PROCEDURE 1

CONTACT SWITCH ASSEMBLY

CSA Procedures:

- > Rotating Knob Assembly (RKA, 11-0000)
- > Housing Assembly (HA, 22-0000)
- > Bracket & PCB Assembly (PCB, 33-0000)
- > Contact Switch Assembly (CSA, 00-0000)

Document Information

Process Owner	Jay J. Dave
Title	Production Process Engineer
Signature	
Date	10/01/2001

Purpose: To provide a reference and training documents, for the CSA-00-0000, Contact Switch Assembly.

Scope: Describes assembly procedure for CSA-00-0000-A, Contact Switch Assembly.

Responsibilities and Authorities: XXX Industries owns this document and is responsible for maintaining it. Production Process Engineering and Manufacturing Operation are responsible for assuring the activities are carried out as described.

Reference Documents

00-0000-DWG	Contact Switch Assembly, CAD Drawing
11-0000-DWG	Rotating Knob Assembly, CAD Drawing
22-0000-DWG	Housing Assembly, CAD Drawing
33-0000-DWG	Bracket PCB Assembly, CAD Drawing
00-0000-FM	CSA - Final Assembly

Revision History

REVISION	DATE	ORIGINATED BY	HISTORY
A	10/01/2003	Jay J. Dave	Initial Release

> Rotating Knob Assembly (RKA, 11-0000)

BILL OF MATERIAL:			
PART #	PART DESCRIPTION	QTY	☒
11-1111	Contactor-A	1	☐
11-2222	Knob Rotator	1	☐
11-3333	Knob Lock	1	☐
	WHEN COMPLETE: INITIAL & DATE ➔		

NOTE: Refer to Figure 1 and Figure 2

1.0. Insert Contactor-A *(11-1111, 1x)*, onto the Knob Rotator *(11-2222, 1x)*. Make sure that slot of the Contactor-A is inserted over the notch of the Knob Rotator.

2.0. Slide the Knob Lock *(11-3333, 1x)* onto the Knob Rotator. Make sure that the cutout slot of the Knob Lock is aligned with the notch of the Knob Rotator.

3.0. Place aside the Rotating Knob Assembly; it will be used to build the Contact Switch Assembly later in the procedure.

FIGURE 1. Rotating Knob Assembly (View 1)

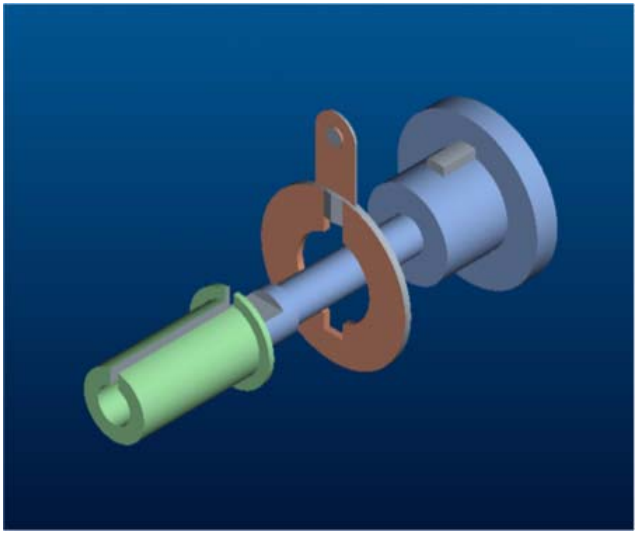
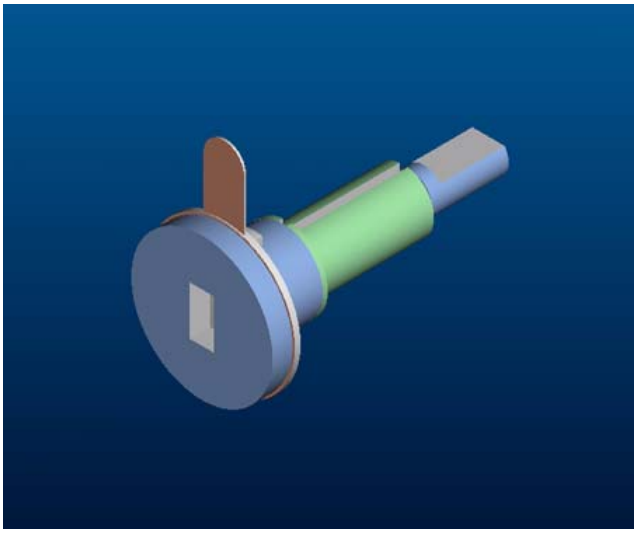


FIGURE 2. Rotating Knob Assembly (View 2)



> Housing Assembly (HA, 22-0000)

BILL OF MATERIAL:			
PART #	PART DESCRIPTION	QTY	☒
22-1111	Main Housing	1	☐
22-2222	Top Pin	1	☐
22-3333	Contactor-B	1	☐
22-4444	Tab	10	☐
22-5555	Resistor	9	☐
22-6666	Tab Screw	10	☐
	WHEN COMPLETE: INITIAL & DATE ➔		

NOTE: Refer to Figure 3 and Figure 4

1.0. Insert and secure the Contactor-B *(22-3333, 1x)* onto the Main Housing *(22-1111, 1x)*. Make sure Contactor-B is placed in 12 o'clock position on the Main Housing.

2.0. Insert and secure the Stop Pin *(22-2222, 1x)* onto the Main Housing at 1 o'clock position.

3.0. Tab & Tab Screw Installation:

3.1 Place the Tab *(22-4444, 1x)* into the 2 o'clock position on the Main Housing. Secure the Tab onto the Main Housing using Tab Screw *(22-6666, 1x)*.

3.2 Repeat Step 3.1, in order to install Tab and Tab Screw onto the Main Housing from 3 o'clock position to 11 o'clock position on the Main Housing.

4.0. Soldering Of the Resistors:

4.1 Place the Main Housing into the Vice Clamp.

4.2 Place the Resistor *(22-5555, 1x)* between the Tabs (Tab at 2 o'clock position and Tab at 3 o'clock position).

4.3 Using Pliers, bend the leads of the Resistor at each end and pass the leads of the Resistor through the Tabs hole.

4.4 Using Soldering Iron and Solder, solder the Resistor onto the Tabs.

4.5 Using Wire Cutter, cutoff the excess leads of the Resistor.

4.6 Using IPA Alcohol and Q-tip clean up the surfaces of the Tabs.

4.7 Repeat Steps 4.2 through 4.6, in order to solder resistors between Tabs (from Tabs at 3 o'clock position through Tab at 11 o'clock position).

FIGURE 3. Housing Assembly (View 1)

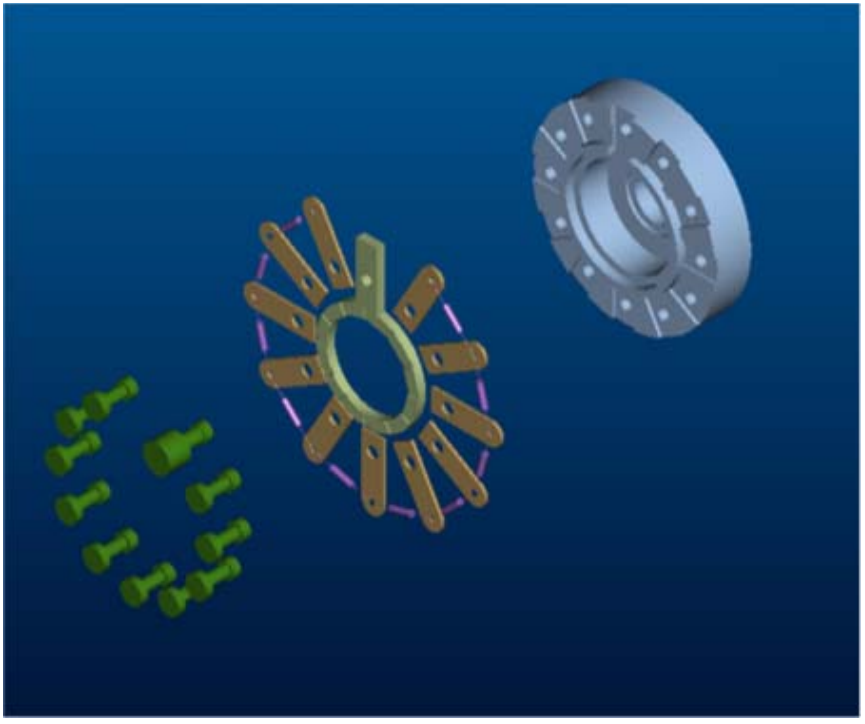
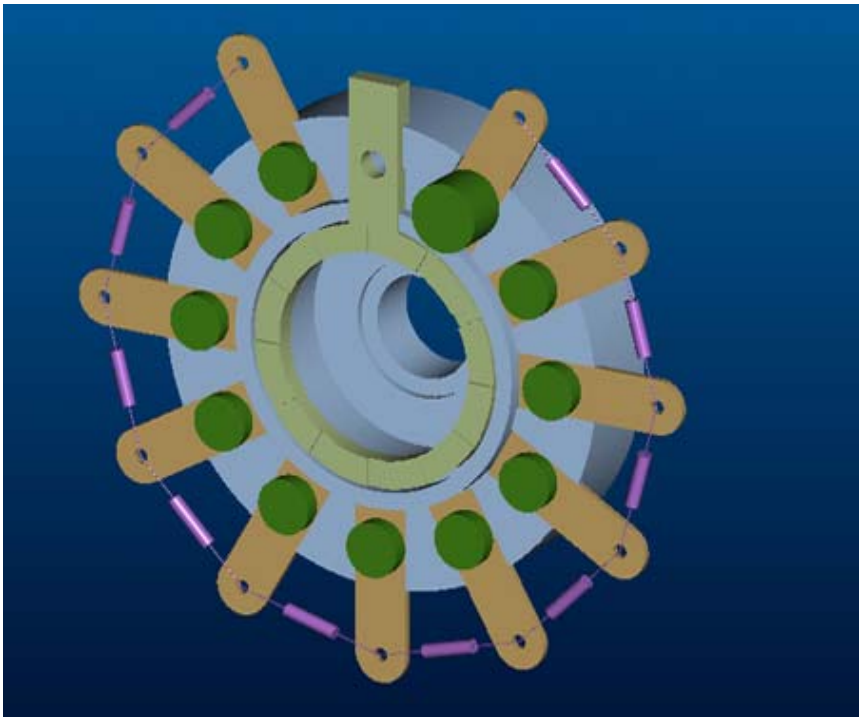


FIGURE 4. Housing Assembly (View 2)



> Bracket & PCB Assembly (PCB, 33-0000)

BILL OF MATERIAL:			
PART #	PART DESCRIPTION	QTY	☒
33-1111	Bracket	1	☐
33-2222	Bracket Nut	2	☐
33-3333	PC Board	1	☐
33-4444	Resistor-1	2	☐
33-5555	Resistor-2	1	☐
33-6666	PC Board Pin	2	☐
	WHEN COMPLETE: INITIAL & DATE ➔		

NOTE: Refer to Figure 5 and Figure 6 and Figure 7

1.0. PCB Board Assembly:

1.1 Place the PCB Board *(33-3333, 1x)* into the Vice Clamp.

1.2 Using Soldering Iron and Solder, solder the following components onto the PCB Board:

- Solder Resistor-1 *(33-4444, 3x)* onto the PCB Board
- Solder Resistor-2 *(33-5555, 2x)* onto the PCB Board

1.3 Using Wire Cutter, cutoff the excess leads of the Resistor.

1.4 Using IPA Alcohol and Q-tip clean up the surfaces of the Tabs.

2.0. Mount the PCB Board onto the Bracket *(33-1111, 1x)* using PCB Board Pins *(33-6666, 2x)*.

3.0. Bracket Nuts *(33-2222, 2x)* will be used later in the Contact Switch Assembly.

FIGURE 5. Bracket & PCB Board Assembly (View 1)

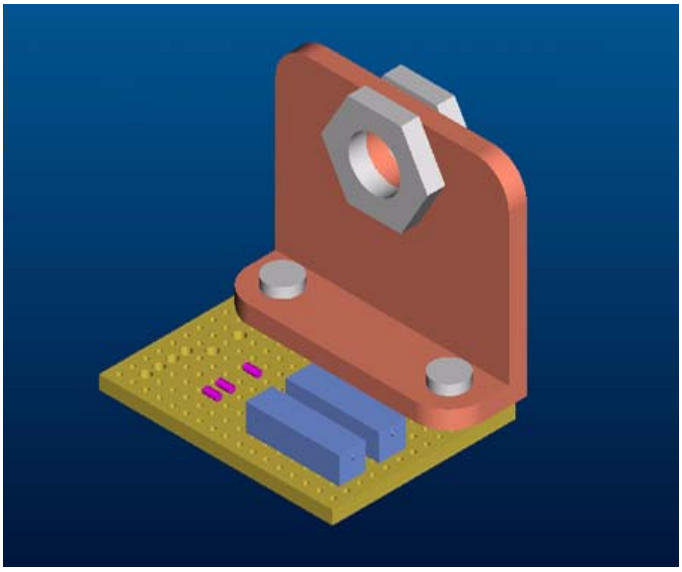


FIGURE 6. Bracket & PCB Board Assembly (View 2)

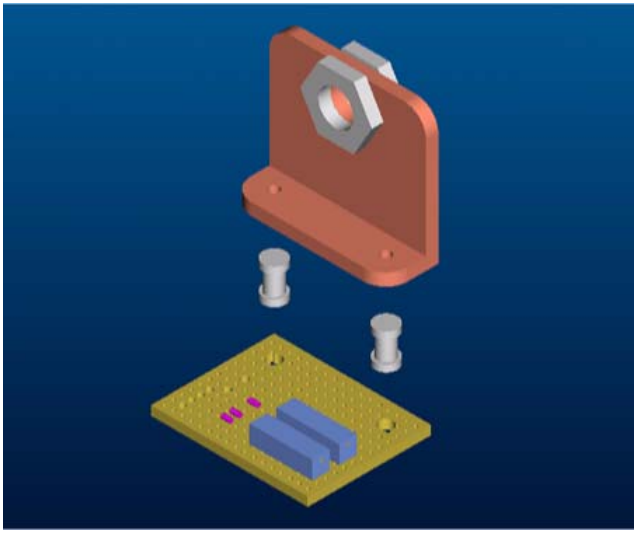
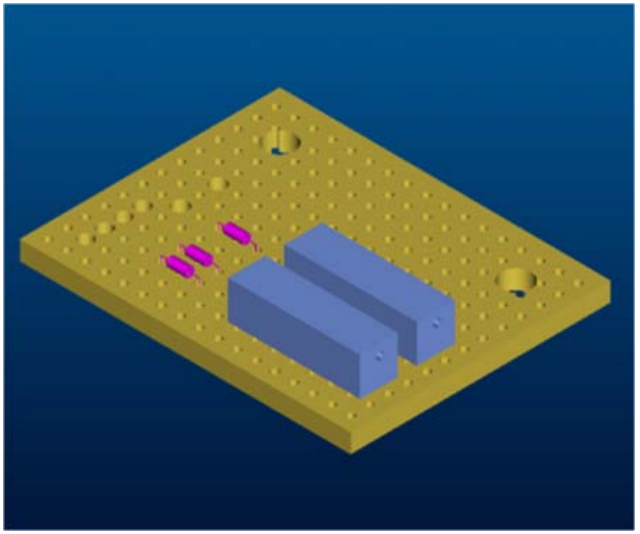


FIGURE 7. Bracket & PCB Board Assembly (View 3)



> Contact Switch Assembly (CSA, 00-0000)

BILL OF MATERIAL:			
PART #	PART DESCRIPTION	QTY	☒
00-1111	Rotating Knob Assembly	1	☐
00-2222	Housing Assembly	1	☐
00-3333	Bracket & PCB Assembly	1	☐
	WHEN COMPLETE: INITIAL & DATE ➔		

NOTE: Refer to Figure 8 and Figure 9

1.0. Slide the Rotating Knob Assembly *(RKA, 11-0000)* through the Housing Assembly *(HA, 22-0000)*.

- Make sure that slot of the Knob Lock (on the Rotating Knob Assembly) is aligned with the notch of the Main Housing (on the Housing Assembly).
- Also, make sure that Contactor-A (on the Rotating Knob Assembly) is properly aligned and flushed with the Contactor-B (On the Housing Assembly).

2.0. Insert the Bracket Mounting Nut *(33-2222, 1x)* to secure the Rotating Knob Assembly onto the Housing Assembly.

3.0. Slide the Bracket *(33-1111, 1x)*, of the PCB Assembly *(33-0000)* over the Knob Lock.

4.0. Secure the Bracket onto the Knob Lock using another Bracket Mounting Nut, this will hold PCB Assembly, Housing Assembly and Rotating Knob Assembly together.

FIGURE 8. Contact Switch Assembly (View 1)

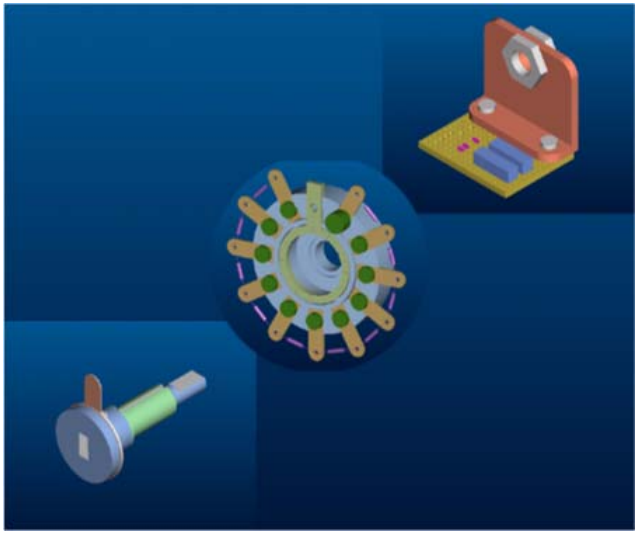


FIGURE 9. Contact Switch Assembly (View 2)