

# REBUILD KIT INSTRUCTIONS

Tools needed to perform this service:

Medium (6-8") Adjustable Wrench

5/32 Allen wrench

#2 Phillips screwdriver

1/2" and 5/16" nut driver or socket wrench

11/16", 1/2" and 5/16" wrench

Note: This procedure will deal with the disassembly of the compressor head and installation of the components contained in the compressor head rebuild kit.

You must have free access to exterior surfaces of the compressor assembly to perform this service. You will need to remove the motor/compressor assembly from the protective case to gain adequate access to perform this service.

Remove any straps from the pan that may inhibit the removal of motor/compressor assembly.

There are 4 bolts that hold the motor onto the pan or case. Locate and hold each of the 4 bolts at the base of the motor using a 1/2" wrench, and loosen the corresponding Nylock nuts on the underneath of the pan using a 1/2" socket wrench. Set bolts and nuts aside until reassembly.

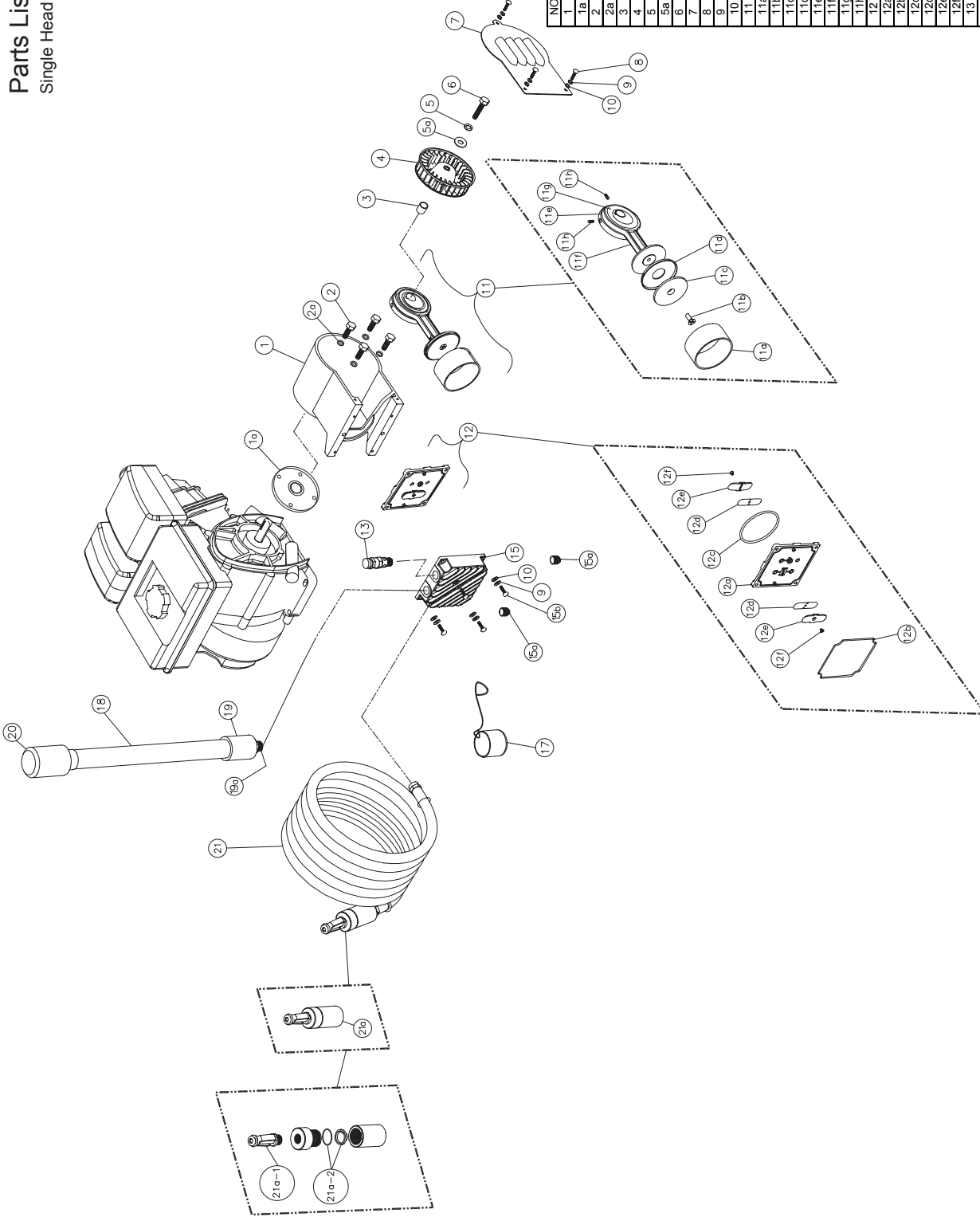
1. Using a 11/16" wrench, remove the black Heat Hose (item 21) from the compressor head.
2. Using a 5/16" socket, remove the screws (item 8), lock washers (item 9) and flat washers (item 10) from front cover (item 7). Remove cover.
3. Using 5/16" socket, remove the screws (item 15b), lockwashers (item 9) and flat washers (item 10, 4 sets) from the compressor head. Remove compressor head (item 15).
4. Separate compressor head (item 15) from valve plate assembly (item 12).
5. Pull out piston sleeve (item 11a).  
*Inspect rod and bearing assembly. The piston rod should pivot freely on the bearing. There should be no play perpendicular to the bearing.*
6. Using a #2 Phillips screwdriver, remove screws (items 12f), valve restraints (items 12e) and flapper valves (items 12d) from plate.
7. Using a 5/32" Allen wrench, remove screw (item 11b) from center of piston head. Remove cap (item 11c) and cup (item 11d).
8. Install new piston sleeve (item 11a) over bare piston head onto piston rod.
9. Slowly pull engine start cord, or manually turn fan (item 4) to position piston at maximum extension.
10. Place piston cap (item 11c) into center of new piston cup (item 11d).
11. Install new retainer screw (item 11b) through cap and cup, into threaded center of piston head. Tighten retainer screw into piston head.
12. Install new flapper valves (items 12d) and valve restraints (items 12e) onto valve plate (item 12a), carefully matching valves with setting posts.
13. Install new o-ring (item 12c) and gasket (item 12b) making sure each is fully seated in its appropriate groove.
14. Hold completed valve plate assembly (item 12) gasket side up. Place head (item 15) onto valve plate assembly (item 12), lining up posts.
15. Place lockwashers (item 9) and flat washers (item 10) onto screws (item 15) and install into corner holes of the head assembly. Install two flat washers (item 10) onto the screw threads protruding through the head assembly. (Washers will be between head assembly and housing.) Align screws with holes in housing and begin threading by hand. Tighten using 5/16" socket.

**NOTE:** For a Twin Head Compressor, repeat steps 3-15 to install a rebuild kit on the other head.

16. Using adjustable wrench, remove relief valve (item 13). Install new relief valve and tighten until snug.
17. Align front cover (item 7) with holes in housing. Install screws (item 8), lockwashers (item 9) and flat washers (item 10). Tighten using a 5/16" socket.
18. Place motor/compressor assembly in pan or dish. Secure with same bolts and nuts as disassembled. Replace any straps that were removed.

# Parts List - AC1 Compressor Assembly

## Single Head Direct Drive - F285 Series



NO.	PART NUMBER	DESCRIPTION
1	AC1U	Housing Single
1a	AC1U-ADAPTER GAS	Housing Adapter Gas Engines
2	HCCSS516F.75	Screw Hex. Head 5/16 x 24 x 3/4
2a	WFLSS516	Washer Flat 5/16 x 3/4
3	280-AFS	Spacer 280 Aluminum
4	688965	Fan
5	WMLSS516	Washer Lock 5/16
5a	WFESS516-1.25	Washer Fender 5/16 - 1.25
6	HGSS516F1.75	Bolt HH SS 5/16 x 24 x 1.75
7	VS-H FACE PLATE	Face Plate Single Housing
8	HMMSS10C.3/8	Screw Trim HH MS SS 10 - 24 x 3/8
9	WMLSS10	Washer Lock 10/32 Med SS
10	AN960C10L	Washer Flat #10 SS
11	AC2-BALU	Rod Assembly Complete
11a	AC-SLEEVE	Sleeve Alum w/ Hardcoat
11b	PFMSS14C.625	Screw Phil Flat 1/4 x 20 x 5/8
11c	AC-CAP	Cap Piston AC Units
11d	AC-CUP-W	Cup Piston White
11e	AC2-6U	Eccentric
11f	AC-ROD	Rod AC Units
11g	6908ZZ-GPL206	Bearing dbi Shields
11h	SSOPSS14C.5	Set Screw 1/4 - 20 x .5 SS
12	AC-VPA	Valve Plate Complete
12a	AC-VALVE PLATE	Valve Plate AC Units
12b	ACT-217	Gasket Special
12c	AC-VFO	O-ring
12d	ACT-218	Flapper Valve
12e	AC-AL-RESTRAINT	Restraint Aluminum
12f	PFMSS56C.25	Screw Flat Head 6/32 x 1/4
13	VRV-300TB-V.60	Pressure Relief Valve
15	AC-HEAD	Head Single AC
15a	06115-06	Plug Brass 3/8"
15b	HMMSS10C1	Bolt Trim HH CS 10 - 24 x 1
17	AC2-DC	Dust Cap w/ Lanyard
18	IS-460	Intake Staff all Units
19	ISS-280	Socket Intake Staff
18a	28-224	Nipple Hex. Brass 3/8 x 1/2
20	DC-460	Drip Cap
21	HF7-172	Heat Hose 7 x 1/2 No Filter
21a	HFH-D Complete	Housing Heat Hose w/ Filler QRSM
21a-1	QRS-38M	Quick Release Male 3/8
21a-2	HFH-DFK	Filler Kit: Screen Assy. O-Ring

COMPRESSOR HEAD REBUILD KIT INCLUDES ITEMS MARKED WITH \* or †  
 † BTL - DORBI  
 \* Part is included  
 Note: One Rebuild Kit is Needed For Each Compressor Head

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5/32 Allen wrench

#2 Phillips screwdriver

1/2" and 5/16" nut driver or socket wrench

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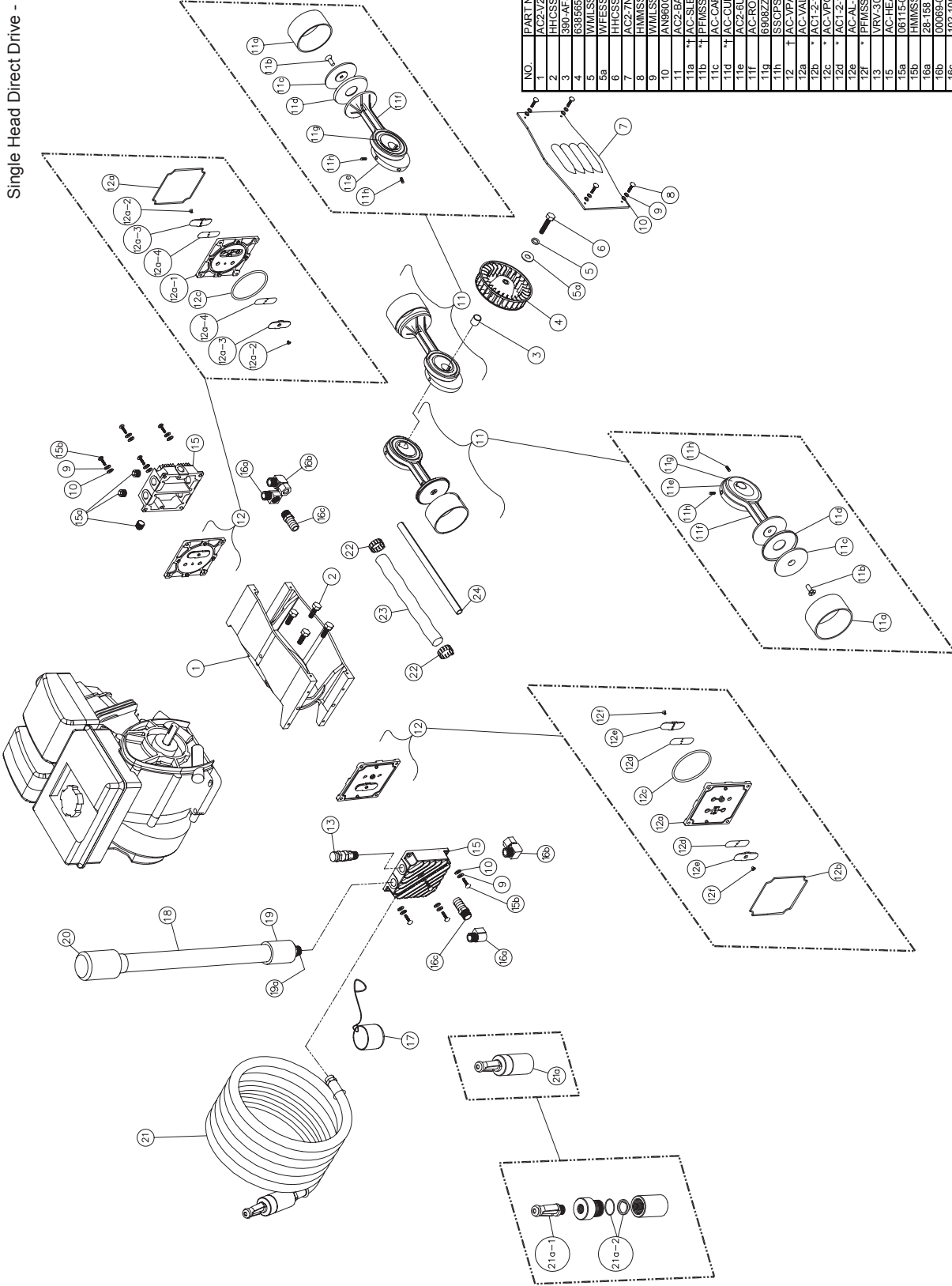
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2. Using a 5/16" socket, remove the screws (item 8), lock washers (item 9) and flat washers (item 10) from front cover (item 7). Remove cover.
3. Using 5/16" socket, remove the screws (item 15b), lockwashers (item 9) and flat washers (item 10, 4 sets) from the compressor head. Remove compressor head (item 15).
4. Separate compressor head (item 15) from valve plate assembly (item 12).
5. Pull out piston sleeve (item 11a).  
*Inspect rod and bearing assembly. The piston rod should pivot freely on the bearing. There should be no play perpendicular to the bearing.*
6. Using a #2 Phillips screwdriver, remove screws (items 12f), valve restraints (items 12e) and flapper valves (items 12d) from plate.
7. Using a 5/32" Allen wrench, remove screw (item 11b) from center of piston head. Remove cap (item 11c) and cup (item 11d).
8. Install new piston sleeve (item 11a) over bare piston head onto piston rod.
9. Slowly pull engine start cord, or manually turn fan (item 4) to position piston at maximum extension.
10. Place piston cap (item 11c) into center of new piston cup (item 11d).
11. Install new retainer screw (item 11b) through cap and cup, into threaded center of piston head. Tighten retainer screw into piston head.
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14. Hold completed valve plate assembly (item 12) gasket side up. Place head (item 15) onto valve plate assembly (item 12), lining up posts.
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**NOTE:** For a Twin Head Compressor, repeat steps 3-15 to install a rebuild kit on the other head.

16. Using adjustable wrench, remove relief valve (item 13). Install new relief valve and tighten until snug.
17. Align front cover (item 7) with holes in housing. Install screws (item 8), lockwashers (item 9) and flat washers (item 10). Tighten using a 5/16" socket.
18. Place motor/compressor assembly in pan or dish. Secure with same bolts and nuts as disassembled. Replace any straps that were removed.

# Parts List - AC2 Compressor Assembly

## Single Head Direct Drive - F390 Series



NO.	PART NUMBER	DESCRIPTION
1	AC2-V2	Housing Twin Version 2
2	HCSS5/16F.75	Screw Hex Head 5 / 16 x 24 x 3 / 4
3	390-AFS	Spacer 390 Alum
4	638565	Fan
5	WMLSS5/16	Washer Lock 5 / 16
5a	WFESS5/16-1.25	Washer Fender 5 / 16 - 1.25
6	HCSS5/16F1.75	Bot HH SS 5 / 16 x 24 x 1.75
7	ACZ-7NSS	Face Plate Twin
8	HMMSS10C.3/8	Screw Trim HH 10 - 24 x 3 / 8
9	WMLSS10	Washer Lock 10 / 32 Med SS
10	AN860C10L	Washer Flat # 10 SS
11	ACZ-BAU	Rod Assembly Complete
11a	AC-SLEEVE	Sleeve Alum w/ Hardcoat
11b	PFMSS14C.625	Screw Phi Flat 1 / 4 x 20 x 5 / 8
11c	AC-CAP	Cap Piston AC Units
11d	AC-CUP-W	Cup Piston White
11e	ACZ-6U	Eccentric
11f	AC-ROD	Rod
11g	6908ZZ-GPL206	Bearing Dbl Shields
11h	SSCPSS14C.5	Set Screws 1 / 4 x 20 x .5 SS
12	AC-VPA	Valve Plate Assembly Complete
12a	AC-VALVE PLATE	Valve Plate AC units
12b	ACT-217	Gasket Special
12c	AC-VPO	O-Ring
12d	ACT-218	Flapper Valve
12e	AC-AL-RESTRAINT	Restraint Alum
12f	PFMSS56C.25	Screw Flat Head 6 / 32 x 1 / 4
13	VRV-3001B-V-60	Pressure Relief Valve
15	AC-HEAD	Head AC
15a	06115-06	Plug Brass 3 / 8"
15b	HMMSS10C1	Bot Trim HH CS-10 - 24 x 1
16a	28-158	Elbow S 1 / 8 x 3 / 8 90 Deg
16b	00669-0806	Elbow S 1 / 8 x 3 / 8 Brass MNPT
16c	102-1006	Band S 1 / 8 x 3 / 8 Brass MNPT
17	ACZ-DC	Dust Cap w/ Lanyard
18	IS-460	Intake Slat All Units
19	SS-230	Socket Intake Slat
19a	68-226	Nipple Hex Brass 3 / 8 x 1 / 2
20	06-470	Drip Cap
21	HH-7	Filter Hose 7" x 12" O.D. filter
21a	HH-D Complete	Filter Hose
21a-1	ORSS3M	Cable Release Meas
21a-2	HH-DFK	Filter Kit Screen Assy. O-ring
22	630-010	Clamp
23	K7190-10x100	Polymite 5 / 8 x 10"
24	XT-390	Crossover Tube 1 / 2" x 10 - 5 / 8"

COMPRESSOR HEAD REBUILD KIT INCLUDES ITEMS MARKED WITH \* or †  
 \* BTL - DDBR1  
 † BTL - DDBR2  
 Note: One Rebuild Kit is Needed For Each Compressor Head