TABLE 17. DISPLACEMENTS AND MAXIMUM HOOP STRESSES IN PIN SEGMENTS, $\nu = 0.3$

k_2	σ_θ/p_1 at $\theta = \alpha/4$, $r = r_2$	$\frac{Eu}{rp_1}$ at $\theta = 0$, $r = r_1$	$\frac{Eu}{rp_1}$ at $\theta = 0$, $r = r_2$	$\frac{Ev}{rp_1}$ at $\theta = \alpha/2$, $r = r_1$	$\frac{Ev}{rp_1}$ at $\theta = \alpha/2$, $r = r_2$
		(a) $\alpha = 60°$			
2.0	4.3266	1.0074	-0.0151	-0.6387	0.5367
3.0	2.7247	1.0681	-0.1303	-0.5313	0.3202
4.0	2.0126	1.1739	-0.1456	-0.5149	0.2459
5.0	1.6019	1.2865	-0.1397	-0.4068	0.2554
		(b) $k_2 = 3.0$			
α					
45°	3.3815	1.0516	-0.1281	-0.4082	0.2336
60°	2.7247	1.0681	-0.1303	-0.5313	0.3202
90°	2.0820	1.1137	-0.1305	-0.7382	0.5195

where A is the area of the pin and P/2 is the shear force shown in Figure 33. For $A = \frac{\pi d^2}{4}$ (d is pin diameter) and P given by Equation (A. 10), the maximum shear stress becomes

$$\tau_{max} = \frac{16}{3} \frac{p_1 r_1 t}{\pi d^2} \qquad (A.\ 18)$$

This equation is the basis of Equation (72) in the text.