

JM PERFORMANCE PRODUCTS, INC.

The Industry Leader in Milling Machine Optimization

Improper knob selection may damage a machine spindle and/or work piece.

Before installation-

- Examine the toolholder and review machine specifications.
- Verify proper thread, coolant hole, head angle, knob diameter, neck, and gage line lengths.
- Used toolholders may require cleaning prior to installation of High Torque knobs to ensure proper seating in the holder.
- Install High Torque Retention Knobs using a torque wrench and socket.

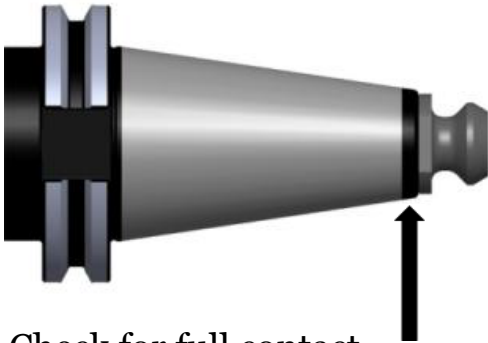
A NOTE ABOUT O-RINGS:

If your retention knob requires O-rings, they are included in each individual tube.

If your retention knob shipped with P/N S-15 and N1.0 X 14.5 O-rings, install S-15 O-ring first.

Install the retention knob and verify the flange is making full contact with the toolholder.

If any space or light is visible, reinstall using the thinner N 1.0 x 14.5 O-ring.



Check for full contact

Retention Knob Tightening Specifications									
30 V-Flange		40 V-Flange		50 V-Flange		60 V-Flange			
Drawbar	Torque	Drawbar	Torque	Drawbar	Torque	Drawbar	Torque	Drawbar	Torque
Force/Lbs	Ft/lbs	Force/Lbs	Ft/lbs	Force/Lbs	Ft/lbs	Force/Lbs	Ft/lbs	Force/Lbs	Ft/lbs
800	8.0	1600	20.0	3200	64.0	4000	100.0		
900	9.0	1800	22.5	3400	68.0	4500	112.5		
1000	10.0	2000	25.0	3600	72.0	5000	125.0		
1100	11.0	2200	27.5	3800	76.0	5500	137.5		
1200	12.0	2400	30.0	4000	80.0	6000	150.0		
1300	13.0	2600	32.5	4200	84.0	6500	162.5		
1400	14.0	2800	35.0	4400	88.0	7000	175.0		
1500	15.0	3000	37.5	4600	92.0	7500	187.5		
1600	16.0	3200	40.0	4800	96.0	8000	200.0		
1700	17.0	3400	42.5	5000	100.0	8500	212.5		
1800	18.0	3600	45.0	5500	110.0	9000	225.0		
1900	19.0	3800	47.5	6000	120.0	9500	237.5		
2000	20.0	4000	50.0	6500	130.0	10000	250.0		
2200	22.0	4200	52.5	7000	140.0	11000	275.0		

Retention Knob Installation Procedure

1. Install toolholder into Smart Tool Holder.
2. Refer to the torque chart above for the torque setting for knob installation.
3. Set the torque wrench to the proper setting.
4. Using compressed air, blow off the threads of the retention knob to remove excess oil or dust.
5. Finger tighten the retention knob into the toolholder to verify the shoulder of the retention knob makes full contact with the small end of the toolholder without resistance.
6. Using the retention knob socket and pre-set torque wrench, tighten the knob into the toolholder.
7. Verify that the retention knob flange is making full contact with the toolholder.

NOTE: DO NOT USE A STANDARD WRENCH TO INSTALL THE RETENTION KNOBS.

JM Performance Products, Inc.

1234 High St. Fairport Harbor, Ohio 44077 Toll Free: 800-322-7750 Fax: 440-357-1129

Sales@jmppinc.com www.jmperformanceproducts.com