

de HAVILLAND

CAGE CODE 71867

DESIGN STANDARD

1.0 Jogging

“Joggle” or “offset” is incorporated in a part when it is necessary for the part that forms a lap-joint to be in a flat plane.

1.1 Design Considerations

- a) Joggles may be omitted if the depth is less than .025 inch, except when a smooth outer surface is required.
- b) Where a section is to be joggled over two members, use a “double” or a “stepped” joggle shown in Figure 1 (b) instead of a single joggle and packing piece design as in Figure 1 (c).
- c) The length of the transition of the joggle shall be five times the joggle depth, “T”, see Figure 1(a).
- d) The distance between the fasteners shall be equal to or less than six times the fastener diameter “D.” Otherwise a second joggle shall be added, or a larger fastener diameter shall be used.
- e) Aluminum alloy 7075-T6 or -T7 (including variations of these tempers) requires hot joggling. Since hot joggling is approximately seven (7) times more expensive than cold joggling, the 7075 alloy should not be specified where joggling is required unless it is absolutely necessary from a strength point of view.
- (A) f) Joggle depth and direction (UP or DN) shall be noted on the flat pattern drawing.

LIST OF CURRENT SHEETS

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REVISION	A	A	A								

SEE ENGINEERING STANDARDS APPROVAL RECORD FOR ORIGINAL SIGNATURES AND CHANGE SUMMARY

DRAWN	J. ROTSCH	JOGGLES	DS 132
CHECKED	S. HAMID		
STRESSED	E. CROMIE		SHEET: 1
APPROVED	S. HAMID		

(A) REDRAWN ON NEW DS FORMAT
NOTE 1.1 f - ADDED

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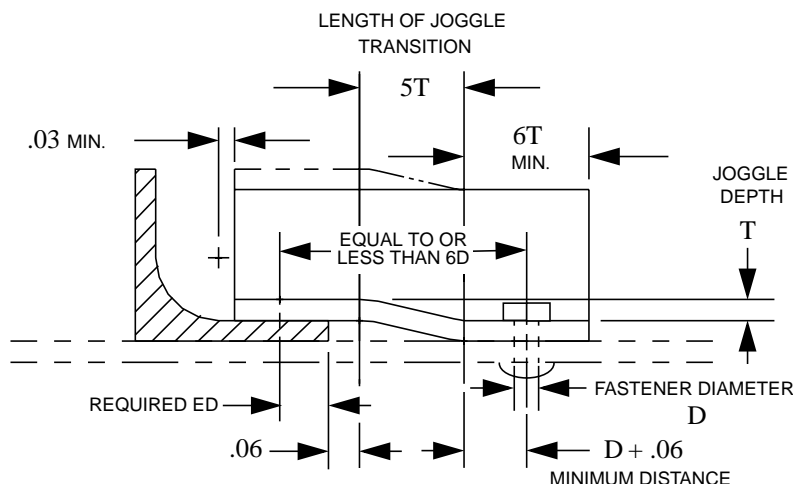
REV:

REV: A - 17 MAY 99

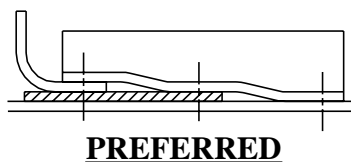
REV: 4 SEP 1996

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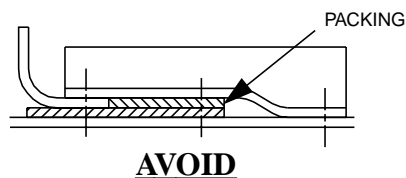
(a) JOGGLE TRANSITION:



(b) STEPPED JOGGLE:



(c) SINGLE JOGGLE WITH PACKING PIECE:



1.2

Joggle Depth Dimensions

The joggle depth specified for **form blocks** (ie. joggles formed by hydroforming) shall be equal to the actual thickness of the members.

The joggle depth specified for **extrusion joggle dies** shall be selected as follows:

- Where possible, specify a joggle depth corresponding to the Fixed Depth Joggle Dies shown below. These dies are easiest to use by Production as they need no set-up.)

FIXED JOGGLE DEPTH “T” INCREMENTS (in.)						
0.028	0.032	0.040	0.050	0.063	0.071	0.125

- Where Fixed Depth Joggle Dies of the correct depth are not suitable, specify a joggle depth equal to the actual thickness of the members. In this case Universal Joggle Dies would be used which can be shimmed to produce the exact joggle depth.

SEE ENGINEERING STANDARDS APPROVAL RECORD FOR ORIGINAL SIGNATURES AND CHANGE SUMMARY

DRAWN	J. ROTSCH	<div style="text-align: center;"> <h1>JOGGLES</h1> </div>	DS 132
CHECKED	S. HAMID		
STRESSED	E. CROMIE		
APPROVED	S. HAMID		SHEET: 2

A) REDRAWN ON NEW DS FORMAT

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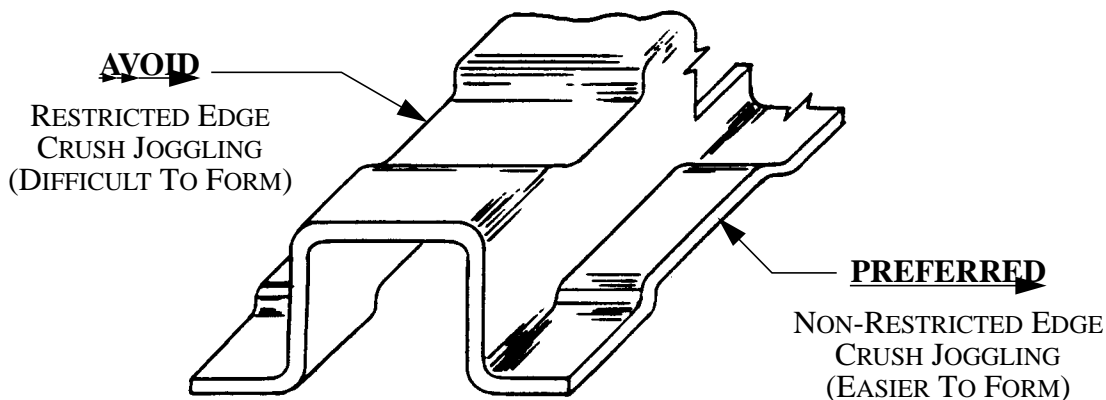
APPROVED: 4 SEP 1964

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DESIGN STANDARD

a) Full Section Jogging

b) Crush Joggling

FIGURE 2 - CRUSH JOGGLING



SEE ENGINEERING STANDARDS APPROVAL RECORD FOR ORIGINAL SIGNATURES AND CHANGE SUMMARY

DRAWN	J. ROTSCH	<div style="text-align: center;"> <h1>JOGGLES</h1> </div>	DS 132
CHECKED	S. HAMID		
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APPROVED	S. HAMID		SHEET: 3

A) REDRAWN ON NEW DS FORMAT

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APPROVED: 4 SEP 1996