LAMPIRAN I

Daftar permasalah beserta kontrol permasalahannya

Daftar permasalahan beserta kontrol permasalahannya digunakan untuk melengkapi data proses Fuzzy FMEA, dimana data diambil dari perusahan CV.Agung Jaya Abadi menggunakan teknik *Fishbone* diagram, tabel ini menerangkan permasalahan beserta dampak yang akan di timbulkan jika tidak segera di perbaiki dan kontrol pencegahannya agar tidak terulang.

No	Permasalahan	Nama Permasalahan	Penyebab permasalahan	Dampak Permasalahan	Kontrol Permasalahan
1	IndorAC ruang	AC mengeluarkan air(bocor)	Saluran pembuangan air tersumbat karna kotoran	Mengakibatkan air menetes keluar	Service secara rutin satu bulan sekali.
2	Compressor AC ruang	Compressor cepat panas	Motor kipas outdoor mengalami kerusakan	Mengakibatkan angin yang di keluarkan AC tidak dingin	Ganti kapasitor kipas outdoor
3	Compressor AC ruang	Compressor tidak stabil	Oli compressor tidak bersih atau kapasitor mengalamai kerusakan	Mengakibatkan angin yang di keluarkan AC tidak dingin	Ganti Kapasitor
4	Compressor AC ruang	Compressor mati	Compressor rusak atau compressor mengalami konsleting listrik	Mengakibatkan angin yang di keluarkan AC tidak dingin	Ganti compressor
5	Indoor AC ruang	Unit Indor mati	PCB tidak terkoneksi dengan baik	AC tidak menyala	Ganti pcb
6	Outdoor AC ruang	Unit outdor mati	Kabel termis bermasalah	AC tidak menyala	Mengganti kabel termis
7	Compressor AC ruang	Compressor mengeluarkan suara berderik	Piston di kompresor aus atau kekurangan oli compressor	Mengakibatkan angin yang di keluarkan AC tidak dingin	Ganti piston atau tambahkan oli compressornya
8	Compressor AC ruang	Compressor mati	Overload mengalami konsleting listrik	Mengakibatkan angin yang di keluarkan AC tidak dingin	Ganti overload
9	Indoor AC ruang	Swing macet	Gir motor swing sudah aus	Mengakibatkan angin yang di keluarkan AC tidak dapat menyebar secara merata	Ganti motor swing
10	Compressor	Kapasitor mati	Kerusakan pata	Lilitan motor	Ganti kapasitor

	AC ruang		kapasitor	akan terbakar karna terjadi arus pendek	
11	Indoor AC ruang	Evaporator beku	Putaran blower indoor pelan atau lemah	Jika di diamkan akan mengakibatkan kebocoran pada indoor	Cek kapasitor indoor,jika lemah ganti dengan yang baru
12	Indoor AC ruang	AC sering mati secara mendadak	Kabel termis tidak berfungsi	Jika di diamkan akan terjadi kerusakan pada compressor	Kabel termis diganti
13	Outdoor AC ruang	Kurang Freon	Ada kebocoran pada ac tersebut	Mengakibatkan angin yang di keluarkan AC tidak dingin	Service secara rutin satu bulan sekali.
14	Indoor AC ruang	Motor indoor lemah	kapasitor indoor sudah tidak bekerja secara normal	Mengakibatkan angin yang di keluarkan AC tidak dingin	Service secara rutin satu bulan sekali.
15	Outdoor AC ruang	Ada es pada pipa tembaga	Unit koil kipas kotor atau filter kotor dan blower unit dalam yang tidak berputar	Mengakibatkan angin yang di keluarkan AC tidak dingin	Service secara rutin satu bulan sekali
16	Indoor AC ruang	Perawatan kondensasi	Sirkulasi udara unit tidak terhambat	Memperpendek umur compressor dan meningkatkan beban listrik	Service secara rutin satu bulan sekali
17	Indoor AC ruang	AC menjadi sangat berisik	Blower atau koil yang sudah kotor	Mengganggu kenyamanan jika di biarkan angin yang di keluarkan AC menjadi tidak dingin	Service secara rutin satu bulan sekali
18	Indoor AC ruang	AC mengeluarkan bau tidak sedap	Evaporator yang sudah kotor	Mengganggu kenyamanan	Service secara rutin satu bulan sekali,jika sudah lama gunakan chemical treatment
19	Indoor AC ruang	AC mengeluarkan debu	Filter ac kotor	Mengakibatkan angin yang di keluarkan AC tidak dingin dan berdebu	Bersihkan filter ac secara rutin
20	Indoor AC ruang	AC hanya bisa di jalankan secara manual	Sensor di bagian komponen pcb terkena air atau rusak	Sulit menyalakan AC karna harus secara manual	Keringkan sensor yang ada di pcb jika terkena air atau diganti

21	Outdoor AC ruang	Perawatan kondensor outdoor	Sirkulasi udara di dalam sistem ac agar tidak terhambat	Menyebabkan inefisiensi pendinginan dan umur compressor menjadi pendek	Serviece kondensor 1 tahun sekali
22	Compressor AC mobil	Compressor aus	Sudah lama digunakan	Mengakibatkan angin yang di keluarkan AC tidak dingin	Service rutin dan diganti
23	Compressor AC mobil	Sil Compressor bocor	Sudah lama digunakan	Mengakibatkan angin yang di keluarkan AC tidak dingin	Service rutin dan diganti
24	Compressor AC mobil	Kurang Freon	Selang karet bocor	Mengakibatkan angin yang di keluarkan AC tidak dingin	Service rutin dan diganti
25	Compressor AC mobil	Sil body compressor bocor	Sudah lama digunakan	Mengakibatkan angin yang di keluarkan AC tidak dingin	Service rutin dan diganti
26	Evaporator AC mobil	Evaporator Kotor	Banyaknya debu yang menempel pada evaporator	Mengakibatkan angin yang di keluarkan AC tidak dingin	Service Rutin
27	Condensor AC mobil	Kurang Freon	Condensor mengalami kebocoran	Mengakibatkan angin yang di keluarkan AC tidak dingin	Service rutin dan diganti
28	Evaporator AC mobil	Kurang Freon	Evaporator mengalami kebocoran	Mengakibatkan angin yang di keluarkan AC tidak dingin	Service rutin dan diganti
29	Condensor AC mobil	Condensor cepat panas	Extrafan sebagai pendingin mengalami kerusakan	Jika di biarkan terus menerus Condensor akan rusak	Diperbaiki extrafan nya atau diganti
30	Evaporator AC mobil	Thermostat rusak	Thermostat tidak bekerja dengan baik sehingga compressor terus bekerja	Mengakibatkan angin yang di keluarkan AC tidak dingin secara maksimal dan compressor cepat aus	Service rutin atau diganti
31	Evaporator AC mobil	Blower mati	Blower mati bisa terjadi karna kotor	Mengakibatkan Angin tidak keluar	Service rutin
32	Compressor AC mobil	Compressor cepat panas	Oli compressor kurang banyak	Mengakibatkan compressor cepat aus,panas yang berlebihan dan akan merusak komponen dalam	Service Rutin dan mengganti oli compressor

				compressor	
33	Compressor AC mobil	Oli compressor menempel di dinding evaporator dan condensor	Oli compressor terlalu berlebih	Mengakibatkan menurunnya kapasitas pendingin	Service rutin dan mengganti oli compressor
34	Compressor AC mobil	Magnetic clutch rusak	Magnetic clutch tidak tersalurkan arus listrik	Compressor tidak bekerja	Service Rutin
35	Evaporator AC mobil	Filter kotor	Banyaknya debu di filter evaporator	Mengakibatkan angin yang di keluarkan AC tidak dingin secara maksimal	Service rutin
36	Evaporator Ac mobil	Expansion mampet	Banyakanya kotoran di expansion	Mengakibatkan angin yang di keluarkan AC tidak dingin secara maksimal	Service rutin
37	Condensor AC mobil	Drayer mampet	Banyaknya kotoran di drayer	Mengakibatkan angin yang di keluarkan AC tidak dingin secara maksimal	Service rutin
38	Condensor AC mobil	Selenuid mampet	Banyaknya kotoran di selenuid	Mengakibatkan angin yang di keluarkan AC tidak dingin secara maksimal	Service rutin
39	Condensor AC mobil	Sikring putus	Arus listrik tidak stabil	Komponen AC tidak bekerja	Service rutin
40	Condensor AC mobil	Rile mati	Arus listrik yang bermasalah	Komponen AC tidak bekerja	Service rutin

LAMPIRAN II

RULE

Rule digunakan untuk proses implikasi pada *fuzzy* mamdani.

NO	ATURAN
1	*IF Severiy is very low and occurrence is very low and detection is very low then output is very low*
2	*IF Severiy is very low and occurrence is very low and detection is low then output is very low-low*
3	*IF Severiy is very low and occurrence is very low and detection is medium then output is low*
4	*IF Severiy is very low and occurrence is very low and detection is high then output is low-medium*
5	*IF Severiy is very low and occurrence is very low and detection is very high then output is medium*
6	*IF Severiy is very low and occurrence is low and detection is very low then output is very low-low*
7	*IF Severiy is very low and occurrence is low and detection is low then output is low*
8	*IF Severiy is very low and occurrence is low and detection is medium then output is low-medium*
9	*IF Severiy is very low and occurrence is low and detection is high then output is medium*
10	*IF Severiy is very low and occurrence is low and detection is very high then output is medium-high*
11	*IF Severiy is very low and occurrence is medium and detection is very low then output is low*
12	*IF Severiy is very low and occurrence is medium and detection is low then output is low-medium*
13	*IF Severiy is very low and occurrence is medium and detection is medium then output is medium*
14	*IF Severiy is very low and occurrence is medium and detection is high then output is medium-high*
15	*IF Severiy is very low and occurrence is medium and detection is very high then output is high*
16	*IF Severiy is very low and occurrence is high and detection is very low then output is low-medium*
17	*IF Severiy is very low and occurrence is high and detection is low then output is medium*
18	*IF Severiy is very low and occurrence is high and detection is medium then output is medium-high*
19	*IF Severiy is very low and occurrence is high and detection is high then output is high*
20	*IF Severiy is very low and occurrence is high and detection is very high then output is high-very high*
21	*IF Severiy is very low and occurrence is very high and detection is very low then output is medium*
22	*IF Severiy is very low and occurrence is very high and detection is low then output is medium high*
23	*IF Severiy is very low and occurrence is very high and detection is medium then output is high*
24	*IF Severiy is very low and occurrence is very high and detection is high then output is high-very high*
25	*IF Severiy is very low and occurrence is very high and detection is very high then output is very high*
26	*IF Severiy is low and occurrence is very low and detection is very low then output is very low-low*
27	*IF Severiy is low and occurrence is very low and detection is low then output is low*
28	*IF Severiy is low and occurrence is very low and detection is medium then output is low-medium*
29	*IF Severiy is low and occurrence is very low and detection is high then output is medium*
30	*IF Severiy is low and occurrence is very low and detection is very high then output is medium-high*
31	*IF Severiy is low and occurrence is low and detection is very low then output is low*
32	*IF Severiy is low and occurrence is low and detection is low then output is low-medium*
33	*IF Severiy is low and occurrence is low and detection is medium then output is medium*
34	*IF Severiy is low and occurrence is low and detection is high then output is medium-high*
35	*IF Severiy is low and occurrence is low and detection is very high then output is high*
36	*IF Severiy is low and occurrence is medium and detection is very low then output is low-medium*
37	*IF Severiy is low and occurrence is medium and detection is low then output is medium*
38	*IF Severiy is low and occurrence is medium and detection is medium then output is medium-high*
39	*IF Severiy is low and occurrence is medium and detection is high then output is high*
40	*IF Severiy is low and occurrence is medium and detection is very high then output is high-very high*
41	*IF Severiy is low and occurrence is high and detection is very low then output is medium*
42	*IF Severiy is low and occurrence is high and detection is low then output is medium-high*
43	*IF Severiy is low and occurrence is high and detection is medium then output is high*
44	*IF Severiy is low and occurrence is high and detection is high then output is high-very high*
45	*IF Severiy is low and occurrence is high and detection is very high then output is very high*
46	*IF Severiy is low and occurrence is very high and detection is very low then output is medium-high*
47	*IF Severiy is low and occurrence is very high and detection is low then output is high*
48	*IF Severiy is low and occurrence is very high and detection is medium then output is high-very high*

49	*IF Severiy is low and occurrence is very high and detection is high then output is very high*
50	*IF Severiy is low and occurrence is very high and detection is very high then output is very high*
51	*IF Severiy is medium and occurrence is very low and detection is very low then output is low*
52	*IF Severiy is medium and occurrence is very low and detection is low then output is low-medium*
53	*IF Severiy is medium and occurrence is very low and detection is medium then output is medium*
54	*IF Severiy is medium and occurrence is very low and detection is high then output is medium-high*
55	*IF Severiy is medium and occurrence is very low and detection is very high then output is high*
56	*IF Severiy is medium and occurrence is low and detection is very low then output is low-medium*
57	*IF Severiy is medium and occurrence is low and detection is low then output is medium*
58	*IF Severiy is medium and occurrence is low and detection is medium then output is medium-high*
59	*IF Severiy is medium and occurrence is low and detection is high then output is high*
60	*IF Severiy is medium and occurrence is low and detection is very high then output is high-very high*
61	*IF Severiy is medium and occurrence is medium and detection is very low then output is medium*
62	*IF Severiy is medium and occurrence is medium and detection is low then output is medium-high*
63	*IF Severiy is medium and occurrence is medium and detection is medium then output is high*
64	*IF Severiy is medium and occurrence is medium and detection is high then output is high-very high*
65	*IF Severiy is medium and occurrence is medium and detection is very high then output is very high*
66	*IF Severiy is medium and occurrence is high and detection is very low then output is medium-high*
67	*IF Severiy is medium and occurrence is high and detection is low then output is high*
68	*IF Severiy is medium and occurrence is high and detection is medium then output is high-very high*
69	*IF Severiy is medium and occurrence is high and detection is high then output is very high*
70	*IF Severiy is medium and occurrence is high and detection is very high then output is very high*
71	*IF Severiy is medium and occurrence is very high and detection is very low then output is high*
72	*IF Severiy is medium and occurrence is very high and detection is low then output is high-very high*
73	*IF Severiy is medium and occurrence is very high and detection is medium then output is very high*
74	*IF Severiy is medium and occurrence is very high and detection is high then output is very high*
75	*IF Severiy is medium and occurrence is very high and detection is very high then output is very high*
76	*IF Severiy is high and occurrence is very low and detection is very low then output is low-medium*
77	*IF Severiy is high and occurrence is very low and detection is low then output is medium*
78	*IF Severiy is high and occurrence is very low and detection is medium then output is medium-high*
79	*IF Severiy is high and occurrence is very low and detection is high then output is high*
80	*IF Severiy is high and occurrence is very low and detection is very high then output high-very high*
81	*IF Severiy is high and occurrence is low and detection is very low then output is medium*
82	*IF Severiy is high and occurrence is low and detection is low then output is medium-high*
83	*IF Severiy is high and occurrence is low and detection is medium then output is high*
84	*IF Severiy is high and occurrence is low and detection is high then output is high-very high*
85	*IF Severiy is high and occurrence is low and detection is very high then output is very high*
86	*IF Severiy is high and occurrence is medium and detection is very low then output is medium-high*
87	*IF Severiy is high and occurrence is medium and detection is low then output is high*
88	*IF Severiy is high and occurrence is medium and detection is medium then output is high-very high*
89	*IF Severiy is high and occurrence is medium and detection is high then output is very high*
90	*IF Severiy is high and occurrence is medium and detection is very high then output is very high*
91	*IF Severiy is high and occurrence is high and detection is very low then output is high*
92	*IF Severiy is high and occurrence is high and detection is low then output is high-very high*
93	*IF Severiy is high and occurrence is high and detection is medium then output is very high*
94	*IF Severiy is high and occurrence is high and detection is high then output is very high*
95	*IF Severiy is high and occurrence is high and detection is very high then output is very high*
96	*IF Severiy is high and occurrence is very high and detection is very low then output is high-very high*
97	*IF Severiy is high and occurrence is very high and detection is low then output is very high*
98	*IF Severiy is high and occurrence is very high and detection is medium then output is very high*
99	*IF Severiy is high and occurrence is very high and detection is high then output is very high*
100	*IF Severiy is high and occurrence is very high and detection is very high then output is very high*
101	*IF Severiy is very high and occurrence is very low and detection is very low then output is medium*
102	*IF Severiy is very high and occurrence is very low and detection is low then output is medium-high*

103	*IF Severiy is very high and occurrence is very low and detection is medium then output is high*
104	*IF Severiy is very high and occurrence is very low and detection is high then output is high-very high*
105	*IF Severiy is very high and occurrence is very low and detection is very high then output is very high*
106	*IF Severiy is very high and occurrence is low and detection is very low then output is medium-high*
107	*IF Severiy is very high and occurrence is low and detection is low then output is high*
108	*IF Severiy is very high and occurrence is low and detection is medium then output is high-very high*
109	*IF Severiy is very high and occurrence is low and detection is high then output is very high*
110	*IF Severiy is very high and occurrence is low and detection is very high then output is very high*
111	*IF Severiy is very high and occurrence is medium and detection is very low then output is high*
112	*IF Severiy is very high and occurrence is medium and detection is low then output is high-very high*
113	*IF Severiy is very high and occurrence is medium and detection is mediumthen output is very high*
114	*IF Severiy is very high and occurrence is medium and detection is high then output is very high*
115	*IF Severiy is very high and occurrence is medium and detection is very high then output is very high*
116	*IF Severiy is very high and occurrence is high and detection is very low then output is high-very high*
117	*IF Severiy is very high and occurrence is high and detection is low then output is very high*
118	*IF Severiy is very high and occurrence is high and detection is medium then output is very high*
119	*IF Severiy is very high and occurrence is high and detection is high then output is very high*
120	*IF Severiy is very high and occurrence is high and detection is very high then output is very high*
121	*IF Severiy is very high and occurrence is very high and detection is very low then output is very high*
122	*IF Severiy is very high and occurrence is very high and detection is low then output is very high*
123	*IF Severiy is very high and occurrence is very high and detection is medium then output is very high*
124	*IF Severiy is very high and occurrence is very high and detection is high then output is very high*
125	*IF Severiy is very high and occurrence is very high and detection is very high then output is very high*

LAMPIRAN III

Hasil Perhitungan Pakar A menggunakan aplikasi Fuzzy FMEA :

NO	Nama Kerusakan	Detail Kerusakan	S	O	D	RPN
1	Indoor AC Ruang	1. Evaporator Beku	8.5	4.5	8.5	916,66
		2. Unit Indoor Mati	8.5	5.5	6	841.66
		3. Perawatan Kondensi	6	8.5	4	691.66
		4. AC Mati	7	4.5	6.5	687.49
		5. Thermistor rusak	7.5	6	5	625
		6. Motor indoor mati	6	5	4	550
		7. AC dijalankan secara manual	5	5	3.5	499.99
		8. AC mengeluarkan air	5.5	4.5	1	250
		9. Indoor AC berisik	5.5	3	1	233.33
		10.Swing Macet	3.5	3	1	212.5
		11.Filter AC kotor	2.5	3	1	172.22
		12. Indoor AC mengeluarkan bau tidak sedap	1.5	1	1	55.55
2	Outdoor AC Ruang	1. Unit outdoor mati	8	8.5	7	883.33
		2. Running capasitor rusak	7.5	6.5	6.5	733.33
		3. Perawatan kondensor outdoor	5	6.5	6.5	668.74
		4. Ada es pada pipa tembaga	3	2	3	275
		5. Fan kapasitor rusak	2	3	3	250
		6. Kurang Freon	3	1	2	172.22
3	Compressor AC Ruang	1. Compressor mati (overload)	8	8	8.5	916.66
		2. Compressor mati	8	8	8	883.33
		3. Compressor cepat panas	7	8	7	841.6
		4. Compressor tidak stabil	7	7.5	7	841
		5. Kapasitor mati	7	6.5	7	768.75
		6. Compressor mengeluarkan suara berderik	6	6.5	7.5	733
4	Compressor AC Mobil	1. Compressor aus	8	8.3	6.7	896.66
		2. Oli compressor menempel di dinding evaporator dan condenser	4.4	6.3	7.7	690
		3. Magnetic clutch rusak	4	5	7.7	638.33
		4. Sil Body Compressor bocor	4	5	7.5	625
		5. Sil Compressor bocor	7	4.5	5	622.22
		6. Compressor clutch selip	6.5	4.5	4.5	597.22
		7. Idle pully dan bearing rusak	4	4	4	550
		8. Compressor bunyi	3	3	3	330
		9. Compressor cepat penas	2	3	1	154.16
		10 Kurang Freon	2	2	2	141.6
5	Evaporator AC Mobil	1. Thermostat Rusak	8	8	8.5	883.33
		2. Kurang Freon	7	8	7	841.66
		3. Blower Mati	7	6	6	622.22

		4. Evaporator Kotor	7	3	5	566.66
		5 Evaporator bocor	5	4	4	550
		6 Evaporator beku	7	3	4.5	547.91
		7 Filter kotor	4	4	3	433.33
		8 Resistor blower rusak	3	3	3	330
		9 Expansion Mampet	5	4	1	250
6	Condensor AC Mobil	1. Kurang Freon	7.9	4.5	3.1	661.40
		2. Condensor cepat panas	6.9	4.3	3.1	544.285
		3. Rile mati	6.9	4	3	538.92
		4. Sikring putus	5	4	3	433.33
		5. Selenuid mampet	4	2.7	1.3	340
		6 Extra fan mati	3.9	2.7	1.3	320
		8 Drayer mampet	3	2.7	1.3	295,06
		7 Condensor bocor	3.7	2.7	1.3	295
7	Katup Ekpansi	1. Sensor panas rusak	7	7	7.5	841.66
		2 Ada kelembapan dalam sistem	8	4	4	733.33
		4 Preassure switch tidak bekerja	6	6.5	6.5	668.749
		3 Heater switch tidak bekerja	7	6	6	622.22
		5 Rusaknya karet suction	5	4	3	433.33
		6 Pipa Kapiler Bocor	6	2	4	375

Hasil Perhitungan Pakar B menggunakan aplikasi Fuzzy FMEA :

NO	Nama Kerusakan	Detail Kerusakan	S	O	D	RPN
1	Indoor AC Ruang	1. Evaporator Beku	7.8	8.3	7.8	896.67
		2. Unit Indoor Mati	8.5	5.5	6	841.66
		3. Perawatan Kondensi	6	8.5	4	691.66
		4. AC Mati	7	4.5	6.5	687.49
		5. Thermistor Rusak	6.4	6.5	6.9	685.08
		6. AC Dijalankan secara manual	6	5	4	550
		7. Motor Indoor mati	5	5	3.5	499.99
		8. AC mengeluarkan air	5.5	4.5	1	250
		9. Indoor AC berisik	3.5	3	1	212.5
		10.Swing Macet	2.7	1	3.3	195.88
		11.Filter AC kotor	2.5	3	1	172.22
		12. Indoor AC mengeluarkan bau tidak sedap	1.5	1	1	55.55
2	Outdoor AC Ruang	1. Unit outdoor mati	8	8.5	7	883.33
		2. Perawatan Kondensor	7.5	6.5	6.5	733.33
		3. Runing Kapasitor rusak	5	6.5	6.5	668.74
		4. Ada es pada pipa tembaga	3	2	3	275
		5. Fan kapasitor rusak	2	3	3	250
		6. Kurang Freon	3	1	2	172.22
3	Compressor AC Ruang	1. Compressor mati (overload)	8	8	8.5	916.66

		2. Compressor mati	7.8	8.3	7.8	896.67
		3. Compressor cepat panas	7	8	7	841.6
		4. Compressor tidak stabil	7	7.5	7	841
		5. Kapasitor mati	7	6.5	7	768.75
		6. Compressor mengeluarkan suara berderik	6	6.5	7.5	733
4	Compressor AC Mobil	1. Compressor aus	8	8.3	6.7	896.66
		2. Oli compressor menempel di dinding evaporator dan condenser	6.4	6.8	7.9	798.33
		3. Magnetic clutch rusak	4	5	7.7	638.33
		4. Sil compressor bocor	4	5	7.5	625
		5. Compressor clutch selip	7	4.5	5	622.22
		6. Sil body compressor bocor	6.5	4.5	4.5	597.22
		7. Idle pully dan bearing rusak	6.4	2.1	6.9	532.28
		8. Compressor bunyi	3	3	3	330
		9. Compressor cepat penas	3.5	3	1	212.5
		10 Kurang Freon	2	2	2	141.6
5	Evaporator AC Mobil	1. Thermostat Rusak	8	8	8.5	883.33
		2. Blower Mati	7	8	7	841.66
		3. Kurang Freon	7.4	6.9	6.5	803.125
		4. Evaporator Kotor	7	3	5	566.66
		5 Evaporator beku	6.4	2.1	6.9	532.28
		6 Evaporator bocor	7	3	4.5	547.91
		7 Resistor blower rusak	4	4	3	433.33
		8 Filter kotor	3	3	3	330
		9 Expansion Mampet	4.5	2.1	1.9	270
6	Condensor AC Mobil	1. Kurang Freon	7.9	4.5	3.1	661.40
		2. Condensor cepat panas	6.9	4.3	3.1	544.285
		3. Rile mati	6.9	4	3	538.92
		4. Sikring putus	6.5	5.3	2.1	370
		5. Selenuid mampet	4	2.7	1.3	340
		6 Extra fan mati	3.9	2.7	1.3	320
		8 Drayer mampet	3	2.7	1.3	295,06
		7 Condensor bocor	3.7	2.7	1.3	295
7	Katup Ekpansi	1. Ada kelembapan dalam sistem	7	7	7.5	841.66
		2 . Sensor Panas Rusak	8	4	4	733.33
		3 .Preassure switch tidak bekerja	6.4	5	7.9	711.66
		4. Heater switch tidak bekerja	6	6.5	6.5	668.749
		5 Rusaknya karet suction	7	6	6	622.22
		6 Pipa Kapiler Bocor	6	5.3	2.1	370