



Parts Manual

KSD-1200
(AC380V/50Hz/3PH)
V1.0



Zhengzhou Kaixue Transport Refrigeration Equipment Co., Ltd.

Preface

This manual is proposed by Zhengzhou Kaixue Transportation Refrigeration Equipment Co., Ltd.

This manual is centralized and drafted by the Technology R & D Department of Zhengzhou Kaixue Transportation Refrigeration Equipment Co., LTD.

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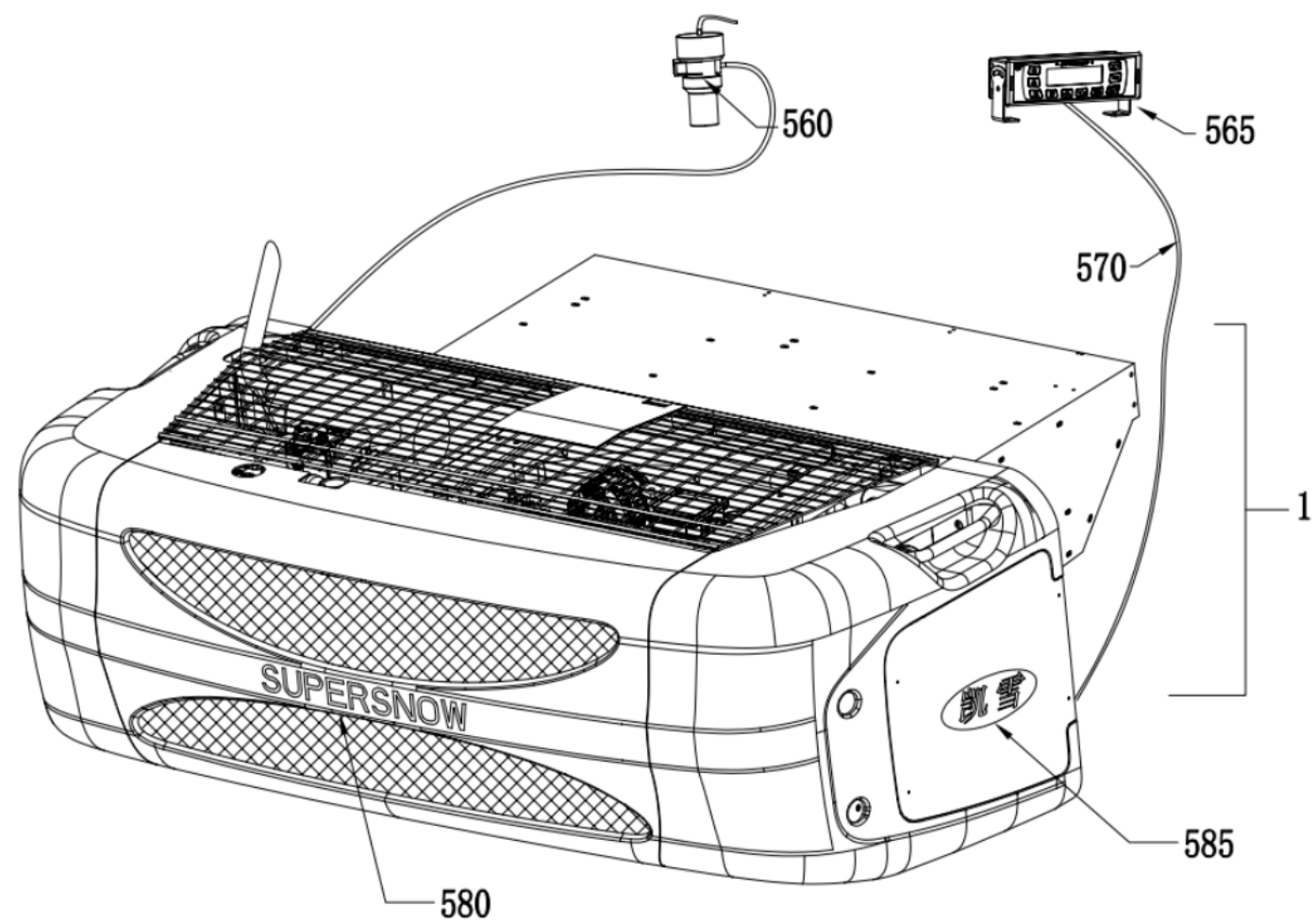
The previous releases of the standard replaced by this manual are:

NO.	Revise version number	Revise content	Revise time	Revise personnel
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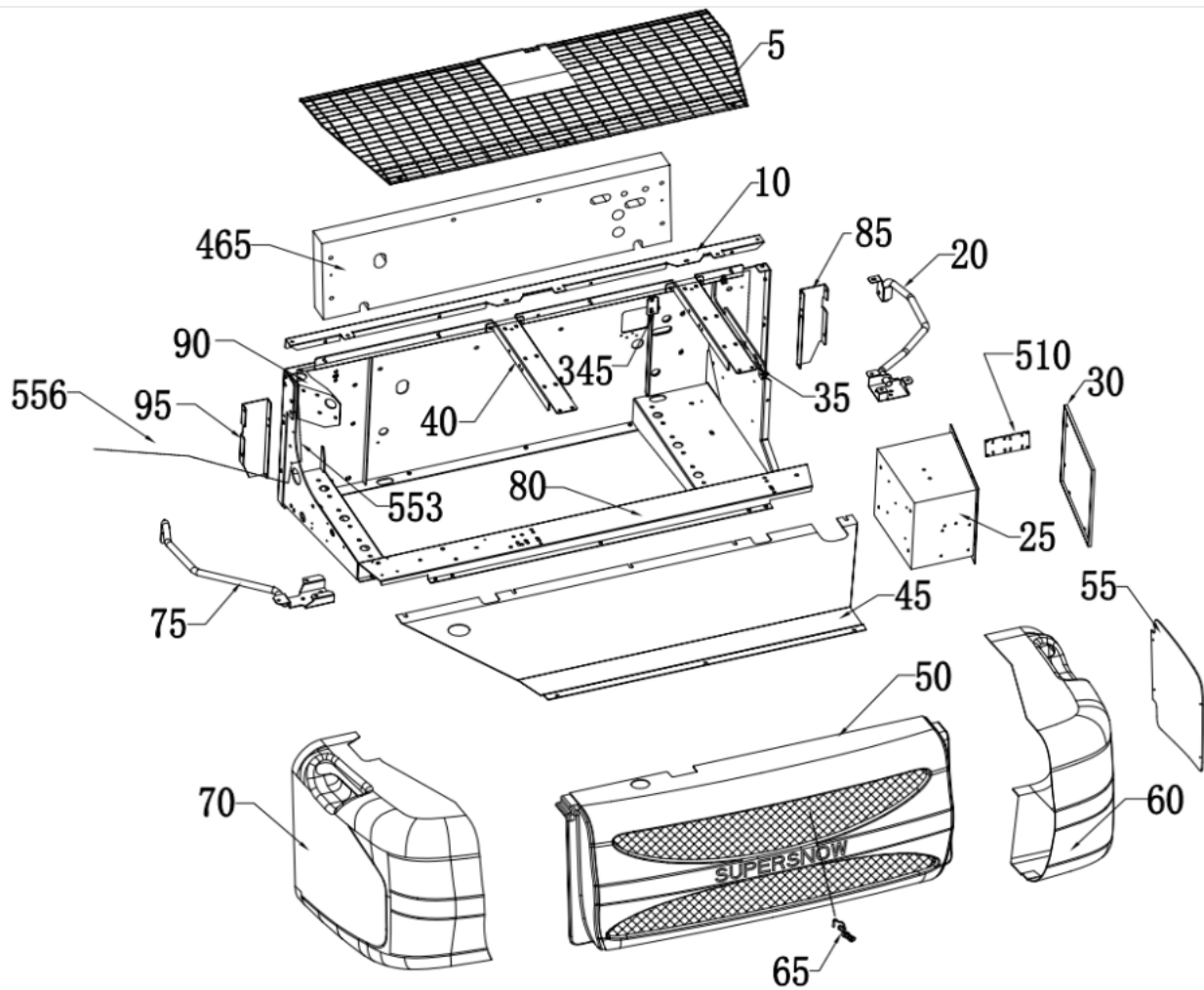
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Chapter 1 Unit Assembly Drawing



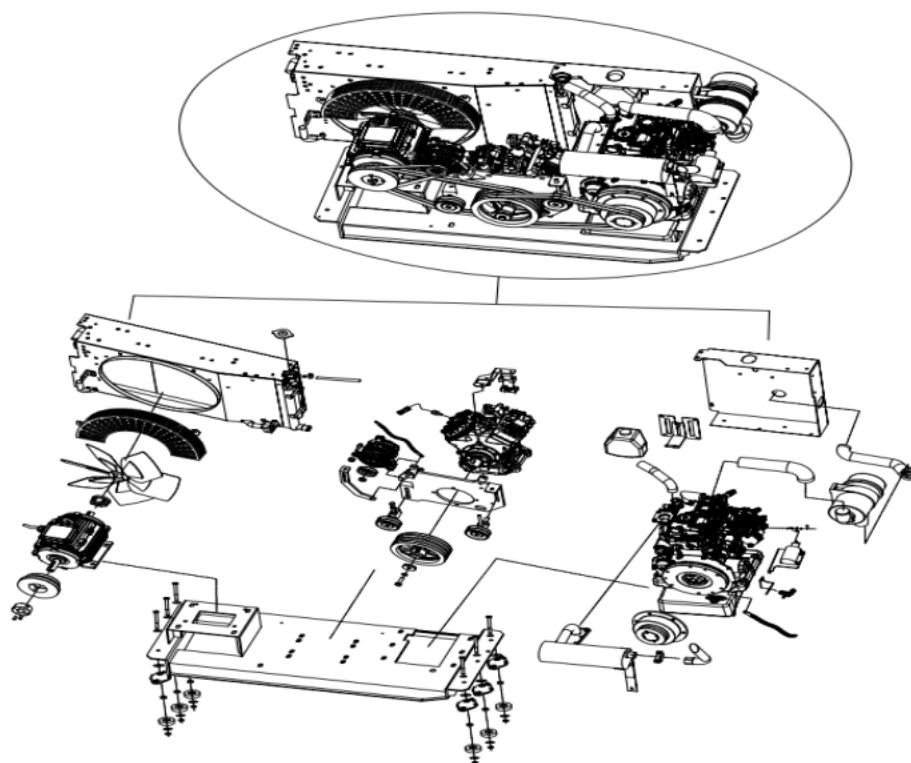
Item	Parts Description	PN	Qty
1	Unit Assy	801030119_V1.0	1

Chapter 2 Unit Frame and Cover Drawing

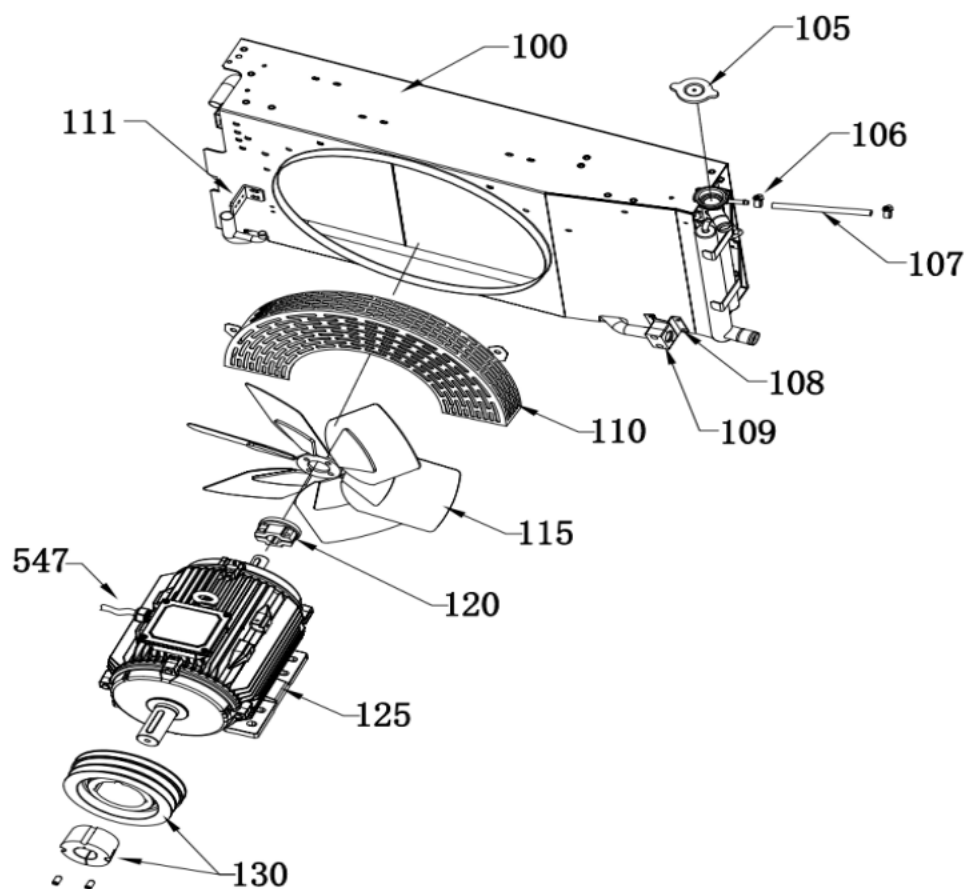


Item	Parts Description	PN	Qty
5	Top grill	12. 1. 27. 0625/003011179	1
10	Harness cover plate	12. 1. 25. 0129/003010113	1
20	Right side handle	12. 1. 25. 0297/003010170	1
25	Electrical control box	12. 1. 25. 1115/003010507	1
30	Electrical control box cover-internal	12. 1. 25. 1310/003010664	1
35	Condenser coil fix plate-right	12. 1. 25. 0133/003010116	2
40	Condenser coil fix plate-left	12. 1. 25. 0141/003010123	2
45	Bottom cover	12. 1. 25. 0132/003010115	1
50	Front cover	12. 1. 03. 0178/003030158	1
55	Electrical control box cover-external	12. 1. 03. 0062/003030161	1
60	Condenser side cover-right	12. 1. 03. 0060/003030160	1
65	Ambient sensor	12. 1. 08. 0036/004070012	1
70	Condenser side cover-left	12. 1. 03. 0061/003030159	1
75	Left side handle	12. 1. 25. 0296/003010169	1
80	Engine fix plate	12. 1. 25. 0127/003010111	1
85	Right side cover fix plate	12. 1. 25. 0067/003010086	1
90	Lifting plate	12. 1. 25. 0076/003010094	1
95	Left side cover fix plate	12. 1. 25. 0077/003010095	1

Chapter 3 Power Pack Drawing

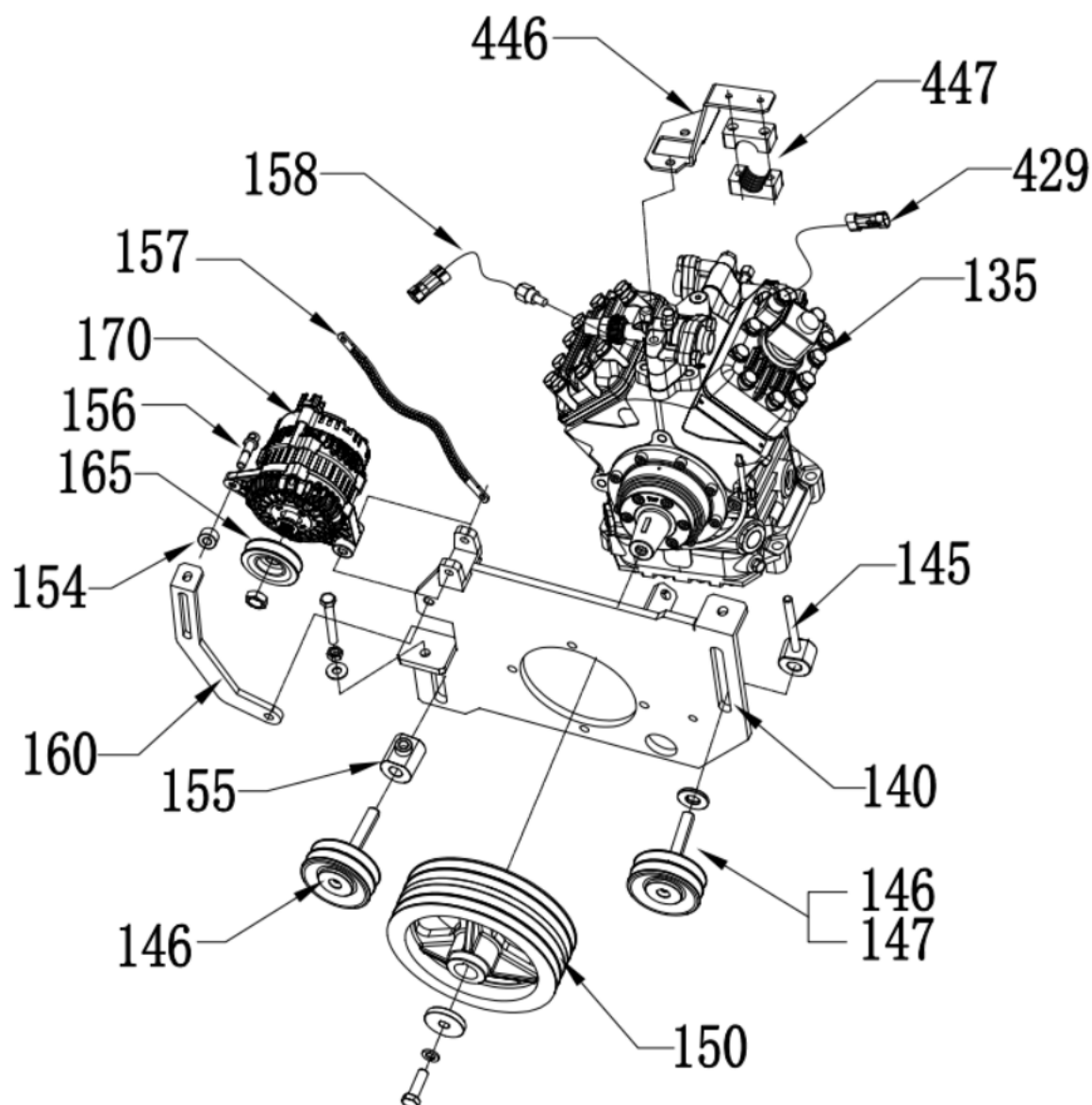


3.1 Electric Standby Drawing

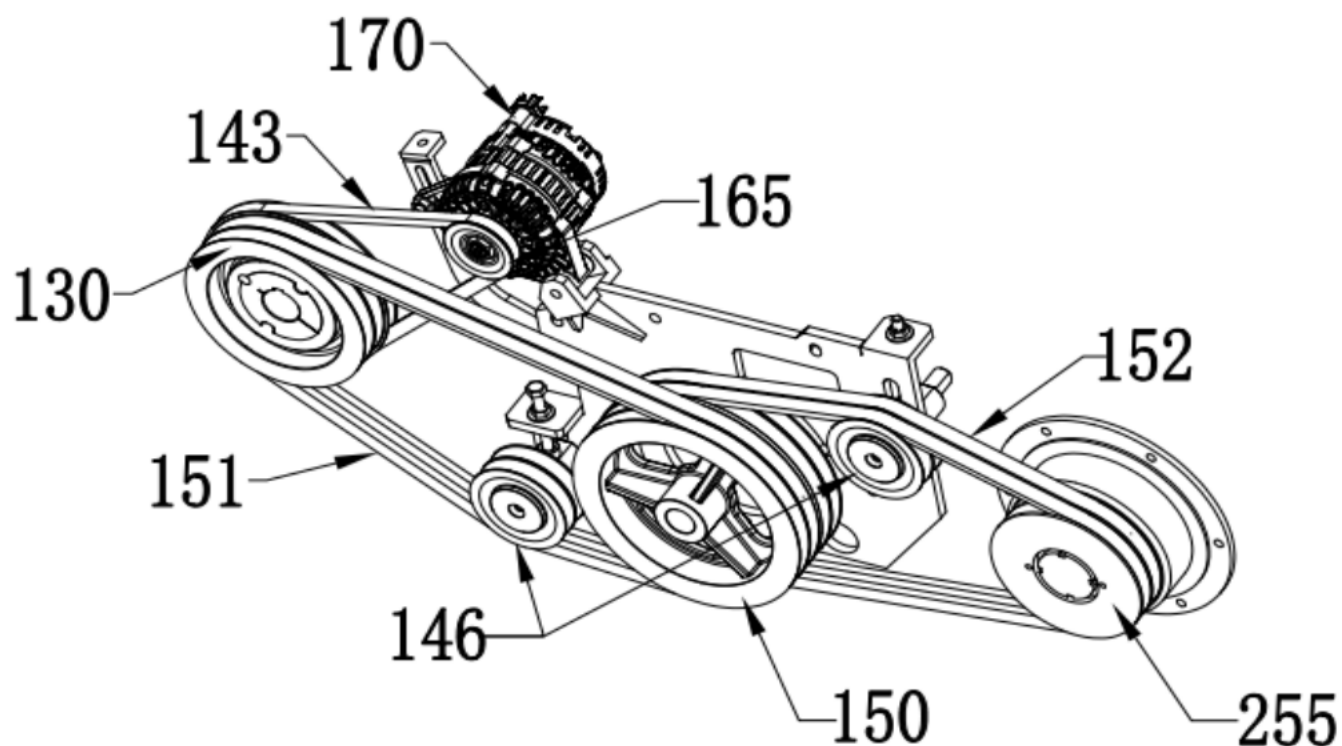


Item	Parts Description	PN	Qty
100	Condenser coil	12. 1. 02. 0057/005020033	1
105	Radiator cap	12. 1. 27. 0292/003100001	1
106	Stainless steel clamp Φ 10-16mm	12. 1. 24. 0031/010050399	2
107	Overflow hose	12. 1. 27. 0324/009120008	1
108	Condenser coil HP pipe bracket	003012093	1
109	Φ 25 plastic clamp	010050342	1
110	Condenser fan cover	12. 1. 25. 0596/003012093	1
111	Stop valve support	12. 1. 25. 0292/003010167	1
115	Condenser fan blade	12. 1. 12. 0029/004090074	1
120	Condenser fan blade fixing sleeve	12. 1. 25. 0167/003010127	1
125	Electric motor	12. 1. 19. 0107/006050031	1
130	Electric motor pulley	12. 1. 28. 0066/006070009	1

3.2 Compressor Connection Drawing

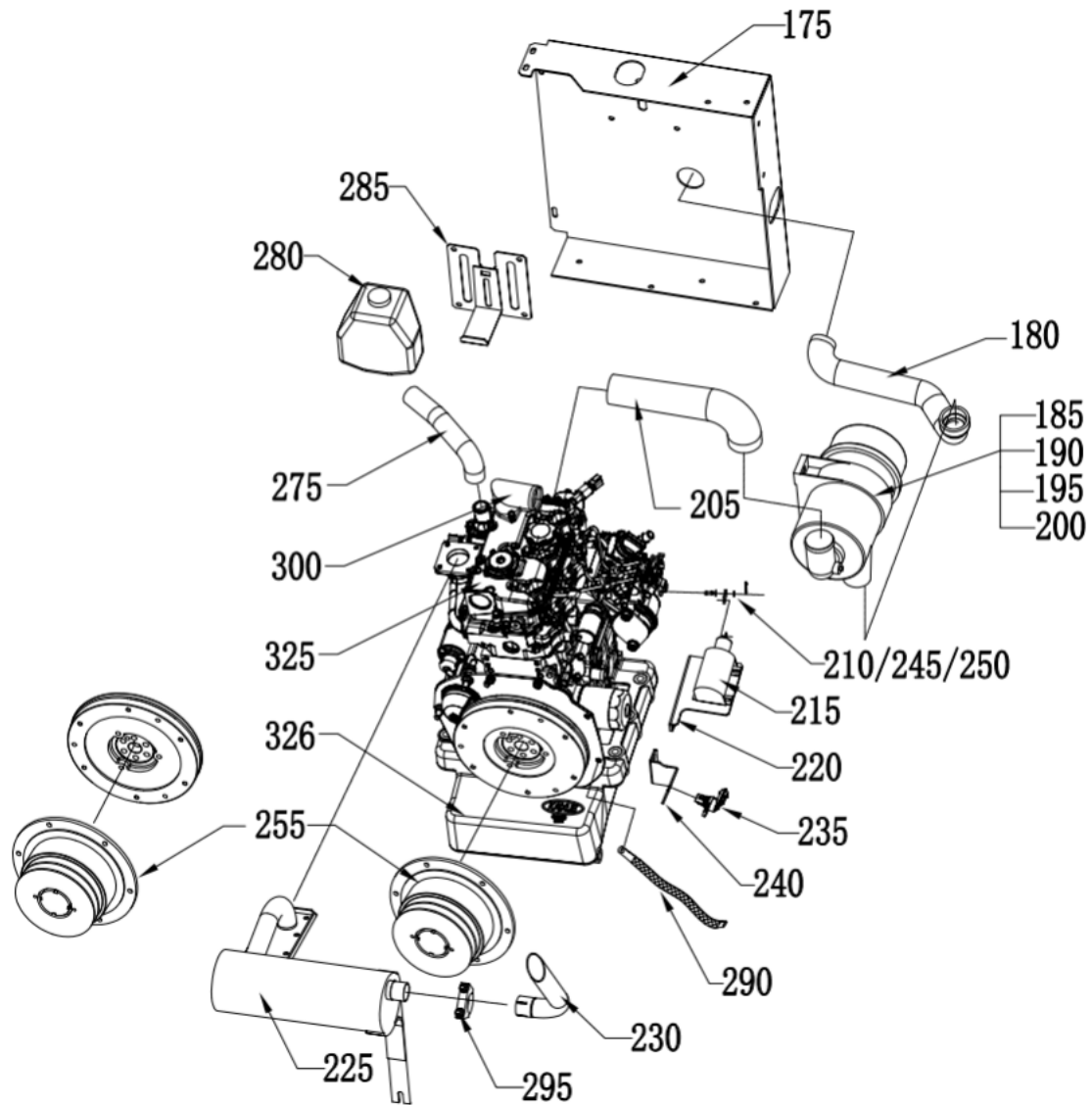


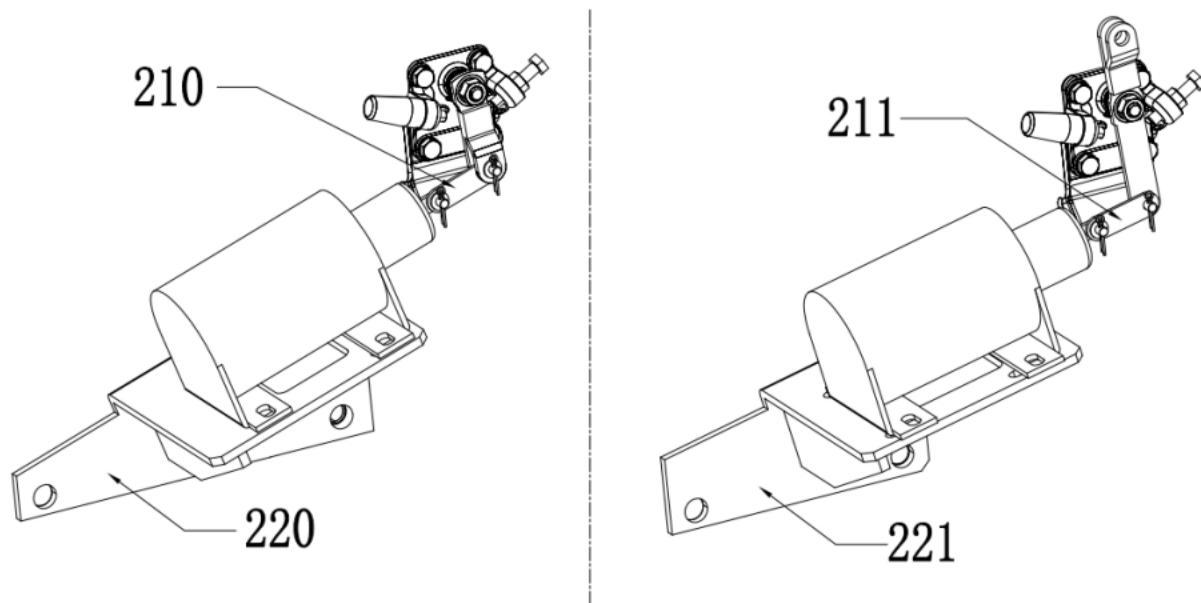
3.3 Belt Connection Drawing



Item	Parts Description	PN	Qty
135	Compressor	12. 1. 01. 0065/006070008	1
140	Compressor bracket	12. 1. 25. 1199 (before Oct 2023)	1
		003012108 (after Oct 2023)	1
143	Alternator belt	12. 1. 33. 0424/006060364	1
		12. 1. 33. 0435/006060375	1
145	Engine tensioner shaft sleeve	12. 1. 25. 0269/006070071	1
146	Tensioner	12. 1. 28. 0072/006070010	2
147	Tensioner gasket	12. 1. 25. 0593/003010305	1
150	Compressor pulley	12. 1. 28. 0065/006070008	1
151	Electric motor to compressor belt	12. 1. 33. 0405/006060345	2
152	Engine to compressor belt	12. 1. 33. 0404/006060344	2
154	Alternator tensioner arm shaft sleeve	12. 1. 28. 0583(stop after Oct 2023)	1
155	Electric motor tensioner arm shaft sleeve	12. 1. 25. 0269/006070071	1
156	Tensioner shaft	12. 1. 28. 0040/006070006	1
157	Alternator ground wire ($\phi 6-\phi 8$)	12. 1. 27. 1125/004040669	1
158	CDT	12. 1. 08. 0034/004070036	1
160	Alternator tensioner arm	12. 1. 25. 0283 (Before Oct 2023)	1
		003012109 (After Oct 2023)	1
165	Alternator pulley	12. 1. 28. 0148/006070022	1
170	Alternator	006030122	1

3.4 Engine Connection Drawing

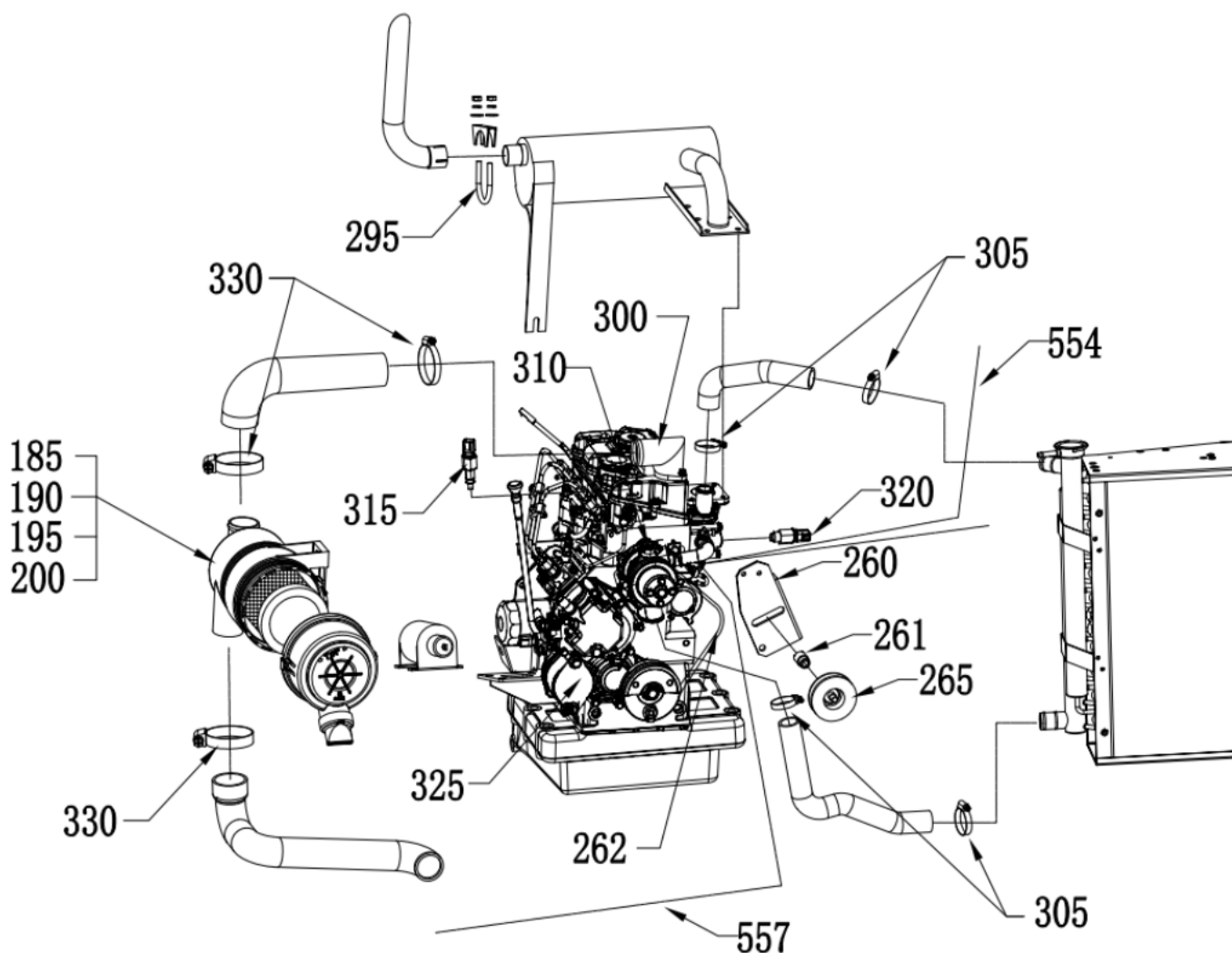




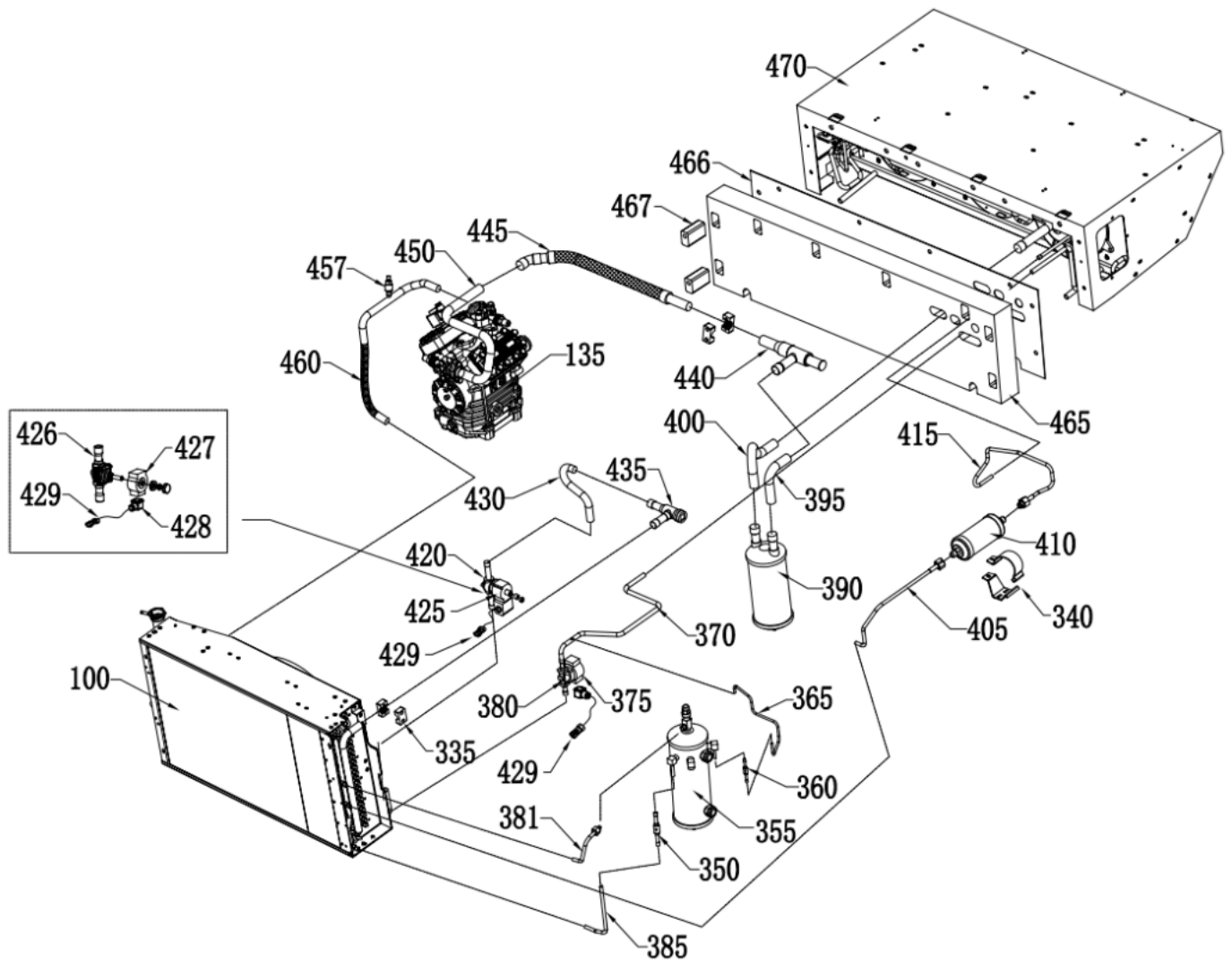
Item	Parts Description	PN	Qty
175	Radiator plate cover	12. 1. 25. 0135/003010117	1
180	Air filter intake pipe	12. 1. 27. 0484/009150032	1
185	Air filter bracket	12. 1. 27. 1466/006010139	1
190	Air filter	12. 1. 27. 0169/006010062	1
195	Air filter housing	12. 1. 27. 1465/006010138	1
200	Air filter front cover	12. 1. 27. 1449/006010126	1
205	Air filter intake pipe	12. 1. 27. 0485/009150005	1
210	Speed adjust plate	12. 1. 25. 1130/003010512	1
211	Speed adjust plate	12. 1. 25. 1679/003010999	1
215	Throttle solenoid	005030727	1
220	Throttle solenoid bracket	12. 1. 25. 1130/003010512	1
221	Throttle solenoid bracket	12. 1. 25. 1770/003011072	1
225	Muffler assy (black)	12. 1. 27. 0154	1
226	Muffler assy(stainless steel)	12. 1. 27. 1435/006010127	1
230	Muffler tail pipe(black)	12. 1. 27. 0136	1
231	Muffler tail pipe(stainless steel)	12. 1. 27. 1437/006010129	1
235	Engine RPM sensor	12. 1. 08. 0027/004070050	1
240	Engine RPM sensor bracket	12. 1. 25. 0808 (Perkins engine with standard oil sump)	1
	Engine RPM sensor bracket	003012000 (Perkins engine with bigger oil sump)	1
245	Throttle solenoid stainless steel pin $\phi 6 \times 15.7$	12. 1. 27. 1459/010010481	1
246	Throttle solenoid stainless steel pin $\phi 5 \times 7.5$	12. 1. 27. 1458/010010479	1
250	Throttle solenoid stainless steel gasket	18. 07. 0352/010030007	4
255	Engine clutch assy($\phi 135$ position)	006010158	1
	Engine clutch assy($\phi 200$ position)	006010157	1
260	Water pump tensioner bracket	12. 1. 25. 0137/003010119	1
261	Water pump tensioner shaft sleeve	12. 1. 25. 0660/003010332	1

262	Water pump tensioner belt	12. 1. 27. 0142/006060420	1
265	Water pump idle pulley	12. 1. 27. 0024/006070081	1
270	Bottom water pipe	12. 1. 27. 0486/009110007	1
275	Up water pipe	12. 1. 27. 0833/009110011	1
280	Coolant bottle	12. 1. 27. 0140/003100003	1
285	Coolant bottle bracket	12. 1. 25. 0085/003010103	1
290	Engine ground wire($\phi 8-\phi 8$)	12. 1. 27. 1455/004041249	1
295	Muffler U clamp	12. 1. 27. 0399/010050075	1
300	Engine air intake elbow pipe	12. 1. 27. 0805/009150036	1
305	Stainless steel clamp	12. 1. 24. 0049/010050035	4
310	Water temp sensor	12. 1. 08. 0060/004070043	1
315	Electric standby plug	12. 1. 14. 0091/004160008	1
320	Electric standby socket	12. 1. 14. 0092/004160009	1
325	Diesel engine 403D-11	12. 1. 19. 0114(Before 2022)	1
	Diesel engine 403EA-11	12. 1. 19. 0123(After 2022)	1
330	Stainless steel clamp	12. 1. 24. 0036/010050066	3
326	Oil sump	12. 1. 27. 1289/006010090	1

3.5 Engine Pipeline Connection Drawing



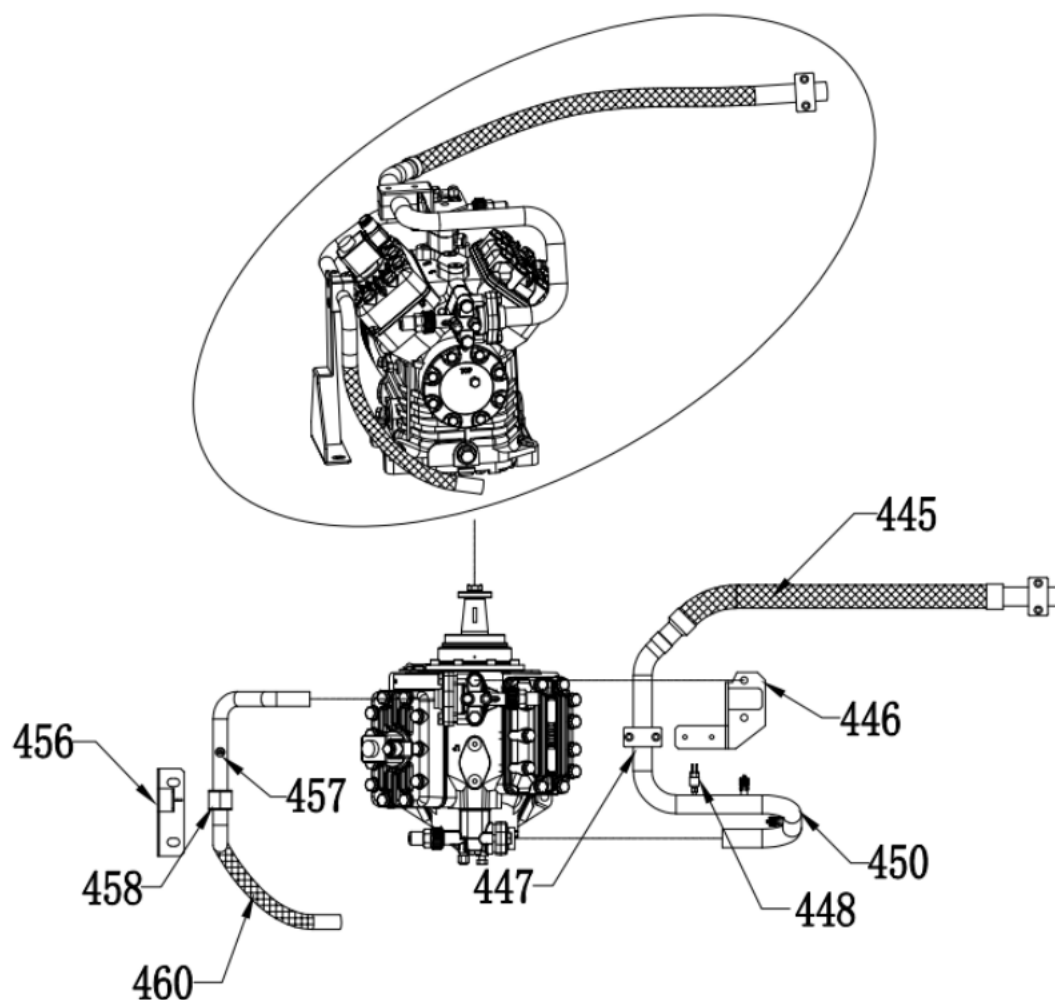
Chapter 4 Pipeline System and Valves Connection Drawing



Item	Parts Description	PN	Qty
335	Aluminum clamp	12. 1. 24. 0043/010050056	2
340	Drier bracket	12. 1. 25. 0228/003010145	1
345	KVL bracket	12. 1. 25. 0295/003010168	1
350	Check valve	12. 1. 18. 0016/005030099	2
355	Receiver tank	12. 1. 17. 0032/005060016	1
360	Check valve	12. 1. 18. 0013/005030098	1
365	Injection pipe	12. 1. 21. 0546/005100351	1
370	Defrost pipe	12. 1. 21. 0139/005100104	1
375	Defrost solenoid	12. 1. 11. 0011/005030006	1
380	Defrost valve	12. 1. 11. 0006/005030003	1
381	Receiver tank liquid outlet pipe	12. 1. 21. 0134/005100099	1
385	Receiver tank liquid inlet pipe	12. 1. 21. 0545/005100350	1
390	Gas-liquid separator	12. 1. 17. 0040/005080012	1
395	Gas-liquid separator air inlet pipe	12. 1. 21. 0136/005100101	1
400	Gas-liquid separator air outlet pipe	12. 1. 21. 0137/005100102	1

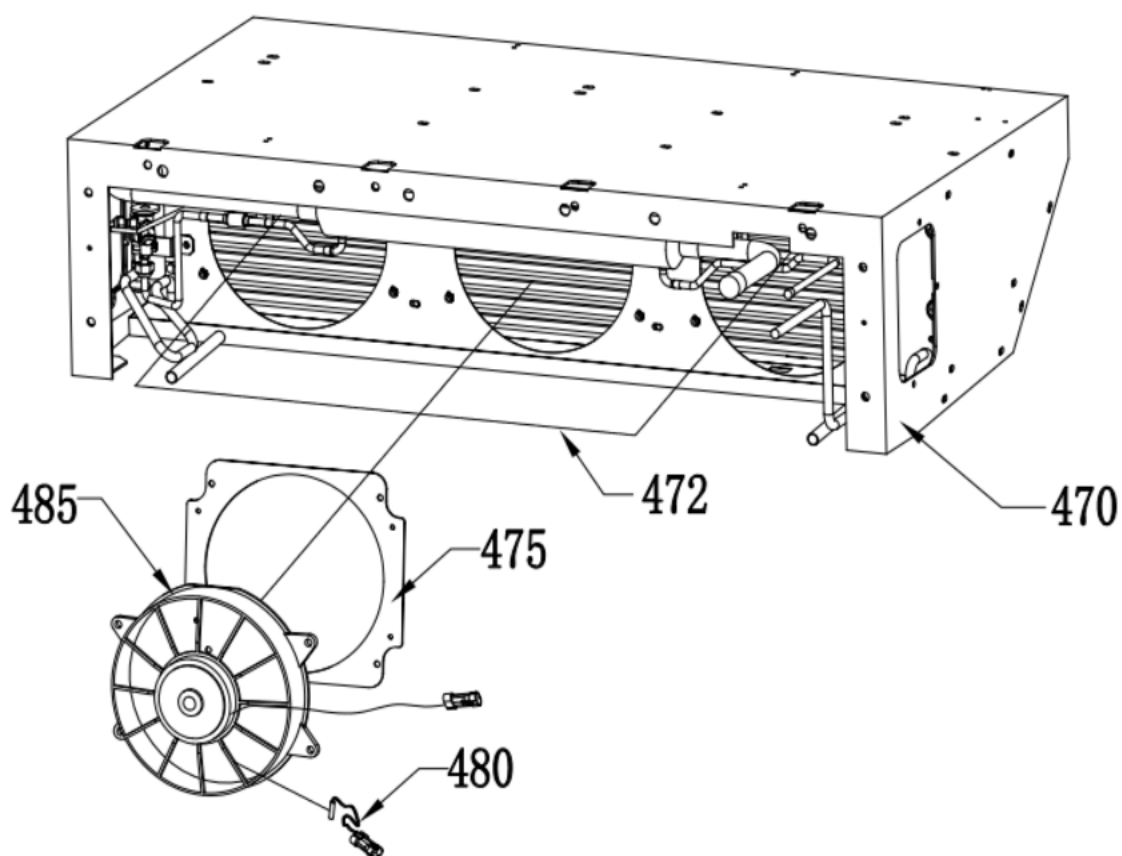
405	Liquid pipe 1	12. 1. 21. 0602/005100372	1
410	Drier	12. 1. 18. 0058/005050005	1
415	Liquid pipe 2	12. 1. 21. 0603/005050005	1
420	Stop valve(option 1-Spolan)	12. 1. 11. 0033/005030015	1
425	Stop solenoid(option 1-Spolan)	12. 1. 11. 0025/005030014	1
426	Stop valve(option 2-Castel)	12. 1. 11. 0082/005030035	1
427	Stop solenoid(option 2-Castel)	12. 1. 11. 0083/005030036	1
428	Solenoid plug	12. 1. 11. 0094/005030042	1
429	Adapter wire	12. 1. 07. 0392/004040642	3
430	Check valve pipe	12. 1. 21. 0408/005100266	1
435	Check valve	12. 1. 18. 0025/005030102	1
440	KVL	12. 1. 18. 0003/005030096	1

4.1 Compressor Pipe Connection Drawing



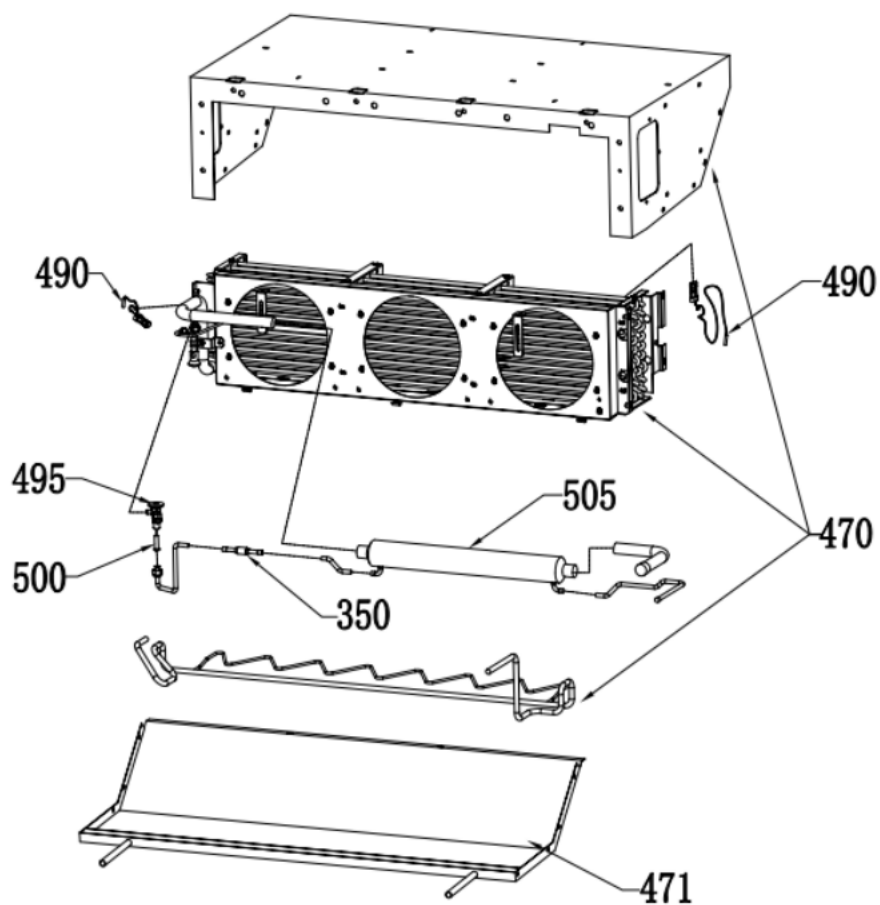
Item	Parts Description	PN	Qty
445	LP corrugated pipe	12. 1. 22. 0145/005100923	1
446	LP corrugated pipe bracket	12. 1. 25. 1747/003011059	1
447	LP pipe clamp	12. 1. 24. 0037/010050062	1
448	LP switch	12. 1. 09. 0041/004080005	1
450	LP copper	12. 1. 21. 0407/005100265	1
456	HP corrugated pipe bracket	12. 1. 25. 1833/003010004	1
457	HP switch	12. 1. 09. 0042/004080014	1
458	HP pipe clamp	12. 1. 24. 0043/010050056	1
460	HP corrugated pipe	005102377	1
465	Insulation plate	12. 1. 27. 0283/008040002	1
466	ABS plate	12. 1. 27. 0308/008040015	1
467	Reinforced wood block	12. 1. 27. 0310/008020060	8

Chapter 5 Evaporator Fan Assembling Drawing



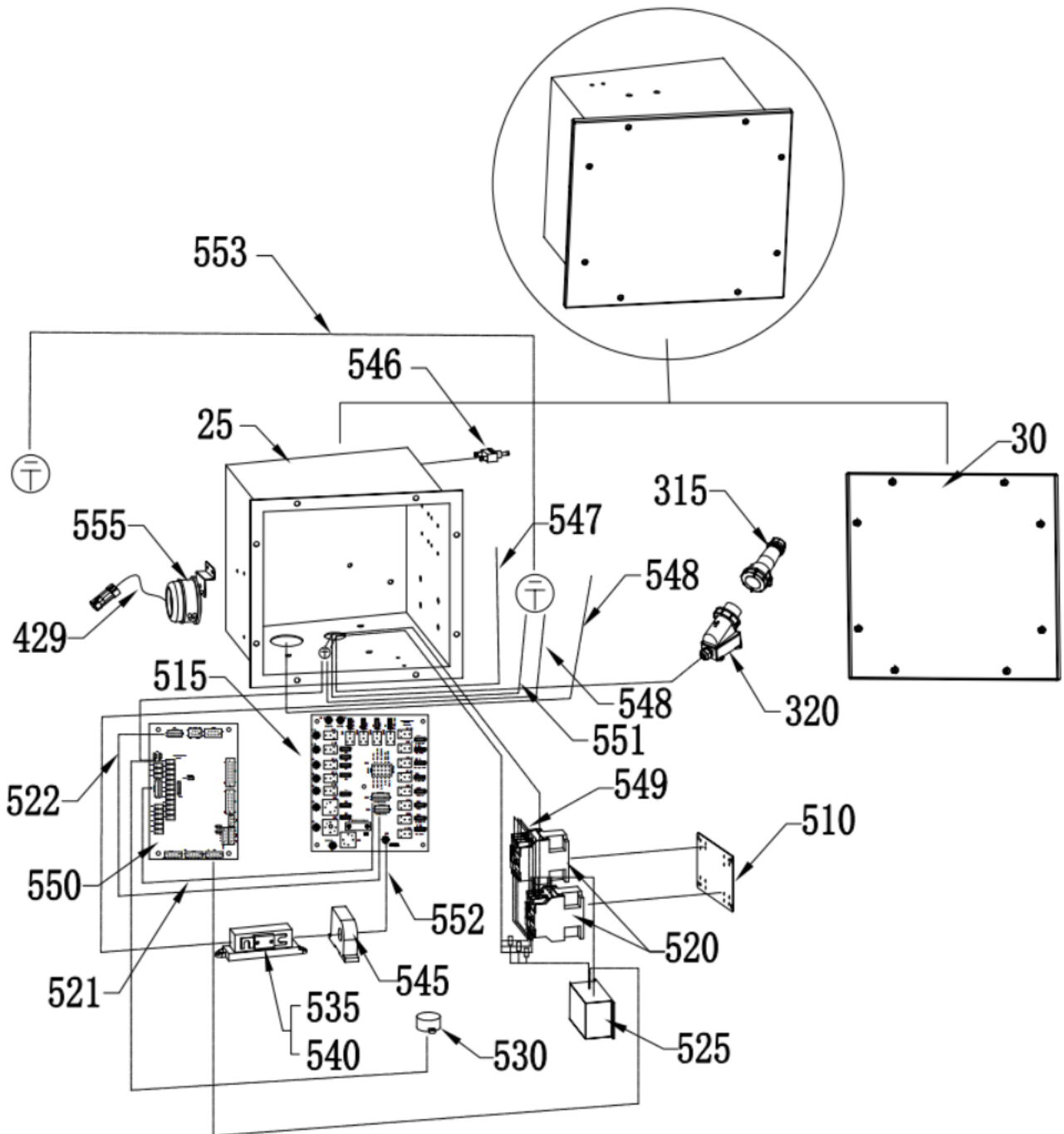
Item	Parts Description	PN	Qty
470	Evaporator coil	12. 1. 02. 0194/005020133	1
471	Evaporator draining pan	003012623	1
472	Output harness	004041374	1
475	Evaporator fan fix plate	12. 1. 25. 0762/003010363	3
480	Return air sensor	12. 1. 08. 0043/004070016	1
485	Evaporator fan	12. 1. 12. 0078/004090017	3

5.1 Evaporator Core Exploded Diagram



Item	Parts Description	PN	Qty
490	Defrost/supply air sensor	12. 1. 08. 0045/004070017	2
495	TXV	12. 1. 15. 0004/005030047	1
500	TXV needle	12. 1. 15. 0013/005030054	1
505	Heat exchanger	12. 1. 18. 0027/005040004	1

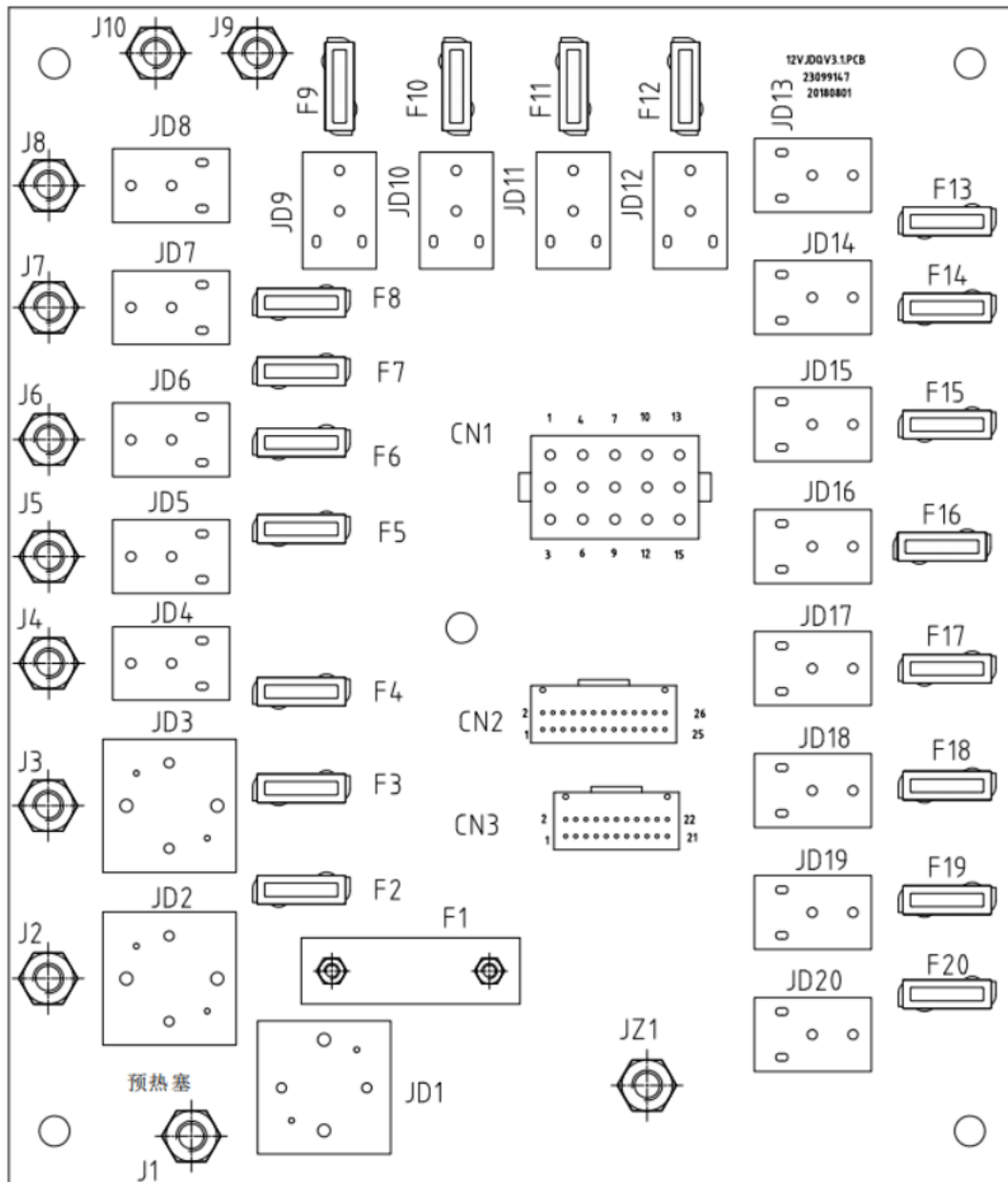
Chapter 6 Electrical Control Box Drawing



Item	Parts Description	PN	Qty
510	AC contactor fix plate	12. 1. 25. 1116/003010508	1
515	Relay board	12. 1. 05. 0147/004020037	1
520	AC contactor	12. 1. 13. 0224/004100094	2
521	Control hanressKXRW-002GA	12. 1. 06. 0114/004040198	1
522	Control harness KXRW-003GA	12. 1. 06. 0115/004040199	1
525	Electric standby module	12. 1. 05. 0166/004030012	1
530	Buzzer	12. 1. 27. 0321/004100197	1

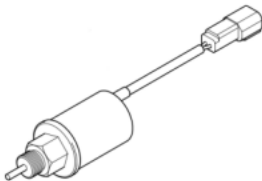
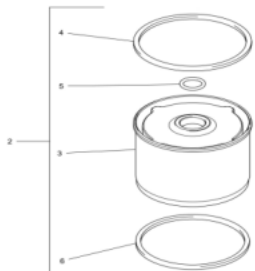
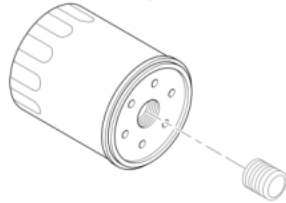
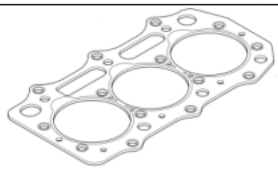
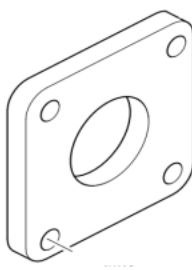
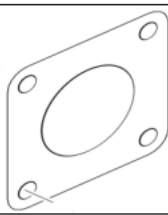
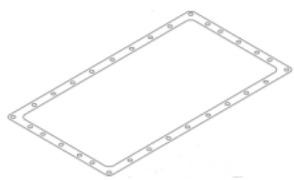
535	Fuse support	12. 1. 14. 0018/004100036	1
540	Fuse	12. 1. 14. 0021/004100012	2
545	DC current transformer	12. 1. 13. 0139/004100156	1
546	Service switch	12. 1. 13. 0029/004080032	1
547	Electric motor cable	12. 1. 27. 0330/004050002	1
548	Output harness	004041373	1
549	Electric standby AC cable (6*4mm ² *6pcs)	12. 1. 07. 0260/004050297	1
550	Control module	12. 1. 05. 0148/004030089	1
551	Black battery wire	12. 1. 14. 0150/004040025	1
552	Red battery wire	12. 1. 14. 0144/004040019	1
553	Black battery wire	12. 1. 14. 0145/004040020	1
554	Red battery wire	12. 1. 14. 0413/004041253	1
555	Defrost switch	12. 1. 09. 0009/004080016	1
556	Black battery wire	12. 1. 14. 0150/004040025	1
557	Red battery wire	12. 1. 14. 0151/004040026	1
560	Fuel pump	12. 1. 19. 0049/006040006	1
565	Controller	12. 1. 04. 0074/004010026	1
570	Control harness	12. 1. 06. 0203/004040231	1
575	SuperSnow logo	12. 1. 27. 0229/009060014	1
580	SUPER SNOW logo	12. 1. 27. 0030/009060012	1

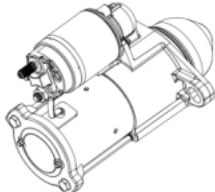
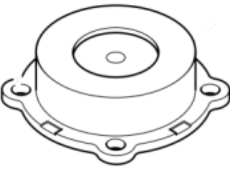
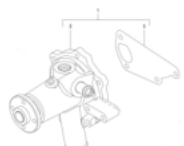
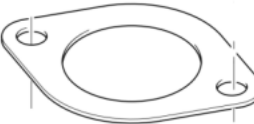
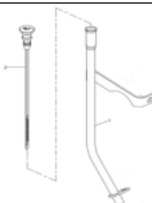
Chapter 7 Relay Board Fuse Drawing

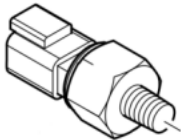
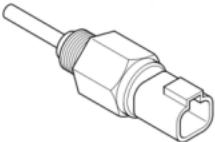


Item	Code	Parts Description	PN	Qty
590	F1	Glow plug fuse ANS-50A	004100008	1
595	F2、F7、F8、F9、F10、F11、F12、F13、F14、F15、F16、F17、F20	Fuse 0287005	004100731	13
600	F3、F18	Fuse 0287030	004100735	2
525	F4、F5、F6、	Fuse 0287020	004100734	3
530	F19	Fuse0287015	004100733	1
535	JD1、JD2、JD3	4 pins relay	004100320	3

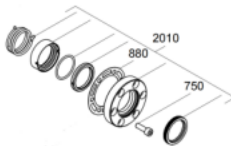
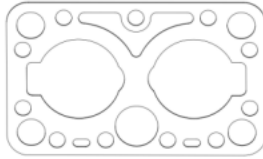
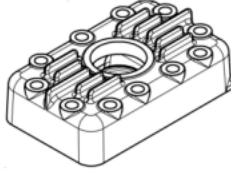
Chapter 8 Engine Spare Parts List

Item	Parts Description	Parts Code	PN	Drawing
1	Start/off solenoid	T401132	006010042	
2	Fuel filter	4326658	006010049	
3	Oil filter	140517050	006010053	
4	Engine cylinder gasket	111147560	006010070	
5	Muffler caution block	W14120360-50	006010074	
6	Muffler gasket	T415605-13	006010075	
7	Oil sump seal gasket	U10996900	006010079	

8	Starter	U5MK8259	006010081	
9	Air valve chamber cover	110506080	006010082	
10	Glow plug	185366250	006010083	
11	Water pump	U45011020	006010086	
12	Thermostat	U45206061	006010106	
13	Thermostat gasket	U45996850	006010107	
14	Lengthened oil gauge	198416830	006010111	
15	Bush-large	U5MB0026	006010130	
16	Bush-small	U5ME0031	006010131	
17	Engine CAM bearing bush	198517592	006010132	

18	Oil pressure switch	185246280	004080022	
19	Water temperature switch	W85720580	004080018	
20	...			

Chapter 9 Compressor Spare Parts List

Item	Parts Description	Parts Code	PN	Drawing
1	Shaft seal	80023	005010127	
2	Cylinder head gasket	06730	005010188	
3	Discharge/Suction port gasket	05067	005010189	
4	Blind flange black steel gasket	50636	005010190	
5	Cylinder head paper gasket	05695	005010665	
6	Unloader valve cylinder head	03383	005010714	
7	...			

