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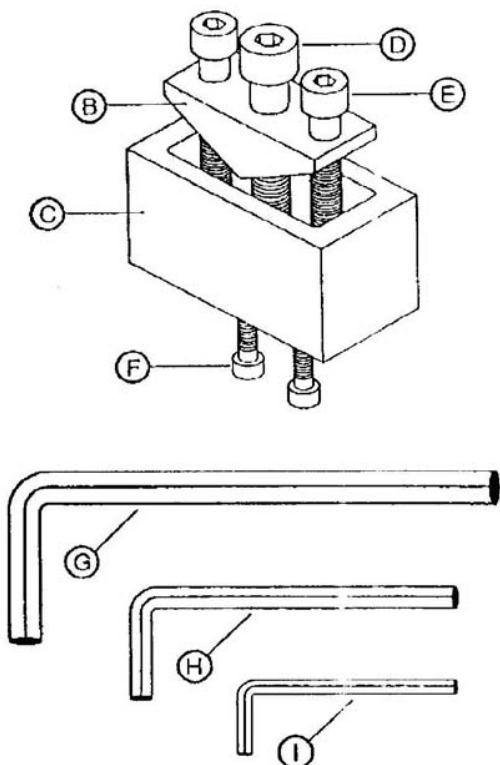
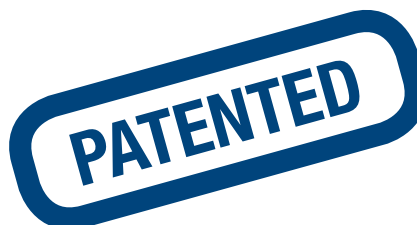
[Murata Power Solutions Inc.](#)  
[DMS-20-CP](#)

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# DMS-20-CP Panel Punch

Panel Cutout Punch and Instructions for Use with All  
 DMS-20-P Series Meters\*



ITEM	QUANTITY	PART NO.	DESCRIPTION
A	1	DWG-DMS-20	Layout Drawing
B	1	DMS-20P	Punch
C	1	DMS-20D	Die
D	1	DCS-6	Draw Screw
E	2	DCS-7	Draw Screw
F	2	SE-1	Eject Screw
G	1	AW-D4	1/4" Hex Key
H	1	AW-D7	5/32" Hex Key
I	1	AW-E	9/64" Hex Key

\* Except model ACA-20PC-4-XXX-XX 100AMP AC ammeters.

**Re-use this container since the wrenches and screws are not standard. Keep all components together. Please note that this document is not an original; the templates shown are not actual size and should be used for reference only.**

**Important Note:**

This chassis cutout punch is not designed to cut through steel or copper panels. Aluminum and FR4 pc-board laminates up to 0.062 inches (15.7mm) thick can be punched SLOWLY. Most fiberglass and Plexiglas materials up to 0.125 inches (3.2mm) thick can also be accommodated. When using the punch on metals, applying a general-purpose cutting oil to the punch and screws is recommended.

This cut out punch is intended to be used for prototype work only; it is not recommended for production environments.

Please see page 3 for additional instructions.



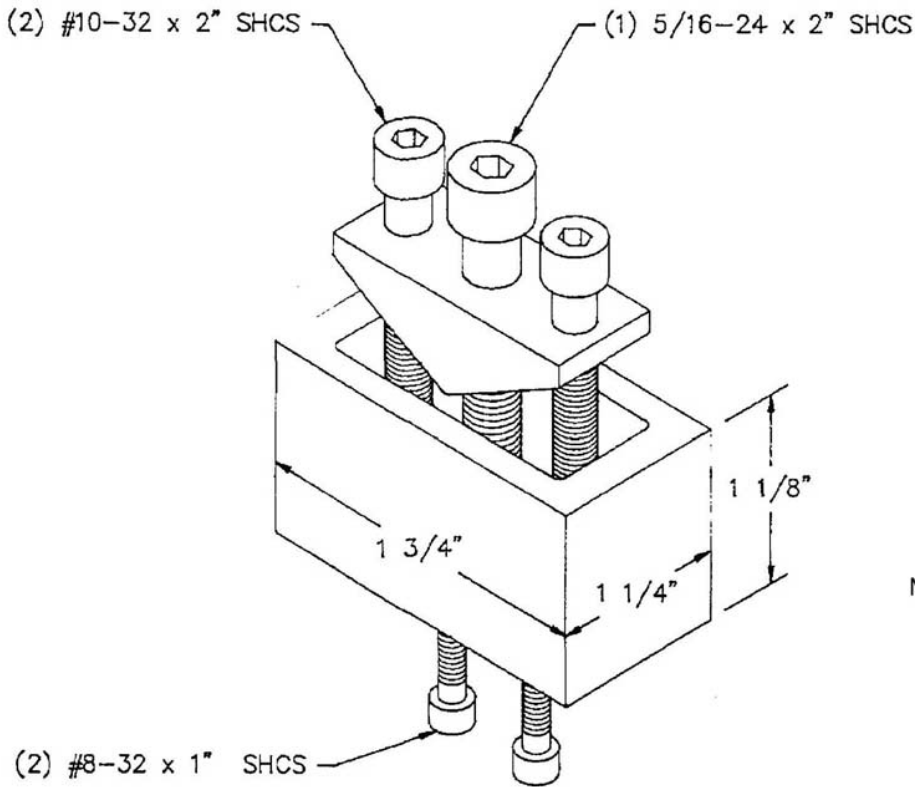
# DMS-20-CP Panel Punch

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**ITEM A**

**Template Detail & Hole Locations for DATEL PANEL PUNCH MODEL DMS-20-CP**

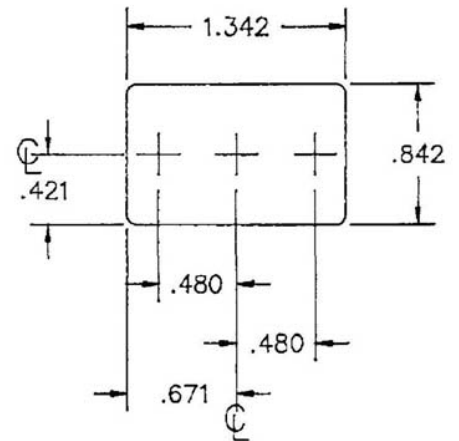
**All dimensions are in inches.**



NOTE: When locating the opening,  
 be sure there are adequate  
 clearances for Punch/Die unit.

**IMPORTANT!**

The template shown below is NOT to scale—  
 do not use it for making hole and/or panel  
 cutouts.



NOTE: A template can be made to these  
 dimensions; or the 3 screw holes  
 can be drilled (as per the instruction  
 sheet) on these centers.

## INSTRUCTIONS

THIS IS A HAND TOOL AND USE OF POWER TOOLS INSTEAD OF THE ALLEN WRENCHES PROVIDED VOIDS ALL WARRANTIES.

1. IT MAY be to your advantage (in the interest of speed) to make a metal template using dimensions provided with the layout drawing. In any event, locate, mark, center punch and drill these three holes according to items (2) and (3) below.
2. CENTER PUNCH at the points you have marked.
3. DRILL the outer two holes with a 13/64 inch drill; drill the center hole with a 21/64 inch drill.
4. CLEAN and LUBRICATE the area to be punched. Any oil (or even vegetable shortening) will allow the punch to work easier.
5. INSERT these three Draw Screws into their holes on the punch, through the 3 holes you drilled in the panel, and thread them into their holes in the die.
6. AFTER properly aligning punch to die and snugging the 3 draw screws hand tight, use the hex keys to tighten the draw screws (alternately if necessary) and thus cut the hole. When cutting lighter material, the entire hole can usually be made by use of the center draw screw only; the screws on either side are then used only to correct any tilting of the punch as related to the die.
7. REMOVE the 3 draw screws after the hole is punched and the die should readily release from the punch.
8. REMOVE the punch from the panel. Tapping the punch lightly with a hammer will make it move easily through the panel.
9. REMOVE the slug. Thread the 2 ejector screws into the bottom of the die and tighten until the slug is forced from the die.

