

Report By:

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



Report: TAB REPORT
Function: Test, Adjust, & Balance
Date: 10/05/2023

PROJECT
10-02-23 CARMAX #7290 -
CHARLOTTESVILLE, VA

1448 RICHMOND RD
CHARLOTTESVILLE,, VA

Client

Comfort Systems USA
9450 W Wingfoot Rd
Houston, TX 77041

Issue List

- EF-10
- RTU-8
- RTU8-SGRD1 Low Flow



10-02-23 CARMAX #7290 - CHARLOTTESVILLE, VA

Project Issue Information

Issue Name : EF-10
Description : Fan is running at 86% of design. Motor sheave is 1 TO. Sheave change is recommended.
Created By : National TAB **Assigned To :** National TAB - Antonio Flores-De La Cruz
Status : Open
Originated Date : 10/05/2023 - Antonio Flores-De La Cruz - National TAB

Project Issue File Details



EF10
10/05/2023



EF10PULLEYS
10/05/2023



10-02-23 CARMAX #7290 - CHARLOTTESVILLE, VA

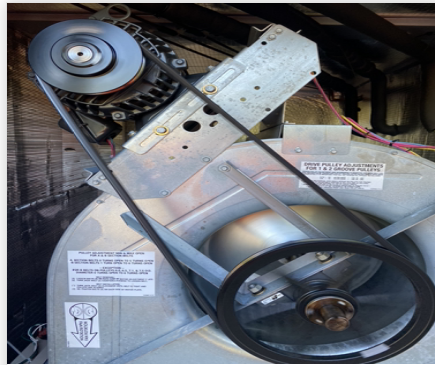
Project Issue Information

Issue Name : RTU-8
Description : Unit is operating at 11% of design. Motor sheave is seized and unable to adjust. Recommended to loosen or switch out and adjust to 2 Turns Out to be within design. Unit is operating below FLA. Design OA: 5000 Actual: 5556
Created By : National TAB **Assigned To :** National TAB - Antonio Flores-De La Cruz
Status : Open
Originated Date : 10/05/2023 - Antonio Flores-De La Cruz - National TAB

Project Issue File Details



RTU8MOTORSHEAVE
10/05/2023



RTU8PULLEY
10/05/2023



RTU8
10/05/2023

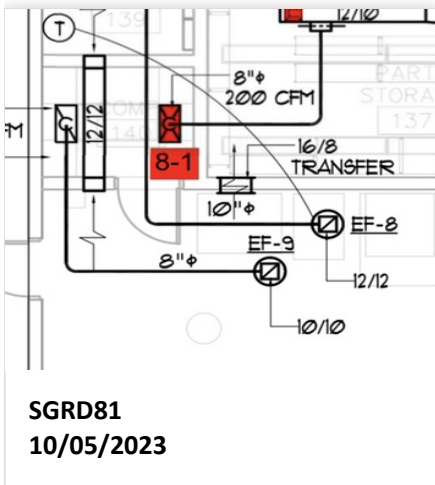


10-02-23 CARMAX #7290 - CHARLOTTESVILLE, VA

Project Issue Information

Issue Name : RTU8-SGRD1 Low Flow
Description : SGRD8-1 is unable to be set to design. After the ductwork was checked, flex duct position was adjusted and small openings were patched and only 50 CFM was added to finish at 111 CFM. Damper is 100% open as well. Dampers in Garage area were attempted to close, but rust did not allow for them to work properly. SGRD8-1 is located in a Storage/Data room
Created By : National TAB **Assigned To :** National TAB - Antonio Flores-De La Cruz
Status : Open
Originated Date : 10/05/2023 - Antonio Flores-De La Cruz - National TAB

Project Issue File Details



CheckList List

- TECH - SITE PICTURES
- TECH - STEP 1: INITIAL SITE WALKTHROUGH
- TECH - STEP 2: UNIT DATA AND EVAL
- TECH - STEP 3: TEST, ADJUST AND BALANCE
- TECH - STEP 4: FINAL TESTS



10-02-23 CARMAX #7290 - CHARLOTTESVILLE, VA

CheckList Information

Name : TECH - SITE PICTURES **Status :** Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 10/02/2023 - Brian Turnbough - National TAB

Completed Date :

CheckList Item Details

STORE FRONT

Comment:



STOREFRONT
10/05/2023

RTU-1

Comment:



RTU1
10/05/2023

RTU-2

Comment:



RTU2(1)
10/05/2023

RTU-3

Comment:



RTU3(1)
10/05/2023

RTU-4

Comment:



RTU4
10/05/2023

RTU-5

Comment:



RTU5(1)
10/05/2023

RTU-6

Comment:



RTU6
10/05/2023

RTU-7

Comment:



RTU6
10/05/2023

RTU-8

Comment:



RTU8
10/05/2023

EF-7

Comment:



EF-7
10/05/2023

EF-8

Comment:



EF8
10/05/2023

EF-9

Comment:



EF9(1)
10/05/2023

EF-10

Comment:



EF10
10/05/2023

EF-11

Comment:



EF11
10/05/2023



10-02-23 CARMAX #7290 - CHARLOTTESVILLE, VA

CheckList Information

Name : TECH - STEP 1: INITIAL SITE WALKTHROUGH **Status :** Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 10/02/2023 - Brian Turnbough - National TAB
Completed Date : 10/04/2023 - Antonio Flores-De La Cruz - National TAB

CheckList Item Details

INITIAL SITE WALKTHROUGH

All diffusers and grilles are installed and match design?

Comment:

All hood filters installed and accounted for?

N/A

Comment:

Hoods are wired and have power?

N/A

Comment:

Hood is free of alarms?

N/A

Comment:

Thermostats have power?

Yes

Comment:

Have trades/general contractor been notified about any issues and are they created on FaciliBuild?

Comment:

Yes



10-02-23 CARMAX #7290 - CHARLOTTESVILLE, VA

CheckList Information

Name : TECH - STEP 2: UNIT DATA AND EVAL **Status :** Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 10/02/2023 - Brian Turnbough - National TAB

Completed Date : 10/04/2023 - Antonio Flores-De La Cruz - National TAB

CheckList Item Details

UNIT DATA AND EVALUATION WHILE GATHERING UNIT DATA CHECK THE FOLLOWING:

RTU's/AHU's

Economizers are assembled and functional? Yes

Comment:

DCV Max damper opening position is set to minimum? Yes

Comment:

Free cooling enthalpy set point set for lowest setting (Typically "D") Yes

Comment:

Motors are all operating below the FLA rating? Yes

Comment:

Are belts tight?

Comment:

Yes

If direct drive unit is the speed controller working.

Comment:

Yes

Is gas piping installed and valves turned on?

Yes

Comment:

Yes

Unit free of noticeable noise and vibration

Yes

Comment:

EF's

Rotation is correct?

Yes

Comment:

Belts are tight?

Comment:

Grease cup installed on hood fan?

N/A

Comment:

Hinge kit installed installed on hood fan?

N/A

Comment:

Lean fan back. Is grease duct installation adequate and is duct ran all the way to the base of the fan?

N/A

Comment:

Flex conduit is long enough so that fan can be completely tilted back?

N/A

Comment:

There is no major leakage around base of fan?

Yes

Comment:

Is the motor operating below the motor FLA rating?

Yes

Comment:

For restroom fan(s) is the back draft damper installed and can it fully open?

N/A

Comment:

Unit free of noticeable noise and vibration?

Yes

Comment:

MUA

Rotation is correct?

N/A

Comment:

Gas piping is installed and valves are in on position?

N/A

Comment:

Heater tested and is functional?

N/A

Comment:

Internal motorized damper is fully opening?

N/A

Comment:

Motor is operating below the FLA rating?

N/A

Comment:

Unit free of noticeable noise and vibration?

N/A

Comment:

HOODS

Kitchen equipment installed in proper places?

N/A

Comment:

Can kitchen equipment be turned on for final smoke test?

N/A

Comment:

DOCUMENTATION

Have trades/general contractor been notified about any issues and are they created on FaciliBuild? Yes

Comment:



10-02-23 CARMAX #7290 - CHARLOTTESVILLE, VA

CheckList Information

Name : TECH - STEP 3: TEST, ADJUST AND BALANCE **Status :** Completed

Assigned Organization : National TAB **Asset :**

Requesting Organization : National TAB

Created Date : 10/02/2023 - Brian Turnbough - National TAB

Completed Date : 10/04/2023 - Antonio Flores-De La Cruz - National TAB

CheckList Item Details

TEST, ADJUST, AND BALANCE ALL EQUIPMENT:

DURING TESTING MAKE NOTE OF THE FOLLOWING:

Is space free of drafting? Yes

Comment:

Is space comfortable in all areas? Yes

Comment:

Is the space free of ventilation noise? Yes

Comment:

If deviations from design were necessary to resolve 1-3 what were they? Otherwise put "NA".

Comment:

N/A



10-02-23 CARMAX #7290 - CHARLOTTESVILLE, VA

CheckList Information

Name : TECH - STEP 4: FINAL TESTS **Status :** Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 10/02/2023 - Brian Turnbough - National TAB
Completed Date : 10/04/2023 - Antonio Flores-De La Cruz - National TAB

CheckList Item Details

FINAL TESTS

HOOD CAPTURE TEST

List equipment turned on for testing

Comment:

N/A

List smoke candle type used

Comment:

N/A

Smoke test capture - Perimeter of hood

Comment:

N/A

Smoke test capture - Top of cooking surface

Comment:

N/A

WITNESS

Date test was completed

Comment:

N/A

TAB tech name / Firm

Comment:

N/A

Site super name / Firm

Comment:

N/A

Owner representative name / Firm (if Applicable)

Comment:

N/A

Building pressure at front & back doors (All Systems On)

Comment:

N/A

ADDITIONAL

Do actual net building airflow, design net building airflow, and pressure coincide? If not why? (All three should either be positive or negative)

Comment:

Thermostats are programmed?

Yes

Comment:

National TAB

Project: 10-02-23 CARMAX #7290 - CHARLOTTESVILLE, VA

System/Unit: AHU/RTU



Asset: RTU1

AREA:SHOWROOM

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	5622G09759
Model Num	LGH300H4B	LGH120H4M
Type	RTU	RTU
Configuration	Vertical	VERTICAL
Num OA Filters 1	-	2
OA Filter Size 1	-	14.125x23.125
Num Final Filter 1	-	4
Final Filter Size 1	-	20x25x2

Motor Data		
	Design	Actual
Motor MFG	-	US MOTORS
Frame	-	184TZ
Horsepower	3	3
Motor Rpm	1765	1765
Phase	3	3
Rated Voltage	480	460
Rated Amperage	7.3	7.3

Drive Data		
	Design	Actual
Motor Sheave Size	-	5"
Motor Bore Size	-	1.125"
Motor Sheave SetPt	-	2 TO
Fan Sheave Size	-	7.5"
Fan Sheave Bore	-	0.875"
Belt CL Distance	-	21.5"
Num of Belts	-	1
Belt Size	-	BX59
Belt Alignment	-	CORRECT

Test Data		
	Design	Actual
SF CFM	4500	4573
SF RPM	-	1006
RA CFM	3950	4006
OA CFM	550	567
RL Voltage	-	488/488/490
RL Amperage	-	4.7/4.7/4.9
SF Rotation	-	CCW
RA Damper Position	-	72%
Min OA Damper Position	-	28%
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	1 mA

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.64"
Fan Suction SP	-	-1.09"
Fan Discharge SP	-	1.18
Total ESP	0.8"	1.82"
Fan Total SP	-	2.27"

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

Completed By: Antonio Flores-De La Cruz on 10/02/2023

National TAB

Project: 10-02-23 CARMAX #7290 - CHARLOTTESVILLE, VA

System/Unit: AHU/RTU



Asset: RTU2

AREA:SHOWROOM

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	5623H02562
Model Num	LGH300H4B	LGT120H4E
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	2
OA Filter Size 1	-	14.125x23.125
Num Final Filter 1	-	4
Final Filter Size 1	-	20X25X2

Motor Data		
	Design	Actual
Motor MFG	-	EBMPAPST
Frame	-	NL
Horsepower	3.0	3
Motor Rpm	-	2240
Phase	3	3
Rated Voltage	480	480
Rated Amperage	7.5	7.5

Drive Data		
	Design	Actual
Motor Sheave Size	-	DD

Test Data		
	Design	Actual
SF CFM	4500	4338
SF RPM	-	DD
RA CFM	3950	3776
OA CFM	550	562
RL Voltage	-	488/488/486
RL Amperage	-	2.6/2.6/2.7
SF Rotation	-	CCW
RA Damper Position	-	76%
Min OA Damper Position	-	24%
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	1 mA

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.57"
Fan Suction SP	-	-0.99"
Fan Discharge SP	-	0.50"
Total ESP	0.8"	1.07"
Fan Total SP	-	1.49"

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

Completed By: Antonio Flores-De La Cruz on 10/03/2023

National TAB

Project: 10-02-23 CARMAX #7290 - CHARLOTTESVILLE, VA

System/Unit: AHU/RTU



Asset: RTU3

AREA:BUYERS

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	5622G11299
Model Num	LGH300H4B	LGH036H4E
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	29.125X14.5
Num Final Filter 1	-	4
Final Filter Size 1	-	16X20X2

Motor Data		
	Design	Actual
Motor MFG	-	GENTEQ
Frame	-	NA
Horsepower	1.5	0.5
Motor Rpm	-	NA
Phase	3	1
Rated Voltage	480	480
Rated Amperage	-	NA

Drive Data		
	Design	Actual
Motor Sheave Size	-	DD

Test Data		
	Design	Actual
SF CFM	1051	1096
SF RPM	-	DD
RA CFM	951	988
OA CFM	100	108
RL Voltage	-	488
RL Amperage	-	0.8
SF Rotation	-	CW
RA Damper Position	-	80%
Min OA Damper Position	-	20%
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	1 mA

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.10"
Fan Suction SP	-	-0.20"
Fan Discharge SP	-	-0.21"
Total ESP	0.6"	0.31"
Fan Total SP	-	0.41"

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

Completed By: Antonio Flores-De La Cruz on 10/03/2023

National TAB

Project: 10-02-23 CARMAX #7290 - CHARLOTTESVILLE, VA



System/Unit: AHU/RTU

Asset: RTU4

AREA:BUSINESS

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	5622H01320
Model Num	LGH300H4B	LGH036H4E
Type	RTU	RTU
Configuration	Vertical	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	29.125X14.5
Num Final Filter 1	-	4
Final Filter Size 1	-	16X20X2

Motor Data		
	Design	Actual
Motor MFG	-	GENTEQ
Frame	-	NA
Horsepower	1.5	0.5
Motor Rpm	-	NA
Phase	3	1
Rated Voltage	480	480
Rated Amperage	-	NA

Drive Data		
	Design	Actual
Motor Sheave Size	-	DD

Test Data		
	Design	Actual
SF CFM	1100	1135
SF RPM	-	DD
RA CFM	1000	1036
OA CFM	100	99
RL Voltage	-	493
RL Amperage	-	0.8
SF Rotation	-	CW
RA Damper Position	-	77%
Min OA Damper Position	-	23%
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	1 mA

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.09"
Fan Suction SP	-	-0.20"
Fan Discharge SP	-	-0.23"
Total ESP	0.6"	0.32"
Fan Total SP	-	0.43"

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

Completed By: Antonio Flores-De La Cruz on 10/03/2023

National TAB

Project: 10-02-23 CARMAX #7290 - CHARLOTTESVILLE, VA



System/Unit: AHU/RTU

Asset: RTU5

AREA: CUSTOMER LOUNGE

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	5622G11304
Model Num	LGH300H4B	LGH036H4E
Type	RTU	RTU
Configuration	Vertical	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	29.125X14.5
Num Final Filter 1	-	4
Final Filter Size 1	-	16X20X2

Motor Data		
	Design	Actual
Motor MFG	-	GENTEQ
Frame	-	NA
Horsepower	1.5	0.5
Motor Rpm	-	NA
Phase	3	3
Rated Voltage	480	480
Rated Amperage	-	NA

Drive Data		
	Design	Actual
Motor Sheave Size	-	DD

Test Data		
	Design	Actual
SF CFM	1100	1181
SF RPM	-	DD
RA CFM	980	1058
OA CFM	120	123
RL Voltage	-	493
RL Amperage	-	0.8
SF Rotation	-	CCW
RA Damper Position	-	87%
Min OA Damper Position	-	13%
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	1 mA

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.11"
Fan Suction SP	-	-0.22"
Fan Discharge SP	-	0.33"
Total ESP	0.6"	0.44"
Fan Total SP	-	0.55"

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

Completed By: Antonio Flores-De La Cruz on 10/02/2023

National TAB

Project: 10-02-23 CARMAX #7290 - CHARLOTTESVILLE, VA

System/Unit: AHU/RTU



Asset: RTU6

AREA:PBX

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	5622G10922
Model Num	LGH300H4B	LGH036H4E
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num Final Filter 1	-	4
Final Filter Size 1	-	16X20X2

Motor Data		
	Design	Actual
Motor MFG	-	GENTEQ
Frame	-	NL
Horsepower	1.5	0.5
Motor Rpm	-	NL
Phase	3	1
Rated Voltage	480	480
Rated Amperage	-	NL

Drive Data		
	Design	Actual
Motor Sheave Size	-	DD

Test Data		
	Design	Actual
SF CFM	960	920
SF RPM	-	DD
RA CFM	960	920
OA CFM	-	0
RL Voltage	-	488
RL Amperage	-	2.1
SF Rotation	-	CW
RA Damper Position	-	100%
Min OA Damper Position	-	0%
Min OA Damper Type	-	NONE
OA Enthalpy Setpt	-	NA

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.19"
Fan Suction SP	-	-0.28"
Fan Discharge SP	-	0.57"
Total ESP	0.6"	0.76"
Fan Total SP	-	0.85"

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

Completed By: Antonio Flores-De La Cruz on 10/03/2023

Notes:
NO OA HOOD INSTALLED

Written By: Antonio Flores-De La Cruz on 10/03/2023

National TAB

Project: 10-02-23 CARMAX #7290 - CHARLOTTESVILLE, VA



System/Unit: AHU/RTU

Asset: RTU7

AREA: BREAK/CONFERENCE ROOM

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	5622G09684
Model Num	LGH300H4B	LGH048H4E
Type	RTU	RTU
Configuration	Vertical	VERTICAL
Num OA Filters 1	-	1
OA Filter Size 1	-	29.125X14.5
Num Final Filter 1	-	4
Final Filter Size 1	-	16X20X2

Motor Data		
	Design	Actual
Motor MFG	-	GENTEQ
Frame	-	NA
Horsepower	1.5	0.75
Motor Rpm	-	NA
Phase	3	1
Rated Voltage	480	480
Rated Amperage	-	NA

Drive Data		
	Design	Actual
Motor Sheave Size	-	DD

Test Data		
	Design	Actual
SF CFM	1200	1279
SF RPM	-	DD
RA CFM	940	1028
OA CFM	260	251
RL Voltage	-	490
RL Amperage	-	1.7
SF Rotation	-	CW
RA Damper Position	-	79%
Min OA Damper Position	-	21%
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	1 mA

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.34"
Fan Suction SP	-	-0.52"
Fan Discharge SP	-	0.38"
Total ESP	0.6"	0.72"
Fan Total SP	-	0.90"

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

Completed By: Antonio Flores-De La Cruz on 10/03/2023

National TAB

Project: 10-02-23 CARMAX #7290 - CHARLOTTESVILLE, VA



System/Unit: AHU/RTU

Asset: RTU8

AREA:SERVICE AREA (BP)

Unit Data		
	Design	Actual
MFG	LENNOX	LENNOX
Serial Num	-	5622H03183
Model Num	LGH300H4B	LGH300H4B
Type	RTU	RTU
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	2
OA Filter Size 1	-	38.125X11.875
Num Final Filter 1	-	12
Final Filter Size 1	-	20X20X2

Motor Data		
	Design	Actual
Motor MFG	-	US MOTORS
Frame	-	184TZ
Horsepower	5.0	5
Motor Rpm	1765	1765
Phase	3	3
Rated Voltage	480	460
Rated Amperage	7.3	7.3

Drive Data		
	Design	Actual
Motor Sheave Size	-	1VP56BB
Motor Bore Size	-	1.125"
Motor Sheave SetPt	-	2 TO
Fan Sheave Size	-	BK120H
Fan Sheave Bore	-	1.187"
Belt CL Distance	-	23.5"
Num of Belts	-	1
Belt Size	-	BK71
Belt Alignment	-	CORRECT

Test Data		
	Design	Actual
SF CFM	7000	7776
SF RPM	-	761
RA CFM	2000	2200
OA CFM	5000	5556
RL Voltage	-	486/485/487
RL Amperage	-	6.5/6.5/6.6
SF Rotation	-	CCW
RA Damper Position	-	75%
Min OA Damper Position	-	100%
Min OA Damper Type	-	ECONOMIZER
OA Enthalpy Setpt	-	1 mA

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.38"
Fan Suction SP	-	-0.84"
Fan Discharge SP	-	1.02"
Total ESP	0.8"	1.40"
Fan Total SP	-	1.86"

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

Completed By: Antonio Flores-De La Cruz on 10/05/2023

National TAB

Project:10-02-23 CARMAX #7290 - CHARLOTTESVILLE, VA

AHU/RTU



Diffuser Supply (GRD)

RTU8/SERVICE AREA (BP)

Asset									
Asset Name	Location	Type	Size	DESIGN CFM	AK	CFM(1)	CFM(2)	FINAL CFM	% to design
RTU8-SGRD1	COMPUTER	12/10	8"	200	1	56	105	111	55.5
RTU8-SGRD2	PARTS STORAGE	12/10 NK		200	1	200	204	217	108.5
RTU8-SGRD3	PARTS STORAGE	12/10 NK		200	1	200	207	218	109.0
RTU8-SGRD4	SERVICE AREA	24/14 NK		725	1	864	826	826	113.9
RTU8-SGRD5	SERVICE AREA	24/14 NK		725	1	834	826	826	113.9
RTU8-SGRD6	SERVICE AREA	24/14 NK		725	1	834	826	826	113.9
RTU8-SGRD7	SERVICE AREA	24/14 NK		725	1	834	826	826	113.9
RTU8-SGRD8	SERVICE AREA	24/14 NK		725	1	834	826	826	113.9
RTU8-SGRD9	SERVICE AREA	24/14 NK		725	1	834	826	826	113.9
RTU8-SGRD10	TOILET		6"	50	1	37	54	54	108.0
Total				5000		5527	5526	5556	111.12%

National TAB

Project: 10-02-23 CARMAX #7290 - CHARLOTTESVILLE, VA

System/Unit: FAN - Exhaust



Asset: EF7

AREA:

Unit Data		
	Design	Actual
MFG	GREENHECK	GREENHECK
Model Num	G-080-D-X	SP-A110-QD
Serial Num	-	10617996
Type	CEILING	CEILING
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	MCMILLAN
Frame	-	NA
Horsepower	-	NA
Motor Rpm	-	NA
Phase	-	1
Voltage (rated)	115	115
Amperage (rated)	-	NA
Service Factor	-	1

Test Data		
	Design	Actual
CFM	110	104
Fan RPM	DD	DD
Fan Rotation	-	CCW
Motor RPM	-	DD
System SetPt	-	DIAL
RL Voltage	-	NA
RL Amperage	-	NA
Total ESP	-	0.08"
Fan Inlet SP	-	-0.08"
Fan Discharge SP	-	ATM"

Completed By: Antonio Flores-De La Cruz on 10/04/2023

National TAB

Project: 10-02-23 CARMAX #7290 - CHARLOTTESVILLE, VA

System/Unit: FAN - Exhaust



Asset: EF8

AREA:

Unit Data		
	Design	Actual
MFG	GREENHECK	GREENHECK
Model Num	G-080-D-X	G-080-D-X
Serial Num	-	106044990610
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	MCMILLAN
Frame	-	NL
Horsepower	0.07	0.07
Motor Rpm	1550	1550
Phase	1	1
Voltage (rated)	120	120
Amperage (rated)	-	1.2
Service Factor	-	1

Test Data		
	Design	Actual
CFM	300	323
Fan RPM	-	DD
Fan Rotation	-	CW
Motor RPM	-	DD
System SetPt	-	LOW SPEED
RL Voltage	-	NA
RL Amperage	-	NA
Total ESP	-	0.13"
Fan Inlet SP	-	-0.13"
Fan Discharge SP	-	ATM

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National TAB

Project: 10-02-23 CARMAX #7290 - CHARLOTTESVILLE, VA

System/Unit: FAN - Exhaust



Asset: EF9

AREA:

Unit Data		
	Design	Actual
MFG	GREENHECK	GREENHECK
Model Num	G-080-D-X	G-080-D-X
Serial Num	-	106044980610
Type	DOWNBLAST	DOWNBLAST
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	MCMILLAN
Frame	-	NL
Horsepower	0.07	0.07
Motor Rpm	1550	1550
Phase	1	1
Voltage (rated)	1.2	115
Amperage (rated)	-	1.2
Service Factor	-	1

Test Data		
	Design	Actual
CFM	200	211
Fan RPM	DD	DD
Fan Rotation	-	CW
Motor RPM	-	DD
System SetPt	-	HIGH SPEED
RL Voltage	-	NA
RL Amperage	-	NA
Total ESP	-	0.11"
Fan Inlet SP	-	-0.11"
Fan Discharge SP	-	ATM

Completed By: Antonio Flores-De La Cruz on 10/04/2023

National TAB

Project: 10-02-23 CARMAX #7290 - CHARLOTTESVILLE, VA

System/Unit: FAN - Exhaust



Asset: EF10

AREA:

Unit Data		
	Design	Actual
MFG	GREENHECK	GREENHECK
Model Num	SWB-212-20-CW-UB-X	SWB-212-20-CW-UB-X
Serial Num	-	06J04140
Type	UTILITY	UTILITY
Configuration	VERTICAL	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR
Frame	-	56H
Horsepower	2	2
Motor Rpm	1750	1750
Phase	3	3
Voltage (rated)	208	460
Amperage (rated)	-	5.9
Service Factor	-	1.15

Drive Data		
	Design	Actual
Motor Sheave Size	-	VP56
Motor Bore Size	-	0.6875"
Motor Sheave SetPt	-	1 TO
Fan Sheave Size	-	3"
Fan Sheave Bore	-	1"
Belt CL Distance	-	8.5"
Num of Belts	-	1
Belt Size	-	AX28

Test Data		
	Design	Actual
CFM	1800	1545
Fan RPM	-	NA
Fan Rotation	-	CW
Motor RPM	-	1770
RL Voltage	-	488/488/486
RL Amperage	-	2.5/2.5/2.6
Suction ESP	-	-4.08"
Discharge ESP	-	ATM
Total ESP	-	4.08"

Completed By: Antonio Flores-De La Cruz on 10/05/2023

National TAB

Project: 10-02-23 CARMAX #7290 - CHARLOTTESVILLE, VA

System/Unit: FAN - Exhaust



Asset: EF11

AREA:

Unit Data		
	Design	Actual
MFG	GREENHECK	GREENHECK
Model Num	SWB-212-20-CW-UB-X	CUBE-161-5-X
Serial Num	-	106045010610
Type	UPBLAST	UPBLAST
Configuration	VERTICAL	VERTICAL

Test Data		
	Design	Actual
CFM	2500	2548
Fan RPM	-	1056
Fan Rotation	-	CCW
Motor RPM	-	1727
RL Voltage	-	120
RL Amperage	-	NA
Suction ESP	-	-0.28"
Discharge ESP	-	ATM
Total ESP	-	0.38"

Motor Data		
	Design	Actual
Motor MFG	-	MARATHON
Frame	-	48Z
Horsepower	0.5	0.5
Motor Rpm	1725	1725
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	7.2
Service Factor	-	1.25

Drive Data		
	Design	Actual
Motor Sheave Size	-	VP34S
Motor Bore Size	-	0.56"
Motor Sheave SetPt	-	1 TO
Fan Sheave Size	-	AK5134
Fan Sheave Bore	-	0.75"
Belt CL Distance	-	5.5"
Num of Belts	-	1
Belt Size	-	AX21

Completed By: Antonio Flores-De La Cruz on 10/03/2023