



## Roll Alignment Check and Adjustment

For optimal performance of the Granulizer, it is crucial that the grinding rolls are kept parallel to each other. Roll alignment should be checked on a regular basis.



**WARNING!**  
**PRIOR TO PERFORMING THIS PROCEDURE,**  
**ENSURE THAT ALL GRINDER ENERGY SOURCES**  
**ARE LOCKED OUT.**

### 1. Position the rolls:

Set the rolls at the minimum gaps as shown on the tag provided with the grinder. On some grinders, this is done by placing the handle in the #1 position. For grinders with gearmotor adjustment, close the gap until the pointer on the gearmotor points to the minimum gap scribe mark (typically 12 o'clock):

The rest of this procedure is designed to check and adjust if necessary so the rolls are restored to their factory pre-set positions.

### 2. Loosen and back out the roll stop bolts:

On the drive end of the grinder, loosen the roll stop jam nuts (1) and loosen the roll stop bolts (2) so that there is a visible gap between the end of the roll stop bolt and the bearing housing.

Repeat on the service end of the grinder.

### 3. Check the roll clearances:

Check the roll clearance from end to end using a feeler gage which corresponds to the minimum gap setting specified for this section.

### 4. If necessary, adjust the roll gaps:

Loosen the roll adjustment bolt jam nuts (4) and turn the roll adjustment bolt (3) on the drive end of the grinder. Turning the bolt clockwise increases the gap, counterclockwise decreases the gap.

### 5. Repeat at the service end of the grinder.

### 6. Once the rolls are parallel with the desired gap setting retighten the roll adjustment bolt jam nuts on both ends of the grinder to lock the roll adjustment bolts in place.

### 7. After tightening the jam nuts on both ends of the grinder, re-check the roll clearances and adjust again if necessary.

### 8. Position and tighten the roll stop bolts:

On the drive end of the grinder, position the roll stop bolt (2) so that there is a 0.002" (50 um) clearance between the end of the bolt and the bearing housing.



- 9. Tighten the jam nut (1) to lock the bolt in place.**
- 10. Repeat on the service end of the grinder.**
- 11. After tightening the jam nuts on both ends of the machine, re-check clearance and reposition the stop bolts if necessary.**

**For Granulizers with roll gap indication:**

**12. Check the roll gap indication:**

Note the roll gap indication on the touch screen. If the roll gap indication does not match the just-checked roll gap, set the roll gap indication as explained below.

**13. If necessary, set the roll gap indication:**

Note: This part of the procedure is performed only on the service end of the grinder.

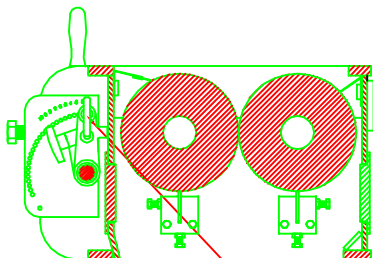
- 14. Loosen the jam nut on the proximity sensor target plate (6) (not on the sensor itself).**
- 15. Slightly loosen the clamp bolt (5) on the proximity sensor target plate.**
- 16. Turn the proximity sensor target plate (7) until the roll gap indication on the control panel matches the just-checked roll gap.**
- 17. Tighten the clamp bolt (5) on the proximity sensor target plate.**
- 18. Check that the roll gap indication on the control panel still shows the correct reading.**
- 19. Tighten the jam nut on (6) the proximity sensor target plate (not on the sensor itself)**

**The Granulizer Roll Alignment Check and Adjustment is complete.**

**NOTE: Spring tension was set at the factory. DO NOT ADJUST.**



**POSITION THE ROLLS**

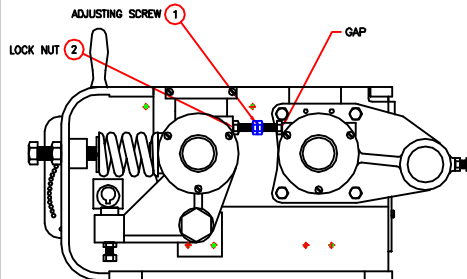


ROLL CLEARANCE IS MINIMUM IN POSITION NO. 1

**STEP No. 1**

ADJUST THE ROLLS SO THAT THE POINTER ON THE ROLL GAP ADJUSTMENT CAM POINTS TO POSITION NO. 1. THIS POSITION IS PRE-SET AT THE FACTORY SO THAT THE ROLL GAP IS AT A MINIMUM AND THE ROLLS ARE PROPERLY ALIGNED.

**LOOSEN AND BACK OUT THE STOP BOLTS**



**WARNING**

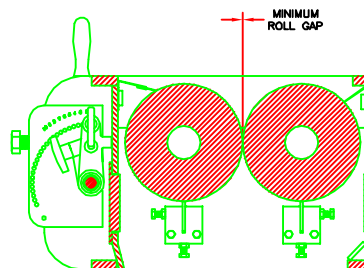
THE GRINDER MUST BE DISCONNECTED FROM POWER SOURCE WHILE PERFORMING THIS PROCEDURE.

**STEP No. 2**

ON THE DRIVE END OF THE GRINDER, LOOSEN THE ROLL STOP JAM NUTS (1) AND LOOSEN THE ROLL STOP BOLTS (2) SO THAT THERE IS A VISIBLE GAP BETWEEN THE END OF THE ROLL STOP BOLT AND THE BEARING HOUSING.

REPEAT ON THE SERVICE END OF THE GRINDER.

**CHECK THE ROLL CLEARANCES**



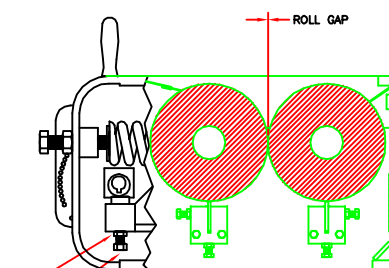
**WARNING**

THE GRINDER MUST BE DISCONNECTED FROM POWER SOURCE WHILE PERFORMING THIS PROCEDURE.

**STEP No. 3**

CHECK THE ROLL CLEARANCE FROM END TO END USING FEELER GAGE WHICH CORRESPONDS TO THE MINIMUM GAP SETTING SPECIFIED FOR THIS SECTION

**IF NECESSARY, ADJUST THE ROLL GAPS**



**WARNING**

THE GRINDER MUST BE DISCONNECTED FROM POWER SOURCE WHILE PERFORMING THIS PROCEDURE.

**STEP No. 4**

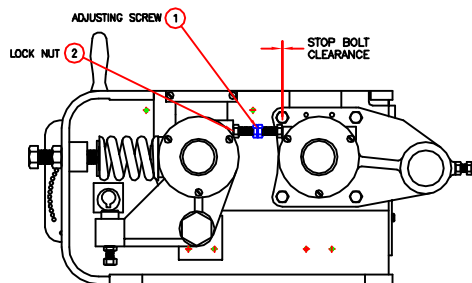
LOOSEN THE ROLL ADJUSTMENT BOLT JAM NUT (4) AND TURN THE ROLL ADJUSTMENT BOLT (3) ON THE DRIVE END OF THE GRINDER. TURNING THE BOLT CLOCKWISE INCREASES THE GAP, COUNTERCLOCKWISE DECREASES THE GAP.

REPEAT AT THE SERVICE END OF THE GRINDER.

ONCE THE ROLLS ARE PARALLEL WITH THE DESIRED GAP SETTING, RETIGHTEN THE ROLL ADJUSTMENT BOLT JAM NUTS ON BOTH ENDS OF THE GRINDER TO LOCK THE ROLL ADJUSTMENT BOLTS IN PLACE.

AFTER TIGHTENING THE JAM NUTS ON BOTH ENDS OF THE GRINDER, RE-CHECK THE ROLL CLEARANCES AND ADJUST AGAIN IF NECESSARY.

**POSITION AND TIGHTEN THE ROLL STOP BOLTS**



**WARNING**

THE GRINDER MUST BE DISCONNECTED FROM POWER SOURCE WHILE PERFORMING THIS PROCEDURE.

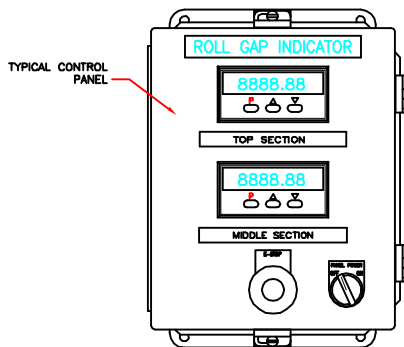
**STEP No. 5**

ON THE DRIVE END OF THE GRINDER, POSITION THE ROLL STOP BOLT (2) TO SET THE CLEARANCE BETWEEN THE END OF THE BOLT AND THE BEARING HOUSING.

TIGHTEN THE JAM NUT (1) TO LOCK THE BOLT IN PLACE

REPEAT ON THE SERVICE END OF THE GRINDER.

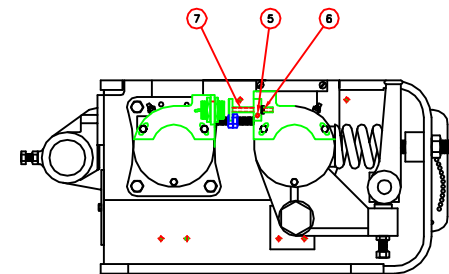
**CHECK THE ROLL INDICATION**



**STEP No. 6**

NOTE THE ROLL GAP INDICATION THE CONTROL PANEL. IF THE ROLL GAP ON THE CONTROL PANEL DOES NOT EQUAL THE ROLL GAP MEASURED, SET THE ROLL GAP INDICATION AS EXPLAINED IN STEP NO. 7.

**IF NECESSARY, SET THE ROLL GAP INDICATION**



**STEP No. 7**

THIS PART OF THE PROCEDURE IS PERFORMED ONLY ON THE SERVICE END OF THE GRINDER.

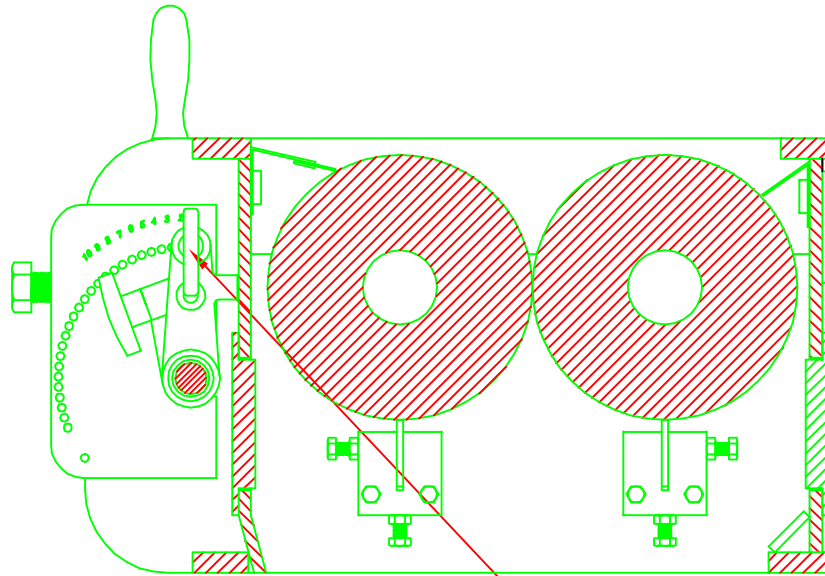
LOOSEN THE JAM NUT ON THE PROXIMITY SENSOR TARGET PLATE (6) (NOT ON THE SENSOR ITSELF).

SLIGHTLY LOOSEN THE CLAMP BOLT (5) ON THE PROXIMITY SENSOR TARGET PLATE.

TURN THE PROXIMITY SENSOR TARGET PLATE (7) UNTIL THE ROLL GAP INDICATION ON THE CONTROL PANEL MATCHES THE MEASURED ROLL GAP IN #1 POSITION (CHECK #1 SETTING ON ROLL SETTING TAG).

RETIGHTEN THE CLAMP BOLT (5) AND JAM NUT (6). VERIFY THE GAP INDICATION DOES NOT CHANGE.

## POSITION THE ROLLS

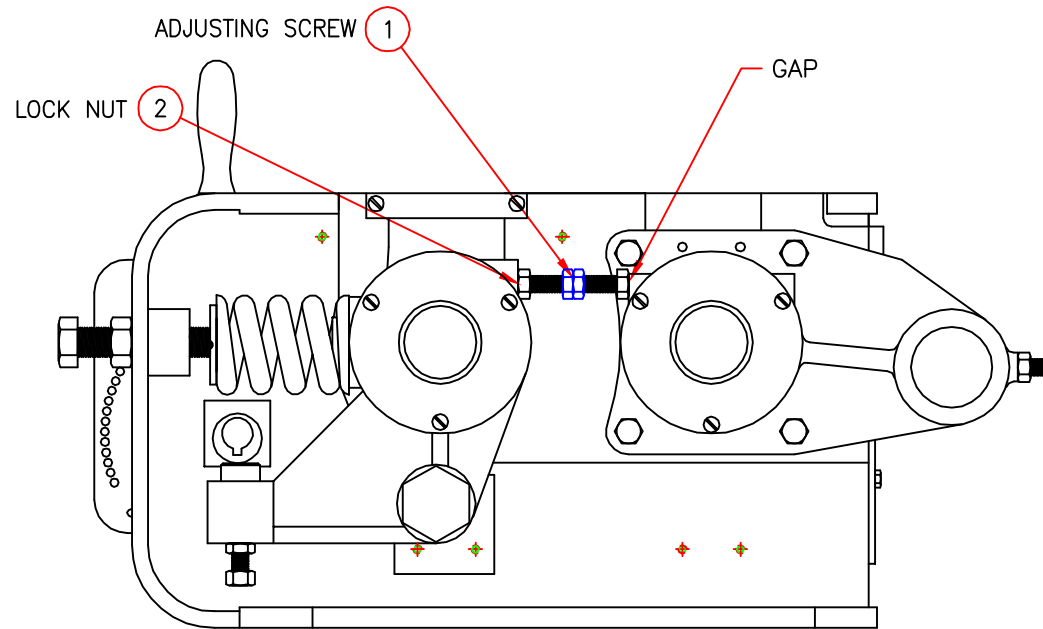


ROLL CLEARANCE IS MINIMUM  
IN POSITION NO. 1

### STEP No. 1

ADJUST THE ROLLS SO THAT THE POINTER ON THE ROLL GAP ADJUSTMENT CAM POINTS TO POSITION NO. 1. THIS POSITION IS PRE-SET AT THE FACTORY SO THAT THE ROLL GAP IS AT A MINIMUM AND THE ROLLS ARE PROPERLY ALIGNED.

## LOOSEN AND BACK OUT THE STOP BOLTS



### WARNING

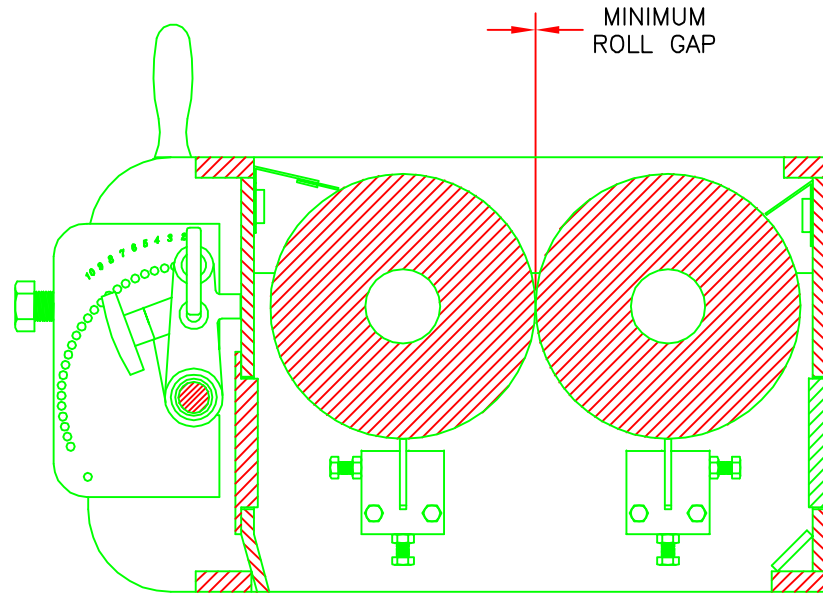
THE GRINDER MUST BE DISCONNECTED FROM  
POWER SOURCE WHILE PERFORMING THIS PROCEDURE.

#### STEP No. 2

ON THE DRIVE END OF THE GRINDER, LOOSEN THE ROLL  
STOP JAM NUTS (1) AND LOOSEN THE ROLL STOP BOLTS (2)  
SO THAT THERE IS A VISIBLE GAP BETWEEN THE END OF  
THE ROLL STOP BOLT AND THE BEARING HOUSING.

REPEAT ON THE SERVICE END OF THE GRINDER.

## CHECK THE ROLL CLEARANCES



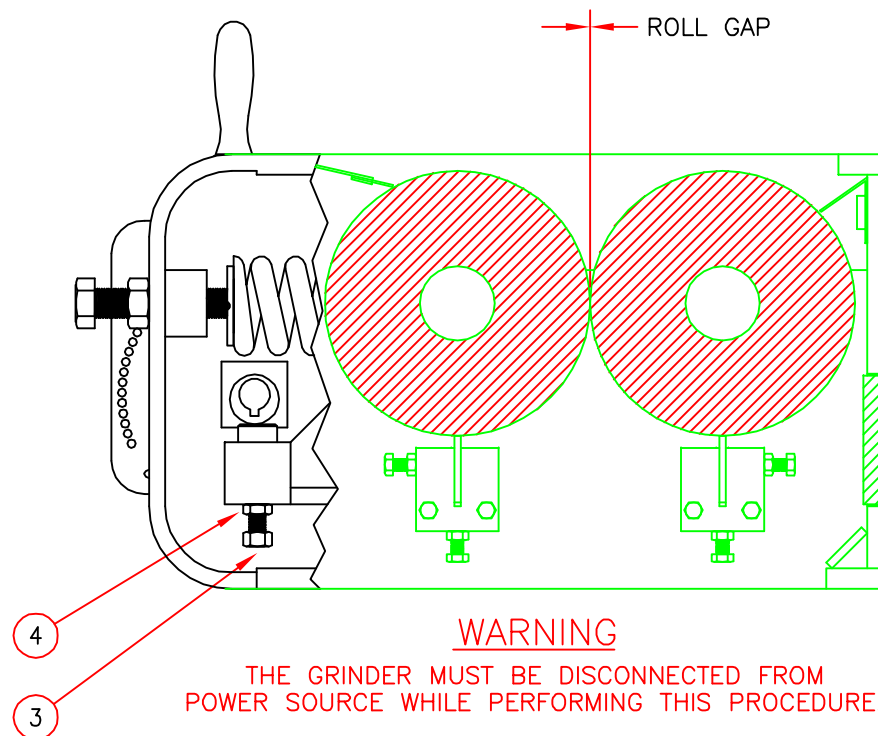
### WARNING

THE GRINDER MUST BE DISCONNECTED FROM  
POWER SOURCE WHILE PERFORMING THIS PROCEDURE.

#### STEP No. 3

CHECK THE ROLL CLEARANCE FROM END TO END  
USING FEELER GAGE WHICH CORRESPONDS TO THE  
MINIMUM GAP SETTING SPECIFIED FOR THIS SECTION

IF NECESSARY, ADJUST THE ROLL GAPS



WARNING

THE GRINDER MUST BE DISCONNECTED FROM POWER SOURCE WHILE PERFORMING THIS PROCEDURE.

STEP No. 4

LOOSEN THE ROLL ADJUSTMENT BOLT JAM NUT (4) AND TURN THE ROLL ADJUSTMENT BOLT (3) ON THE DRIVE END OF THE GRINDER. TURNING THE BOLT CLOCKWISE INCREASES THE GAP, COUNTERCLOCKWISE DECREASES THE GAP.

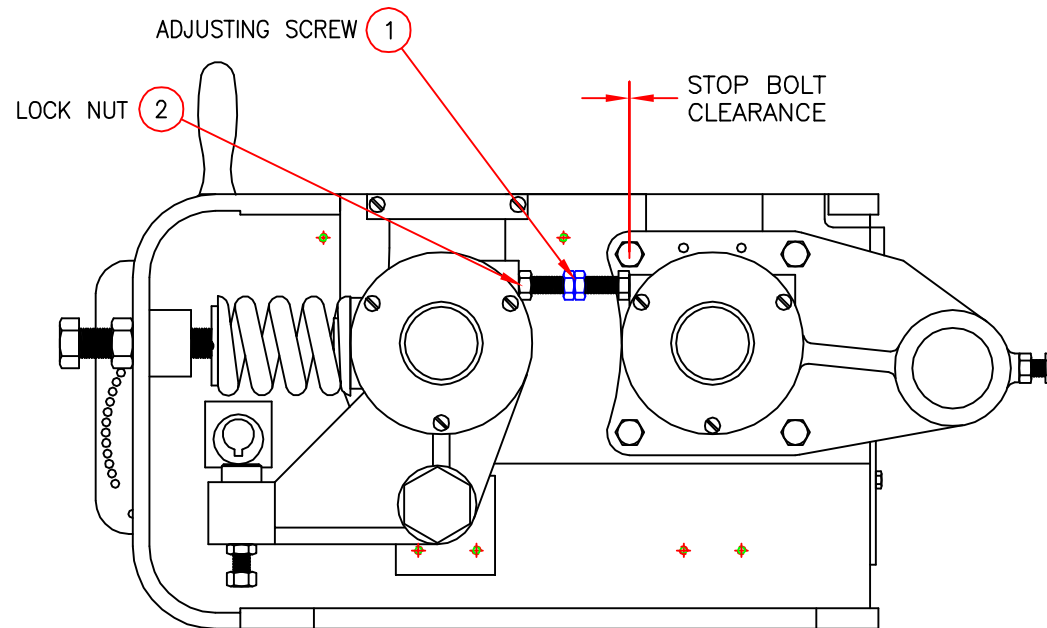
REPEAT AT THE SERVICE END OF THE GRINDER.

ONCE THE ROLLS ARE PARALLEL WITH THE DESIRED GAP SETTING, RETIGHTEN THE ROLL ADJUSTMENT BOLT JAM NUTS ON BOTH ENDS OF THE GRINDER TO LOCK THE ROLL ADJUSTMENT BOLTS IN PLACE.

AFTER TIGHTENING THE JAM NUTS ON BOTH ENDS OF THE GRINDER, RE-CHECK THE ROLL CLEARANCES AND ADJUST AGAIN IF NECESSARY.



## POSITION AND TIGHTEN THE ROLL STOP BOLTS



### WARNING

THE GRINDER MUST BE DISCONNECTED FROM  
POWER SOURCE WHILE PERFORMING THIS PROCEDURE.

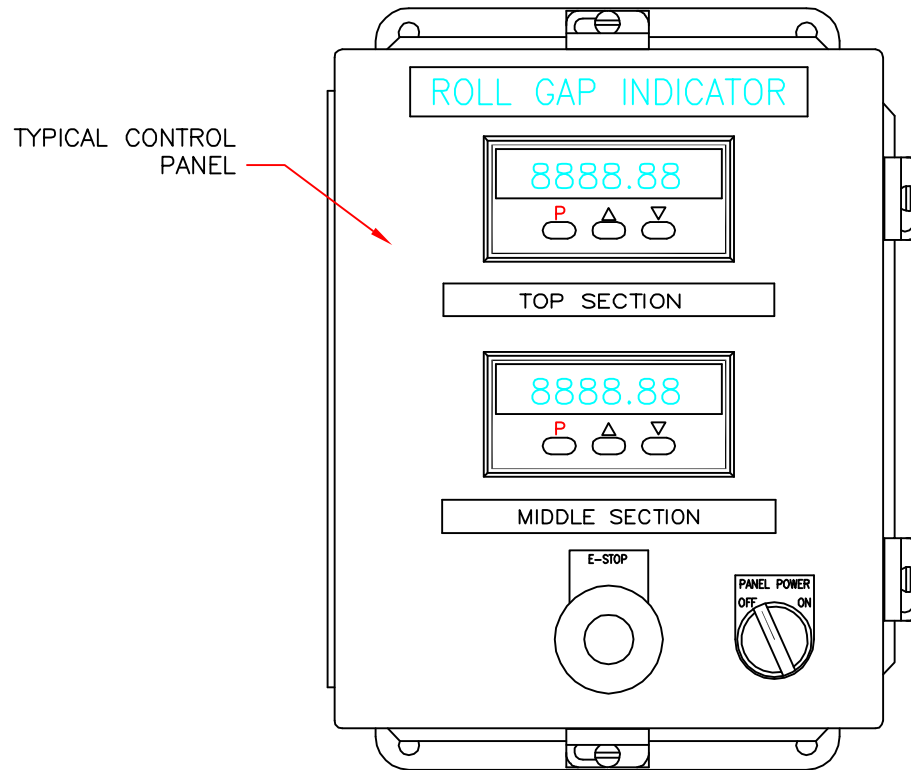
#### STEP No. 5

ON THE DRIVE END OF THE GRINDER, POSITION THE  
ROLL STOP BOLT (2) TO SET THE CLEARANCE  
BETWEEN THE END OF THE BOLT AND THE BEARING  
HOUSING.

TIGHTEN THE JAM NUT (1) TO LOCK THE BOLT IN PLACE

REPEAT ON THE SERVICE END OF THE GRINDER.

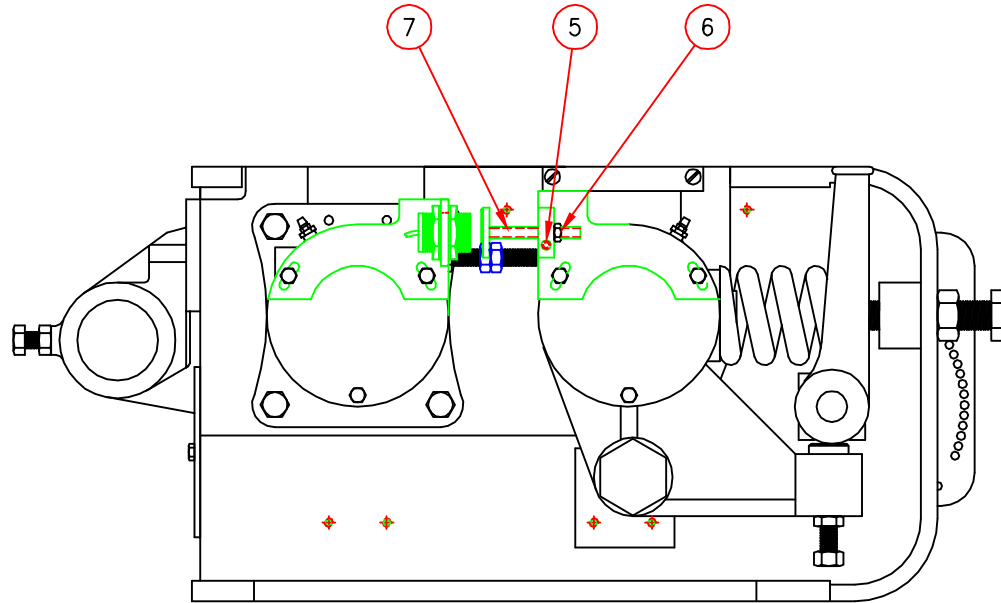
CHECK THE ROLL INDICATION



STEP No. 6

NOTE THE ROLL GAP INDICATION THE CONTROL PANEL.  
IF THE ROLL GAP ON THE CONTROL PANEL DOES NOT  
EQUAL THE ROLL GAP MEASURED, SET THE ROLL  
GAP INDICATION AS EXPLAINED IN STEP NO. 7.

IF NECESSARY, SET THE ROLL GAP INDICATION



STEP No. 7


THIS PART OF THE PROCEDURE IS PERFORMED ONLY ON THE SERVICE END OF THE GRINDER.

LOOSEN THE JAM NUT ON THE PROMIXITY SENSOR TARGET PLATE (6) (NOT ON THE SENSOR ITSELF).

SLIGHTLY LOOSEN THE CLAMP BOLT (5) ON THE PROXIMITY SENSOR TARGET PLATE.

TURN THE PROXIMITY SENSOR TARGET PLATE (7) UNTIL THE ROLL GAP INDICATION ON THE CONTROL PANEL MATCHES THE MEASURED ROLL GAP IN #1 POSITION (CHECK #1 SETTING ON ROLL SETTING TAG).

RETIGHTEN THE CLAMP BOLT (5) AND JAM NUT (6). VERIFY THE GAP INDICATION DOES NOT CHANGE.

				MATERIAL	USED ON UNIT	 <b>MODERN PROCESS EQUIPMENT, Inc.</b> 3125 South Kolin Avenue, Chicago, Illinois 60623	DRAWN FJO	SCALE
							DATE 11/13/02	NTS
				PATTERN NO.		CHECKED		
A	CH'D .004" TO #1 SETTING (7)	21OCT05	JEN			NAME OF PART	PART NO.	
REV.	CHANGE	DATE	BY			ROLL GAP ADJUSTMENT FOR MODEL IMD 800 GRINDER	8CG-4952	D