram #5 if you have a single 707-TW installed in your instrument, or have two or more pickups in your instrument and want to use the pot as the Tone control for the 707-TW Pickup only.
Installing the shunt on position H4 connects a tone capacitor on the PC Board to the wiper of the 25K Pot and creates a passive Tone control. The output of pickup can be either position H1 or H2.

Diagram #6 uses the 25K Tone control independently of the pickup output. By taking the output of the pickup from Position H5, the control is now available to use as a Tone Control independent of the pickup output.
Position H3 is the input to the Tone Control, with H1 or H2 being the output of the control, if necessary.
Position H5, the output of the pickup, would typically go to a selection switch or output jack.

Diagram #7
Insert the plug onto the 7 pin header
of the pickup as shown above.
Note the orientation arrow.

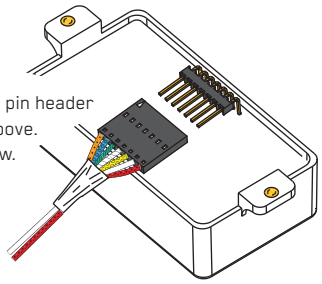


Diagram #8
One TW Pickup
Master Volume

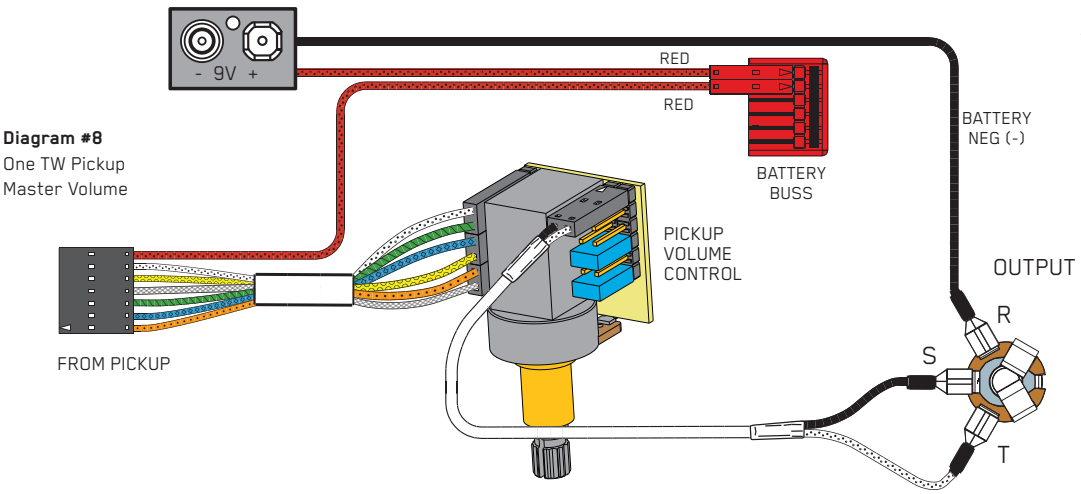
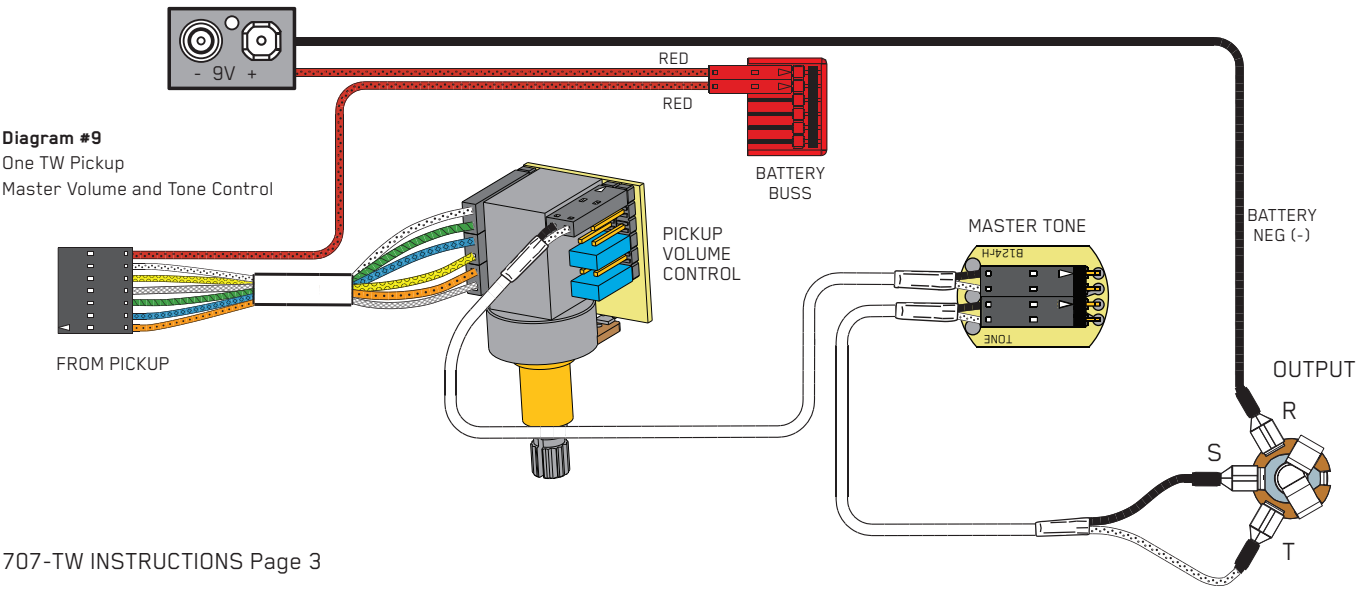


Diagram #9
One TW Pickup
Master Volume and Tone Control



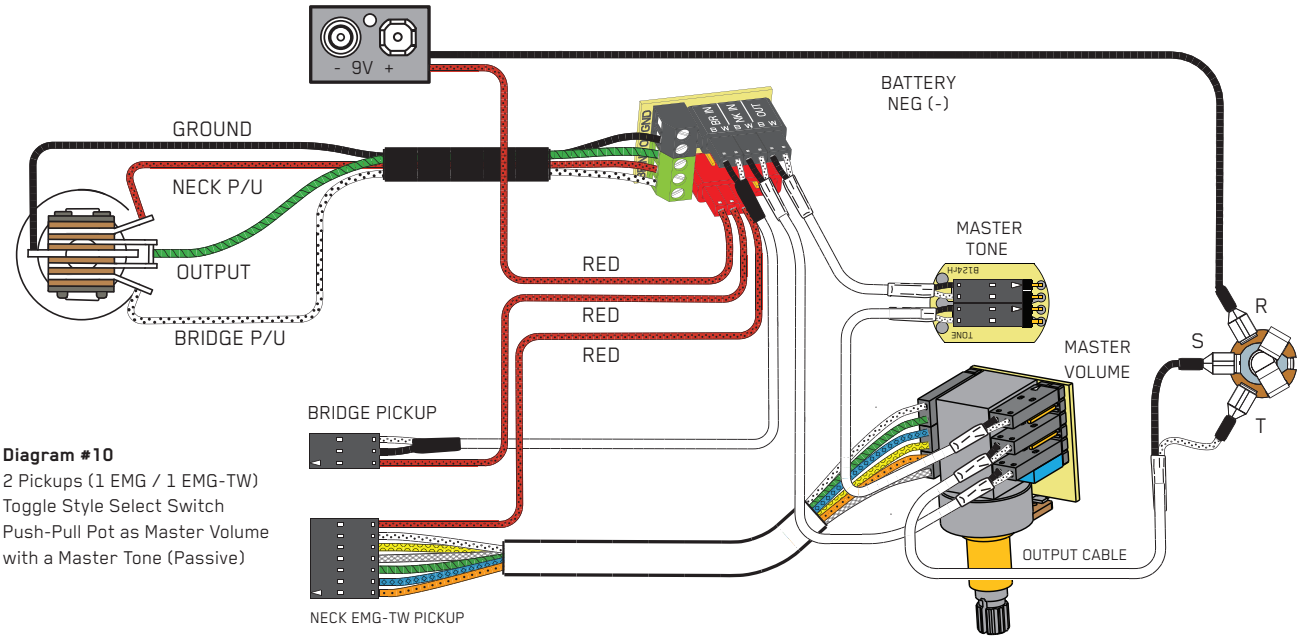


Diagram #10
2 Pickups (1 EMG / 1 EMG-TW)
Toggle Style Select Switch
Push-Pull Pot as Master Volume
with a Master Tone (Passive)

Refer to Diagram #10 Above:

1) Install the Pickups and route the cables to the control cavity keeping any excess cable under the pickup.
2) Choose an up/down option from Diagram #1 or #2 and plug the 707-TW Pickup cable onto the push-pull pot.
3) Route a coax cable from the push/pull pot (H4) to the Pickup buss, Position 1. Plug the pickup cable of the other EMG into Position 2 of the pickup buss.
4) Plug a coax cable from Position 3 of the Pickup Buss to the Tone control. Plug a coax cable from the Tone control to the Push-Pull Pot (H1)
5) Plug the output cable from the Push-Pull Pot (H2) to the output jack and push the connectors onto the T, S, and R terminals of the jack as shown.
6) Plug the RED Wires of the pickups onto the V+ Supply Buss (RED Shroud) with the RED wire of the battery clip.
7) Strip the insulation from the switch wires and Insert them into the GREEN and BLACK Terminal Blocks and tighten the screws with a small screwdriver. Refer to the B157 Pickup buss instructions enclosed.
8) Put the battery in the insulating foam piece provided and place it securely in the control cavity.
We suggest that you plug in the instrument and test it before closing the control cavity.

Refer to Diagram #11 Below:

1) Install the 707-TW Pickups and route the cables to the control cavity keeping any excess cable under the pickup.
2) Choose an up/down option from Diagram #1 or #2 and plug the 707-TW Pickup
cables onto the push-pull switch sections.
3) Route a coax cable from each of the Push-Pull Pots (H1) to the Tone controls.
4) Plug a coax cable from the Bridge Tone to the Pickup Buss (Position 1) Plug a coax cable from the Neck Tone to the Pickup Buss (Position 2)
5) Plug the output cable from the Pickup Buss (Position 3) to the output jack and push the connectors onto the T, S, and R terminals of the jack as shown.
6) Plug the RED Wires of the pickups onto the V+ Supply Buss (RED Shroud) with the RED wire of the battery clip.
7) Strip the insulation from the switch wires and Insert them into the GREEN and BLACK Terminal Blocks and tighten the screws with a small screwdriver. Refer to the B157 Pickup buss instructions enclosed.
8) Put the battery in the insulating foam piece provided and place it securely in the control cavity.
We suggest that you plug in the instrument and test it before closing the control cavity.

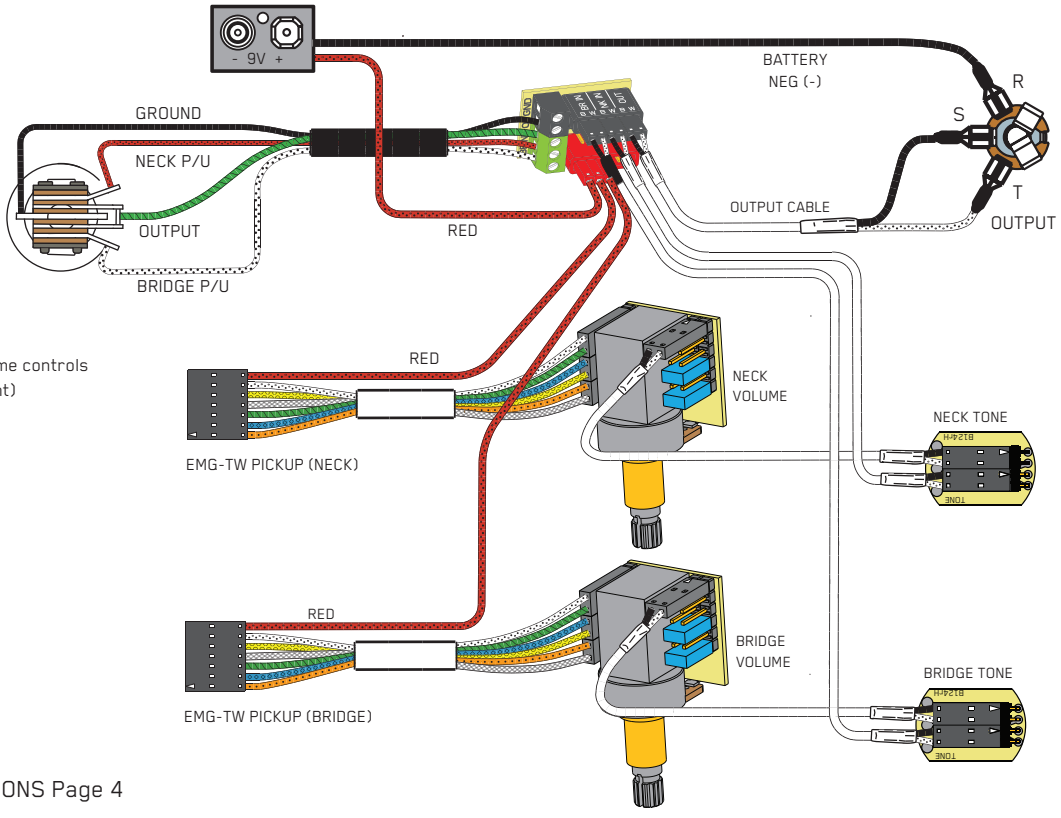


Diagram #11
2 TW Pickups
2 Push-Pull Pots as Volume controls
(Volumes are independent)
2 Tones (Passive)
Toggle Style Switch