

## PTH153 - 154K Package Terminal Heat Pump

PTH153K25AXXXAA  
PTH153K25CXXXAA  
PTH153K25VXXXAA  
PTH153K35AXXXAA  
PTH153K35CXXXAA  
PTH153K35PXXXAA  
PTH153K35VXXXAA  
PTH153K50AXXXAA  
PTH153K50CXXXAA  
PTH153K50VXXXAA  
PTH154K25AXXXAA  
PTH154K35AXXXAA  
PTH154K35CXXXAA  
PTH154K35VXXXAA  
PTH154K50AXXXAA  
PTH154K50CXXXAA  
PTH154K50VXXXAA



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This manual is to be used by qualified technicians only.

# Important Information

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## Index

|                              |        |
|------------------------------|--------|
| Functional Parts List .....  | 3      |
| Illustration and Parts ..... | 4 - 13 |

*Views shown are for parts illustrations only, not servicing procedures.*

### Text Codes:

AR - As Required

NA - Not Available

NS - Not Shown

00000000 - See Note

QTY - Quantity Example (QTY 3) (If Quantity not shown, Quantity = 1)

M - Model Example (M1) (If M Code not shown, then part is used on all Models)

### Expanded Model Nomenclature:

|   |
|---|
| Example<br>M1 - Model#1<br>M2 - Model#2<br>M3 - Model#3 |
|---|

Goodman Company, L.P. is not responsible for personal injury or property damage resulting from improper service. Review all service information before beginning repairs.

Warranty service must be performed by an authorized technician, using authorized factory parts. If service is required after the warranty expires, Goodman Company, L.P. also recommends contacting an authorized technician and using authorized factory parts.

Goodman Company, L.P. reserves the right to discontinue, or change at any time, specifications or designs without notice or without incurring obligations.

For assistance within the U.S.A. contact:

Homeowner Support  
Goodman Company, L.P.  
19001 Kermier Road  
Waller, Texas 77484  
877-254-4729-Telephone  
713-863-2382-Facsimile

For assistance outside the U.S.A. contact:

International Division  
Goodman Company, L.P.  
19001 Kermier Road  
Waller, Texas 77484  
713-861-2500-Telephone  
713-863-2382-Facsimile

# Functional Parts

**Part No:**            **Description:**

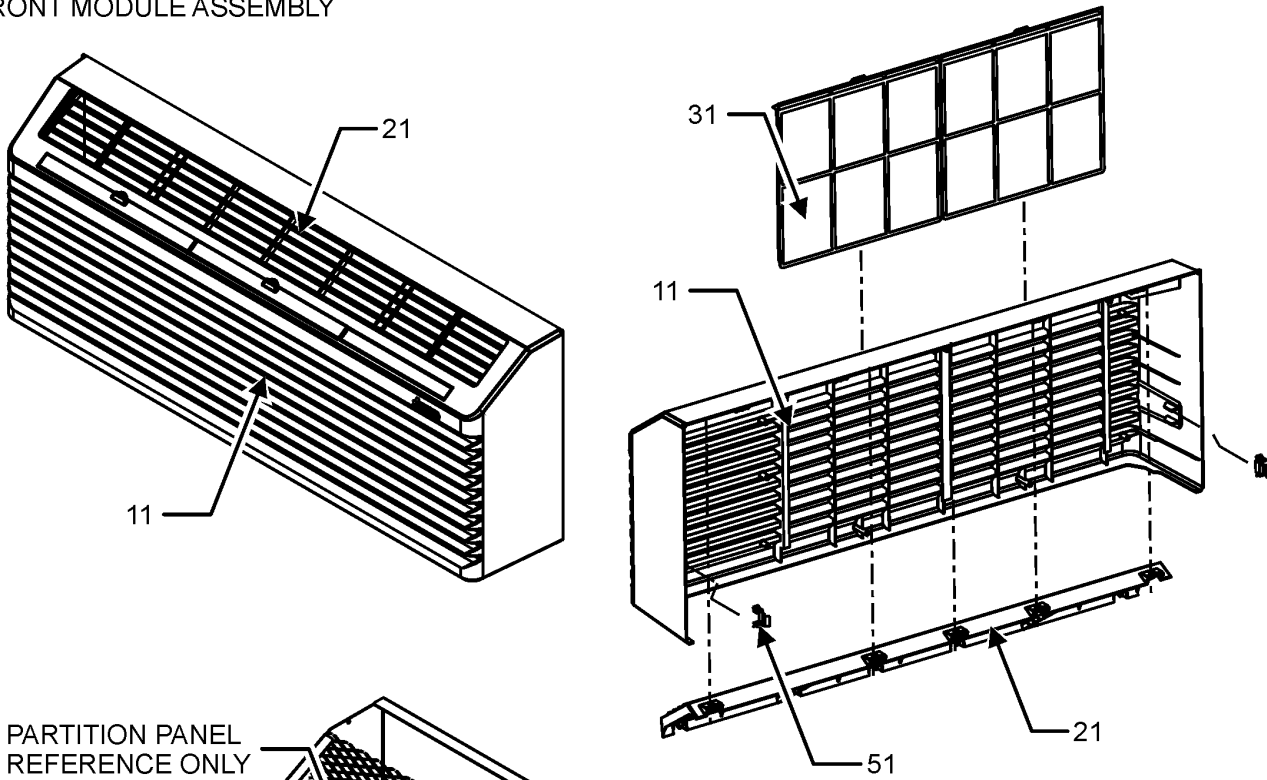
|                |   |
|----------------|---|
| CAP020300450CS | CAP, 2/30 MFD/450V/DUAL RD (M11, M12, M13, M14, M15, M16, M17)                            |
| CAB050350440CS | CAP, 5/35 MFD/440V RD - BPRF (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10)                    |
| CAP015000500RP | CAPACITOR (M11, M12, M13, M14, M15, M16, M17)   |
| CAP020000440RP | CAPACITOR (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10)                                       |
| 50A3672M-9GKE  | Compressor-R410-A (M11, M12, M13, M14, M15, M16, M17)                                     |
| 50A3622M-9GKE  | Compressor-R410-A (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10)                               |
| 0130P00177     | CORD, 250 VAC, 20A (LCDI (M4, M5, M6, M7)   |
| 0130P00184     | CORD, 250VAC, 15A, (LCDI (M1, M2, M3)   |
| 0130P00178     | CORD, 277V, 20A (M11, M12, M13, M14)  |
| 0130P00186     | CORD, 277V, 30A (M15, M16, M17)   |
| 0130P00185     | CORD,250VAC,30A (LCDI) (M8, M9, M10)  |
| 0161P00140     | COVER WIRE  |
| 0161P00055     | FAN CONDENSER   |
| 3P263839-1     | FERRITE CORE  |
| A3410402       | FUSE 15A (M11)  |
| A3410403       | FUSE 20A (M12, M13, M14)  |
| 0275P00087     | Heater 230 v-3.5 KW (M4, M5, M6, M7)  |
| 0275P00089     | Heater 230 v-5 KW (M8, M9, M10)   |
| 0275P00088     | Heater 265 v-3.5 KW (M12, M13, M14)   |
| 0275P00090     | Heater 265 v-5 KW (M15, M16, M17)   |
| 0275P00019     | HEATER ASSY (M1, M2, M3)  |
| 0275P00023     | HEATER ASSY (M11)   |
| 0130P00187     | HUMIDITY SENSOR (M3, M7, M10, M14, M17)   |
| 0131P00061     | INDOOR MOTOR-PSC (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10)                                |
| 0131P00071     | INDOOR MOTOR-PSC (M11, M12, M13, M14, M15, M16, M17)                                      |
| PCBCP160       | M90 Board Tier 1 (M1, M2, M3, M4, M5, M7, M8, M9, M10, M11, M12, M13, M14, M15, M16, M17) |
| PCBCP170       | M90 Board Tier 2 (M6)   |
| 0130P00137     | MOTOR (M3, M7, M10, M14, M17)   |
| 0131P00085     | OUTDOOR MOTOR, DC (M6)  |
| 0131P00064     | OUTDOOR MOTOR-PSC (M11, M12, M13, M14, M15, M16, M17)                                     |
| 0131P00063     | OUTDOOR MOTOR-PSC (M1, M2, M3, M4, M5, M7, M8, M9, M10)                                   |
| 0151P00024     | PTAC REVERSING VLV ASSY (M11, M12, M13, M14, M15, M16, M17)                               |
| 0151P00023     | PTAC REVERSING VLV ASSY (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10)                         |
| 0130M00735     | SWITCH HIGH PRESSURE  |
| 0130P00167     | THERMISTOR INDOOR   |
| 0130P00167     | THERMISTOR INDOOR   |
| 0130P00173     | THERMISTOR OUTDOOR 7MM  |
| 0130M00726     | Transformer 20VA 240/208V (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10)                       |
| 0130M00728     | TRANSFORMER 20VA 277V (M11, M12, M13, M14, M15, M16, M17)                                 |
| 0130M00727     | Transformer 40VA 240/208V (M3, M7, M10)   |
| 0130M00729     | TRANSFORMER 40VA 277V (M14, M17)  |
| 0151M00026     | VALVE, CHECK  |
| 20406303       | VALVE-BASEPAN   |

## Expanded Model Nomenclature

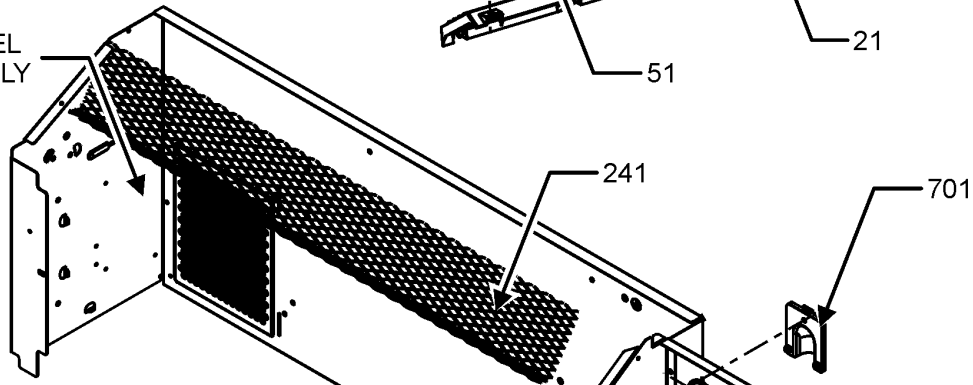
|                       |
|-----------------------|
| M1 - PTH153K25AXXXAA  |
| M2 - PTH153K25CXXXAA  |
| M3 - PTH153K25VXXXAA  |
| M4 - PTH153K35AXXXAA  |
| M5 - PTH153K35CXXXAA  |
| M6 - PTH153K35PXXXAA  |
| M7 - PTH153K35VXXXAA  |
| M8 - PTH153K50AXXXAA  |
| M9 - PTH153K50CXXXAA  |
| M10 - PTH153K50VXXXAA |
| M11 - PTH154K25AXXXAA |
| M12 - PTH154K35AXXXAA |
| M13 - PTH154K35CXXXAA |
| M14 - PTH154K35VXXXAA |
| M15 - PTH154K50AXXXAA |
| M16 - PTH154K50CXXXAA |
| M17 - PTH154K50VXXXAA |

# FRONT MODULE AND CONTROL PANEL ASSEMBLY

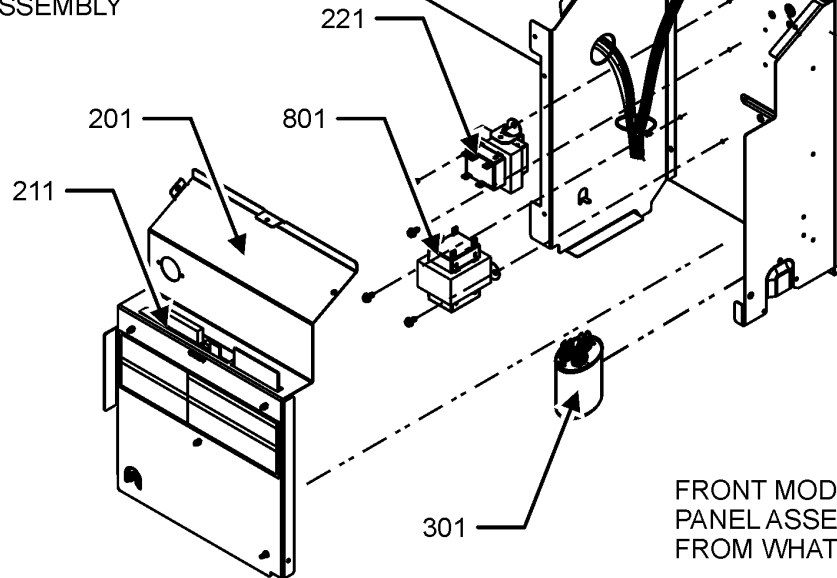
## FRONT MODULE ASSEMBLY



PARTITION PANEL  
REFERENCE ONLY



## CONTROL PANEL ASSEMBLY



FRONT MODULE AND CONTROL  
PANEL ASSEMBLY MAY DIFFER  
FROM WHAT IS SHOWN

# FRONT MODULE AND CONTROL PANEL ASSEMBLY

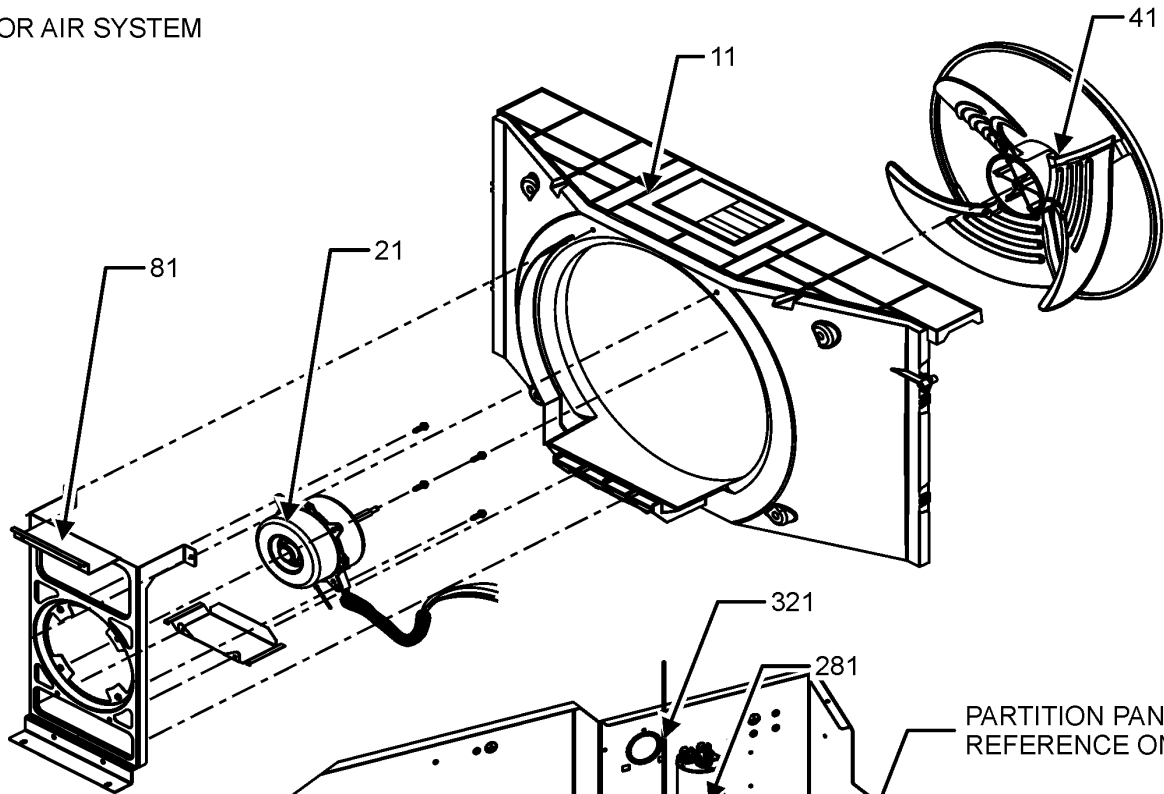
| Ref. Part No:   | Ref. Part No:  | Description:  | Description: |
|-----------------|----------------|---|--------------|
| <b>Image 1:</b> |                |   |              |
| 11              | 0261P00033     | FRONT ASSY  |              |
| 21              | 0161P00132     | LOUVERED FRONT DISCHARGE  |              |
| 31              | 0161P00148     | FILTER RACK (QTY 2)   |              |
| 51              | 0163P00025     | CLIP (QTY 2)  |              |
| 201             | 0121P00431     | CONTROL BOX PANEL   |              |
| 211             | PCBCP160       | M90 Board Tier 1 (M1, M2, M3, M4, M5, M7, M8, M9, M10, M11, M12, M13, M14, M15, M16, M17) |              |
| 211             | PCBCP170       | M90 Board Tier 2 (M6)   |              |
| 221             | 0130M00726     | Transformer 20VA 240/208V (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10)                       |              |
| 221             | 0130M00728     | TRANSFORMER 20VA 277V (M11, M12, M13, M14, M15, M16, M17)                                 |              |
| 241             | 0121P00194BL   | SCREEN DISCHARGE PAINTED  |              |
| 301             | CAP020300450CS | CAP, 2/30 MFD/450V/DUAL RD (M11, M12, M13, M14, M15, M16, M17)                            |              |
| 301             | CAB050350440CS | CAP, 5/35 MFD/440V RD - BPRF (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10)                    |              |
| 701             | 0161P00140     | COVER WIRE  |              |
| 721             | 3P263839-1     | FERRITE CORE  |              |
| 801             | 0130M00727     | Transformer 40VA 240/208V (M3, M7, M10)   |              |
| 801             | 0130M00729     | TRANSFORMER 40VA 277V (M14, M17)  |              |
| NS              | C6476001       | BAYONET FUSE HOLDER (M11)   |              |
| NS              | C6476002       | BAYONET FUSE HOLDER (M12, M13, M14)   |              |
| NS              | A3410402       | FUSE 15A (M11)  |              |
| NS              | A3410403       | FUSE 20A (M12, M13, M14)  |              |
| NS              | 0259P00043     | WIRE HARNESS KIT  |              |

## Expanded Model Nomenclature

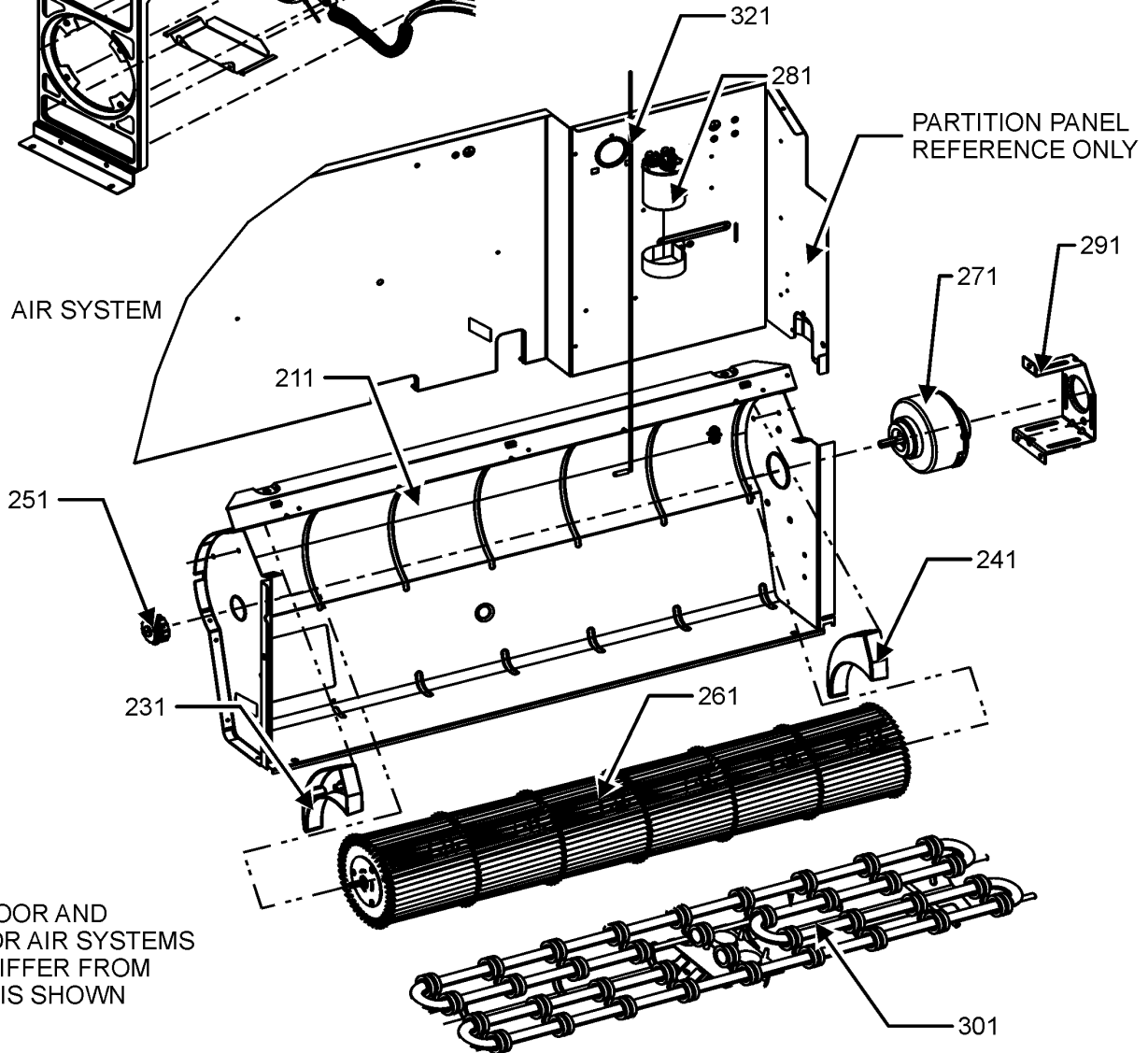
|                       |
|-----------------------|
| M1 - PTH153K25AXXXAA  |
| M2 - PTH153K25CXXXAA  |
| M3 - PTH153K25VXXXAA  |
| M4 - PTH153K35AXXXAA  |
| M5 - PTH153K35CXXXAA  |
| M6 - PTH153K35PXXXAA  |
| M7 - PTH153K35VXXXAA  |
| M8 - PTH153K50AXXXAA  |
| M9 - PTH153K50CXXXAA  |
| M10 - PTH153K50VXXXAA |
| M11 - PTH154K25AXXXAA |
| M12 - PTH154K35AXXXAA |
| M13 - PTH154K35CXXXAA |
| M14 - PTH154K35VXXXAA |
| M15 - PTH154K50AXXXAA |
| M16 - PTH154K50CXXXAA |
| M17 - PTH154K50VXXXAA |

# OUTDOOR AND INDOOR AIR SYSTEM

## OUTDOOR AIR SYSTEM



## INDOOR AIR SYSTEM



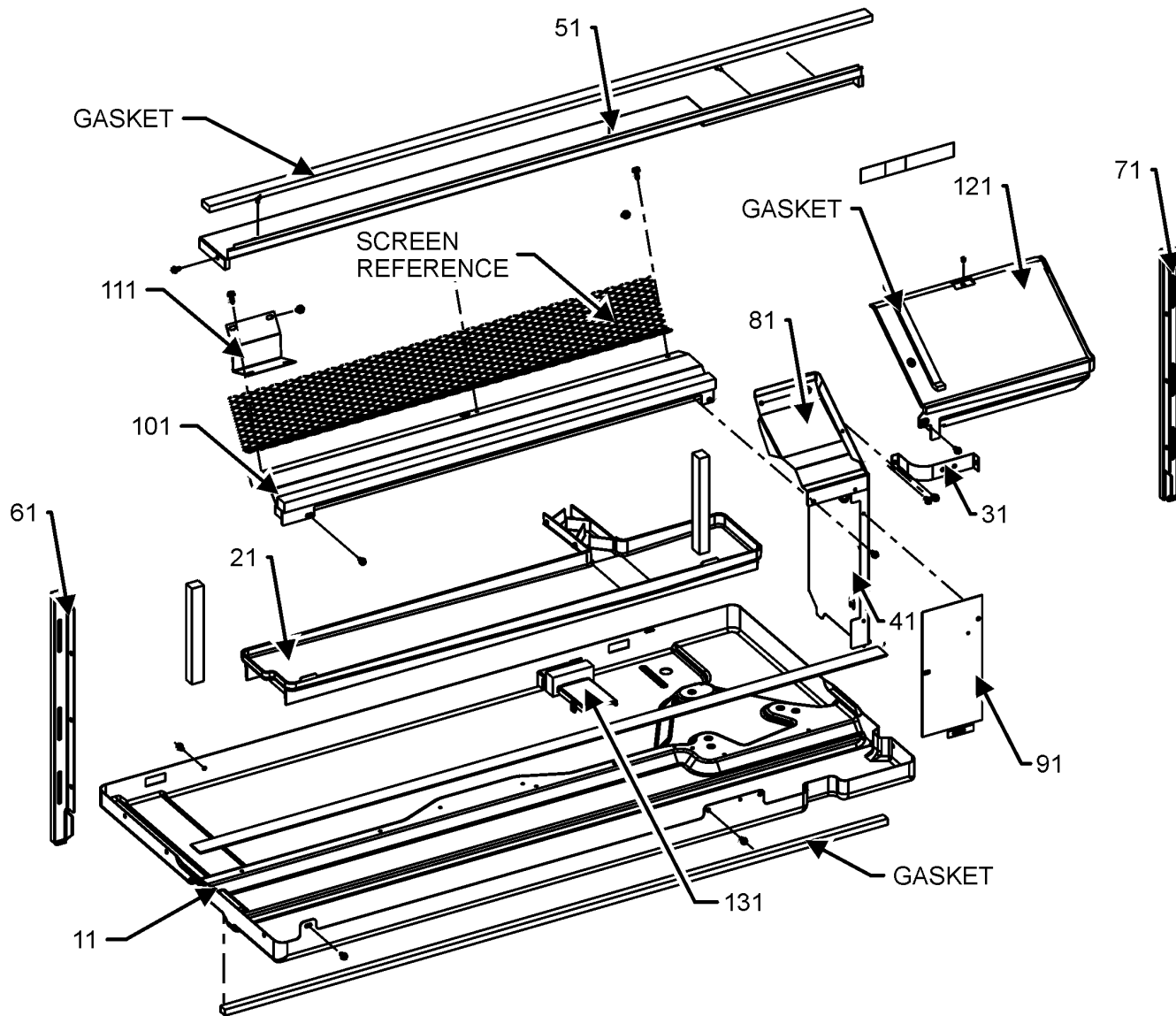
OUTDOOR AND  
INDOOR AIR SYSTEMS  
MAY DIFFER FROM  
WHAT IS SHOWN

# OUTDOOR AND INDOOR AIR SYSTEM

| Ref. Part No:   | Ref. Part No:  | Description:   | Description:           |
|-----------------|----------------|--|------------------------|
| <b>Image 1:</b> |                | <b>Expanded Model Nomenclature</b>   |                        |
| 11              | 0261P00034     | ASY CONDENSER SHROUD   | M1 - PTH153K25A XXXAA  |
| 21              | 0131P00085     | OUTDOOR MOTOR, DC (M6)   | M2 - PTH153K25C XXXAA  |
| 21              | 0131P00063     | OUTDOOR MOTOR-PSC (M1, M2, M3, M4, M5, M7, M8, M9, M10)                                      | M3 - PTH153K25V XXXAA  |
| 21              | 0131P00064     | OUTDOOR MOTOR-PSC (M11, M12, M13, M14, M15, M16, M17)  | M4 - PTH153K35A XXXAA  |
| 41              | 0161P00055     | FAN CONDENSER  | M5 - PTH153K35C XXXAA  |
| 81              | 0121P00350NG   | MOTOR BRACKET, SHROUD  | M6 - PTH153K35P XXXAA  |
| 211             | 0270P01642     | SCROLL ASSY  | M7 - PTH153K35V XXXAA  |
| 231             | 0161P00153     | PTAC END CAP LEFT  | M8 - PTH153K50A XXXAA  |
| 241             | 0161P00152     | END CAP RIGHT  | M9 - PTH153K50C XXXAA  |
| 251             | 0163P00027     | BEARING  | M10 - PTH153K50V XXXAA |
| 261             | 0150P00005     | WHEEL BLOWER   | M11 - PTH154K25A XXXAA |
| 271             | 0131P00061     | INDOOR MOTOR-PSC (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10)                                   | M12 - PTH154K35A XXXAA |
| 271             | 0131P00071     | INDOOR MOTOR-PSC (M11, M12, M13, M14, M15, M16, M17)   | M13 - PTH154K35C XXXAA |
| 281             | CAP015000500RP | CAPACITOR (M11, M12, M13, M14, M15, M16, M17)  | M14 - PTH154K35V XXXAA |
| 281             | CAP020000440RP | CAPACITOR (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10)  | M15 - PTH154K50A XXXAA |
| 291             | 0121P00048     | BRACKET MOTOR MOUNT  | M16 - PTH154K50C XXXAA |
| 301             | 0275P00087     | Heater 230 v -3.5 KW (M4, M5, M6, M7)  | M17 - PTH154K50V XXXAA |
| 301             | 0275P00089     | Heater 230 v -5 KW (M8, M9, M10)   |                        |
| 301             | 0275P00088     | Heater 265 v -3.5 KW (M12, M13, M14)   |                        |
| 301             | 0275P00090     | Heater 265 v -5 KW (M15, M16, M17)   |                        |
| 301             | 0275P00019     | HEATER ASSY (M1, M2, M3)   |                        |
| 301             | 0275P00023     | HEATER ASSY (M11)  |                        |
| 321             | 0130P00167     | THERMISTOR INDOOR  |                        |
| NS              | 0163P00029     | CAPACITOR CLAMP  |                        |
| NS              | 0130P00177     | CORD, 250 VAC, 20A (LCDI) (M4, M5, M6, M7)   |                        |
| NS              | 0130P00184     | CORD, 250VAC, 15A, (LCDI) (M1, M2, M3)   |                        |
| NS              | 0130P00178     | CORD, 277V, 20A (M11, M12, M13, M14)   |                        |
| NS              | 0130P00186     | CORD, 277V, 30A (M15, M16, M17)  |                        |
| NS              | 0130P00185     | CORD, 250VAC, 30A (LCDI) (M8, M9, M10)   |                        |
| NS              | 0121P00378     | SHIELD ANGLED MOTOR (M1, M2, M3, M4, M5, M7, M8, M9, M10, M11, M12, M13, M14, M15, M16, M17) |                        |
| NS              | 0163P00052     | THERMISTOR CLAMP   |                        |

# BASE PAN ASSEMBLY

## BASE PAN ASSEMBLY



BASE PAN ASSEMBLY MAY DIFFER FROM WHAT IS SHOWN

# BASE PAN ASSEMBLY

| Ref. Part No: | Ref. Part No: | Description: | Description: |
|---------------|---------------|--------------|--------------|
|---------------|---------------|--------------|--------------|

**Image 1:**

|     |              |   |
|-----|--------------|---|
| 11  | 0121P00284DG | BASE PAN PAINTED (M1, M3, M4, M6, M7, M8, M10, M11, M12, M14, M15, M17) |
| 11  | 0121P00284NG | BASE PAN PAINTED (M2, M5, M9, M13, M16)                                 |
| 21  | 0161P00154   | PLASTIC- DRAIN PAN  |
| 31  | C6300502     | STAP CAP CO PTC   |
| 41  | 0121P00432   | PANEL MID PRT   |
| 51  | 0121P00376NG | PANEL, TOP PARTITION, PAINTED   |
| 61  | 0121P00379   | SEAL L SIDE PTC   |
| 71  | 0121P00380   | SEAL R SIDE PTC   |
| 81  | 0121P00371DG | PAINTED COVER MOTOR   |
| 91  | 0121P00374   | COVER ACCESS  |
| 101 | 0121P00377DG | CUTOFF SCROLL DG  |
| 111 | 0121P00233   | LEFT SIDE SCRILL BLOCKOFF   |
| 121 | 0161P00142   | SPLASH GUARD  |
| 131 | 0161P00147   | COVER DRAIN PAN   |

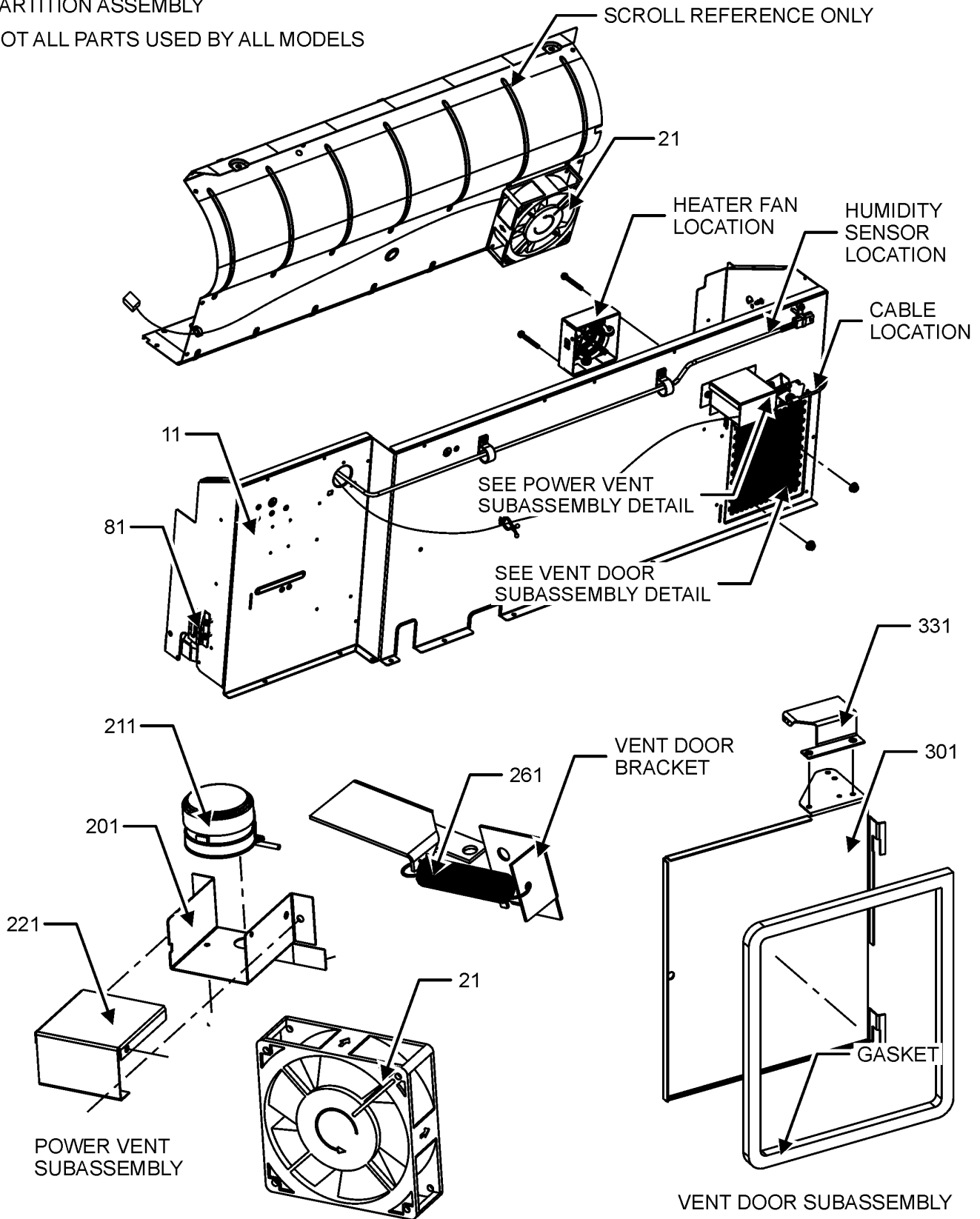
**Expanded Model Nomenclature**

|                       |
|-----------------------|
| M1 - PTH153K25AXXXAA  |
| M2 - PTH153K25CXXXAA  |
| M3 - PTH153K25VXXXAA  |
| M4 - PTH153K35AXXXAA  |
| M5 - PTH153K35CXXXAA  |
| M6 - PTH153K35PXXXAA  |
| M7 - PTH153K35VXXXAA  |
| M8 - PTH153K50AXXXAA  |
| M9 - PTH153K50CXXXAA  |
| M10 - PTH153K50VXXXAA |
| M11 - PTH154K25AXXXAA |
| M12 - PTH154K35AXXXAA |
| M13 - PTH154K35CXXXAA |
| M14 - PTH154K35VXXXAA |
| M15 - PTH154K50AXXXAA |
| M16 - PTH154K50CXXXAA |
| M17 - PTH154K50VXXXAA |

# PARTITION ASSEMBLY

PARTITION ASSEMBLY

NOT ALL PARTS USED BY ALL MODELS



PARTITION ASSEMBLY MAY DIFFER FROM WHAT IS SHOWN

# PARTITION ASSEMBLY

| Ref. Part No: | Ref. Part No: | Description: | Description: |
|---------------|---------------|--------------|--------------|
|---------------|---------------|--------------|--------------|

**Image 1:**

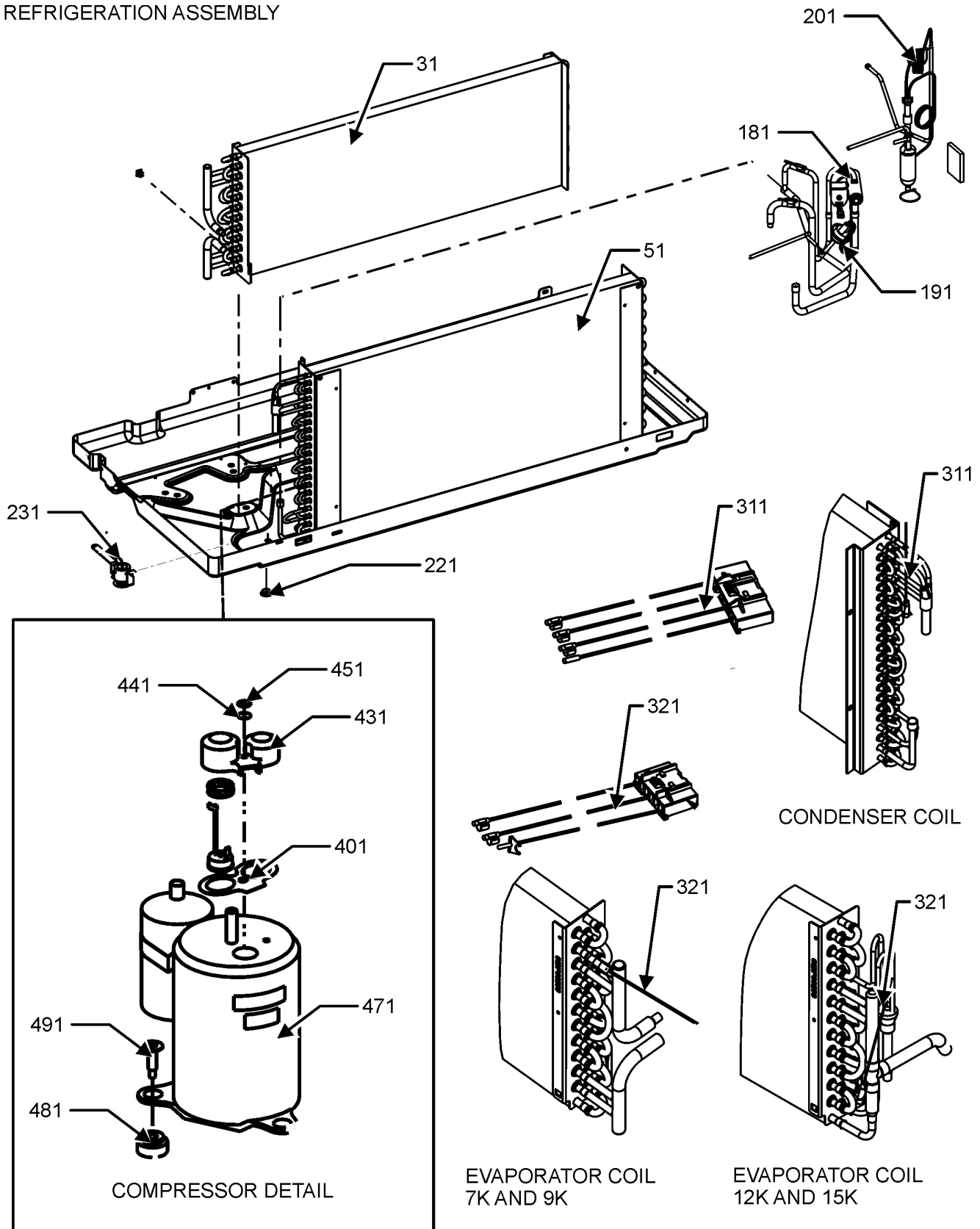
|     |              |  |
|-----|--------------|--|
| 11  | 0121P00360NG | PANEL PARTITION  |
| 21  | 0131P00081   | FAN MUFFIN (M3, M7, M10, M14, M17)   |
| 81  | 11191703     | BRKT-PART PAN (QTY 2)  |
| 201 | 11166101     | BRKT-MOTOR PTC (M3, M7, M10, M14, M17)                                     |
| 211 | 0130P00137   | MOTOR (M3, M7, M10, M14, M17)  |
| 221 | 11166201     | BRKT-COVER PTC (M3, M7, M10, M14, M17)                                     |
| 261 | 11166401     | SPRING-EXTENSION (M3, M7, M10, M14, M17)                                   |
| 301 | 0121P00177NG | DOOR PNT VENT PTC  |
| 331 | 0121P00180   | BRKT POWER VENT (M3, M7, M10, M14, M17)                                    |
| NS  | 0121P00079   | BRACKET, VENT DOOR (M3, M7, M10, M14, M17)                                 |
| NS  | 0121P00072NG | BRACKET, VENT DOOR-C (M1, M2, M4, M5, M6, M8, M9, M11, M12, M13, M15, M16) |
| NS  | 0163P00019   | CABLE (M1, M2, M4, M5, M6, M8, M9, M11, M12, M13, M15, M16)                |
| NS  | 0130P00187   | HUMIDITY SENSOR (M3, M7, M10, M14, M17)                                    |
| NS  | 11046302     | LEVER ARM PTC (M1, M2, M4, M5, M6, M8, M9, M11, M12, M13, M15, M16)        |
| NS  | 0259P00039   | WIRE HARNESS (M3, M7, M10, M14, M17)                                       |

**Expanded Model Nomenclature**

|                       |
|-----------------------|
| M1 - PTH153K25AXXXAA  |
| M2 - PTH153K25CXXXAA  |
| M3 - PTH153K25VXXXAA  |
| M4 - PTH153K35AXXXAA  |
| M5 - PTH153K35CXXXAA  |
| M6 - PTH153K35PXXXAA  |
| M7 - PTH153K35VXXXAA  |
| M8 - PTH153K50AXXXAA  |
| M9 - PTH153K50CXXXAA  |
| M10 - PTH153K50VXXXAA |
| M11 - PTH154K25AXXXAA |
| M12 - PTH154K35AXXXAA |
| M13 - PTH154K35CXXXAA |
| M14 - PTH154K35VXXXAA |
| M15 - PTH154K50AXXXAA |
| M16 - PTH154K50CXXXAA |
| M17 - PTH154K50VXXXAA |

# REFRIGERATION ASSEMBLY

## REFRIGERATION ASSEMBLY



# REFRIGERATION ASSEMBLY

| Ref. Part No:   | Ref. Part No: | Description:   | Description: |
|-----------------|---------------|--|--------------|
| <b>Image 1:</b> |               |  |              |
| 31              | 0202P00113    | 7MM EVAP ASSY 3 ROW  |              |
| 51              | 0201P00170MB  | 7mm CONDENSOR COIL ASSY (M2, M5, M9, M13, M16)                                   |              |
| 51              | 0201P00158    | ASSY., 7MM CONDENSER COIL (M1, M3, M4, M6, M7, M8, M10, M11, M12, M14, M15, M17) |              |
| 181             | 0151P00023    | PTAC REVERSING VLV ASSY (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10)                |              |
| 181             | 0151P00024    | PTAC REVERSING VLV ASSY (M11, M12, M13, M14, M15, M16, M17)                      |              |
| 191             | 0130M00735    | SWITCH HIGH PRESSURE   |              |
| 201             | 0210P00697    | ASSY., CAPILLARY WELDMENT (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10)              |              |
| 201             | 0210P00740    | CAPILLARY ASSY (M11, M12, M13, M14, M15, M16, M17)                               |              |
| 221             | M0570805      | PLUG BUTTON (M6)   |              |
| 231             | 20406303      | VALVE-BASEPAN  |              |
| 311             | 0130P00173    | THERMISTOR OUTDOOR 7MM   |              |
| 321             | 0130P00167    | THERMISTOR INDOOR  |              |
| 401             | 60100107      | TERMINAL COVER GASKET  |              |
| 431             | 60100317      | TERMINAL COVER   |              |
| 441             | 60100201      | WASHER - RECHI COMPRESSOR  |              |
| 451             | 60100401      | TERMINAL NUT - RECHI COMP  |              |
| 471             | 50A3622M-9GKE | Compressor-R410-A (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10)                      |              |
| 471             | 50A3672M-9GKE | Compressor-R410-A (M11, M12, M13, M14, M15, M16, M17)                            |              |
| 481             | 60140209      | GROMMET - RECHI COMPRESSOR (QTY 3)   |              |
| 491             | 0163P00044    | SCREW 1/4" - 20 UNC - 2A (QTY 3)   |              |
| NS              | 0130P00022    | REVERSING VALVE COIL   |              |
| NS              | 0151M00026    | VALVE, CHECK   |              |
| NS              | 0259P00036    | WIRE HARNESS   |              |

## Expanded Model Nomenclature

|                       |
|-----------------------|
| M1 - PTH153K25AXXXAA  |
| M2 - PTH153K25CXXXAA  |
| M3 - PTH153K25VXXXAA  |
| M4 - PTH153K35AXXXAA  |
| M5 - PTH153K35CXXXAA  |
| M6 - PTH153K35PXXXAA  |
| M7 - PTH153K35VXXXAA  |
| M8 - PTH153K50AXXXAA  |
| M9 - PTH153K50CXXXAA  |
| M10 - PTH153K50VXXXAA |
| M11 - PTH154K25AXXXAA |
| M12 - PTH154K35AXXXAA |
| M13 - PTH154K35CXXXAA |
| M14 - PTH154K35VXXXAA |
| M15 - PTH154K50AXXXAA |
| M16 - PTH154K50CXXXAA |
| M17 - PTH154K50VXXXAA |