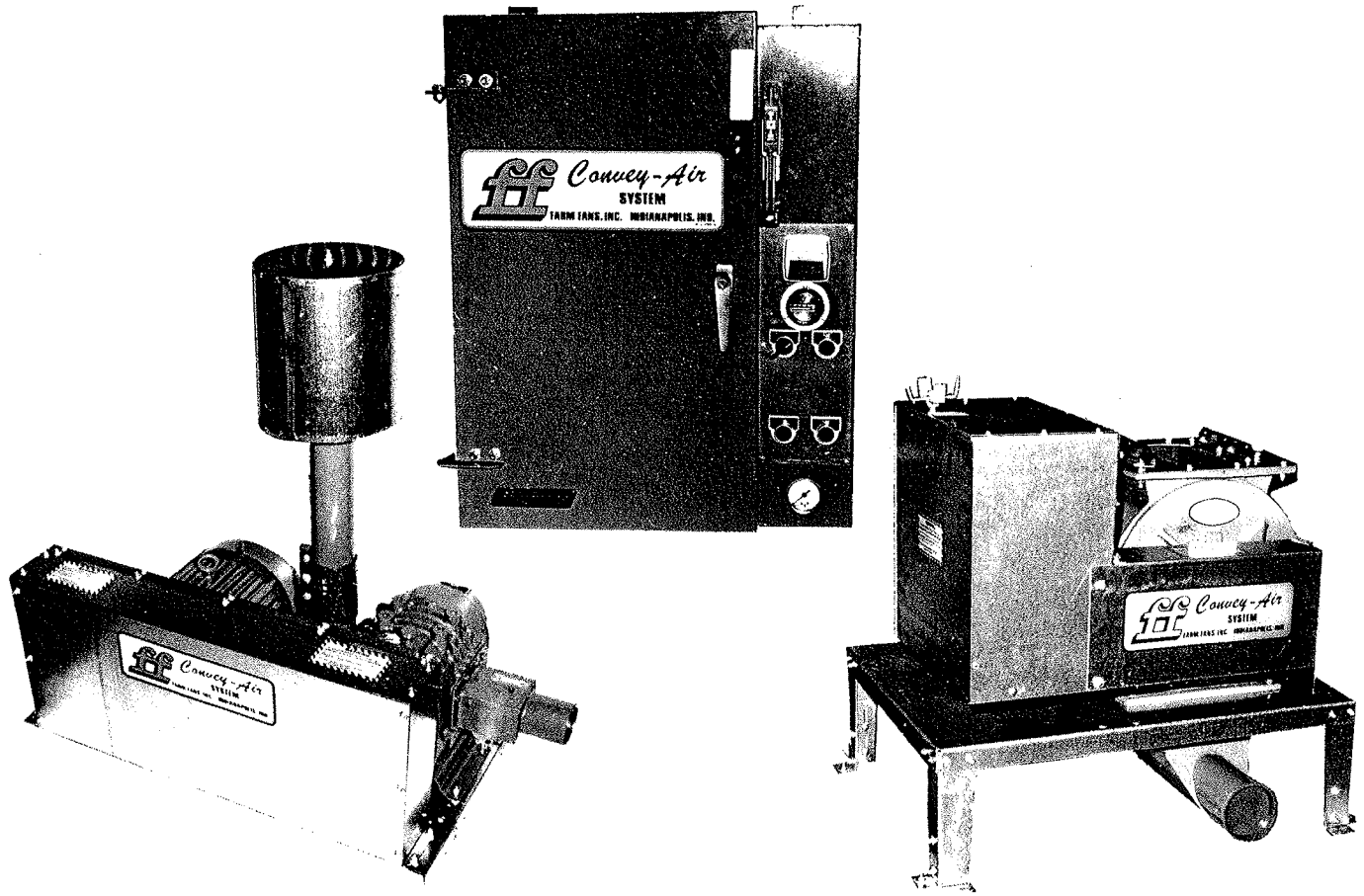
PARTS MANUAL

Convey-Air

GRAIN HANDLING SYSTEM



FARM FANS
Division of ffi CORPORATION
5900 ELMWOOD AVE. • INDIANAPOLIS, IN 46203
© 1990 ffi CORP.
Printed in U.S.A.

CONTENTS

Figure 1 - Control Box Assembly 1

Figure 2 - Control Chassis Assembly 2-5

Figure 3 - Blower Assembly 6-9

Figure 4 - Airlock Assembly 10-14

FIG. 1 - CONTROL BOX ASSEMBLY

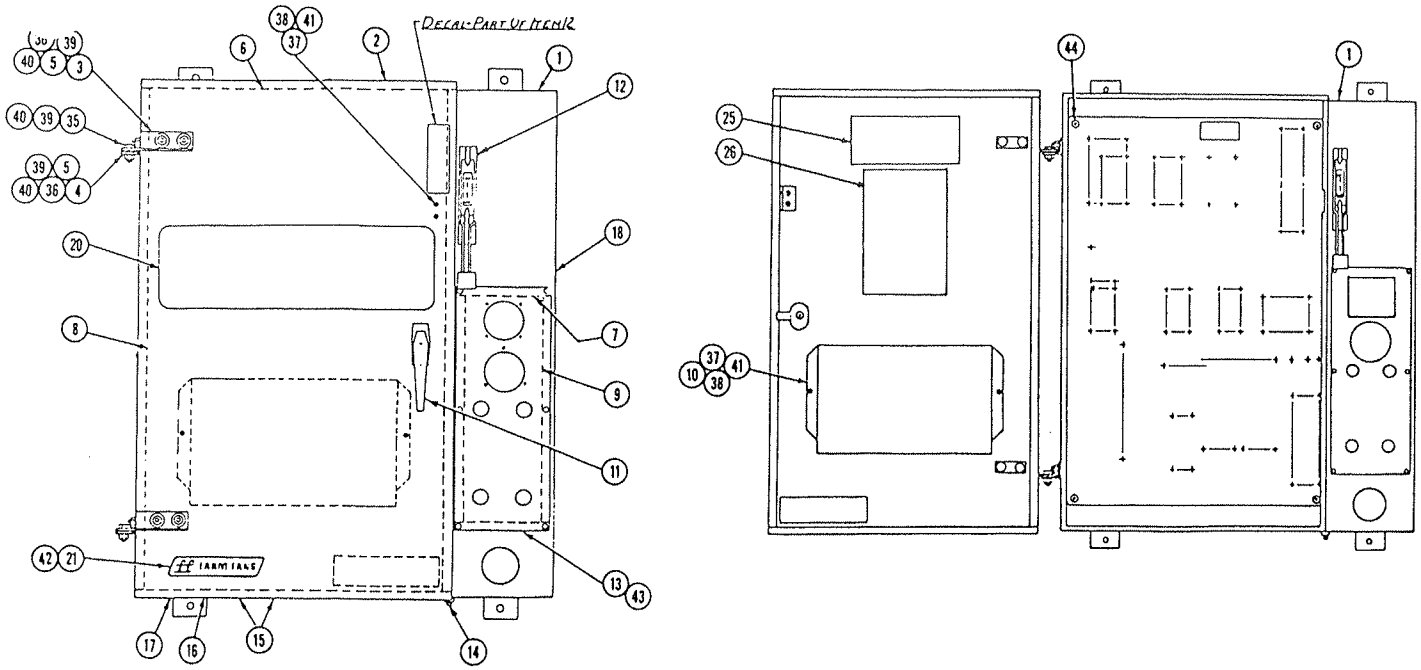


Fig. 1 - CONTROL BOX PARTS

Item	FF. Part No.	Description	Qty
Ref	410-1161-0	Control Box Assembly	1
1	410-1157-8	Control Box Weldment	1
2	401-1415-9	Control Box Door	1
3	401-1423-3	Hinge - Door Segment	2
4	401-1424-1	Hinge - Box Segment	2
5	401-1422-5	Hinge - Back-up Plate	4
6	406-1909-0	Gasket - Top & Bottom	2
7	406-1910-8	Gasket - Top & Bottom	2
8	406-1911-6	Gasket - Side	2
9	406-1912-4	Gasket - Side	2
10	006-1125-1	Literature Holder	1
11	023-1022-5	Lock/Handle - w/ keys	1
12	023-1034-0	Latch - Disconnect Device	1
13	401-1418-3	Plate - Switch Mounting	1
14	(1)	Plug - 1/8" NPT	1
15	048-1018-0	Plug - 7/8" Hole	2
16	048-1019-8	Plug - 1-1/8" Hole	1
17	048-1020-6	Plug - 1-3/8" Hole	1
18	048-1062-8	Plug - 1-3/4" Hole	1
20	420-1092-6	Decal - ConveyAir	1
21	420-1037-1	Nameplate	1
25	420-1115-5	Decal - Power Circuit, 1-PH only	AR
25	420-1116-3	Decal - Power Circuit, 3-PH except CA632 & CAH632	AR
25	420-1117-1	Decal - Power Circuit, 3-PH, CA632 & CAH 632 only	AR
26	420-1118-9	Decal - Control Circuit, all models	1
		STANDARD HARDWARE ITEMS	
35	(1)	Capscrew - 5/16"-18 X 3/4"	2
36	(1)	Carriage Bolt - 5/16"-18 X 3/4"	8
37	(1)	Screw - #8-32 X1/2"	4
38	(1)	Hex Nut - #8-32	4
39	(1)	Hex Nut - 5/16"-18 ESNA	10
40	(1)	Flat Washer - 5/16"	10
41	(1)	Lock Washer - #8	4
42	(1)	Speed Nut - Tinnerman	2
43	(1)	Screw - #8 X 1/2", Type A	6
44	(1)	Capscrew - 5/16"-18 X 1"	4
45	(1)	Hex Nut - 5/16"-18	4
46	(1)	Lock Washer - 5/16"	4
		(1) Standard Hardware Items - Purchase Locally	

FIG. 2 - CONTROL CHASSIS ASSEMBLY

3 PHASE

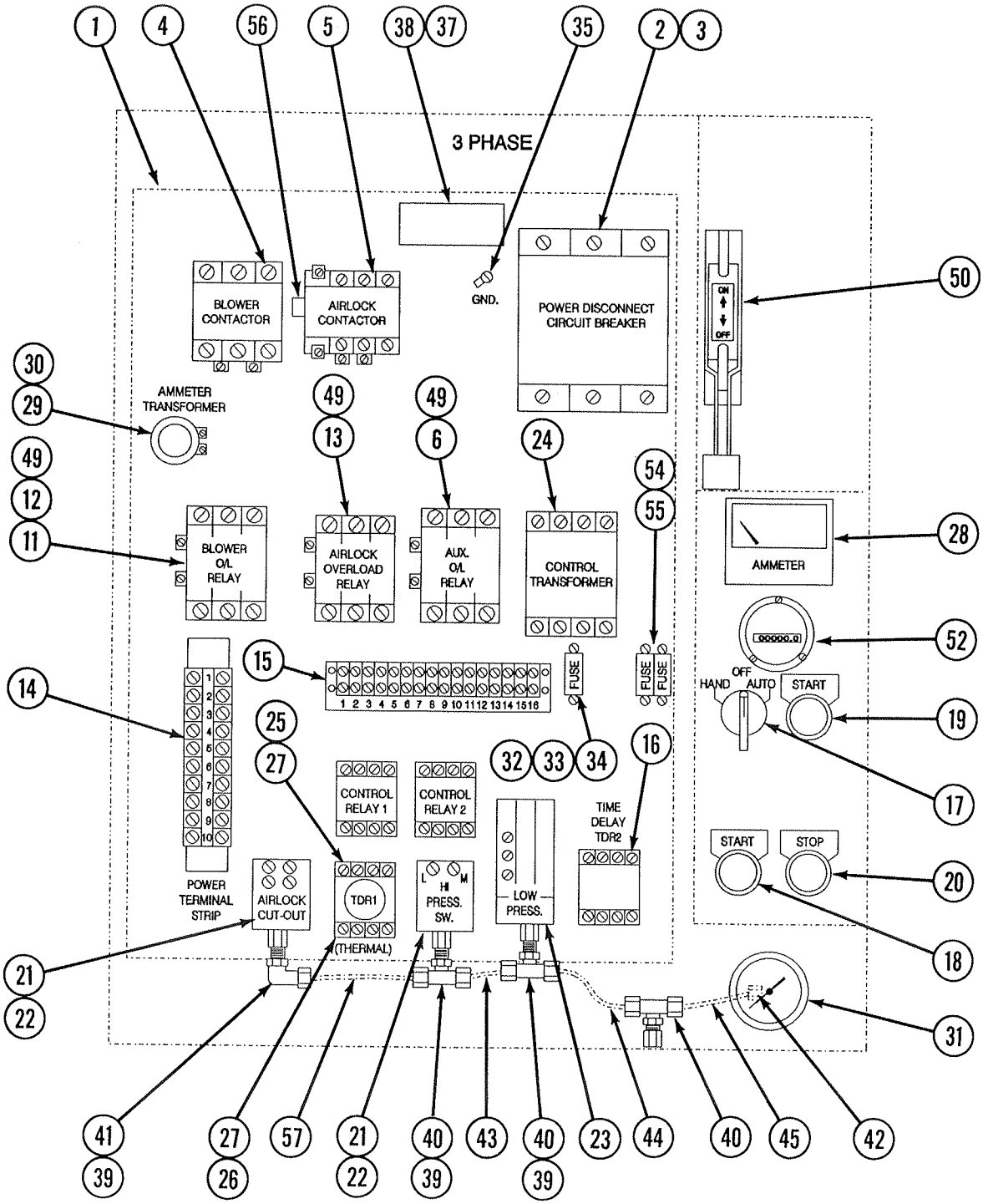


FIG. 2 - CONTROL CHASSIS ASSEMBLY

1 PHASE

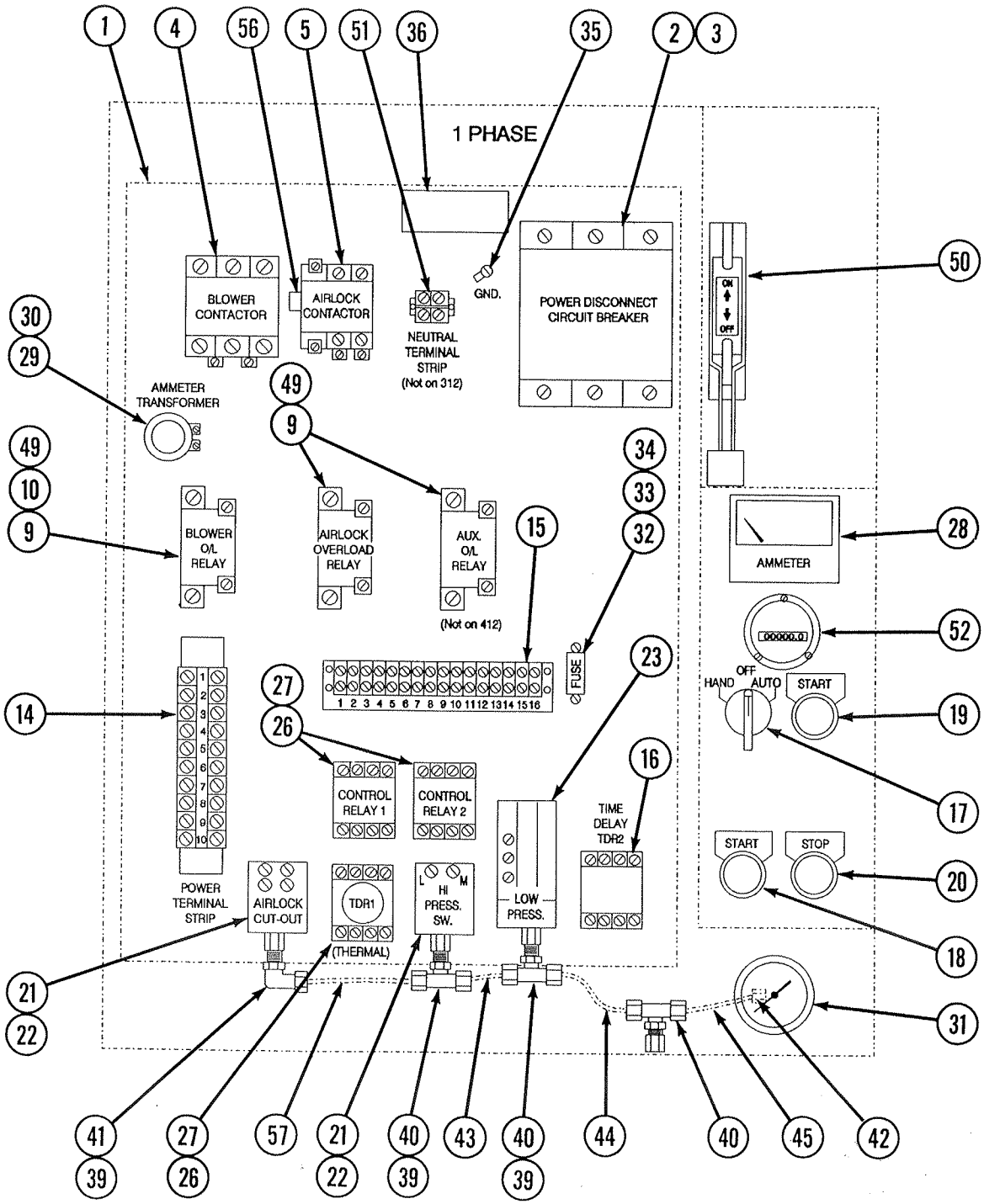


Fig. 2 - CONTROL CHASSIS ASSEMBLY PARTS

Item	FF Part No.	Description	Quantity													
			3" Sys.			4" Sys.					5" Sys.		6" Sys.			
			CA 312	CA 332	CA 334	CA 412	CA 432	CA 434	CAH 432	CAH 434	CAH 532	CAH 534	CA 632	CA 634	CAH 632	CAH 634
Ref	410-1162-8	Control Chassis Assembly	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ref	410-1163-6	Control Chassis Assembly	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Ref	410-1164-4	Control Chassis Assembly	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Ref	410-1165-1	Control Chassis Assembly	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Ref	410-1166-9	Control Chassis Assembly	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Ref	410-1167-7	Control Chassis Assembly	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Ref	410-1168-5	Control Chassis Assembly	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Ref	410-1169-3	Control Chassis Assembly	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Ref	410-1170-1	Control Chassis Assembly	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Ref	410-1171-9	Control Chassis Assembly	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Ref	410-1207-1	Control Chassis Assembly	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Ref	410-1208-9	Control Chassis Assembly	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Ref	410-1209-7	Control Chassis Assembly	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Ref	410-1210-5	Control Chassis Assembly	-	-	-	-	-	-	-	-	-	-	-	-	-	1
1	401-1416-7	Mounting Plate - Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	401-1417-5	Bracket - Circuit Breaker Mtg	1	1	1	1	1	1	1	1	1	1	-	1	-	1
2	401-1586-7	Bracket - Circuit Breaker Mtg	-	-	-	-	-	-	-	-	-	-	1	-	1	-
3	026-1085-5	Circuit Breaker - 60 Amp	-	1	1	-	-	1	-	1	-	1	-	-	-	-
3	026-1062-4	Circuit Breaker - 100 Amp	1	-	-	1	1	-	1	-	1	-	-	1	-	1
3	026-1104-5	Circuit Breaker - 150 Amp	-	-	-	-	-	-	-	-	-	-	1	-	1	-
4	056-1189-2	Contactor - Blower, 60A, 2 Pole	1	-	-	-	-	-	-	-	-	-	-	-	-	-
4	056-1188-4	Contactor - Blower, 50A, 3 Pole	-	1	1	-	1	1	1	1	-	1	-	1	-	-
4	056-1191-8	Contactor - Blower, 75A, 3 Pole	-	--	-	1	-	-	-	-	1	-	-	-	-	1
4	056-1345-0	Contactor W/OL - Blower, 120A, 3 Pole	-	-	-	-	-	-	-	-	-	-	1	-	1	-
5	056-1025-8	Contactor - Airlock, 40A, 2 Pole	1	1	-	1	-	-	-	-	-	-	-	-	-	-
5	056-1030-8	Contactor - Airlock, 40A, 3 Pole	-		1	-	1	1	1	1	1	1	1	1	1	1
9	056-1236-1	Overload Relay - 60A, 1 Pole	3	-	-	1	-	-	-	-	-	-	-	-	-	-
10	056-1233-8	Overload Relay - 100 Amp	-	-	-	1	-	-	-	-	-	-	-	-	-	-
11	056-1310-4	Overload Relay - 100 Amp	-	-	-	-	-	-	-	-	1	-	-	-	-	-
12	056-1235-3	Overload Relay - 60 Amp	-	2	2	-	2	2	2	2	1	2	1	2	-	2
13	056-1328-6	Overload Relay - 30 Amp	-	-	-	-	1	1	1	1	1	1	1	1	1	1
14	045-1005-3	Terminal Strip - Power, 10 Pos.	1	1	1	1	1	1	1	1	1	1	-	1	-	1
14	045-1036-8	Terminal Strip - Power, 6 Pos.	-	-	-	-	-	-	-	-	-	-	1	-	1	-
15	045-1004-6	Terminal Strip - Control, 16 Pos.	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16	056-1691-7	Time Delay Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17	026-1098-8	Selector Switch-4	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18	026-1099-6	Start Switch	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19	026-1102-8	Airlock Start Switch	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20	026-1100-2	Stop Switch	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21	026-1101-0	High Pressure Switch	2	2	2	2	2	2	2	2	2	2	2	2	2	2
22	401-1425-8	Bracket	2	2	2	2	2	2	2	2	2	2	2	2	2	2
23	026-1097-0	~~Airlock~~ Start Switch Low Press	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24	043-1017-3	Control Transformer - .125 KVA	-	1	1	1	-	1	1	1	1	1	1	1	1	1
25	044-1018-9	Control Relay	2	2	2	2	2	2	2	2	2	2	2	2	2	2
26	044-1024-7	Time Delay Relay	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27	055-1038-3	Relay Base	3	3	3	3	3	3	3	3	3	3	3	3	3	3
28	068-1026-1	Ammeter	1	1	1	1	1	1	1	1	1	1	-	1	-	1
28	068-1030-3	Ammeter	-	-	-	-	-	-	-	-	-	-	1	-	1	-
29	043-1014-0	Ammeter Transformer	1	1	1	1	1	1	1	1	1	1	-	1	-	1
29	043-1-16-5	Ammeter Transformer	-	-	-	-	-	-	-	-	-	-	1	-	1	-
30	(1)	Clamp - 1" Nylon	1	1	1	1	1	1	1	1	1	1	1	1	1	1
31	041-1006-0	Pressure Gauge - 0-15 PSI	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32	050-1001-2	Fuse - 5 Amp	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33	037-1007-6	Fuse Holder	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34	037-1030-8	Fuse Block Spacer	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35	309-1092-1	Ground Lug	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36	029-1133-7	Decal - 230 Volt, 1-PH	1	-	-	1	-	-	-	-	-	-	-	-	-	-
37	029-1134-5	Decal - 220 Volt, 3-PH	-	1	-	-	1	-	1	-	1	-	1	-	1	-
38	029-1158-4	Decal - 440 Volt, 3-PH	-	-	1	-	-	1	-	1	-	1	-	1	-	1
39	019-1048-8	Bushing	2	2	2	2	2	2	2	2	2	2	2	2	2	2
40	007-1309-9	Tee	2	2	2	2	2	2	2	2	2	2	2	2	2	2
41	007-1256-2	Elbow - 90	1	1	1	1	1	1	1	1	1	1	1	1	1	1
42	(1)	Elbow - 90 , 1/8" NPT - Tube	1	1	1	1	1	1	1	1	1	1	1	1	1	1
43	007-1526-8	Tube	1	1	1	1	1	1	1	1	1	1	1	1	1	1
44	007-1527-6	Tube	1	1	1	1	1	1	1	1	1	1	1	1	1	1
45	033-1020-8	Tube	1	1	1	1	1	1	1	1	1	1	1	1	1	1
46	007-1542-5	Tube Assembly (not shown)	1	1	1	1	1	1	1	1	1	1	1	1	1	1
49	(2)	Overload Relay Heater Element	3	9	9	2	9	9	9	9	9	9	9	9	6	9
50	023-1035-7	Operating Mechanism	1	1	1	1	1	1	1	1	1	1	-	1	-	1
50	023-1036-5	Operating Mechanism	-	-	-	-	-	-	-	-	-	-	1	-	1	-

033-1018-8 (RAW)

Fig. 2 - CONTROL CHASSIS ASSEMBLY PARTS

Continued

Item	FF Part NO.	Description	Quantity													
			3" SYS.			4" SYS.					5" SYS.		6" SYS.			
			CA 312	CA 332	CA 334	CA 412	CA 432	CA 434	CAH 432	CAH 434	CAH 532	CAH 534	CA 632	CA 634	CAH 632	CAH 634
Ref	410-1162-8	Control Chassis Assembly	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ref	410-1163-6	Control Chassis Assembly	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Ref	410-1164-4	Control Chassis Assembly	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Ref	410-1165-1	Control Chassis Assembly	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Ref	410-1166-9	Control Chassis Assembly	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Ref	410-1167-7	Control Chassis Assembly	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Ref	410-1168-5	Control Chassis Assembly	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Ref	410-1169-3	Control Chassis Assembly	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Ref	410-1170-1	Control Chassis Assembly	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Ref	410-1171-9	Control Chassis Assembly	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Ref	410-1207-1	Control Chassis Assembly	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Ref	410-1208-9	Control Chassis Assembly	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Ref	410-1209-7	Control Chassis Assembly	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Ref	410-1210-5	Control Chassis Assembly	-	-	-	-	-	-	-	-	-	-	-	-	-	1
51	045-1014-5	Terminal Strip - 2 Pos.	1	-	-	1	-	-	-	-	-	-	-	-	-	-
52	044-1026-2	Hourmeter	1	1	1	1	1	1	1	1	1	1	1	1	1	1
53	420-1108-0	Decal Pkg. - Component Ident.	1	1	1	1	1	1	1	1	1	1	1	1	1	1
54	047-1011-7	Fuse Holder - 2 Pos.	-	1	1	-	1	1	1	1	1	1	1	1	1	1
55	050-1008-7	Fuse, 5A 600V	-	2	2	-	2	2	2	2	2	2	2	2	2	2
56	056-1303-9	Interlock Switch	-	1	1	-	1	1	1	1	1	1	1	1	1	1
57	033-1018-2	Tube	-	1	1	-	1	1	1	1	1	1	1	1	1	18
		STANDARD HARDWARE ITEMS														
--	(1)	Screw - #6 X 5/8", Type F	9	11	11	9	11	11	11	11	11	11	11	11	11	11
--	(1)	Screw - #8 X 1/2", Type A	31	37	37	31	37	37	37	37	37	37	33	37	29	37
--	(1)	Screw - #12 X 1/2", Type A	4	4	4	4	4	4	4	4	4	4	4	4	4	4
--	(1)	Hex Nut - #8-32	4	4	4	4	4	4	4	4	4	4	4	4	4	4
--	(1)	Lock Washer - #8	4	4	4	4	4	4	4	4	4	4	4	4	4	4

(1) Standard Hardware - Purchase Locally.
(2) See Fig. 2A for Heater Element Listing.

Fig. 2A - O/L RELAY HEATER ELEMENTS

E#	F.F. Part #	Model	Relay Use	Qty.
		3 Inch Systems		
E72	056-1336-9	CA-312	Blower	1
E41	056-1333-6	CA-312	Airlock	1
E62	056-1245-2	CA-312	AUX. Conv.	1
E67	056-1247-8	CA-332	Blower	3
E32	056-1331-0	CA-332	Airlock	3
E60	056-1244-5	CA-332	AUX. Conv.	3
E57	056-1335-1	CA-334	Blower	3
E19	056-1329-4	CA-334	Airlock	3
E51	056-1243-7	CA-334	AUX. Conv.	3
		4 Inch Systems		
E79	056-1339-3	CA-412	Blower	1
E46	056-1334-4	CA-412	Airlock	1
E73A	056-1383-1	CA-432	Blower	3
E38	056-1332-8	CA-432	Airlock	3
E60	056-1244-5	CA-432	AUX. Conv.	3
E62	056-1245-2	CA-434	Blower	3
E27	056-1330-2	CA-434	Airlock	3
E51	056-1243-7	CA-434	AUX. Conv.	3

Fig. 2A - O/L RELAY HEATER ELEMENTS

E#	F.F. PART NO.	MODEL	RELAY USE	QTY
		5 Inch Systems		
E79	056-1339-3	CAH-532	Blower	3
E38	056-1332-8	CAH-532	Airlock	3
E60	056-1244-5	CAH-532	AUX. Conv.	3
E73	056-1249-4	CAH-534	Blower	3
E27	056-1330-2	CAH-534	Airlock	3
E51	056-1243-7	CAH-534	AUX. Conv.	3
		6 Inch Systems		
E96	056-1296-5	CA-632	Blower	3
E39	056-1343-5	CA-632	Airlock	3
E60	056-1244-5	CA-632	AUX. Conv.	3
E77	056-1251-0	CA-634	Blower	3
E28	056-1337-7	CA-634	Airlock	3
E51	056-1243-7	CA-634	AUX. Conv.	3
E98	056-1344-3	CAH-632	Blower	3
E39	056-1343-5	CAH-632	Airlock	3
E78	056-1252-8	CAH-634	Blower	3
E28	056-1337-7	CAH-634	Airlock	3
E51	056-1243-7	CAH-634	AUX. Conv.	3

Fig. 3 - BLOWER ASSEMBLY PARTS

ITEM	FF PART NO.	DESCRIPTION	Quantity								
			3" SYS.		4" SYS.			5" SYS.		6" SYS.	
			CA 312	CA 332 334	CA 412	CA 432 434	CAH 432 434	CAH 532 534	CA 532 PC	CA 632 634	CAH 632 634
Ref	415-1374-8	Blower Package - 3" (NOS. 1-39)	1	1	-	-	-	-	-	-	-
Ref	415-1375-5	Blower Package - 4" (NOS. 1-39)	-	-	1	1	-	-	-	-	-
Ref	415-1375-5	Blower Package - 4" (NOS. 1-39)	-	-	-	-	1	-	-	-	-
Ref	415-1376-3	Blower Package - 5", 25 HP (NOS. 1-39)	-	-	-	-	-	-	1	-	-
Ref	415-1376-3	Blower Package - 5", 30 HP (NOS. 1-39)	-	-	-	-	-	1	-	-	-
Ref	415-1300-3	Blower Package - 6", 40 HP (NOS. 1-39)	-	-	-	-	-	-	-	1	-
Ref	314-1301-1	Blower Package - 6", 50 HP (NOS. 1-39)	-	-	-	-	-	-	-	-	1
Ref	415-1377-1	Blower - Sub Assy, 3" (NOS. 1-12)	1	1	-	-	-	-	-	-	-
Ref	415-1378-9	Blower - Sub Assy, 4" (NOS. 1-12)	-	-	1	1	1	-	-	-	-
Ref	415-1379-7	Blower - Sub Assy, 5" (NOS. 1-12)	-	-	-	-	-	1	1	-	-
Ref	415-1302-9	Blower - Sub Assy, 6" (NOS. 1-12)	-	-	-	-	-	-	-	1	1
1	069-1015-2	Blower	1	1	-	-	-	-	-	-	-
1	069-1014-5	Blower	-	-	1	1	1	-	-	-	-
1	069-1016-0	Blower	-	-	-	-	-	1	1	-	-
1	069-1020-2	Blower	-	-	-	-	-	-	-	1	1
2	410-1132-1	Intake Transition Weldment	1	1	-	-	-	-	-	-	-
2	410-1135-4	Intake Transition Weldment	-	-	1	1	1	-	-	-	-
2	410-1138-8	Intake Transition Weldment	-	-	-	-	-	1	1	-	-
2	410-1196-6	Intake Transition Weldment	-	-	-	-	-	-	-	1	1
3	410-1133-9	Intake Stack Weldment	1	1	-	-	-	-	-	-	-
3	410-1136-2	Intake Stack Weldment	-	-	1	1	1	-	-	-	-
3	410-1139-6	Intake Stack Weldment	-	-	-	-	-	1	1	-	-
3	410-1189-1	Intake Stack Weldment	-	-	-	-	-	-	-	1	1
4	415-1229-4	Stack Coupler	1	1	-	-	-	-	-	-	-
4	415-1232-8	Stack Coupler	-	-	1	1	1	-	-	-	-
4	415-1235-1	Stack Coupler	-	-	-	-	-	1	1	-	-
4	415-1304-5	Stack Coupler	-	-	-	-	-	-	-	1	1
5	415-1230-2	Air Filter	1	1	1	1	1	-	-	-	-
5	415-1237-7	Air Filter	-	-	-	-	-	1	1	1	1
6	406-1181-6	Gasket - Transitions	2	2	-	-	-	-	-	-	-
6	406-1182-4	Gasket - Transitions	-	-	2	2	2	-	-	-	-
6	406-1183-2	Gasket - Transitions	-	-	-	-	-	2	2	-	-
6	406-1184-0	Gasket - Transitions	-	-	-	-	-	-	-	2	2
7	410-1125-5	Air Filter Shroud Weldment	1	1	1	1	1	-	-	-	-
7	410-1127-1	Air Filter Shroud Weldment	-	-	-	-	-	1	1	1	1
8	410-1225-3	Discharge Transition Weldment	1	1	-	-	-	-	-	-	-
8	410-1226-1	Discharge Transition Weldment	-	-	1	1	1	-	-	-	-
8	410-1140-4	Discharge Transition Weldment	-	-	-	-	-	1	1	-	-
8	410-1197-4	Discharge Transition Weldment	-	-	-	-	-	-	-	1	1
9	410-1261-8	Check Valve Weldment	1	1	-	-	-	-	-	-	-
9	410-1262-6	Check Valve Weldment	-	-	1	1	1	-	-	-	-
9	410-1263-4	Check Valve Weldment	-	-	-	-	-	1	1	-	-
9	410-1264-2	Check Valve Weldment	-	-	-	-	-	-	-	1	1
10	406-1917-3	Gasket - Filter	1	1	1	1	1	1	1	1	1
11	406-1231-9	Restriction Indicator	1	1	1	1	1	1	1	1	1
12	(1)	Nipple - 1/8 NPI X 2-1/2 Cad Pl.	1	1	1	1	1	1	1	1	1
18	018-1059-7	Sheave - 2B-4.8-SDS	1	1	-	-	-	-	-	-	-
18	018-1061-3	Sheave - 2B-5.8-SDS	-	-	1	1	1	-	-	-	-
18	018-1064-7	Sheave - 3B-5.6-SD	-	-	-	-	-	1	1	-	-
18	018-1069-6	Sheave - 3B-7.4-SK	-	-	-	-	-	-	-	1	-
18	018-1071-2	Sheave - 4B-7.4-SK	-	-	-	-	-	-	-	-	1
19	018-1062-1	Sheave - 2B-6.8-SDS	1	1	-	-	-	-	-	-	-
19	018-1063-9	Sheave - 2B-9.4-SK	-	-	1	1	1	-	-	-	-
19	018-1065-4	Sheave - 3B-9.4-SK	-	-	-	-	-	1	1	-	-
19	018-1066-2	Sheave - 3B-7.0-SK	-	-	-	-	-	-	-	1	-
19	018-1070-4	Sheave - 4B-7.0-SK	-	-	-	-	-	-	-	-	1
20	019-1044-7	Bushing - SDS-1-3/8	1	1	-	-	-	-	-	-	-
20	019-1047-0	Bushing - SK-1-5/8	-	-	1	1	1	-	-	-	-
20	019-1043-9	Bushing - SK-1-7/8	-	-	-	-	-	1	1	1	1
21	019-1045-4	Bushing - SDS-1-7/16	1	1	1	1	1	-	-	-	-
21	019-1046-2	Bushing - SD-1-7/16	-	-	-	-	-	1	1	-	-
21	019-1049-6	Bushing - SK-1-7/16	-	-	-	-	-	-	-	1	1
22	017-1473-2	Belt Set - BX-63, 2-Matched	1	1	-	-	-	-	-	-	-
22	020-1023-9	Belt Set - BX-68, 2-Matched	-	-	1	1	1	-	-	-	-
22	017-1474-6	Belt Set - BX-68, 3-Matched	-	-	-	-	-	1	1	-	-
22	017-1475-7	Belt Set - BX-80, 3-Matched	-	-	-	-	-	-	-	1	-
22	017-1476-5	Belt Set - BX-80, 4-Matched	-	-	-	-	-	-	-	-	1

Fig. 3 - BLOWER ASSEMBLY PARTS

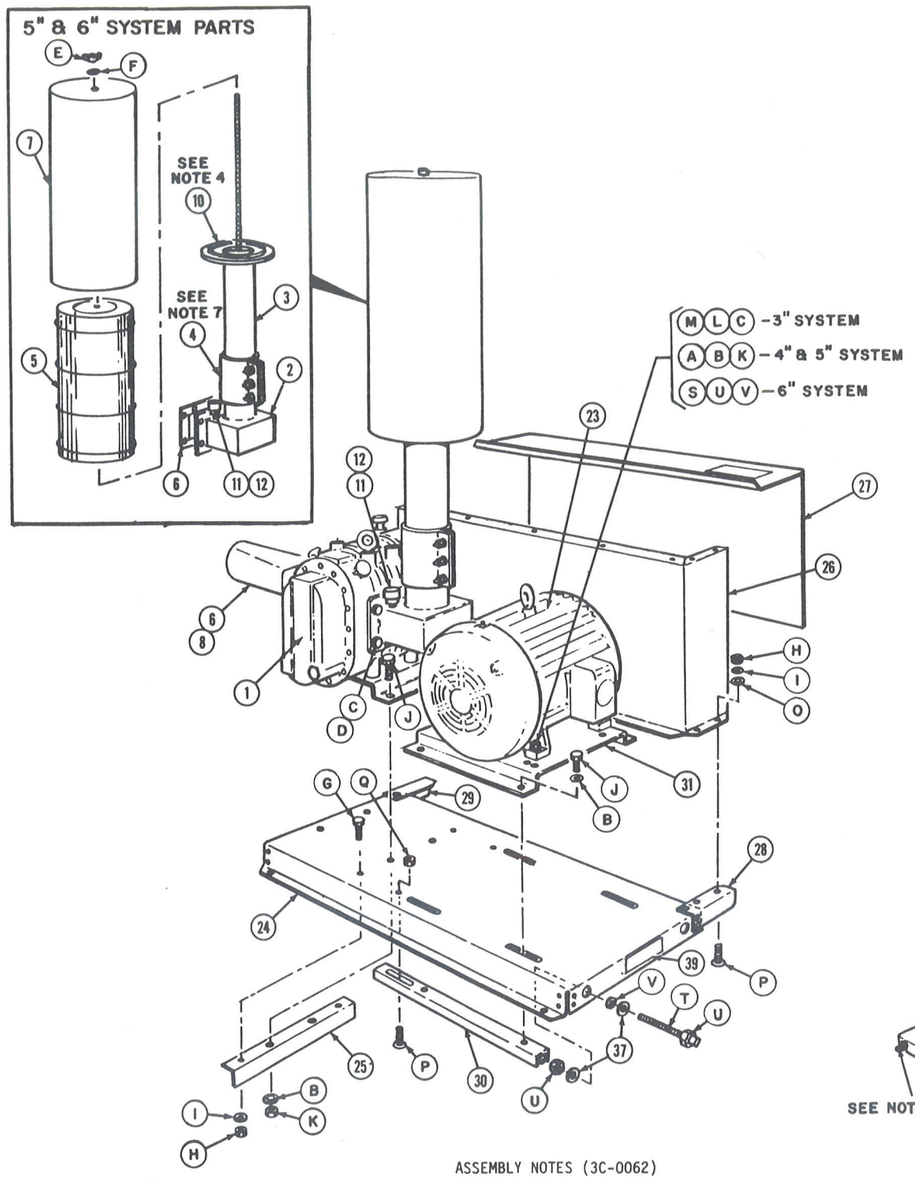
Continued

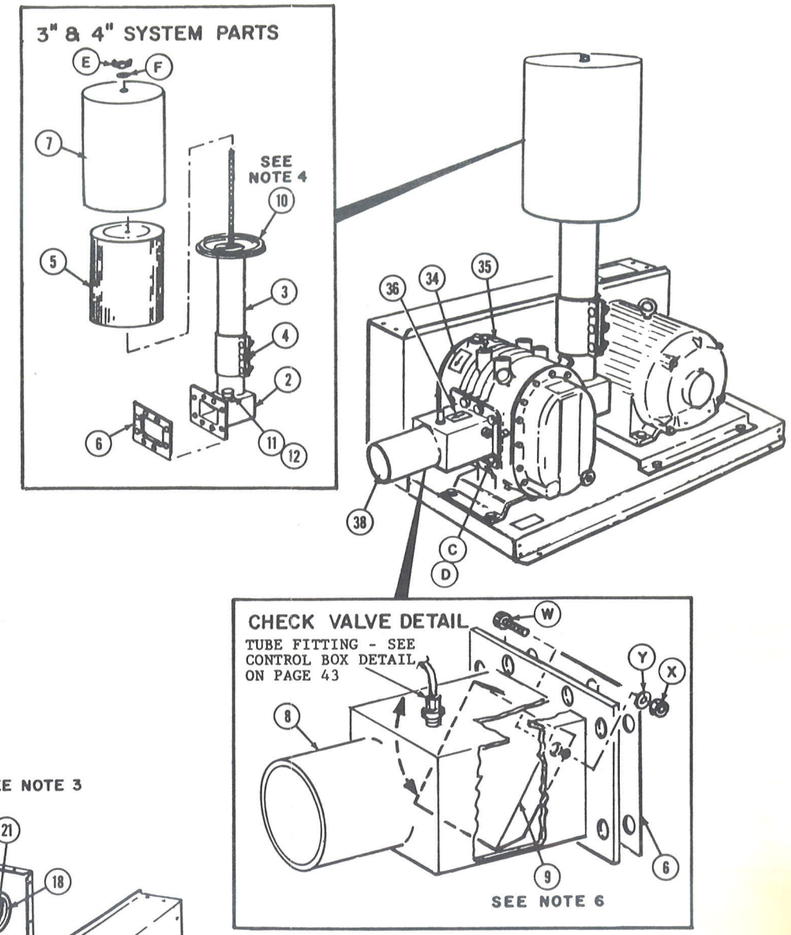
ITEM	FF PART NO.	DESCRIPTION	Quantity								
			3" SYS.		4" SYS.			5" SYS.		6" SYS.	
			CA 312	CA 332 334	CA 412	CA 432 434	CAH 432 434	CAH 532 534	CA 532 PC	CA 632 634	CAH 632 634
23	002-1077-3	Motor - 10 HP, 1-PH	1	-	-	-	-	-	-	-	-
23	002-1069-0	Motor - 10 HP, 3-PH	-	1	-	-	-	-	-	-	-
23	002-1078-1	Motor - 15 HP, 1-PH	-	-	1	-	-	-	-	-	-
23	002-1183-9	Motor - 15 HP, 3-PH	-	-	-	1	-	-	-	-	-
23	002-1184-7	Motor - 20 HP, 3-PH	-	-	-	-	1	-	-	-	-
23	002-1185-4	Motor - 25 HP, 3-PH	-	-	-	-	-	-	1	-	-
23	002-1214-2	Motor - 30 HP, 3-PH	-	-	-	-	-	1	-	-	-
23	002-1249-8	Motor - 40 HP, 3-PH	-	-	-	-	-	-	-	1	-
23	002-1247-2	Motor - 50 HP, 3-PH	-	-	-	-	-	-	-	-	1
Ref	415-1380-5	Base Assy., Blower Mtg. (Nos. 24-37)	1	1	-	-	-	-	-	-	-
Ref	415-1381-3	Base Assy., Blower Mtg. (Nos. 24-37)	-	-	1	1	1	-	-	-	-
Ref	415-1382-1	Base Assy., Blower Mtg. (Nos. 24-37)	-	-	-	-	-	1	1	-	-
Ref	415-1303-7	Base Assy., Blower Mtg. (Nos. 24-37)	-	-	-	-	-	-	-	1	1
24	410-1143-8	Base	1	1	1	1	1	1	1	-	-
24	401-1557-8	Base	-	-	-	-	-	-	-	1	1
25	401-1474-6	Reinforced Angle	-	-	-	-	-	1	1	-	-
25	401-1558-6	Reinforced Angle	-	-	-	-	-	-	-	1	1
26	401-1462-1	Belt Shield Base	1	1	1	1	1	1	1	-	-
26	401-1559-4	Belt Shield Base	-	-	-	-	-	-	-	1	1
27	401-1463-9	Belt Shield Cover	1	1	1	1	1	1	1	-	-
27	401-1560-2	Belt Shield Cover	-	-	-	-	-	-	-	1	1
28	401-1464-7	Support Bracket - R.H.	1	1	1	1	1	1	1	1	1
29	401-1465-4	Support Bracket - L.H.	1	1	1	1	1	1	1	1	1
30	410-1149-5	Motor Adjustment Rail Weldment	2	2	2	2	2	2	2	-	-
30	410-1199-0	Motor Adjustment Rail Weldment	-	-	-	-	-	-	-	2	2
31	401-1546-1	Motor Adapter Plate	1	1	-	-	-	-	-	-	-
31	401-1452-2	Motor Adapter Plate	-	-	1	1	1	1	1	-	-
31	401-1562-8	Motor Adapter Plate	-	-	-	-	-	-	-	1	1
32	323-1066-6	Decal - Warning	1	1	1	1	1	1	1	1	1
33	420-1092-6	Decal - Convey-Air	1	1	1	1	1	1	1	1	1
34	420-1093-4	Decal - Rotation	1	1	1	1	1	1	1	1	1
35	323-1028-6	Decal - Caution	2	2	2	2	2	2	2	2	2
36	420-1110-6	Decal - Air Flow	1	1	1	1	1	1	1	1	1
37	326-1042-0	Washer - 5/8", Hardened	4	4	4	4	4	4	4	4	4
38	048-1064-4	Plug - Tapered	1	1	-	-	-	-	-	-	-
38	048-1065-1	Plug - Tapered	-	-	1	1	1	-	-	-	-
38	048-1066-9	Plug - Tapered	-	-	-	-	-	2	2	-	-
38	048-1067-7	Plug - Tapered	-	-	-	-	-	-	-	2	2
39	010-1001-6	Decal - Model & Serial No.	1	1	1	1	1	1	1	1	1
		STANDARD HARDWARE ITEMS									
A	(1)	Machine Screw - 1/2-13 X 1-3/4 Hex	-	-	4	4	4	4	4	-	-
B	(1)	Lock Washer - 1/2"	8	8	12	12	12	12	12	8	8
C	(1)	Lock Washer 3/8"	16	16	16	16	16	16	16	20	20
D	(1)	Machine Screw - 3/8-16 X 3/4 Hex	12	12	16	16	16	16	16	20	20
E	(1)	Wing Nut - 3/8"-16	1	1	1	1	1	1	1	1	1
F	(1)	Flat Washer - 3/8"	1	1	1	1	1	1	1	1	1
G	(1)	Machine Screw - 5/16-18 X 3/4 Hex	-	-	-	-	-	2	2	2	2
H	(1)	Nut - 5/16"-18 Hex	10	10	10	10	10	12	12	12	12
I	(1)	Lock Washer - 5/16"	10	10	10	10	10	12	12	12	12
J	(1)	Machine Screw - 1/2-13 X 1-1/4 Hex	8	8	8	8	8	8	8	8	8
K	(1)	Nut - 1/2"-13 Hex	4	4	8	8	8	8	8	4	4
L	(1)	Nut - 3/8"-16 Hex	4	4	-	-	-	-	-	-	-
M	(1)	Capscrew - 3/8"-16 X 1-1/4"	4	4	-	-	-	-	-	-	-
O	(1)	Flat Washer - 5/16"	4	4	4	4	4	4	4	4	4
P	(1)	Carriage Bolt - 5/16"-18 X 3/4"	12	12	12	12	12	12	12	12	12
Q	(1)	ESNA Locknut - 5/16"-18	2	2	2	2	2	2	2	2	2
R	(1)	Screw - 1/4", Type A, Hex	15	15	15	15	15	15	15	15	15
S	(1)	Capscrew - 5/8"-11 X 2", Hex	-	-	-	-	-	-	-	4	4
T	(1)	Setscrew - 5/8"-11 X 6", Sq. Hd.	2	2	2	2	2	2	2	2	2
U	(1)	Nut - 5/8"-11, Hex	4	4	4	4	4	4	4	8	8
V	(1)	Lock Washer - 5/8"	2	2	2	2	2	2	2	6	6
W	(1)	Shoulder Screw - 1/4-20 Thd.	2	2	2	2	2	2	2	2	2
X	(1)	Lock Nut - 1/4"-20	2	2	2	2	2	2	2	2	2
Y	(1)	Flat Washer - 1/4"	15	15	15	15	15	15	15	15	15
Z	(1)	Pipe Plug 1/8 NPT	1	1	1	1	1	1	1	1	1
AA	(1)	Belleville Washer	4	4	4	4	4	4	4	4	4

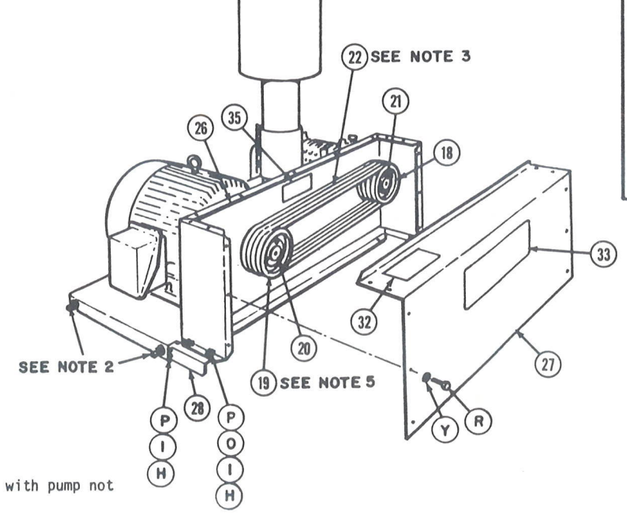
(1) Standard Hardware Items - Purchase Locally

NOTES

FIG. 3 - BLOWER ASSEMBLY







ASSEMBLY NOTES (3C-0062)

NOTE #1: Oil level to be midway in oil gauge sight glass. Level to be taken with pump not operating. Remove one breather at gear case end when adding oil.

Use a high quality motor oil for blower lubricant.

Oil must meet or exceed the requirements of SAE specifications SE and CC. 10W40 viscosity is recommended for all ordinary operating conditions.

NOTE #2: Adjust rails evenly to maintain proper sheave alignment & uniform belt tension.

NOTE #3: Belts to be installed in matched sets only.

NOTE #4: Be sure gasket is installed between filter and mounting flange.

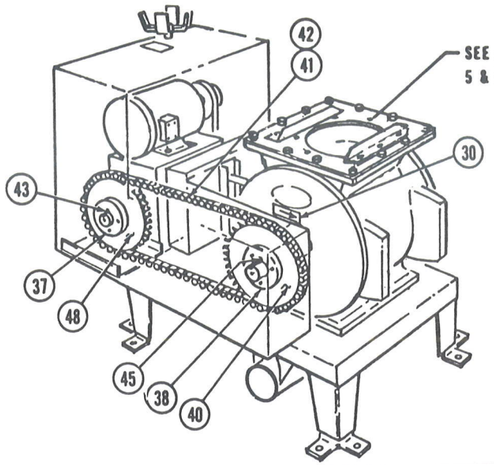
NOTE #5: Check sheave alignment before tightening bushings.

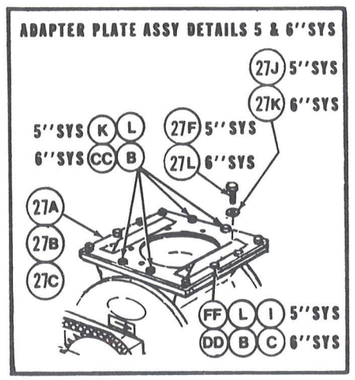
ASSEMBLY NOTES (CONT'D.)

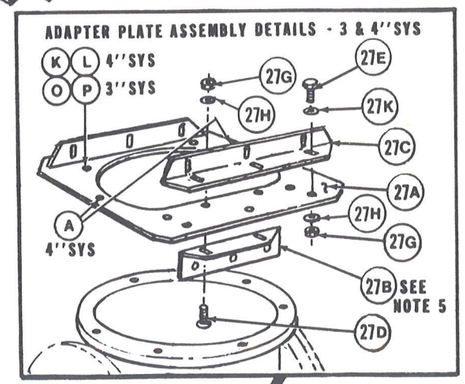
NOTE #6: With check valve installed and hardware assembled (but not fully tightened), shift top end of check valve upward to obtain minimum gap at upper surface. Then fully tighten capscrew and check for proper operation. CHECK VALVE MUST ROTATE FREELY.

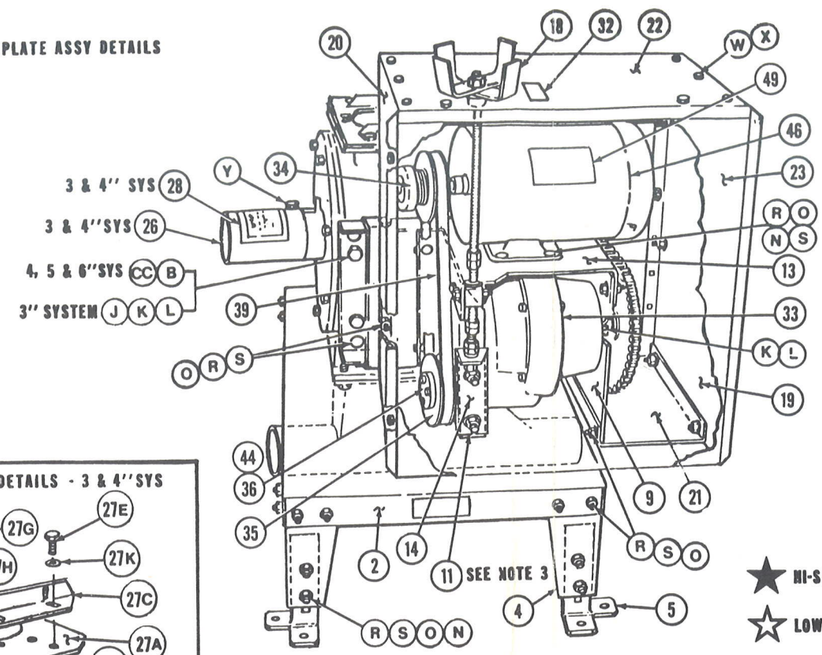
NOTE #7: 5" & 6" Systems Only - After testing, remove coupler, intake stack and filter for shipping purposes and install Item 38 to close blower inlet.

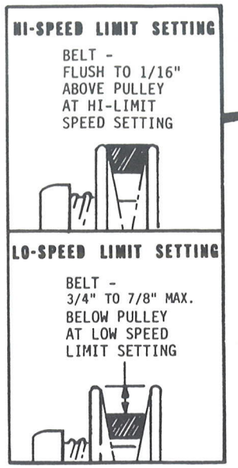
FIG. 4 - AIRLOCK ASSEMBLY





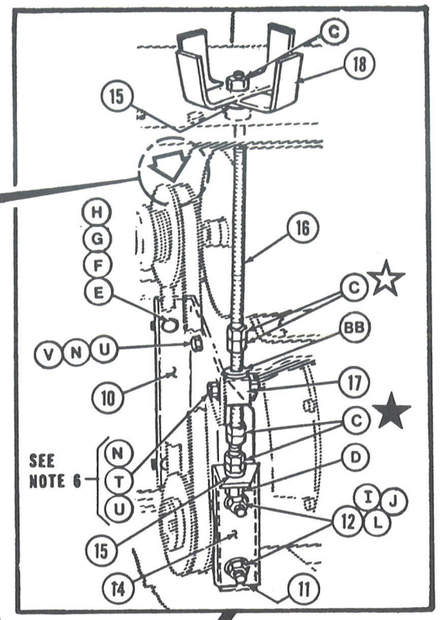


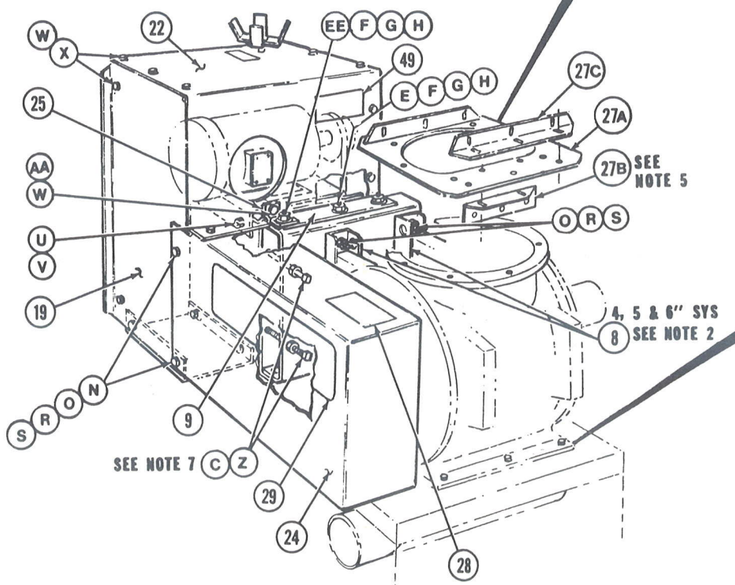


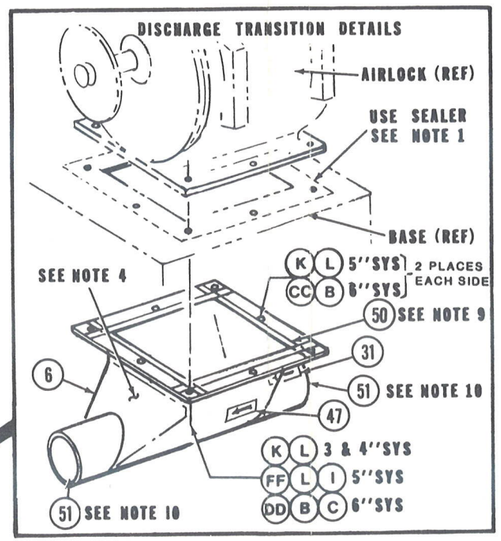


★ HI-SPEED LIMIT ADJUSTMENT NUTS

☆ LOW-SPEED LIMIT ADJUSTMENT NUTS







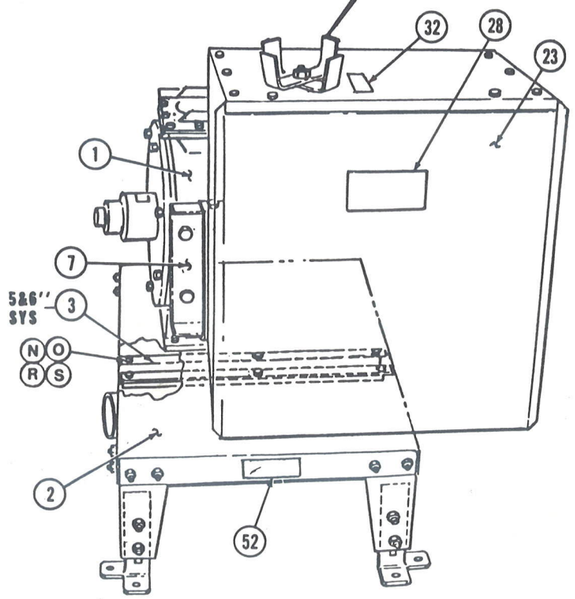


FIG. 4 - AIRLOCK ASSEMBLY

ASSEMBLY NOTES

NOTE #1: Use sealant between airlock #1 and base #2.

NOTE #2: Assemble brackets #8 to #7 on 4", 5" and 6" systems before assembly of #7 to airlock.

NOTE #3:

A. Position gear box #33 to bracket #9 and LOOSELY install hardware "L" and "K".

B. Position bracket #10 to gear box and to bracket #9, then LOOSELY install hardware "E", "F", "G" and "H".

C. Position bracket #13 across brackets #9 and #10, then install hardware "N", "U" and "V" only to where secure, but bracket #13 can still pivot up and down freely.

D. Install U-bolt #12 and bracket #14, using hardware "I", "J" and "L", while checking stress on bolts "K" thru speed reducer. If necessary, add shim #11 between #14 and #10, then tighten all hardware.

E. Position bracket #9 and #7 and install hardware.

NOTE #4: Slanted side of discharge transition #6 to be factory installed on sprocket side of airlock (may be rotated 180°, if required, for field installation).

NOTE #5: Assemble grain baffle #27B to inlet adapter plate #27A and align to straight edge of plate opening. Install inlet adapter plate so that grain baffle is away from motor side of airlock.

NOTE #6: Bolt to be assembled with locknut away from belt.

NOTE #7: After chain tightness is adjusted with "Z", lock in place with "C".

NOTE #8: During airlock test, rotate handwheel with airlock operating and check belt location within variable pulley at both the hi-speed and low-speed limit settings. See detail box and speed chart for specifications.

AIRLOCK SPEED CHART

3", 4" & 5" Airlocks

Minimum - 18 to 20 RPM (4-3/4 Turns in 14 to 16 Seconds)
Maximum - 30 to 32 RPM (7-3/4 Turns in 14 to 16 Seconds)

6" Airlocks

Minimum - 13 to 15 RPM (3-1/2 Turns in 14 to 16 Seconds)
Maximum - 21 to 23 RPM (5-1/2 Turns in 14 to 16 Seconds)

NOTE #9: Install gaskets #50 onto discharge transition #6 so that gaskets are located inside the bolt lines with gasket ends overlapped, as indicated.

NOTE #10: After testing, install plug #51 into each end of transition #6.

Fig. 4 - AIRLOCK UNIT

ITEM	FF PART NO.	DESCRIPTION	QUANTITY						
			3" SYS.		4" SYS.		5" SYS.		6" SYS.
			CA312	CA332 CA334	CA412	CA432 CA434 CAH432 CAH434	CAH532 CAH534	CA532PC	CA632 CA634 CAH632 CAH634
Ref Ref Ref Ref	415-1249-2 415-1250-0 415-1251-8 415-1322-7	Airlock Package - 3" Airlock Package - 4" Airlock Package - 5" Airlock Package - 6"	1 - - -	1 - - -	- 1 - -	- 1 - -	- - 1 -	- - 1 -	- - - 1
1 1 1 1	069-1017-8 069-1018-6 069-1019-4 069-1021-0	Airlock Assembly - 3" Airlock Assembly - 4" Airlock Assembly - 5" Airlock Assembly - 6"	1 - - -	1 - - -	- 1 - -	- 1 - -	- - 1 -	- - 1 -	- - - 1
2 2 2 2	401-1393-8 401-1387-0 401-1409-2 401-1572-7	Base Plate Base Plate Base Plate Base Plate	1 - - -	1 - - -	- 1 - -	- 1 - -	- - 1 -	- - 1 -	- - - 1
3 4 4 5	401-1411-8 401-1388-8 401-1405-1 401-1402-7	Brace - Base Plate Leg Leg Leg Extension	- 4 - 4	- 4 - 4	- 4 - 4	- 4 - 4	1 - 4 4	1 - 4 4	1 - 4 4
6 6 6 6	410 401-1150-3 401-1151-1 401-1152-9 401-1200-6	Discharge Transition Weldment Discharge Transition Weldment Discharge Transition Weldment Discharge Transition Weldment	1 - - -	1 - - -	- 1 - -	- 1 - -	- - 1 -	- - 1 -	- - - 1
7 7 7	410-1126-3 410-1131-3 410-1201-4	Channel Weldment - Drive Mtg Channel Weldment - Drive Mtg Channel Weldment - Drive Mtg	1 - -	1 - -	1 - -	1 - -	- 1 -	- 1 -	- - 1
8 9 9	401-1400-1 401-1383-9 401-1408-4	Bracket - Lifting Mounting Bracket - Gear Box Mounting Bracket - Gear Box	- 1 -	- 1 -	2 1 -	2 1 -	2 - 1	2 - 1	2 - 1
10 11 12 13	401-1385-4 401-1389-6 (1) 401-1386-2	"Z" Bracket - Gear Box Support Shim - Gear Box Journal U-Bolt - 3/8"-16 (SS #432) Motor Mount	1 1AR 1 1	1 1AR 1 1	1 1AR 1 1	1 1AR 1 1	1 1AR 1 1	1 1AR 1 1	1 1AR 1 1
14 15 16 17	406-1107-1 017-1016-9 406-1108-9 406-1109-7	Bracket - Belt Tightener Bearing Adjustment Rod Nut - Motor Adjustment Phenolic	1 2 1 1	1 2 1 1	1 2 1 1	1 2 1 1	1 2 1 1	1 2 1 1	1 2 1 1
18 19 20 21	410-1130-5 401-1394-6 401-1395-3 401-1396-1	Handwheel Weldment Shield - R.H. End Shield - L.H. End Channel Support Shield	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1
22 23	401-1397-9 401-1398-7	Shield - Top Panel Shield - Front Panel	1 1	1 1	1 1	1 1	1 1	1 1	1 1
24 24 24	401-1399-5 401-1438-1 401-1575-0	Extension Shield Extension Shield Extension Shield	1 - -	1 - -	1 - -	1 - -	- 1 -	- 1 -	- - 1

Fig. 4 - AIRLOCK UNIT

Continued

ITEM	FF PART NO.	DESCRIPTION	QUANTITY						
			3" SYS.		4" SYS.		5" SYS.		6" SYS.
			CA312	CA332 CA334	CA412	CA432 CA434 CAH432 CAH434	CAH532 CAH534	CA532PC	CA632 CA634 CAH632 CAH634
25	401-1401-9	Bracket - Shield Anchor	1	1	1	1	1	1	1
26	410-1129-7	Shield Weldment	1	1	1	1	-	-	-
27	410-1174-3	Plate Assembly - Adapter, 10 X 8 (Items 27A-27K)	1	1	-	-	-	-	-
27	410-1173-5	Plate Assembly - Adapter, 12 X 10 (Items 27A-27K)	-	-	1	1	-	-	-
27	410-1172-7	Plate Assembly - Adapter, 16 X 12 (Items 27A-27K)	-	-	-	-	1	1	-
27	410-1211-3	Plate Assembly - Adapter, 20 X 15 (Items 27A-27K)	-	-	-	-	-	-	1
27A	401-1443-1	Plate Adapter	1	1	-	-	-	-	-
27A	401-1441-5	Plate Adapter	-	-	1	1	-	-	-
27A	401-1406-8	Plate Adapter	-	-	-	-	1	1	-
27A	401-1580-0	Plate Adapter	-	-	-	-	-	-	1
27B	401-1444-9	Baffle - Grain	1	1	-	-	-	-	-
27B	401-1442-3	Baffle - Grain	-	-	1	1	-	-	-
27B	401-1440-7	Baffle - Grain	-	-	-	-	1	1	-
27B	401-1585-9	Baffle - Grain	-	-	-	-	-	-	1
27C	401-1439-9	Bracket - Dryer Attachment	2	2	2	2	2	2	2
27D	(1)	Bolt - 5/16"-18 X 3/4" Carr.	2	2	2	2	3	3	3
27E	(1)	Mach. Screw - 5/16"-18 X 3/4"	4	4	4	4	-	-	-
27F	(1)	Screw - 1/4", Type B X 5/8"	-	-	-	-	6	6	-
27G	(1)	Nut - 5/16"-18 Hex	6	6	6	6	3	3	3
27H	(1)	Lock Washer - 5/16"	6	6	6	6	3	3	3
27J	(1)	Flat Washer - 1/4"	-	-	-	-	6	6	-
27K	(1)	Flat Washer - 5/16"	4	4	4	4	-	-	6
27L	(1)	Screw - 5/16", Type B X 5/8"	-	-	-	-	-	-	6
28	323-1066-6	Decal - Warning	3	3	3	3	2	2	2
29	420-1092-6	Decal - Convey-Air	1	1	1	1	1	1	1
30	420-1093-4	Decal - Rotation Arrow	1	1	1	1	1	1	1
31	420-1110-6	Decal - Air Flow	1	1	1	1	1	1	1
32	420-1096-7	Decal - Increase Arrow	1	1	1	1	1	1	1
33	308-1049-3	Gear Box - 60:1 Planetary	1	1	1	1	1	1	1
34	018-1052-2	Sheave -#4SL-5/8 Variable Speed	1	1	-	-	-	-	-
34	018-1053-0	Sheave -#5SL-5/8 Variable Speed	-	-	1	1	1	1	1
35	018-1068-8	Sheave -#BK34-3/4	1	1	-	-	-	-	-
35	018-1067-0	Sheave -#BK45H	-	-	1	1	1	1	1
36	019-1042-1	Bushing - #H-3/4, Gear Box Input	-	-	1	1	1	1	1
37	019-1026-4	Bushing - SDS-1-1/4, Gear Box Output	1	1	1	1	1	1	1
38	019-1045-4	Bushing - SDS-1-7/16, Airlock	1	1	1	1	-	-	-
38◀	019-1058-9	Bushing - SDS-1/15/16, Airlock	-	-	-	-	1	1	1
39	020-1036-1	Belt - B-32	1	1	-	-	-	-	-
39	020-1038-7	Belt - B-34	-	-	1	1	1	1	1
40	068-1015-4	Sprocket - #50, SDS40, Airlock	1	1	1	1	1	1	-
40	068-1004-8	Sprocket - #50, SDS48, Airlock	-	-	-	-	-	-	1
41	420-2096-6	Roller Chain - #50, sgl. strand apprx 6	1	1	1	1	1	1	1
42	069-1005-3	Connector Link, Roller Chain #50	1	1	1	1	1	1	1
43	094-1016-8	Key - 1/4 X 1/4 X 1-3/8", Gear Box	1	1	1	1	1	1	1
44	094-1017-6	Key - 3/16 X 3/16 X 1-1/4", Gear Box	1	1	1	1	1	1	1
45	094-1010-1	Key - 3/8 X 3/8 X 1-1/4, Airlock	1	1	1	1	-	-	-
46	002-1233-2	Motor - 1/2 HP, 1-PH	1	-	-	-	-	-	-
46	002-1234-0	Motor - 1/2 HP, 3-PH	-	1	-	-	-	-	-
46	002-1022-9	Motor - 3/4 HP, 1-PH	-	-	1	-	-	1	-
46	002-1153-2	Motor - 3/4 HP, 3-PH	-	-	-	1	1	-	-
46	002-1087-2	Motor - 1 HP, 3-PH	-	-	-	-	-	-	1
47	029-1202-0	Decal - Grain Flow Arrow	1	1	1	1	1	1	1
48	068-1027-9	Sprocket - #50, SDS36, Gear Box	1	1	1	1	1	1	-
48	068-1003-0	Sprocket - #50, SDS30, Gear Box	-	-	-	-	-	-	1
49	323-1028-6	Decal - Caution	2	2	2	2	2	2	2

Fig. 4 - AIRLOCK UNIT

Continued

ITEM	FF PART NO.	DESCRIPTION	QUANTITY						
			3" SYS.		4" SYS.		5" SYS.		6" SYS.
			CA312	CA332 CA334	CA412	CA432 CA434 CAH432 CAH434	CAH532 CAH534	CA532PC	CA632 CA634 CAH632 CAH634
50	406-1913-2	Gasket	4	4	-	-	-	-	-
50	406-1914-0	Gasket	-	-	4	4	-	-	-
50	406-1915-7	Gasket	-	-	-	-	4	4	-
50	406-1916-5	Gasket	-	-	-	-	-	-	4
51	048-1064-4	Plug - Tappered	2	2	-	-	-	-	-
51	048-1065-1	Plug - Tappered	-	-	2	2	-	-	-
51	048-1066-9	Plug - Tappered	-	-	-	-	2	2	-
51	048-1067-7	Plug - Tappered	-	-	-	-	-	-	2
52	010-1001-6	Decal - Model & Serial NO.	1	1	1	1	1	1	1
		STANDARD HARDWARE ITEMS							
A	(1)	Machine Screw - 3/8"-16 X 1/2"	-	-	2	2	2	2	-
B	(1)	Lock Washer - 1/2"	-	-	4	4	4	4	28
C	(1)	Nut 1/2"-13 Hex	9	9	9	9	9	9	25
D	(1)	Locknut - 1/2"-13 Hex, ESNA	1	1	1	1	1	1	1
E	(1)	Carriage Bolt - 7/16"-14 X 1"	7	7	7	7	9	9	9
F	(1)	Nut - 7/16"-14 Hex	8	8	8	8	10	10	10
G	(1)	Flat Washer - 7/16"	8	8	8	8	10	10	10
H	(1)	Lock Washer - 7/16"	8	8	8	8	10	10	10
I	(1)	Nut - 3/8"-16 Hex	2	2	2	2	18	18	2
J	(1)	Flat Washer - 3/8"	6	6	2	2	2	2	2
K	(1)	Machine Screw - 3/8"-16 X 1"	16	16	18	18	10	10	4
L	(1)	Lock Washer - 3/8"	16	16	20	20	28	28	4
N	(1)	Flat Washer - 5/16"	36	36	36	36	36	36	36
O	(1)	Lock Washer - 5/16"	51	51	43	43	46	46	54
P	(1)	Machine Screw - 5/16"-18 X 3/4"	12	12	4	4	4	4	-
R	(1)	Carriage Bolt - 5/16"-18 X 3/4"	39	39	39	39	46	46	54
S	(1)	Nut - 5/16"-18 Hex	43	43	43	43	43	43	43
T	(1)	Capscrew - 5/16"-18 X 1-3/4"	1	1	1	1	1	1	1
U	(1)	Locknut - 5/16"-18 Hex, ESNA	3	3	3	3	3	3	3
V	(1)	Carriage Bolt - 5/16"-18 X 1"	2	2	2	2	2	2	2
W	(1)	Screw - 1/4" X 1/2" Type A Hex	13	13	13	13	13	13	13
X	062-1022-3	Tinnerman Clip 1/4"	12	12	12	12	12	12	12
Y	(1)	Setscrew - 5/16"-18 X 3/8 Allen Hd	1	1	1	1	-	-	-
Z	(1)	Setscrew - 1/2"-13 X 4" Square Hd	2	2	2	2	2	2	2
AA	(1)	Flat Washer 1/4"	1	1	1	1	1	1	1
BB	(1)	Flat Washer - 1/2"	1	1	1	1	1	1	1
CC	(1)	Machine Screw - 1/2"-13 X 1"	-	-	4	4	4	4	12
DD	(1)	Machine Screw - 1/2"-13 X 1-1/2"	-	-	-	-	-	-	16
EE	(1)	Carriage Bolt - 7/16"-14 X 1-1/4"	1	1	1	1	1	1	1
FF	(1)	Machine Screw - 3/8-16 X 1-1/2"	-	-	-	-	16	16	-

(1) Standard Hardware - Purchase Locally

◄ With Key - 1/2" X 5/16" X 1-5/16

Part #?

FARM FANS
Division of ffi CORPORATION
5900 ELMWOOD AVE. • INDIANAPOLIS, IN 46203
© 1990 ffi CORP.
Printed in U.S.A.