



**PIC CONTROLS
FOR CENTRAL-STATION
AIR-HANDLING UNITS**

39L PIC

SIZE: 03-35

SERIES: 0

INDEX

	Page(s):
PIC CONTROL MODEL NUMBER BREAKDOWN	2
PIC CONTROL OPTIONS NUMBER BREAKDOWN	3
UNIT AND SERIAL / ID PLATE ILLUSTRATION	4
CONTROL BOX SECTION:	
CONTROL BOX ASSY. IDENTIFICATION INSTRUCTIONS	5-7
CONTROL BOX ASSY. PARTS LISTS	8-13
CONTROL BOX ASSY. ILLUSTRATIONS	14-16
FAN SECTION ACCESSORY KITS:	
FAN SECT. ACCESSORY KIT IDENTIFICATION INSTRUCTIONS	17
ACCESSORY KIT PARTS LISTS AND ILLUSTRATIONS	18-20
DAMPER CONTROL PACKAGES:	
DAMPER CONTROL PKG. IDENTIFICATION INSTRUCTIONS	21-22
DAMPER CONTROL PKG. PARTS LISTS	23-25
DAMPER CONTROL ILLUSTRATIONS	26-34
MISCELLANEOUS OPTIONS AND ILLUSTRATIONS	35-39
VALVE ASSEMBLIES:	
VALVE ASSEMBLY IDENTIFICATION & ILLUSTRATION	40
VALVE ASSEMBLY PARTS LISTS	41
PIC CONTROL CASING PARTS LISTS AND ILLUSTRATION	42



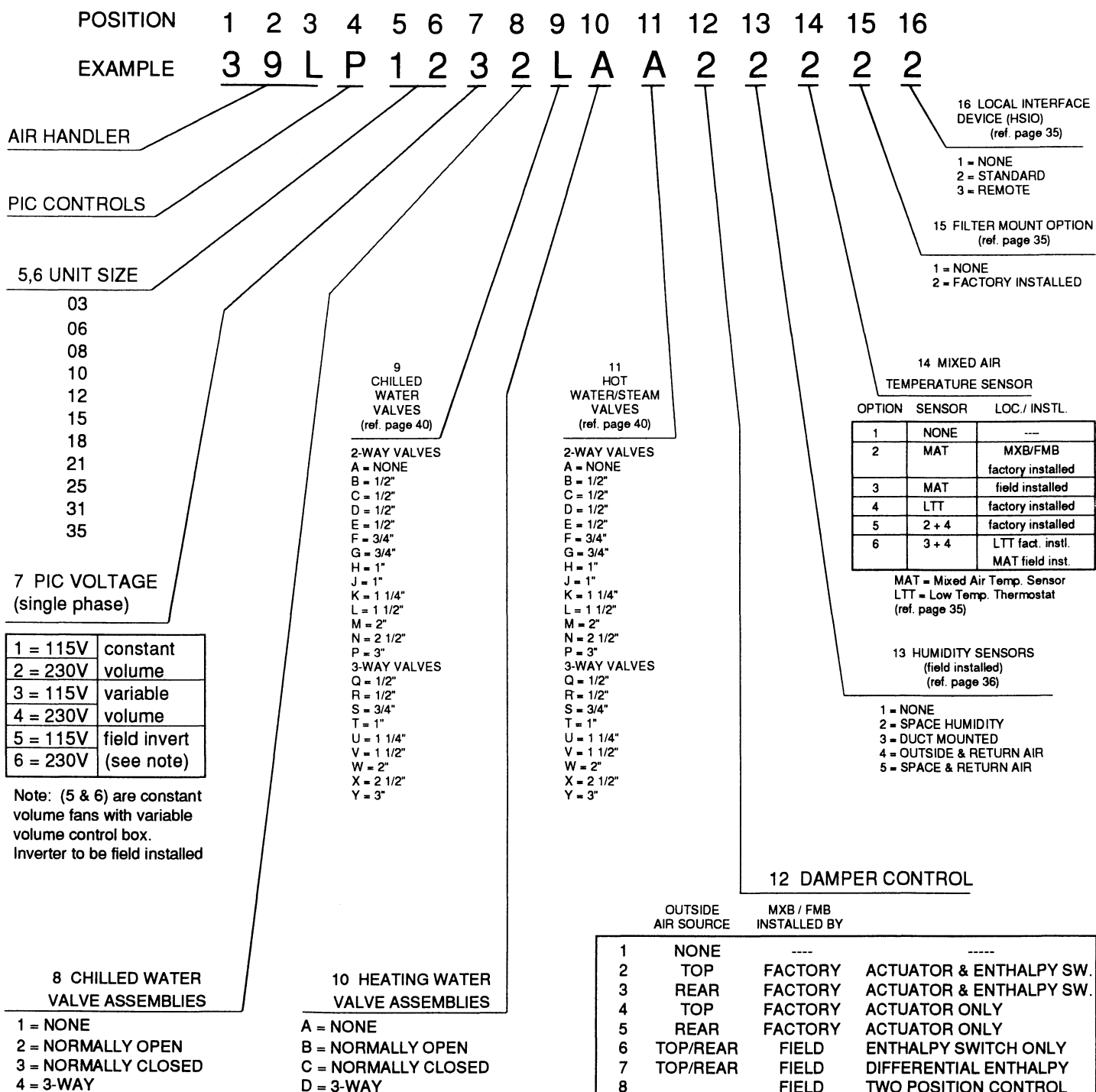
PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

SIZE: 03-35

SERIES: 0

PIC CONTROL MODEL NUMBER BREAKDOWN





PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

SIZE: 03-35

SERIES: 0

PIC OPTIONS NUMBER BREAKDOWN

POSITION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
EXAMPLE	3	9	L	J	2	1	1	1	A	A	1	1	1	-	-	-
MODEL 39LP WITH OPTIONAL CONTROLS																
5 ELECTRIC HEAT (factory installed)																
1 = NONE 2 = HAS ELEC. HEAT																
6 OPTION MODULE																
1 = NONE 2 = HAS OPTION MODULE																
7 HUMIDIFIER CONTROL																
1 = NONE 2 = 2-STAGE SPRAY BAR 3 = MODULATING VALVE (ref. page 36)																
8 SMOKE CONTROL																
1 = NONE 2 = FACTORY INSTALLED (with top outside air damper of MXB / FMB) 3 = FACTORY INSTALLED (with bottom outside air damper of MXB / FMB) 4 = FIELD SUPPLIED MXB (for 2 & 3 ref. pages 21-34 -- for 4 ref. page 36)																
9 OPTIONAL OUTPUTS																
A = NONE B = WITH OPTIONAL OUTPUTS (ref. page 36)																
10 OPTIONAL TEMPERATURE INPUTS																
A = NONE B = SPACE TEMPERATURE C = DUCT TEMPERATURE (ref. page 36)																
11 OPTIONAL OUTSIDE AIR ACTUATOR																
1 = NONE 2 = 15 LB/IN TORQUE 3 = 75 LB/IN TORQUE 4 = 190 LB/IN TORQUE (ref. page 36)																
12 OPTIONAL RETURN AIR ACTUATOR																
1 = NONE 2 = 15 LB/IN TORQUE 3 = 75 LB/IN TORQUE 4 = 190 LB/IN TORQUE (ref. page 36)																
13 OPTIONAL EXHAUST AIR ACTUATOR																
1 = NONE 2 = 15 LB/IN TORQUE 3 = 75 LB/IN TORQUE 4 = 190 LB/IN TORQUE (ref. page 36)																
BLANK																

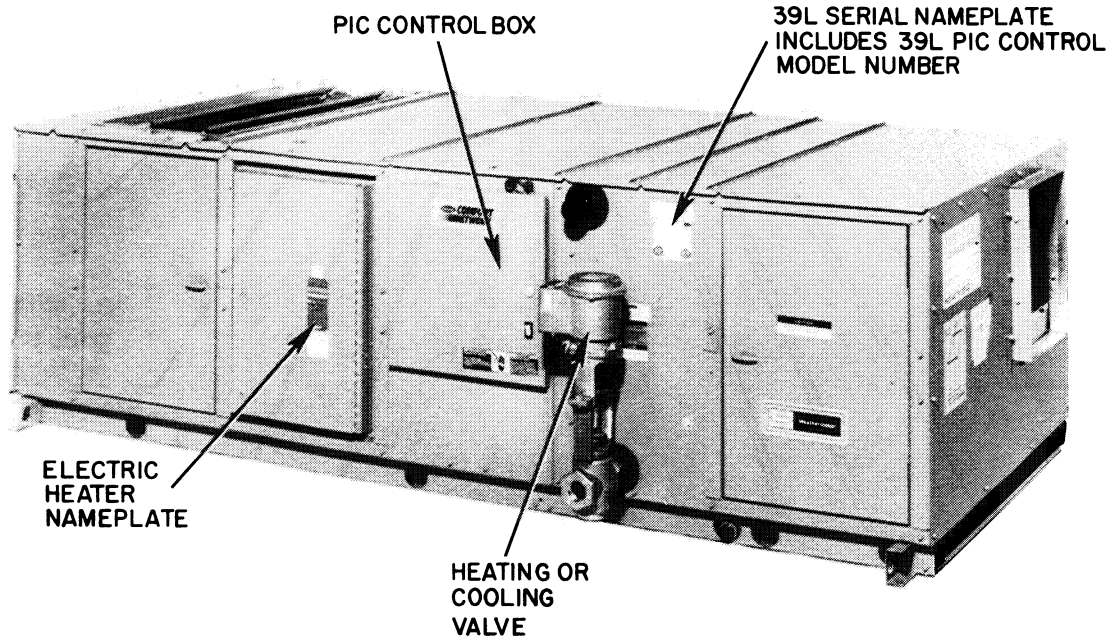
**PIC CONTROLS
FOR CENTRAL-STATION
AIR-HANDLING UNITS**

39L PIC

SIZE: 03-35

SERIES: 0

39L UNIT WITH PIC CONTROLS



IMPORTANT
THESE TWO NUM-
BERS ARE USED
THROUGHOUT THIS
CATALOG TO IDENT-
IFY NEEDED RE-
PLACEMENT PARTS.
PLEASE SUPPLY
BOTH NUMBERS
WHEN MAKING
PARTS INQUIRIES
TO RCD.

Carrier Air Conditioning 	
 Division of Carrier Corporation	
SERIAL NUMBER	
UNIT NUMBER	
COIL LOC. UPPER	
1 OR 5 LOWER	
COIL LOC. 2	
COIL LOC. 3	
COIL LOC. 4	
MOTOR NUMBER	
DRIVE NUMBER	
PIC CONTROL	39LP1232LAA22222
PIC CONTROL OPTIONS	39LJ2111AA111
MISCELLANEOUS UNIT OPTIONS	
 MADE IN USA 39LC_500...551 REV B 	

39L SERIAL /ID PLATE

THE SERIAL NAMEPLATE IS LOCATED ON THE DRIVE END
PANEL OF THE FAN SECTION.



PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

SIZE: 03-35

SERIES: 0

PIC CONTROL BOX ASSEMBLY IDENTIFICATION INSTRUCTIONS

- 1.) Find the PIC Control Model Number and the PIC Control Options Number on the unit's serial / ID plate located on the drive end panel of the fan section (sample serial / ID plate on page 4).
- 2.) With this information refer to the charts on pages 6 and 7.
Chart 1 is for units without an option module or electric heat (Option Number, position 6 = 1, position 5 = 1)
Chart 2 is for units without an option module, with electric heat (Option Number, position 6 = 1, position 5 = 2)
Chart 3 is for units with an option module, without electric heat (Option Number, position 6 = 2, position 5 = 1)
Chart 4 is for units with an option module and electric heat (Option Number, position 6 = 2, position 5 = 2)
- 3.) After locating the appropriate chart, match the equipment and options indicated in your unit's Model and Option Numbers to the appropriate row in the chart. The Control Box Assembly Number can be found in one of the right hand columns depending on your unit being constant volume or variable volume.
(constant or variable volume is determined by the 7th digit in the Model Number.)
- 4.) When the PIC control box assembly number has been determined, go to the parts lists on pages 8 thru 13 and find the column identified by the number. Illustrations are on pages 14-16.

EXAMPLE

Serial / ID plate data:	PIC Control Model Number --- 3 9 L P 1 2 ③② L A A ② 2 2 2 2
(ref. pages 2, 3, & 4)	PIC Control Options Number --- 3 9 L J ②① 1 1 A A 1 1 1 - - -

STEP 1. Option Number position 6 = 1 and position 5 = 2, so use chart number 2 on page 6.

STEP 2. UNIT EQUIPMENT:

From Model Number: position 8 is a "2" = unit has a chilled water valve ("Y" in chart 2, 1st column)
position 12 is a "2" = factory installed MXB ("Y" in chart 2, 2nd column)

STEP 3. From Model Number: position 7 is a "3" = variable volume (far right column in chart 2)

The above equipment matches up to the 4th row in chart 2 and since the unit is variable volume the PIC control box assembly is 39LC400443. The control box parts for the given EAMPLE are listed in column 39LC400443 on page 10.

Use this same procedure for identifying the Control Box Assembly for your unit.



PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

SIZE: 03-35

SERIES: 0

CONTROL BOX ASSEMBLY IDENTIFICATION

CHART 1
UNITS WITHOUT OPTION MODULE AND
WITHOUT ELECTRIC HEAT
(Option Number, position #6 = 1)
(Option Number, position #5 = 1)

REFER TO MODEL NUMBER (page 2)			CONTROL BOX ASSEMBLIES	
position 8	position 10	position 12		
units with chilled water valves N = NONE Y = YES	units with heating water valves N = NONE Y = YES	MXB N/F = None or Field installed Y = Factory installed	CONSTANT VOLUME UNITS	VARIABLE VOLUME UNITS
N	N	N/F	39LC400430	39LC400432
N	N	Y	39LC400434	39LC400439
N	Y	N/F	39LC400434	39LC400439
N	Y	Y	39LC400435	39LC400440
Y	N	N/F	39LC400434	39LC400439
Y	N	Y	39LC400435	39LC400440
Y	Y	N/F	39LC400435	39LC400440
Y	Y	Y	39LC400436	39LC400441

CHART 2
UNITS WITHOUT OPTION MODULE AND
WITH ELECTRIC HEAT
(Option Number, position #6 = 1)
(Option Number, position #5 = 2)

REFER TO MODEL NUMBER (page 2)		CONTROL BOX ASSEMBLIES	
position 8	position 12		
units with chilled water valves N = NONE Y = YES	MXB N/F = None or Field installed Y = Factory installed	CONSTANT VOLUME UNITS	VARIABLE VOLUME UNITS
N	N/F	39LC400431	39LC400433
N	Y	39LC400437	39LC400442
Y	N/F	39LC400437	39LC400442
Y	Y	39LC400438	39LC400443



PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

SIZE: 03-35

SERIES: 0

CONTROL BOX ASSEMBLY IDENTIFICATION

CHART 3
UNITS WITH OPTION MODULE AND
WITHOUT ELECTRIC HEAT
(Option Number, position #6 = 2)
(Option Number, position #5 = 1)

REFER TO MODEL NUMBER (PAGE 2)			REFER TO OPTION NUMBER (PAGE 3)	CONTROL BOX ASSEMBLIES	
position 8	position 10	position 12	position 8		
CHILLED WATER VALVES N = NONE Y = YES	HEATING WATER VALVES N = NONE Y = YES	MXB N/F = None or Field installed Y = Factory installed	SMOKE CONTROL OPTION N/F = None or Field installed Y = Factory installed	CONSTANT VOLUME UNITS	VARIABLE VOLUME UNITS
N	N	N/F	N/F	39LC400465	39LC400467
N	N	Y	Y	39LC400469	39LC400474
N	Y	N/F	N/F	39LC400469	39LC400474
N	Y	Y	Y	39LC400470	39LC400475
Y	N	N/F	N/F	39LC400469	39LC400474
Y	N	Y	Y	39LC400470	39LC400475
Y	Y	N/F	N/F	39LC400470	39LC400475
Y	Y	Y	Y	39LC400471	39LC400476

CHART 4
UNITS WITH OPTION MODULE AND
WITH ELECTRIC HEAT
(Option Number, position #6 = 2)
(Option Number, position #5 = 2)

REFER TO MODEL NUMBER (PAGE 2)		REFER TO OPTION NUMBER (PAGE 3)	CONTROL BOX ASSEMBLIES	
position 8	position 12	position 8		
CHILLED WATER VALVES N = NONE Y = YES	MXB N/F = None or Field installed Y = Factory installed	SMOKE CONTROL OPTION N/F = None or Field installed Y = Factory installed	CONSTANT VOLUME UNITS	VARIABLE VOLUME UNITS
N	N/F	N/F	39LC400466	39LC400468
N	Y	Y	39LC400472	39LC400477
Y	N/F	N/F	39LC400472	39LC400477
Y	Y	Y	39LC400473	39LC400478



PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

SIZE: 03-35

SERIES: 0

ITEM	PART DESCRIPTION	39LC400430	39LC400431	39LC400432	39LC400433	39LC400434
		W/O SLV MOD	W/O SLV MOD	W/O SLV MOD	W/O SLV MOD	W/O SLV MOD
CONTROL BOX GROUP						
1	PIC MODULE (PSIO MASTER)	CEAS421175-02	->	->	->	->
2	CONNECTOR (PIC MODULE PL5)	HY84EE004	->	->	->	->
3	SENSOR MODULE (PSIO SLAVE)	X	X	X	X	X
4	PLUG, POWER (PSIO SLAVE)	X	X	X	X	X
5	TRACK (FOR PSIO)	39LC500966	->	->	->	->
6	RELAY (DSIO)	X	HK50AA002	X	HK50AA002	X
7	PLUG, POWER (DSIO)	X	HY84EE003	X	HY84EE003	X
8	AIR FLOW SWITCH	HK06WC030	->	->	->	->
9	TRANSDUCER	X	X	HK05ZG001	->	X
10	HEAT INTERLOCK RELAY	X	X	HK35AB001	->	X
11	FAN STATUS RELAY	HK35AB001	->	->	->	->
12	HIGH PRESSURE SWITCH	X	X	HK02WC001	->	X
13	FUSE	GMQ3 2/10	->	->	->	->
14	FUSE HOLDER	HLQ 1K0656	->	->	->	->
15	TERMINAL BOARD (TB-1)	39LC500967	->	->	->	->
16	TERMINAL BOARD (TB-2)	39LC500986	->	->	->	->
17	TERMINAL BOARD (TB-3) OPTIONAL	SEE DAMPER SECT.	->	->	->	->
18	BRACKET, TERMINAL BOARD	39LC500978	->	->	->	->
19	GROUND LUG	HY90AZ001	->	->	->	->
20	SWITCH	HR54ZA010	->	->	->	->
21	LOCK WITH KEY	KA05DS001	->	->	->	->
22	PLUG (PL3/PL13 PSIO)	HY84EE021	->	->	->	->
23	PLUG (PL17 PSIO SLAVE)	X	X	X	X	X
24	PLUG (PL16 PSIO SLAVE)	X	X	X	X	X
25	FITTING	HW72DW015	->	->	->	->
26	UNION	KA70BS200	->	->	->	->
27	TEE	X	X	KA70BT250	->	X
28	HARNESS ASY. ELEC. HEAT	X	39LC400632	X	39LC400632	X
30	TRANSFORMERS #1, 2, 3, 4, 7, & 8	HT01AW229	->	->	->	->
31	TRANSFORMERS #5 & 6	HT01BD113	->	->	->	->

ILLUSTRATIONS ARE ON PAGES 14-16.



PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

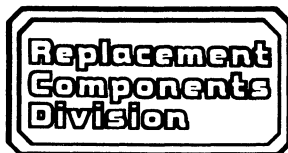
39L PIC

SIZE: 03-35

SERIES: 0

ITEM	PART DESCRIPTION	39LC400435 W/O SLV MOD	39LC400436 W/O SLV MOD	39LC400437 W/O SLV MOD	39LC400438 W/O SLV MOD	39LC400439 W/O SLV MOD
CONTROL BOX GROUP						
1	PIC MODULE (PSIO MASTER)	CEAS421175-02	->	->	->	->
2	CONNECTOR (PIC MODULE PL5)	HY84EE004	->	->	->	->
3	SENSOR MODULE (PSIO SLAVE)	X	X	X	X	X
4	PLUG, POWER (PSIO SLAVE)	X	X	X	X	X
5	TRACK (FOR PSIO)	39LC500966	->	->	->	->
6	RELAY (DSIO)	X	X	HK50AA002	->	X
7	PLUG, POWER (DSIO)	X	X	HY84EE003	->	X
8	AIR FLOW SWITCH	HK06WC030	->	->	->	->
9	TRANSDUCER	X	X	X	X	HK05ZG001
10	HEAT INTERLOCK RELAY	X	X	X	X	HK35AB001
11	FAN STATUS RELAY	HK35AB001	->	->	->	->
12	HIGH PRESSURE SWITCH	X	X	X	X	HK02WC001
13	FUSE	GMQ3 2/10	->	->	->	->
14	FUSE HOLDER	HLQ 1K0656	->	->	->	->
15	TERMINAL BOARD (TB-1)	39LC500967	->	->	->	->
16	TERMINAL BOARD (TB-2)	39LC500986	->	->	->	->
17	TERMINAL BOARD (TB-3) OPTIONAL	SEE DAMPER SECT.	->	->	->	->
18	BRACKET, TERMINAL BOARD	39LC500978	->	->	->	->
19	GROUND LUG	HY90AZ001	->	->	->	->
20	SWITCH	HR54ZA010	->	->	->	->
21	LOCK WITH KEY	KA05DS001	->	->	->	->
22	PLUG (PL3/PL13 PSIO)	HY84EE021	->	->	->	->
23	PLUG (PL17 PSIO SLAVE)	X	X	X	X	X
24	PLUG (PL16 PSIO SLAVE)	X	X	X	X	X
25	FITTING	HW72DW015	->	->	->	->
26	UNION	KA70BS200	->	->	->	->
27	TEE	X	X	X	X	KA70BT250
28	HARNESS ASY. ELEC. HEAT	X	X	39LC400632	->	X
30	TRANSFORMERS #1, 2, 3, 4, 7, & 8	HT01AW229	->	->	->	->
31	TRANSFORMERS #5 & 6	HT01BD113	->	->	->	->

ILLUSTRATIONS ARE ON PAGES 14-16.



PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

SIZE: 03-35

SERIES: 0

ITEM	PART DESCRIPTION	39LC400440 W/O SLV MOD	39LC400441 W/O SLV MOD	39LC400442 W/O SLV MOD	39LC400443 W/O SLV MOD
CONTROL BOX GROUP					
1	PIC MODULE (PSIO MASTER)	CEAS421175-02	->	->	->
2	CONNECTOR (PIC MODULE PL5)	HY84EE004	->	->	->
3	SENSOR MODULE (PSIO SLAVE)	X	X	X	X
4	PLUG, POWER (PSIO SLAVE)	X	X	X	X
5	TRACK (FOR PSIO)	39LC500966	->	->	->
6	RELAY (DSIO)	X	X	HK50AA002	->
7	PLUG, POWER (DSIO)	X	X	HY84EE003	->
8	AIR FLOW SWITCH	HK06WC030	->	->	->
9	TRANSDUCER	HK05ZG001	->	->	->
10	HEAT INTERLOCK RELAY	HK35AB001	->	->	->
11	FAN STATUS RELAY	HK35AB001	->	->	->
12	HIGH PRESSURE SWITCH	HK02WC001	->	->	->
13	FUSE	GMQ3 2/10	->	->	->
14	FUSE HOLDER	HLQ 1K0656	->	->	->
15	TERMINAL BOARD (TB-1)	39LC500967	->	->	->
16	TERMINAL BOARD (TB-2)	39LC500986	->	->	->
17	TERMINAL BOARD (TB-3) OPTIONAL	SEE DAMPER SECTION	->	->	->
18	BRACKET, TERMINAL BOARD	39LC500978	->	->	->
19	GROUND LUG	HY90AZ001	->	->	->
20	SWITCH	HR54ZA010	->	->	->
21	LOCK WITH KEY	KA05DS001	->	->	->
22	PLUG (PL3/PL13 PSIO)	HY84EE021	->	->	->
23	PLUG (PL17 PSIO SLAVE)	X	X	X	X
24	PLUG (PL16 PSIO SLAVE)	X	X	X	X
25	FITTING	HW72DW015	->	->	->
26	UNION	KA70BS200	->	->	->
27	TEE	KA70BT250	->	->	->
28	HARNESS ASY. ELEC. HEAT	X	X	39LC400632	->
30	TRANSFORMERS #1, 2, 3, 4, 7, & 8	HT01AW229	->	->	->
31	TRANSFORMERS #5 & 6	HT01BD113	->	->	->

ILLUSTRATIONS ARE ON PAGES 14-16.



PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

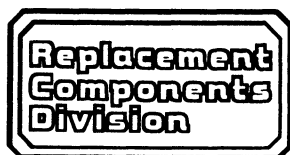
39L PIC

SIZE: 03-35

SERIES: 0

ITEM	PART DESCRIPTION	39LC400465 W/ SLAVE MOD	39LC400466 W/ SLAVE MOD	39LC400467 W/ SLAVE MOD	39LC400468 W/ SLAVE MOD	39LC400469 W/ SLAVE MOD
CONTROL BOX GROUP						
1	PIC MODULE (PSIO MASTER)	CEAS421175-02	->	->	->	->
2	CONNECTOR (PIC MODULE PL5)	HY84EE004	->	->	->	->
3	SENSOR MODULE (PSIO SLAVE)	CEAS420775-01	->	->	->	->
4	PLUG, POWER (PSIO SLAVE)	HY84EE003	->	->	->	->
5	TRACK (FOR PSIO)	39LC500966	->	->	->	->
6	RELAY (DSIO)	X	HK50AA002	X	HK50AA002	X
7	PLUG, POWER (DSIO)	X	X	X	X	X
8	AIR FLOW SWITCH	HK06WC030	->	->	->	->
9	TRANSDUCER	X	X	HK05ZG001	->	X
10	HEAT INTERLOCK RELAY	X	X	HK35AB001	->	X
11	FAN STATUS RELAY	HK35AB001	->	->	->	->
12	HIGH PRESSURE SWITCH	X	X	HK02WC001	->	X
13	FUSE	GMQ3 2/10	->	->	->	->
14	FUSE HOLDER	HLQ 1K0656	->	->	->	->
15	TERMINAL BOARD (TB-1)	39LC500967	->	->	->	->
16	TERMINAL BOARD (TB-2)	39LC500986	->	->	->	->
17	TERMINAL BOARD (TB-3) OPTIONAL	SEE DAMPER SECT.	->	->	->	->
18	BRACKET, TERMINAL BOARD	39LC500978	->	->	->	->
19	GROUND LUG	HY90AZ001	->	->	->	->
20	SWITCH	HR54ZA010	->	->	->	->
21	LOCK WITH KEY	KA05DS001	->	->	->	->
22	PLUG (PL3/PL13 PSIO)	HY84EE021	->	->	->	->
23	PLUG (PL17 PSIO SLAVE)	X	X	X	X	X
24	PLUG (PL16 PSIO SLAVE)	X	X	X	X	X
25	FITTING	HW72DW015	->	->	->	->
26	UNION	KA70BS200	->	->	->	->
27	TEE	X	X	KA70BT250	->	X
28	HARNESS ASY. ELEC. HEAT	X	39LC400632	X	39LC400632	X
30	TRANSFORMERS #1, 2, 3, 4, 7, & 8	HT01AW229	->	->	->	->
31	TRANSFORMERS #5 & 6	HT01BD113	->	->	->	->

ILLUSTRATIONS ARE ON PAGES 14-16.



PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

SIZE: 03-35

SERIES: 0

ITEM	PART DESCRIPTION	39LC400470	39LC400471	39LC400472	39LC400473	39LC400474
		W/ SLAVE MOD	W/ SLAVE MOD	W/ SLAVE MOD	W/ SLAVE MOD	W/ SLAVE MOD
CONTROL BOX GROUP						
1	PIC MODULE (PSIO MASTER)	CEAS421175-02	->	->	->	->
2	CONNECTOR (PIC MODULE PL5)	HY84EE004	->	->	->	->
3	SENSOR MODULE (PSIO SLAVE)	CEAS420775-01	->	->	->	->
4	PLUG, POWER (PSIO SLAVE)	HY84EE003	->	->	->	->
5	TRACK (FOR PSIO)	39LC500966	->	->	->	->
6	RELAY (DSIO)	X	X	HK50AA002	->	X
7	PLUG, POWER (DSIO)	X	X	X	X	X
8	AIR FLOW SWITCH	HK06WC030	->	->	->	->
9	TRANSDUCER	X	X	X	X	HK05ZG001
10	HEAT INTERLOCK RELAY	X	X	X	X	HK35AB001
11	FAN STATUS RELAY	HK35AB001	->	->	->	->
12	HIGH PRESSURE SWITCH	X	X	X	X	HK02WC001
13	FUSE	GMQ3 2/10	->	->	->	->
14	FUSE HOLDER	HLQ 1K0656	->	->	->	->
15	TERMINAL BOARD (TB-1)	39LC500967	->	->	->	->
16	TERMINAL BOARD (TB-2)	39LC500986	->	->	->	->
17	TERMINAL BOARD (TB-3) OPTIONAL	SEE DAMPER SECT.	->	->	->	->
18	BRACKET, TERMINAL BOARD	39LC500978	->	->	->	->
19	GROUND LUG	HY90AZ001	->	->	->	->
20	SWITCH	HR54ZA010	->	->	->	->
21	LOCK WITH KEY	KA05DS001	->	->	->	->
22	PLUG (PL3/PL13 PSIO)	HY84EE021	->	->	->	->
23	PLUG (PL17 PSIO SLAVE)	X	X	X	X	X
24	PLUG (PL16 PSIO SLAVE)	X	X	X	X	X
25	FITTING	HW72DW015	->	->	->	->
26	UNION	KA70BS200	->	->	->	->
27	TEE	X	X	X	X	KA70BT250
28	HARNESS ASY. ELEC. HEAT	X	X	39LC400632	->	X
30	TRANSFORMERS #1, 2, 3, 4, 7, & 8	HT01AW229	->	->	->	->
31	TRANSFORMERS #5 & 6	HT01BD113	->	->	->	->

ILLUSTRATIONS ARE ON PAGES 14-16.



PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

SIZE: 03-35

SERIES: 0

ITEM	PART DESCRIPTION	39LC400475	39LC400476	39LC400477	39LC400478
		W/ SLAVE MOD	W/ SLAVE MOD	W/ SLAVE MOD	W/ SLAVE MOD
CONTROL BOX GROUP					
1	PIC MODULE (PSIO MASTER)	CEAS421175-02	->	->	->
2	CONNECTOR (PIC MODULE PL5)	HY84EE004	->	->	->
3	SENSOR MODULE (PSIO SLAVE)	CEAS420775-01	->	->	->
4	PLUG, POWER (PSIO SLAVE)	HY84EE003	->	->	->
5	TRACK (FOR PSIO)	39LC500966	->	->	->
6	RELAY (DSIO)	X	X	HK50AA002	->
7	PLUG, POWER (DSIO)	X	X	X	X
8	AIR FLOW SWITCH	HK06WC030	->	->	->
9	TRANSDUCER	HK05ZG001	->	->	->
10	HEAT INTERLOCK RELAY	HK35AB001	->	->	->
11	FAN STATUS RELAY	HK35AB001	->	->	->
12	HIGH PRESSURE SWITCH	HK02WC001	->	->	->
13	FUSE	GMQ3 2/10	->	->	->
14	FUSE HOLDER	HLQ 1K0656	->	->	->
15	TERMINAL BOARD (TB-1)	39LC500967	->	->	->
16	TERMINAL BOARD (TB-2)	39LC500986	->	->	->
17	TERMINAL BOARD (TB-3) OPTIONAL	SEE DAMPER SECTION	->	->	->
18	BRACKET, TERMINAL BOARD	39LC500978	->	->	->
19	GROUND LUG	HY90AZ001	->	->	->
20	SWITCH	HR54ZA010	->	->	->
21	LOCK WITH KEY	KA05DS001	->	->	->
22	PLUG (PL3/PL13 PSIO)	HY84EE021	->	->	->
23	PLUG (PL17 PSIO SLAVE)	X	X	X	X
24	PLUG (PL16 PSIO SLAVE)	X	X	X	X
25	FITTING	HW72DW015	->	->	->
26	UNION	KA70BS200	->	->	->
27	TEE	KA70BT250	->	->	->
28	HARNESS ASY. ELEC. HEAT	X	X	39LC400632	->
30	TRANSFORMERS #1, 2, 3, 4, 7, & 8	HT01AW229	->	->	->
31	TRANSFORMERS #5 & 6	HT01BD113	->	->	->

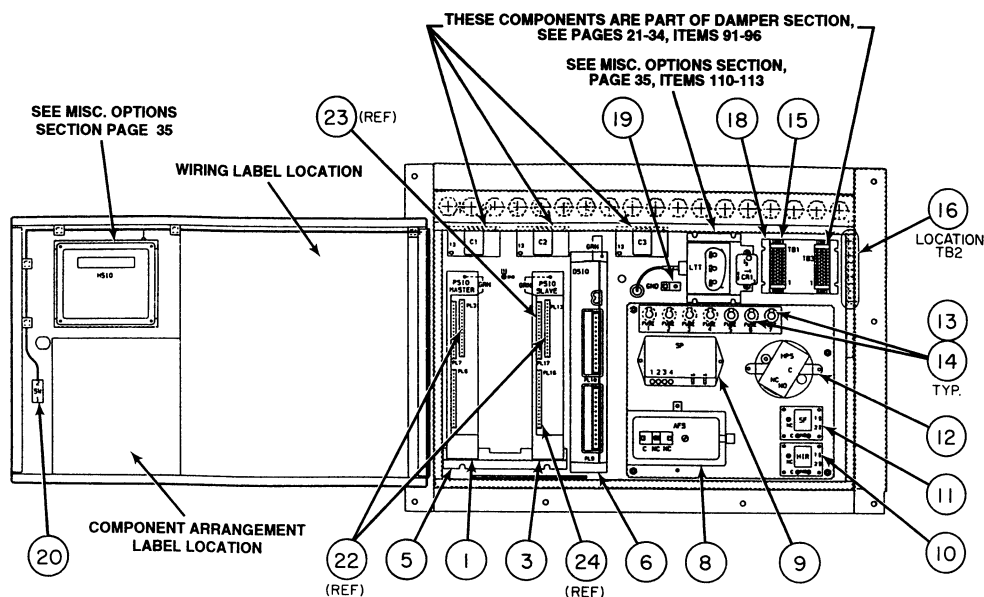
ILLUSTRATIONS ARE ON PAGES 14-16.

PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

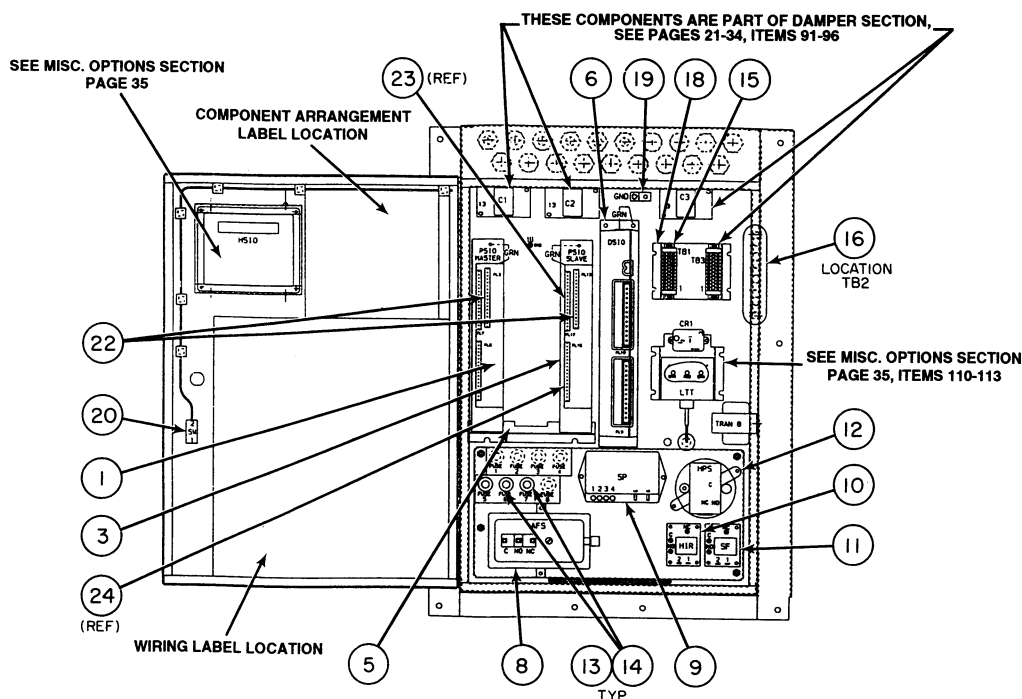
39L PIC

SIZE: 03-35

SERIES: 0



**CONTROL BOX ARRANGEMENT
FOR 03 & 06 SIZE UNITS**



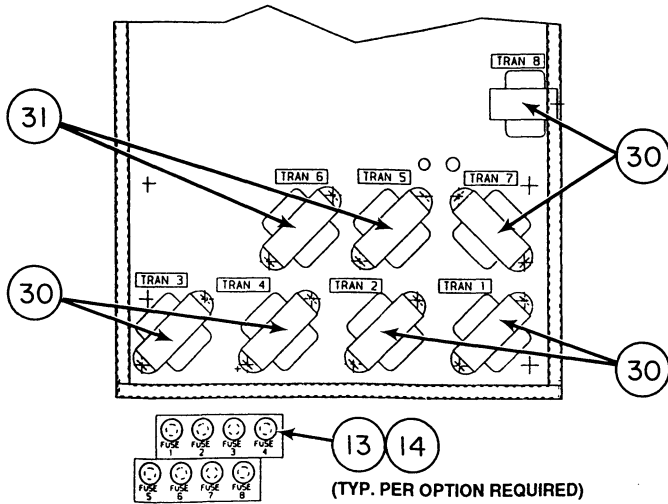
**CONTROL BOX ARRANGEMENT
FOR SIZES 08 THRU 35 SIZE UNITS**

PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

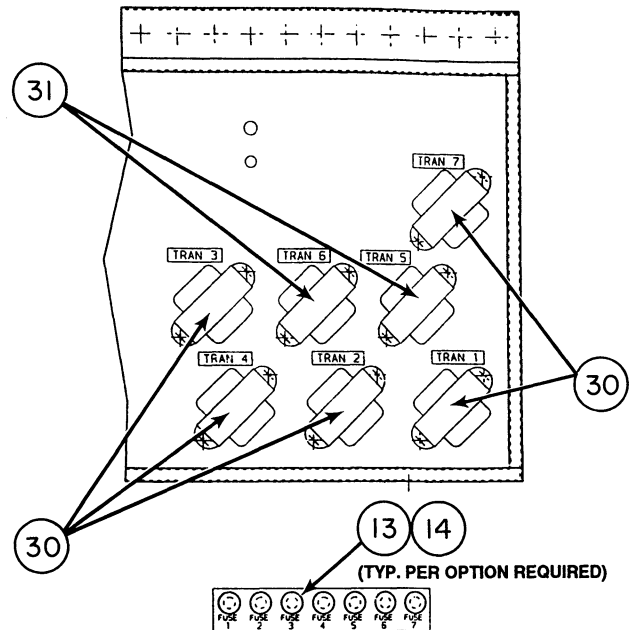
39L PIC

SIZE: 03-35

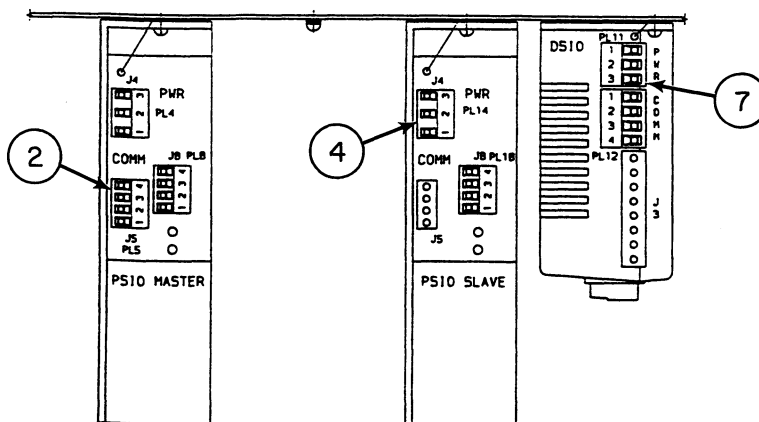
SERIES: 0



TRANSFORMER ARRANGEMENT
FOR 08 THRU 35 SIZE UNITS (FOR VERT. BOX)



TRANSFORMER ARRANGEMENT
FOR 03 & 06 SIZE UNITS (FOR HORZ. BOX)

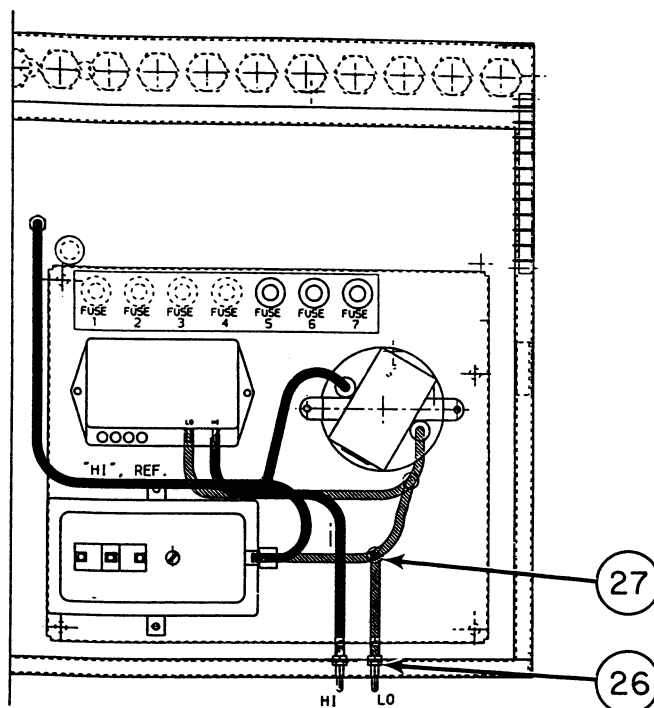
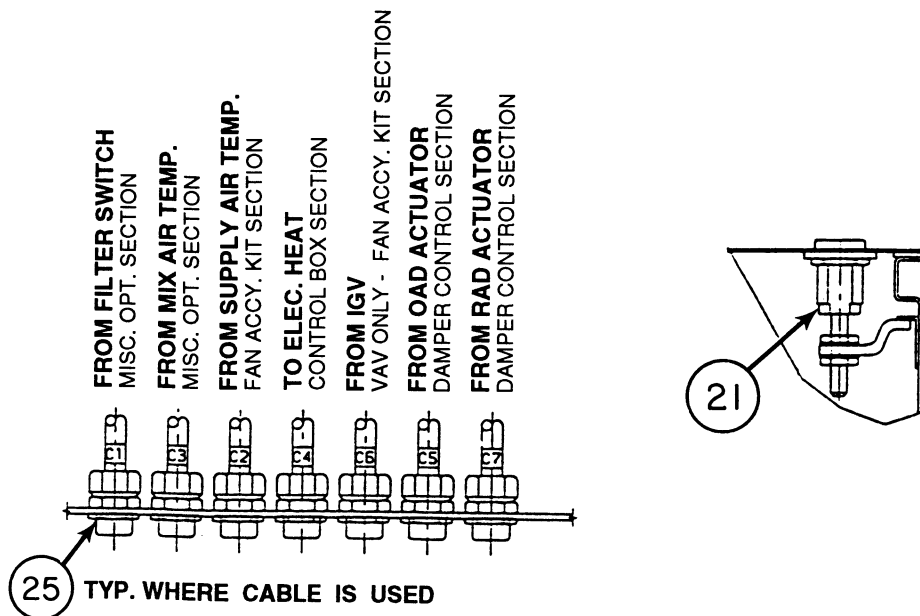


PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

SIZE: 03-35

SERIES: 0



VARIABLE AIR VOLUME
SHOWN: HIGH AND LOW-PRESSURE TUBING ARRANGEMENT FOR 03 & 06 SIZE UNITS



**PIC CONTROLS
FOR CENTRAL-STATION
AIR-HANDLING UNITS**

39L PIC

SIZE: 03-35

SERIES: 0

FAN SECTION ACCESSORY KITS

To identify the fan section accessory kit used in your unit you will need to know the numbers in the 5th, 6th, and 7th positions of your unit's PIC Control Model Number found on the unit's ID plate located on the drive end panel of the fan section.

Use this information in the chart below to determine the Kit Number for your unit. Then go to page 18 and find the parts list for the Kit Number.

IF POSITIONS #5 AND #6 ARE:	AND POSITION #7 IS:	USE FAN SECTION ACCESSORY KIT NUMBER	ILLUSTRATION ON PAGE:
03 THRU 35	1, 2, 5, (OR) 6	39LC400283	19
06	3 (OR) 4	39LC400284	19
08	3 (OR) 4	39LC400285	19
10 OR 12	3 (OR) 4	39LC400286	20
15, 18, OR 21	3 (OR) 4	39LC400629	20
25, 31, OR 35	3 (OR) 4	39LC400444	19

EXAMPLE

POSITION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
EXAMPLE MODEL	3	9	L	P	1	2	3	2	L	A	A	2	2	2	2	2

POSITIONS #5 AND #6 = 12

POSITION #7 = 3

FROM THE CHART FIND FAN SECTION ACCESSORY KIT NUMBER 39LC400286

THE PARTS FOR KIT NUMBER 39LC400286 CAN BE FOUND ON PAGE 18.



PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

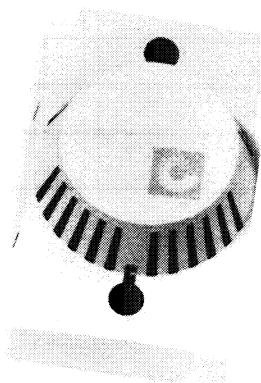
39L PIC

SIZE: 03-35

SERIES: 0

FAN SECTION ACCESSORY KITS SERVICE PARTS

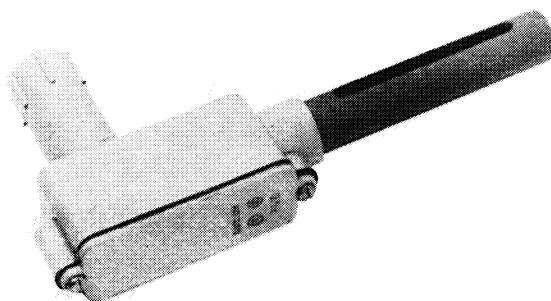
ITEM	PART DESCRIPTION	39LC400283	39LC400284	39LC400285	39LC400286	39LC400444	39LC400629
		FAN ACY. KIT	FAN ACY. KIT	FAN ACY. KIT	FAN ACY. KIT	FAN ACY. KIT	FAN ACY. KIT
FAN AND MOTOR GROUP							
50	DUCT AIR TEMP. SENSOR	(2) HH79NZ019	(2) ->	(2) ->	(2) ->	(2) ->	->
51	CABLE ASSEMBLY (C2)	39LC400636	->	->	->	->	->
52	PROBE, AIR FLOW SENSOR	EV83XZ150	->	->	->	->	->
53	ACTUATOR	X	HF27BB006	->	HF27BB001	HF27BB010	HF27BB001
54	CABLE ASSY. (ACTUATOR, C6)	X	39LC400720	->	->	->	->
55	LINKAGE	X	(2) HF91BB125	(2) ->	(2) ->	(2) ->	(2) ->
56	SHAFT	X	5/16 X 8.32"	5/16 X 16.14"	5/16 X 22.96"	5/16 X 23.62"	5/16 X 30.28"
57	CONNECTOR	HW60EA001	->	->	->	->	->
58	BRACKET, ACTUATOR MNTG	X	X	X	39LC400630	X	39LC400630
59	OPERATING LEVER	X	X	X	39EA402762	X	39EA402762
60	DRIVE MOTOR, ACTUATOR	X	X	X	HF39CB001	X	HF39CB001
61	ROD ASSEMBLY	X	X	X	X	39LC400450	X
62	CONNECTOR, ROD END	X	X	X	X	HF91AA003	X
63	SPACE TEMP. SENSOR	X	X	X	X	X	HH79NZ018
64	PROBE, STATIC PRES. SENSOR	39EK20462	->	->	->	->	->
65	OUTDOOR AIR TEMP. SENSOR	HH79NZ023	->	->	->	->	X



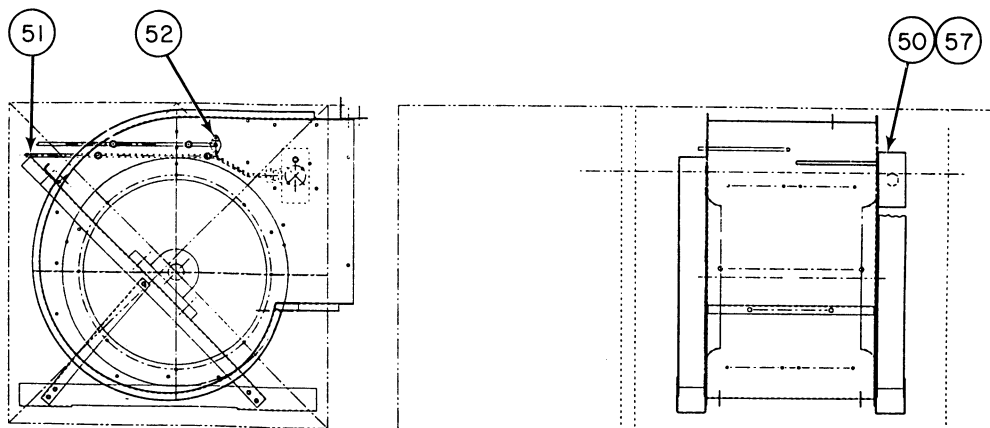
SPACE TEMPERATURE SENSOR - #63



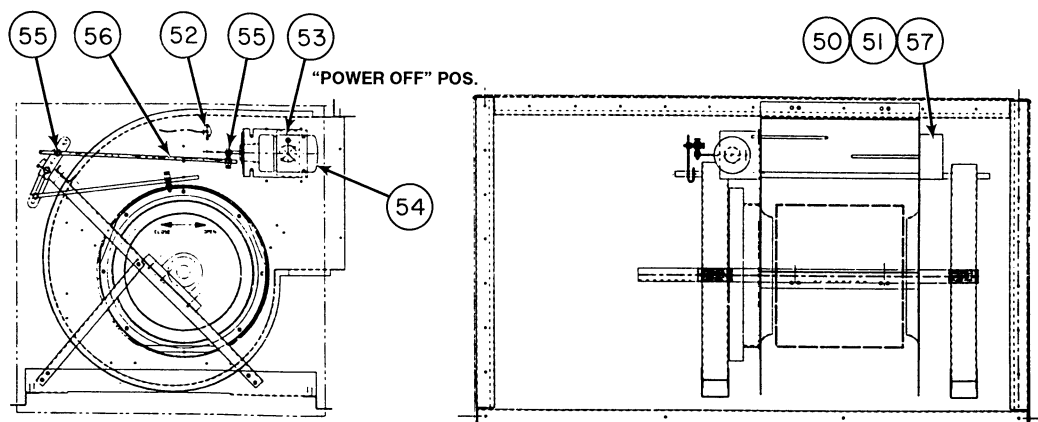
STATIC PRESSURE PROBE - #64



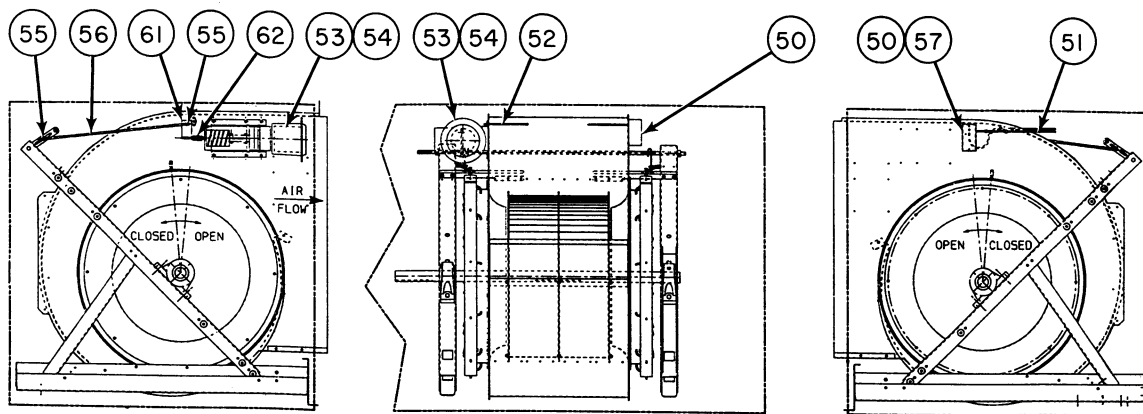
OUTDOOR AIR TEMPERATURE SENSOR - #65



TYPICAL OF ALL SIZES WITHOUT IGV



FOR 06 & 08 SIZE UNITS WITH IGV



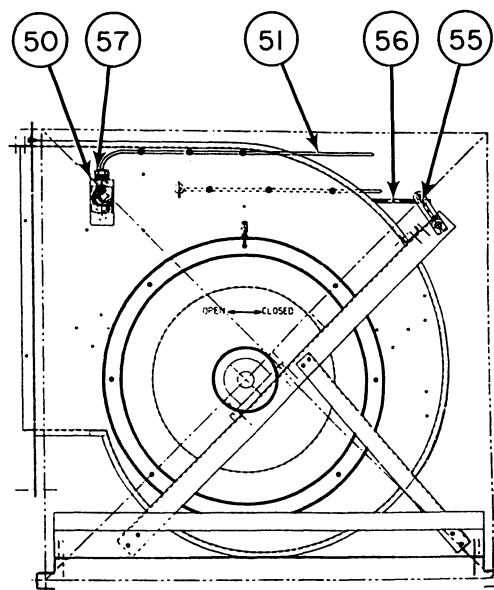
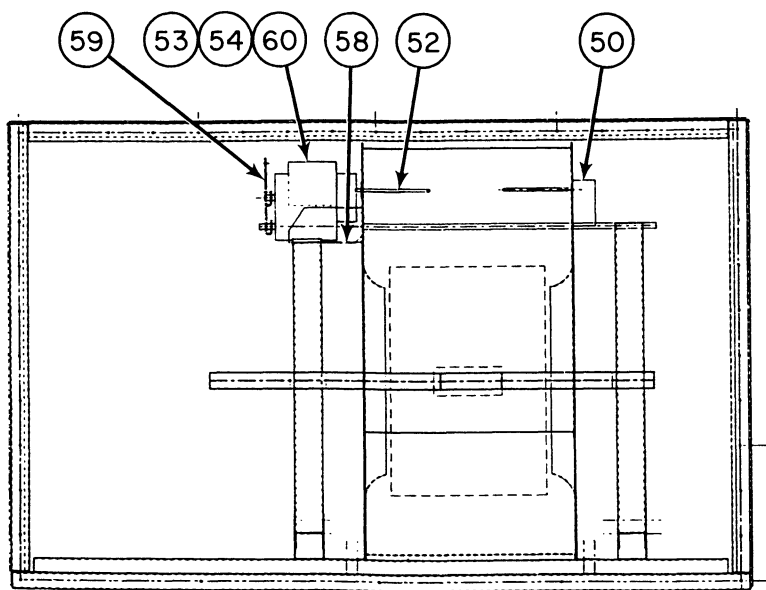
FOR 25, 31, & 35 SIZE UNITS

PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

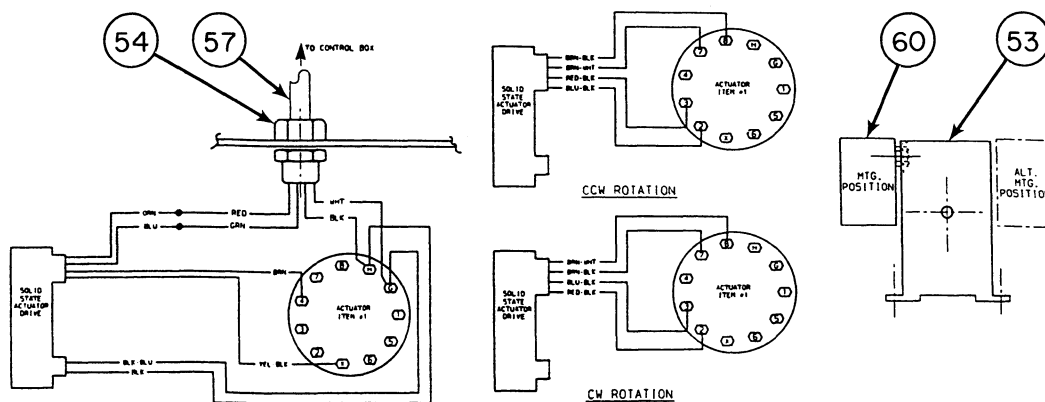
39L PIC

SIZE: 03-35

SERIES: 0



FOR 10, 12, 15, 18, & 21 SIZE UNITS





PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

SIZE: 03-35

SERIES: 0

DAMPER CONTROL PACKAGE IDENTIFICATION INSTRUCTIONS

- 1.) You first need to determine whether your unit has Standard Dampers or Dampers with Optional Smoke Control.
- 2.) Refer to the Pic Option Number on the unit's Serial / ID plate located on the drive end panel of the fan section. If a number "2" or "3" appears in the 8th position then the unit has Dampers with Optional Smoke Control.
- 3.) Then refer to the appropriate chart on the page 22:
Chart 5 is for units with Standard Damper Controls.
-> use the numbers in the 5th, 6th, & 12th positions of the Pic Model Number to identify damper control package number.
Chart 6 is for Damper Controls with the Smoke Control Option
-> use the numbers in the 5th & 6th positions of the Pic Model Number and the number in the 8th position of the Pic Option Number to identify damper control package number.
- 4.) The parts lists for the damper control packages can be found on pages 23 thru 25. The illustrations for the damper control packages can be found on pages 26 thru 34.

EXAMPLE 1

example PIC option number 3 9 L J 2 1 1 ① A A 1 1 1 - - -

example PIC model no. 3 9 L P ①② 3 2 L A A ② 2 2 2 2

- A.) The 8th position of the PIC Option Number is a 1 = no smoke control, so Chart 5 is used.
- B.) The 5th & 6th positions of the PIC Model Number = 12
and The 12th position of the PIC Model Number is a "2"
- C.) This information applied to Chart 5 identifies damper control package number 39LC400341. The parts list for this package is found on page 23 and the illustration is found on page 27.

EXAMPLE 2

example PIC option number 3 9 L J 2 1 1 ③ A A 1 1 1 - - -

example PIC model no. 3 9 L P ①② 3 2 L A A 2 2 2 2 2

- A.) The 8th position of the PIC Option Number is 3 = unit has optional smoke control, so Chart 6 is used.
- B.) The 5th & 6th positions of the PIC Model Number = 12
- C.) This information applied to Chart 6 identifies damper control package number 39LC400446. The parts list for this package is found on page 23 and the illustration is found on page 30.



PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

SIZE: 03-25

SERIES: 0

DAMPER CONTROL PACKAGES

CHART 5: STANDARD DAMPER CONTROL PACKAGES

FROM PIC CONTROL MODEL NUMBER		USE DAMPER CONTROL PACKAGE NUMBER	PARTS LIST IS ON PAGE:	ILLUSTRATION IS ON PAGE:
IF POSITIONS #5 & #6 ARE:	AND POSITION #12 IS:			
03 (OR) 06	2, 3, 4, (OR) 5	39LC400338	23	26
08	2, 3, 4, (OR) 5	39LC400340	23	26
10 (OR) 12	2, 3, 4, (OR) 5	39LC400341	23	27
15	2, 3, 4, (OR) 5	39LC400343	23	27
18 (OR) 21	2, 3, 4, (OR) 5	39LC400344	23	27
25 (OR) 31	2 (OR) 4	39LC400498	25	27
25 (OR) 31	3 (OR) 5	39LC400490	24	27
35	2 (OR) 4	39LC400499	25	27
35	3 (OR) 5	39LC400491	24	27

CHART 6: DAMPER CONTROLS WITH OPTIONAL SMOKE CONTROL

FROM PIC MODEL No. POSITIONS #5 & #6	FROM PIC OPTION No. POSITION #8	USE DAMPER CONTROL PACKAGE NUMBER	PARTS LIST IS ON PAGE:	ILLUSTRATION IS ON PAGE:
03 (OR) 06	2 (OR) 3	39LC400447	23	28
08	2 (OR) 3	39LC400449	24	29
10 (OR) 12	2	39LC400489	24	30
10 (OR) 12	3	39LC400446	23	30
15	2	39LC400493	24	31
15	3	39LC400448	23	31
18	2	39LC400494	25	32
18	3	39LC400487	24	32
21	2	39LC400495	25	33
21	3	39LC400488	24	33
25 (OR) 31	2 (OR) 3	39LC400492	24	34
35	2 (OR) 3	39LC400500	25	34



PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

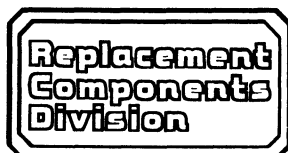
SIZE: 03-35

SERIES: 0

ITEM	PART DESCRIPTION	39LC400338	39LC400340	39LC400341	39LC400343
		STD. DAMPERS	STD. DAMPERS	STD. DAMPERS	STD. DAMPERS
70	ACTUATOR	HF27BB006	->	HF27BB001	->
71	MOUNTING PLATE, ACTUATOR	39LC500572	39LC500573	39LC500580	39LC500579
72	DRIVE MOTOR, ACTUATOR	X	X	HF39CB001	->
73	CABLE ASSEMBLY	X	X	39LC400719 (FOR C5)	->
74	CONNECTOR	X	X	HW60EA001	->
75	OPERATING LEVER	39EA402762	->	(2) HF92BB001	(2) ->
76	LINKAGE	(2) HF91BB125	(2) ->	(2) ->	(2) ->
77	ROD, LINKAGE	5/16 X 6.88"	->	5/16 X 14.96"	5/16 X 21.26"
78	ROD, LINKAGE	X	X	X	X
79	BRACKET, LINKAGE SUPPORT	X	X	X	X
80	BEARING	X	X	X	X
81	SHAFT	X	X	X	X
82	SUPPORT PANEL	X	X	X	X
83	PAN	X	X	X	X
84	ANGLE	X	X	X	X
85	SHAFT	X	X	X	X
86	COLLAR, SHAFT	X	X	X	X
87	PANEL, LINKAGE SUPPORT	X	X	X	X
88	ROD, LINKAGE	X	X	X	X
89	ROD, LINKAGE	X	X	X	X
90	TRANSFORMER #8	X	X	X	X
91	RELAY, SMOKE CONTROL OPTION	X	X	X	X
92	SOCKET, FOR RELAY (ITEM #91)	X	X	X	X
93	NOISE SUPPRESSOR	X	X	X	X
94	TERMINAL BLOCK (TB-3)	X	X	X	X
95	INLINE FUSE HOLDER (TB3-PIN 2)	X	X	X	X
96	FUSE FOR ITEM 95	X	X	X	X
97	CABLE ASSEMBLY	X	X	X	X

ITEMS 91 THRU 96 -- REFER TO ILLUSTRATION ON PAGE 34

ITEM	PART DESCRIPTION	39LC400344	39LC400446	39LC400447	39LC400448
		STD. DAMPERS	W/ SMOKE OPT	W/ SMOKE OPT	W/ SMOKE OPT
70	ACTUATOR	HF27BB001	(2) ->	(2) HF27BB006	(2) HF27BB001
71	MOUNTING PLATE, ACTUATOR	39LC500574	(2) 39LC500580	(2) 39LC500572	(2) 39LC500579
72	DRIVE MOTOR, ACTUATOR	HF39CB001	(2) ->	X	(2) HF39CB001
73	CABLE ASSEMBLY	39LC400719 (FOR C5)	39LC400062 (FOR C7)	X	39LC400062 (FOR C7)
74	CONNECTOR	HW60EA001	(2) ->	X	(2) HW60EA001
75	OPERATING LEVER	(2) HF92BB001	(6) ->	(2) 39EA402762	(6) HF92BB001
76	LINKAGE	(2) HF91BB125	(6) ->	(4) ->	(6) ->
77	ROD, LINKAGE	5/16 X 25.39"	(2) 5/16 X 13.19"	(2) 5/16 X 6.88"	5/16 X 13.19"
78	ROD, LINKAGE	X	X	X	X
79	BRACKET, LINKAGE SUPPORT	X	39LC500989	X	39LC500989
80	BEARING	X	(2) KT50NZ045	X	(2) KT50NZ045
81	SHAFT	X	39LC500984	X	39LC500984
82	SUPPORT PANEL	X	X	X	X
83	PAN	X	X	X	X
84	ANGLE	X	X	X	X
85	SHAFT	X	X	X	X
86	COLLAR, SHAFT	X	X	X	X
87	PANEL, LINKAGE SUPPORT	X	39LC500991	X	39LC500991
88	ROD, LINKAGE	X	5/16 X 14.96"	X	5/16 X 21.26"
89	ROD, LINKAGE	X	X	X	5/16 X 25.39"
90	TRANSFORMER #8	X	HT01AW229	X	HT01AW229
91	RELAY, SMOKE CONTROL OPTION	X	(3) HN61KM024	(3) ->	(3) ->
92	SOCKET, FOR RELAY (ITEM #91)	X	(3) HN79KM024	(3) ->	(3) ->
93	NOISE SUPPRESSOR	X	(3) HK99ZZ001	(3) ->	(3) ->
94	TERMINAL BLOCK (TB-3)	X	39LC500967	->	->
95	INLINE FUSE HOLDER (TB3-PIN 2)	X	HHJ-B	->	->
96	FUSE FOR ITEM 95	X	AGC3	->	->
97	CABLE ASSEMBLY	X	39LC400719 (FOR C5)	X	39LC400719 (FOR C5)



PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

SIZE: 03-35

SERIES: 0

ITEM	PART DESCRIPTION	39LC400449	39LC400487	39LC400488	39LC400489
		W/ SMOKE OPT	W/ SMOKE OPT	W/ SMOKE OPT	W/ SMOKE OPT
70	ACTUATOR	(2) HF27BB006	(2) HF27BB001	(2) ->	(2) ->
71	MOUNTING PLATE, ACTUATOR	(2) 39LC500573	(2) 39LC500574	(2) ->	(2) 39LC500580
72	DRIVE MOTOR, ACTUATOR	X	(2) HF39CB001	(2) ->	(2) ->
73	CABLE ASSEMBLY	X	39LC400062 (FOR C7)	->	39LC400062 (FOR C7)
74	CONNECTOR	X	(2) HW60EA001	(2) ->	(2) ->
75	OPERATING LEVER	(2) 39EA402762	(6) HF92BB001	(6) ->	(6) ->
76	LINKAGE	(4) HF91BB125	(6) ->	(6) ->	(6) ->
77	ROD, LINKAGE	(2) 5/16 X 6.88"	5/16 X 16.14"	->	(2) 5/16 X 13.19"
78	ROD, LINKAGE	X	X	X	X
79	BRACKET, LINKAGE SUPPORT	X	39LC500989	39LC500990	39LC500989
80	BEARING	X	(2) KT50NZ045	(2) ->	(2) ->
81	SHAFT	X	39LC500984	39LC500988	39LC500984
82	SUPPORT PANEL	X	X	X	X
83	PAN	X	X	X	X
84	ANGLE	X	X	X	X
85	SHAFT	X	X	X	X
86	COLLAR, SHAFT	X	X	X	X
87	PANEL, LINKAGE SUPPORT	X	39LC500992	->	39LC500991
88	ROD, LINKAGE	X	5/16 X 25.39"	->	5/16 X 14.96"
89	ROD, LINKAGE	X	5/16 X 21.26"	->	X
90	TRANSFORMER #8	X	HT01AW229	->	->
91	RELAY, SMOKE CONTROL OPTION	(3) HN61KM024	(3) ->	(3) ->	(3) ->
92	SOCKET, FOR RELAY (ITEM #91)	(3) HN79KM024	(3) ->	(3) ->	(3) ->
93	NOISE SUPPRESSOR	(3) HK99ZZ001	(3) ->	(3) ->	(3) ->
94	TERMINAL BLOCK (TB-3)	39LC500967	->	->	->
95	INLINE FUSE HOLDER (TB3-PIN 2)	HHJ-B	->	->	->
96	FUSE FOR ITEM 95	AGC3	->	->	->
97	CABLE ASSEMBLY	X	39LC400719 (FOR C5)	->	39LC400719 (FOR C5)

ITEMS 91 THRU 96 -- REFER TO ILLUSTRATION ON PAGE 34

ITEM	PART DESCRIPTION	39LC400490	39LC400491	39LC400492	39LC400493
		STD. DAMPERS	STD. DAMPERS	W/ SMOKE OPT	W/ SMOKE OPT
70	ACTUATOR	HF27BB010	->	(2) ->	(2) HF27BB001
71	MOUNTING PLATE, ACTUATOR	X	X	X	(2) 39LC500579
72	DRIVE MOTOR, ACTUATOR	X	X	X	(2) HF39CB001
73	CABLE ASSEMBLY	39LC400719 (FOR C5)	->	39LC400062 (FOR C7)	->
74	CONNECTOR	HW60EA001	->	(2) ->	(2) ->
75	OPERATING LEVER	(3) HF92BB001	(3) ->	(4) ->	(4) ->
76	LINKAGE	(3) HF91BB125	(3) ->	(4) ->	(6) ->
77	ROD, LINKAGE	5/16 X 13.19"	->	->	->
78	ROD, LINKAGE	5/16 X 3.94"	->	(2) ->	X
79	BRACKET, LINKAGE SUPPORT	39LC500981	->	->	39LC500989
80	BEARING	(2) KT50NZ045	(2) ->	(2) ->	(2) ->
81	SHAFT	39LC500984	->	->	->
82	SUPPORT PANEL	39LC500979	39LC500983	39LC500979	X
83	PAN	39LC500982	->	->	X
84	ANGLE	(2) 39LC500980	(2) ->	(2) ->	X
85	SHAFT	HF91BB101	->	(2) ->	X
86	COLLAR, SHAFT	KT51DC001	->	(2) ->	X
87	PANEL, LINKAGE SUPPORT	X	X	X	39LC500991
88	ROD, LINKAGE	X	X	X	5/16 X 21.26"
89	ROD, LINKAGE	X	X	X	5/16 X 25.39"
90	TRANSFORMER #8	X	X	HT01AW229	->
91	RELAY, SMOKE CONTROL OPTION	X	X	(3) HN61KM024	(3) ->
92	SOCKET, FOR RELAY (ITEM #91)	X	X	(3) HN79KM024	(3) ->
93	NOISE SUPPRESSOR	X	X	(3) HK99ZZ001	(3) ->
94	TERMINAL BLOCK (TB-3)	X	X	39LC500967	->
95	INLINE FUSE HOLDER (TB3-PIN 2)	X	X	HHJ-B	->
96	FUSE FOR ITEM 95	X	X	AGC3	->
97	CABLE ASSEMBLY	X	X	39LC400719 (FOR C5)	->



PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

SIZE: 03-35

SERIES: 0

ITEM	PART DESCRIPTION	39LC400494	39LC400495	39LC400498	39LC400499	39LC400500
		W/ SMOKE OPT	W/ SMOKE OPT	STD. DAMPERS	STD. DAMPERS	W/ SMOKE OPT
70	ACTUATOR	(2) HF27BB001	(2) ->	HF27BB010	->	(2) ->
71	MOUNTING PLATE, ACTUATOR	(2) 39LC500574	(2) ->	X	X	X
72	DRIVE MOTOR, ACTUATOR	(2) HF39CB001	(2) ->	X	X	X
73	CABLE ASSEMBLY	39LC400062 (FOR C7)	->	39LC400719 (FOR C5)	->	39LC400062 (FOR C7)
74	CONNECTOR	(2) HW60EA001	(2) ->	->	->	(2) ->
75	OPERATING LEVER	(6) HF92BB001	(6) ->	->	->	(6) ->
76	LINKAGE	(6) HF91BB125	(6) ->	->	->	(6) ->
77	ROD, LINKAGE	5/16 X 16.14"	->	5/16 X 13.19"	->	->
78	ROD, LINKAGE	X	X	5/16 X 3.94"	->	(2) ->
79	BRACKET, LINKAGE SUPPORT	39LC500989	39LC500990	39LC500981	->	->
80	BEARING	(2) KT50NZ045	(2) ->	(2) ->	(2) ->	(2) ->
81	SHAFT	39LC500984	39LC500988	39LC500984	->	->
82	SUPPORT PANEL	X	X	39LC500979	39LC500983	->
83	PAN	X	X	39LC500982	->	->
84	ANGLE	X	X	(2) 39LC500980	(2) ->	(2) ->
85	SHAFT	X	X	HF91BB101	->	(2) ->
86	COLLAR, SHAFT	X	X	KT51DC001	->	(2) ->
87	PANEL, LINKAGE SUPPORT	39LC500992	->	X	X	X
88	ROD, LINKAGE	5/16 X 25.39"	->	X	X	X
89	ROD, LINKAGE	5/16 X 21.26"	->	X	X	X
90	TRANSFORMER #8	HT01AW229	->	X	X	HT01AW229
91	RELAY, SMOKE CONTROL OPTION	(3) HN61KM024	(3) ->	X	X	(3) HN61KM024
92	SOCKET, FOR RELAY (ITEM #91)	(3) HN79KM024	(3) ->	X	X	(3) HN79KM024
93	NOISE SUPPRESSOR	(3) HK99ZZ001	(3) ->	X	X	(3) HK99ZZ001
94	TERMINAL BLOCK (TB-3)	39LC500967	->	X	X	39LC500967
95	INLINE FUSE HOLDER (TB3-PIN 2)	HHJ-B	->	X	X	HHJ-B
96	FUSE FOR ITEM 95	AGC3	->	X	X	AGC3
97	CABLE ASSEMBLY	39LC400719 (FOR C5)	->	X	X	39LC400719 (FOR C5)

ITEMS 91 THRU 96 -- REFER TO ILLUSTRATION ON PAGE 34

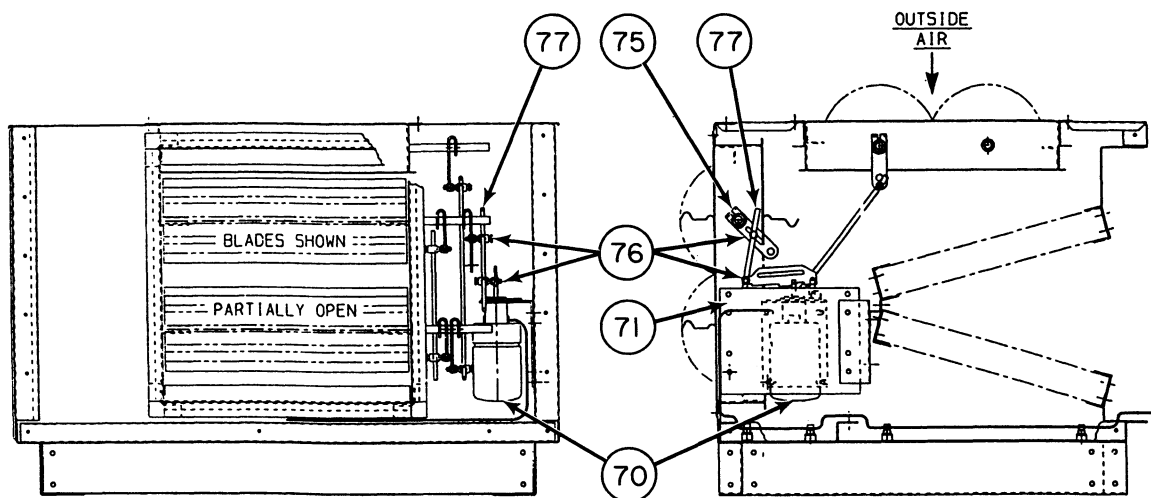
**PIC CONTROLS
FOR CENTRAL-STATION
AIR-HANDLING UNITS**

39L PIC

SIZE: 03-35

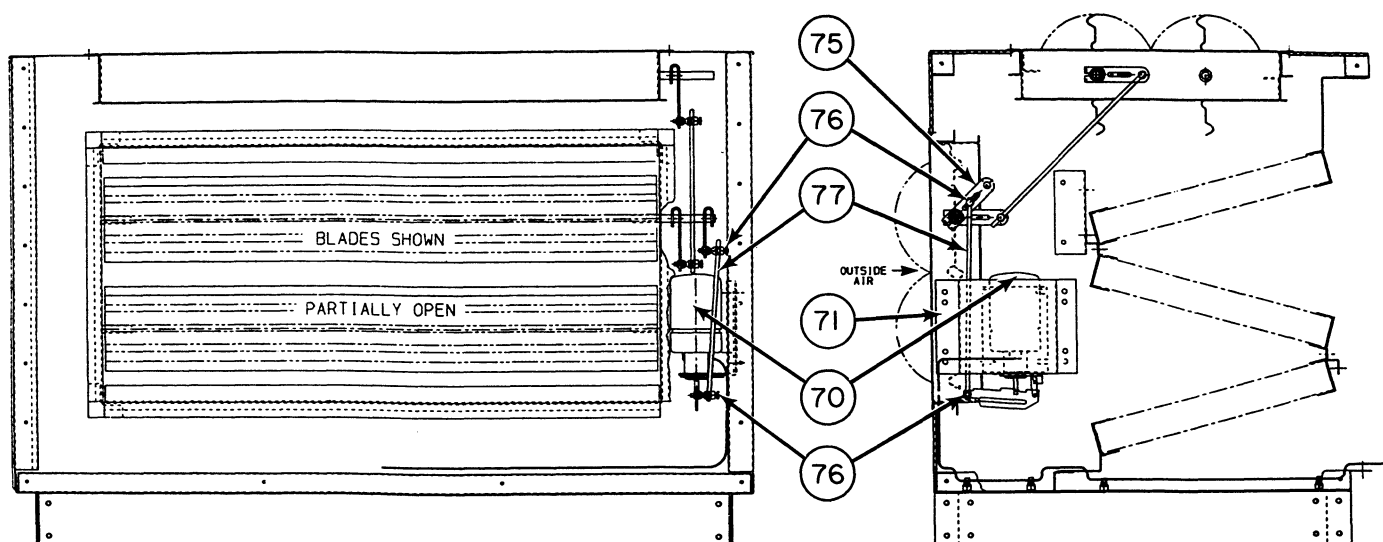
SERIES: 0

**DAMPER CONTROL PACKAGE 39LC400338
FOR 03 & 06 SIZE UNITS WITH STANDARD DAMPERS**



TOP INLET/OUTSIDE AIR SHOWN
REAR INLET/OUTSIDE AIR USES SAME COMPONENTS ARRANGED DIFFERENTLY

**DAMPER CONTROL PACKAGE 39LC400340
FOR 08 SIZE UNITS WITH STANDARD DAMPERS**



REAR INLET/OUTSIDE AIR SHOWN
TOP INLET/OUTSIDE AIR USES SAME COMPONENTS ARRANGED DIFFERENTLY

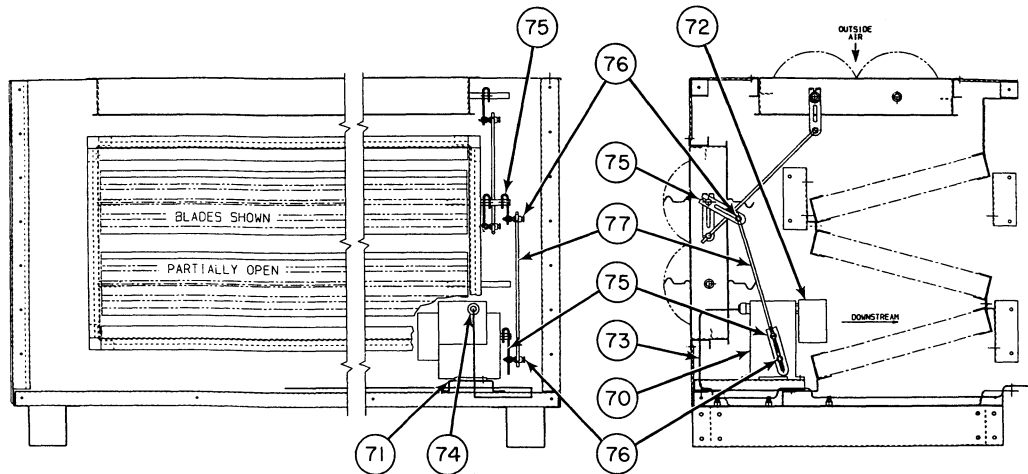
PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

SIZE: 03-35

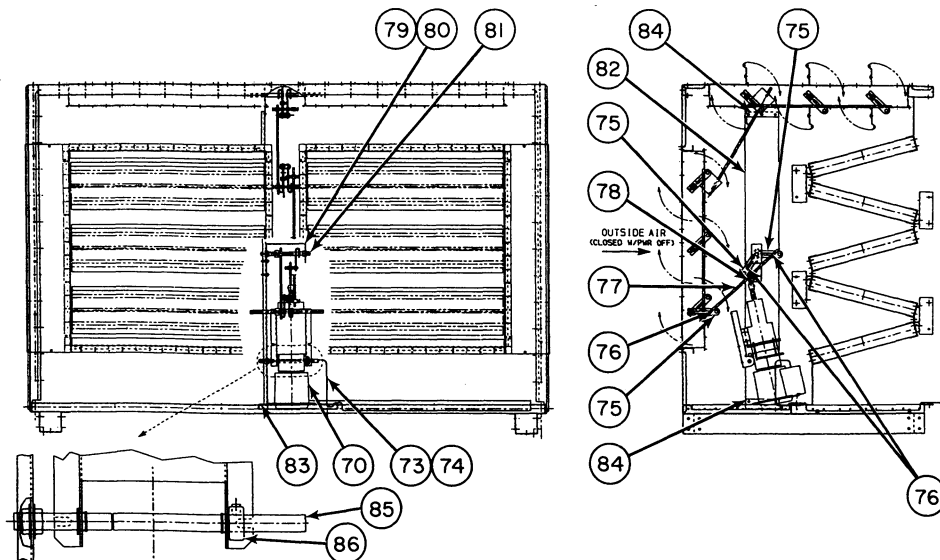
SERIES: 0

DAMPER CONTROL PACKAGES 39LC400341, 39LC400343, 39LC400344 FOR 10, 12, 15, 18, & 21 SIZE UNITS WITH STANDARD DAMPERS



TOP INLET/OUTSIDE AIR SHOWN
REAR INLET/OUTSIDE AIR USES SAME COMPONENTS ARRANGED DIFFERENTLY

DAMPER CONTROL PACKAGES 39LC400490, 39LC400491, 39LC400498, 39LC400499 FOR 25, 31 & 35 SIZE UNITS WITH STANDARD DAMPERS



REAR INLET/OUTSIDE AIR SHOWN
TOP INLET/OUTSIDE AIR USES SAME COMPONENTS ARRANGED DIFFERENTLY

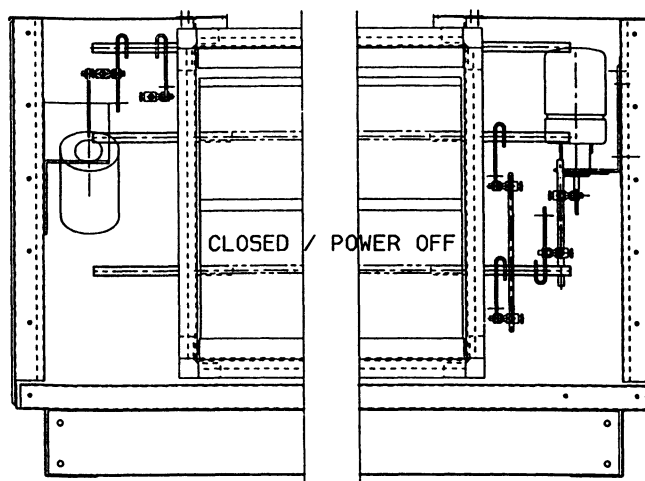
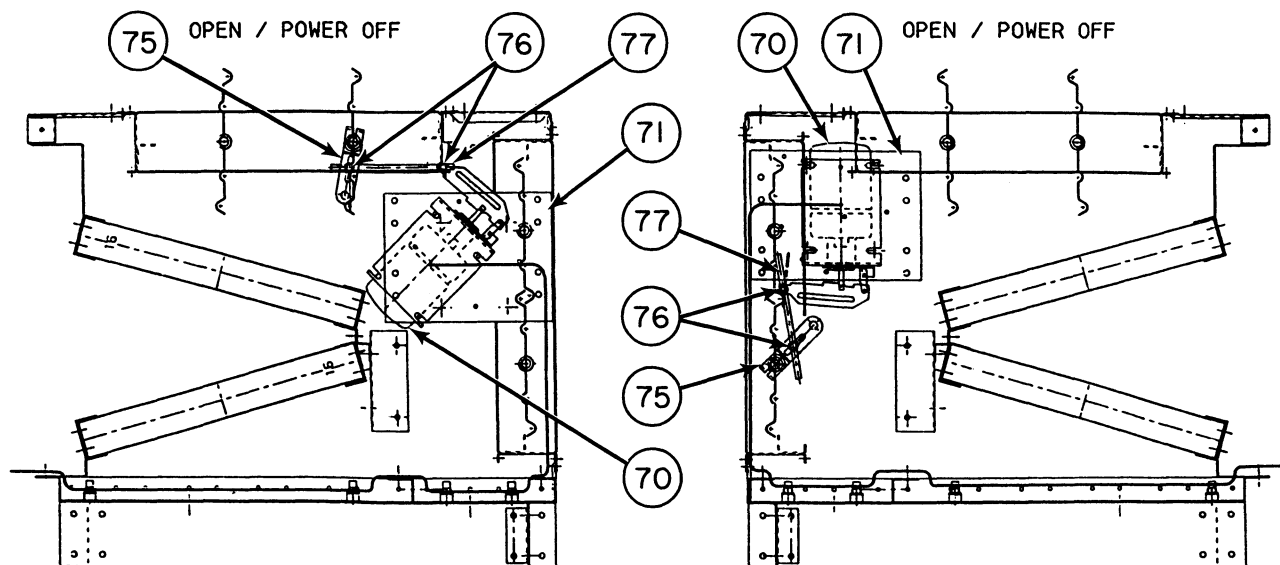
PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

SIZE: 03-35

SERIES: 0

DAMPER CONTROL PACKAGE 39LC400447 FOR 03 & 06 SIZE UNITS WITH SMOKE CONTROL OPTION



REAR VIEW, WITH SIDE PANELS REMOVED

REAR INLET/OUTSIDE AIR SHOWN
TOP INLET/OUTSIDE AIR USES SAME COMPONENTS ARRANGED DIFFERENTLY

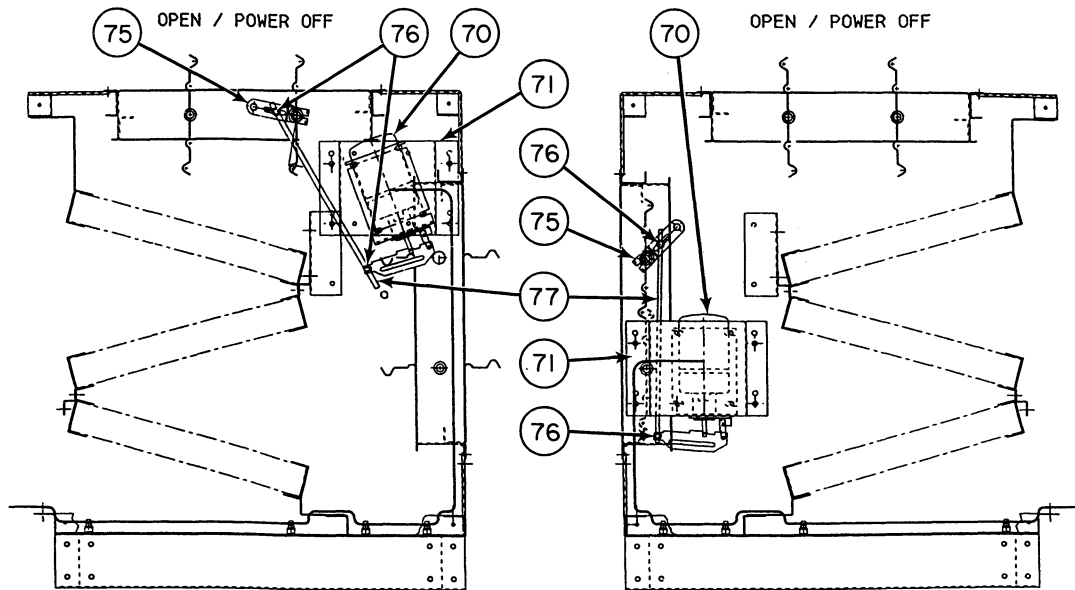
PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

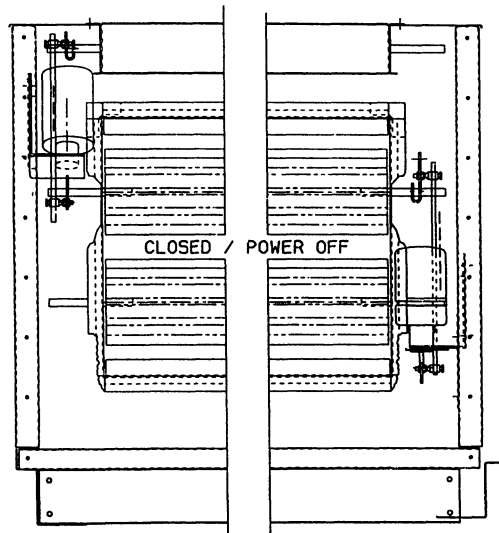
SIZE: 03-35

SERIES: 0

DAMPER CONTROL PACKAGE 39LC400449 FOR 08 SIZE UNITS WITH SMOKE CONTROL OPTION



REAR INLET / OUTSIDE AIR



REAR VIEW, WITH SIDE PANELS REMOVED

REAR INLET/OUTSIDE AIR SHOWN
TOP INLET/OUTSIDE AIR USES SAME COMPONENTS ARRANGED DIFFERENTLY

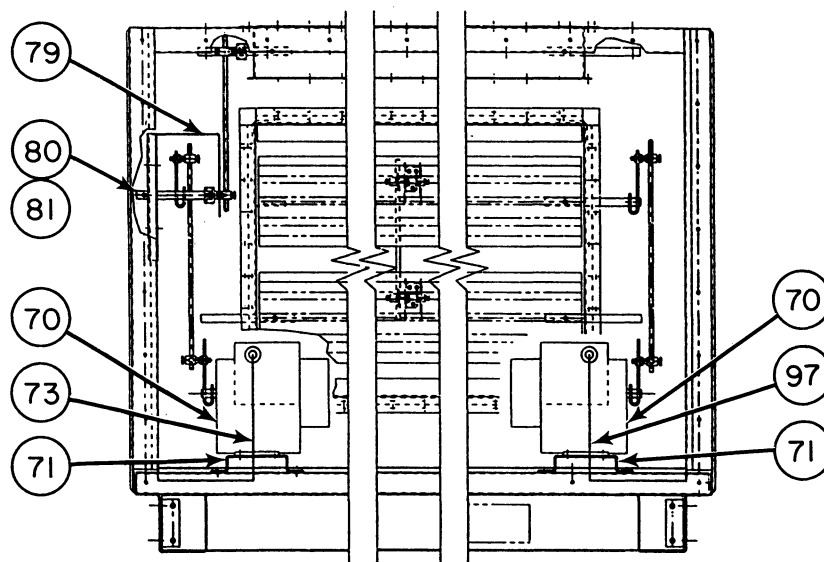
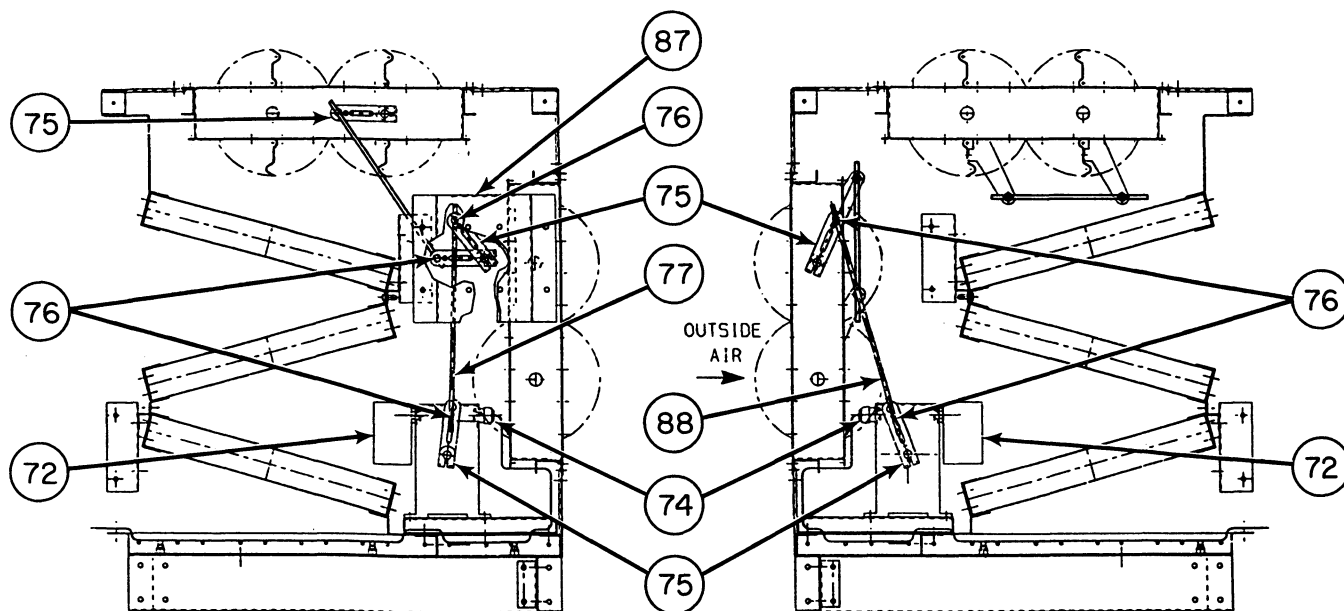
PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

SIZE: 03-35

SERIES: 0

DAMPER CONTROL PACKAGE 39LC400446
FOR 10 & 12 SIZE UNITS WITH SMOKE CONTROL OPTION



39LC400446 SHOWN – REAR INLET/OUTSIDE AIR
39LC400489 USES SAME COMPONENTS – TOP INLET/OUTSIDE AIR

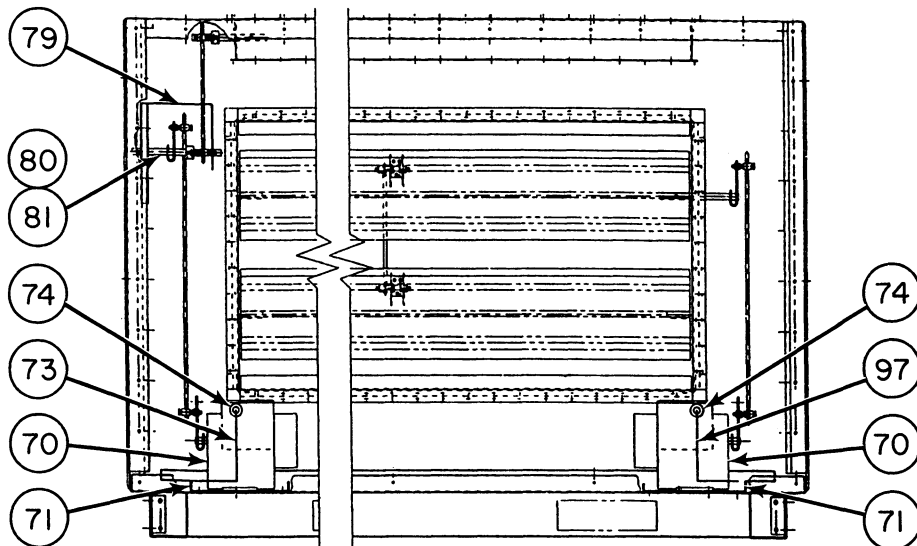
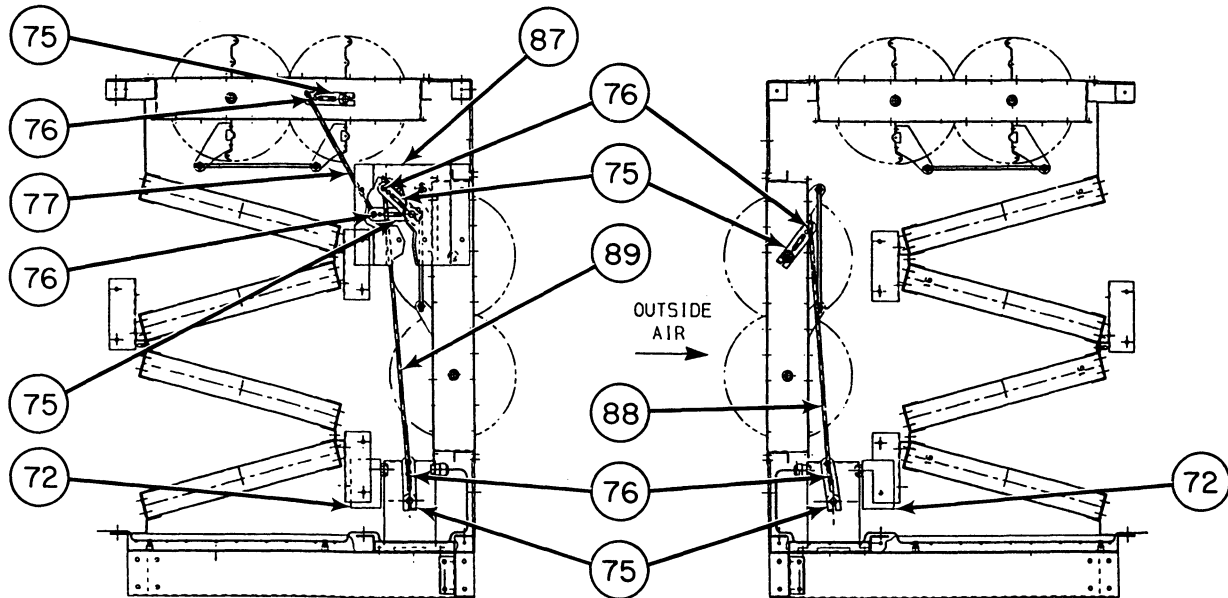
**PIC CONTROLS
FOR CENTRAL-STATION
AIR-HANDLING UNITS**

39L PIC

SIZE: 03-35

SERIES: 0

**DAMPER CONTROL PACKAGE 39LC400448
FOR 15 SIZE UNITS WITH SMOKE CONTROL OPTION**



39LC400448 SHOWN – REAR INLET/OUTSIDE AIR
39LC400493 USES SAME COMPONENTS – TOP INLET/OUTSIDE AIR

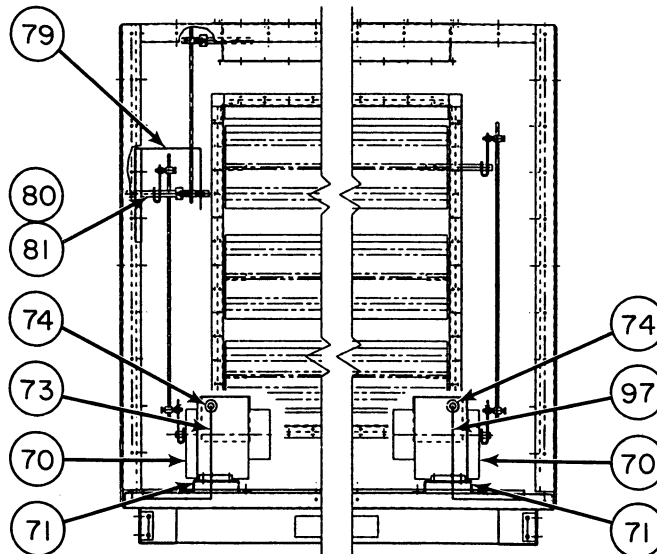
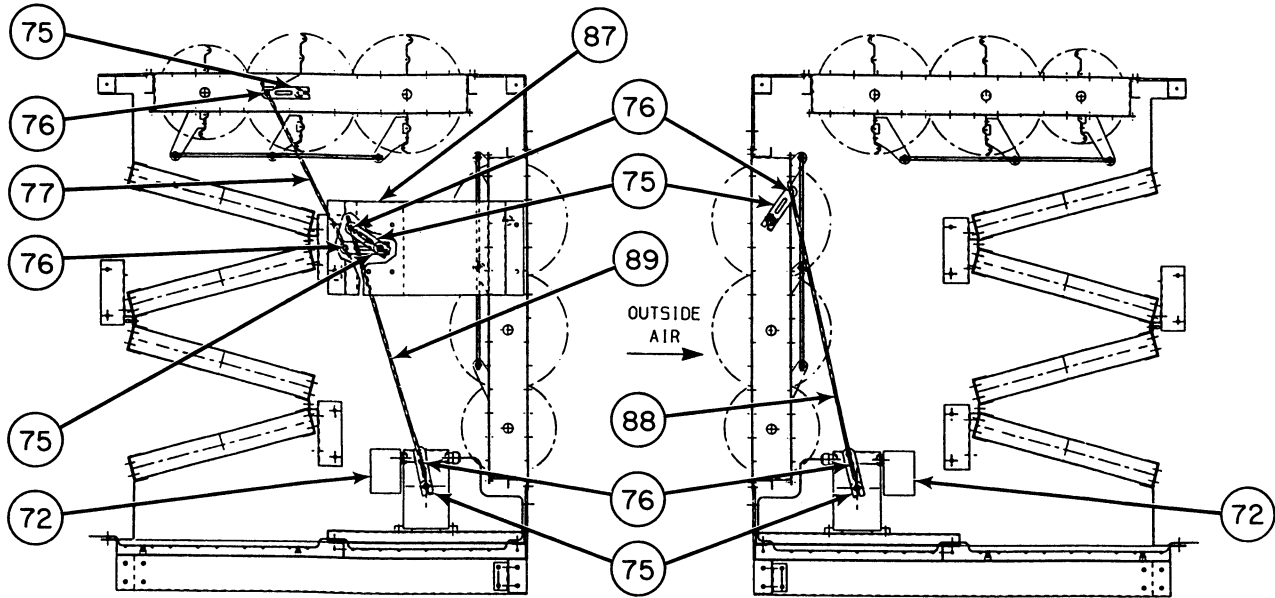
**PIC CONTROLS
FOR CENTRAL-STATION
AIR-HANDLING UNITS**

39L PIC

SIZE: 03-35

SERIES: 0

**DAMPER CONTROL PACKAGE 39LC400487
FOR 18 SIZE UNITS WITH SMOKE CONTROL OPTION**



39LC400487 SHOWN – REAR INLET/OUTSIDE AIR
39LC400494 USES SAME COMPONENTS – TOP INLET/OUTSIDE AIR

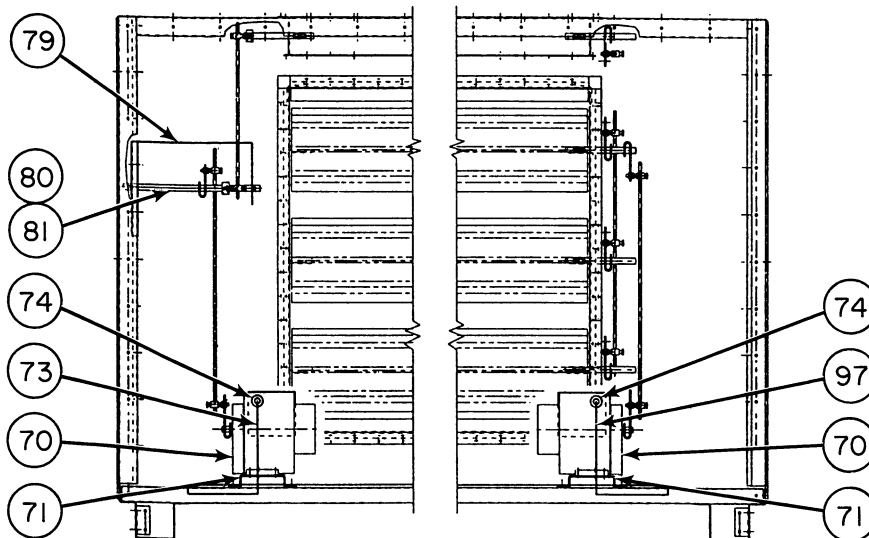
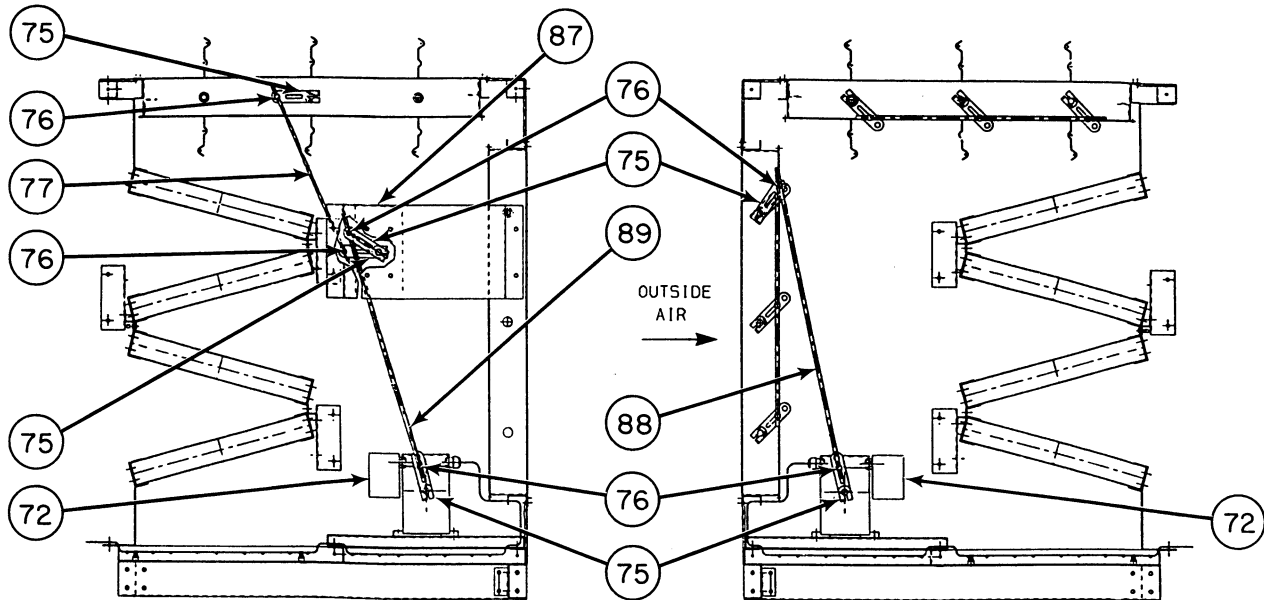
PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

SIZE: 03-35

SERIES: 0

DAMPER CONTROL PACKAGE 39LC400488 FOR 21 SIZE UNITS WITH SMOKE CONTROL OPTION



39LC400488 SHOWN - REAR INLET/OUTSIDE AIR
39LC400495 USES SAME COMPONENTS - TOP INLET/OUTSIDE AIR

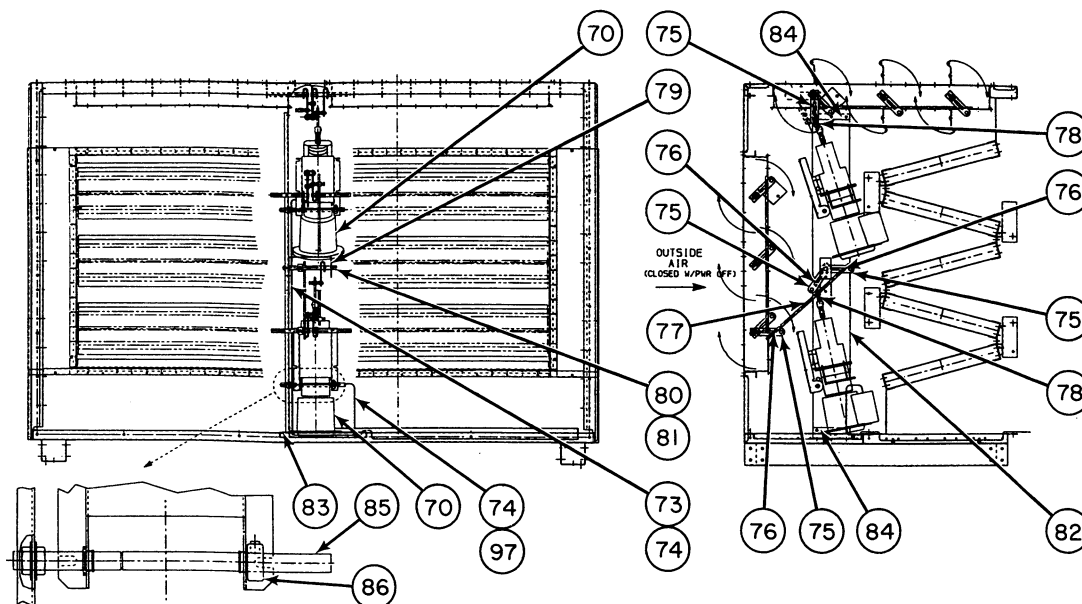
PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

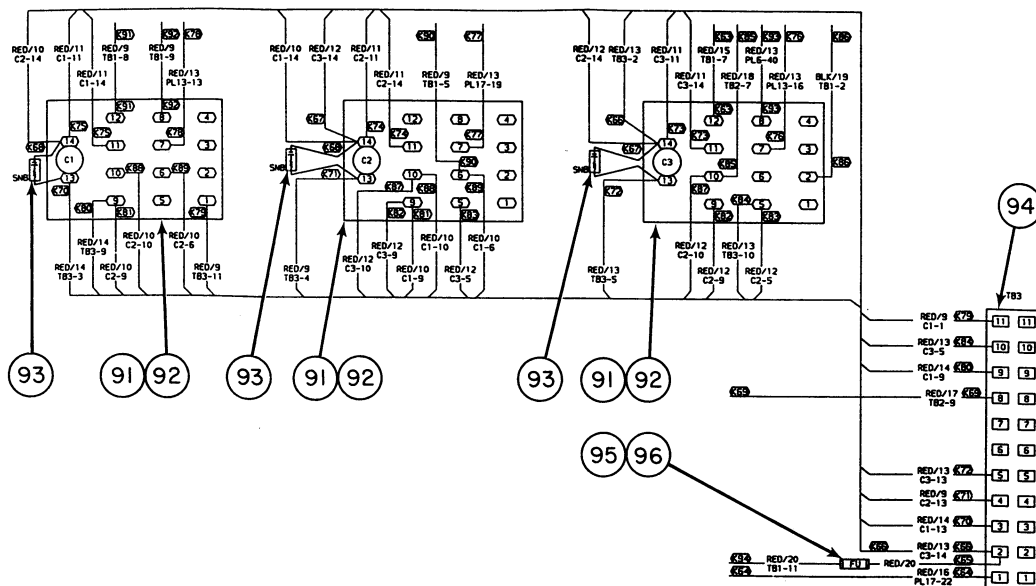
SIZE: 03-35

SERIES: 0

DAMPER CONTROL PACKAGES 39LC400492 & 39LC400500 FOR 25, 31, & 35 SIZE UNITS WITH SMOKE CONTROL OPTION



39LC400492, 39LC400500 SHOWN – REAR INLET/OUTSIDE AIR
TOP INLET/OUTSIDE AIR USES SAME COMPONENTS ARRANGED DIFFERENTLY



THESE COMPONENTS LOCATED IN CONTROL BOX
USED ON UNITS THAT HAVE DAMPER CONTROLS WITH SMOKE CONTROL OPTION



**PIC CONTROLS
FOR CENTRAL-STATION
AIR-HANDLING UNITS**

39L PIC

SIZE: 03-35

SERIES: 0

MISCELLANEOUS OPTIONS

MIXED AIR TEMPERATURE ACCESSORY KIT (MAT): see illustration on page 37
(refer to unit's PIC control Model number and Model number breakdown on page 2)
If PIC Model number position #14 = "2" then items 100 thru 103 are provided
If PIC Model number position #14 = "3" then only item 100 is provided

ITEM	DESCRIPTION	PART NUMBER
100	SENSOR (MAT)	HH79NZ021
101	CABLE ASSEMBLY (C3)	39LC400637
102	CONNECTOR	HW60EA001
103	BRACKET, SENSOR SUPPORT	39LC500617

LOW TEMPERATURE SENSOR ACCESSORY KIT (LTT): see illustration on page 37
(refer to unit's PIC control Model number and Model number breakdown on page 2)
If position #14 = "4" AND position #7 = "1, 3, (or) 5" --- unit uses kit number 39LC400479
If position #14 = "4" AND position #7 = "2, 4, (or) 6" --- unit uses kit number 39LC400480

ITEM	DESCRIPTION	PARTS FOR 39LC400479	PARTS FOR 39LC400480
110	SWITCH	HH22CZ001	HH22CZ001
111	RELAY	HN61KK912	HN61KK913
112	NOISE SUPPRESSOR	HK99ZZ001	HK99ZZ001
113	BRACKET	39LC500593	39LC500593

FILTER SERVICE ACCESSORY KIT (FLTS): see illustration on page 37
(refer to PIC Model number. Position #15 = "2").

ITEM	DESCRIPTION	PART NUMBER
120	SENSOR	HK06WC031
121	BRACKET	39LC500996
122	CABLE ASSEMBLY (C1)	39LC400634
123	UNION	KA70BS200
124	CONNECTOR	HW60EA001

KEYBOARD & DISPLAY MODULE (HSIO): see illustration on page 37
(refer to PIC Model number)
If position #16 = "2" unit uses HSIO module HK50AA009
If position #16 = "3" unit uses HSIO module HK50AA009 & mounting kit 39LC400484

ITEM	DESCRIPTION	PART NUMBER
130	HSIO MODULE	HK50AA009
131	KIT 39LC400484 INCLUDES:	MOUNTING BOX ASY.
132		PLUG
133		CONNECTOR



**PIC CONTROLS
FOR CENTRAL-STATION
AIR-HANDLING UNITS**

39L PIC

SIZE: 03-35

SERIES: 0

MISCELLANEOUS OPTIONS

SEE ILLUSTRATIONS ON PAGES 38 & 39

FROM PIC CONTROL MODEL NUMBER: (refer to example on page 2)

ITEM	OPTION	IF PIC MODEL NUMBER POSITION No.	IS:	USE PART NUMBER	DESCRIPTION
140	ENTHALPY SWITCH	12	2, 3, (or) 6	HH57AC076	SWITCH (ENT)
141	2-POSITION DAMPER	12	8	HK35AB001	FAN RELAY
142	DIFFERENTIAL ENTHALPY	13	2	HL39ZZ001	RH TRANSMITTER
143	DIFFERENTIAL ENTHALPY	13	3	HL39ZZ002	RH TRANSMITTER
144	DIFFERENTIAL ENTHALPY	13	4	(2) HL39ZZ002	RH TRANSMITTER
145	DIFFERENTIAL ENTHALPY	13	5	HL39ZZ001 HL39ZZ002	RH TRANSMITTER RH TRANSMITTER

FROM PIC OPTIONS NUMBER: (refer to example on page 3)

ITEM	OPTION	IF PIC OPTION NUMBER POSITION No.	IS:	PART NUMBER	DESCRIPTION
150	HUMIDITY CONTROL 2-STAGE	7	2	(2) HK35AB001 HL38ZG024	FAN RELAY HUMIDISTAT (DHH)
151	HUMIDITY CONTROL MODULATING VALVE	7	3	HL38ZG024	HUMIDISTAT (DHH)
152	SMOKE CONTROL FIELD-SUPPLIED MXB	8	4	39LC400485	KIT: ★ SEE NOTE BELOW
153	OPTIONAL OUTPUTS	9	B	(2) HK35AB001	FAN RELAY
154	OPTIONAL TEMPERATURE INPUT SPACE TEMPERATURE	10	B	HH51BX001	SPACE TEMPERATURE SENSOR (SPT)
155	OPTIONAL TEMPERATURE INPUT DUCT TEMPERATURE	10	C	HH79NZ019	DUCT TEMPERATURE (SAT) OR (RAT)
156	OPTIONAL ACTUATORS: 15 LB./IN. ACTUATOR	11, 12, (or) 13	2	HF27BB006	ACTUATOR
157	75 LB./IN. ACTUATOR		3	HF27BB009	
158	190 LB./IN. ACTUATOR		4	HF27BB010	

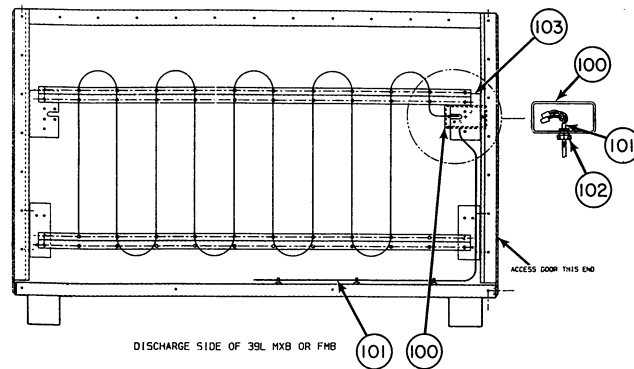
★ ITEM 152, 39LC400485, SMOKE CONTROL OPTION KIT for units with field-supplied MXB
Refer to the damper assemblies on pages 23 thru 25 (for units w/smoke opt.) items #91 thru #96.
The illustration for these parts is on the bottom of page 34.

PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

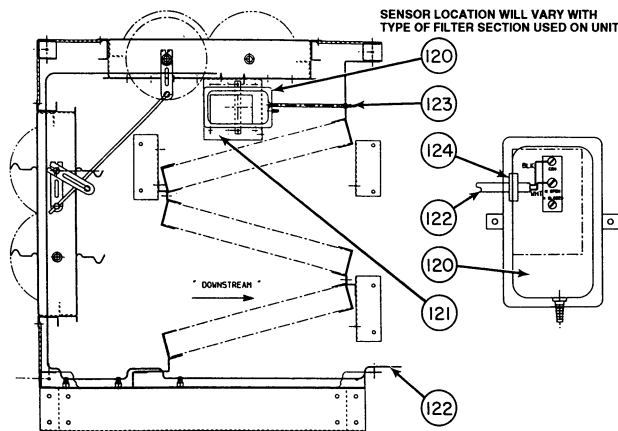
39L PIC

SIZE: 03-35

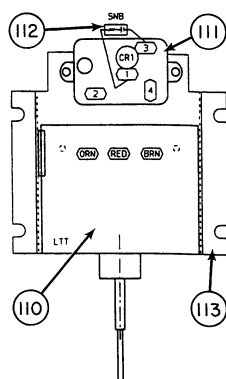
SERIES: 0



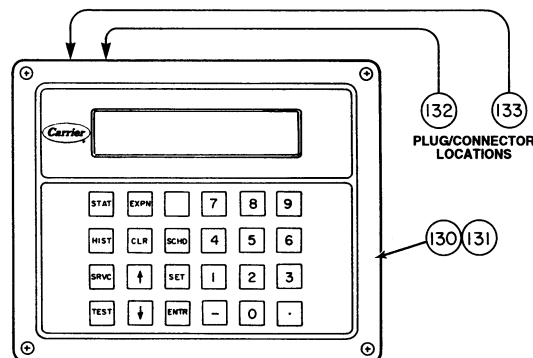
MIXED AIR TEMPERATURE ACCESSORY KIT



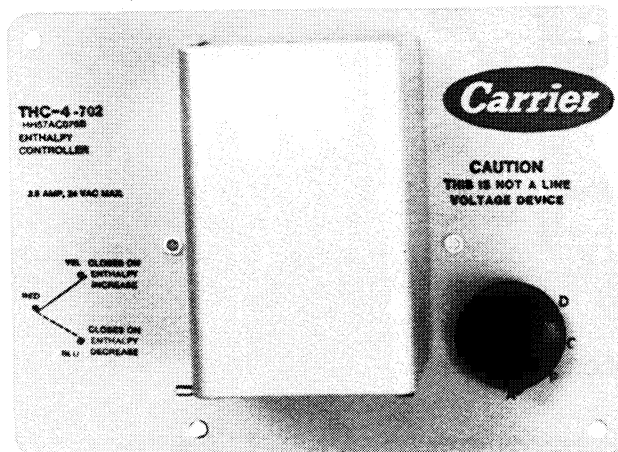
FILTER SERVICE ACCESSORY KIT



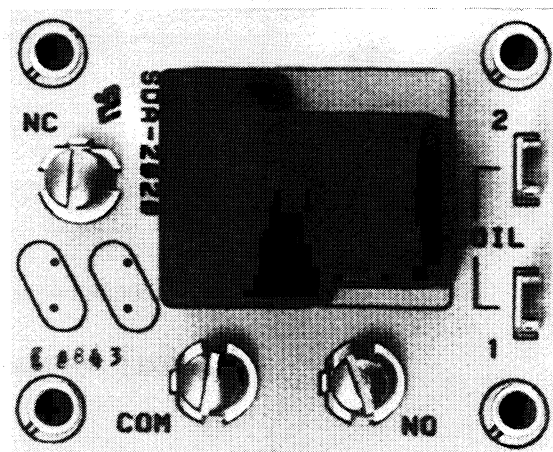
**LOCATED IN CONTROL BOX
LOW TEMPERATURE SENSOR**



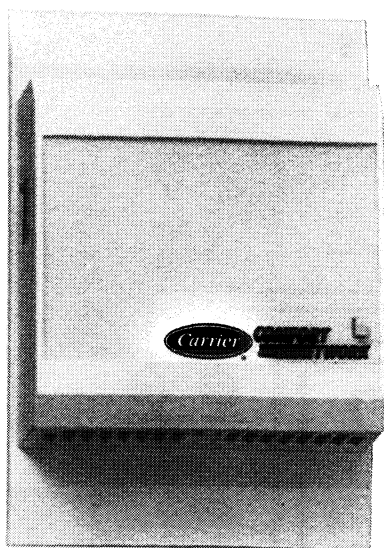
HSIO LOCAL INTERFACE DEVICE



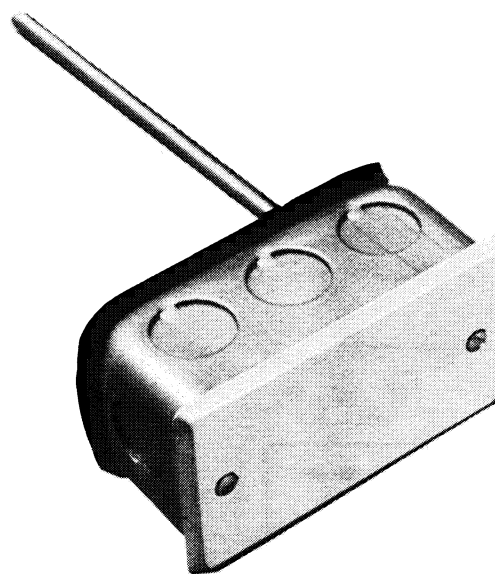
ENTHALPY SWITCH - #140



**SINGLE POLE, DOUBLE THROW (SPDT) RELAY
FAN RELAY - #141, 150, 153**



SPACE TEMPERATURE SENSOR - #154



DUCT TEMPERATURE SENSOR - #155

**PIC CONTROLS
FOR CENTRAL-STATION
AIR-HANDLING UNITS**

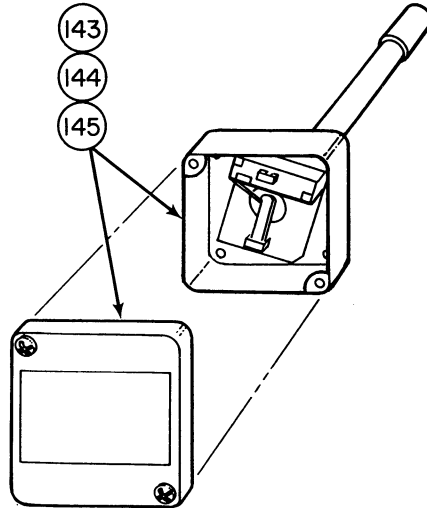
39L PIC

SIZE: 03-35

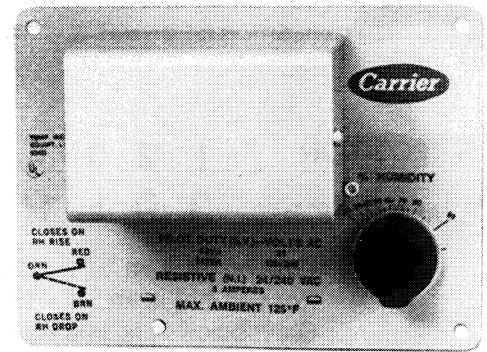
SERIES: 0



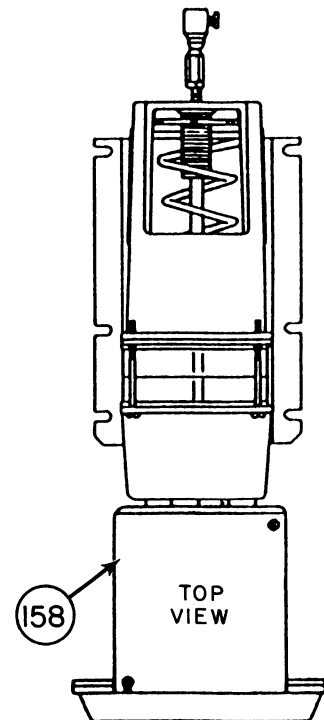
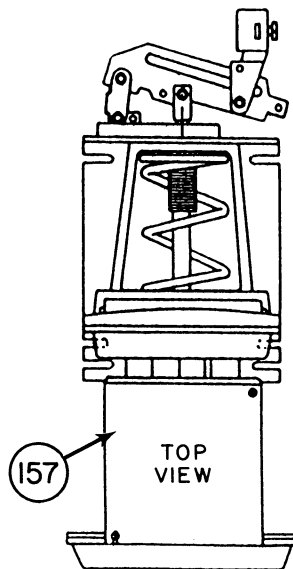
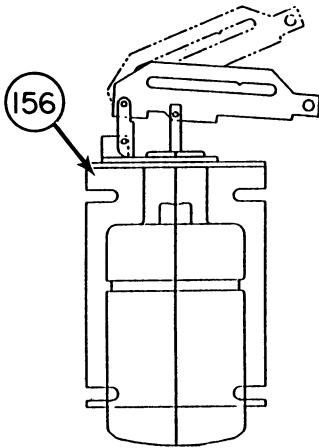
**HL39ZZ001 WALL-MOUNTED
RELATIVE HUMIDITY SENSOR -
#142, 145**



**DUCT MOUNTED
RELATIVE HUMIDITY SENSOR
#143, 144, 145**



**DUCT HIGH HUMIDITY SENSOR -
#150, 151**





PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

SIZE: 03-35

SERIES: 0

VALVE ASSEMBLIES

TO DETERMINE THE VALVE ASSEMBLY USED ON YOUR UNIT REFER TO THE PIC CONTROL MODEL NUMBER ON THE UNIT'S SERIAL / ID PLATE AND THE PIC MODEL NUMBER BREAKDOWN ON PAGE 2. LOCATE THE LETTER IN THE 9th OR 11th POSITION AND APPLY THE NUMBER TO THE APPROPRIATE CHART BELOW. THE PARTS FOR THESE ASSEMBLIES ARE FOUND ON PAGE 41.

THE 9th POSITION IS FOR CHILLED WATER VALVES OR 3-WAY VALVES.

THE 11th POSITION IS FOR HOT WATER / STEAM VALVES OR 3-WAY VALVES.

EXAMPLE

POSITION 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
EXAMPLE MODEL 3 9 L P 1 2 3 2 L A A 2 2 2 2 2

Position #9 is an "L" = 1 1/2", 2-way, chilled water valve

Position #11 is an "A" = No heating valve

Chart below indicates valve assembly number 39LC400410

Parts list for 39LC400410 is on page 41.

CHILLED WATER 2-WAY VALVES

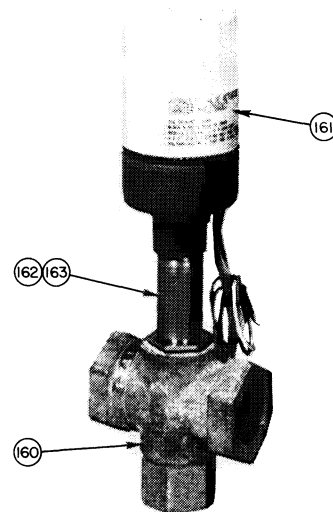
IF POSITION #9 OF PIC MODEL NUMBER IS:	THEN VALVE PACKAGE NUMBER IS:
A = NONE	N/A
B = 1/2"	39LC400401
C = 1/2"	39LC400402
D = 1/2"	39LC400403
E = 1/2"	39LC400404
F = 3/4"	39LC400405
G = 3/4"	39LC400406
H = 1"	39LC400407
J = 1"	39LC400408
K = 1 1/4"	39LC400409
L = 1 1/2"	39LC400410
M = 2"	39LC400411
N = 2 1/2"	39LC400412
P = 3"	39LC400413

HOT WATER / STEAM 2-WAY VALVES

IF POSITION #11 OF PIC MODEL NUMBER IS:	THEN VALVE PACKAGE NUMBER IS:
A = NONE	N/A
B = 1/2"	39LC400501
C = 1/2"	39LC400502
D = 1/2"	39LC400503
E = 1/2"	39LC400504
F = 3/4"	39LC400505
G = 3/4"	39LC400506
H = 1"	39LC400507
J = 1"	39LC400508
K = 1 1/4"	39LC400509
L = 1 1/2"	39LC400510
M = 2"	39LC400511
N = 2 1/2"	39LC400512
P = 3"	39LC400513

HOT / COLD 3-WAY VALVES

IF POSITION #9 OR #11 OF PIC MODEL NUMBER IS:	THEN VALVE PACKAGE NUMBER IS
Q = 1/2"	39LC400602
R = 1/2"	39LC400604
S = 3/4"	39LC400606
T = 1"	39LC400608
U = 1 1/4"	39LC400609
V = 1 1/2"	39LC400610
W = 2"	39LC400611
X = 2 1/2"	39LC400612
Y = 3"	39LC400613



VALVE ASSEMBLY



PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

SIZE: 03-35

SERIES: 0

ITEM	PART DESCRIPTION	39LC400401 COLD 2-WAY	39LC400402 COLD 2-WAY	39LC400403 COLD 2-WAY	39LC400404 COLD 2-WAY	39LC400405 COLD 2-WAY
VALVE ASSEMBLY						
160	VALVE BODY	EF04CZ187	EF04CZ188	EF04CZ189	EF04CZ190	EF04CZ244
161	OPERATOR MOTOR	HF27BB007	->	->	->	->
162	LINKAGE KIT	EF09ZZ016	->	->	->	->
163	HI-TEMP. EXTENSION	EF09ZZ017	->	->	->	->

ITEM	PART DESCRIPTION	39LC400406 COLD 2-WAY	39LC400407 COLD 2-WAY	39LC400408 COLD 2-WAY	39LC400409 COLD 2-WAY	39LC400410 COLD 2-WAY
VALVE ASSEMBLY						
160	VALVE BODY	EF04CZ245	EF04CZ304	EF04CZ302	EF04CZ363	EF04CZ422
161	OPERATOR MOTOR	HF27BB007	->	->	->	HF27BB008
162	LINKAGE KIT	EF09ZZ016	->	->	->	EF09ZZ013
163	HI-TEMP. EXTENSION	EF09ZZ017	->	->	->	X

ITEM	PART DESCRIPTION	39LC400411 COLD 2-WAY	39LC400412 COLD 2-WAY	39LC400413 COLD 2-WAY	39LC400501 HEAT 2-WAY	39LC400502 HEAT 2-WAY
VALVE ASSEMBLY						
160	VALVE BODY	EF04CZ481	EF04CZ541	EF04CZ602	EF04CZ181	EF04CZ182
161	OPERATOR MOTOR	HF27BB008	->	->	HF27BB007	->
162	LINKAGE KIT	EF09ZZ013	EF09ZZ018	->	EF09ZZ016	->
163	HI-TEMP. EXTENSION	X	X	X	EF09ZZ017	->

ITEM	PART DESCRIPTION	39LC400503 HEAT 2-WAY	39LC400504 HEAT 2-WAY	39LC400505 HEAT 2-WAY	39LC400506 HEAT 2-WAY	39LC400507 HEAT 2-WAY
VALVE ASSEMBLY						
160	VALVE BODY	EF04CZ183	EF04CZ184	EF04CZ241	EF04CZ242	EF04CZ303
161	OPERATOR MOTOR	HF27BB007	->	->	->	->
162	LINKAGE KIT	EF09ZZ016	->	->	->	->
163	HI-TEMP. EXTENSION	EF09ZZ017	->	->	->	->

ITEM	PART DESCRIPTION	39LC400508 HEAT 2-WAY	39LC400509 HEAT 2-WAY	39LC400510 HEAT 2-WAY	39LC400511 HEAT 2-WAY	39LC400512 HEAT 2-WAY
VALVE ASSEMBLY						
160	VALVE BODY	EF04CZ301	EF04CZ361	EF04CZ421	EF04CZ482	EF04CZ542
161	OPERATOR MOTOR	HF27BB007	->	HF27BB008	->	->
162	LINKAGE KIT	EF09ZZ016	->	EF09ZZ013	->	EF09ZZ018
163	HI-TEMP. EXTENSION	EF09ZZ017	->	X	X	X

ITEM	PART DESCRIPTION	39LC400513 HEAT 2-WAY	39LC400602 3-WAY	39LC400604 3-WAY	39LC400606 3-WAY	39LC400608 3-WAY
VALVE ASSEMBLY						
160	VALVE BODY	EF04CZ601	EF04CZ181	EF04CZ182	EF04CZ241	EF04CZ301
161	OPERATOR MOTOR	HF27BB008	HF27BB007	->	->	->
162	LINKAGE KIT	EF09ZZ018	EF09ZZ016	->	->	->
163	HI-TEMP. EXTENSION	X	EF09ZZ017	->	->	->

ITEM	PART DESCRIPTION	39LC400609 3-WAY	39LC400610 3-WAY	39LC400611 3-WAY	39LC400612 3-WAY	39LC400613 3-WAY
VALVE ASSEMBLY						
160	VALVE BODY	EF04CZ361	EF04CZ421	EF04CZ482	EF04CZ541	EF04CZ601
161	OPERATOR MOTOR	HF27BB007	HF27BB008	->	->	->
162	LINKAGE KIT	EF09ZZ016	EF09ZZ013	->	EF09ZZ018	->
163	HI-TEMP. EXTENSION	EF09ZZ017	X	X	X	X



PIC CONTROLS FOR CENTRAL-STATION AIR-HANDLING UNITS

39L PIC

SIZE: 03-35

SERIES: 0

CASING PARTS FOR PIC CONTROL SECTION

ITEM	PART DESCRIPTION	03	06	08	10	12	15
		UNIT SIZE	UNIT SIZE	UNIT SIZE	UNIT SIZE	UNIT SIZE	UNIT SIZE
CASING GROUP							
170	TOP PANEL	39LC599025	39LC599033	X	X	X	X
171	TOP PANEL	39LC595033	39LC595034	39LC595035	39LC595036	39LC595037	->
172	SIDE PANEL	39LC599022	39LC599032	39LC599001	->	->	39LC599047
173	BOTTOM PANEL	39LC599029	39LC599038	39LC599003	39LC599044	39LC599021	->
174	FRAME ASY., PIC CONTRL BOX	39LC400095	39LC400096	39LC400097	->	->	39LC400098

ITEM	PART DESCRIPTION	18	21	25	31	35
		UNIT SIZE	UNIT SIZE	UNIT SIZE	UNIT SIZE	UNIT SIZE
CASING GROUP						
170	TOP PANEL	X	X	X	X	X
171	TOP PANEL	39LC595037	39LC595043	->	39LC595044	39LC595045
172	SIDE PANEL	39LC599012	->	39LC599916	->	39LC599917
173	BOTTOM PANEL	39LC599021	39LC599909	->	39LC599910	39LC599911
174	FRAME ASY., PIC CONTROL BOX	39LC400099	->	39LC400100	->	39LC400026

