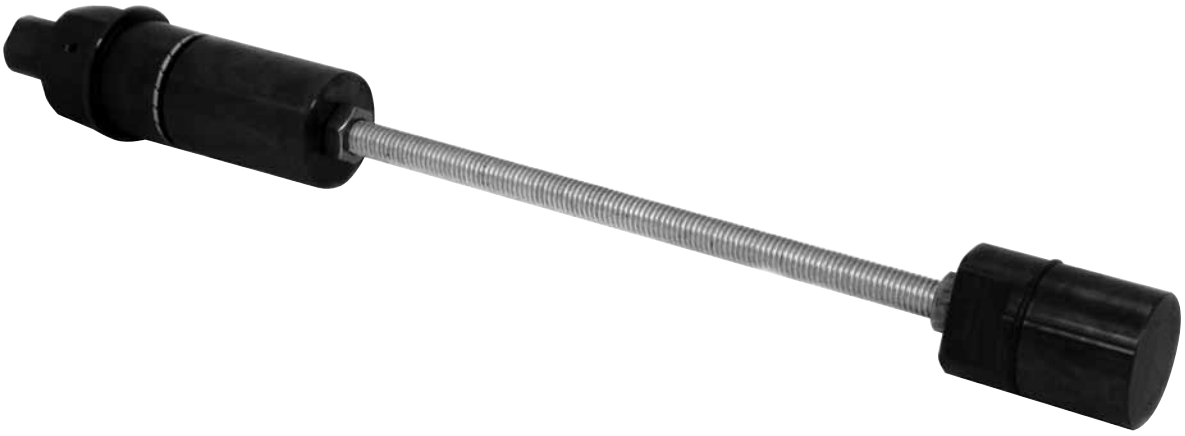
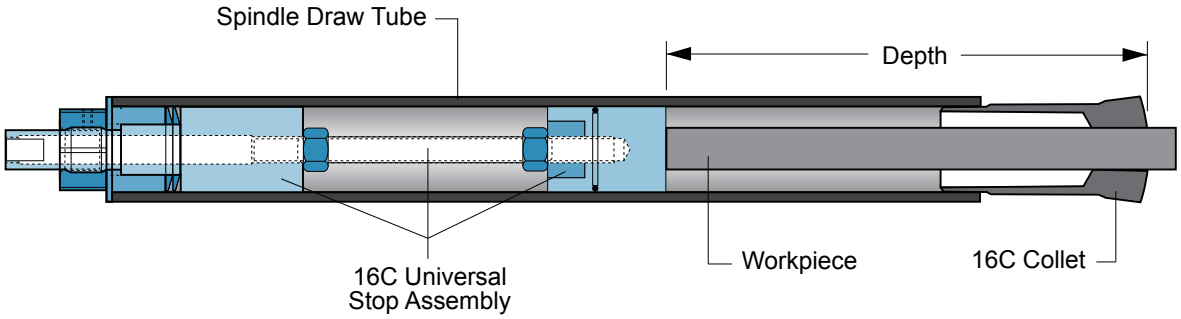


Installation Instructions
for the Hardinge®
16C Universal Stop Assembly

The Hardinge Model 16C Universal Stop Assembly provides a fully adjustable positive stop for a wide range of long parts ranging from 7 1/4" up to approximately 17 inches. The unit is mounted in the draw tube of the collet closer of any Hardinge 16C spindle lathe for the purpose of maintaining consistent part length. The assembly comes with a long stop rod and a short stop rod. The short stop rod will accommodate the longest possible part depth.



Part No. BB -0009500-0056

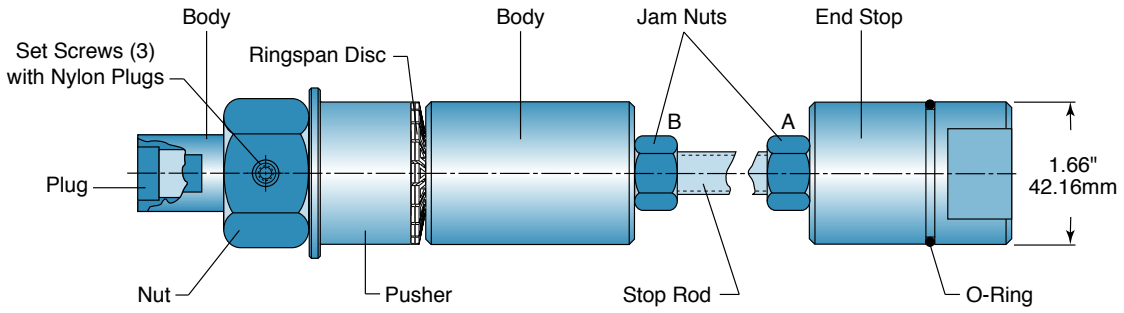


Figure 1 — 16C Universal Stop Assembly

Assembly and Mounting Instructions

1. Be sure that execution of the active program has been completed; then, press the **RESET** key to stop spindle rotation.

2. Remove the access panel at the left (headstock) end of the machine.

3. The **End Stop** can be modified if the back end of the part needs to be located off a shoulder or between centers. (Refer to Figure 2)

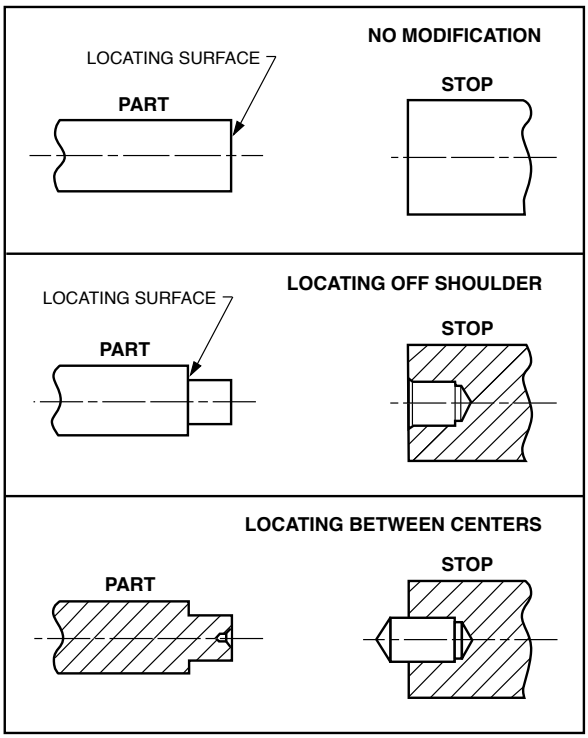


Figure 2 — Typical End Stop Modifications

CAUTION: Always engage at least four threads of the Stop Rod into the End Stop and Body. Do not remove the end Plug from the Body.

4. Thread the **End Stop** onto the **Stop Rod** and tighten the **Jam Nut "A"**.

Part No. BB -0009500-0056

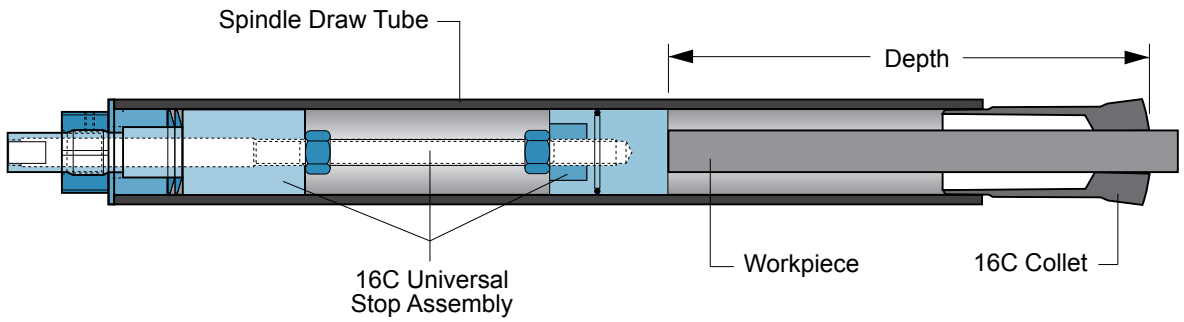


Figure 3 — Universal Stop Assembled in Draw Tube

5. Loosen the **Jam Nut "B"** and adjust the **Stop Rod** to obtain the desired depth. (Refer to Figure 1). Retighten the **Jam Nut.**

   CAUTION: If the machine will not be operated with the universal stop in place, the spindle draw tube plug must be installed in the draw tube to prevent coolant and chips from entering the spindle drive compartment.

6. Remove the spindle draw tube plug from the rear of the spindle of your machine.
7. Apply a light coating of O-Ring lubricant to the **O-Ring** of the stop assembly, Figure 1.
8. Loosen the three **Set Screws** enough to permit the **Nut** to be tightened against the **Pusher.**
9. Slide the **Universal Stop Assembly** into the back of the draw tube in your machine.
10. Use a wrench to prevent the **Body** from turning and tighten the **Nut (**finger tight) to expand the **Ringspan Discs**.
11. Slide a workpiece into the collet against the stop and check the depth. If the depth adjustment is satisfactory, proceed to step 15. If further adjustment is required, go to step 12.
12. Loosen the **Nut** and remove the assembly from the spindle.
13. Loosen the **Jam Nut "B"** and adjust the stop rod as necessary.
14. Retighten the **Jam Nut** and repeat steps 9 through 11. If further fine adjustment is required, it can be accomplished using the "work shift offset" on the machine's control.
15. Use a wrench to prevent the **Body** from turning and tighten the **Nut** approximately one-eighth turn using a $1^5/_8$ inch wrench.
16. Tighten one **Set Screw** to secure the setting.

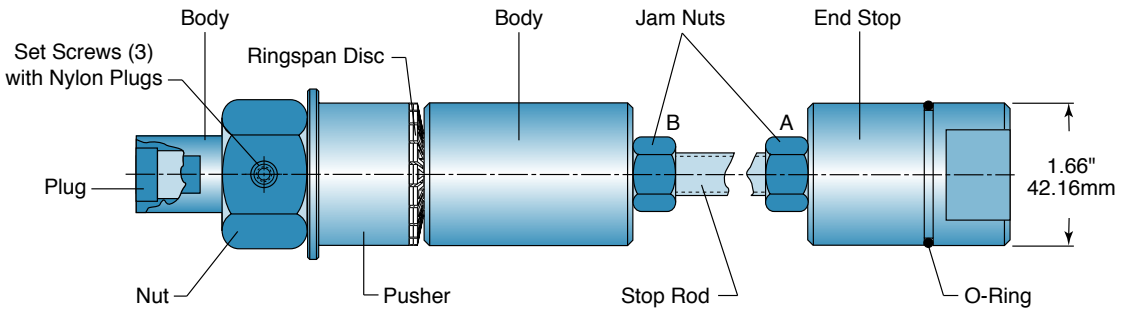


Figure 1

Part No. BB -0009500-0056

16C Spindle Stop Removal

1. Be sure that execution of the active program has been completed; then, press the **RESET** key to stop the spindle rotation.

2. Remove the access panel at the left (headstock) end of the machine.

3. Loosen the **Set Screws** on the **Universal Stop Assembly**.

4. Use a wrench to prevent the **Body** from turning and loosen the **Nut** using a 1 5/8 inch wrench.

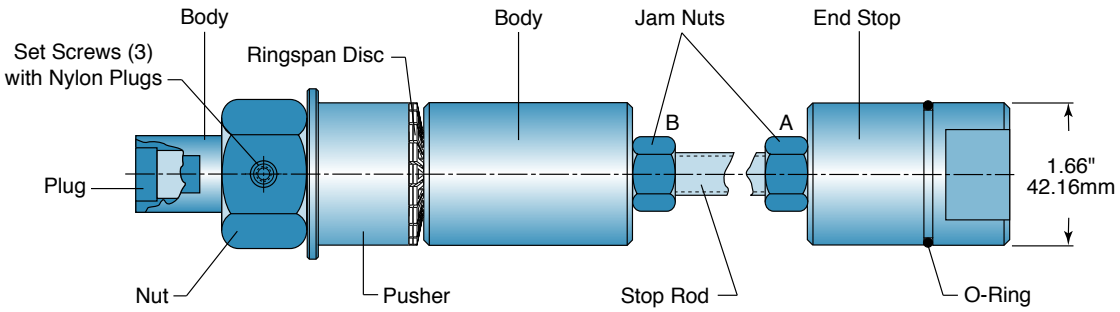
5. Remove the **Universal Stop Assembly** from the spindle.

   CAUTION: If the machine wlll not be operated with a bar feed, the spindle draw tube plug must be In place to prevent coolant and chips from entering the spindle drive compartment.

6. Install the spindle draw tube plug in the spindle.

7. Re-install the access panel on the machine.

Parts List



PARTS LIST
16C UNIVERSAL STOP ASSEMBLY

PART NAME	PART NUMBER	QTY PER ASSEMBLY
Plug	17176601000000	1
Body	17176602000000	1
Nut	17176603000000	1
Set Screw 10-32 x 3/16	0570303	3
Nylon Plug	N37 0000483	3
Pusher	17176604000000	1
Ringspan Disc	17176608000000	2
Jam Nut	MD 0003182	2
Short Stop Rod	17176605000000	1
Long Stop Rod	17176606000000	1
End Stop	17176607000000	1
O-Ring	OR 0002427	1

Part No. BB -0009500-0056