



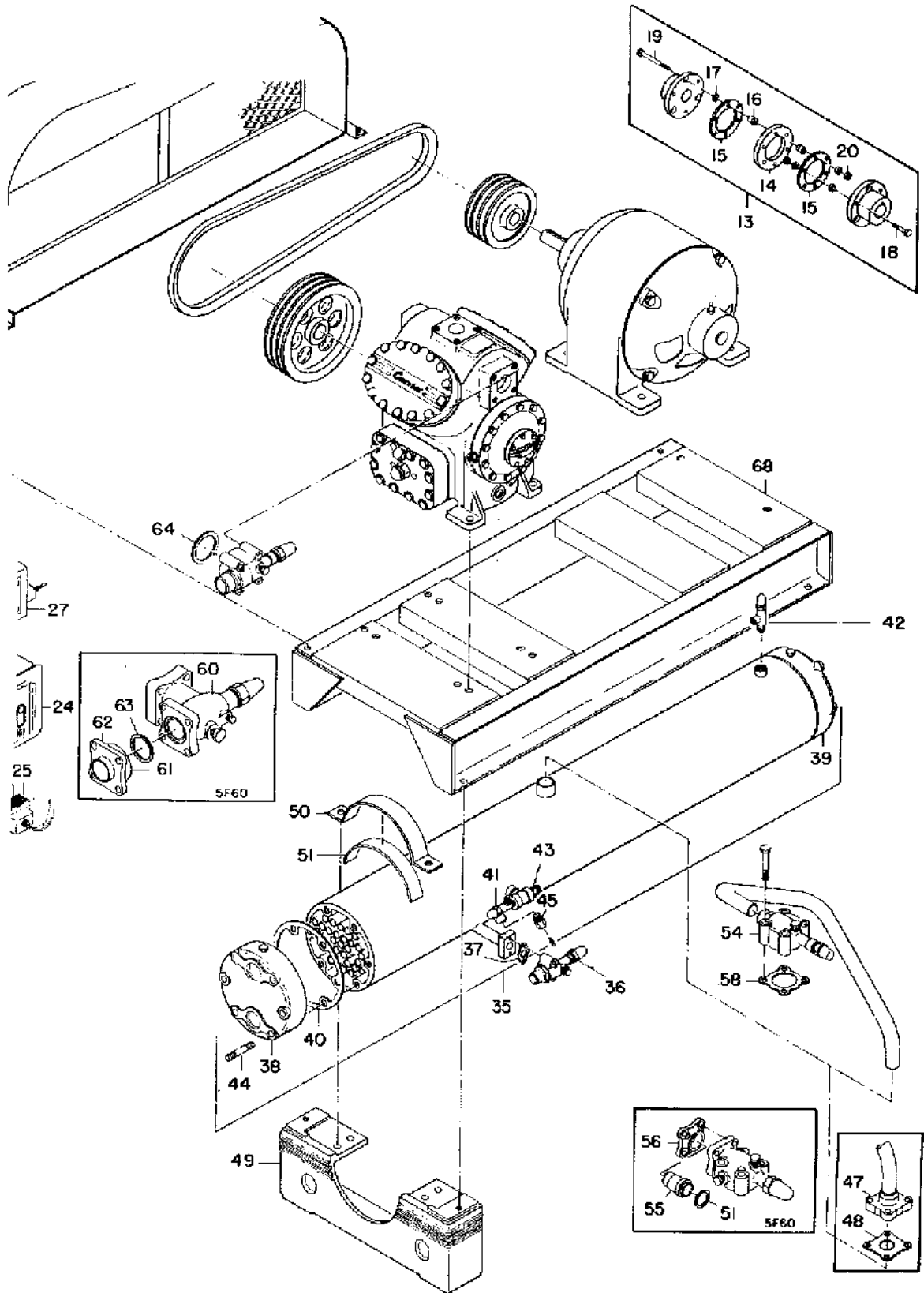
FREON CONDENSING UNIT

5F

ITEM NO.	PART NAME	LDC	REPLACEMENT PART NUMBER	UNIT USAGE			
				5F			
				20	30	40	60
COMPRESSOR GROUP							
1	Compressor (Without Unloaders)		5F20-S674	1			
			5F30-S644		1		
			*5F20-A189	1			
1	Compressor (With Unloaders) *Prior Serial #K201667 *Start Serial #K201667		5F20-S684	1			
			5F30-S664		1		
			5F40-A219			1	
			5F60-A219				1
			*5F20-A219	1			
<p>NOTES: 1. All Compressors are less Flywheels, Shut-Off Valves and Pressurestats, but with Valve Pads and Crankcase Heater Casing.</p> <p>2. Compressors for Carrens 22 are available on special order only. For Water Cooled Cylinder Head Packages see "Compressor Body Group."</p> <p>3. Belt Drive Packages which include Pulley, Belts and Flywheels are not listed. Refer to your 5F,H Master Price Pages.</p>							
DRIVE GROUP							
2	Compressor Motors	CD					
3	Belt Drive Packages (See Note #3 Above)	AP					
4	Flywheel Package 8" O.D., 7.5PD, 2B Groove	AP					
	8" O.D., 7.5PD, 3B Groove	AP					
	(See Note #3 Above) 10" O.D., 9.5PD, 3B Groove	AP					
	10" O.D., 9.5PD, 4B Groove	AP					
5	Parts for Flexible Coupling Assembly (5F20 & 30 Only)						
6	Motor Flange - Select Correct Size						
	1" Bore (For Old Motor Frame 225)	NA					
	1 1/8" Bore (For Old Motor Frame 154)	AC	5F20-1463	1	1		
	1 1/4" Bore (For Old Motor Frame 284)	AC	5F20-1473	1	1		
7	Flywheel	AC	50M4-1153	1	1		
8	Spicer Beaded Washer	MP	AU51AB-271	18	18		
9	Hex Hd. Capscrew	MP	AA06BS-264	6	6		
10	Hex Nut	AC	AT39AB-271	6	6		
11	Set Screw (Motor)	AC	AE19AS-224	2	2		
12	Disc	AC	50M4-1352	2	2		

FREON CONDENSING UNIT

5F



5F40,60



FREON CONDENSING UNIT

5F

ITEM NO.	PART NAME	LDC	REPLACEMENT PART NUMBER	UNIT USAGE			
				5F			
				20	30	40	60

DRIVE GROUP (CONT'D.)

13	Flexible Coupling Packages							
	N.E.M.A.	MOTOR SHAFT						
	<u>MOTOR H.P.</u>	<u>FRAME SIZE</u>	<u>DIAMETER</u>					
	7 1/2	284 (Old)	1 1/4	NA	5F40-613		1	
	7 1/2, 10	254U, 256U	1 3/8	NA	5F40-603		1	1
	10, 15	324 (Old),						
		326 (Old) & 284U	1 5/8	NA	5F40-623		1	1
	20, 30	286U	1 5/8	NA	5F60-623		1	1
	25, 30	324U, 326U						
		& 364 (Old)	1 7/8	NA	5F60-613			1
	Packages 5F20-847, 5F30-847, 5F40-603, 5F40-613 & 5F40-623							
	Include:							
14	Center Ring		(1) 5F-11238	AC				
15	Disc (Multiple Rings)		(2) 5F-10663	AC				
16	Spacer		(6) 5F-11223	AC				
17	Bevel Washer		(18) 5F-10731	AC				
18	Short Bolt		(6) 5F-10728	AC				
19	Long Bolt		(3) 5F-11198	AC				
20	Lock Nut		(9) AT61AA-172	MP				
NI	Motor Flange - Specify Motor Shaft							
	Dia. as shown above							
NI	Compressor Flange		(1) 5F-11772	NS				
	Packages 5F60-623 and 5F60-613							
	Include:							
14	Center Ring		(1) 5F11241	AC				
15	Disc (Multiple Rings)		(2) 5F-10664	AC				
16	Spacer		(6) 5F-11240	AC				
17	Bevel Washer		(18) 5F-11205	AC				
18	Short Bolt		(6) 5F-10721	AC				
19	Long Bolt		(3) 5F-11206	AC				
20	Lock Nut		(9) AT61AA-202	MP				
NI	Motor Flange - For 1 5/8 Dia. Shaft		(1) 5F-21925	NS				
	- For 1 7/8 Dia. Shaft		(1) 5F-21748	NS				
NI	Compressor Flange		(1) 5F-21853	NS				

CONTROL GROUP

NI	Oil Gauge 0-200#			AC	KM01BC-200	1	1		
21	Pressure Control Bracket - Allen Bradley			NA	5F40-1372	1			
	- Allen Bradley			NA	5F30-1372		1		
	- Robertshaw			AC	*5F40-5202			1	1
22	Dual Pressure Control (Carrene 12, 22, 500)								
	Allen Bradley High Side			AC	HK02HA-012	1	1		
	Low Side			AC	HK02HB-012	1	1		
	Robertshaw High Side			AC	*HK02UA-300	1	1	1	1
	Low Side			AC	*HK02UB-050	1	1	1	1

*NOTE: *Bracket 5F40-5202 is required when replacing any old style Pressurestat (Dual or HK04UN-500 Type). When replacing an HK04UN-500 Pressurestat on 5F40 and 60, both the High and Low Sides plus the bracket will have to be replaced. The 5F20 and 30 Compressors will mount the Pressurestats on the Compressor Base.*



FREON CONDENSING UNIT

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ITEM NO.	PART NAME	LDC	REPLACEMENT PART NUMBER	UNIT USAGE				
				5F				
				20	30	40	60	
CONTROL GROUP (CONT'D.)								
NI	Enclosure, Robertshaw	AC	HK09UZ-012	1	1			
NI	Parts for Oil Safety Switch Package ("Early Type") For 5F20-933 Package - 110V, 208/230V, 440V, 550V; AC, 50/60HZ and 5F20-943 Package - 230V, DC (Both used with single Compressor, Carrene 12 or 500)							
NI	Adapter - 5/8"-18 x 1/4 I.P.S.		5F20-1311	AC				
NI	Gasket		AU51YA-011	MP				
NI	Flare Nut - Short - 1/4"		DD02CA-051	AC				
NI	Half Union Coupling - 1/4"		DD07DA-051	AC				
23	*Differential Pressure Switch		HK06UC-014	AC				
24	Time Delay Relay		*HN68AD-006	NA				
NI	*Thermal Element		HN71AZ-131	NA				
25	*Transformer (5F20-933 Only)		HT01AC-150	NA				
NI	*Resistor (5F20-943 Only)		RT21AM-180	NA				
	Oil Safety Switch Package ("Latest Type") 110V, 208/220, AC or DC - For Single Compressor - For Duplex Compressor			NA	5F20-212	1	1	1
				NA	5H40-287	1	1	1
	For use with 440 and 550 Volt a suitable Transformer and Relay will be necessary Includes:							
					ON	ON		
					5F20	5H40		
NI	Adapter		(1) (2) 5F20-1311	AC				
NI	Gasket		(1) (2) AU51YA-011	MP				
NI	Flare Nut 1/4"		(2) (4) DD02CA-051	AC				
NI	Half Union Coupling		(3) (4) DD07DA-051	AC				
26	*Differential Pressure Switch with Time Delay Relay		(1) *(1) HK06UL-012	AC				
27	Differential Pressure Switch - No Relay		(1) HK06UA-012	AC				
	NOTES: *Robertshaw HK06UL-012 may be used as a replacement for the Differential Pressure Switch, Time Delay Relay and the Transformer (or Resistor on DC).							
	**Penn. Switch HK06BA-108 was supplied with some machines using R-12. Replace with HK06UL-012.							
NI	Oil Cooler Package			AP	5F20-547		1	1
	Includes:							
NI	Oil Cooler		(1) KH52HC-101	AC				
NI	Cooler Bracket		(1) 5F20-4932	NA				
NI	Coupling (Oil Cooler)		(1) DD07DA-051	AC				
NI	Bracket Stud		(2) 5F20-1781	NA				
NI	Lockwasher 3/8"		(2) AU11AR-241	NA				
NI	Hex Nut		(2) AT39AA-241	MP				
NI	Set Screw, Bracket 7/16-14 x 3/8"		(1) AE11AR-254	AC				
NI	Coupling (Bearing Head)		(4) DD07DA-101	NA				



FREON CONDENSING UNIT

5F

ITEM NO.	PART NAME	LDC	REPLACEMENT PART NUMBER	UNIT USAGE			
				5F	20	30	40

CONTROL GROUP (CONT'D.)

ITEM NO.	PART NAME	ON 5F40			PART NUMBER	LDC	REPLACEMENT PART NUMBER	UNIT USAGE				
		777	807	787				5F	20	30	40	60
	Electrical Compensated Capacity ("Latest Design") Control-Bevel Gear Type (Accessory) Minn-Honeywell Barber Colman				*NA	5F40-777					1	1
					*NA	5F40-787					1	1
					*NA	5F40-807					1	1
	Each Includes:											
NI	Control Motor	1		1	AC	HF25AA-001						
					NS	HF12CB-116						
			1		NA	HT01AA-120						
NI	Transformer	1			NS	HT01AA-115						
NI	Relay	1	1		NS	HN61DJ-005						
NI	Bevel Gear Assembly	1	1		AC	5F40-A772						
				1	NA	5F40-A762						
NI	Bevel Gear Assembly	1	1	1	AC	5F40-791						
NI	Special Stud	4	4	4	NA	5F40-4912						
NI	Outer Valve Assembly	1	1	1	NA	5F40-A782						
NI	Support Plate	1	1	1	NA	5F40-2243						
NI	Hex Hd. Screw 1/4"-20 x 1	4	4	3	NS	AA06BR-170						
NI	Mach Screw Nut 1/4"	4	4	3	MP	AT39AB-171						
NI	Plain Washer 1/4"	4	4	3	MP	AU01AB-171						
NI	Lockwasher 1/4"	6	6	5	MP	AU11AS-171						
NI	Flanged Bearing	1	1	1	NA	KT66CX-031						
NI	Hex Hd. Screw 1/4-20 x 3/8	2	2	2	NA	AA06BS-164						
NI	F.H. Socket Screw	4	4	4	NA	AC27FR-166						
NI	Grease Fitting	1	1	1	NA	GW12CB-502						
NI	Cap Screw Gasket 3/8	4	4	4	MP	AU51YA-005						
	Parts for Electrical Compensated Capacity Control-Spur Gear Type ("Early Design") (Motor, Transformer and Relay same as above) Each Includes:											
NI	Spur Gear - 3"P.D. on Minn-Honeywell			5F40-771	NA							
	- 2 1/2"P.D. on Barber Colman			5F40-761	NA							
NI	Spur Gear - 5/8"P.D.			5F40-751	AC							
NI	Support Bracket			5F40-4702	NA							
NI	Set Screw			5F40-3791	NA							
NI	Motor Bracket			5F40-2183	NA							
NI	Control Valve			5F40-A332	AC							

CONDENSER GROUP

ITEM NO.	PART NAME	LDC	REPLACEMENT PART NUMBER	UNIT USAGE				
				5F	20	30	40	60
28	Condenser Assembly - (Shell & Coil) 5 Ton, 28 5/8" overall x 8 5/16" O.D., 1 3/8" O.D. Hot Gas Inlet	NA	5F20-344			1		
	7 1/2 Ton, 39 5/8" overall x 8 5/16" O.D., 1 3/8" O.D. Hot Gas Inlet	NA	5F30-344				1	1
	Includes:							
29	Liquid Valve		(1) EP12BH-211					AC
30	*Flangible Safety Union - 385 PSI		(1) EB51LR-385					AC
NI	Purge Cock Assembly		(2) 7F0-132					AC
	Includes:							
31	Body		(1) 7F0-1452					NS
32	Stem		(1) 50146					NA



FREON CONDENSING UNIT

5F

ITEM NO.	PART NAME	LDC	REPLACEMENT PART NUMBER	UNIT USAGE		
				20	30	40 60
CONDENSER GROUP (CONT'D.)						
28	Condenser Assembly - (Shell & Coil) ("Early Type" Distinguished by 7" Dia.) 43 1/2" overall x 7" Dia. Includes:		**5F20-469			
		NA	5F30-469			
29	Liquid Shut-Off Valve For 5F20 - 5/8 ODS	(1) EN32AA-212	AC			
	For 5F30 - 7/8 ODS	(1) EN07AA-271	AC			
30	Fusible Safety Union	(1) EK41JK-202	AC			
	Purge Cock Assembly	(1) 7F0-132	AC			
33	Valve Gasket	(1) 6D23-1421	MP			
34	Angle Valve	(1) EP23SC-090	AC			
	<i>NOTE: *Condenser Assemblies prior to Serial #4350300 must use the following Safety Device:</i>					
	<i>Fusible Safety Union - Approximately 300 PSI</i>					
NI	For 5F20 & 30	(1) EK41JK-202	AC			
NI	For 5F40 & 60	(1) EK41JK-302	NA			
	<i>**5F20-469 not available - replace with</i>					
	Condenser	(1) 5F20-344	AC			
NI	Support Strap Package	(1) 5F20-A532	AC			
	<i>Includes:</i>					
NI	Support Strap	(2) 5F20-2048	AC			
NI	Strap Liner	(2) 5F20-1682	NS			
	<i>It is necessary to put blocks under the Compressor Base to make this conversion.</i>					
35	Condenser Assembly - (Shell & Tube) 10 Ton, 63" overall x 8 5/8" O.D., 1 3/8" O.D. Hot Gas Inlet		NA	5F40-429	1	1
	15 Ton, 74" overall x 8 5/8" O.D., 1 5/8" O.D. Hot Gas Inlet		NA	5F60-429	1	1
	Includes:	ON				
		5F40	5F60			
36	Liquid Valve 7/8" O.D.	1	1	EN07AA-271	AC	
	1 1/8" O.D.		1	EN07AA-395	AC	
37	Valve Gasket	1	1	6D23-1421	MP	
			1	7K4-4522	MP	
38	Nozzle Water Head	1	1	5F40-1203	AC	
39	Blank Water Head	1	1	5F40-1213	AC	
40	Water Head Gasket-Front Conn	2	2	09RA011-1303	AC	
NI	-Rear Plain	1	1	09RA011-1313	AC	
41	Angle Valve (Water Regulating)	1	1	EP23LC-090	AC	
42	Angle Valve (Purge)	2	2	EP23SC-090	AC	
43	*Pressure Relief Valve - 385 PSI	1	1	EB51LP-121	AC	
NI	Tru Fin Tube	26		99TF501784	AC	
			30	99TF501794	AC	
44	Stud Bolt	12	12	AR07AA-468	NS	
45	Try Cock Assembly	1	1	7F0-132	AC	
NI	Screw 5/8-11 x 3 Lg.	8	8	AA06BR-329	AC	
NI	Nut 5/8-11	8	8	AT11AA-331	AC	



FREON CONDENSING UNIT

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ITEM NO.	PART NAME	LDC	REPLACEMENT PART NUMBER	UNIT USAGE			
				5F	20	30	40
CONDENSER GROUP (CONT'D.)							
Condenser Assembly - in 5F40 & 60 Sizes ("Early Type") with Flanged Discharge are replaced by the standard 5F40-429 & 5F60-429 Condenser. Parts on the "Early Type" Condenser are the same as standard except for the following: (Items 47-51)							
47	Discharge Line Flanged Adapter 1 3/8" O.D. Tube 1 5/8" O.D. Tube	NA NS	DK16CA-901 DK16CB-301			1	1
48	Discharge Line Flanged Gasket	AC	55452			1	1
43	Fusible Safety Union (Pressure Relief)	NA	EK41JK-302			1	1
49	Condenser Support	NS	05HY500-253			2	2
50	Condenser Strap	NS NS	5F20-2042 5F40-1662	2	2		4 4
51	Condenser Strap Liner	NA AC	5H40-1692 5H120-1682	4	4		4 4
NOTE: Liners may have to be cut to desired length.							
52	Discharge Line (Not normally stocked) (Select from Combination below)						
"Late Units"							
For: Belt Drive Units				5F20	5F20	5F20-1063	
				5F20	5F30	5F20-223	
				5F30	5F20	5F30-113	
				5F30	5F30	5F30-1063	
				5F30	5F40	5F30-1033	
				5F40	5F30	5F40-1033	
				5F40	5F40	5F40-1204	
				5F40	5F60	5F40-284	
				5F60	5F40	5F60-113	
				5F60	5F60	5F60-1063	
				5F60	5F40	5F60-117	
For: Direct Drive Units				5F40	5F40	5F40-1503	
				5F40	5F60	5F40-107	
				5F60	5F60	5F60-1503	
				5F60	5F40	5F60-107	
"Early Units"							
For: Belt Drive Units				5F20	5F20	5F20-1433	
				5F30	5F20	5F30-413	
				5F30	5F30	5F30-1433	
				5F40	5F30	5F40-1184	
				5F40	5F40	5F40-594	
				5F60	5F40	5F60-303	
				5F40	5F30	5F40-1423	
				5F40	5F40	5F40-213	
				5F60	5F60	5F60-213	
				+5F60	5F60	5F60-223	
+Compressor has 1" Spacer Blocks to accomodate larger motor.							



FREON CONDENSING UNIT

5F

ITEM NO.	PART NAME	LDC	REPLACEMENT PART NUMBER	UNIT USAGE			
				5F			
				20	30	40	60
CONDENSER GROUP (CONT'D.)							
NI	Tube Brush (Nylon)		KC21AH-105	As Required			
COMPRESSOR SHUT-OFF VALVE GROUP							
53	Discharge Shut-Off Valve - 7/8 O.D.S. (SSN K201567)	AC	EN07AA-284	1			
	- 7/8 O.D.S. (PSN K201567)	AC	EN07AA-390	1			
	- 1 1/8 O.D.S.	AC	EN07AA-395	1			
	Each Includes:						
NI	Seal Cap (1) EN99ZA-002	AC					
NI	Seal Cap Gasket (1) EN99ZA-102	MP					
NI	Companion Flange (1) EN99ZD-005	NA					
NI	Adapter Gasket (1) EN99ZE-005	NA					
NI	Adapter for EN07AA-390 (1) EN99ZC-027	NA					
	for EN07AA-395 (1) EN99AC-033	NA					
53	Valve - 1 3/8 O.D.S.		EN07EA-039		1	1	
	Includes:						
NI	Seal Cap (1) EN99ZA-002	AC					
NI	Seal Cap Gasket (1) EN99ZA-102	MP					
53	Valve - 1 5/8 O.D.S.		EN13HA-045				1
	Includes:						
NI	Seal Cap (1) EN99ZA-002	AC					
NI	Seal Cap Gasket (1) EN99ZA-102	MP					
55	Adapter (Tail Piece) (1) EN99ZC-045	NS					
56	Companion Flange (1) EN99ZD-010	AC					
57	Adapter Gasket (1) EN99ZE-010	NS					
58	Valve Gasket <i>ø</i> (To be used with EN07AA-284)	MP	ø6D40-1131	1			
		MP	7K4-4522	1			
		MP	5F30-1361		1	1	
		MP	DK36CA-001				1
59	Suction Shut-Off Valve (SSN K201567)	AC	EN07EA-033	1			
	- 1 1/8" O.D.S. (PSN K201567)	AC	EN07EC-341	1			
59	Suction Shut-Off Valve - 1 5/8" O.D.S.		EN07EA-041		1	1	
	Includes:						
NI	Seal Cap (1) EN99ZA-002	AC					
NI	Seal Cap Gasket (1) EN99ZA-102	MP					
60	Suction Shut-Off Valve - 2 1/8" O.D.S.		EM13FC-521				1
	Includes:						
NI	Seal Cap (1) EN99ZA-018	AC					
NI	Seal Cap Gasket (1) EN99ZA-109	AC					
61	Adapter (Tail Piece) (1) EP29VC-540	AC					
62	Companion Flange (1) EP29ZC-560	NA					
63	Adapter Gasket (1) EP29YC-560	AC					
64	Valve Gasket	AC	7K3-4522	1			
		MP	5F30-1361		1	1	
		MP	5H40-1361				1
65	Valve Adapter - 1 1/8" Fitting x 1 3/8" Solder Cup	AC	DE20BA-903	1			
66	Capscrew 1/2-13 x 2 1/4 (Discharge Valve)	MP	AA06BR-296	2			
67	1/2-13 x 2 1/2 (Suction Valve)	MP	AA06BR-297	4			
NI	1/2-13 x 3 (Suction & Discharge Valve)	MP	AA06BR-299	8	8		
	For EN07BA-401						



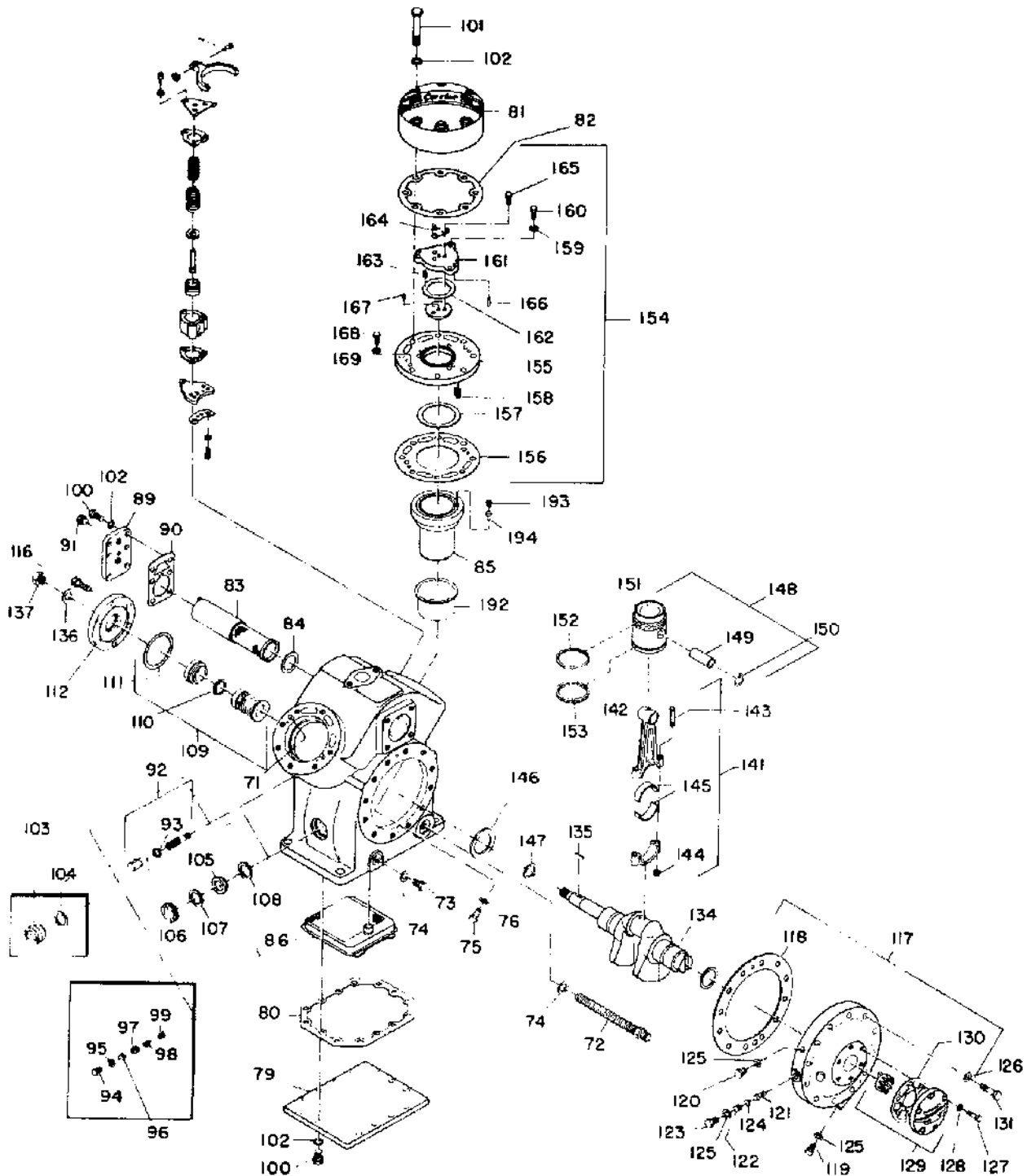
FREON CONDENSING UNIT

5F

ITEM NO.	PART NAME	LDC	REPLACEMENT PART NUMBER	UNIT USAGE			
				5F			
				20	30	40	60
COMPRESSOR SHUT-OFF VALVE GROUP (CONT'D.)							
NI	Capscrew 1/2-13 x 3 (Suction & Discharge Valve) For EN07BA-461 For EN07EA-039 For EN07EA-041 1/2-13 x 3 1/4 (Discharge Valve) 5/8-11 x 2 1/2 (Suction Valve)	MP MP MP NS NA	AA06BR-299 AA06BR-297 AA06BR-297 AA06BR-298 AA06BR-327		8 8 8	8 8 8	4 4
MISCELLANEOUS GROUP							
68	Compressor Base Assembly For use with 5F20 & 30 Condenser Belt Drive For use with 5F40 & 60 Condenser Belt Drive For use with 5H40 Condenser Belt Drive Direct Drive Direct Drive when used with 5H40 Condenser **Early Units** Belt Drive Direct Drive <i>NOTE: "Early Units" were used with the old N.E.M.A. Motor Frame.</i>	NS NS NS NS NS NS NS NS	5F20-238 5F40-408 5H40-598 5F40-398 5H40-588 5F20-569 5F40-A299	1 1	1 1 1 1	1 1 1 1	1 1 1 1
NI	Compressor Shim (Laminated) 3 1/8 x 2 1/16 x 1/32 Thk. (C.R.S.) 3 1/8 x 2 1/16 x 1/32 Thk.	NS AC	5F40-1572 5F40-1582	As Required	As Required	As Required	As Required
NI	Motor Shim (Laminated) 3 3/8 x 3 1/2 x 1/32 Thick (C.R.S.) 3 3/8 x 3 1/2 x 1/32 Thick	AC AC	5F40-1702 5F40-1712	As Required	As Required	As Required	As Required
NI	Motor Rail (Belt Drive Units)	NA	5F40-1843		2	2	
69	Water Regulating Valves	CD					
NI	Muffler 1 1/8 O.D.F. 1 3/8 O.D.F. or 1 5/8 O.D.M.	NA NA	5F20-683 5F40-683	1	1	1	1
	Compressor Oil Suitable for use with Carrene 12, 22, 500. Used with Hermetic Compressors with Evaporator Temperature above 70°F. Used with Reciprocating Compressors with Evaporator Temperature above 120°F. Viscosity @ 100°F. SSU -150 ± 10 @ 200°F. SSU -40 - 45 Suitable for use with Reciprocating Compressor using Carrene 12 or 22 with Evaporator Temperature above 40°F. or Centrifugal Compressors using C12 with Evaporator Temperature above 40°F., or with Centrifugal Compressor using R114 with Evaporator Temperature above -20°F. Viscosity @ 100°F. SSU -300 ± 20 @ 210°F. SSU -45 - 50	CD		As Required	As Required	As Required	As Required

FREON CONDENSING UNIT

5F



5F20,30



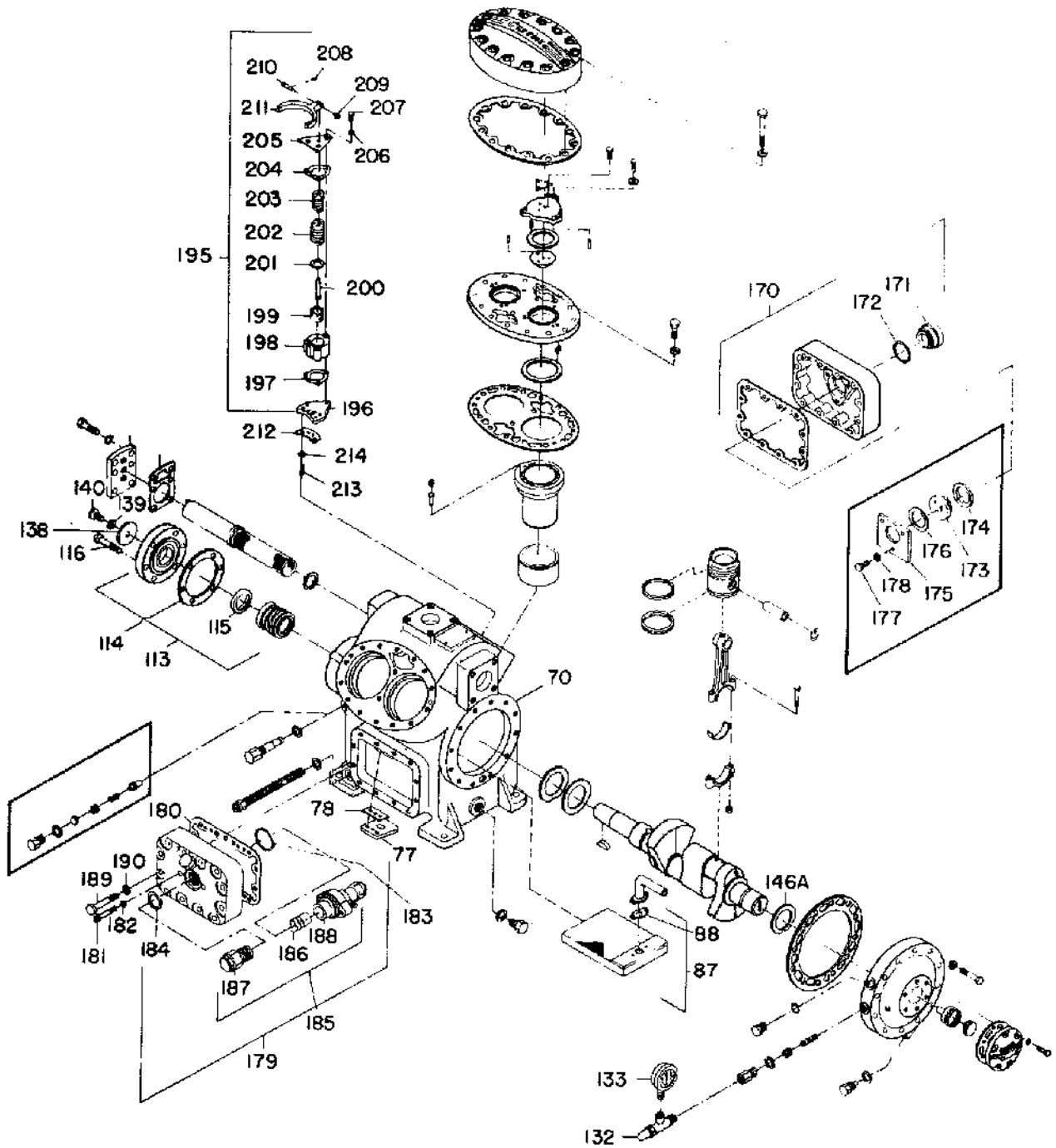
FREON CONDENSING UNIT

5F

ITEM NO.	PART NAME	LDC	REPLACEMENT PART NUMBER	UNIT USAGE			
				5F			
				20	30	40	60
COMPRESSOR BODY GROUP							
NI	Gasket Set	AC	5F20660001	1	1		
		AC	5F60660001			1	1
70	Crankcase Assembly - (For use without Unloaders)	NA	5F20-364	1			
		NA	5F30-364		1		
		NA	5F40-364			1	
	Each Includes:						
NI	Main Bearing, Seal End (on 5F20-364)	AC	(1) 5F20-1012				
	(on 5F30-364)	AC	(1) 5F30-1012				
	(on 5F40-364)	AC	(1) 5F40-1012				
71	Dowel Pin (Valve Plate) 5/16" x 5/8"						
	(on 5F20-364 & 5F40-364)	MP	(4) AX11AR-197				
	(on 5F30-364)	MP	(6) AX11AR-197				
NI	Dowel Pin (Bearing Washer) 3/16" x 3/8"		(1) AX35HR-120				
		PT					
72	Heater Casing (Start Ser. #420001)		(1) 5F20-3742				
73	Magnetic Plug		(1) GA99AA-101				
74	Gasket for Magnetic Plug & Heater Casing		(2) AU51YA-011				
74		MP					
70	Crankcase Assembly - (For use with Unloaders)	NA	5F20-384	1			
		NA	*5F30-384		1		
		NA	5F40-384			1	
		NA	5F60-B399				1
	Each Includes:						
NI	Dowel Pin (Bearing Washer) 3/16" x 3/8"		(1) AX35HR-120				
		MP					
72	Heater Casing (Start Ser. #420001)		(1) 5F20-3742				
		AC					
73	By-Pass Plug		(1) 5H40-1141				
		AC					
74	Gasket for By-Pass Plug & Heater Casing		(1) AU51YA-011				
		MP					
	<i>NOTE: 5F30-384 is equipped for 1 or 2 steps unloading.</i>						
	5F20-384 Also Includes:						
NI	Main Bearing, Seal End		(1) 5F20-1012				
71	Dowel Pin, Valve Plate		(4) AX11AR-197				
		MP					
NI	Unloader Oil Tube		(1) 5F20-1173				
		NA					
NI	Tube Ferrule 3/16		(2) 5H40-1531				
		AC					
	5F30-384 Also Includes:						
NI	Main Bearing, Seal End		(1) 5F30-1012				
		AC					
71	Dowel Pin, Valve Plate		(6) AX11AR-197				
		MP					
NI	Unloader Oil Tube		(1) 5F30-333				
		NS					
NI	Tube Ferrule 3/16		(2) 5H40-1531				
		AC					
NI	Tube Ferrule 1/4		(1) 5H40-1541				
		AC					
	5F40-384 Also Includes:						
NI	Main Bearing, Seal End		(1) 5F40-1012				
		AC					
71	Dowel Pin, Valve Plate		(4) AX11AR-197				
		MP					
NI	Unloader Oil Supply Tube						
	To Cylinder #1L		(1) 5F40-1153				
		AC					
NI	To Cylinder #1R		(1) 5F40-1173				
		AC					
NI	To Cylinder #2L		(1) 5F40-1123				
		AC					
NI	Oil Supply Tube		(1) 5F40-1233				
		AC					
NI	Tube Ferrule 3/16		(6) 5H40-1531				
		AC					
NI	Tube Ferrule 1/4		(2) 5H40-1541				
		AC					

FREON CONDENSING UNIT

5F



5F40.60



FREON CONDENSING UNIT

5F

ITEM NO.	PART NAME	LDC	REPLACEMENT PART NUMBER	UNIT USAGE			
				5F			
				20	30	40	60
COMPRESSOR BODY GROUP (CONT'D.)							
NI	5F60-B399 Also Includes:						
NI	Main Bearing, Seal End	(1)	5F40-1012	AC			
71	Dowel Pin, Valve Plate	(6)	AX11AR-197	MP			
NI	Unloader Oil Supply Tube						
NI	To Cylinder #1L	(1)	5F60-1153	AC			
NI	To Cylinder #1R	(1)	5F60-1173	AC			
NI	To Cylinder #2L	(1)	5F60-1123	AC			
NI	To Cylinder #2R	(1)	5F60-1163	AC			
NI	Oil Supply Tube	(1)	5F60-1233	AC			
NI	Tube Ferrule 3/16	(8)	5H40-1531	AC			
NI	Tube Ferrule 1/4	(2)	5H40-1541	AC			
NI	Crankcase Heater Element	115V, 100W (3.12 Lg.)			HT31AR-100	1	1
		230V, 100W (3.12 Lg.)			HT31AR-130	1	1
		120V, 100W (8.25 Lg.)		AC	HT31AZ-120	1	1
		240V, 100W (8.25 Lg.)		AC	HT31AZ-240	1	1
NI	Crankcase Heater Relay	115V, 60HZ		AC	HN61AJ-101	1	1
		230V, 60HZ		AC	HN61AJ-108	1	1
		115V, 50HZ		AC	HN61AJ-101	1	1
		230V, 50HZ		AC	HN61AJ-108	1	1
NI	Heater Coupling			AC	HW25FA-005	1	1
NI	Oil Return Check Valve Package			AC	5F20-A792	2	2
	Includes:						
75	Check Valve	(1)		NSS			
76	Check Valve Lock Washer	(1)	AU27AR-271	MP			
NI	Oil Return Check Valve Package			AC	5H40-932		2
	Includes:						
77	Check Valve	(1)		NSS			
78	Check Valve Gasket	(1)	5H40-1171	PT			
79	Bottom Plate			AC	5F20-1133	1	1
80	Bottom Plate Gasket			AC	5F20-1813	1	1
81	Cylinder Head			AC	5F20-2263	2	3
				AC	5F60-1004		2
82	Cylinder Head Gasket			MP	5F20-1093	2	3
				MP	5F40-1093		2
NI	Water Cooled Cylinder Head Package (Obtain from Fin. Goods)			NA	5F20-172	1	
				NA	5F30-172		1
	Includes:						
		REQ'D. ON					
		5F20	5F30				
NI	Cool Water Tube Assembly	I	5F20-573	NSS			
	3/8 O.D.		1 5F30-573	AC			
			1 5F30-A302	AC			
NI	Cylinder Head	2	3 5F20-1004	AC			
NI	Cylinder Head Gasket	2	3 5F20-1093	MP			
NI	Cylinder Head Cover	2	3 5F20-1434	AC			
NI	Cylinder Head Cover Gasket	2	3 5F20-1703	AC			
NI	Hex Hd. Cap Screw 3/8" x 1"	16	24 AA06BR-230	PT			
NI	Hex Hd. Cap Screw 3/8 x 3 1/2"	16	24 AA06BR-241	MP			
NI	Capscrew Gasket	16	24 AU51YA-005	PT			
NI	Dowel Pin	2	3 AX11AR-062	MP			
NI	Half Union Elbow	2	2 DD10CA-208	AC			
NI	Half Union Coupling		2 DD07DA-208	AC			



FREON CONDENSING UNIT

5F

ITEM NO.	PART NAME	LDC	REPLACEMENT PART NUMBER	UNIT USAGE			
				5F			
				20	30	40	60
COMPRESSOR BODY GROUP (CONT'D.)							
NI	Water Cooled Cylinder Head Package (Obtain From Fin. Includes: REQ'D. ON Goods)	NA NA	5F40-172 5F60-172				1 1
NI	Cool Water Tube Assembly 5/8 O.D.			1			
NI				1			
NI				1			
NI	Cylinder Head			2	3		
NI	Cylinder Head Gasket			2	3		
NI	Cylinder Head Cover			2	3		
NI	Cylinder Head Cover Gasket			2	3		
NI	Hex Hd. Capscrew 5/16 x 1"			28	42		
NI	Hex Hd. Capscrew 3/8 x 3 1/2"			28	42		
NI	Capscrew Gasket			28	42		
NI	Half Union Elbow			1	4		
NI	Half Union Coupling			1			
83	Suction Strainer Assembly	AC AC AC AC	5F20-132 5F30-132 5F40-132 5F60-132		1		1 1 1 1
84	Suction Strainer Gasket	MP MP	5F30-1831 5F60-1831			1	2
NI	Suction Filter Package Includes:	AC	5F40-A352				1
NI	Felt Filter						(1) 5F40-3792
NI	Suction Filter Package Includes:	AC	5F60-A352				1
NI	Felt Filter						(2) 5F60-3792
85	Cylinder Sleeves with Holes (Used in place of Sleeve without Unloader Fin Holes)	AC	5F30-1003	2	3	4	6
86	Oil Filter Screen Assembly	AC	5F20-2653	1	1		
87	Oil Filter Screen Package Includes:	AC	5F40-237			1	1
88	Oil Filter Screen Gasket						(2) 5F40-1371
89	Manifold Cover Plate	AC NS	5F20-1052 5F40-1052	1			1
90	Manifold Cover Gasket	AC	5F20-1032	1		1	
91	Hex Head Pipe Plug - 1/4" (High & Low Pressure Connection)	AC	DD22DA-051	2	2		
NI	Suction Manifold	AC	5F60-1094				1
NI	Suction Manifold Gasket	AC	5F60-1681				2
92	Non-Adjustable Oil Regulating Valve Package Starting Serial #94001	AC	5H40-962	1	1	1	1
93	Includes: Gasket	MP					(1) AU5IYA-011



FREON CONDENSING UNIT

5F

ITEM NO.	PART NAME	LDC	REPLACEMENT PART NUMBER	UNIT USAGE			
				20	30	40	60
COMPRESSOR BODY GROUP (CONT'D.)							
	*Parts for Adjustable Oil By-Pass Valve						
94	Oil By-Pass Plug	AC	5H40-1141				
95	Oil By-Pass Plug Gasket	MP	AU51YA-011				
96	Oil By-Pass Lock Screw 5/8"-18 x 5/16"	MP	AF20AA-313				
97	Oil By-Pass Adjusting Screw	AC	5H40-1121				
98	Oil By-Pass Spring	AC	7K3-4182				
99	Oil By-Pass Valve	AC	5H40-1111				
100	Capscrew 3/8"-16 x 1" (Bottom Plate, Manifold Cover)	MP	AA06BR-230	20	14	6	
101	Capscrew 3/8"-16 x 3" (Cylinder Head, Suction Manifold)	MP	AA06ER-239	16	24	28	50
102	Capscrew Gasket 3/8"	MP	AU51YA-008	36	38	34	50
NI	Safety Relief Valve (Under L. H. Cylinder Head)	AC	EB51FN-272				1
NI	Gasket, Safety Relief Valve	AC	6G65-1251				1
NI	Sight Glass Package (New Style)	AC	5F20-152	1	1		
	Includes:						
103	Sight Glass Assembly	(1)					
104	Sight Glass Gasket	(1) 5F20-1631	MP				
	The above sight glass package replaced the old style which consisted of:						
105	Sight Glass	(1) 5F20-781	AC				
106	Sight Glass Gland	(1)					
107	Sight Glass Gasket, Inner	(1) 5F20-1011	MP				
108	Sight Glass Gasket, Outer	(1) 5F20-1621	NA				
	NOTE: *The non-adjusting Valve is a replacement for the adjustable Oil By-Pass Valve parts on 5F30 & 40 & 60. It can only be used on 5F20 Units originally equipped with non-adjustable Valve.						

SEAL END GROUP

109	Shaft Seal - Rotary Sleeve Type (PSN K201567)	AC	5F20-676	1	1		
	Includes:						
110	Carbon Ring	(1) 5F-D-1000-49	NSS				
111	Cover Plate Gasket	(1) 7F3-0112	MP				
112	Cover Plate	(1) 5F20-4942	AC				
109	Shaft Seal - Rotary Sleeve Type (SSN K201567)	AC	05HG660006	1	1		
	Includes:						
110	Carbon Ring	(1) 5F-D-1000-49	NSS				
111	Cover Plate Gasket	(1) 5F36-1032	AC				
112	Cover Plate	(1) 5F20-A832	AC				
113	Shaft Seal - Rotary Sleeve Type	AC	5F40-276			1	1
	Includes:						
114	Cover Plate Gasket	(1) 5F40-4512	AC				
115	*Carbon Washer	(1) 5F-D-1500-971V	AC				
	Cover Plate with Integral Seal Seat	(1)	NSS				
116	Capscrew (Shaft Seal Cover) 3/8" - 16 x	MP	AA06BR-230	6	6		
		MP	AA06BR-232			8	8
	NOTES: *Replace only rings damaged in shipping or installation. Not recommended if seals have been in operation. For replacing stationary Bellows Type seals, use (1) Seal Package 5F20-67E.						



FREON CONDENSING UNIT

5F

ITEM NO.	PART NAME	LDC	REPLACEMENT PART NUMBER	UNIT USAGE			
				5F			
				20	30	40	60
PUMP END GROUP							
117	Bearing Head & Oil Pump Assembly (Drilled for Oil Cooler Application)	AC	+5F20-677	1			
		AC	++5F30-677		1		
		AC	++5F40-677			1	1
	Each Includes:						
118	Bearing Head Gasket	(1)	5F20-1113	MP			
NI	Main Bearing, Pump End (5F20 Only)	(1)	5F20-1022	AC			
NI	(5F30,40,60)	(1)	5F40-1022	AC			
119	Magnetic Plug	(1)	CA99AA-101	AC			
120	Oil, By-Pass Plug	(1)	5H40-1141	AC			
121	Control Strainer	(1)	5H40-1971	AC			
122	Hollow Lock Screw	(1)	AF20AA-313	MP			
123	Modulating Valve Adapter	(1)	5F20-1311	AC			
124	Orifice Disc, 5F20,30 Only	(2)	5H40-1981	AC			
125	Capscrew Gasket 5/8	(3)	AU51YA-011	MP			
126	Capscrew Gasket 3/8 (Brg. Hd.)	(12)	AU51YA-005	MP			
127	Hex Hd. Capscrew 1/4-28 x 3/4 (Oil Pump Cover)	(6)	AB06BR-168	MP			
128	Capscrew Gasket 1/4"	(6)	AU51YA-001	MP			
NI	Dowel Pin (Bearing Washer)	(1)	AX35HR-120	MP			
129	Oil Pump Package - Matched Parts	(1)	5F20-A272	AC			
	Includes:						
NI	Cover, Idler, Rotor & Bushing						
130	Oil Pump Cover Gasket	(1)	6F25-1031	AC			
118	Bearing Head Gasket	(1)	5F20-1113	MP			
131	Hex Head Capscrew 3/8-16" x 1 3/4" (Brg. Hd. Cover)		AA06BR-234	MP	12	12	12
NI	Capacity Control Valve - For Carrene 12		EB02AD-002	AC	1	1	
	- For Carrene 22		EB02AD-003	AC	1		
NI	Flexible Hose (Capacity Control Valve)		KA73RR-025	AC	1		
132	Angle Valve - 1/4" x 1/4" Prior Ser. #D707060		EP23LC-090	AC			2
	Shipping Valve Start Ser. #D707060		06DA401373	AC			2
133	Oil Gauge Prior Ser. #D707060		KM01BC-200	AC			2
	Cap (Shipping Valve) Start Ser. #D707060		06DA501892	AC			2
	NOTES: +Available with .010 and .020 Undersize Bearings on special order.						
	++Interchangeable with Early Type which were used on units Prior to Serial #040001 on 5F40 and #030063 on 5F60.						
	For Early Type Units Use:						
	Bearing Head Cover Gasket		5F20-1113	MP			1
	Oil Pump Cover Gasket .006" Thick		5F40-1211	MP			1
	Capscrew - 3/8"-16 x 2 1/4" (Bearing Hd. Cover)		AA06BR-236	MP			12
	Capscrew Gasket - 3/8"		AU51YA-005	MP			12
CRANKSHAFT AND PISTON GROUP							
134	Crankshaft	AC	05HG660004		1		
		AC	05HG660005			1	
134	Crankshaft Assembly	AC	5F40-114				1
		AC	5F60-114				1



FREON CONDENSING UNIT

5F

ITEM NO.	PART NAME	LDC	REPLACEMENT PART NUMBER	UNIT USAGE			
				5F			
				20	30	40	60
CRANKSHAFT AND PISTON GROUP (CONT'D.)							
135	Woodruff Key #13-3/16" x 1" (For Units PSN C201894) #21 x 1/4 x 1 1/4" (For Units SSN C201894)	MP AC MP	AW21FD-722 5F20-5232 AW21FD-735	1 1	1 1		1 1
136	Plate Washer (Flywheel)	MP	AU02AA-361	2	2		
137	Lock Nut 3/4"-16	MP	AT61AA-362	1	1		
138	Flywheel Retaining Washer	AC	5F40-1401			1	1
139	Flywheel Lockwasher	MP	AU11AR-241			1	1
140	Flywheel Capscrew 3/8-24 x 7/8"	MP	AB06BR-229			1	1
141	Connecting Rod Package	AC	5F20-103	2	3	4	6
	Includes:						
142	Connecting Rod	(1) NSS	5F20-1293				
143	Connecting Rod Bolt	(2) AC	5F20-1041				
144	Connecting Rod Nut	(2) MP	AT61AA-202				
	Piston Pin Bushing	(1) NSS	5F20-1031				
	Connecting Rod Bearing Package	AC	5F20-451	1	2	2	3
	Includes:						
145	Connecting Rod Bearing Half	(4)	5F20-1002				
146	Bearing Washer (Bronze)	AC	5F20-1741	2	2	1	1
146A		AC	5F40-1751			1	1
147	Seal End Thrust Washer (Steel)	AC AC	5F20-1761 5F40-1761	1	1		1 1
148	Piston and Pin Package (Unassembled)	AC	5F20-482	2	3	4	6
	Includes:						
149	Piston Pin	(1) AC	5F20-1051				
150	Piston Pin Lock Ring	(2) MP	5F20-3521				
151	Piston	(1) NSS	5F20-1023				
152	#Piston Rings - Compression (See Note Below)	NSS	5F20-1071	4	6	8	12
	- Oil	NSS	5F20-1091	4	6	8	12
	NOTE: #Available in Packages only - order 5F20-481 Which Includes: Compression Rings (8) 5F20-1071 Oil Rings (8) 5F20-1091 Order sufficient packages to meet requirement in the unit usage column.	AC					

UNDERSIZE CRANKSHAFT AND BEARING GROUP

NI	.010 Undersize Crankshaft and Bearing Package	NA NA	5F20-544 5F30-544	1			1
	Each Includes:						
		ON 5F20	ON 5F30				
NI	*Crankshaft	(1)	(1)				
NI	Connecting Rod Bearing	(4) 5F20-3422	(6) 5F20-3422				
NI	Seal End Main Bearing	(1) 5F20-3442	(1) 5F30-3442				
NI	Pump End Main Bearing	(1) 5F20-3462	(1) 5F40-3462				



FREON CONDENSING UNIT

5F

ITEM NO.	PART NAME	LDC	REPLACEMENT PART NUMBER	UNIT USAGE			
				5F			
				20	30	40	60
HANDHOLE COVER GROUP (CONT'D.)							
NI	Lockwasher - #10	NA	AD11A5-151			2	2
NI	Hex Nut #10-24	NS	AT39AA-131			2	2
NI	Pressure Control Tube Clip	AC	5F20-1501			2	2
192	Unloader Sleeve	AC	5F20-1752	1	2	3	4
193	Unloader Lifter Spring	NSS	66G45-1151	6	12	18	24
	NOTE: <i>Available in packages only - Order 6G45-872 Which Includes: Valve Lifter Springs (8) 6G45-1151 Order sufficient packages to meet requirements listed in unit usage column.</i>	AC					
194	Valve Lifter Pin	AC	6G45-1191	6	12	18	24
195	Unloader Power Element Assembly	AC	*5F20-153	1	2	3	4
	Includes:						
196	Unloader Cylinder Bracket (1)	AC	5F20-1762				
197	Unloader Cylinder Gasket (Bottom) (1)	MP	5F20-1711				
198	Unloader Cylinder (1)	AC	5F20-1772				
199	Unloader Piston (1)	AC	5F20-1782				
200	Unloader Piston Rod (1)	AC	5F20-1731				
201	Unloader Spring Retaining Washer (1)	MP	5F20-1811				
202	Unloader Spring (5F20-173 Only) 2"Lg. (1)	AC	5F20-1822				
203	Unloader Spring 1 13/16" Lg. (1)	AC	5F20-1802				
204	Unloader Cylinder Gasket (Top) (1)	MP	5F20-1701				
205	Cylinder Cover Plate Assembly (1)	AC	5F20-242				
206	Lockwasher 1/4" (3)	MP	AU61ML-171				
207	Socket Hd. Capscrew 1/4"-28 x 1 3/4" (3)	NS	AB44AA-174				
208	Cotter Pin 1/16" x 3/8" (1)	MP	AX01AA-003				
209	Plate Washer (1)	MP	5F20-1301				
210	Clevis Pin (1)	AC	5F20-2751				
211	Unloader Fork (1)	AC	5F20-5352				
NI	Unloader Spring-Inner(5F20-163 Only) (1)	AC					
212	Unloader Bracket Gasket	MP	5F20-1451	1	2	3	4
213	Socket Head Capscrew 1/4"-28 x 1" (Unloader Assembly to Crankcase)	MP	AB44AA-170	2	4	6	8
214	Capscrew Lockwasher - 1/4"	MP	AU61ML-171	2	3	6	8
	NOTES: <i>For Unloader Power Element Assembly 5F20-163, (Intermediate type), use 5F20-153 and add Inner Spring 5F20-1812 which is available separately. Unloader Spring (1) 5F20-1812 Unloader Spring (1) 5F20-1822</i>						
	* <i>The 5F20-153 Power Element can be converted to the 5F20-173 by adding Spring 5F20-1822 which must be purchased separately</i>						
	<i>5F20-153 is Soft Type 5F20-173 is Stiff Type</i>						



ORDERING INSTRUCTIONS

- A. All orders and inquiries should include the complete model and serial number of the unit on which the parts are to be used, and the part number and description of each part.
- B. Dealers should forward orders to their Carrier Distributor.

GENERAL NOTES

1. Casing parts and panels are not normally stocked, but are available upon request while in production. Requests for casing parts and panels, for units no longer in production, must be cleared for availability prior to submitting an order.
Certain "sheet metal" parts are omitted in the interest of simplicity as orders for them are so infrequent that a simple description of the part, plus the model and serial number of the unit, will be acceptable.
2. Complete "Accessory Packages" or "F.I.O.P.'s" (Factory-Installed Option Plan) are not normally stocked or supplied by the Parts Center. (Refer to "Master Price Pages" and order from: Carrier Air Conditioning Co., Order Dept.)
Accessory Packages and F.I.O.P.'s are listed in this catalog only for reference and to assist in the selection and ordering of components.
3. The replacement parts listed in this catalog are "Carrier Specified Parts" and, as a result of "standardization," may not be identical to the original part furnished on the equipment.
4. Letter designations (appearing in the LDC column preceding the part number column) are used throughout this catalog to represent the classification of those parts. These letter designations are listed below for ease of interpretation and identification. LDC designation in effect when original catalog is issued. Contact your Order Correspondent for latest parts availability.

- AC — Available Component
 - AP — Accessory Package
 - CD — Contact your authorized CAC Distributor for procurement information.
 - FIOP — Factory-Installed Option Plan
 - FF — Field Fabricate
 - MP — Multiple Package — Order sufficient number of packages to meet the unit requirements listed in the "Used On" column. Refer to Price Pages for order quantity.
 - NI — Not Illustrated
 - NA — Part is Not Available
 - NPS — New Part or Item that is Stocked
 - NPN — New Part or Item that is Not Stocked
 - NS — Not Stocked
 - NSS — Not Sold Separately — Order complete assembly
-
- SM1 — Sheet Metal 1. Current production unit. Available production component. Normal lead times. Order will be placed on factory for delivery after next production run.
 - SM2 — Sheet Metal 2. Obsolete production unit. May be supplied on a special order basis for a period up to two years following last production run. Longer lead times than SM1. Price and delivery will be supplied to the customer for his approval before placing the order. Where customer does not want to place an order because of excessive cost, we will supply drawings, if he so requests.
 - SM3 — Obsolete production unit. Tooling is not available, or fabrication cost excessive. Part no longer available. Drawings of these parts will be made available on request.