

**Project Name**  
10ton split - Patriot  
**Project Number**  
**Client / Purchaser**



### Submittal Summary Page

Qty	Tag #	Model #	Description
1		YC120C00A2ALA5	10 Ton, York Predator Split System R-410A Air Conditioner, 2-Pipe R-410A, Two Stage Cooling, 208/230-3-60, Microchannel Condenser Coil • Low Ambient Control
1		NC120C00D6AAA3	10 Ton, York Predator Split System R-410A Air Handler, 2-Pipe, 3.0 HP Motor, 208/230/460-3-60 • Composite Drain Pan

Equipment start-up and commissioning by a factory trained technician is recommended.  
Contact your supplying distributor or sales representative for additional information & guidance.

Project Name: 10ton split - Patriot

Unit Model #: YC120C00A2ALA5

Quantity: 1

System: YC120C00A2ALA5, NC120C00D6AAA3

### Cooling Performance

Total gross capacity	124.0 MBH
Sensible gross capacity	88.5 MBH
Total net capacity	117.7 MBH
Sensible net capacity	82.2 MBH
Efficiency (at ARI)	11.20 EER
Integrated eff. (at ARI)	12.70 IEER
Ambient DB temp.	95.0 °F
Power input (w/o blower)	9.37 kW
Sound power	90 dB(A)

### Refrigerant

Refrigerant type	R-410A
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### Electrical Data

Power supply	208-3-60
Unit min circuit ampacity	41.4 Amps
Unit max over-current protection	50 Amps

### Dimensions & Weight

Hgt	50 in.	Len	59 in.	Wth	32 in.
Weight with factory installed options		499 lbs.			

### Clearances

Right	30 in.	Front	36 in.	Back	24 in.
Top	120 in.	Bottom	0 in.	Left	30 in.

Note: Please refer to the tech guide for listed maximum static pressures



### Unit Features

- Two Stage Cooling
- Unit Cabinet Constructed of Powder Painted Steel, Certified At 1000 Hours Salt Spray Test (ASTM B-117 Standards)
- Full Perimeter Base Rails with Built in Rigging Capabilities
- Scroll Compressors with Crankcase Heater
- Single Refrigeration Circuit (2 Pipe)
- Liquid Line Driers (Supplied for Field Installation)
- Aluminum Tube/ Aluminum Fin Microchannel Coils
- Back Seating Suction and Liquid Line Service Valves
- Inherently Protected Fan Motors
- Factory Installed Low Ambient Control to 0°F
- Side or Bottom Single Point Power Connections
- Short Circuit Current: 5kA RMS Symmetrical

### 10 Ton

- YORK Predator Split System Units are Manufactured at an ISO 9001 Registered Facility.

### Standard Unit Controller: Simplicity Control Board

- Anti-Short Cycle Protection, Lead-Lag, Low Voltage Protection, On-Board Diagnostic and Fault Code Display
- Safety Monitoring - Monitors the High and Low-Pressure Switches. The Unit Control Board will Alarm on Compressor Lockouts and Repeated Limit Switch Trips.

### Warranty

- One (1) Year Limited Warranty on All Other Parts
- Five (5) Year Limited Warranty on Compressors



**Predator OD Split System**  
Split-System Outdoor

Project Name: 10ton split - Patriot

Unit Model #: YC120C00A2ALA5

Quantity: 1

System: YC120C00A2ALA5, NC120C00D6AAA3

**Factory Installed Options**

**YC120C00A2ALA5**

Product Category:	<b>Y</b>	York Predator Split System R-410A Air Conditioner
Product Identifier:	<b>C</b>	2-Pipe R-410A
Nominal Cooling Capacity:	<b>120</b>	10 Ton
Heat Type and Nominal Heat Capacity:	<b>C00</b>	
Airflow:	<b>A</b>	
Voltage:	<b>2</b>	208/230-3-60
Additional Options:	<b>LA</b>	Microchannel Condenser Coil Low Ambient Control

**Field Installed Accessories**





# Predator OD Split System

## Split-System Outdoor

Project Name: 10ton split - Patriot

Quantity: 1

Unit Model #: YC120C00A2ALA5

System: YC120C00A2ALA5, NC120C00D6AAA3

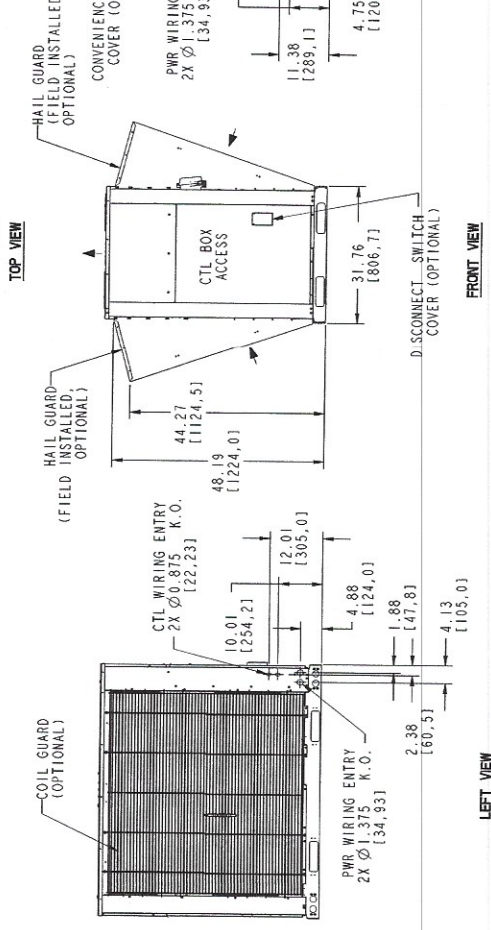
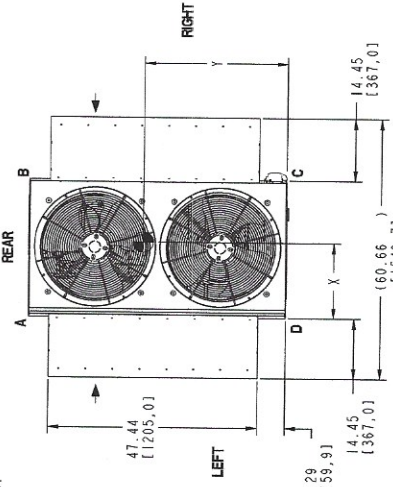
### Consolidated Drawing

- NOTES:
- FOR OUTDOOR USE ONLY.
  - WEIGHTS SHOWN ARE FOR OPERATING, WITHOUT HAIL GUARDS.
  - MIN. CLEARANCES TO BE:  
RIGHT SIDE: 30 [762]  
LEFT SIDE: 30 [762]  
FRONT: 36 [914]  
REAR: 24 [610]  
TOP: 120 [3048]  
BOTTOM: 0 [0]
  - FOR SMALLER SERVICE AND OPERATIONAL CLEARANCES CONTACT JOHNSON CONTROLS APPLICATION ENGINEERING DEPARTMENT.
  - DIMENSIONS IN [ ] ARE IN MILLIMETERS OR KILOGRAMS.
- △ 6 YD UNITS ONLY.



TONNAGE	U N T	OPERATING WEIGHT (BASE UNIT)	CENTER OF GRAVITY LOCATION (BASE UNIT)			4 POINT CORNER LOADS (LBS.) (BASE UNIT)			
			X	Y	A	B	C	D	
10	10	497 [225]	17.3 [439.4]	32.3 [820.4]	124 [56.2]	147 [67]	122 [55]	103 [47]	
10	10	490 [222]	17.4 [442]	32.5 [825.5]	123 [56]	147 [67]	120 [54]	100 [45]	
10	10	514 [260]	16.4 [416.6]	32.3 [820.4]	153 [69]	161 [73]	134 [61]	127 [58]	
12.5	12.5	497 [225]	17.0 [431.8]	32.3 [820.4]	127 [58]	145 [66]	120 [54]	105 [48]	
12.5	12.5	490 [222]	17.4 [442]	32.5 [825.5]	123 [56]	147 [67]	120 [54]	100 [45]	

SYSTEM DATA			
	SYSTEM 1	SYSTEM 2	
	SUCTION LINE O.D.	SUCTION LINE O.D.	LIQUID LINE O.D.
PC	1.375 [34.93]	0.875 [22.23]	N/A
YC	1.375 [34.93]	0.875 [22.23]	N/A
YD	1.125 [28.58]	0.625 [15.88]	0.625 [15.88]



YORK NO.	REV
JUST-PREDD-200F50H	A
PART NO.	SHT NO. 1 OF 1



**Predator OD Split System**  
Split-System Outdoor

Project Name: 10ton split - Patriot

Unit Model #: YC120C00A2ALA5

Quantity: 1

System: YC120C00A2ALA5, NC120C00D6AAA3

**Piping & Connection**

**Piping and Electrical Connection Sizes (Inches)**

MODEL	PC090	PC120	YC090	YC120	YD120	YC150	YD150
No. Refrigeration Circuits	1	1	1	1	2	1	2
Suction Line OD (in.)	1 1/8	1 3/8	1 1/8	1 3/8	1 1/8	1 3/8	1 1/8
Liquid Line OD (in.)	5/8	7/8	5/8	7/8	5/8	7/8	5/8
Power Wiring Knockout	1 3/8	1 3/8	1 3/8	1 3/8	1 3/8	1 3/8	1 3/8
Control Wiring Knockout	7/8	7/8	7/8	7/8	7/8	7/8	7/8

MODEL	PC180	PD180	PC240	PD240	YC180	YD180	YC240	YD240	YC300
No. Refrigeration Circuits	1	2	1	2	1	2	1	2	1
Suction Line OD (in.)	1 5/8	1 3/8	1 5/8	1 3/8	1 5/8	1 3/8	1 5/8	1 3/8	1 5/8
Liquid Line OD (in.)	7/8	5/8	7/8	5/8	7/8	5/8	7/8	5/8	7/8
Power Wiring Knockout	1 3/8	1 3/8	1 3/8	1 3/8	1 3/8	1 3/8	1 3/8	1 3/8	1 3/8
Control Wiring Knockout	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8



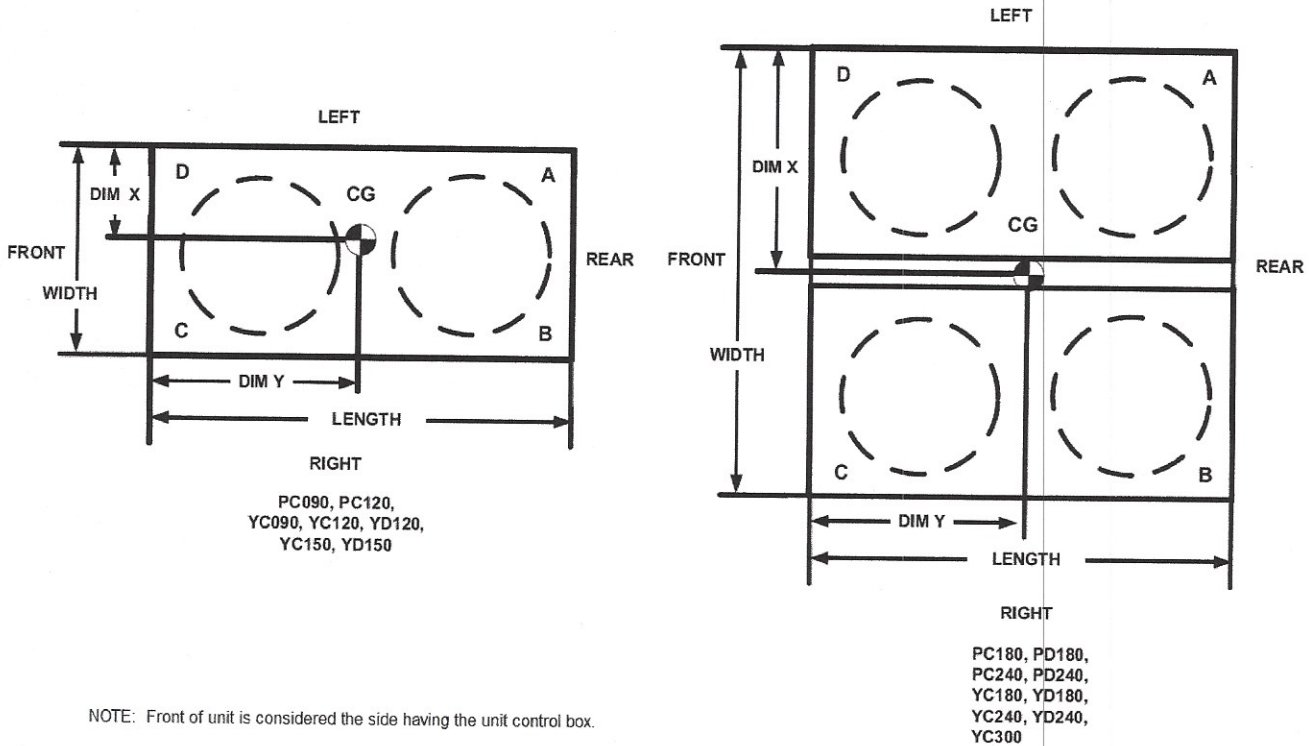
Project Name: 10ton split - Patriot

Unit Model #: YC120C00A2ALA5

Quantity: 1

System: YC120C00A2ALA5, NC120C00D6AAA3

### Corner Weights & Center of Gravity



### Corner Weights & Center of Gravity AC/HP Units

Model	Weight (lbs.)		Center of Gravity (in.)		4 Point Load Location (lbs.)			
	Shipping	Operating	X	Y	A	B	C	D
PC090	421	430	17.3	33	110	130	103	87
PC120	543	574	16.4	32.3	153	161	134	127
PC180	947	968	32.5	33	266	274	217	211
PD180	921	942	34	32.5	243	275	225	199
PC240	1116	1152	32.1	30.8	300	301	276	275
PD240	1090	1126	31.2	31.8	311	295	253	267
YC090	390	387	17	32.3	99	113	94	82
YC120	499	497	17.3	32.3	124	147	122	103
YD120	493	490	17.4	32.5	123	147	120	100
YC150	499	497	17	32.3	127	145	120	105
YD150	493	490	17.4	32.5	123	147	120	100
YC180	914	909	32.5	31.5	239	246	215	209
YD180	899	894	32.5	31.5	235	242	212	206
YC240	945	942	30.3	31.0	261	234	212	236
YD240	930	927	32.7	31.8	244	255	218	210
YC300	945	942	30.3	31.0	261	234	212	236



# Predator ID Split System

Split-System Air Handler R-410A AC

Project Name: 10ton split - Patriot

Unit Model #: NC120C00D6AAA3

Quantity: 1

System: YC120C00A2ALA5, NC120C00D6AAA3

### Cooling Performance

Total gross capacity	124.0 MBH
Sensible gross capacity	88.5 MBH
Total net capacity	117.7 MBH
Sensible net capacity	82.2 MBH
Entering DB temp.	80.0 °F
Entering WB temp.	67.0 °F
Leaving DB temp.	59.5 °F
Leaving WB temp.	57.2 °F

### Supply Air Blower Performance

Supply air	4000 CFM
Ext. static pressure	1.0 IWG
Addl. Unit Losses (Options/Accessories)	0.05 IWG
Blower speed	915 RPM
Duct location	Upflow
Motor rating	3.00 HP
Actual required BHP	1.94 HP
Power input	1.83 kW
Elevation	0 ft.
Drive type	BELT

### Indoor Electrical Data

Power supply	208-3-60
Unit min circuit ampacity	12.00 Amps
Unit max over-current protection	15 Amps

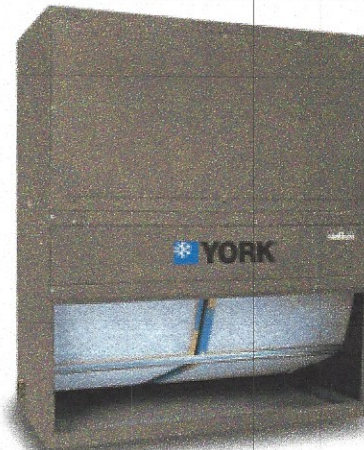
### Indoor Dimensions & Weight

Hgt	65 in.	Len	30 in.	Wth	56 in.	
Weight with factory installed options						573 lbs.

### Indoor Clearances

Side w/Piping	24 in.
Side Opposite Piping	24 in.
Side w/ Return Air	24 in.
Side w/ Supply Air	24 in.

Note: Please refer to the tech guide for listed maximum static pressures



### 10 Ton

- York Predator split system units are manufactured at an ISO 9001 registered facility

### Unit Features

- Unit Cabinet Constructed of Powder Painted Steel, Certified At 1000 Hours Salt Spray Test (ASTM B-117 Standards).
- Easily converted in the field from vertical to horizontal configuration.
- Slide-out Composite Drain Pan
- Single Circuit Refrigeration
- Adjustable balanced port TXV's
- 3.0 HP Motor and Adjustable Sheave Belt Drive
- Unit ships with 2" Throwaway filters with a standard filter rack that will accept up to 4" filters.
- Short Circuit Current: 5kA RMS Symmetrical

### Warranty

- One (1) Year Limited Warranty on all Other Parts
- Five (5) Year limited Warranty on Electric Heating Elements





# Predator ID Split System

Split-System Air Handler R-410A AC

Project Name: 10ton split - Patriot

Unit Model #: NC120C00D6AAA3

Quantity: 1

System: YC120C00A2ALA5, NC120C00D6AAA3

## Factory Installed Options

### NC120C00D6AAA3

Product Category:	<b>N</b>	York Predator Split System R-410A Air Handler
Product Identifier:	<b>C</b>	2-Pipe
Nominal Cooling Capacity:	<b>120</b>	10 Ton
Heat Type and Nominal Heat Capacity:	<b>C00</b>	
Airflow:	<b>D</b>	3.0 HP Motor
Voltage:	<b>6</b>	208/230/460-3-60
Additional Options:	<b>AA</b>	Composite Drain Pan
Product Generation:	<b>3</b>	

## Field Installed Accessories





**Predator ID Split System**  
Split-System Air Handler R-410A AC

Project Name: 10ton split - Patriot

Unit Model #: NC120C00D6AAA3

Quantity: 1

System: YC120C00A2ALA5, NC120C00D6AAA3

**Piping & Connection**

**PIPING, ELECTRICAL AND DUCT OPENING CONNECTION SIZES**

MODEL	NC090	NC120	ND120	NC180	ND180	NC240	ND240	NC300
<b>SYSTEM DATA</b>								
No. Refrigeration Circuits	1	1	2	1	2	1	2	1
Suction Line OD (in.)	1 1/8	1 3/8	1 1/8	1 5/8	1 3/8	1 5/8	1 3/8	2 1/8
Liquid Line OD (in.)	5/8	7/8	5/8	7/8	5/8	7/8	7/8	7/8
Power Wiring Knockout	1 3/4	1 3/4	1 3/4	1 3/4	1 3/4	1 3/4	1 3/4	7/8
Control Wiring Knockout	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8
Electric Heat Wiring Knockout	1 3/4	1 3/4	1 3/4	1 3/4	1 3/4	1 3/4	1 3/4	7/8
Drain Line Fitting PVC Stub	3/4	3/4	3/4	3/4	3/4	3/4	3/4	7/8 <sup>1</sup>
<b>BLOWER OUTLET</b>								
Number	1	1	1	1	1	2	2	2
Width	13.4	15.9	15.9	18.9	18.9	15.9	15.9	22
Length	15.6	18.6	18.6	21.6	21.6	18.6	18.6	22
<b>RETURN AIR INLET</b>								
Width	20.5	20.5	20.5	27.3	27.3	19.2	19.2	33.2
Length	52	52	52	71.9	71.9	93.4	93.4	95.6

<sup>1</sup> 7/8 in. Steel Pipe

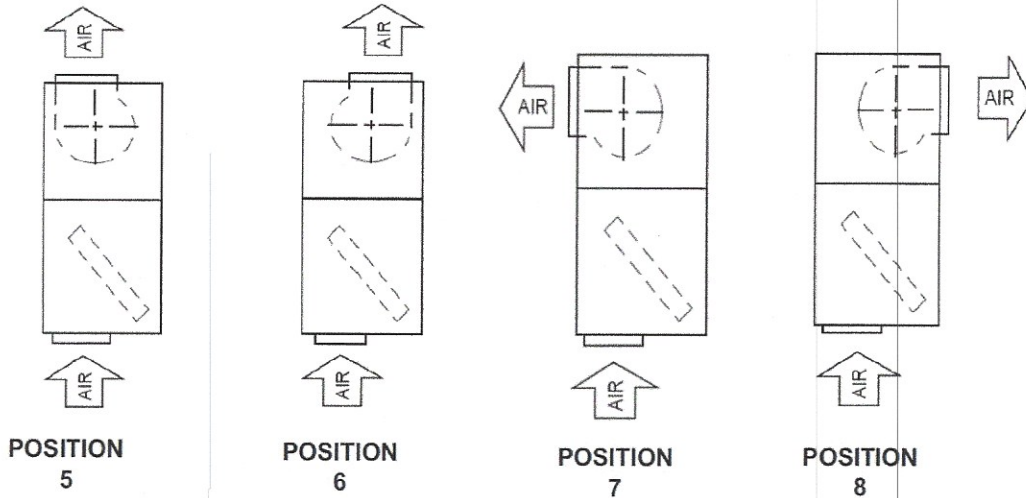
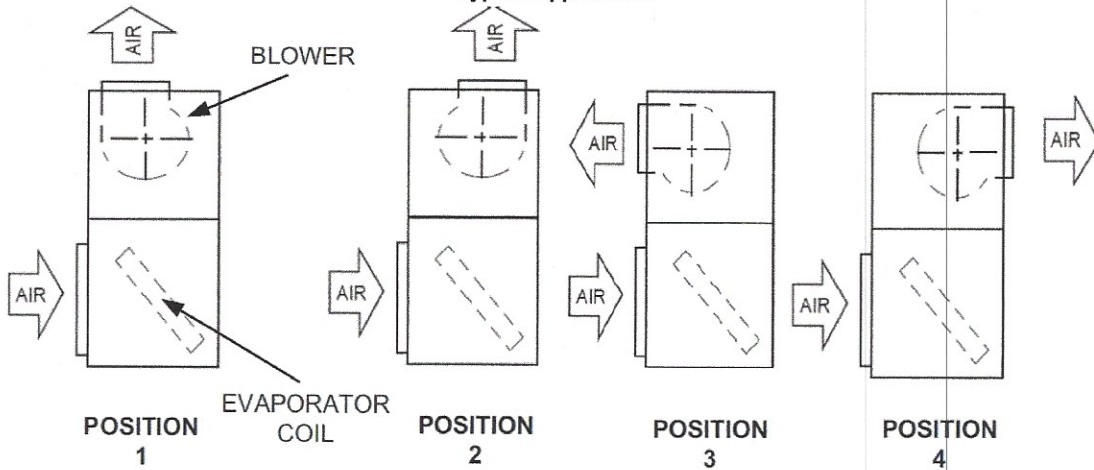
Project Name: 10ton split - Patriot

Unit Model #: NC120C00D6AAA3

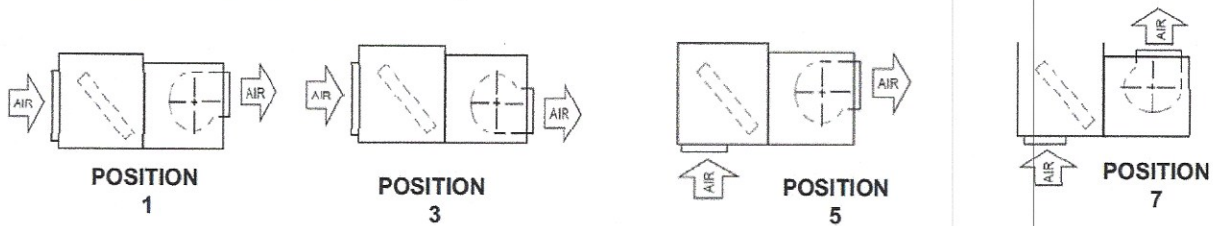
Quantity: 1

System: YC120C00A2ALA5, NC120C00D6AAA3

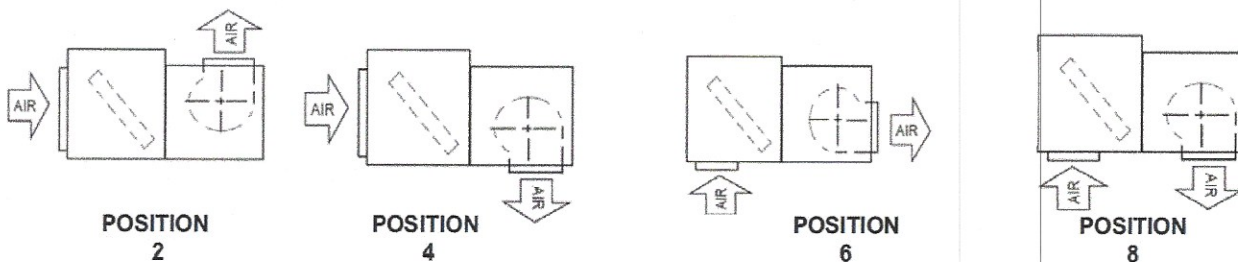
### Typical Applications



### Vertical Airflow Arrangements



### Horizontal Airflow Arrangements





# Predator ID Split System

## Split-System Air Handler R-410A AC

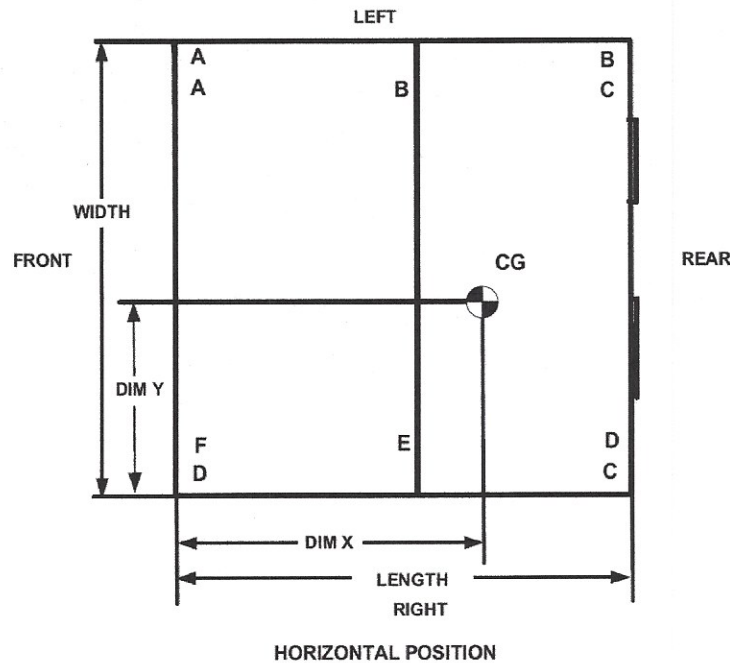
Project Name: 10ton split - Patriot

Unit Model #: NC120C00D6AAA3

Quantity: 1

System: YC120C00A2ALA5, NC120C00D6AAA3

### Corner Weights & Center of Gravity



### Corner Weights & Center of Gravity NC/ND 090 Thru 240 Units

Model	Drive Options	Weight (lbs.)		Center of Gravity (in.)		4 Point Load Location (lbs.)				6 Point Load Location (lbs.)					
		Shipping	Operating	X	Y	A	B	C	D	A	B	C	D	E	F

### Horizontal Airflow

NC090	Std. Mtr. and Drv.	524	498	30.1	26.7	118	119	131	130	79	79	79	87	87	87
	High Static Mtr. and Drv.	526	500	30.1	26.7	119	120	132	130	79	79	80	88	87	87
NC120	Std. Mtr. and Drv.	562	539	29.9	26.8	129	129	140	141	86	86	86	94	94	94
	High Static Mtr. and Drv.	573	550	30.2	26.7	130	132	145	142	87	87	88	97	96	95
ND120	Std. Mtr. and Drv.	564	541	29.9	26.9	131	130	140	141	87	87	86	93	94	94
	High Static Mtr. and Drv.	575	552	30.2	26.9	132	133	144	142	88	88	89	96	96	95
NC180	Std. Mtr. and Drv.	769	737	33.2	34.4	169	171	199	197	113	114	114	133	132	131
	High Static Mtr. and Drv.	797	765	33.8	34.4	172	181	211	201	114	118	122	142	137	133
ND180	Std. Mtr. and Drv.	769	737	33.2	34.4	169	171	199	197	113	114	114	133	132	131
	High Static Mtr. and Drv.	797	765	33.8	34.4	172	181	211	201	114	118	122	142	137	133
NC240	Std. Mtr. and Drv.	908	873	30.1	42.6	188	189	249	247	125	126	126	166	165	164
	High Static Mtr. and Drv.	938	903	30.6	42.4	191	198	262	252	126	130	133	176	171	167
ND240	Std. Mtr. and Drv.	908	873	30.1	42.6	188	189	249	247	125	126	126	166	165	164
	High Static Mtr. and Drv.	938	903	30.6	42.4	191	198	262	252	126	130	133	176	171	167

### Minimum Clearances

Minimum Clearances	
Top with Supply Air Opening <sup>1</sup>	24"
Front with Return Air Opening	24"
Right Side with access for Piping, Power & Control Wiring Connections <sup>2</sup>	24"
Left Side	24"
Rear <sup>3</sup>	N/A
Bottom <sup>4</sup>	N/A

<sup>1</sup> This dimension will vary if an electric heater, a supply air plenum or a base is used.

<sup>2</sup> This dimension is required for normal installation and service.

<sup>3</sup> Although no clearance is required for service and operation, some clearance may be required for routing the power and control wiring.

<sup>4</sup> Allow enough clearance to trap the condensate drain line.

**Note:** If the coil has to be removed, the blower section can be unbolted and set aside and the coil can be lifted out the top of the evaporator section.





# Predator ID Split System

Split-System Air Handler R-410A AC

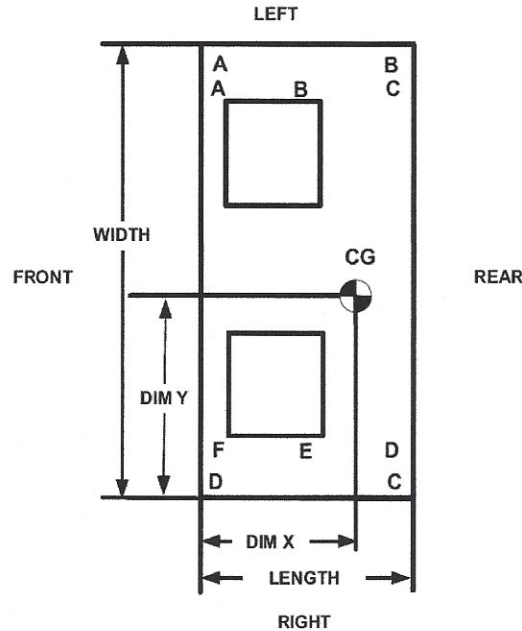
Project Name: 10ton split - Patriot

Unit Model #: NC120C00D6AAA3

Quantity: 1

System: YC120C00A2ALA5, NC120C00D6AAA3

### Corner Weights & Center of Gravity



### VERTICAL POSITION

### Corner Weights & Center of Gravity NC/ND 090 Thru 240 Units

Model	Drive Options	Weight (lbs.)		Center of Gravity (in.)		4 Point Load Location (lbs.)				6 Point Load Location (lbs.)					
		Shipping	Operating	X	Y	A	B	C	D	A	B	C	D	E	F
<b>Vertical Airflow</b>															
NC090	Std. Mtr. and Drv.	524	498	16.2	26.7	109	128	141	120	71	79	88	97	86	78
	High Static Mtr. and Drv.	526	500	16.2	26.7	110	129	142	120	71	79	88	97	87	78
NC120	Std. Mtr. and Drv.	562	539	15.5	26.8	125	134	146	136	82	86	90	98	94	89
	High Static Mtr. and Drv.	573	550	15.5	26.7	127	136	148	139	84	87	91	100	96	91
ND120	Std. Mtr. and Drv.	564	541	15.5	26.9	126	135	145	136	83	87	91	98	94	89
	High Static Mtr. and Drv.	575	552	15.5	26.9	128	137	148	138	84	88	92	100	95	91
NC180	Std. Mtr. and Drv.	769	737	18.0	34.4	155	185	216	181	101	113	127	148	131	117
	High Static Mtr. and Drv.	797	765	18.0	34.4	161	192	224	188	104	117	132	154	136	122
ND180	Std. Mtr. and Drv.	769	737	18.0	34.4	155	185	216	181	101	113	127	148	131	117
	High Static Mtr. and Drv.	797	765	18.0	34.4	161	192	224	188	104	117	132	154	136	122
NC240	Std. Mtr. and Drv.	908	873	15.8	42.6	179	198	260	235	118	125	134	176	165	154
	High Static Mtr. and Drv.	938	903	15.7	42.4	185	204	269	245	122	129	138	182	171	161
ND240	Std. Mtr. and Drv.	908	873	15.8	42.6	179	198	260	235	118	125	134	176	165	154
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### Minimum Clearances

Minimum Clearances	
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Front with Return Air Opening	24"
Right Side with access for Piping, Power & Control Wiring Connections <sup>2</sup>	24"
Left Side	24"
Rear <sup>3</sup>	N/A
Bottom <sup>4</sup>	N/A

- <sup>1</sup> This dimension will vary if an electric heater, a supply air plenum or a base is used.
- <sup>2</sup> This dimension is required for normal installation and service.
- <sup>3</sup> Although no clearance is required for service and operation, some clearance may be required for routing the power and control wiring.
- <sup>4</sup> Allow enough clearance to trap the condensate drain line.

**Note:** If the coil has to be removed, the blower section can be unbolted and set aside and the coil can be lifted out the top of the evaporator section.



**Predator ID Split System**  
Split-System Air Handler R-410A AC

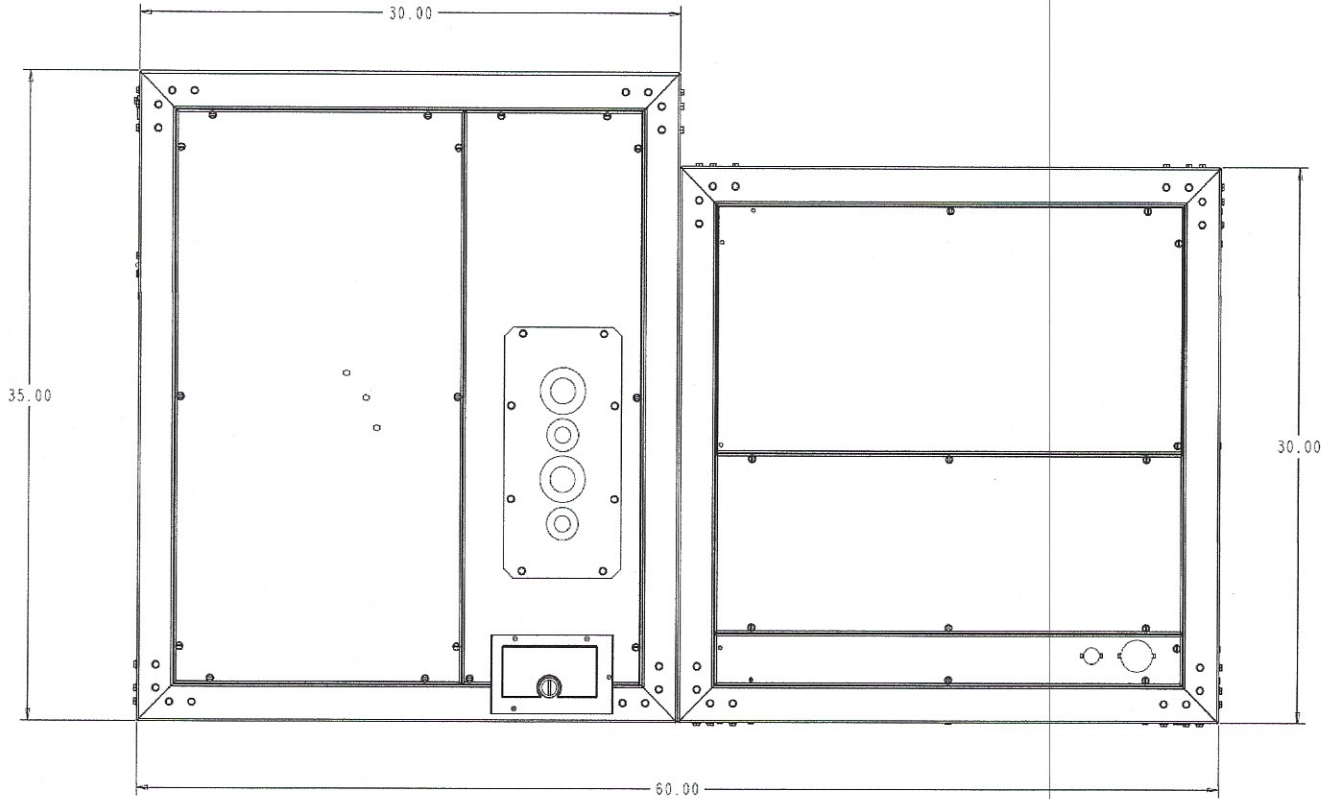
Project Name: 10ton split - Patriot

Unit Model #: NC120C00D6AAA3

Quantity: 1

System: YC120C00A2ALA5, NC120C00D6AAA3

**Dimensions & Clearances**



**HORIZONTAL CONFIGURATION DIMENSIONS FOR 7.5, 10 AND 20 TON UNITS**



# Predator ID Split System

Split-System Air Handler R-410A AC

Project Name: 10ton split - Patriot

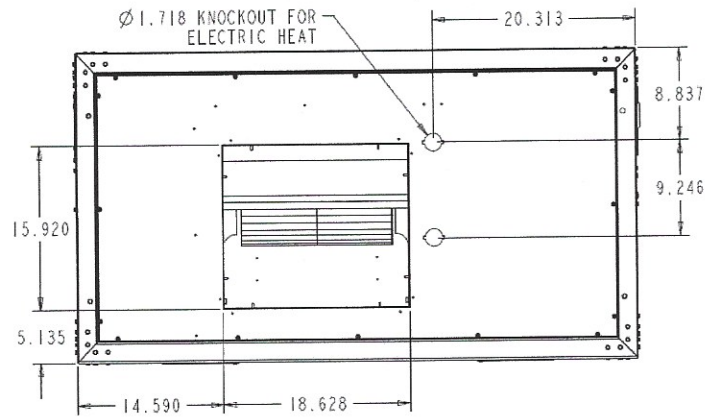
Unit Model #: NC120C00D6AAA3

Quantity: 1

System: YC120C00A2ALA5, NC120C00D6AAA3

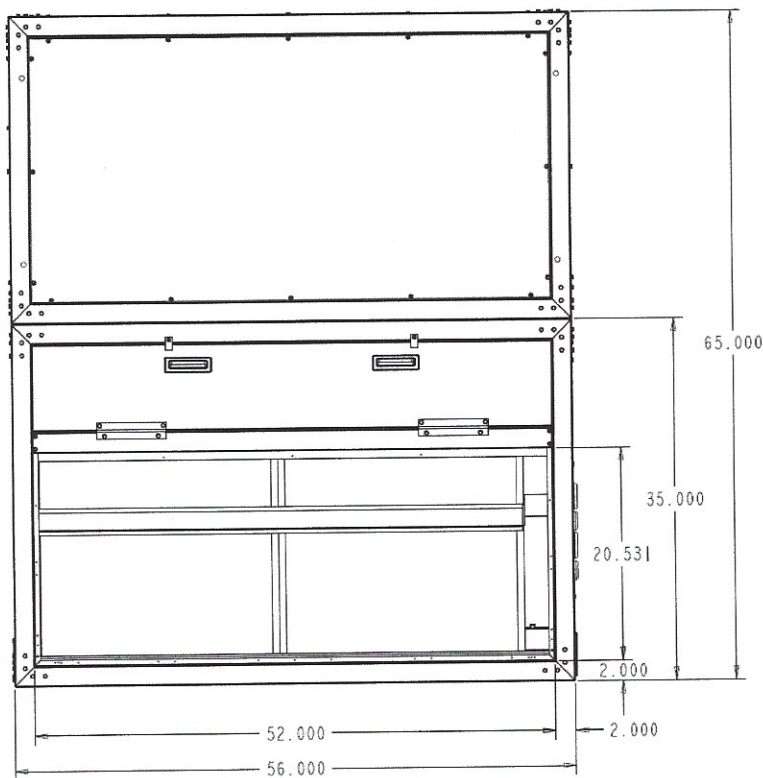
### Unit Dimensions

#### TOP VIEW

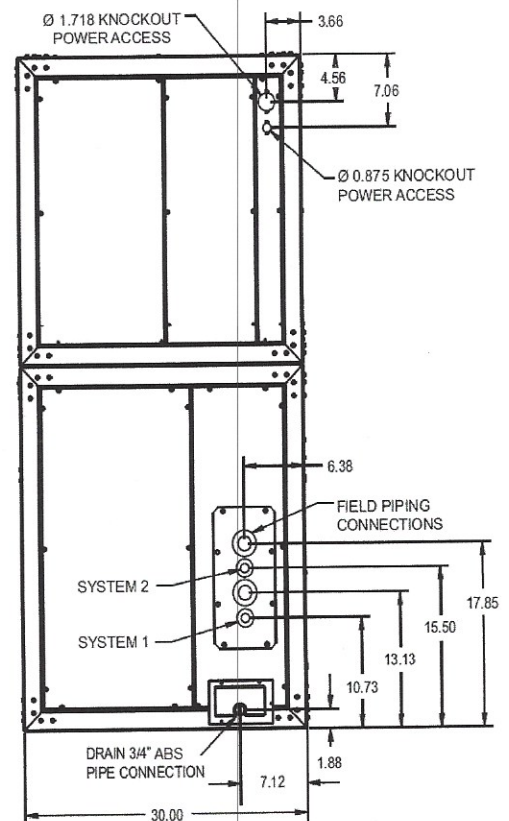


BLOWER OUTLET 10 TON

#### FRONT AND SIDE VIEW



FRONT VIEW - RETURN AIR 10 TON



RIGHT SIDE VIEW - DRAIN PIPING/CONTROLS  
\*SYSTEM 1 USED FOR 2-PIPE DIMENSIONS



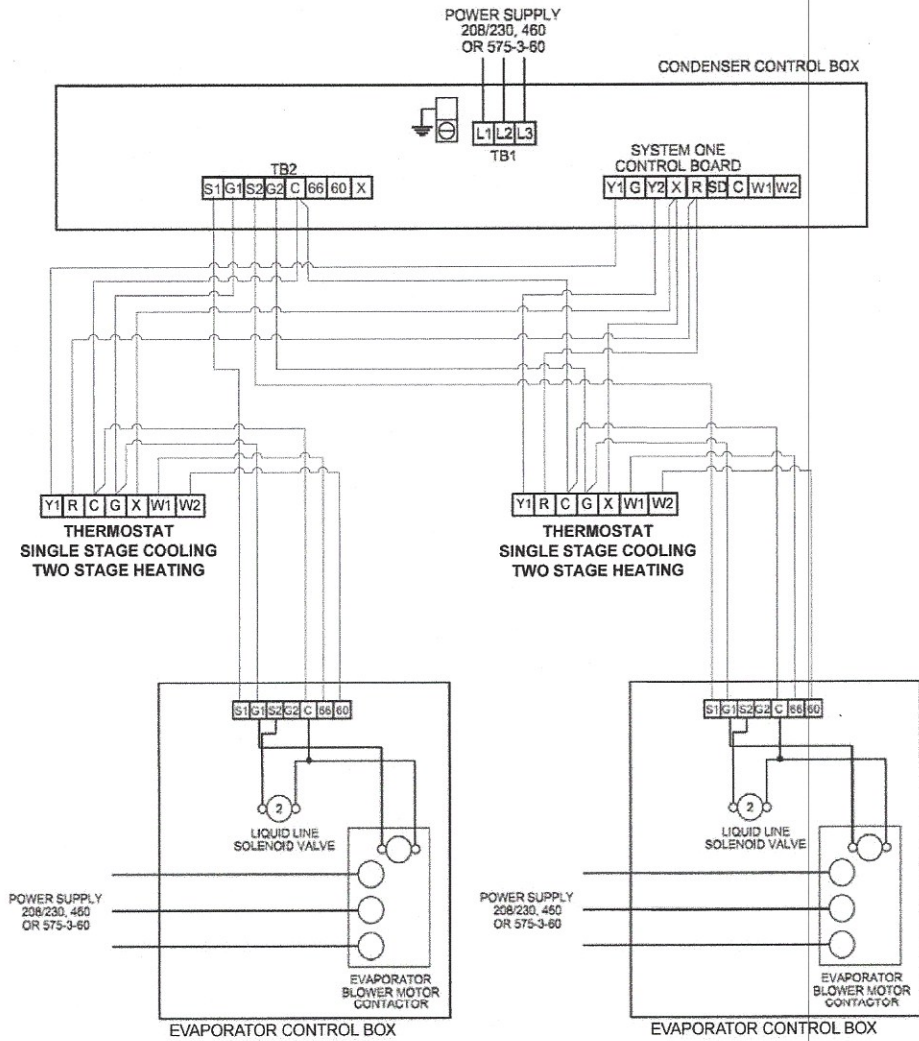
Project Name: 10ton split - Patriot

Unit Model #: NC120C00D6AAA3

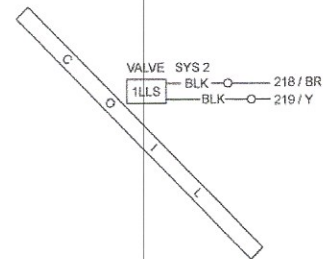
Quantity: 1

System: YC120C00A2ALA5, NC120C00D6AAA3

### Wiring Diagram



Typical Field Wiring Diagram - Twin 10-20 Ton Evaporator Units with 4-Pipe Condenser Unit



10-20 Liquid Line Solenoid Wiring

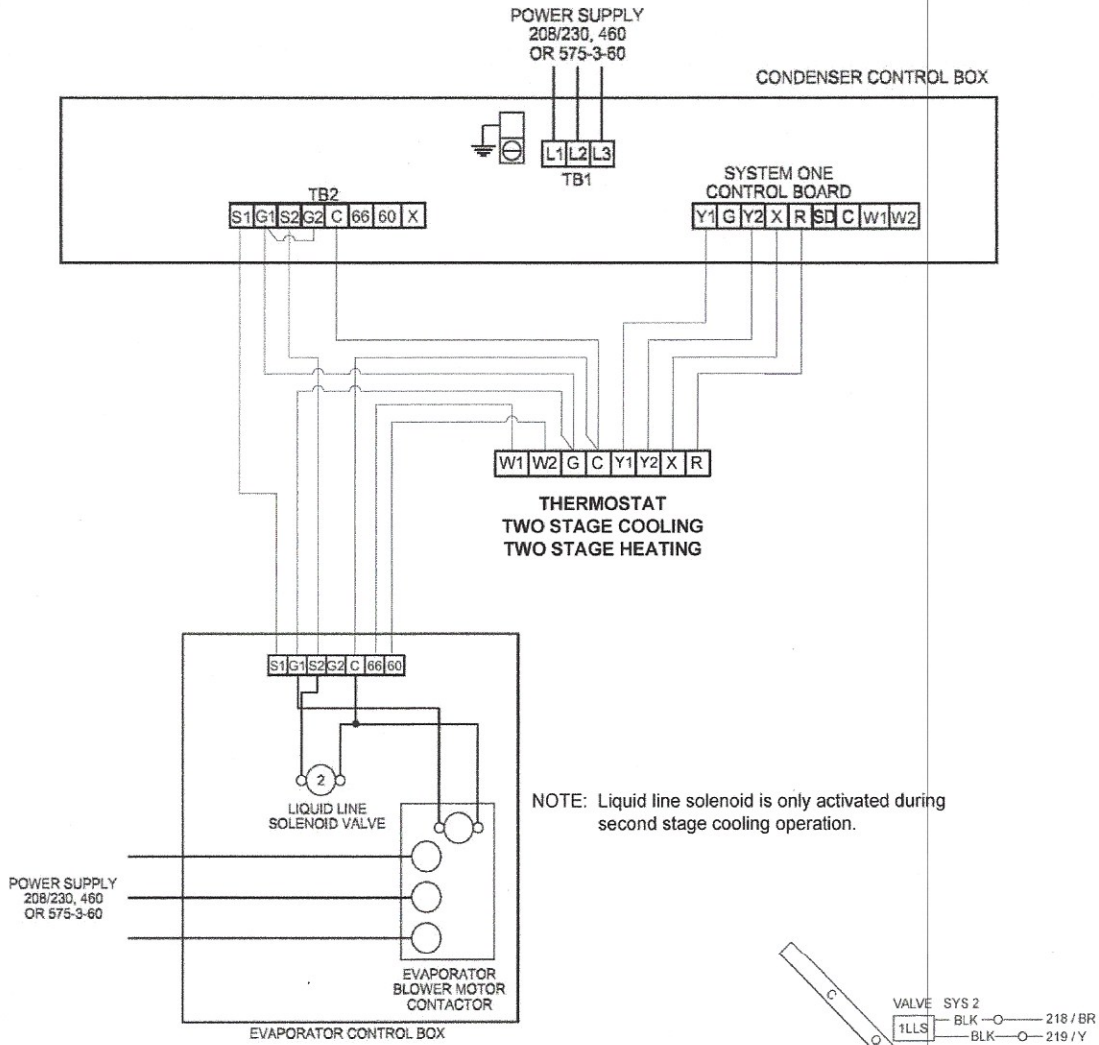
Project Name: 10ton split - Patriot

Unit Model #: NC120C00D6AAA3

Quantity: 1

System: YC120C00A2ALA5, NC120C00D6AAA3

### Wiring Diagram



Typical Field Wiring Diagram - 10-20 Ton Evaporator Unit with 10-20 Ton Condenser Unit

10-20 Ton Liquid Line Solenoid Wiring

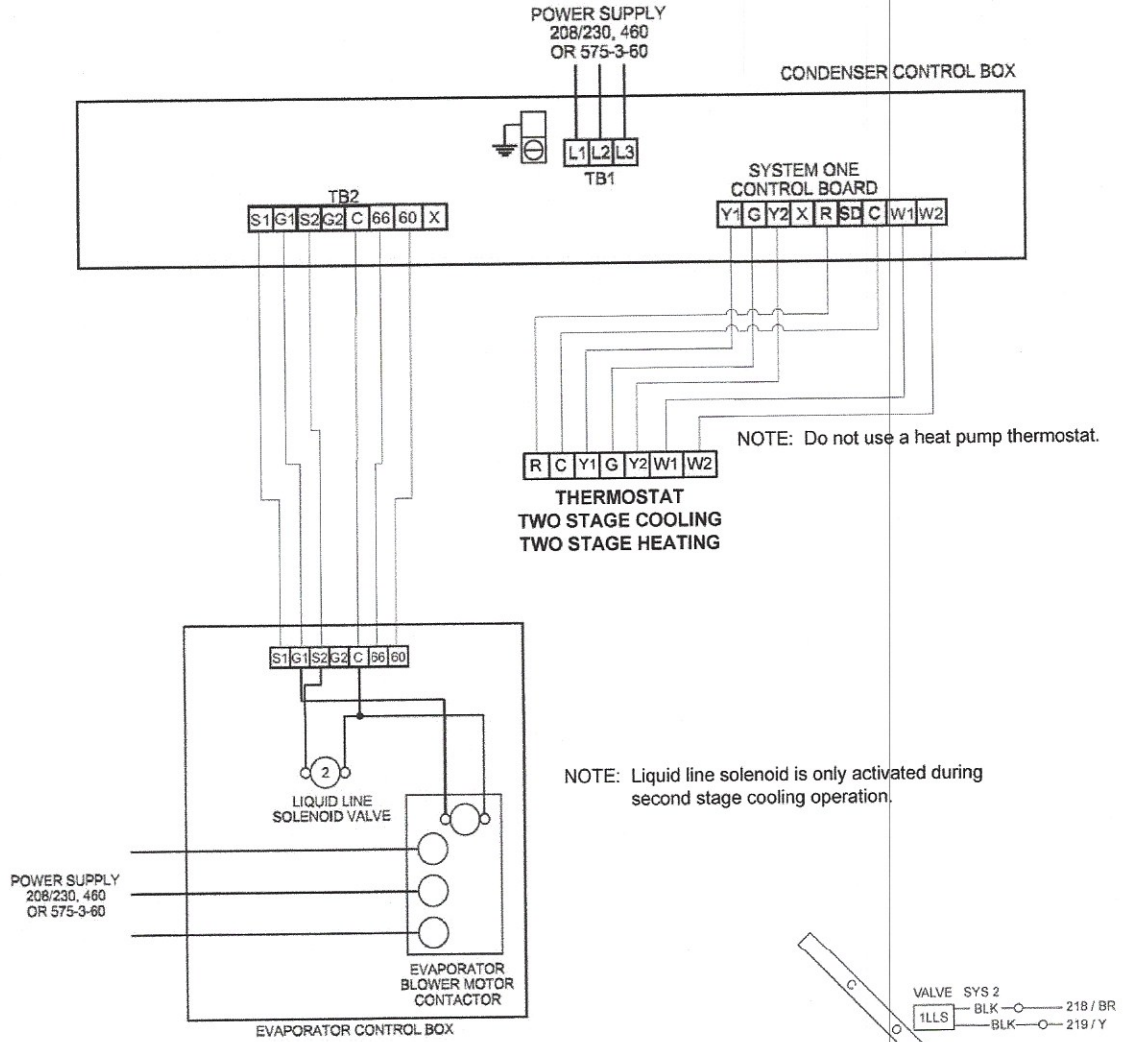
Project Name: 10ton split - Patriot

Unit Model #: NC120C00D6AAA3

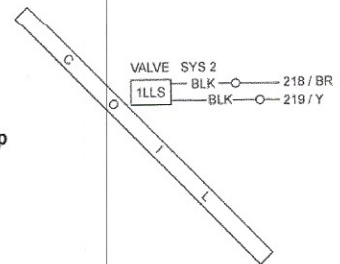
Quantity: 1

System: YC120C00A2ALA5, NC120C00D6AAA3

### Wiring Diagram



Typical Field Wiring Diagram - 10-20 Ton Evaporator Unit with 10-20 Ton Heat Pump



10-20 Ton Liquid Line Solenoid Wiring