

# ○ 1/2" Button Installation

**Step  
One**

**Mill Sensor Pocket**  
(use included Drawing,  
Sensor Pocket Problems  
Page and End Mill)

**Step  
Two**

**Check Sensor Pocket**  
(use 1/2" Button Gauge Plug  
and Block)

**Step  
Three**

**Install Sensor**  
(Refer to Sensor Installation  
Problems Page)

**Step  
Four**

**Check Installed Sensor**  
(Use Sensor Tester)

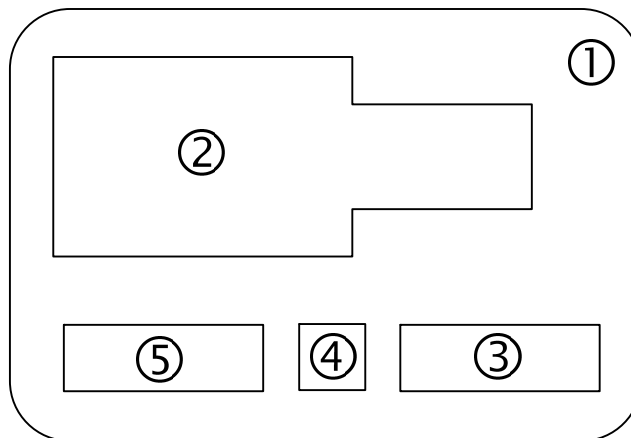
Rev. 7.0



# 1/2" Button Installation/Check Kit

## Reorder Information

	<b>Part Number</b>	<b>Description</b>
①	PA-BSPK-CAS	Carrying Case
②	LS-TESTER	Lynx Sensor Tester
③	89-0127-TL1	Carbide End Mill
④	MA-0127-PLG	1/2" Button Gauge Plug
⑤	MA-0127-BLK	1/2" Button Test Block



## Pocket Milling Instructions

### Step One:

Rough mill sensor pocket to  $-.010$ " from finish size and rough mill cable slot to print

### Step Two:

Add  $.020$ " DP x DIA +1/8" C'Bore (spot face) to pocket noted \* at right

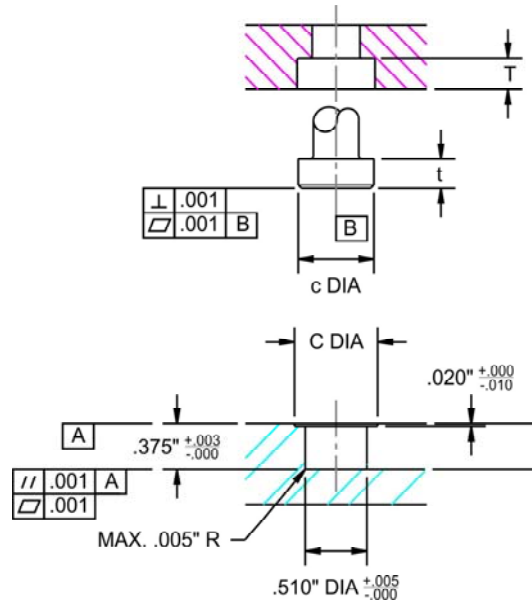
### Step Three:

Finish mill sensor pocket with 5/16" DIA Dead Sharp 4-fluted end mill by circular interpolation to size. Note MAX internal corner radius.

RJG Part Number:  
89-0127-TL1

### Step Four:

Check with RJG  $\frac{1}{2}$ " gauge plug  
RJG Part Number:  
MA-0127-PLG

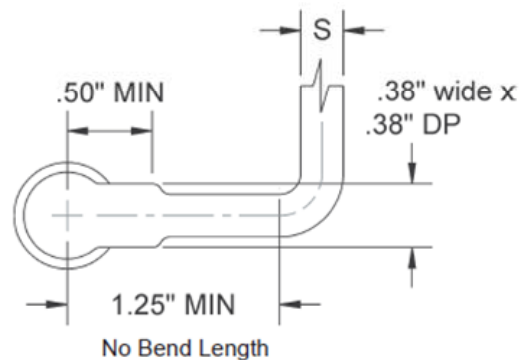


#### Notes:

$T = (t + .010") \frac{+.01"}{-.00"} \text{ Ejector Pin Head Clearance}$

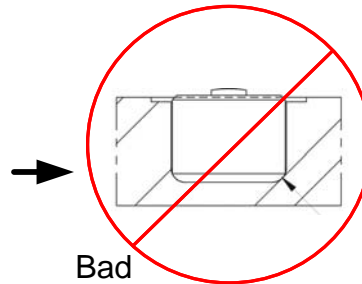
$C = (c + .125") \frac{+.02"}{-.02"} \text{ Counter Bore Clearance}$

$S = .25" \text{ Wide Slot for Lead Wire}$

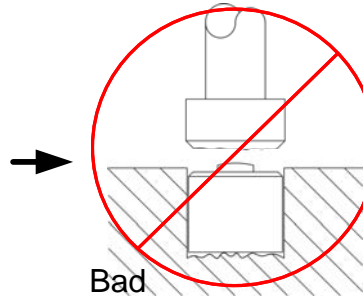


## Sensor Pocket Problems to be avoided

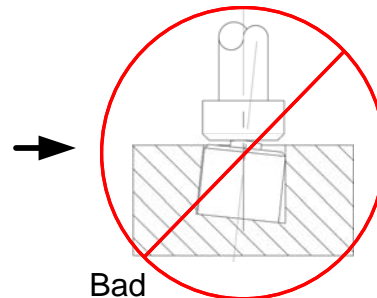
Design sensor pocket to the specifications in the manual. Specify no radius on the bottom to prevent side-loading



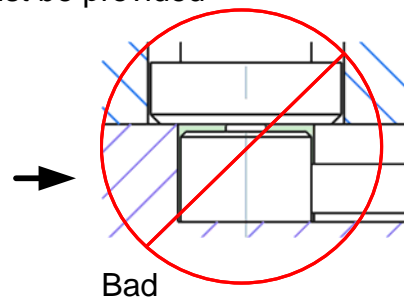
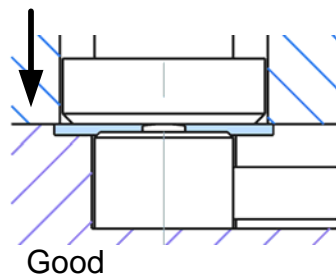
The metal that transmits pressure to the sensor from a ejector pin must be a smooth surface. The mold surface must also have a surface finish of  $32\mu$  or better



Ejector pin head must be perpendicular to the pin shaft



If the ejector pin head is larger than the sensor head, additional clearance room must be provided

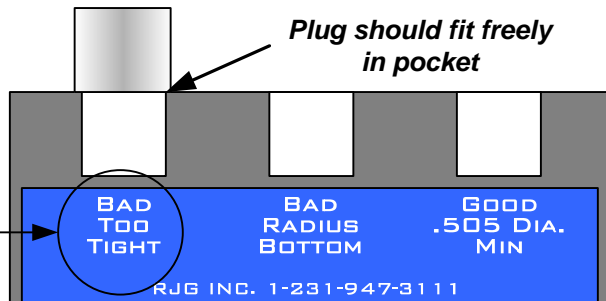


## Using the 1/2" Button Gauge Plug

The 1/2" Button Gauge Plug allows the tool room to check new sensor pockets for some of the most common and most damaging sensor pocket problems. The Block is included to demonstrate operation of the gauge plug.

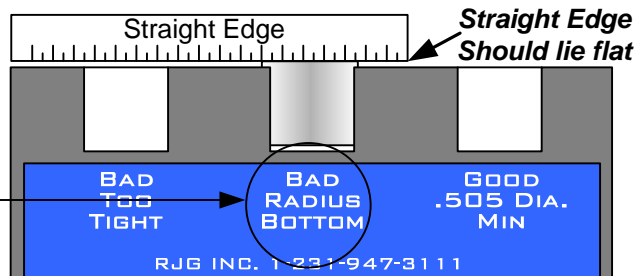
### Bad: Too Tight

This pocket demonstrates a pocket diameter that is too small. Such a pocket can cause damage to a sensor under pressure.



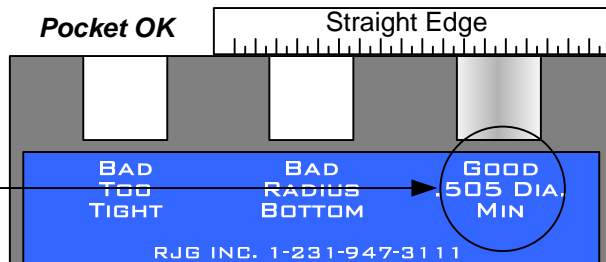
### Bad: Radius Bottom

This pocket demonstrates a pocket that has radius in the corner. Such a pocket can cause the sensor to protrude above the plate. This will cause sensor errors and/or the destruction of the sensor when the mold is reassembled.



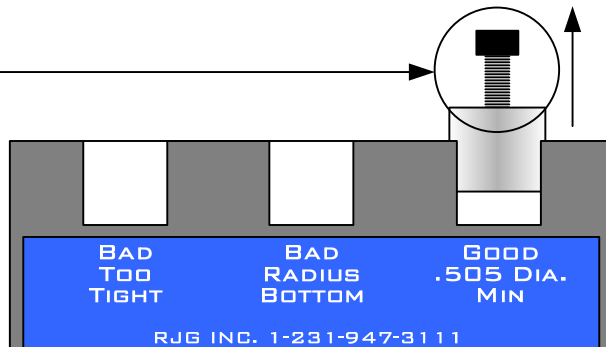
### Good: .505" Dia. Min

This pocket demonstrates a correct pocket. The plug inserts freely and does not protrude above plate.



### Plug Removal

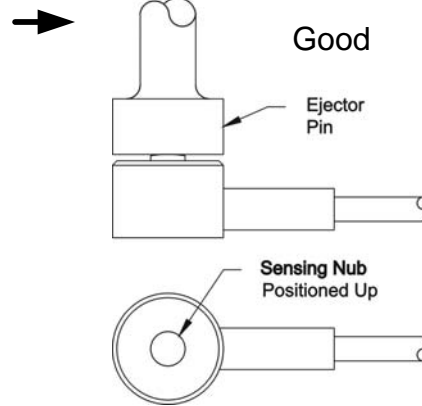
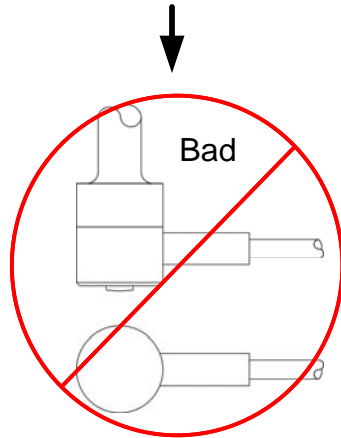
Use the included screw to remove the plug from the plate.



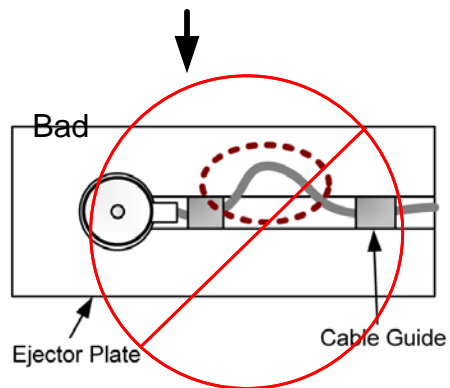
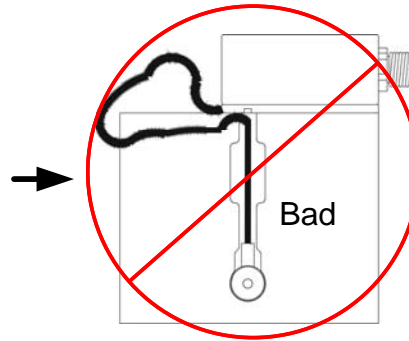
**Attention!**  
Tolerances are tight.  
Keep all components  
dry and free of  
particulate.

## Installation Problems to be avoided

Nub must touch the ejector pin  
(do not install upside down)



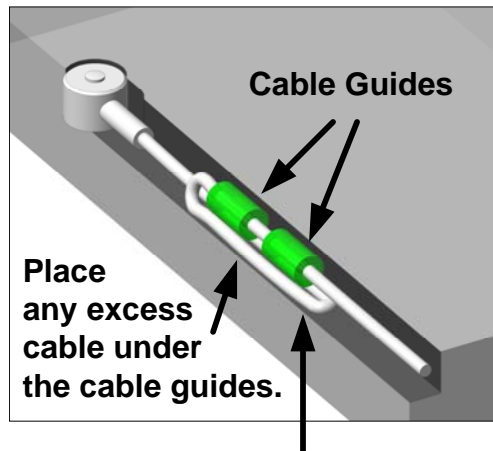
Bury the sensor wire. It should go straight into the mold from the bottom of the Lynx case (on RJG Standard sensors). This will prevent sensor cable damage. Do not allow the sensor cable to fall outside the mold.



## Sensor Cable Retention Tools

### Self Locking Cable Guide Installation\*

- ➔ Put the sensor's cable through the cable guide, then insert the guide & cable into the channel.
- ➔ Install as many cable guides as necessary in order to secure the cable in the channel.
- ➔ Guide can be removed by gently pulling up on the sensor's cable.



*\*Note: This is not for blue piezoelectric cables. Bending piezo cables in this manner can damage them*

### Cable Retention Putty

Use Cable Retention Putty to retain sensor wires when the use of the cable guides supplied with our sensors will not work for your application. Example: Multiple wires per channel.

