**PART_Move**

Purpose: Translate a part by an incremental displacement in either a local or a global coordinate system. This option currently applies to parts defined either by shell and solid elements. All nodal points of the given part ID are moved. Care must be observed since parts that share boundary nodes with the part being moved must also be moved to avoid severe mesh distortions.

Cards 1,2,3,4, … (the next “*” card terminates the input)

Card Format (I8, 3E16.0, 2I8)

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<tbody>
<tr>
<td>Variable</td>
<td>PID/SID</td>
<td>XMOV</td>
<td>YMOV</td>
<td>ZMOV</td>
<td>CID</td>
<td>IFSET</td>
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**VARIABLE**  
**DESCRIPTION**

| PID | Part identification. |
| XMOV | Move shell/solid part ID, PID, in the x-direction by the incremental distance, XMOV. |
| YMOV | Move shell/solid part ID, PID, in the y-direction by the incremental distance, YMOV. |
| ZMOV | Move shell/solid part ID, PID, in the z-direction by the incremental distance, ZMOV. |
| CID | Coordinate system ID to define incremental displacement in local coordinate system. All displacements, XMOV, YMOV, and ZMOV, are with respect to CID. EQ.0: global |
| IFSET | Indicate if part set ID (SID), is used in PID/SID definition. EQ.1: part set ID (SID) is used |

**Remarks:**

1. A new variable IFSET is added to address the move of multiple parts that share common boundary nodes, e.g., in case of tailor-welded blank. The new variable allows for a part
set to be move simultaneously. For example, keyword *SET_PART_LIST can be used to include all tailor welded blank parts and the resulting Part Set ID can be used in this keyword.

2. Draw beads can be modeled as beam elements and moved in the same distance in the same direction as either the die or punch, depending on the draw types.

3. A partial keyword input is provided to automatically position all tools in a toggle draw of a decklid inner, with tailor welded blanks PID 1 and PID5, as shown below:

```
*PARAMETER
R  blnkvm  0.0
R  upbinmv  0.0
R  uppunmv  0.0
*SET_PART_LIST
1
1,5
*SET_PART_LIST
2
2
*SET_PART_LIST
3
3
*SET_PART_LIST
4
4
*CONTROL_FORMING_AUTOPOSITION_PARAMETER_SET
$ PID/SID   CID   DIR MPID/MSID Position PREMOVE THICK PARORDER
  1   3     4   4   1  1.5  blnkvm
  3   3     1   1   1  1.5  upbinmv
  2   3     1   1   1  1.5  uppunmv
$-------1-------2-------3-------4-------5-------6-------7-------8
*PART_MOVE
$ PID XMOV YMOV ZMOV CID IFSET
  1  0.0  0.0  &blnkvm  1
  3  0.0  0.0  &upbinmv  1
  2  0.0  0.0  &uppunmv  1
```

A tailor welded blank is positioned in a decklid toggle draw.