



Instructions and Parts List for DOUBLE-ANGLE COLLET TOOL HOLDER

INTRODUCTION

Hardinge double-angle collet tool holders use 100, 200, or 300 series double-angle collets to hold small diameter round shank tools securely. These collets provide a positive gripping capacity because the opposed split configuration places parallel bearing on the full diameter of the tool shank.

Double-angle collet tool holders are designed to be installed in round shank tool holders mounted on the machine tool. The diameter of the mounting hole in the tool holder on the machine tool determines the body diameter of the double-angle collet tool holder to be used.

Typically, the 3½ inch version of the double-angle collet tool holder is used on lathes. The 5½ inch version is generally used on machining centers, where greater tool length may be required.

The double-angle collet tool holder is available in two body lengths and four body diameters. The model number is located on the side of the tool holder body. Refer to Table 1, on page 3, for information on the collet series and range of tooling that each tool holder can accommodate.

OPTIONAL HARDWARE

Collet Chuck Stop

Collet chuck stop "D", Figure 1, can be positioned as needed inside the body of the tool holder to provide a qualified location for the tooling to position against. When using qualified tooling with the collet chuck stop, the double-angle collet tool holder allows the machine operator to quickly replace worn tooling with minimal adjustment to the tool offsets. The collet chuck stop also helps prevent any possible rearward movement of the tool during machining operations.

Qualifying Collar

Qualifying collar "C", Figure 1, can be positioned as needed on the outside of the body of the tool holder to provide a qualified surface for positioning the collet tool holder in a round shank tool holder mounted on the machine tool.

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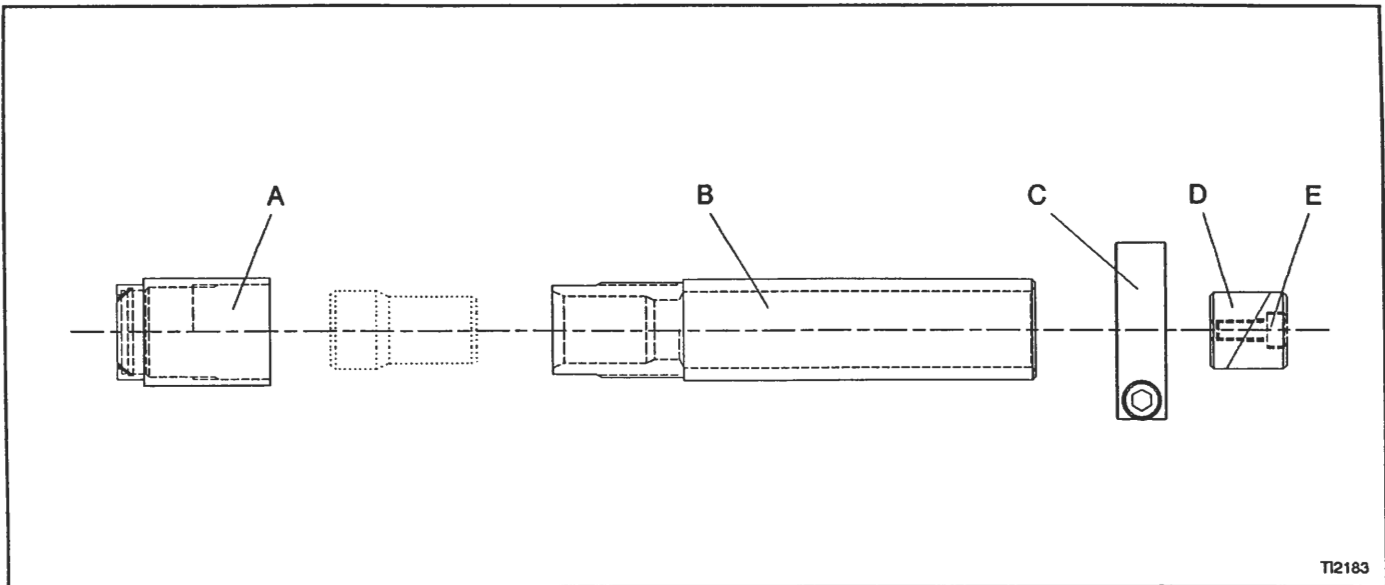


Figure 1 - Exploded View

ASSEMBLY AND INSTALLATION

- NOTE -

Front cap "A", Figure 1, is equipped with a bushing that compresses the collet when the front cap is tightened. If a collet is installed in the double-angle collet tool holder, DO NOT fully tighten the front cap unless a tool is installed in the collet.

1. Unthread and remove front cap "A", Figure 1.

- NOTE -

Refer to Table 1, on page 3, for information on the collet series and range of tooling that each tool holder can accommodate.

2. Install a double-angle collet with the proper order hole size into body "B".
3. Replace front cap "A", but do not fully tighten.
4. Insert the shank of the required tooling into the collet.
5. Position the tip of the tool an appropriate distance from the face of front cap "A" and tighten the front cap.
6. If optional collet chuck stop "D" is being used:
 - a) Tighten screw "E" until a slight resistance is felt when collet chuck stop "D" is inserted into the back end of body "B".
 - b) Slide collet chuck stop "D" against the end of the shank of the tool.
 - c) Tighten screw "E" to lock collet chuck stop "D" in position
7. If optional qualifying collar "C" is being used, slide the qualifying collar over the back end of body "B".
8. Insert the double-angle collet tool holder into a round shank tool holder mounted on the machine tool.

9. If necessary, set the tool tip to the spindle centerline.
10. Secure the double-angle collet tool holder in the round shank tool holder.
11. If optional qualifying collar "C" is being used, slide the qualifying collar against the face of the round shank tool holder; then tighten the screw to lock the qualifying collar in position.

Double Angle Collet Tool Holder			Collet Series	Tool Shank Capacity	
Model No.	Overall Length	Shank Diameter		Minimum	Maximum
DAH155	5.500	1.000	100	3/64"	9/16"
DAH135	3.500	1.000	100	3/64"	9/16"
DAH255	5.500	0.750	200	3/64"	3/8"
DAH235	3.500	0.750	200	3/64"	3/8"
DAH355	5.500	0.625	300	3/64"	1/4"
DAH335	3.500	0.625	300	3/64"	1/4"
DAH350	5.500	0.500	300	3/64"	1/4"
DAH330	3.500	0.500	300	3/64"	1/4"

Table 1 - Tool Holders and Capacities

PARTS LIST

LEVEL	KEY	PART NUMBER	PART NAME	QUANTITY PER ASSEMBLY
		1925 00 0000 0000	DOUBLE ANGLE COLLET TOOL HOLDER ASSEMBLY (1/2 INCH ROUND, 3-1/2 INCH LONG)	
001	1	1935 00 0000 0000	BUSHING, CAP	1
001	2	1937 00 0000 0000	WIRE, BUSHING RETAINING	1
001	3	1933 00 0000 0000	CAP	1
001	4	1941 00 0000 0000	COLLAR, QUALIFYING *	1
001	5	1939 00 0000 0000	STOP, CHUCK *	1
001	6	1929 00 0000 0000	BODY (SHORT)	1
		1927 00 0000 0000	DOUBLE ANGLE COLLET TOOL HOLDER ASSEMBLY (1/2 INCH ROUND, 5-1/2 INCH LONG)	
001	1	1935 00 0000 0000	BUSHING, CAP	1
001	2	1937 00 0000 0000	WIRE, BUSHING RETAINING	1
001	3	1933 00 0000 0000	CAP	1
001	4	1941 00 0000 0000	COLLAR, QUALIFYING *	1
001	5	1939 00 0000 0000	STOP, CHUCK *	1
001	6	1931 00 0000 0000	BODY (LONG)	1
		1943 00 0000 0000	DOUBLE ANGLE COLLET TOOL HOLDER ASSEMBLY (5/8 INCH ROUND, 3-1/2 INCH LONG)	
001	1	1953 00 0000 0000	BUSHING, CAP	1
001	2	1955 00 0000 0000	WIRE, BUSHING RETAINING	1
001	3	1951 00 0000 0000	CAP	1
001	4	1957 00 0000 0000	COLLAR, QUALIFYING *	1
001	5	1939 00 0000 0000	STOP, CHUCK *	1
001	6	1947 00 0000 0000	BODY (SHORT)	1

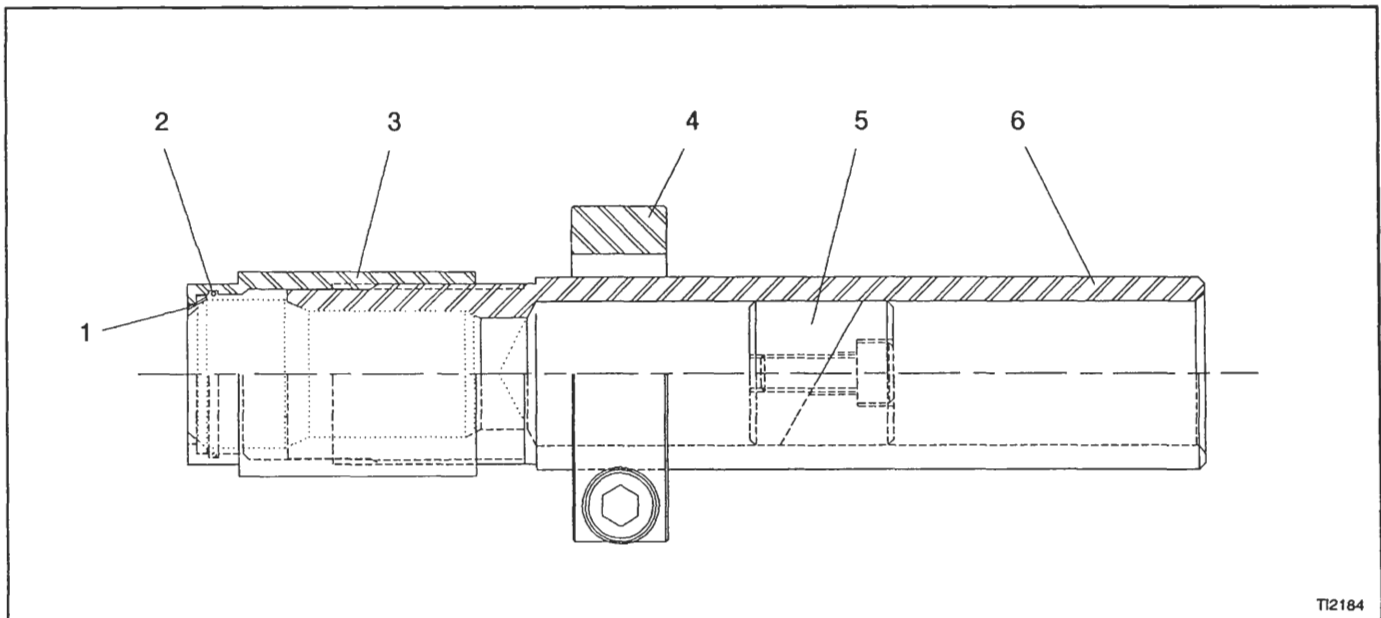


Figure 2 - Cross Sectional View

LEVEL	KEY	PART NUMBER	PART NAME	QUANTITY PER ASSEMBLY
		1945 00 0000 0000	DOUBLE ANGLE COLLET TOOL HOLDER ASSEMBLY (5/8 INCH ROUND, 5-1/2 INCH LONG)	
001	1	1953 00 0000 0000	BUSHING, CAP	1
001	2	1955 00 0000 0000	WIRE, BUSHING RETAINING	1
001	3	1951 00 0000 0000	CAP	1
001	4	1957 00 0000 0000	COLLAR, QUALIFYING *	1
001	5	1939 00 0000 0000	STOP, CHUCK *	1
001	6	1949 00 0000 0000	BODY (LONG)	1
		1959 00 0000 0000	DOUBLE ANGLE COLLET TOOL HOLDER ASSEMBLY (3/4 INCH ROUND, 3-1/2 INCH LONG)	
001	1	1969 00 0000 0000	BUSHING, CAP	1
001	2	1971 00 0000 0000	WIRE, BUSHING RETAINING	1
001	3	1967 00 0000 0000	CAP	1
001	4	1975 00 0000 0000	COLLAR, QUALIFYING *	1
001	5	1973 00 0000 0000	STOP, CHUCK *	1
001	6	1963 00 0000 0000	BODY (SHORT)	1
		1961 00 0000 0000	DOUBLE ANGLE COLLET TOOL HOLDER ASSEMBLY (3/4 INCH ROUND, 5-1/2 INCH LONG)	
001	1	1969 00 0000 0000	BUSHING, CAP	1
001	2	1971 00 0000 0000	WIRE, BUSHING RETAINING	1
001	3	1967 00 0000 0000	CAP	1
001	4	1975 00 0000 0000	COLLAR, QUALIFYING *	1
001	5	1973 00 0000 0000	STOP, CHUCK *	1
001	6	1965 00 0000 0000	BODY (LONG)	1
		1977 00 0000 0000	DOUBLE ANGLE COLLET TOOL HOLDER ASSEMBLY (1 INCH ROUND, 3-1/2 INCH LONG)	
001	1	1987 00 0000 0000	BUSHING, CAP	1
001	2	1989 00 0000 0000	WIRE, BUSHING RETAINING	1
001	3	1985 00 0000 0000	CAP	1
001	4	1993 00 0000 0000	COLLAR, QUALIFYING *	1
001	5	1991 00 0000 0000	STOP, CHUCK *	1
001	6	1981 00 0000 0000	BODY (SHORT)	1
		1979 00 0000 0000	DOUBLE ANGLE COLLET TOOL HOLDER ASSEMBLY (1 INCH ROUND, 5-1/2 INCH LONG)	
001	1	1987 00 0000 0000	BUSHING, CAP	1
001	2	1989 00 0000 0000	WIRE, BUSHING RETAINING	1
001	3	1985 00 0000 0000	CAP	1
001	4	1993 00 0000 0000	COLLAR, QUALIFYING *	1
001	5	1991 00 0000 0000	STOP, CHUCK *	1
001	6	1983 00 0000 0000	BODY (LONG)	1

* Optional components.