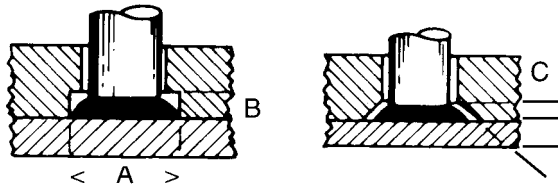


ACCOMODATING THE FILLET

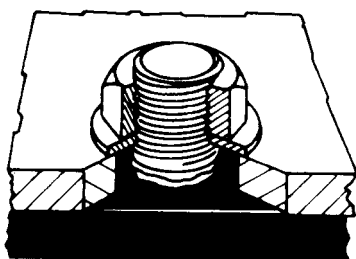
When a stud is end-welded, a fillet forms around its base with the dimensions being closely controlled by the design of the ferrule. Since the diameter of the fillet is generally larger than the diameter of the stud, some consideration is required in the design of mating parts. Counter

bore and counter sink methods are commonly used. Dimensions will vary with studs and ferrules. Additional methods of accommodating the fillet include oversized clearance holes, use of a gasket material around the fillet or use of a dog-type construction.

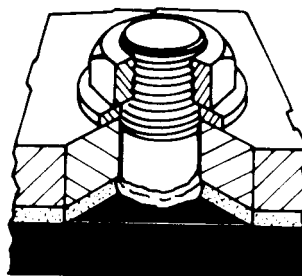
FILLET CLEARANCE FOR ELECTRIC-ARC WELDED FULL BASE STUDS



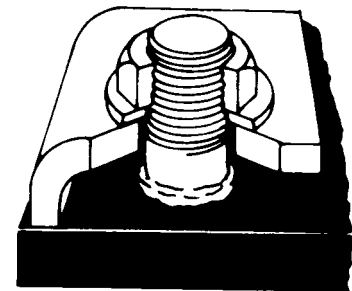
STUD SIZE (in.)	COUNTERBORE (in.)		90° COUNTERSINK (in.)
	A	B	C
1/4	0.437	0.125	0.125
5/16	0.500	0.125	0.125
3/8	0.593	0.125	0.125
7/16	0.656	0.187	0.125
1/2	0.750	0.187	0.187
5/8	0.875	0.218	0.187
3/4	1.125	0.312	0.187



(a) Oversize clearance hole



(b) Gasket material



(c) Dog clamp

Reduced base studs are designed so that the weld fillet does not exceed the maximum diameter of the fastener. This design is not recommended if full thread diameter fastener strength is required.

