

Model CAS35WG Maintenance & Parts

CAS35WG AIR COMPRESSOR / WELDER / GENERATOR



IOWA MOLD TOOLING CO., INC.
PO Box 189
Garner, IA 50438
Tel: 641-923-3711 FAX: 641-923-2424
Website: <http://www.imt.com>

Manual # 99904771
Revised 20091214



www.imt.com

Iowa Mold Tooling Co., Inc. is an Oshkosh Corporation company.

Model CAS35WG Maintenance & Parts

1. GENERAL

The following table provides list of routine maintenance items, including service intervals. The remainder of the section includes a part lists and assembly drawings of the compressor, welder, and AC generator.

MAINTENANCE OPERATION	SERVICE INTERVALS			
	DAILY	WEEKLY	250/3	500/6
INSPECT DRIVE COUPLING FOR WEAR				
AIR CLEANER - CHANGE				
AIR INTAKE - INSPECT				
CRANKCASE OIL LEVEL - CHECK, ADD IF NEEDED				
CRANKCASE OIL - CHANGE (SEE NOTE 1)				
CHECK CYLINDER HEAD STUD TORQUE (SEE NOTE 2)				
COOLING VANES (FINS) - CLEAN				
AIR RECEIVER - DRAIN CONDENSATION				
RECEIVER SAFETY VALVES - CHECK OPERATION				
CHECK ALL ELECTRICAL CONNECTIONS				
CHECK FITTINGS AND AIR LINES FOR LEAKS				
<p>Service intervals are listed as hours/months, whichever occurs first.</p> <p>Use only IMT's synthetic compressor oil. The use of any other oil causes excessive carbon buildup, and will void the warranty on the compressor.</p> <p>NOTE 1. Under normal operating conditions, oil changes are required every 3 months. When operating in a dirty environment, change the oil and air filter more frequently as your particular operating conditions dictate. Oil capacity is 1-1/3 quarts.</p> <p>NOTE 2. Cylinder head stud torque MUST be checked after the initial 8-10 hours of operation. The compressor must be cold (room temperature) before retorquing of studs. Torque studs to 240 in-lb plus or minus 10 in-lb.</p>				

FIGURE 1. ROUTINE MAINTENANCE CHECKLIST



Model CAS35WG Maintenance & Parts

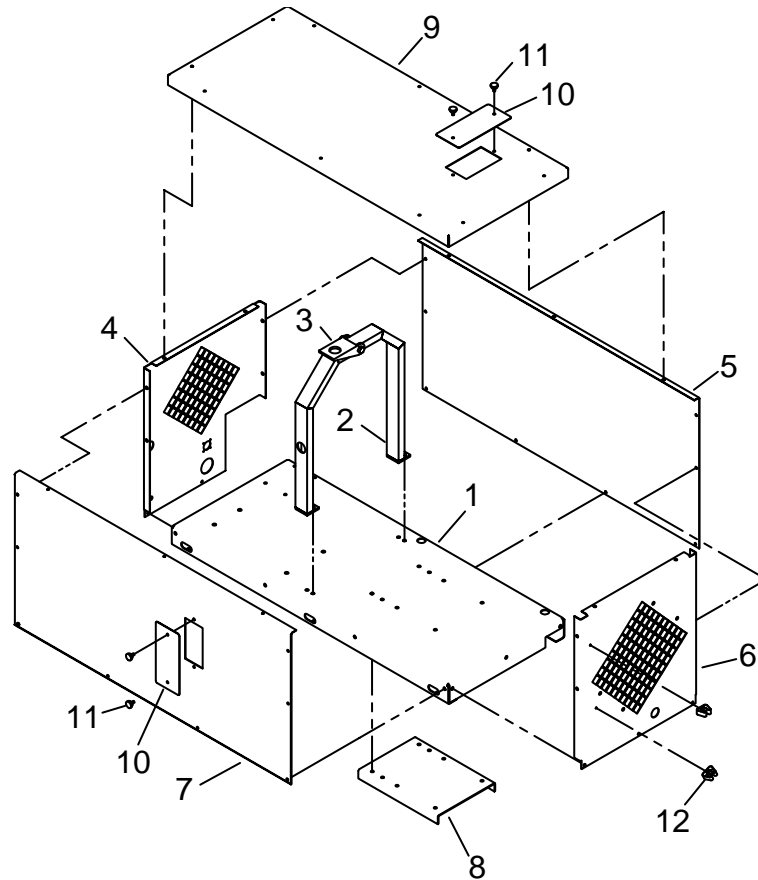
2. PARTS DRAWINGS

MAIN ASSEMBLY PARTS	5
HYDRAULIC HOSE AND FITTING ASSEMBLY PARTS	6
HYDRAULIC CONTROL BLOCK ASSEMBLY PARTS	7
COMPRESSOR ASSEMBLY PARTS	8
COMPRESSOR ASSEMBLY PARTS LIST	10
AIR CONTROL ASSEMBLY	12
CONTROL PANEL ASSEMBLY PARTS	13
TRUCK INSTALLATION ASSEMBLY PARTS	14
INTERNAL WIRING DIAGRAM	15
CONTROL BOX WIRING DIAGRAM	16



Model CAS35WG Maintenance & Parts

SHELL ASSEMBLY PARTS

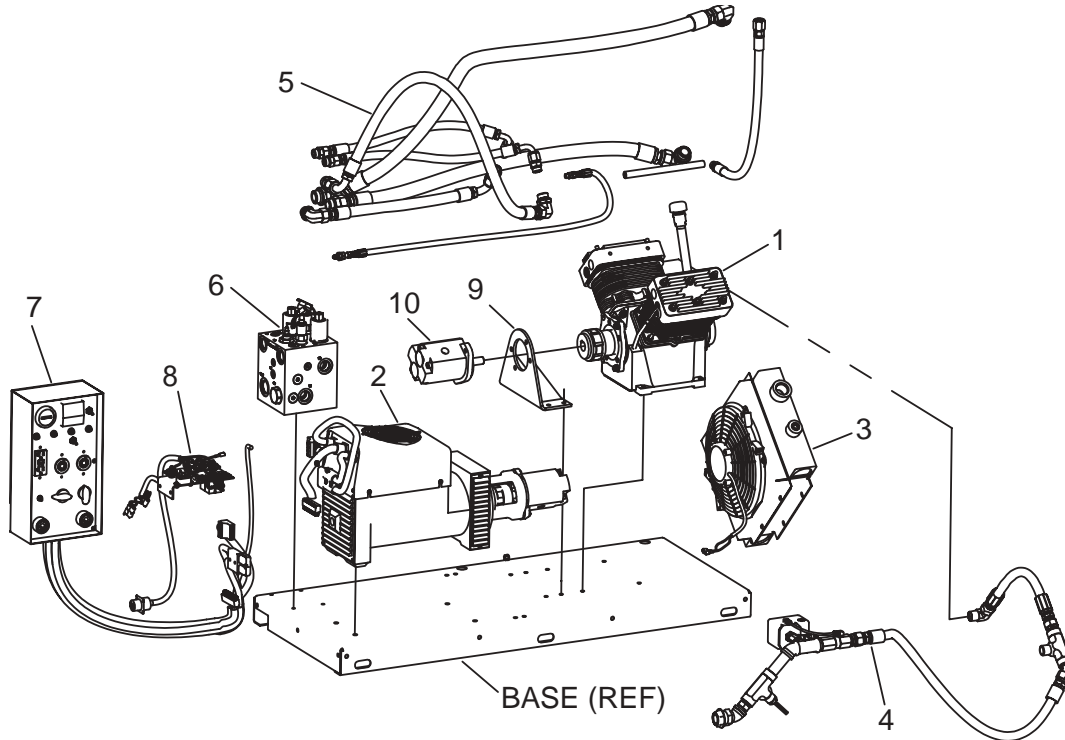


ITEM	QUANTITY	PART NO.	DESCRIPTION
1	1	71744183	BASE, CAS35WG
2	1	71744184	SINGLE POINT LIFT
3	1	71744185	FOLDING POINT LIFT
4	1	71744186	PANEL, LEFT
5	1	71744187	PANEL, REAR
6	1	71744188	PANEL, RIGHT
7	1	71744189	PANEL, FRONT
8	1	71744190	BRACE COMPRESSOR/MOTOR CAS35WG
9	1	71744191	LID
10	2	71744192	PANEL, ACCESS
11	2	71744193	THUMBSCREW, 1/4-20 X 3/4
12	1	71744194	HOSE CLIP



Model CAS35WG Maintenance & Parts

MAIN ASSEMBLY PARTS

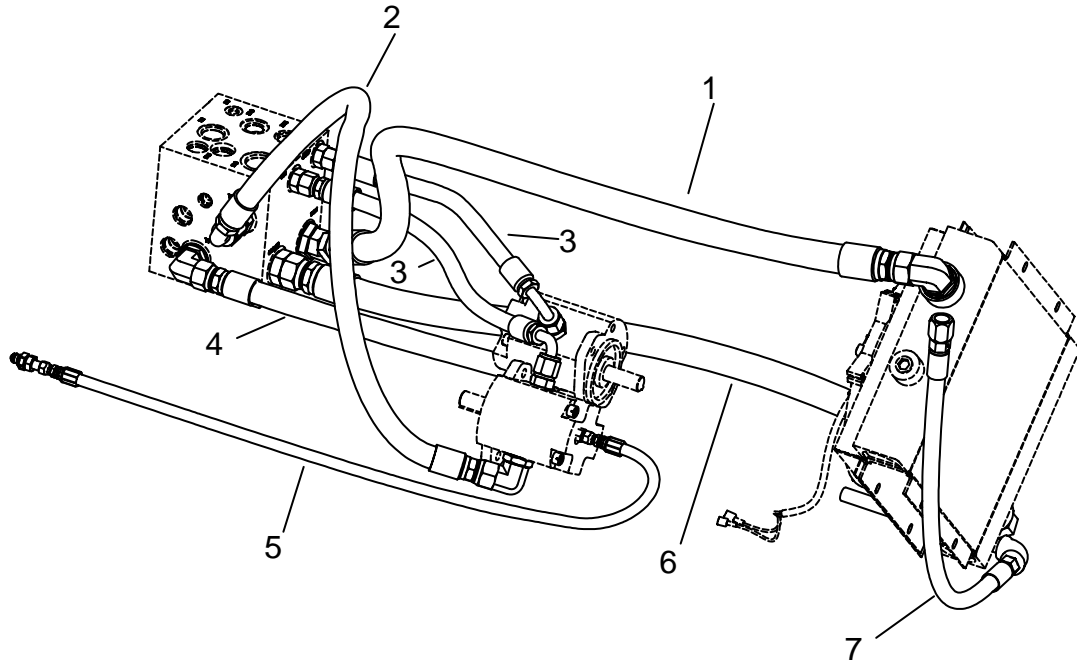


ITEM	QUANTITY	PART NO.	DESCRIPTION
1	1		COMPRESSOR, ASSEMBLY
2	1	77734497	WELDER/GENERATOR ASSEMBLY
3	1	70734499	OIL COOLER, CAS35WG
	1		FAN, OIL COOLER (PART OF OIL COOLER)
4	1	70734500	AIR CONTROLLER, CAS35WG
5	1		HOSES (SEE HOSE ASSEMBLY DRAWING)
6	1	70734501	MANIFOLD, CAS35WG
7	1	70734502	CONTROL BOX ASSEMBLY
8	1	77734503	DIODE/RELAY BRACKET ASSEMBLY
9	1	73661683	BRACKET, COMPRESSOR
10	1	73043062	HYDRAULIC MOTOR, COMPRESSOR



Model CAS35WG Maintenance & Parts

HYDRAULIC HOSE AND FITTING ASSEMBLY PARTS

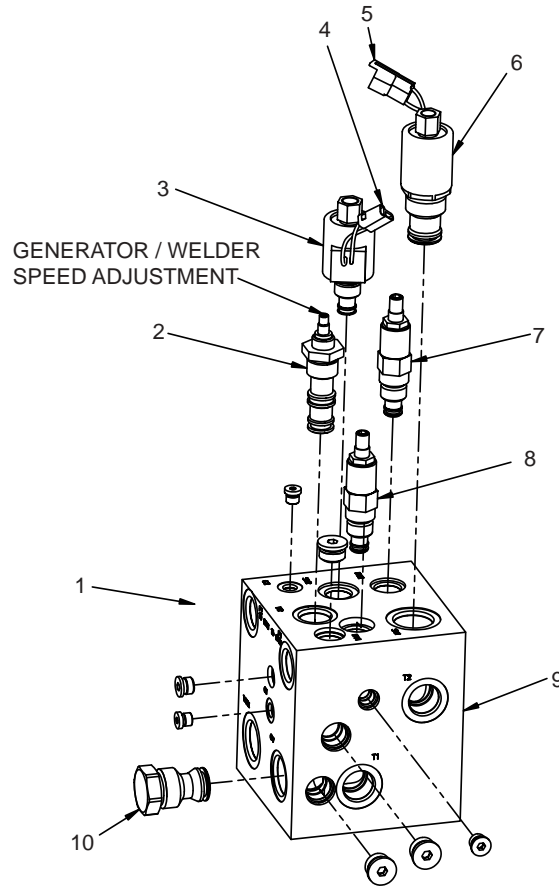


ITEM	QUANTITY	PART NO.	DESCRIPTION
1	1	76534625	HYDRAULIC HOSE ASSEMBLY, 1" X 45.5"
2	1	76534626	HYDRAULIC HOSE ASSEMBLY, 3/4" X 32.75"
3	2	76534627	HYDRAULIC HOSE ASSEMBLY, 5/8" X 17.75"
4	1	76534628	HYDRAULIC HOSE ASSEMBLY, 3/4" X 16"
5	1	76534629	HOSE, CASE DRAIN ASSEMBLY
6	1	76534630	HYDRAULIC HOSE ASSEMBLY, 1" X 35"
7	1	76534631	HOSE, COMPRESSOR DRAIN



Model CAS35WG Maintenance & Parts

HYDRAULIC CONTROL BLOCK ASSEMBLY PARTS



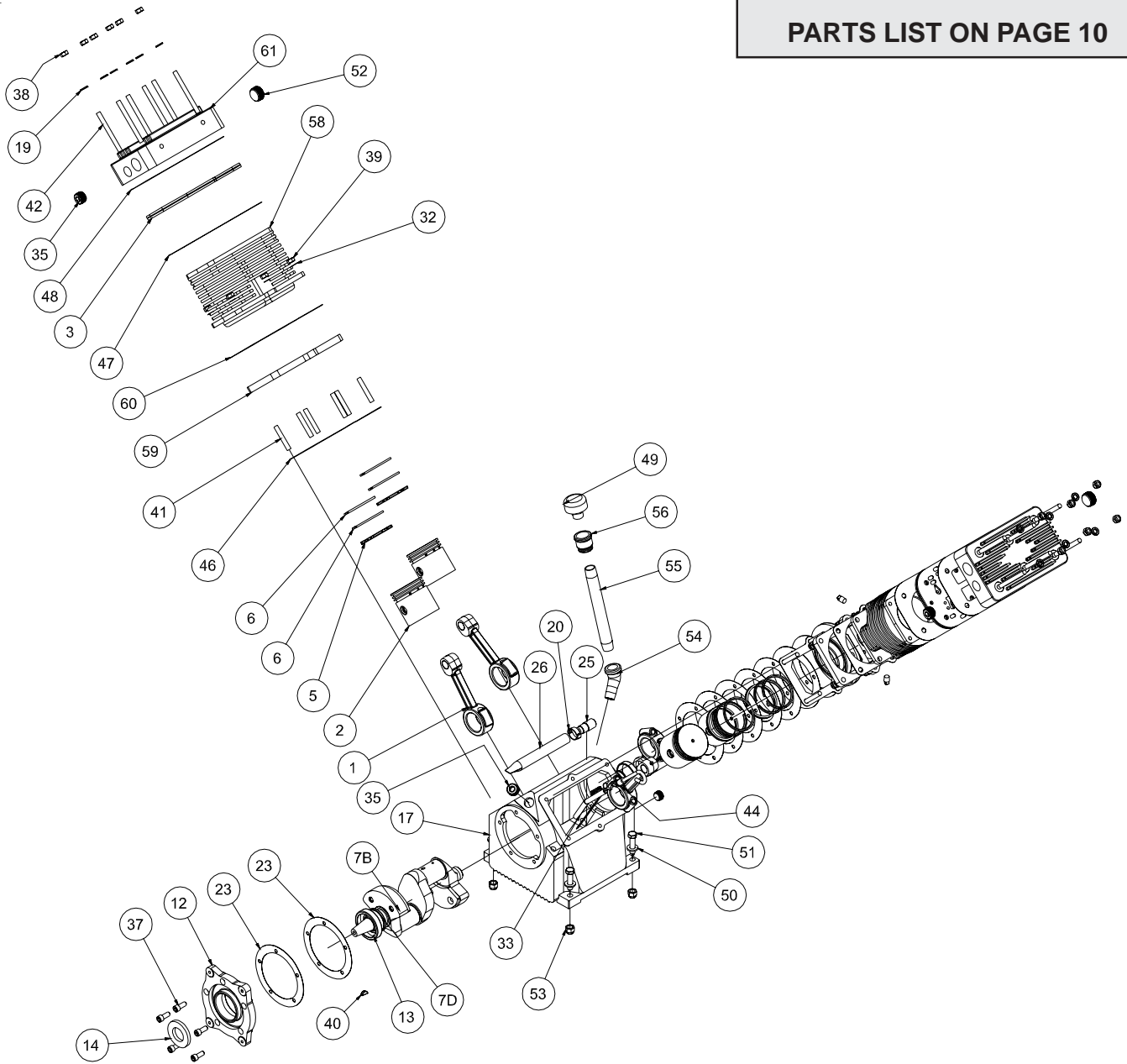
ITEM	QUANTITY	PART NO.	DESCRIPTION
1	1	73534632	HYDRAULIC CONTROL BLOCK ASSEMBLY (INCL. 1-11)
2	1	73534633	FLOW CONTROL VALVE
3	1	77534634	SOLENOID ASSEMBLY, AIR
4	1	77534635	CONNECTOR, MALE
5	1	77534636	CONNECTOR, FEMALE
6	1	77534637	SOLENOID ASSEMBLY, GENERATOR
7	1	77534640	RELIEF VALVE, 2400 PSI
8	1	77534641	RELIEF VALVE, 2800 PSI
9	1	77534642	CONTROL BLOCK
10	1	77534643	CHECK VALVE
11	2REF	77534659	COIL, SOLENOID 12V (PART OF SOLENOID ASSEMBLY 3, 7)



Model CAS35WG Maintenance & Parts

COMPRESSOR ASSEMBLY PARTS

CONTINUED
PARTS LIST ON PAGE 10



200205-999



Model CAS35WG Maintenance & Parts

COMPRESSOR ASSEMBLY PARTS LIST

CONTINUED
DRAWING ON PAGE 8

ITEM	QUANTITY	PART NO.	DESCRIPTION
		70734066	COMPRESSOR ASSEMBLY, COMPLETE
1.	4	51029283	ROD ASM CONNECTING HD950
2.	4	51029285	PISTON, ASM HD750-HD950
3.	2	70733069	VALVE ASSY, REED CAS435EL/EAR/HAR
4.	1	70051006	PUMP, OIL 37TRC-2
5.	4	70014600	RING, OIL MUSKEGON
6.	8	70014599	RING, COMPRSN MUSKEGON
7.	1	51705661	ASSY, CRANKSHAFT
7A.	1	60101269	COLLAR, OIL PUMP HD750/950/1250
7B.	1	60108748	CRANKSHAFT, HD1250
7C.	1	70055009	BEARING, CONE L44649
7D.	1	70055012	BEARING, CONE LM67048
7E.	1	72066307	PIN, ROLL .16 X .44
12.	1	60025007	HOUSING, FRONT BEARING HD750/950
13.	1	70055011	BEARING, CUP LM67010
14.	1	76039119	SEAL, GREASE -CHI 01 12551
15.	1	60025005	HOUSING, REAR BEARING HD750/950
16.	1	70055010	BEARING, CUP
17.	1	60025012	CRANKCASE, MACH V-4 COMPR
18.	5	929105-100	BOLT, HEX GR5 5/16-18 X 1
19.	17	938005-078	WASHER, LOC GR5 5/16
20.	1	72066008	CLAMP, OIL SCREEN 1720
21.	1	76039092	GASKET, REAR BEARING HOUSING .006 THK
22.	1	76039094	GASKET, REAR BEARING HOUSING .010 THK
23.	2	76039112	GASKET, FRONT BEARING HOUSING
24.	5	76039144	GASKET, REAR BEARING HOUSING .020 THK
25.	1	60101270	TUBE, OIL SCREEN
26.	1	70014610	SCREEN, OIL HD750
27.	1	60025006	COVER, REAR BEARING HOUSING COMPR
30.	1	60101505	BUSHING, PLUNGER TRANSFER HD750
31.	1	70014583	SPRING, OIL PUMP 19TRC63-74
32.	12	70024122	WASHER, CU .33X .50X .03
33.	1	70143153	TUBE, DIPSTICK HD1154
34.	1	902915-015	PLUG, PIPE 3/8 RECESSED ZINC
35.	3	902915-020	PLUG, PIPE 1/2 RECESSED ZINC
36.	2	900000-005	PLUG, PIPE SQR HD 1/8 GAL
37.	9	930005-075	BOLT, SOC HD GR5 5/16-18 X 3/4
38.	12	925205-273	NUT, HEX GR5 5/16-18
39.	12	925805-273	NUT, HEX GR5 5/16-24 ZINC
40.	1	72066267	KEY, WOODRUFF .16 X .62
41.	12	72601060	STUD, 5/16-24 X 2 NC GR5 STL
42.	12	72601708	STUD, 5/16 X 3 1/2
43.	1	72661487	PIN, DRIVE LOCK .16 X .44
44.	1	73731843	DIPSTICK, ASM-HD1154
45.	1	76039093	GASKET, PUMP COVER QAS 30
46.	2	76039111	GASKET, CYL BLOCK BOTTOM



Model CAS35WG Maintenance & Parts

COMPRESSOR ASSEMBLY PARTS LIST, continued

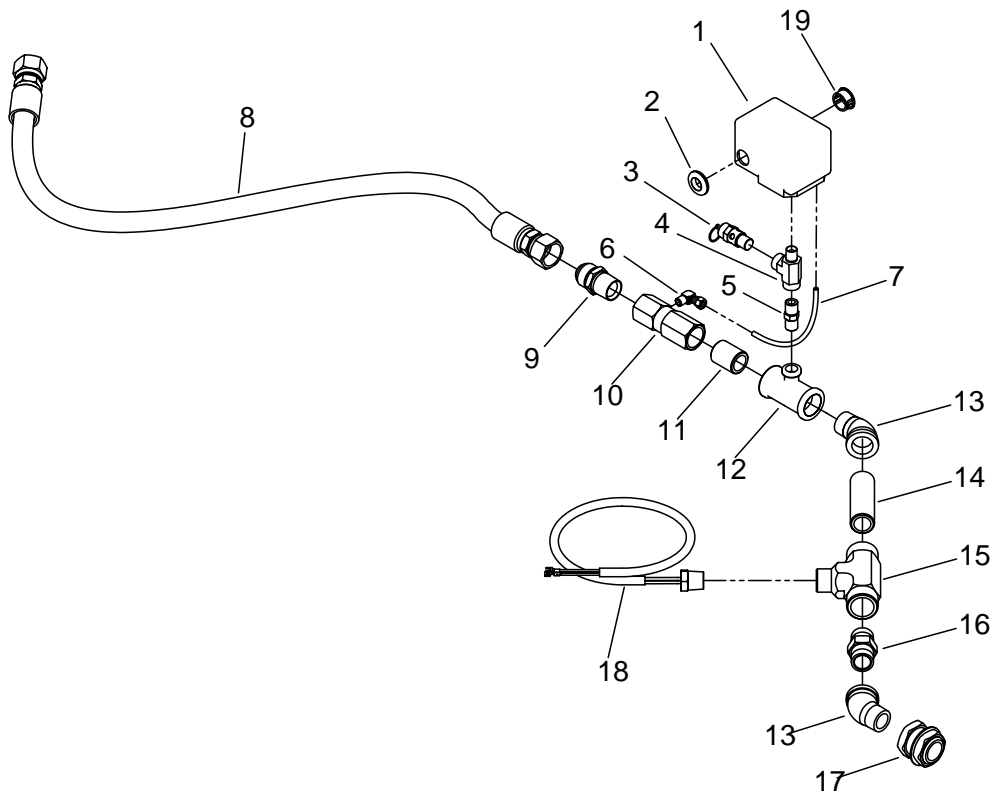
DRAWING ON PAGE 8

47.	2	76392641	GASKET, REED VALVE/CYL HD1154
48.	2	76392642	GASKET, REED VALVE/HD HD1154
49.	1	70143495	CAP, BREATHER ANTI SPLASH BFFL
50.	4	938206-071	WASHER, FLAT GR8 3/8
51.	4	929806-150	BOLT, HEX GR8 3/8-16 X 1 1/2
52.	2	902915-030	PLUG, PIPE 3/4 RECESSED ZINC
53.	4	925506-198	NUT, NYLOC GR8 3/8-16
54.	1	903315-020	ELBOW, PIPE 45° STREET 1/2
55.	1	922108-070	NIPPLE, PIPE 1/2 X 7 GAL SCH40
56.	1	971612-050	BUSHING, BELL RED 3/4 X 1/2
57.	1	70039300	PLACARD, AIR COMPR MODEL # (NOT SHOWN)
58.	2	60025194	CYLINDER BLOCK-HD 950
59.	2	70029293	SPACER-CYLINDER BLOCK HD950
60.	2	76392119	GASKET-CYL BLOCK HD950
61.	2	303500M	HEAD, COMPRESSOR MACHINING



Model CAS35WG Maintenance & Parts

AIR CONTROL ASSEMBLY

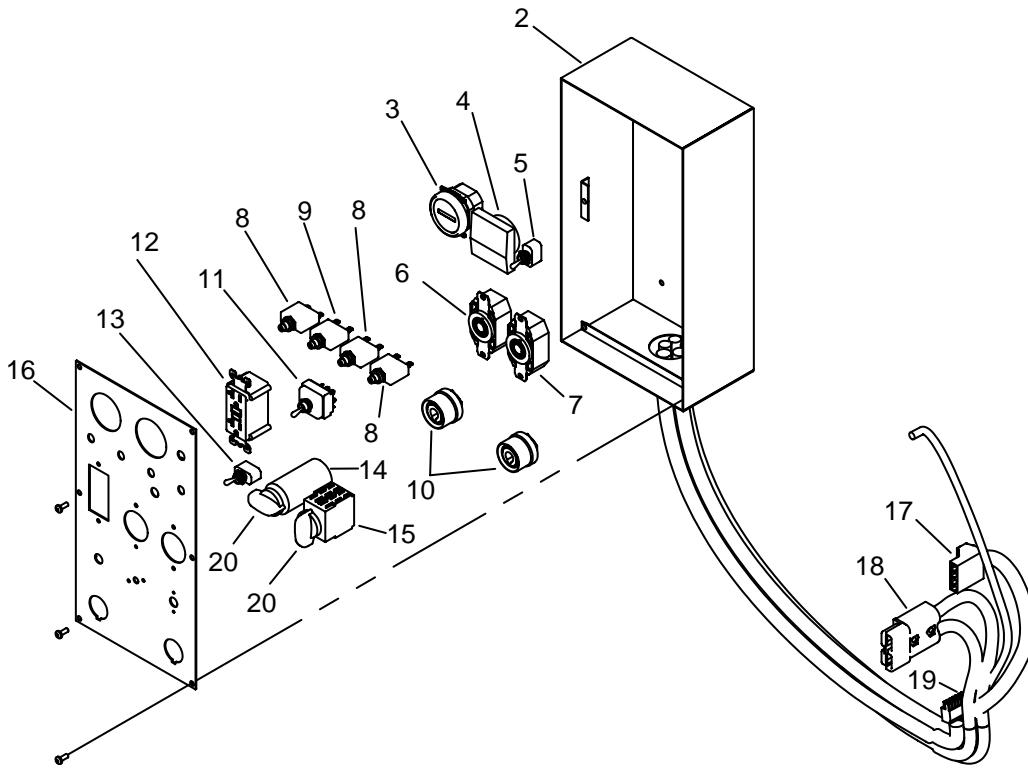


ITEM	QUANTITY	PART NO.	DESCRIPTION
1	1	77441377	SWITCH, COMPRESSOR CYCLING
2	1		GROMMET
3	1	73534638	VALVE, RELIEF ASME 1/4" X 200 PSI
4	1		STREET TEE, BAR STOCK, 0.25"
5	1		NIPPLE, .25" LP BRASS
6	1		FITTING, ELBOW/M 1/4" X 1/8"
7	1		TUBE, COPPER
8	1		HOSE, BRAIDED S/S AIRLINE
9	1		CONNECTOR, JIC M #12 X 3/4"
10	1	73534639	CHECK VALVE
11	1		NIPPLE, 3/4" CLOSE BRASS
12	1		TEE, REDUCING 3/4" X 1/4" BRONZE
13	2		ELBOW, STREET 45 DEG 3/4"
14	1		NIPPLE, PIPE 3/4" X 3" BRASS
15	1		TEE, REDUCING BRANCH 3/4" X 1/2" BRONZE
16	1		NIPPLE, 3/4" X 3/4" HEX
17	1		ANCHOR COUPLING #12
18	1	77441378	AIR TEMP SWITCH WIRE
19	1		PLUG .875 BLACK PLASTIC



Model CAS35WG Maintenance & Parts

CONTROL PANEL ASSEMBLY PARTS

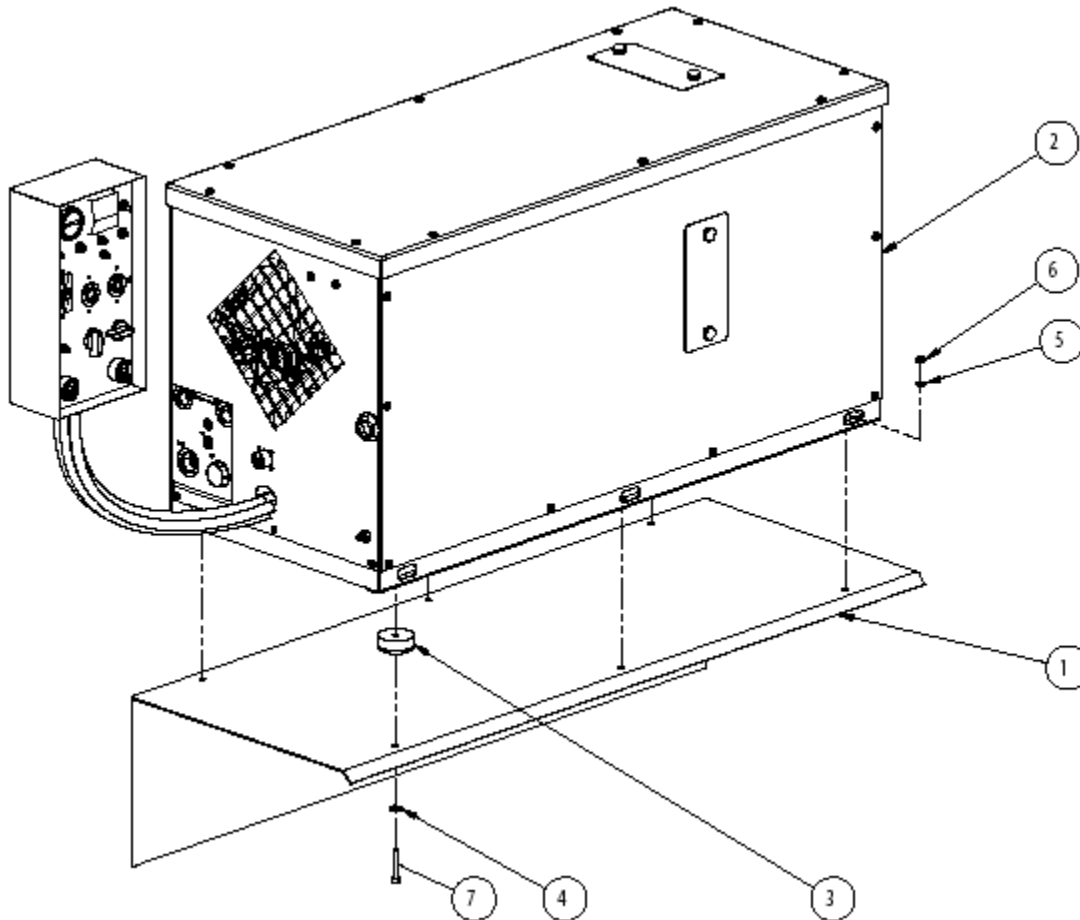


ITEM	QUANTITY	PART NO.	DESCRIPTION
1	1	77441379	CONTROL BOX, ASSEMBLY (INCL. 2-20)
2	1	77441380	CONTROL BOX
3	1	77441381	HOUR METER
4	1	77441382	METER, AC
5	1	77441383	SWITCH, ON/OFF
6	1	77441384	RECEPTACLE
7	1	77441385	RECEPTACLE
8	3	77441386	CIRCUIT BREAKER, 20 AMP
9	1	77441387	CIRCUIT BREAKER, 30 AMP
10	2	77441388	TERMINAL, WELDING 400A FEMALE
11	1	77441389	SWITCH, HYDRA 120/240
12	1	77441390	GROUND FAULT INTERRUPTOR, GRAY
13	1	77441391	SWITCH, 10 AMP
14	1	77441392	SWITCH, ROTARY 7 POLE 16A 400V
15	1	77441399	SWITCH, WELDER, LOW-MED-HIGH
16	1	77441400	PANEL, CONTROL
17	1	77441401	CONNECTOR, 4-PIN MALE
18	1	77441402	PLUG, BLUE
19	1	77441403	CONNECTOR, 14-PIN FEMALE
20	2	77441404	KNOB, CONTROL BOX



Model CAS35WG Maintenance & Parts

TRUCK INSTALLATION ASSEMBLY PARTS

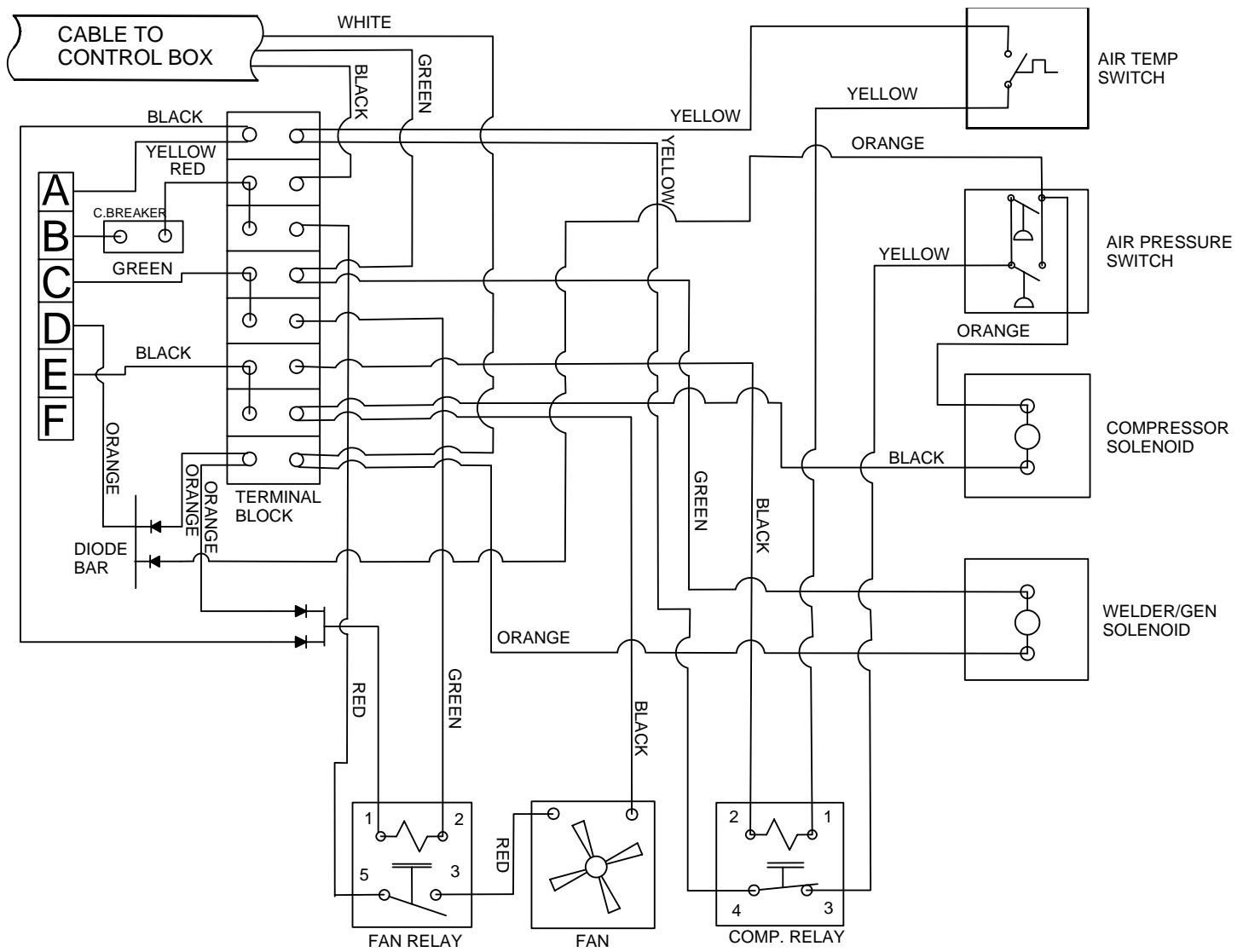


ITEM	QUANTITY	PART NO.	DESCRIPTION
1	1		TRUCK BODY
2	1	CAS35WG	COMPRESSOR / WELDER / GENERATOR
3	6	76391527	BUMPER, RUBBER
4	6	72063003	WASHER, FLAT 3/8"
5	6		WASHER, SPLIT 3/8"
6	6		NUT, 5/16"
7	6		BOLT, 3/8-16X2" HEX HEAD



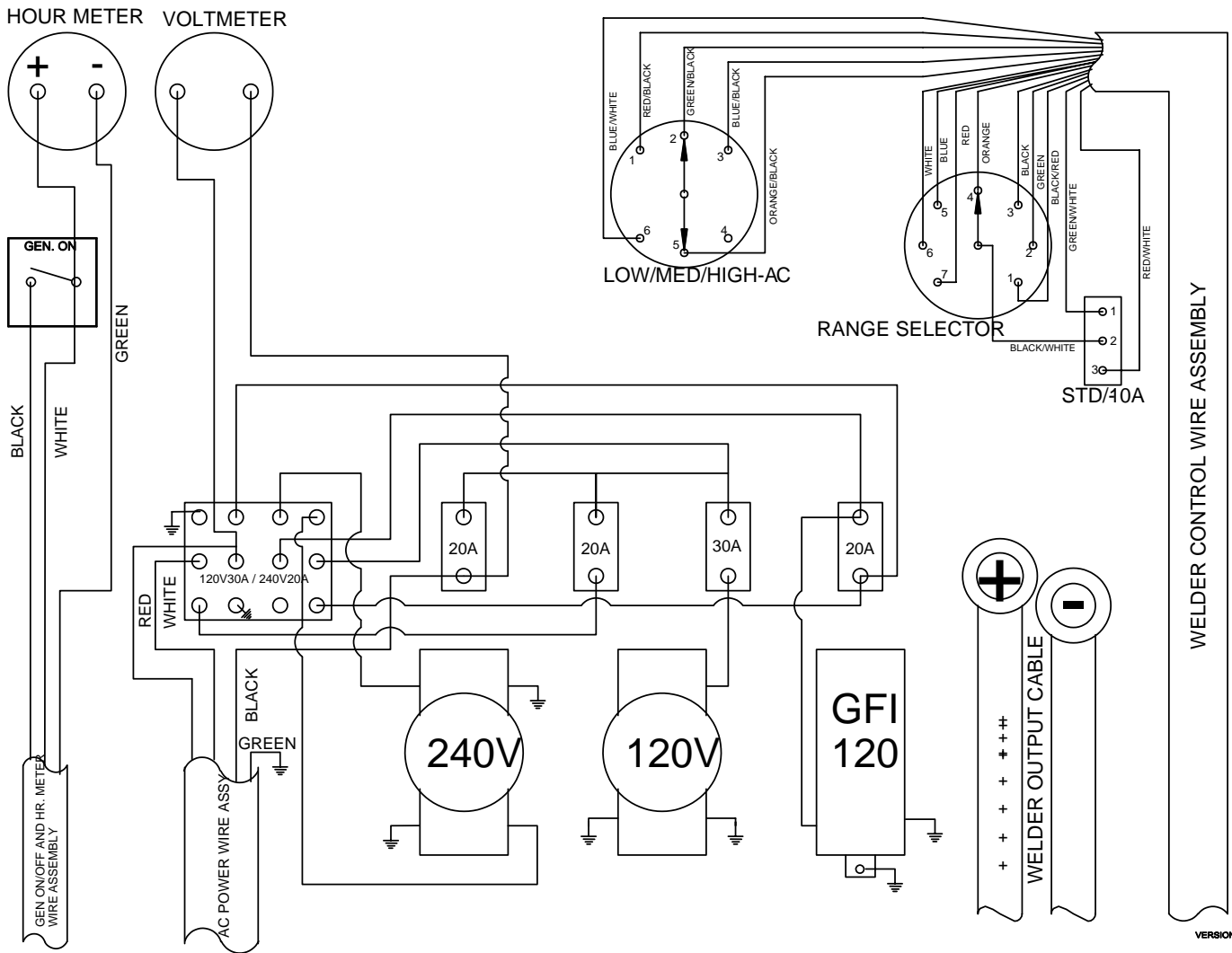
Model CAS35WG Maintenance & Parts

INTERNAL WIRING DIAGRAM



Model CAS35WG Maintenance & Parts

CONTROL BOX WIRING DIAGRAM



Model CAS35WG Maintenance & Parts

3. RECOMMENDED SPARE PARTS LIST

ASSEMBLY DESIGNATION	ITEM	PART #	DESCRIPTION	QUANTITY
<i>MAIN ASSEMBLY</i>				
	3	70733499	OIL COOLER	1
	10	73043062	HYDRAULIC MOTOR	1
<i>HYDRAULIC CONTROL BLOCK</i>				
	3	77534634	SOLENOID ASSEMBLY, GENERATOR	1
	6	77534637	SOLENOID ASSEMBLY, AIR	1
<i>COMPRESSOR ASSEMBLY</i>				
	3	70733069	REED VALVE ASSEMBLY	2
	4	70051006	OIL PUMP	1
	5	70014600	OIL RING	4
	6	70014599	COMPRESSION RING	8
	7	51705661	CRANKSHAFT ASSEMBLY	1
	7e	72066307	ROLL PIN	1
	30	60101505	BUSHING, PLUNGER	1
	31	70014583	OIL PUMP SPRING	1
	32	70024122	WASHER, COPPER .33X .50X .03	12
	45	76039093	GASKET, PUMP COVER	1
	46	76039111	GASKET, CYL BLOCK BOTTOM	2
	47	76392641	GASKET, REED VALVE/CYL	2
	48	76392642	GASKET, REED VALVE/HD	2
	49	70143495	CAP, BREATHER ANTI SPLASH	1
	58	60025194	CYLINDER BLOCK	2
	59	70029293	SPACER-CYLINDER BLOCK	2
	60	76392119	GASKET-CYL BLOCK	2
<i>AIR CONTROL ASSEMBLY</i>				
	1	77441377	SWITCH, COMPRESSOR CYCLING	1
	18	77441378	AIR TEMP SWITCH WIRE	1
<i>CONTROL PANEL ASSEMBLY</i>				
	5	77441383	SWITCH, ON/OFF	1
	8	77441386	CIRCUIT BREAKER, 20 AMP	3
	9	77441387	CIRCUIT BREAKER, 30 AMP	1
	11	77441389	SWITCH, HYDRA 120/240	1
	13	77441391	SWITCH, 10 AMP	1
	14	77441392	SWITCH, ROTARY 7-POLE	1
	15	77441399	SWITCH, WELDER	1
<i>WELDING CABLES</i>				
		77441368	WELDING CABLE, 25'	
		77441369	WELDING CABLE, 50'	



Model CAS35WG Maintenance & Parts

