

Part B covers 10° angle.

$$\sin 10^\circ = .1739$$

$$.1739 \cdot 16.12 = 33.4''$$

$$\text{Outside overlap} = 34.5 - 33.4 = 1.1''$$

$$.1739 \cdot 6.12 = 12.5''$$

$$\text{Inside overlap} = 13.5 - 12.5 = 1.0''$$

Part A covers 40° angle

$$48 / \sin 40^\circ = 48 / .6428 = 74.65''$$

$$\text{Radial overlap} = 74.65 - 72.0 = 2.65''$$

$$48 / \tan 40^\circ = 48 / .8395 = 57.20'' + 74.65 - 57.20 = 17.45''$$

$$96 - (17.45 + 74.65) = 3.90''$$

$$\text{Overlap} = (3.9/2) \sin 40^\circ = 1.95 \cdot .6428 = 1.25''$$

$$17.45 + 3.90/2 = 19.40, \text{ say } 19\frac{1}{2}''$$