

Report By:

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



Report: TAB REPORT
Function: Test, Adjust, & Balance
Date: 10/30/2023

PROJECT

08-14-23 CULVERS LEE SUMMIT, MO REVIVE

1701 NE Douglas St

Lee Summit, MO 64086

Client

MPH Dinning

National TAB

Project: 08-14-23 CULVERS LEE SUMMIT,MO REVIVE

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Issue List

- HIGH PRIORITY – Economizers would stay open after setting.
- HIGH PRIORITY – Humidity sensor not communicating on RTU-2.
- HIGH PRIORITY – Kitchen RTU pulley is seized and cannot be adjusted
- LOW PRIORITY – Restroom exhaust fan is not operational.



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Project Issue Information

Issue Name : HIGH PRIORITY – Economizers would stay open after setting.
Description : Economizers would stay open after setting. Appears to be due to not receiving an occupied signal. Recommend service company address this to ensure dampers stay at the set positions.
Created By : National TAB **Assigned To :** National TAB - Dan Hertenstein
Status : Open
Originated Date : 10/30/2023 - Jacob Davidson - National TAB



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Project Issue Information

Issue Name : HIGH PRIORITY – Humidity sensor not communicating on RTU-2.
Description : Humidity sensor not communicating on RTU-2. No voltage measured on the sensor. The unit is flashing alarm 76 which is a humidity sensor issue. Checked the wiring and it appears to be correct. Recommend a service company contact Lennox technical support to resolve.

Created By : National TAB **Assigned To :** National TAB - Dan Hertenstein

Status : Open

Originated Date : 10/30/2023 - Jacob Davidson - National TAB



08-14-23 CULVERS LEE SUMMIT,MO REVIVE

Project Issue Information

Issue Name : HIGH PRIORITY – Kitchen RTU pulley is seized and cannot be adjusted
Description : Kitchen RTU pulley is seized and cannot be adjusted. Recommend service company break free or replace the pulley so airflow adjustment can be made. The unit is 70% of design currently
Created By : National TAB **Assigned To :** National TAB - Wale Odofin
Status : Open
Originated Date : 10/30/2023 - Jacob Davidson - National TAB



08-14-23 CULVERS LEE SUMMIT,MO REVIVE

Project Issue Information

Issue Name : LOW PRIORITY – Restroom exhaust fan is not operational.
Description : Restroom exhaust fan is not operational. Recommend having the fan serviced.
Created By : National TAB **Assigned To :** National TAB - Wale Odofin
Status : Open
Originated Date : 10/30/2023 - Jacob Davidson - National TAB

CheckList List

- SITE PICTURES
- TECH - STEP 1: INITIAL READINGS
- TECH - STEP 2: INITIAL WALKTHROUGH
- TECH - STEP 3: UNIT DATA AND EVAL
- TECH - STEP 4: TEST, ADJUST AND BALANCE
- TECH - STEP 5: FINAL TESTS



Rtu1
08/16/2023

RTU-2

Comment:



Rtu2(1)
08/16/2023

PRV-1

Comment:



Prv1
08/16/2023

PRV-2

Comment:



Prv2
08/16/2023

PRV-3

Comment:



Prv3
08/16/2023

PRV-4

Comment:



Prv4
08/16/2023

HOOD 1

Comment:



Hood1
08/16/2023

HOOD 2

Comment:



Hood2
08/16/2023

HOOD 3

Comment:



Hood3
08/16/2023



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CheckList Information

Name : TECH - STEP 1: INITIAL READINGS **Status :** Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 08/11/2023 - Wale Odofin - National TAB
Completed Date : 08/16/2023 - Sergio Del Toro - National TAB

CheckList Item Details

INITIAL BUILDING REVIEW:

What is the initial building pressure before making any changes?

Comment:

FRONT DOORS -0.04 BACK DOOR -0.03

Are thermostats programmed?

Comment:

YES

Are building pressure relief working properly?

Comment:

YES

INITIAL AIRFLOWS:

SUPPLY RTU-1

Comment:

74% OF 8K

OA RTU-1

Comment:

679

SUPPLY RTU-2

Comment:

66% OF 8K

OA RTU-2

Comment:

299

SUPPLY RTU-3

Comment:

OA RTU-3

Comment:

EF-1

Comment:

0 CFM

EF-2

Comment:

117%

EF-3

Comment:

134%

EF-4

Comment:

228 CFM

MAU-1

Comment:



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CheckList Information

Name : TECH - STEP 2: INITIAL WALKTHROUGH **Status :** Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 08/11/2023 - Wale Odofin - National TAB
Completed Date : 08/16/2023 - Sergio Del Toro - National TAB

CheckList Item Details

INITIAL SITE WALKTHROUGH

All diffusers and grilles are installed and match design?

Comment:

YES

All hood filters installed and accounted for?

Comment:

YES

Hoods are wired and have power?

Comment:

YES

Hood is free of alarms?

Comment:

YES

Thermostats have power?

Comment:

YES

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

Comment:

YES



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CheckList Information

Name : TECH - STEP 3: UNIT DATA AND EVAL **Status :** Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 08/11/2023 - Wale Odofin - National TAB
Completed Date : 08/16/2023 - Sergio Del Toro - 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?

Comment:

YES

DCV Max damper opening position is set to minimum?

Comment:

YES

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

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:

NA

Is gas piping installed and valves turned on?

Comment:

YES

Unit free of noticeable noise and vibration

Comment:

YES

EF's

Rotation is correct?

Comment:

YES

Belts are tight?

Comment:

YES

Grease cup installed on hood fan?

Comment:

YES

Hinge kit installed installed on hood fan?

Comment:

YES

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

Comment:

YES

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

Comment:

YES

There is no major leakage around base of fan?

Comment:

YES

Is the motor operating below the motor FLA rating?

Comment:

YES

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

Comment:

YES

Unit free of noticeable noise and vibration?

Comment:

YES

MUA

Rotation is correct?

Comment:

Gas piping is installed and valves are in on position?

Comment:

Heater tested and is functional?

Comment:

Internal motorized damper is fully opening?

Comment:

Motor is operating below the FLA rating?

Comment:

Unit free of noticeable noise and vibration?

Comment:

HOODS

Kitchen equipment installed in proper places?

Comment:

YES

Can kitchen equipment be turned on for final smoke test?

Comment:

YES

DOCUMENTATION

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

Comment:



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CheckList Information

Name : TECH - STEP 4: TEST, ADJUST AND BALANCE **Status :** Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 08/11/2023 - Wale Odofin - National TAB
Completed Date : 08/16/2023 - Sergio Del Toro - National TAB

CheckList Item Details

TEST, ADJUST, AND BALANCE ALL EQUIPMENT:

DURING TESTING MAKE NOTE OF THE FOLLOWING:

Is space free of drafting?

Comment:

YES

Is space comfortable in all areas?

Comment:

YES

Is the space free of ventilation noise?

Comment:

YES

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

Comment:

NA



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CheckList Information

Name : TECH - STEP 5: FINAL TESTS **Status :** Completed
Assigned Organization : National TAB **Asset :**
Requesting Organization : National TAB
Created Date : 08/11/2023 - Wale Odofin - National TAB
Completed Date : 08/16/2023 - Sergio Del Toro - National TAB

CheckList Item Details

FINAL TESTS

HOOD CAPTURE TEST

List equipment turned on for testing

Comment:

FRYER, GRIDDLE

List smoke candle type used

Comment:

WITNESSED FOOD COOKING

Smoke test capture - Perimeter of hood

Comment:

YES

Smoke test capture - Top of cooking surface

Comment:

YES

WITNESS

Date test was completed

08/16/2023

Comment:

TAB tech name / Firm

Comment:

SERGIO DEL TORO

Site super name / Firm

Comment:

NA

Owner representative name / Firm (if Applicable)

Comment:

NA

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

Comment:

FRONT 0.018 BACK 0.011

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:

YES

Thermostats are programmed?

Comment:

YES

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Project: 08-14-23 CULVERS LEE SUMMIT,MO REVIVE

System/Unit: AHU/RTU



Asset: RTU1

AREA:DINING

Unit Data		
	Design	Actual
MFG	NA	LENNOX
Serial Num	-	5604B00559
Model Num	NA	LGC240S2BH1Y
Type	-	RTU
Configuration	-	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	-	US MOTORS
Frame	-	213TZ
Horsepower	-	7.5
Motor Rpm	-	1765
Phase	-	3
Rated Voltage	-	208-230V
Rated Amperage	-	20.40-18.70A

Drive Data		
	Design	Actual
Motor Sheave Size	-	6.5"
Motor Bore Size	-	1-1/8"
Motor Sheave SetPt	-	UTO
Fan Sheave Size	-	10.5"
Fan Sheave Bore	-	1-1/8"
Belt CL Distance	-	21.5"
Num of Belts	-	2
Belt Size	-	BX66
Belt Alignment	-	CORRECT

Test Data		
	Design	Actual
SF CFM	-	5963
SF RPM	-	938
RA CFM	-	4704
OA CFM	-	1259
RL Voltage	-	211.2/211.1/212.8V
RL Amperage	-	10.9/11.5/10.7A
SF Rotation	-	CORRECT
RA Damper Position	-	1-1/8"
Min OA Damper Position	-	1-1/8"
Min OA Damper Type	-	OPPOSED BLADE
OA Enthalpy Setpt	-	D

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.34"
Fan Suction SP	-	-0.67"
Fan Discharge SP	-	0.44"
Total ESP	-	1.01"
Fan Total SP	-	1.11"

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

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Project: 08-14-23 CULVERS LEE SUMMIT,MO REVIVE

System/Unit: AHU/RTU



Asset: RTU2

AREA:KITCHEN

Unit Data		
	Design	Actual
MFG	NA	LENNOX
Serial Num	-	5604B00559
Model Num	NA	LGA240H2BS3Y
Type	-	RTU
Configuration	-	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	-	US MOTORS
Frame	-	213T
Horsepower	-	7.50
Motor Rpm	-	1745
Phase	-	3
Rated Voltage	-	208-230V
Rated Amperage	-	21.20-18.90A

Drive Data		
	Design	Actual
Motor Sheave Size	-	6.5"
Motor Bore Size	-	1-1/8"
Motor Sheave SetPt	-	UTO
Fan Sheave Size	-	10.5"
Fan Sheave Bore	-	1-1/8"
Belt CL Distance	-	21"
Num of Belts	-	2
Belt Size	-	BX66
Belt Alignment	-	CORRECT

Test Data		
	Design	Actual
SF CFM	-	5302
SF RPM	-	914
RA CFM	-	4000
OA CFM	-	1302
RL Voltage	-	211.6/211.3/213.7V
RL Amperage	-	11.6/11.5/11.4A
SF Rotation	-	CORRECT
RA Damper Position	-	1-1/4"
Min OA Damper Position	-	1-1/4"
Min OA Damper Type	-	OPPOSED BLADE
OA Enthalpy Setpt	-	D

Performance Data		
	Design	Actual
MA Plenum SP	-	-0.53"
Fan Suction SP	-	-0.93
Fan Discharge SP	-	0.35"
Total ESP	-	0.88"
Fan Total SP	-	1.28"

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

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Project: 08-14-23 CULVERS LEE SUMMIT,MO REVIVE

System/Unit: FAN - Exhaust



Asset: PRV1

AREA:RESTROOMS

Unit Data		
	Design	Actual
MFG	NA	ACCUREX
Model Num	NA	G-095-DGEX-QD
Serial Num	-	11092239
Type	-	DOWNBLAST
Configuration	-	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	DAYTON ELECTRIC
Frame	-	NA
Horsepower	-	1/8
Motor Rpm	-	1550/1300/1050
Phase	-	1
Voltage (rated)	-	115V
Amperage (rated)	-	2.6A
Service Factor	-	NA

Test Data		
	Design	Actual
CFM	-	0
Fan RPM	-	NA
Fan Rotation	-	NA
Motor RPM	-	NA
System SetPt	-	NA
RL Voltage	-	NA
RL Amperage	-	NA
Total ESP	-	NA
Fan Inlet SP	-	NA
Fan Discharge SP	-	NA

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Project: 08-14-23 CULVERS LEE SUMMIT,MO REVIVE

System/Unit: FAN - Exhaust



Asset: PRV2

AREA:GRILL

Unit Data		
	Design	Actual
MFG	NA	ACCUREX
Model Num	NA	XRUB-161XP-15-G
Serial Num	-	13702407
Type	-	UPBLAST
Configuration	-	CENTRIFUGAL

Motor Data		
	Design	Actual
Motor MFG	-	CENTURY
Frame	-	U56H
Horsepower	-	1.5
Motor Rpm	-	1725
Phase	-	3
Voltage (rated)	-	200-230V
Amperage (rated)	-	5.0-5.6A
Service Factor	-	1.15

Drive Data		
	Design	Actual
Motor Sheave Size	-	4"
Motor Bore Size	-	5/8"
Motor Sheave SetPt	-	UTO
Fan Sheave Size	-	2.5"
Fan Sheave Bore	-	7/8"
Belt CL Distance	-	5.5"
Num of Belts	-	1
Belt Size	-	AX23

Test Data		
	Design	Actual
CFM	-	1555
Fan RPM	-	2010
Fan Rotation	-	CORRECT
Motor RPM	-	NA
RL Voltage	-	NA
RL Amperage	-	NA
Suction ESP	-	-0.82"
Discharge ESP	-	ATM
Total ESP	-	0.82"

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Project: 08-14-23 CULVERS LEE SUMMIT,MO REVIVE

System/Unit: FAN - Exhaust



Asset: PRV3

AREA:FRYER

Unit Data		
	Design	Actual
MFG	NA	ACCUREX
Model Num	NA	XRUB-141-7-G
Serial Num	-	13702405
Type	-	UPBLAST
Configuration	C	CENTRIFUGAL

Motor Data		
	Design	Actual
Motor MFG	-	WEG
Frame	-	B56
Horsepower	-	3/4
Motor Rpm	-	1740
Phase	-	3
Voltage (rated)	-	208-230V
Amperage (rated)	-	2.65-2.40A
Service Factor	-	1.25

Drive Data		
	Design	Actual
Motor Sheave Size	-	3"
Motor Bore Size	-	5/8"
Motor Sheave SetPt	-	UTO
Fan Sheave Size	-	3.5"
Fan Sheave Bore	-	5/8"
Belt CL Distance	-	5.5"
Num of Belts	-	1
Belt Size	-	AX23

Test Data		
	Design	Actual
CFM	-	1591
Fan RPM	-	1132
Fan Rotation	-	CORRECT
Motor RPM	-	NA
RL Voltage	-	NA
RL Amperage	-	NA
Suction ESP	-	-0.42"
Discharge ESP	-	ATM
Total ESP	-	0.42"

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Project: 08-14-23 CULVERS LEE SUMMIT,MO REVIVE

System/Unit: FAN - Exhaust



Asset: PRV4

AREA:DISHWASHER

Unit Data		
	Design	Actual
MFG	NA	ACCUREX
Model Num	NA	GB-081-4X-QD-R3
Serial Num	-	04122652
Type	-	DOWNBLAST
Configuration	-	VERTICAL

Motor Data		
	Design	Actual
Motor MFG	-	FASCO
Frame	-	NA
Horsepower	-	1/4
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	115V
Amperage (rated)	-	4.1A
Service Factor	-	NA

Test Data		
	Design	Actual
CFM	-	228
Fan RPM	-	CORRECT
Fan Rotation	-	CORRECT
Motor RPM	-	NA
System SetPt	-	NA
RL Voltage	-	NA
RL Amperage	-	NA
Total ESP	-	0.28"
Fan Inlet SP	-	-0.28"
Fan Discharge SP	-	ATM

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Project: 08-14-23 CULVERS LEE SUMMIT,MO REVIVE

System/Unit: Kitchen Hood Type I



Asset: HD1

AREA:GRILL

Unit Data		
	Design	Actual
MFG	NA	ACCUREX
Model Num	NA	XGEP-64-S
Job / Serial Num	-	13705086
Type	-	TYPE I CANOPY
Hood length	-	64"
Hood Width	-	23"

Test Data Exhaust		
	Design	Actual
Filter Type	-	GREASE GRABBER
Filter Size 1	-	16X16
Filter Qty 1	-	4
Filter AK factor size 1	-	1.53
Filter Total AK Area	-	6.12
Filter1 FPM	-	211
Filter2 FPM	-	241
Filter3 FPM	-	314
Filter4 FPM	-	253
Filter Ave FPM(corr)	-	254
CFM	-	1555

Cooking Equipment		
	Design	Actual
Item 1	-	GRIDDLE

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Project: 08-14-23 CULVERS LEE SUMMIT,MO REVIVE

System/Unit: Kitchen Hood Type I



Asset: HD2

AREA:FRYER

Unit Data

	Design	Actual
MFG	NA	ACCUREX
Model Num	NA	XXEP-83-S
Job / Serial Num	-	13705085
Type	-	TYPE I CANOPY
Hood length	-	83"
Hood Width	-	23"

Test Data Exhaust

	Design	Actual
Filter Type	-	GREASE GRABBER
Filter Size 1	-	16X16
Filter Qty 1	-	5
Filter AK factor size 1	-	1.53
Filter Total AK Area	-	7.65
Filter1 FPM	-	193
Filter2 FPM	-	207
Filter3 FPM	-	239
Filter4 FPM	-	197
Filter5 FPM	-	205
Filter Ave FPM(corr)	-	208
CFM	-	1591

Cooking Equipment

	Design	Actual
Item 1	-	FRYER

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Project: 08-14-23 CULVERS LEE SUMMIT,MO REVIVE

System/Unit: Kitchen Hood Type II



Asset: HD3

AREA:DISHWASHER

Unit Data		
	Design	Actual
MFG	NA	ACCUREX
Model Num	NA	GD3-3.50-S
Serial Num	-	04I16343
Type	-	TYPE II
Hood length	-	42"
Hood Width	-	42"

Test Data		
	Design	Actual
Exhaust CFM	-	228

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