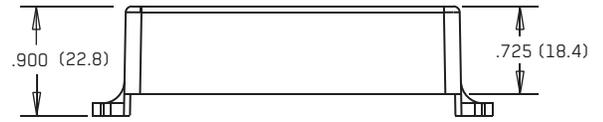
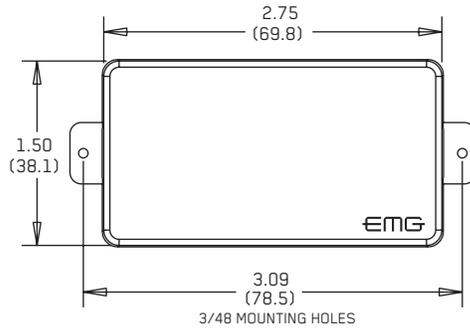




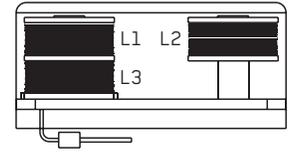
0230-0300R-A

PO BOX 4394
SANTA ROSA, CA
95402 USA

P (707) 525-9941
F (707) 575-7046
EMGPICKUPS.COM



EMG 89R



INSTALLATION INFORMATION EMG MODELS: GARY HOLT- GH SET

SPECIFICATIONS:

	MODEL: NECK 89R Copper A	Single-Coil	Dual-Coil	BRIDGE 81 Silver C/S
Logo Color				
Magnet Type	A			C/S
Resonant Frequency (KHz)		3.80	2.00	1.63
Output Voltage (String)		1.00	2.00	3.00
Output Voltage (Strum)		3.00	4.50	4.50
Output Noise (60 Hz)		-107	-109	-100
Output Impedance (Kohm)		10	10	10
Current @9V (Microamps)	160			80
Battery Life (Hours)	1500			3000
Maximum Supply (Volts DC)	27			27

*Note: Logo Colors are not distinguished on the JH Set

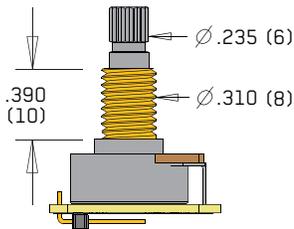
**Note: Magnet Type: C (Ceramic) C/S (Ceramic/Steel)

INSTALLATION NOTES:

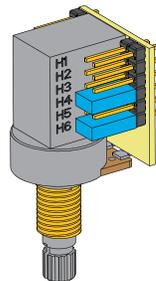
All EMG Pickups are compatible with each other. EMG accessories, the VLPF, EXG, SPC or RPC Controls can be added to any EMG Pickup System without requiring an extra battery. DO NOT reconnect the bridge ground wire, EMG Pickups do not require string grounding. Use the 25K Ohm controls that are included for best results. If your output jack is a long panel style you will need a stereo jack, use a SwitchCraft 152B, soldering will be required (see the bottom of page 2). Adjust the pickup level to the strings, and at a distance that works for you, experiment. Alternate wiring diagrams are available at; emgpickups.com.

INCLUDED IN THE SYSTEM:

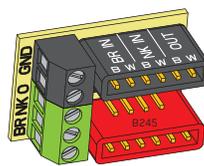
- 1 VOLUME CONTROL (25K)
- 2 TONE CONTROLS (25K)



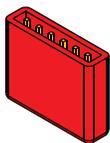
- 1 TW P/P SWITCH W/POT (25K)



- 2 PICKUP IN/ OUT BATTERY BUSS



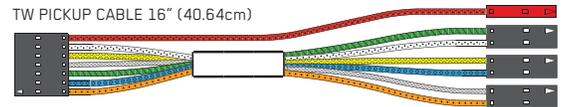
- BATTERY BUSS



- ADJUSTMENT SCREWS & SPRINGS (2 pr)



- STEREO OUTPUT JACK



- 1 PICKUP CABLE 15" (27.94cm) and 15" (38cm)



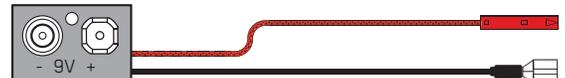
- 4 CONNECT CABLES 5.5" (14cm)



- OUTPUT CABLE 6" (15cm)



- BATTERY CABLE 7" (18cm)



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.

**Installation Instructions:
EMG Models: EMG-GH Set**

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, see diagram #6.
 - 2) Some instruments may already have a battery holder installed and in that case see the diagram at the bottom of page 4.
 - 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 separate 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.

- ****Tips and Tricks**** Start your installation by:**
- 1) Determine which type output jack your instrument has. A Stereo 152B type is Included, but if you have a long panel jack a SwitchCraft 152B Long Panel Jack will be required.
 - 2) Remove the strings, remove any existing Pickups and controls (remember the order and function of each control)
 - 3) Determine a good spot for the Pickup Buss and make sure the cable or wires from the selection switch will reach the Pickup Buss,
 - 4) Install the EMG Volume and Tone Controls and tighten them in.
 - 5) Then install the pickups keeping any excess cable under the pickup rather than in the control cavity.
 - 6) **IMPORTANT: EMG Active pickups do not require a string ground wire! DO NOT Reconnect the string ground, it is unnecessary.**

Diagram #1

HUMBUCKING ON: DOWN POSITION
SINGLE COIL ON: UP POSITION

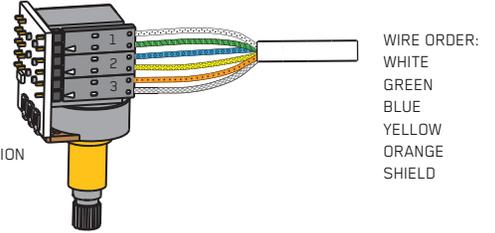


Diagram #2

SINGLE-COIL ON: DOWN POSITION
HUMBUCKING ON: UP POSITION

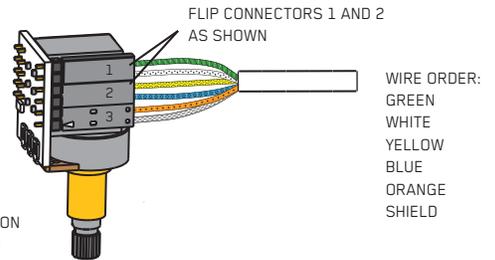


Diagram #3

Insert the plug onto the 3 pin header of the pickup as shown above. Note the orientation arrow.

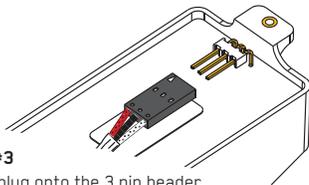


Diagram #4 (Dual Mode)

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

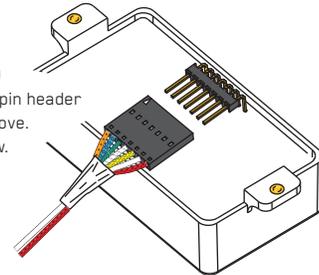
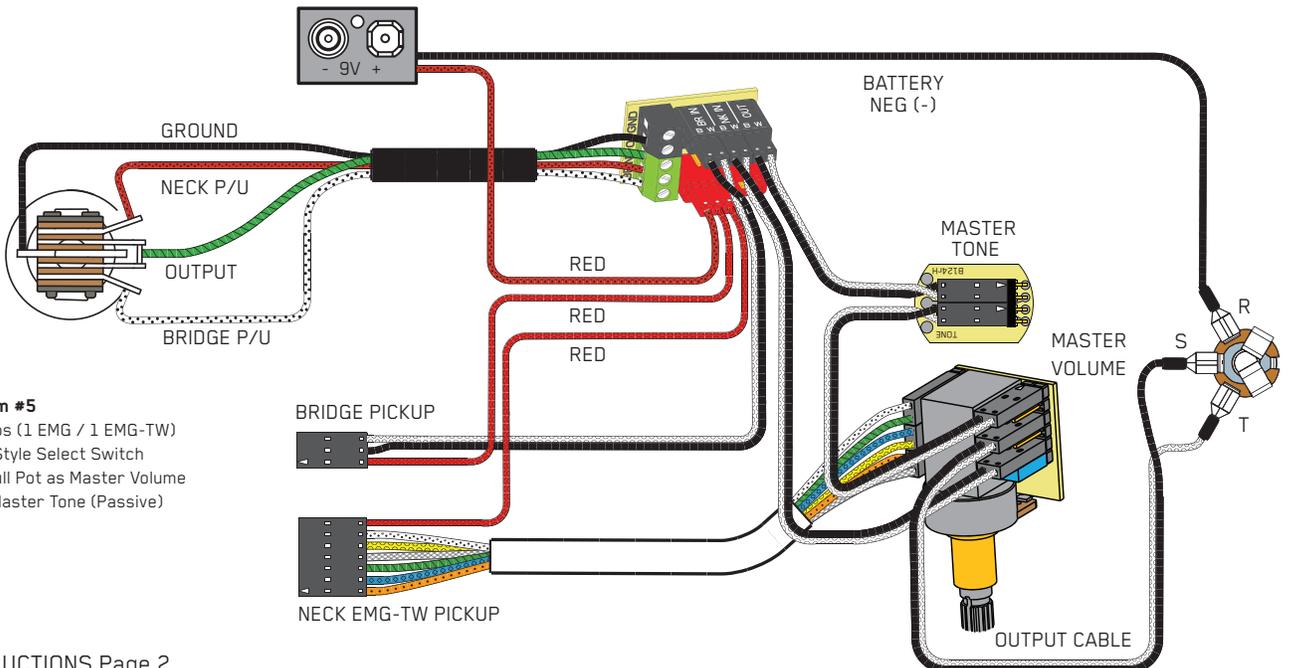


Diagram #5

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



2 Pickups / Toggle Select Switch / 2 Volumes and Master Tone

Refer to Diagram #6

- 1) Install the Pickups and route the Pickup cables to the control cavity.
If the cables are too long, wind up the excess and keep it under the pickup.
- 2) Mount the Volume and Tone controls into the body.
Plug both pickup cables onto the Volume controls as shown.
Plug a connect cable from the Bridge Volume control to the Pickup Buss (Position 1)
- 3) Plug a connect cable from the Neck Volume control to the Pickup Buss (Position 2)
- 4) Strip the insulation from the switch wires and Insert them into the GREEN Terminal Block and tighten the screws with a small screwdriver.
The Bridge pickup goes to the BR Terminal
The Neck Pickup goes to the NK Terminal
The Output of the switch goes to the O Terminal
If there is a ground wire coming from the switch, insert it into one of the black terminals on the terminal block.
- 5) Plug the output cable onto the Tone control and connect the wires to the output jack by pushing the connectors on as shown.
WHITE wire onto the TIP (T) contact,
BLACK wire onto the SLEEVE (S) contact
BLACK Battery Negative wire onto the RING (R) contact.
- 6) Plug the RED Wires of the pickups onto the V+ Supply Bus (RED Shroud) along with the RED of the battery clip. Extra pins are for EMG Accessories.
- 7) Put the battery in the insulating foam 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 #6

2 Pickups (1 EMG / 1 EMG-TW)
Toggle Style Switch
Volume each Pickup (Volumes are independent)
Master Tone

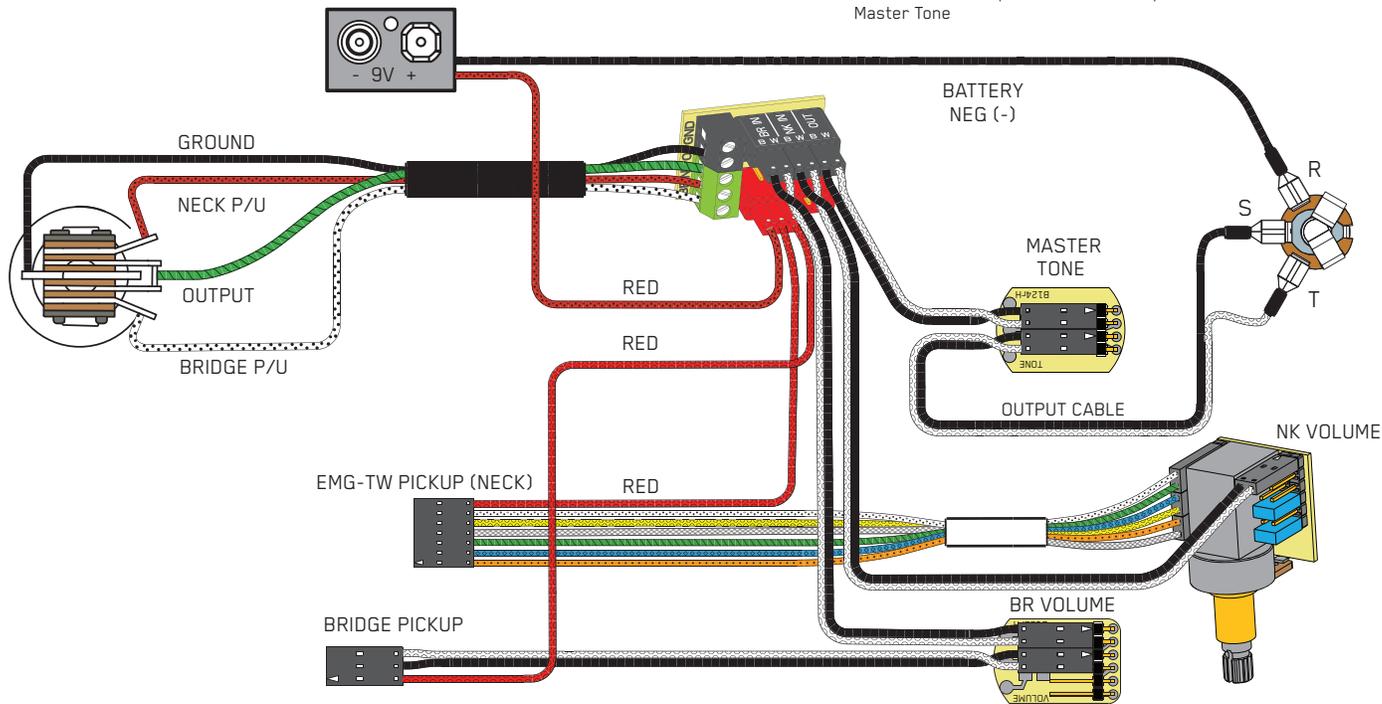


Diagram #7a

Connecting to the B289 3 Way Toggle:

Install the 4 pin Connector housing on the switch as shown in the diagram below. Install both of the 2 pin connectors on to the 4 pin connector between the black and red housings as shown. The black and green terminal blocks will not be used for the switch.

For more details you can refer to the B289 Instructions.

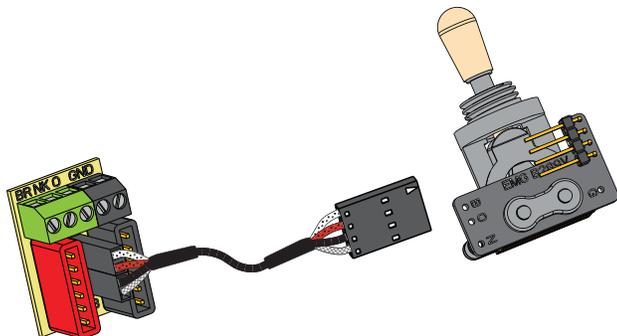


Diagram #7b

2 Pickups
Lever Style Select Switch
Master Volume & Master Tone

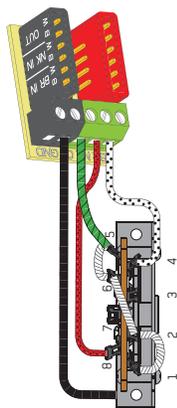
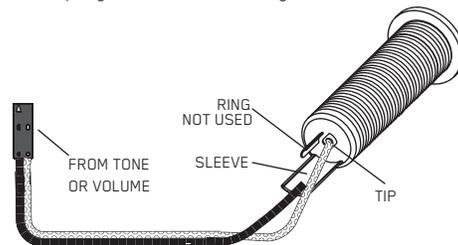


Diagram #7c

Soldering to the 152B Panel Jack:

If your instrument has a long Panel Jack like the one below you will have to solder the output cable as shown.

Ground (Black) to the Sleeve
Signal (White) to the Tip
Battery Negative (Black) to the Ring



2 Pickups / Toggle Select Switch / 2 Volumes and 2 Tones)

Refer to Diagram #8

- 1) Install the Pickups and route the cables to the control cavity.
If the cables are too long, wind up the excess and keep it under the pickup.
- 2) Mount the Volume and Tone controls into the body
Plug both Neck and Bridge pickup cables onto the Volume Controls as shown.
Plug a connect cable from the Bridge (BR) Volume control to the Pickup Buss (Position 1). See Diagram #8
Plug a connect cable from the Neck (NK) Volume control to the Neck (NK) Tone control as shown.
- 3) Plug a connect cable from the Bridge (BR) Volume control to the Bridge (BR) Tone control as shown.
- 4) Plug a connect cable from the Neck (NK) Tone control to the Pickup Buss (Position 2). See Diagram #8
- 5) Strip the insulation from the switch wires and Insert them into the GREEN Terminal Block and tighten the screws with a small screwdriver.
The Bridge pickup goes to the BR Terminal
The Neck Pickup goes to the NK Terminal
The Output of the switch goes to the O Terminal
If there is a ground wire coming from the switch, insert it into one of the black terminals on the terminal block.
- 6) Plug the output cable onto the Pickup Buss (Position 3) and push the connectors onto the jack as shown.
WHITE wire onto the TIP (T) contact,
BLACK wire onto the SLEEVE (S) contact
BLACK Battery Negative wire onto the RING (R) contact.
- 7) Plug the RED Wires of the pickups onto the V+ Supply Buss (RED Shroud) along with the RED of the battery clip. Extra pins are for EMG Accessories.
- 8) Put the battery in the foam insulator and place it securely in the control cavity.
We suggest that you plug in the instrument and test it before closing the control cavity.

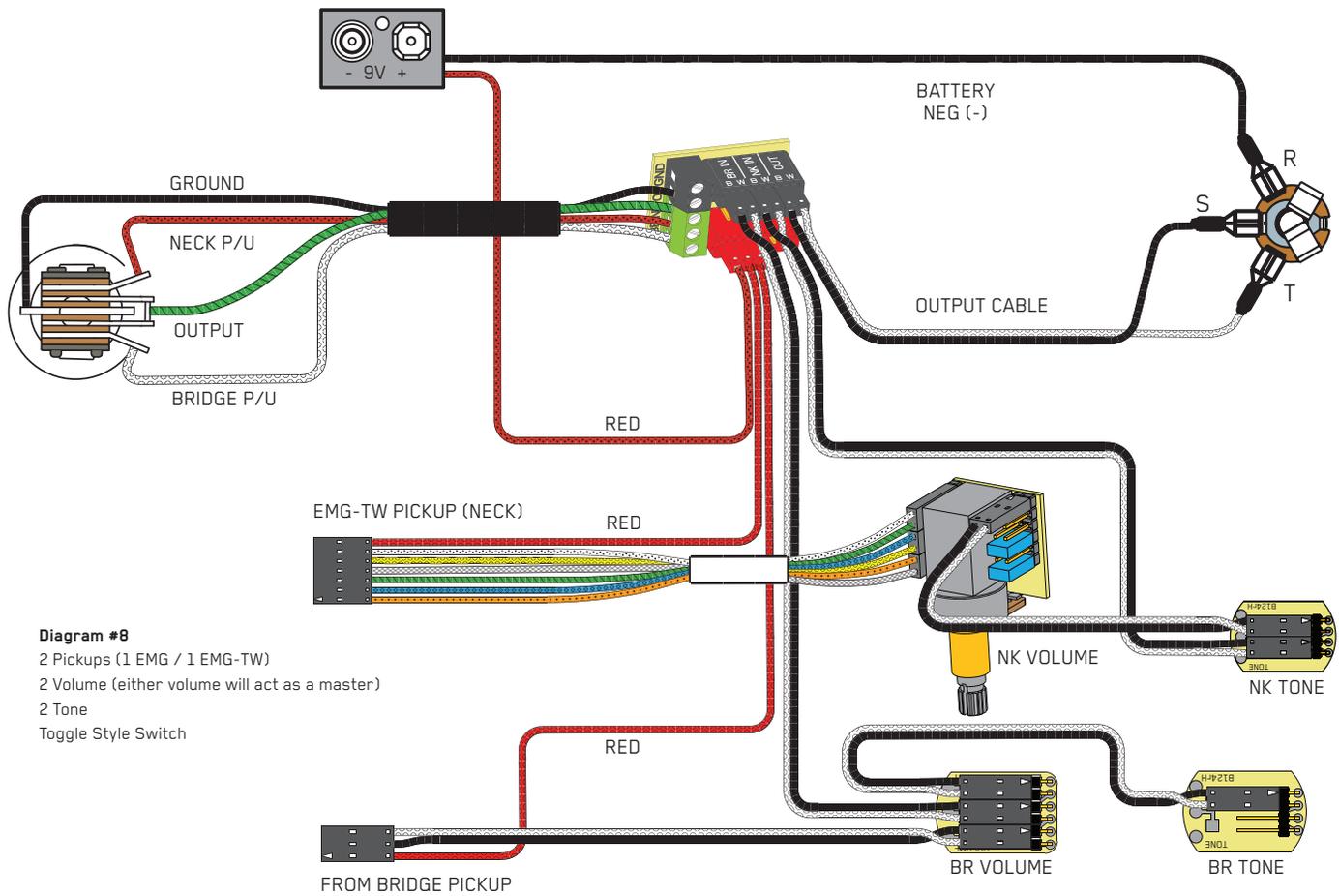


Diagram #8
 2 Pickups (1 EMG / 1 EMG-TW)
 2 Volume (either volume will act as a master)
 2 Tone
 Toggle Style Switch

If the instrument has a Battery Holder:

If your instrument has a 9 or 18 Volt battery holder you can still use the EMG Connectors to supply power to the pickups. Simply cut and strip the wires from the battery clip provided. Twist the wires together and use the shrink tubing included to cover the connections. Soldering the wires is the preferred.

