**CDX Distance Learning**

**Exercise #44**

**Metric Brake Drum Inspection**

**Student Name:** Click or tap here to enter text.

Viewing the animations will be required to answer the following questions correctly. Read each question, or set of questions, and use the link provided in each section to open the animation. Follow the directions in the questions and select the correct answer by clicking or tapping the check box next to it. When complete, close the animation window and move on to the next question(s).

[**Brake Drum Animation 1**](http://d2jw81rkebrcvk.cloudfront.net/assetscdx2/202003%20-%20COVID/Assessments/MS/ANIM/BR/BR_BDrumAssMm01_C1/BR_BDrumAssMm01_C1/BR_BDrumAssMm01_C1.html)

1. What is the diameter of the brake drum when it is new?
	1. 203.2 mm [ ]
	2. 0.03 mm [ ]
	3. 202.1 mm [ ]
	4. 204.5 mm [ ]
2. What is the maximum out-of-round (ovality) allowed?
	1. 0.02 mm [ ]
	2. 203.2 mm [ ]
	3. 0.03 mm [ ]
	4. 204.5 mm [ ]
3. What is the maximum drum diameter allowed?
	1. 203.2 mm [ ]
	2. 204.5 mm [ ]
	3. 0.02 mm [ ]
	4. 0.03 mm [ ]
4. Measure the drum with the drum micrometer set to 20 cm on the large scale, 2 mm on the small scale, and the measurement on the dial. What is the largest diameter of the drum?
	1. 203.2 mm [ ]
	2. 221.2 mm [ ]
	3. 200.12 mm [ ]
	4. 0.012 mm [ ]
5. How much is the drum out-of-round?
	1. 8 mm [ ]
	2. 8.05 mm [ ]
	3. 0 mm [ ]
	4. 0.0012 mm [ ]
6. Is the drum okay to return to service?
	1. Yes, it is within all specifications. [ ]
	2. No, it is oversize. [ ]
	3. No, it is too far out-of-round. [ ]
	4. No, it is undersize. [ ]
7. If the drum condition is good visually, what is the appropriate recommended service?
	1. No service needed [ ]
	2. Refinish drum [ ]
	3. Replace drum [ ]
	4. Install drum on opposite wheel [ ]

[**Brake Drum Animation 4**](http://d2jw81rkebrcvk.cloudfront.net/assetscdx2/202003%20-%20COVID/Assessments/MS/ANIM/BR/BR_BDrumAssMm04_C1/BR_BDrumAssMm04_C1/BR_BDrumAssMm04_C1.html)

1. Measure the drum with the drum micrometer set to 20 cm on the large scale, 2 mm on the small scale, and the measurement on the dial. What is the largest diameter of the drum?
	1. 200.4 mm [ ]
	2. 221.4 mm [ ]
	3. 203.4 mm [ ]
	4. 201.3 mm [ ]
2. How much is the drum out-of-round?
3. 0 mm [ ]
4. 1 mm [ ]
5. 0.08 mm [ ]
6. 0.5 mm [ ]
7. Is the drum okay to return to service?
8. Yes, it is within all specifications. [ ]
9. No, it is oversize. [ ]
10. No, it is too far out-of-round. [ ]
11. No, it is undersize and too far out-of-round. [ ]
12. What is the appropriate recommended service?
13. No service needed [ ]
14. Refinish drum [ ]
15. Replace drum [ ]
16. Install drum on opposite wheel [ ]

[**Brake Drum Animation 5**](http://d2jw81rkebrcvk.cloudfront.net/assetscdx2/202003%20-%20COVID/Assessments/MS/ANIM/BR/BR_BDrumAssMm05_C1/BR_BDrumAssMm05_C1/BR_BDrumAssMm05_C1.html)

1. Measure the drum with the drum micrometer set to 20 cm on the large scale, 2 mm on the small scale, and the measurement on the dial. What is the largest diameter of the drum?
2. 201.6 mm [ ]
3. 200.7 mm [ ]
4. 203.65 mm [ ]
5. 201.6 mm [ ]
6. How much is the drum out-of-round?
7. 0 mm [ ]
8. 0.1 mm [ ]
9. 0.25 mm [ ]
10. 1 mm [ ]
11. Is the drum okay to return to service?
12. Yes, it is within all specifications. [ ]
13. No, it is oversize. [ ]
14. No, it is too far out-of-round. [ ]
15. No, it is undersize. [ ]
16. What is the appropriate recommended service?
17. No service needed [ ]
18. Refinish drum [ ]
19. Replace drum [ ]
20. Install drum on opposite wheel [ ]

[**Brake Drum Animation 6**](http://d2jw81rkebrcvk.cloudfront.net/assetscdx2/202003%20-%20COVID/Assessments/MS/ANIM/BR/BR_BDrumAssMm06_C1/BR_BDrumAssMm06_C1/BR_BDrumAssMm06_C1.html)

1. Measure the drum with the drum micrometer set to 20 cm on the large scale, 2 mm on the small scale, and the measurement on the dial. What is the largest diameter of the drum?
2. 203.1 mm [ ]
3. 201.3 mm [ ]
4. 202.02 mm [ ]
5. 203.8 mm [ ]
6. How much is the drum out-of-round?
7. 0 mm [ ]
8. 0.2 mm [ ]
9. 2 mm [ ]
10. 20 mm [ ]
11. Is the drum okay to return to service?
12. Yes, it is within all specifications. [ ]
13. No, it is oversize. [ ]
14. No, it is too far out-of-round. [ ]
15. No, it is undersize. [ ]
16. What is the appropriate recommended service?
17. No service needed [ ]
18. Refinish drum [ ]
19. Replace drum [ ]
20. Install drum on opposite wheel [ ]
21. What would the customer concern most likely be?
22. Brakes lock up when braking. [ ]
23. Brake pedal pulsates when braking. [ ]
24. Brakes do not apply when braking. [ ]
25. Brake pedal is low and spongy. [ ]

[**Brake Drum Animation 7**](http://d2jw81rkebrcvk.cloudfront.net/assetscdx2/202003%20-%20COVID/Assessments/MS/ANIM/BR/BR_BDrumAssMm07_C1/BR_BDrumAssMm07_C1/BR_BDrumAssMm07_C1.html)

1. Measure the drum with the drum micrometer set to 20 cm on the large scale, 2 mm on the small scale, and the measurement on the dial. What is the largest diameter of the drum?
2. 202.4 mm [ ]
3. 204.7 mm [ ]
4. 204.4 mm [ ]
5. 204.5 mm [ ]
6. How much is the drum out-of-round?
7. 0 mm [ ]
8. 0.25 mm [ ]
9. 0.15 mm [ ]
10. 2.5 mm [ ]
11. Is the drum okay to return to service?
12. Yes, it is within all specifications. [ ]
13. No, it is oversize. [ ]
14. No, it is too far out-of-round. [ ]
15. No, it is oversize and too far out-of-round. [ ]
16. What is the appropriate recommended service?
17. No service needed [ ]
18. Refinish drum [ ]
19. Replace drum [ ]
20. Install drum on opposite wheel [ ]
21. What would the customer concern most likely be?
22. Brakes lock up when braking. [ ]
23. Brake pedal pulsates when braking. [ ]
24. Brakes do not apply when braking. [ ]
25. Brake pedal is low and spongy. [ ]