

Report By:

National TAB
1329 E. KEMPER ROAD
SUITE 4210
CINCINNATI, OH 45246



Report: TAB Report
Function: Test, Adjust, & Balance
Date: 05/28/2024

PROJECT
05-20-24 CARMAX #7110 - DORAL, FL

12800 TUCKAHOE CREEK PKW

DORAL , FL

Client

Comfort Systems USA - Houston
9450 W Wingfoot Rd
Houston, TX 77041

National TAB

Project: 05-20-24 CARMAX #7110 - DORAL, FL

Table Of Contents

Section	Page #
Summary	3
Remarks	4
Site Pictures	7
Checklists	15
AHU/RTU	19

Project Summary

The summary below provides a quick understanding of our scope of work and general testing procedures. Enclosed in the report is further detail about your building performance including recommendations, asset data, and pictures. Our focus is to work with the trades to remedy any issues or deficiencies during the actual field balancing and not after the balancing has occurred to achieve a positive environment and outcome. The level of success is determined by the availability of the trades, possible parts needed, or time constraints.

Facility Identification and TAB Requirements

The mechanical equipment to be tested, adjusted, and balanced includes all RTU's and EF's on the Test and Balance Scope on the mechanical drawings.

Standard RTU's

Each of the RTU's were measured at their terminal devices utilizing a flow hood or via total traverse. The sum of these readings is equal to the total flow for that particular unit. The total flow of each RTU was then adjusted to within tolerance of the specified design. Outside airflow was measured by reading the inlet with a velocity grid times the area of the filter. Any equipment that fell outside of this tolerance is noted throughout the report.

Bypass RTU's

The Bypass RTU's were measured by first closing the bypass damper completely. By doing this, the outside airflow is equal to the total flow for the unit. The airflow was measured using a velgrid at the outdoor air intake and multiplying by the free area of the filters. Adjustments made to the motor sheave in order to get airflow within tolerance of design. The bypass damper is then adjusted so that bypass and OA flows are within tolerance.

ERV RTU's

The supply air portion of the ERV is 100% OA that is supplied to the space via two fans in series. The airflow was measured by reading the intake air filter with a velgrid and multiplying by the free area of the filter. Adjustments were made to the airflow by adjusting the motor sheaves to balance airflow within design tolerances. The exhaust system has one fan and was measured via either traverse or by reading the inlets with a velgrid and multiplying by the free area of the filter.

Exhaust Fans

The exhaust fans were measured by reading each air device with a flow hood or via a velgrid reading times the free area of the inlets. The total airflow for each fan is equivalent to the sum of these readings. Fan speed was then adjusted so that the airflow was within tolerance of design. Any equipment that fell outside of this tolerance is noted throughout the report.

Issue List

- RTU 1 - High Airflow
- RTU 1 - OA Filters Incorrectly Installed



05-20-24 CARMAX #7110 - DORAL, FL

Project Issue Information

Issue Name : RTU 1 - High Airflow
Description : Current airflow measured at 17774CFM out of 10000CFM design (177%). Outside air filters were not installed in the RTU. Unable to adjust VFD, error messages given when any parameter was changed. Reducing the airflow via just the VFD also would prevent the unit from modulating speed, as only ~35Hz would be available. Sheave change recommended.
Created By : National TAB **Assigned To :** National TAB - Stephen Tassinaro
Status : Open
Priority : High **Asset Tag :**
Originated Date : 05/22/2024 - Stephen Tassinaro - National TAB



05-20-24 CARMAX #7110 - DORAL, FL

Project Issue Information

Issue Name : RTU 1 - OA Filters Incorrectly Installed
Description : The outside air filters were not correctly installed on RTU-1. All filters fell out of the unit and onto the rooftop when unit was tested in high speed.
Created By : National TAB **Assigned To :** National TAB - Stephen Tassinaro
Status : Open
Priority : High **Asset Tag :**
Originated Date : 05/22/2024 - Stephen Tassinaro - National TAB

Project Issue File Details



IMG_3058
05/22/2024



IMG_3057
05/22/2024

CheckList List

- TECH - SITE PICTURES



RTU_1
05/28/2024

RTU-2

Comment:



RTU_2
05/28/2024

RTU-3

Comment:



RTU_3
05/28/2024

RTU-4

Comment:



RTU_4
05/28/2024

RTU-5

Comment:



RTU_5
05/28/2024

RTU-6

Comment:



RTU_6
05/28/2024

RTU-7

Comment:



RTU_7
05/28/2024

RTU-8

Comment:



RTU_8
05/28/2024

RTU-12

Comment:



RTU_12
05/28/2024

RTU-13

Comment:



RTU_13
05/28/2024

RTU-14

Comment:



RTU_14
05/28/2024

RTU-19

Comment:



RTU_19
05/28/2024

CheckList List

- RTU CHECKLIST



05-20-24 CARMAX #7110 - DORAL, FL

CheckList Information

Name : RTU CHECKLIST **Status :** Not Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 05/28/2024 - Stephen Tassinaro - National TAB

CheckList Item Details

RTU's/AHU's

Economizers are assembled and functional?

Comment:

YES

Motors are all operating below the FLA rating?

Comment:

YES

Are belts tight?

Comment:

YES

If direct drive unit is the speed controller working.

Comment:

YES

Is gas piping installed and valves turned on?

Comment:

YES

Unit free of noticeable noise and vibration

Comment:

YES

Units are labeled and installed on proper curb

Comment:

YES

Unit ductwork properly installed / sealed on curb

Comment:

YES

Pulleys are properly aligned

Comment:

YES

Condensate lines and P-Traps installed correctly

Yes

Comment:

Disconnect Switch Installed

Comment:

YES

Outside air dampers/Economizers installed and functioning

Comment:

YES

Additional Comments or recommendations:

Comment:

N/A

If issues, have NTAB team and Comfort Systems USA been notified ?

Comment:

YES

If any issues, have Facilibuild issues been created explaining in detail?

Comment:

YES

Pictures

All Issues

Comment:

YES

Each Piece of equipment

Comment:

YES

National TAB

Project: 05-20-24 CARMAX #7110 - DORAL, FL



System/Unit: AHU/RTU

Asset: RTU1

AREA:OFFICE

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	5623J07046
Model Num	LCH300H4B	LCH300H4ML2G
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	5
OA Filter Size 1	-	23x14
Num Final Filter 1	-	12
Final Filter Size 1	-	20x20x2

Motor Data		
	Design	Actual
Motor MFG	-	NIDEC MOTOR CORPORATION
Frame	-	213TZ
Horsepower	5.0	7.5
Motor Rpm	-	1765
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	9.4

Drive Data		
	Design	Actual
Motor Sheave Size	-	6 1/2"
Motor Bore Size	-	1 3/8"
Motor Sheave SetPt	-	2.5 TURNS OUT
Fan Sheave Size	-	12 1/2"
Fan Sheave Bore	-	1 3/16"
Belt CL Distance	-	24 1/4"
Num of Belts	-	1
Belt Size	-	BX75
Belt Alignment	-	GOOD

Test Data		
	Design	Actual
SF CFM	10000	17774
SF RPM	-	802
RA CFM	8000	14490
OA CFM	2000	3284
RL Voltage	-	481/484/484
RL Amperage	-	8.1/8.2/8.2
SF Rotation	-	CCW
RA Damper Position	-	64%
Min OA Damper Position	-	36%
Min OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.53"
Fan Suction SP	-	-0.92"
Fan Discharge SP	-	0.60"
Total ESP	0.75"	1.13"
Fan Total SP	-	1.52"

General		
	Design	Actual
Fan Rotation Correct	-	YES
Unit Filters Clean	-	YES
Condensate Drain Installed	-	YES

Completed By: Stephen Tassinaro on 05/28/2024

Notes:

OUTSIDE AIR SET PROPORTIONALLY HIGH. WHEN SUPPLY AIRFLOW IS REDUCED TO DESIGN, OUTSIDE AIR IS EXPECTED TO ALSO REDUCE TO DESIGN.

Written By: Stephen Tassinaro on 05/23/2024

National TAB

Project: 05-20-24 CARMAX #7110 - DORAL, FL

System/Unit: AHU/RTU



Asset: RTU2

AREA:SHOWROOM

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	5623L03555
Model Num	LCT240H4M	LCT240H4MJ1G
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	3
OA Filter Size 1	-	23x13
Num Final Filter 1	-	6
Final Filter Size 1	-	24x24x2

Motor Data		
	Design	Actual
Motor MFG	-	NIDEC MOTOR CORPORATION
Frame	-	213TZ
Horsepower	7.5	7.5
Motor Rpm	-	1765
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	9.4

Drive Data		
	Design	Actual
Motor Sheave Size	-	6 1/2"
Motor Bore Size	-	1 3/8"
Motor Sheave SetPt	-	2.5
Fan Sheave Size	-	10 1/2"
Fan Sheave Bore	-	1 3/16"
Belt CL Distance	-	21 3/8"
Num of Belts	-	1
Belt Size	-	BX66
Belt Alignment	-	GOOD

Test Data		
	Design	Actual
SF CFM	9000	8645
SF RPM	-	948
RA CFM	6200	5917
OA CFM	2800	2728
RL Voltage	-	484/487/486
RL Amperage	-	8.5 VFD
SF Rotation	-	CCW
RA Damper Position	-	45%
Min OA Damper Position	-	55%
Min OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.75"
Fan Suction SP	-	-1.39"
Fan Discharge SP	-	0.34"
Total ESP	0.60"	1.09"
Fan Total SP	-	1.73"

General		
	Design	Actual
Fan Rotation Correct	-	YES
Unit Filters Clean	-	YES
Condensate Drain Installed	-	YES

Completed By: Mark Johnson on 05/23/2024

National TAB

Project: 05-20-24 CARMAX #7110 - DORAL, FL

System/Unit: AHU/RTU



Asset: RTU3

AREA:SHOWROOM

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	5623L03744
Model Num	LCT180H4M	LCT180H4MJ1G
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	3
OA Filter Size 1	-	23x13
Num Final Filter 1	-	6
Final Filter Size 1	-	24x24x2

Motor Data		
	Design	Actual
Motor MFG	-	INTERLINK
Frame	-	56HZ
Horsepower	3.0	3.0
Motor Rpm	-	1750
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	4.0

Drive Data		
	Design	Actual
Motor Sheave Size	-	3 3/4"
Motor Bore Size	-	7/8"
Motor Sheave SetPt	-	2.5 TURNS OUT
Fan Sheave Size	-	6 3/4"
Fan Sheave Bore	-	1 3/16"
Belt CL Distance	-	20 1/2"
Num of Belts	-	1
Belt Size	-	BX55
Belt Alignment	-	GOOD

Test Data		
	Design	Actual
SF CFM	6000	5705
SF RPM	-	842
RA CFM	4750	4447
OA CFM	1250	1258
RL Voltage	-	483/484/486
RL Amperage	-	4.7 VFD
SF Rotation	-	CORRECT
RA Damper Position	-	60%
Min OA Damper Position	-	40%
Min OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.80"
Fan Suction SP	-	-1.15"
Fan Discharge SP	-	0.42"
Total ESP	0.75"	1.22"
Fan Total SP	-	1.57"

General		
	Design	Actual
Fan Rotation Correct	-	YES
Unit Filters Clean	-	YES
Condensate Drain Installed	-	YES

Completed By: Stephen Tassinaro on 05/28/2024

National TAB

Project: 05-20-24 CARMAX #7110 - DORAL, FL

System/Unit: AHU/RTU



Asset: RTU4

AREA:BUSINESS

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	5623L03556
Model Num	LCT240H4M	LCT240H4MJ1G
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	3
OA Filter Size 1	-	23x13
Num Final Filter 1	-	6
Final Filter Size 1	-	24x24x2

Motor Data		
	Design	Actual
Motor MFG	-	NIDEC MOTOR CORPORATION
Frame	-	213TZ
Horsepower	7.5	7.5
Motor Rpm	-	1765
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	9.4

Drive Data		
	Design	Actual
Motor Sheave Size	-	6 1/2"
Motor Bore Size	-	1 3/8"
Motor Sheave SetPt	-	2.5
Fan Sheave Size	-	10 1/2"
Fan Sheave Bore	-	1 3/16"
Belt CL Distance	-	21 1/4"
Num of Belts	-	1
Belt Size	-	BX66
Belt Alignment	-	GOOD

Test Data		
	Design	Actual
SF CFM	9000	8329
SF RPM	-	973
RA CFM	6200	5569
OA CFM	2800	2760
RL Voltage	-	482/483/480
RL Amperage	-	8.7 VFD
SF Rotation	-	CORRECT
RA Damper Position	-	52%
Min OA Damper Position	-	48%
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.84"
Fan Suction SP	-	-1.56"
Fan Discharge SP	-	0.40"
Total ESP	0.60"	1.24"
Fan Total SP	-	1.96"

General		
	Design	Actual
Fan Rotation Correct	-	YES
Unit Filters Clean	-	YES
Condensate Drain Installed	-	YES

Completed By: Mark Johnson on 05/23/2024

National TAB

Project: 05-20-24 CARMAX #7110 - DORAL, FL

System/Unit: AHU/RTU



Asset: RTU5

AREA: BREAK/OFFICE

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	5623L03745
Model Num	LCT180H4M	LCT180H4MJ1G
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	3
OA Filter Size 1	-	23x13
Num Final Filter 1	-	6
Final Filter Size 1	-	24x24x2

Motor Data		
	Design	Actual
Motor MFG	-	NIDEC MOTOR CORPORATION
Frame	-	184TZ
Horsepower	5.0	5.0
Motor Rpm	-	1765
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	6.5

Drive Data		
	Design	Actual
Motor Sheave Size	-	6 1/2"
Motor Bore Size	-	1 1/8"
Motor Sheave SetPt	-	2.5
Fan Sheave Size	-	10 1/2"
Fan Sheave Bore	-	1 3/16"
Belt CL Distance	-	21"
Num of Belts	-	1
Belt Size	-	BX65
Belt Alignment	-	GOOD

Test Data		
	Design	Actual
SF CFM	7000	7124
SF RPM	-	937
RA CFM	5600	5841
OA CFM	1400	1283
RL Voltage	-	493 VFD
RL Amperage	-	6.58 VFD
SF Rotation	-	CORRECT
RA Damper Position	-	61%
Min OA Damper Position	-	39%
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.77"
Fan Suction SP	-	-1.22"
Fan Discharge SP	-	0.47"
Total ESP	0.75"	1.24"
Fan Total SP	-	1.69"

General		
	Design	Actual
Fan Rotation Correct	-	YES
Unit Filters Clean	-	YES
Condensate Drain Installed	-	YES

Completed By: Mark Johnson on 05/23/2024

National TAB

Project: 05-20-24 CARMAX #7110 - DORAL, FL

System/Unit: AHU/RTU



Asset: RTU6

AREA:PARTS

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	5623J04950
Model Num	LCT060H4E	LCT060H4EC1G
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	29x14
Num Final Filter 1	-	4
Final Filter Size 1	-	20x20x2

Motor Data		
	Design	Actual
Motor MFG	-	EBMPAPST
Frame	-	N/A
Horsepower	1.5	1.5
Motor Rpm	-	N/A
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	2.4

Drive Data		
	Design	Actual
Motor Sheave Size	-	DD
Motor Bore Size	-	DD
Motor Sheave SetPt	-	DD
Fan Sheave Size	-	DD
Fan Sheave Bore	-	DD
Belt CL Distance	-	DD
Num of Belts	-	DD
Belt Size	-	DD
Belt Alignment	-	DD

Test Data		
	Design	Actual
SF CFM	2250	2231
SF RPM	-	79% MSAV
RA CFM	2050	2036
OA CFM	200	195
RL Voltage	-	482
RL Amperage	-	1.3
SF Rotation	-	CORRECT
RA Damper Position	-	80%
Min OA Damper Position	-	20%
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.25"
Fan Suction SP	-	-0.56"
Fan Discharge SP	-	0.72"
Total ESP	0.75"	0.97"
Fan Total SP	-	1.28"

General		
	Design	Actual
Fan Rotation Correct	-	YES
Unit Filters Clean	-	YES
Condensate Drain Installed	-	YES

Completed By: Mark Johnson on 05/23/2024

National TAB

Project: 05-20-24 CARMAX #7110 - DORAL, FL

System/Unit: AHU/RTU



Asset: RTU7

AREA:PHOTO BOOTH/OFFICE

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	5623M06595
Model Num	LCT240H4M	LCT240H4MK1G
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	3
OA Filter Size 1	-	23x13
Num Final Filter 1	-	6
Final Filter Size 1	-	24x24x2

Motor Data		
	Design	Actual
Motor MFG	-	NIDEC MOTOR CORPORATION
Frame	-	184TZ
Horsepower	5.0	5.0
Motor Rpm	-	1765
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	6.5

Drive Data		
	Design	Actual
Motor Sheave Size	-	6 1/4"
Motor Bore Size	-	1 1/8"
Motor Sheave SetPt	-	2.5 TURNS OUT
Fan Sheave Size	-	10 1/2"
Fan Sheave Bore	-	1 3/16"
Belt CL Distance	-	21.0"
Num of Belts	-	1
Belt Size	-	BX65
Belt Alignment	-	GOOD

Test Data		
	Design	Actual
SF CFM	7000	7389
SF RPM	-	948
RA CFM	5300	5707
OA CFM	1700	1682
RL Voltage	-	488/486/488
RL Amperage	-	6.4/6.5/6.5
SF Rotation	-	CORRECT
RA Damper Position	-	55%
Min OA Damper Position	-	45%
Min OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.66"
Fan Suction SP	-	-1.01"
Fan Discharge SP	-	0.69"
Total ESP	0.75"	1.35"
Fan Total SP	-	1.70"

General		
	Design	Actual
Fan Rotation Correct	-	YES
Unit Filters Clean	-	YES
Condensate Drain Installed	-	YES

Completed By: Stephen Tassinaro on 05/23/2024

National TAB

Project: 05-20-24 CARMAX #7110 - DORAL, FL

System/Unit: AHU/RTU



Asset: RTU8

AREA:SERVICE WRITER

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	5623J04954
Model Num	LCT060H4E	LCT060H4EG1G
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	29x14
Num Final Filter 1	-	4
Final Filter Size 1	-	20x20x2

Motor Data		
	Design	Actual
Motor MFG	-	EBMPAPST
Horsepower	1.5	1.5
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	2.4

Drive Data		
	Design	Actual
Motor Sheave Size	-	DD
Motor Bore Size	-	DD
Motor Sheave SetPt	-	DD
Fan Sheave Size	-	DD
Fan Sheave Bore	-	DD
Belt CL Distance	-	DD
Num of Belts	-	DD
Belt Size	-	DD
Belt Alignment	-	DD

Test Data		
	Design	Actual
SF CFM	2250	2175
SF RPM	MSAV	79% MSAV
RA CFM	2010	1930
OA CFM	240	245
RL Voltage	-	484/484/485
RL Amperage	-	1.3/1.3/1.3
SF Rotation	-	CORRECT
RA Damper Position	-	70%
Min OA Damper Position	-	30%
Min OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.38"
Fan Suction SP	-	-0.63"
Fan Discharge SP	-	0.44"
Total ESP	0.60"	0.82"
Fan Total SP	-	1.07"

General		
	Design	Actual
Fan Rotation Correct	-	YES
Unit Filters Clean	-	YES
Condensate Drain Installed	-	YES

Completed By: Stephen Tassinaro on 05/23/2024

National TAB

Project: 05-20-24 CARMAX #7110 - DORAL, FL



System/Unit: AHU/RTU

Asset: RTU12

AREA:FQC

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	5623J04951
Model Num	LCT060H4EC1G	LCT060H4EC1G
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	29X14
Num Final Filter 1	-	4
Final Filter Size 1	-	20X20X2

Motor Data		
	Design	Actual
Horsepower	1.5	1.5
Phase	3	3
Rated Voltage	480	480
Rated Amperage	-	2.3

Drive Data		
	Design	Actual
Motor Sheave Size	-	DD
Motor Bore Size	-	DD
Motor Sheave SetPt	-	DD
Fan Sheave Size	-	DD
Fan Sheave Bore	-	DD
Belt CL Distance	-	DD
Num of Belts	-	DD
Belt Size	-	DD
Belt Alignment	-	DD

Test Data		
	Design	Actual
SF CFM	2250	2157
SF RPM	-	74% MSAV
RA CFM	2050	1974
OA CFM	200	183
RL Voltage	-	482/483/483
RL Amperage	-	1.2/1.3/1.3
SF Rotation	-	CORRECT
RA Damper Position	-	72%
Min OA Damper Position	-	28%
Min OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.31"
Fan Suction SP	-	-0.54"
Fan Discharge SP	-	0.30"
Total ESP	0.75"	0.61"
Fan Total SP	-	0.84"

General		
	Design	Actual
Fan Rotation Correct	-	YES
Unit Filters Clean	-	YES
Condensate Drain Installed	-	YES

Completed By: Stephen Tassinaro on 05/23/2024

National TAB

Project: 05-20-24 CARMAX #7110 - DORAL, FL

System/Unit: AHU/RTU



Asset: RTU13

AREA:FQC OFFICE

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	5623J04955
Model Num	LCT036H4E	LCT036H4EC1P
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	29X14
Num Final Filter 1	-	4
Final Filter Size 1	-	20X20X2

Motor Data		
	Design	Actual
Horsepower	0.5	0.5
Phase	1	1
Rated Voltage	208	208
Rated Amperage	-	4.3

Drive Data		
	Design	Actual
Motor Sheave Size	-	DD
Motor Bore Size	-	DD
Motor Sheave SetPt	-	DD
Fan Sheave Size	-	DD
Fan Sheave Bore	-	DD
Belt CL Distance	-	DD
Num of Belts	-	DD
Belt Size	-	DD
Belt Alignment	-	DD

Test Data		
	Design	Actual
SF CFM	1150	1156
SF RPM	-	74% MSAV
RA CFM	1030	1043
OA CFM	120	113
RL Voltage	-	209
RL Amperage	-	4.2
SF Rotation	-	CORRECT
RA Damper Position	-	80%
Min OA Damper Position	-	20%
Min OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.27"
Fan Suction SP	-	-0.41"
Fan Discharge SP	-	0.69"
Total ESP	0.60"	0.96"
Fan Total SP	-	1.10"

General		
	Design	Actual
Fan Rotation Correct	-	YES
Unit Filters Clean	-	YES
Condensate Drain Installed	-	YES

Completed By: Stephen Tassinaro on 05/23/2024

National TAB

Project: 05-20-24 CARMAX #7110 - DORAL, FL

System/Unit: AHU/RTU



Asset: RTU14

AREA:FQC

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	5623J04953
Model Num	LCT060H4E	LT060H4EG1G
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	29X14
Num Final Filter 1	-	4
Final Filter Size 1	-	20X20X2

Motor Data		
	Design	Actual
Horsepower	1.5	1.5
Phase	3	3
Rated Voltage	480	480
Rated Amperage	-	2.3

Drive Data		
	Design	Actual
Motor Sheave Size	-	DD
Motor Bore Size	-	DD
Motor Sheave SetPt	-	DD
Fan Sheave Size	-	DD
Fan Sheave Bore	-	DD
Belt CL Distance	-	DD
Num of Belts	-	DD
Belt Size	-	DD
Belt Alignment	-	DD

Test Data		
	Design	Actual
SF CFM	2400	2395
SF RPM	-	90% MSAV
RA CFM	700	591
OA CFM	1700	1804
RL Voltage	-	481/482/483
RL Amperage	-	1.7/1.8/1.9
SF Rotation	-	CORRECT
RA Damper Position	-	34%
Min OA Damper Position	-	66%
Min OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.22"
Fan Suction SP	-	-0.48"
Fan Discharge SP	-	0.82"
Total ESP	0.60"	1.04"
Fan Total SP	-	1.30"

General		
	Design	Actual
Fan Rotation Correct	-	YES
Unit Filters Clean	-	YES
Condensate Drain Installed	-	YES

Completed By: Stephen Tassinaro on 05/23/2024

National TAB

Project: 05-20-24 CARMAX #7110 - DORAL, FL

System/Unit: AHU/RTU



Asset: RTU19

AREA:AUCTION/DRIVE AISLE

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	5623J04952
Model Num	LCT060H4E	LCT060H4EG1G
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	29x14
Num Final Filter 1	-	4
Final Filter Size 1	-	20x20x2

Motor Data		
	Design	Actual
Motor MFG	-	EBMPAPST
Horsepower	1.5	1.5
Phase	3	3
Rated Voltage	480	460
Rated Amperage	-	2.4

Drive Data		
	Design	Actual
Motor Sheave Size	-	DD
Motor Bore Size	-	DD
Motor Sheave SetPt	-	DD
Fan Sheave Size	-	DD
Fan Sheave Bore	-	DD
Belt CL Distance	-	DD
Num of Belts	-	DD
Belt Size	-	DD
Belt Alignment	-	DD

Test Data		
	Design	Actual
SF CFM	1800	1801
SF RPM	-	65% MSAV
RA CFM	1600	1609
OA CFM	200	192
RL Voltage	-	482/483/483
RL Amperage	-	0.9/0.9/1.0
SF Rotation	-	CORRECT
RA Damper Position	-	73%
Min OA Damper Position	-	27%
Min OA Damper Type	-	ECONOMIZER

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.23"
Fan Suction SP	-	-0.39"
Fan Discharge SP	-	0.32"
Total ESP	0.75"	0.55"
Fan Total SP	-	0.71"

General		
	Design	Actual
Fan Rotation Correct	-	YES
Unit Filters Clean	-	YES
Condensate Drain Installed	-	YES

Completed By: Stephen Tassinaro on 05/23/2024