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Thank you for your inquiry! NKK Switches is looking forward to providing you with your custom legend and/or assembly solution. Please provide as much information as necessary to build your custom solution. Quote accuracy is based on provided specifications. It is subject to change if there are any alterations. Customer provided drawings will supersede this form. If there is no preference for a particular item, please leave it blank. NKK Switches reserves the right to choose components if such information is not provided in order to produce an expedient quote.

NKK Switches will create an approval form or drawing that the customer must sign before work can begin.

Shown below are the many options available for a custom solution. Please note that not all parts are required, as they are dependent on your project requirements. Custom designs with more than one connector or overwrap are also possible. The following sheets cover each section step by step to help clarify the information necessary to create your custom legend or assembly solution.

Typical Switch and Wire Harness Assembly:

Switch Top View USA Legend - Laser Etch - Screen Print - Pad Print - Film Insert	Switch Side View	Solder • J Hook • Straight • Straight	Cable Ties BC Termination • Wire with Insulation • Wire Tinned • Straight Cut • Connector • Quick Connects	
• Film Insert				
1. Contact Information:			Data:	
Address:			_ Date: Phone:	
		ate: Zip Code:		
		Email:		
Full Switch Part Number:				
2. Quantity & Build Information	:			
Full Switch Part Number:				
<i>Build Frequency</i> One-time Build: □ Quantity: Repeat Build: □				
For all assemblies there will be a m	ninimum qu	antity based on the build specifications.		
For a repeat build please provide the	he Estimate	ed Annual Usage (EAU):		
<u>Number of Different Builds</u> Sometimes there is a need for a gr	oup of asse	emblies that are similar except for the lege	end.	
Number of different build types:				
Single part number for a group of b	ouilds 🗆	Each build to have its own individual particular	rt number 🛛	



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3.	Legend:	(Legend-only. No harness: $\Box$	])		
<u>Lec</u>	<u>gend Imprint Method</u> Laser etching inside □ Laser etching outside				
	Pad Print $\Box$ Screen Print $\Box$ No Preference $\Box$				
<u>Lec</u>	<ul> <li>a) Graphic Image(s)  <ul> <li>Text </li> <li>b) If legend(s) is provided via a graphic image(s), your image(s) when submitting this form.</li> <li>c) When using text for your legend(s), please provided text for your legend(s), please</li></ul></li></ul>	vide the following: ed for multiple legends. Verify that			
Sel nur	<ul> <li>printable areas. Not all switches can support m</li> <li>d) Pad or screen print color (Pantone color, if des</li> <li>e) Font Style (regular, bold, italic etc):</li></ul>	tches' part	Part#Left	NKK Part # Top LEGEND IKK Part # Bottom	NKK Part # Bight

**Laser Etching** is a quick method for adding a durable dark legend to switch caps. On illuminated caps, it can go inside the cap lens for a smooth cap feel. On non-illuminated caps it can go on the outside.

**Pad Printing** is the best option for printing a legend on an irregular surface, such as rockers, because it has minimal or no distortion. It has a minimum of tactile feel. A variety of colors can be used. Please note that pad printing is best if used on non-illuminated switches. Legends can go on the cap lens or diffuser to create different appearances.

**Screen Printing** is the best for printing a single-color legend on illuminated switches or when thick paint is needed to create a stronger tactile feel. It can go on the cap lens or diffuser to create different appearances.

**Film Inserts** allow for multicolor legends, like logos. They are also durable and have a smooth cap feel. Film inserts are best when used on illuminated switches because they have a clear and sharp look.

Please note:

When using Pantone colors, the legend color(s) will have a tolerance of shades adjacent to the desired Pantone color.

The center of the graphic image or text will be located within a Ø.040-inch tolerance zone.



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4. Wire Harness: (If the legends-only box is

(If the legends-only box is checked on page 2 then this page is not needed.)

## Wire Characteristics

(Wire Harness-only. No legend:  $\Box$ )

- a) Wire gauge (AWG)? \_
- b) Stranded  $\Box$  Solid  $\Box$
- c) Wire voltage and temperature rating and/or UL or MIL spec type? Or no preference:  $\Box$
- d) Wire harness length from back of the switch body to the head of connector (or end of wire) and tolerances?
- e) Which color wire will go to which terminal?

Switch Terminal(s)	Wire Color(s)	Connector Terminal(s)	Resistor (Value and Watts)

## Switch Characteristics

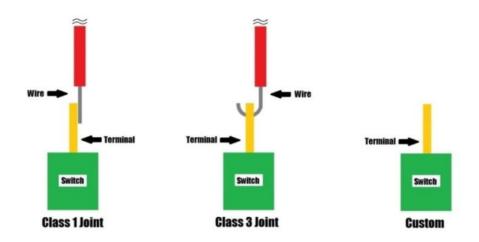
f) Select solder joints class:

Class 1 Class 3 (J-Hook) Class 3 Class 3 (J-Hook) Class 1 Class 3 Clas

A Class 1 joint is a straight solder.

A **Class 3** joint is a J-hook through the terminal hole. Class 3 joints can only be used for solder lug thru-hole terminals where the wire, with tinning, is small enough to fit through the terminal hole.

If Custom, please include an illustration and/or description.





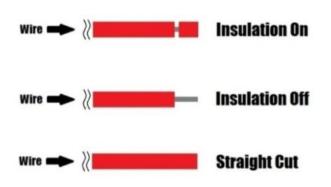
## **Customer Requirements Review Document**

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<u>Connector/Termination</u> (If legends-only box is checked on page 2 then this page is not needed.)

- g) Select the type of termination for the non-switch end of the wire: Wire (Default) □ Connector □ Quick Connect □ Other □
- h) For quick connects or connector(s) and/or contact(s) list the part numbers:
- i) Does the wire insulation O.D. fit the terminals requested? Yes  $\Box$ .
- j) For wire termination ends:

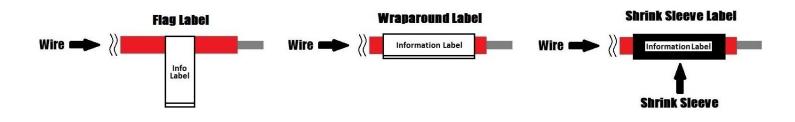
a.	Select the termination r	method for the non-switch end of the v	wire:
Insulati	on On 🗆 Insulation Off (	(Tinned) 🗆 Straight Cut (Default) 🗆	



b. What wire stripping length(s) is required at the non-switch end of wire?

## <u>Miscellaneous</u>

- k) Shrink tubing over solder joints? Yes  $\Box$
- I) What additional shrink sleeve(s) is required (diameter, length, and location)?
- m) Is a wraparound, flag, or shrink sleeve label needed? If so, please provide a language sample with dimensions and location:





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n) Epoxy Encapsulation: Yes  $\Box$ 

**Epoxy Encapsulation** is a process that involves placing a switch into a mold or case and then pouring liquid epoxy compound (3M Scotch-Weld DP270) to completely cover the unit. It is then cured. This process protects the unit from harsh environmental conditions.

o) Extra identifying label(s) for packing box or bags (in addition to NKK part number):

Comments & Additional Requirements:

Please send this completed form to webemail@nkkswitches.com

If you have any questions or need assistance, please contact customer support at: (480) 505-3790

Include any additional relevant drawings or additional specifications

Thank you!

