*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)

Card 1	1	2	3	4	5	6	7	8	9	10
Variable	PID/SID	XMOV		YMOV		ZMOV		CID	IFSET	
Type	I	F		F		F		I	I	
Default	none	0.0		0.0		0.0		0	0	

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   blnkmv       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         1                     1.5     blnkmv
         3                 3         1         1                     1.5     upbinmv
         2                 3         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          &blnkmv             1
     3             0.0            0.0          &upbinmv            1
     2             0.0            0.0          &uppunmv            1
```
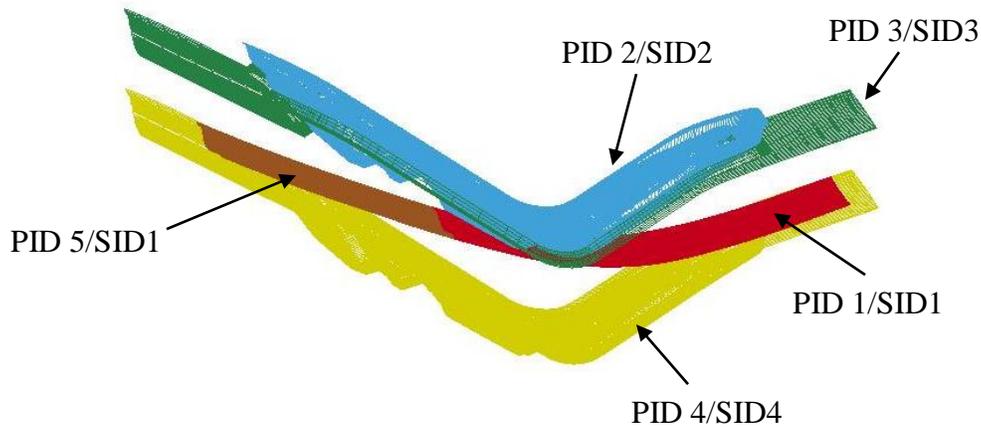

A tailor welded blank is positioned in a decklid toggle draw.