



0230-XXXX

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## INSTALLATION INFORMATION

### EMG MODEL: 45-HZ PICKUP

#### SPECIFICATIONS:

Logo Color  
Magnet Type \*  
Inductance (Henries) (1)  
DC Resistance (kOhm)  
Resonant Frequency (KHz) (2)  
Resonant Frequency (KHz) (3)  
Impedance at Resonance (kOhm) (2)

#### MODEL:

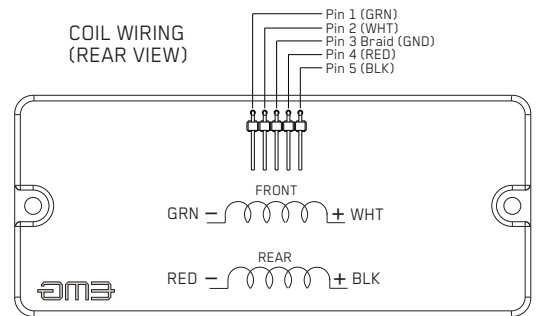
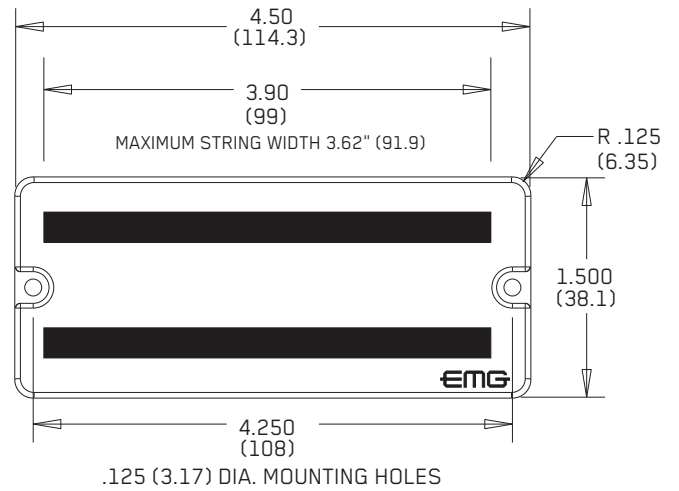
45-HZ  
Silver  
C/S  
3.62  
11  
2.40  
4.05  
54.5

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

(1) Wired in Series

(2) Loaded with 500K Volume and Tone with a 20' (6M) Cable

(3) Loaded with 1 MegOhm / 47pf



#### INSTALLATION NOTES:

All EMG-HZ Pickups are compatible with each other. The connector system is an easy method of installation, avoiding the need to solder, and provides an easy way to interchange pickups. The 5-Wire cable allows Series/Parallel switching or simple single/dual-coil combinations can be used. For more information go to <http://www.emgpickups.com>.

EMG Accessory Circuits like the EXB, BT,C or BQC Controls can be added to any EMG Pickup System, all have buffered inputs and can be used on either passive or active pickups. The B245 Buss included with the set will be used on instruments that use a selection switch.

If your installation is passive only and doesn't require a battery the RED V+ port of the Buss will not be used.

If you decide to add active circuitry the V+ port can power as many as 5 EMG Accessories.

**SPECIAL NOTE: The Red Wire of the HZ Pickup is NOT for battery power, it is a coil wire.**

#### Each Pickup Includes:

- 1 ea Pickup cable
- 2 ea 500K Pots with quick-connect solderless connectors
- 1 ea B245 Pickup Buss
- 1 ea Black wire with connector (ground)
- 1 ea IDC bridge ground connector
- 1 ea #11 1/4 inch Phone Jack
- 2 ea Adjustment screws

#### 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 Model: 45-HZ

#### 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, soldering will be required
  - 2) Instruments with two pickups may need soldering to the selection switch in some installations.

If you are installing only one pickup use the instructions on this page.  
If you are installing two pickups go to page 3 and begin there.

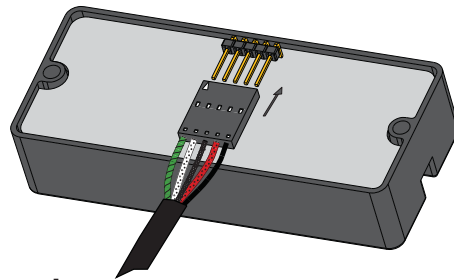


Diagram #1

### Installation (One Pickup Guitars):

- 1) Plug the pickup cable onto the EMG Pickup as shown in Diagram #1 and route the cable to the control cavity. If the cable is too long, wind up the excess and keep it under the pickup if possible. Diagram #2 shows the other end of the pickup cable. The Green wire and shield are pre-wired to Pin 1 and the Red wire is pre-wired to Pin 2. The Red wire is the signal output from the pickup. The White and Black wires are wired together and covered with shrink tubing. This is standard humbucking series wiring.

#### Master Volume control only

##### 2) Refer to Diagram #3.

- Plug both the Pickup cable and the output cable onto the Volume control as shown. Also, plug the bridge ground wire onto terminal #2 of the volume control. See diagram #5 for further information about the bridge ground.
- 3) Connect the wires of the output cable to the output jack by pushing the connectors on as shown. WHITE wire to the TIP (T) contact, BLACK wire to the SLEEVE (S) contact. We suggest that you plug in the instrument and test it before closing the control cavity.

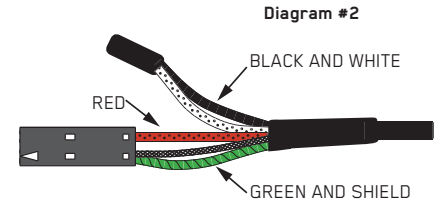


Diagram #2

Diagram #3  
One Pickup  
One Volume

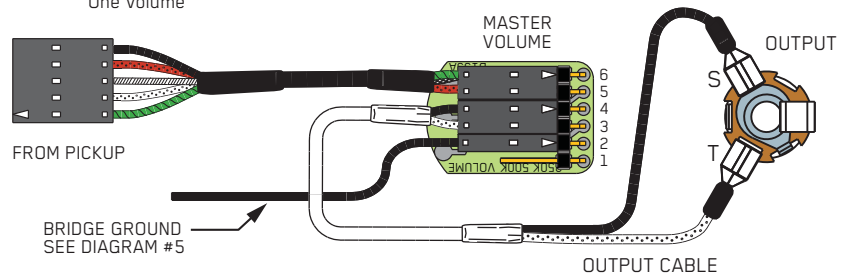
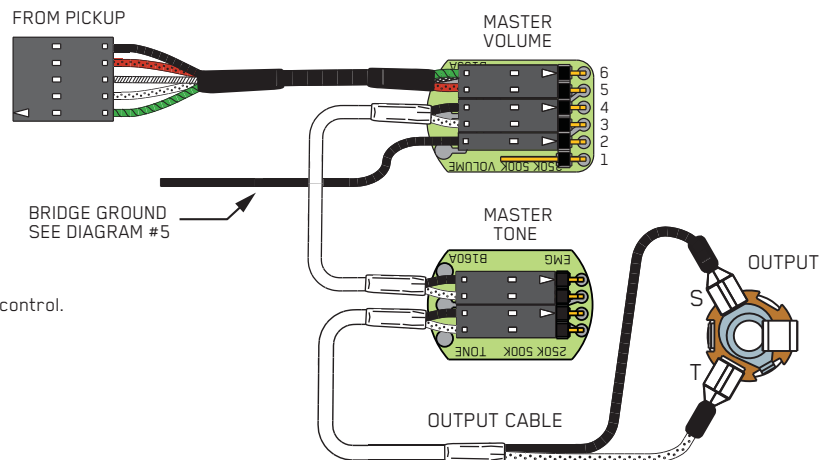


Diagram #4  
One Pickup  
One Volume  
One Tone

#### Master Volume and Tone control

##### 4) Refer to Diagram #4.

- Plug the Pickup cable onto the Volume control as shown. Plug a coax cable from the Volume control to the Tone control. Plug the output cable onto the tone control as shown. Also, plug the bridge ground wire onto terminal #2 of the volume control. See diagram #5 for further information about the bridge ground.
- 5) Connect the wires of the output cable to the output jack by pushing the connectors on as shown. WHITE wire to the TIP (T) contact, BLACK wire to the SLEEVE (S) contact. We suggest that you plug in the instrument and test it before closing the control cavity.

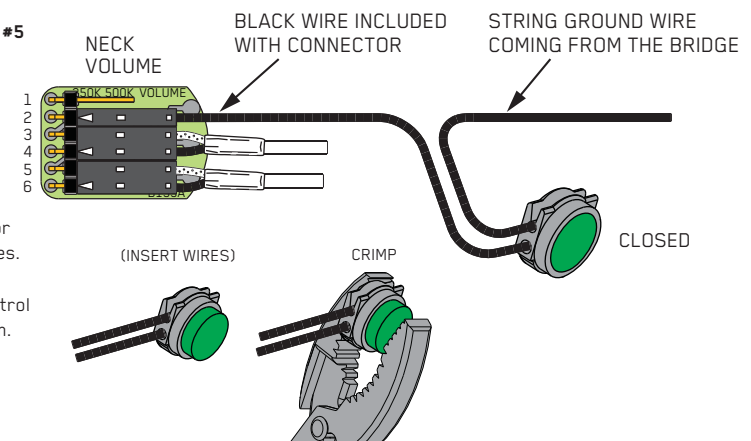


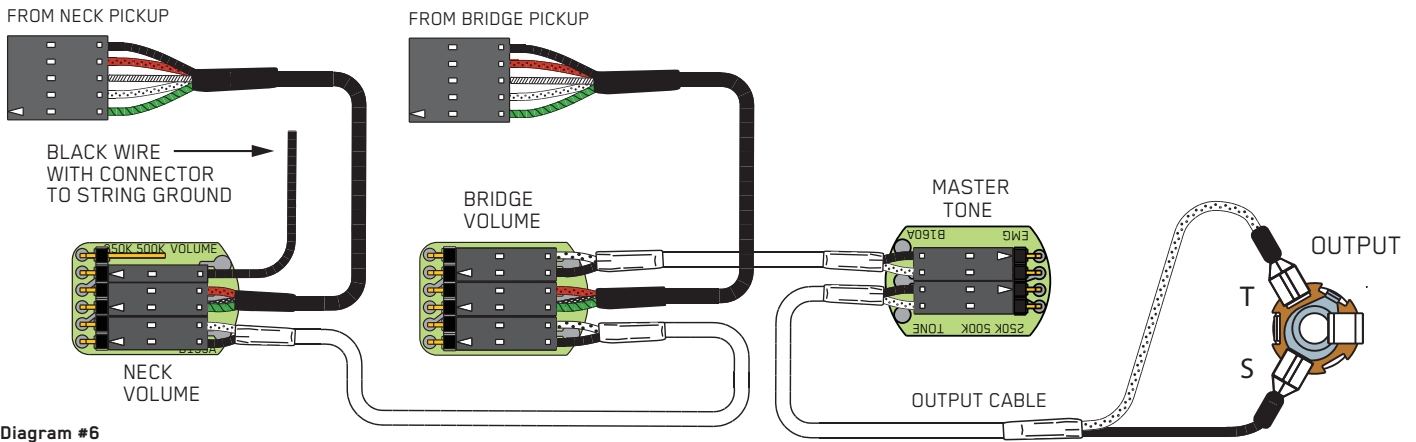
#### Attaching the bridge ground wire

##### 6) Refer to Diagram #5.

- As mentioned on page 1, it is common to "ground" (earth) the strings on guitars that have passive pickups. Included with the system is a black wire with a single black connector attached. Also included is an IDC connector for connecting the two wires together. Insert the bridge ground wire, and the connector wire into the IDC connector, crimp the connector with a pair of pliers until it snaps and this will connect the two wires. You don't need to strip the insulation from the wires. Push the black connector onto terminal 2 (GND) of the volume control as shown in the diagram. This will ground the strings to the system.

Diagram #5





**Diagram #6**  
2 Pickups  
Volume / Volume/ Tone

**Installation (Two Pickup Guitars with Selection switch):**

The Pickup B245 Buss is a convenient way to wire your guitar without soldering. There is a separate sheet attached to these instructions that describes the Pickup Buss in detail. Since you are installing passive EMG-HZ Pickups the RED Shroud of the B245 Buss will not be used. It is for battery power.

- 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 into the Pickup Buss (BLACK Shroud) as shown,

**Refer to Diagram #5**

Bridge Pickup to **BR IN**

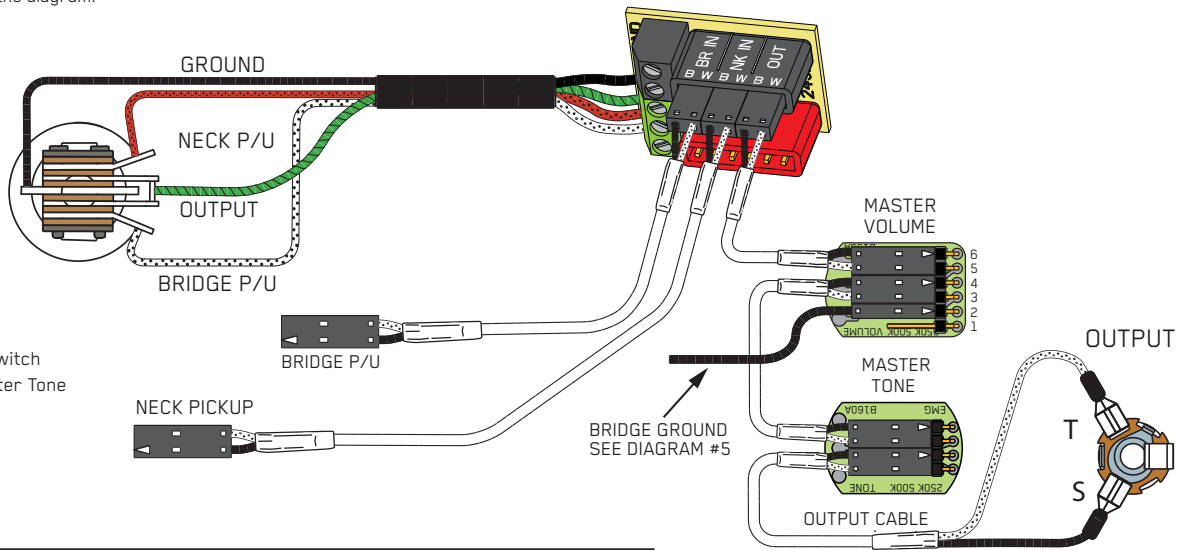
Neck Pickup to **NK IN**

- 3) Plug a coax cable from the Pickup Buss (**OUT**) to the Master Volume control as shown in the diagram.

**\*\*\*\*Tips and Tricks\*\*\*\***

**Start your installation by:**

- 1) Remove the strings
- 2) 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.



**Diagram #7**  
2 Pickups  
Toggle Style Select Switch  
Master Volume / Master Tone

**Diagram #8, 8a**

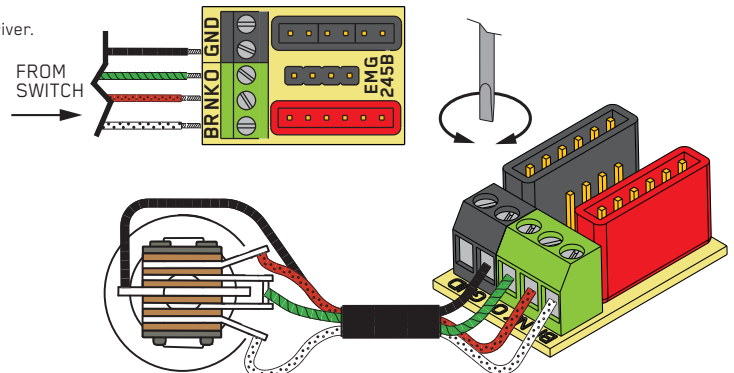
**Wiring the Selection Switch**

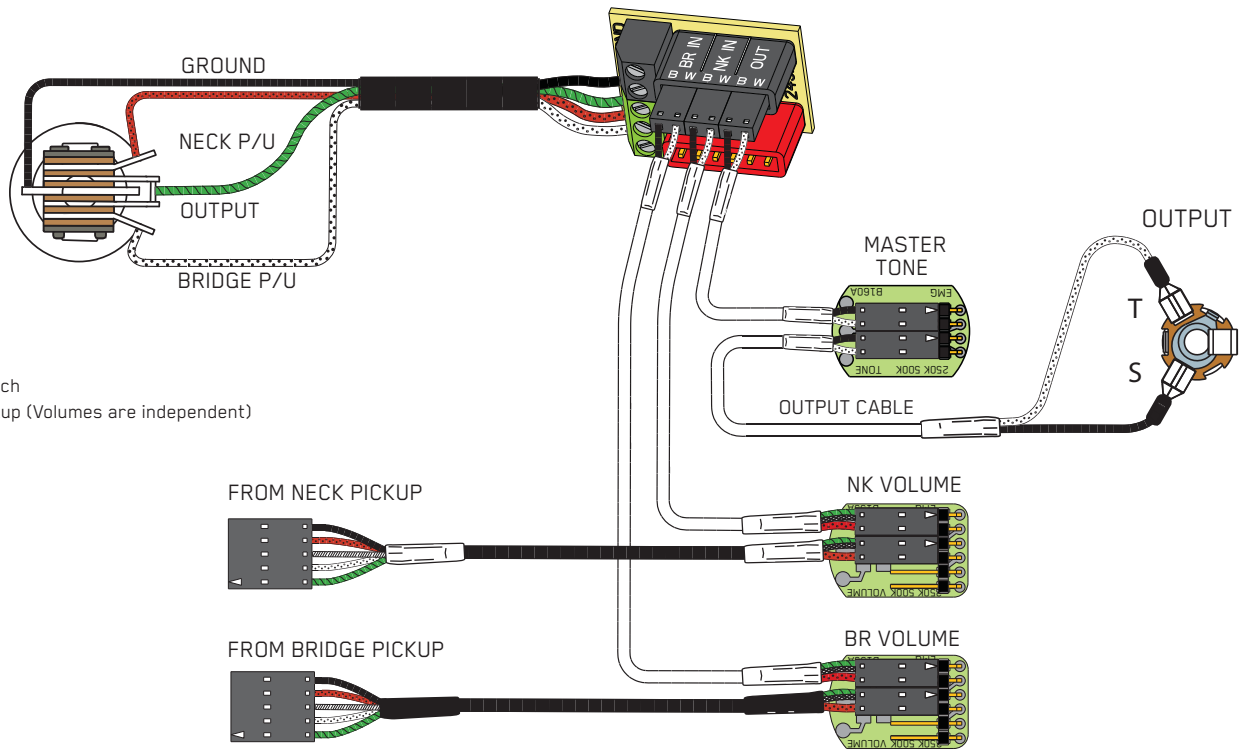
- 4) Refer to diagrams 8 and 8a, strip the insulation from the switch wires and insert them into the GREEN Terminal Block and tighten the screws with a small screwdriver.  
The Bridge pickup to the **BR** Terminal  
The Neck pickup to the **NK** Terminal  
The Output of the switch to the **O** Terminal  
If there is a ground wire coming from the switch, insert it into one of the black (**GND**) terminals on the terminal block.

- 5) Plug the output cable onto the Master Volume control and connect the output wires to the output jack by pushing the connectors on as shown.

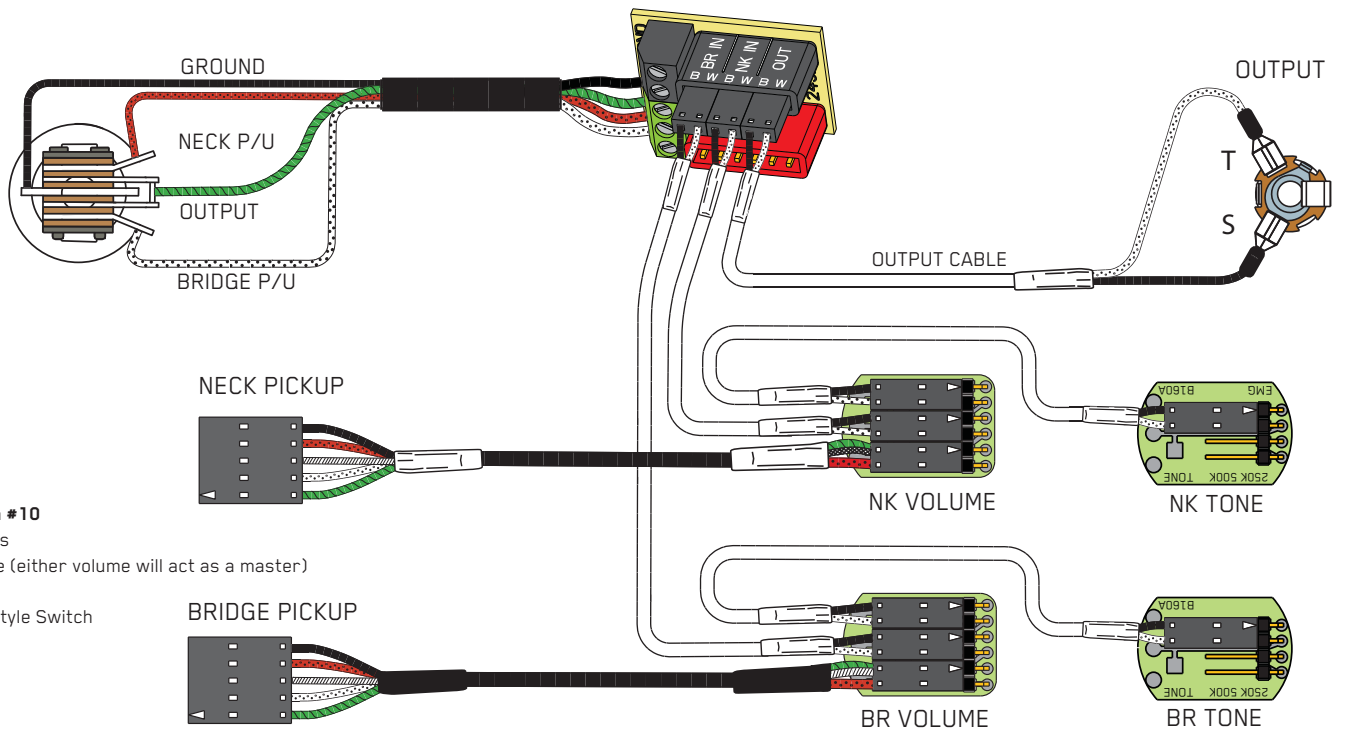
**WHITE** wire onto the **TIP (T)** contact,  
**BLACK** wire onto the **SLEEVE (S)** contact

We suggest that you plug in the instrument and test it before closing the control cavity.





**Diagram #9**  
 2 Pickups  
 Toggle Style Switch  
 Volume each Pickup (Volumes are independent)  
 Master Tone



**Diagram #10**  
 2 Pickups  
 2 Volume (either volume will act as a master)  
 2 Tone  
 Toggle Style Switch

**Soldering to the 151 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

**Diagram #11**

