



Onboard Power Solutions™

Parts Manual

Compressor Models

VHP30RMH - Open Center

VHP30RMH - Closed Center

VHP40RMH - Open Center

VHP40RMH - Closed Center



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*****Always use Ingersoll Rand Replacement parts!*****



Parts Ordering

Parts Ordering

General

This publication, which contains an illustrated parts breakdown, has been prepared as an aid in locating those parts which may be required in the maintenance of the unit. All of the compressor parts, listed in the parts breakdown, are manufactured with the same precision as the original equipment. For the greatest protection always insist on genuine Ingersoll Rand Company parts for your compressor.

The unit covered by the manual has been custom designed and built to satisfy our customer's unique specifications by the Ingersoll Rand Portable Power Division.

Contact the Portable Compressor Division (PCD) Parts Department for assistance when ordering parts. Include the unit serial number with all orders.

NOTE: Ingersoll Rand Company can bear no responsibility for injury or damages resulting directly from the use of non-approved repair parts.

Ingersoll Rand Company service facilities and parts are available worldwide. There are Ingersoll Rand Company Construction Equipment Group Sales Offices and authorized distributors located in the principal cities of the United States. In Canada, our customers are serviced by the Canadian Ingersoll Rand Company, Limited. There are also Ingersoll Rand International autonomous companies and authorized distributors located in the principal cities throughout the free world.

Description

The illustrated parts breakdown illustrates and lists the various assemblies, subassemblies and detailed parts which make up this particular machine. This covers the standard models and the more popular options that are available. A series of illustrations show each part distinctly and in location relative to the other parts in the assembly. The part number, the description of the part and the quantity of parts required are shown on each illustration or on adjacent page.

The quantities specified are the number of parts used per one assembly and are not necessarily the total number of parts used in the machine. Where no quantity is specified the quantity is assumed to be one.

Each description of a part is based upon the "noun first" method, i.e., the identifying noun or item name is always the first part of the description. The noun name is generally followed by a single descriptive modifier. The descriptive modifier may be followed by words or abbreviations such as upper, lower, inner, outer, front, rear, RH, LH, etc. when they are essential.

In referring to the rear, the front or to either side of the unit, always consider the discharge end of the unit as the front. Standing at the rear of the unit facing the discharge end (front) will determine the right and left sides.

Fasteners

Both SAE/inch and ISO/metric hardware have been used in the design and assembly of these units. In the disassembly and reassembly of parts, extreme care must be taken to avoid damaging threads by the use of wrong fasteners. In order to clarify the proper usage and for exact replacement parts, all standard fasteners have been identified by part number, size and description. This will enable a customer to obtain fasteners locally rather than ordering from the factory. These parts are identified in tables that will be found at the rear of the parts illustrations. Any fastener that has not been identified by both part number and size is a specially engineered part that must be ordered by part number to obtain the exact replacement part.

Markings and Decals

NOTE: Do not paint over safety warnings or instructional decals. If safety warning decals become illegible, immediately order replacements from the factory.

Part numbers for original individual decals and their mounting locations are shown within Parts List. These are available as long as a particular model is in production.

Afterwards, service sets of exterior decals and current production safety warning decals are available. Contact the Product Support Group at Mocksville for your particular needs and availability.

How to Use Parts List

- a. Turn to Parts List Section.
- b. Locate the area or system of the compressor in which the desired part is used and find illustration page number.
- c. Locate the desired part on the illustration by visual identification and make note of part number and description.

How to Order

The satisfactory ordering of parts by a purchaser is greatly dependent upon the proper use of all available information. By supplying your nearest sales office, autonomous company or authorized distributor, with complete information, you will enable them to fill your order correctly and to avoid any unnecessary delays.

In order that all avoidable errors may be eliminated, the following instructions are offered as a guide to the purchaser when ordering replacement parts:

- a. Always specify the model number of the unit as shown on the general data decal attached to the unit.
- b. Always specify the serial number of the unit. **THIS IS IMPORTANT.** The serial number of the unit will be found stamped on a plate attached to the unit.

- c. Always specify the number of the parts list publication.
- d. Always specify the quantity of parts required.
- e. Always specify the part number, as well as the description of the part, or parts, exactly as it is given on the parts list illustration.

In the event parts are being returned to your nearest sales office, autonomous company or authorized distributor, for inspection or repair, it is important to include the serial number of the unit from which the parts were removed.

Terms/Conditions on Parts Orders

Acceptance: Acceptance of an offer is expressly limited to the exact terms contained herein. If purchaser's order form is used for acceptance of an offer, it is expressly understood and agreed that the terms and conditions of such order form shall not apply unless expressly agreed to by Ingersoll Rand Company ("Company") in writing. No additional or contrary terms will be binding upon the Company unless expressly agreed to in writing.

Taxes: Any tax or other governmental charge now or hereafter levied upon the production, sale, use or shipment of material and equipment ordered or sold is not included in the Company's price and will be charged to and paid for by the Purchaser.

Delivery: Shipping dates are approximate. The Company will use best efforts to ship by the dates specified; however, the Company shall not be liable for any delay or failure in the estimated delivery or shipment of material and equipment or for any damages suffered by reason thereof.

Shipping dates shall be extended for delays due to acts of God, acts of Purchaser, acts of Government, fires, floods, strikes, riot, war, embargo, transportation shortages, delay or default on the part of the Company's vendors, or any other cause beyond the Company's reasonable control. Should Purchaser request special shipping instruction, such as exclusive use of shipping facilities, including air freight when common carrier has been quoted and before change order to purchase order can be received by the Company, the additional charges will be honored by the Purchaser.

Warranty: The Company warrants that parts manufactured by it will be as specified and will be free from defects in materials and workmanship. The Company's liability under this warranty shall be limited to the repair or replacement of any part which was defective at the time of shipment provided Purchaser notifies the Company of any such defect promptly upon discovery, but in no event later than three (3) months from the date of shipment of such part by the Company.

Repairs and replacements shall be made by the Company F.O.B. point of shipment. The Company shall not be responsible for costs of transportation, removal or installation.

Warranties applicable to material and equipment supplied by the Company but wholly manufactured by others shall be limited to the warranties extended to the Company by the manufacturer, which are able to be conveyed to the Purchaser.

The company makes no other warranty or representation of any kind whatsoever, expressed or implied, except that of title, and all implied warranties, including any warranty of merchantability and fitness for a particular purpose, and hereby disclaimed.

Limitation of Liability: The remedies of the Purchaser set forth herein are exclusive, and the total liability of the Company with respect to this order whether based on contract, warranty, negligence, indemnity, strict liability or otherwise, shall not exceed the purchase price of the part upon which such liability is based.

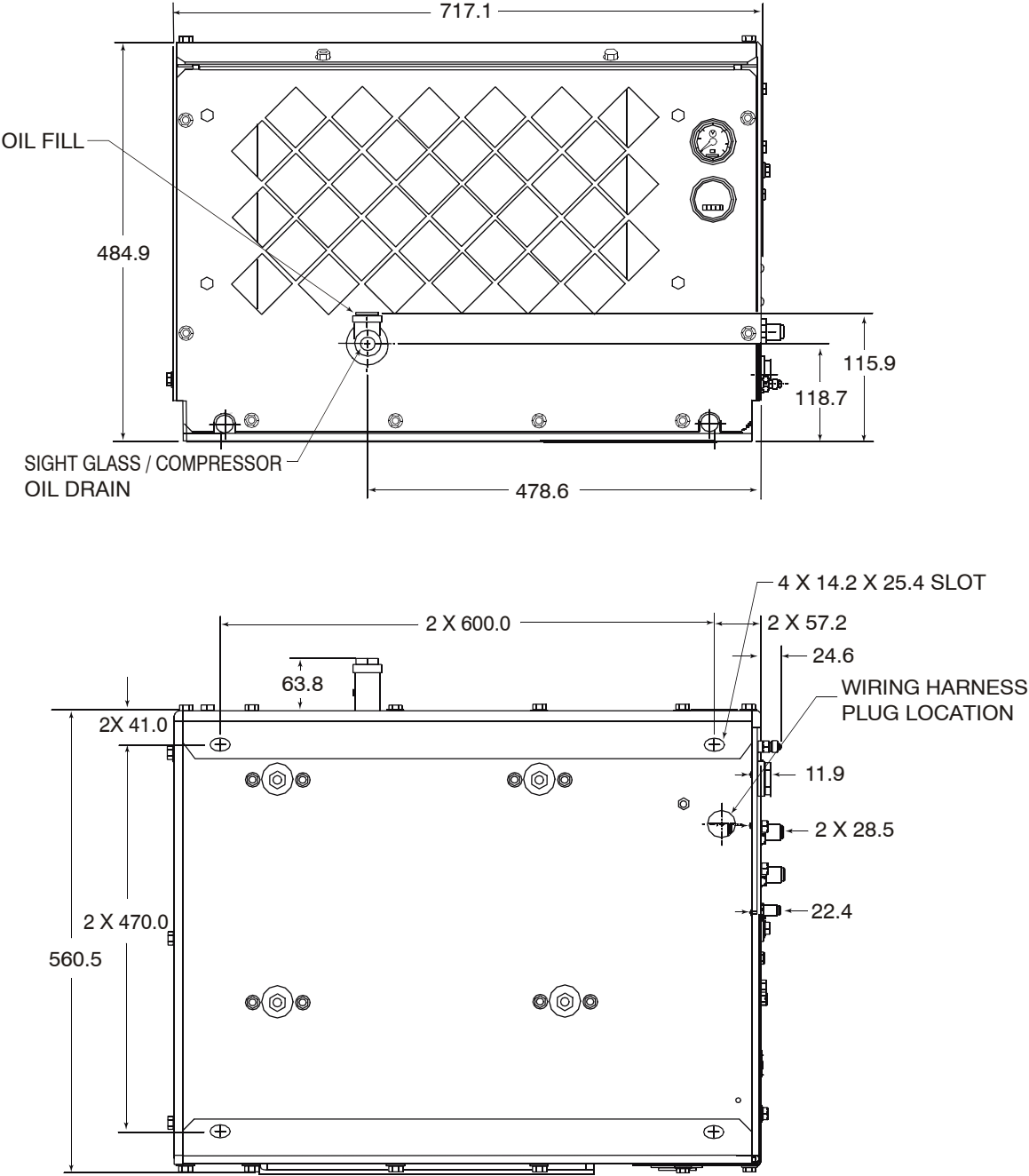
The Company shall in no event be liable to the Purchaser, any successors in interest or any beneficiary of this order for any consequential, incidental, indirect, special or punitive damages arising out of this order or any breach thereof, or any defect in, or failure of, or malfunction of the parts hereunder, whether based upon loss of use, lost profits or revenue, interest, lost goodwill, work stoppage, impairment of other goods, loss by reason of shutdown or non-operation, increased expenses of operation or claims of customers of Purchaser for service interruption whether or not such loss or damage is based on contract, warranty, negligence, indemnity, strict liability or otherwise.

*****Always use Ingersoll Rand Replacement parts!*****

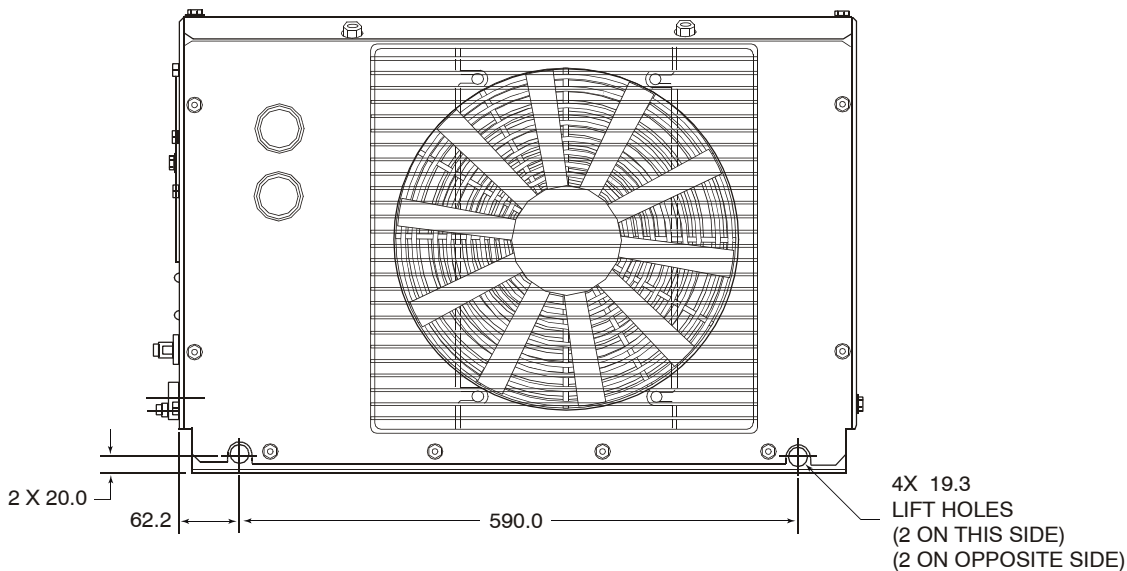
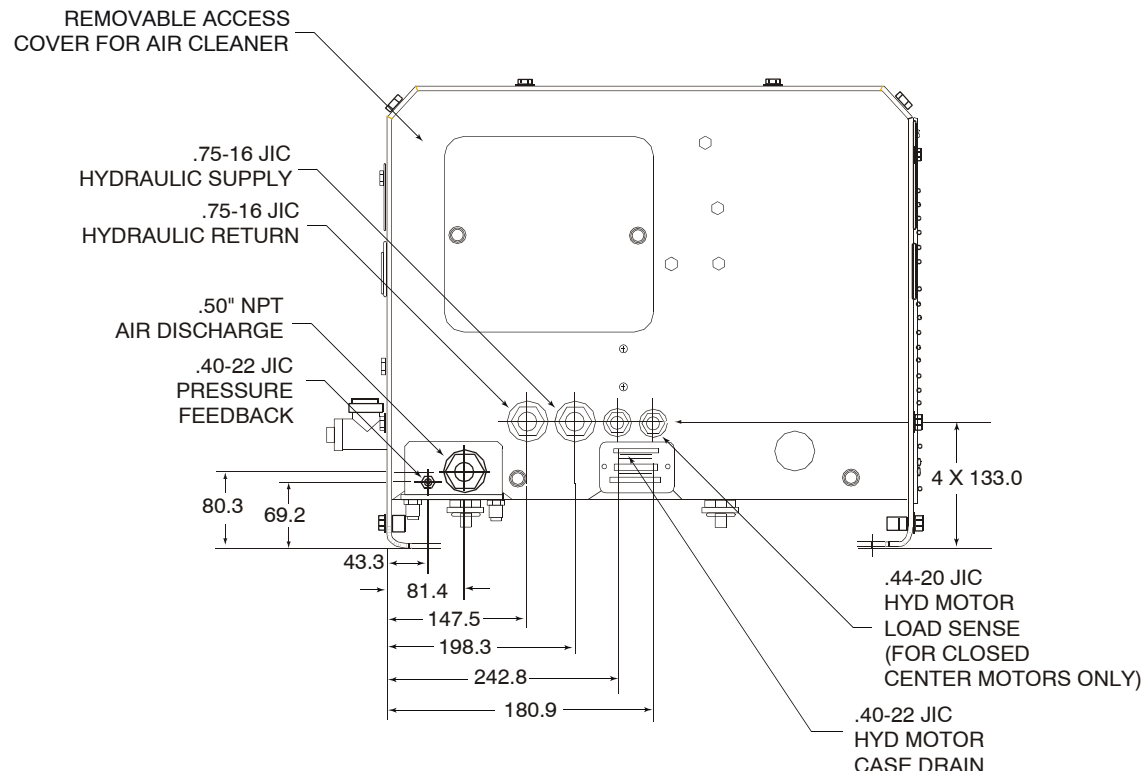


Parts List

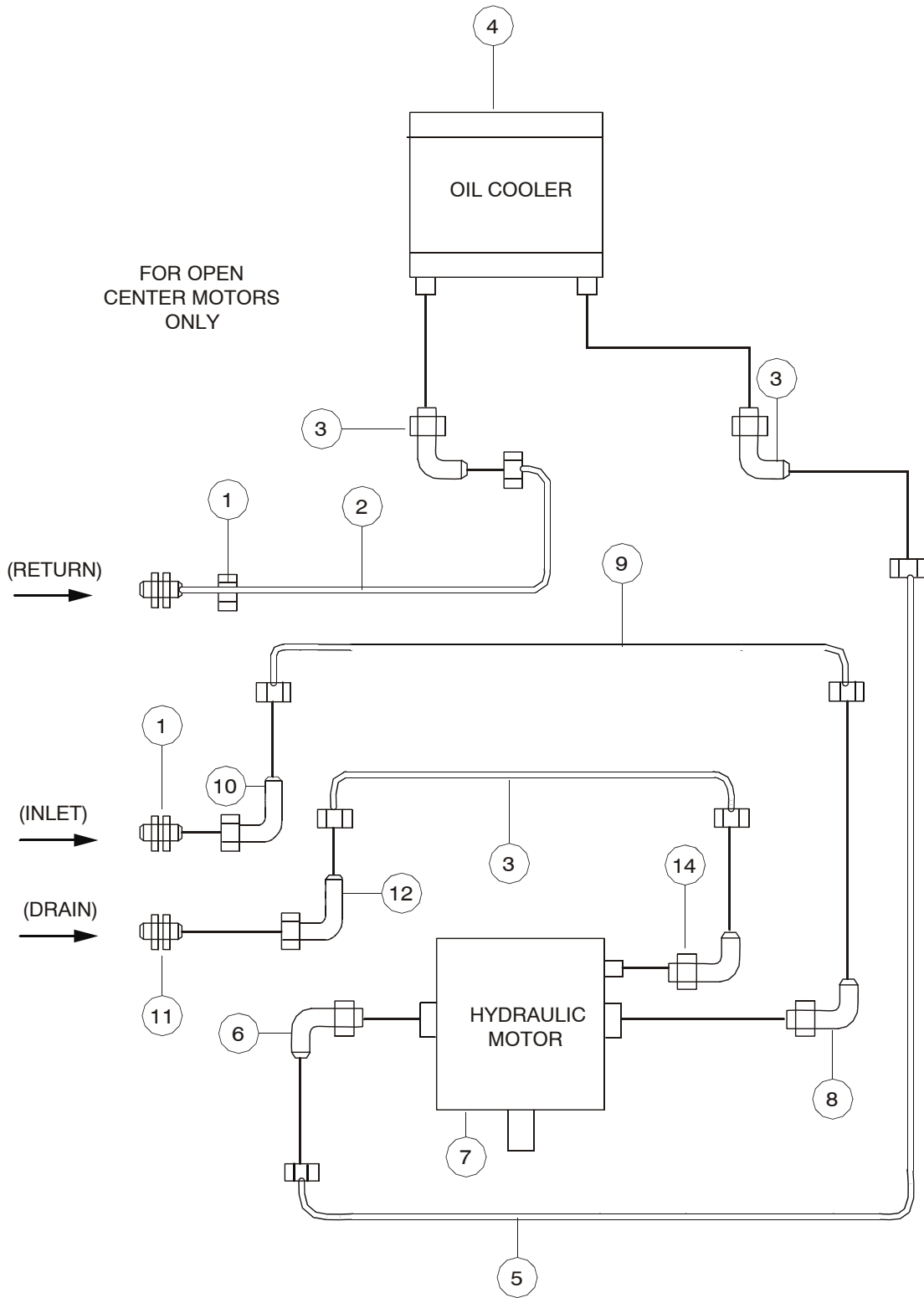
General Arrangement



General Arrangement



Piping Assembly

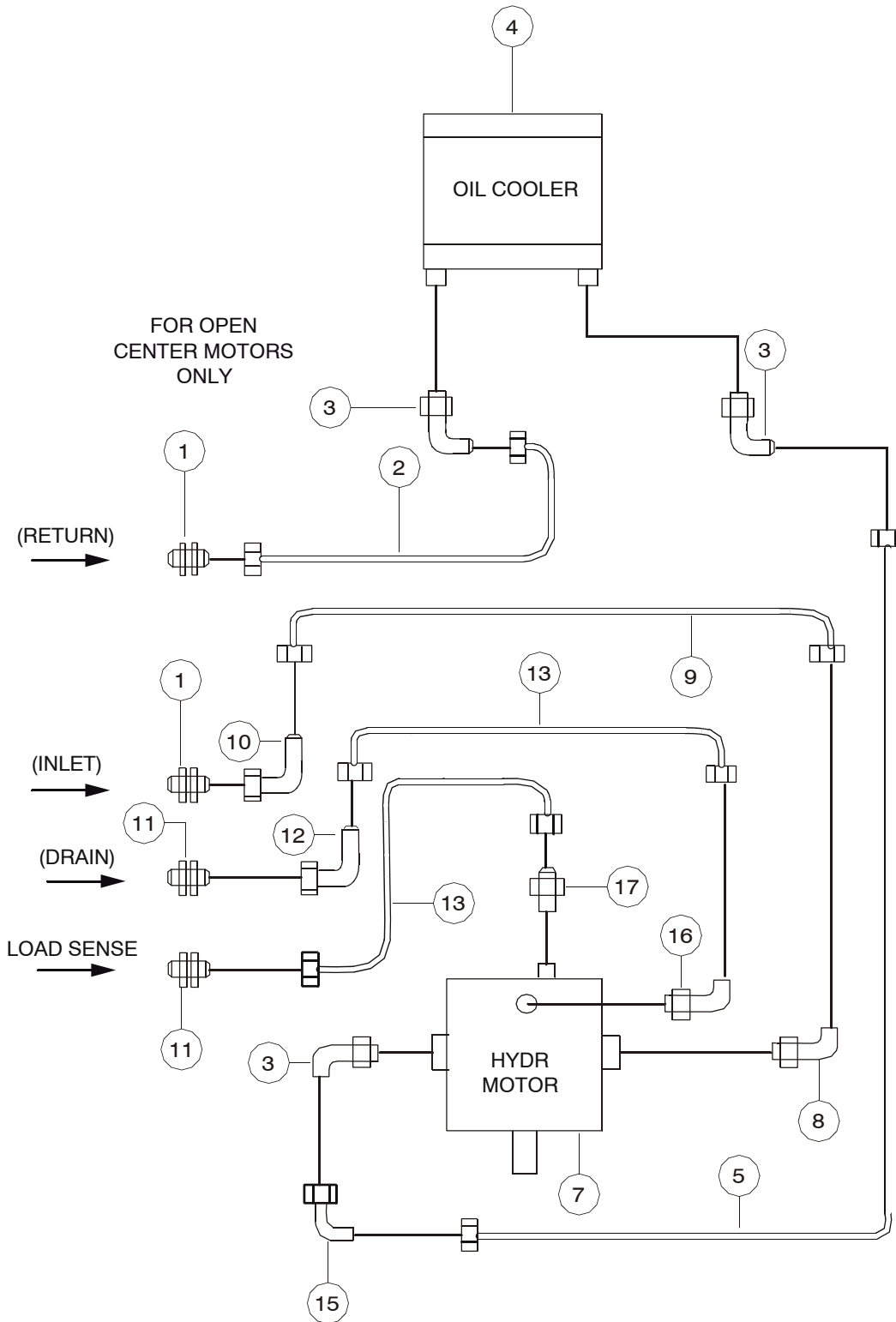


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Piping Assembly

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	35285451	Conn		.50 Tube X .50 Bulkhead
2	22393383	Hose, Assembly		8 X 18.00"
3	39171962	Elbow		90 X .75 Tube X 1.31 SAE
4A	22357214	Cooler		VHP30
4B	22357222	Cooler		VHP40
5	22393375	Hose, Assembly		8 X 27.00"
6	35294750	Elbow		90 X .75 Tube X 1.06 SAE
7A	22369607	Motor		Hyd VHP30 Open Center
7B	22396873	Motor		Hyd VHP30 Closed Center
7C	22369615	Motor		Hyd VHP40 Open Center
7D	22396865	Motor		Hyd VHP40 Closed Center
8	35286442	Elbow		90 X .50 Tube X .88 SAE
9	22393367	Hose, Assembly		8 X 15.00"
10	35287911	Elbow		90 X .50 Tube X .50 fem Tube SWL
11	95365151	Conn		.25 Tube X .25 Bulkhead

Piping Assembly

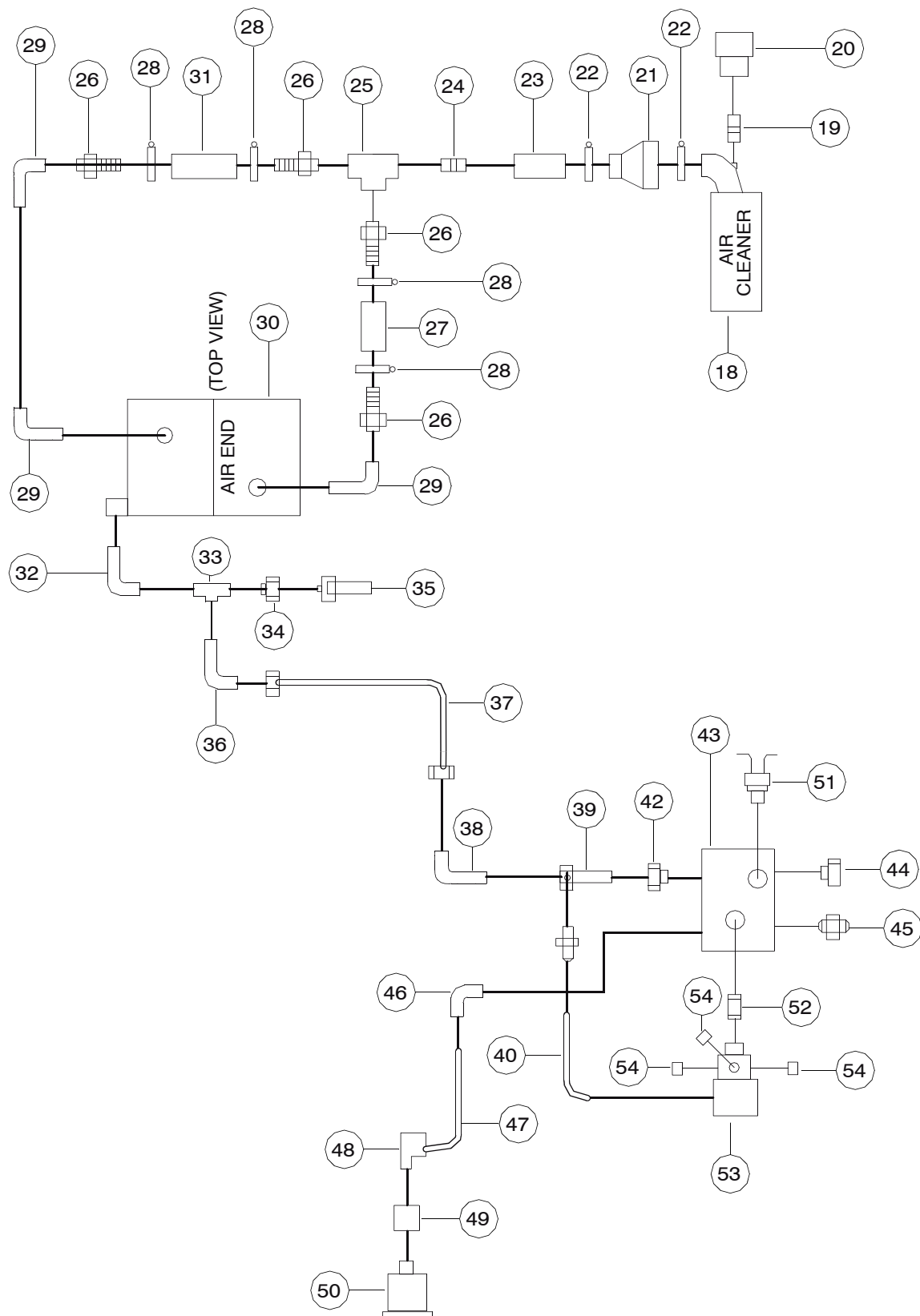


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Piping Assembly

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	35285451	Conn		.50 Tube X .50 Bulkhead
2	22393383	Hose, Assembly		8 X 18.00"
3	39171962	Elbow		90 X .75 Tube X 1.31 SAE
4A	22357214	Cooler		VHP30
4B	22357222	Cooler		VHP40
5	22393375	Hose, Assembly		8 X 27.00"
6	35294750	Elbow		90 X .75 Tube X 1.06 SAE
7A	22369607	Motor		Hyd VHP30 Open Center
7B	22396873	Motor		Hyd VHP30 Closed Center
7C	22369615	Motor		Hyd VHP40 Open Center
7D	22396865	Motor		Hyd VHP40 Closed Center
8	35286442	Elbow		90 X .50 Tube X .88 SAE
9	22393367	Hose, Assembly		8 X 15.00"
10	35287911	Elbow		90 X .50 Tube X .50 fem Tube SWL
11	95365151	Conn		.25 Tube X .25 Bulkhead
12	95938049	Elbow		90 X .25 Tube X .25 fem Tube SWL
13	22393391	Hose, Assembly		4 X 14.00"
14	35279876	Elbow		90 X .25 Tube X .44 SAE
15	35301506	Elbow		90 X .75 Tube X .75 fem Tube SWL
16	95985933	Elbow		90 X .56 Tube X .35 Tube
17	95981429	Conn		.56 Tube X .25 Tube

Piping Assembly

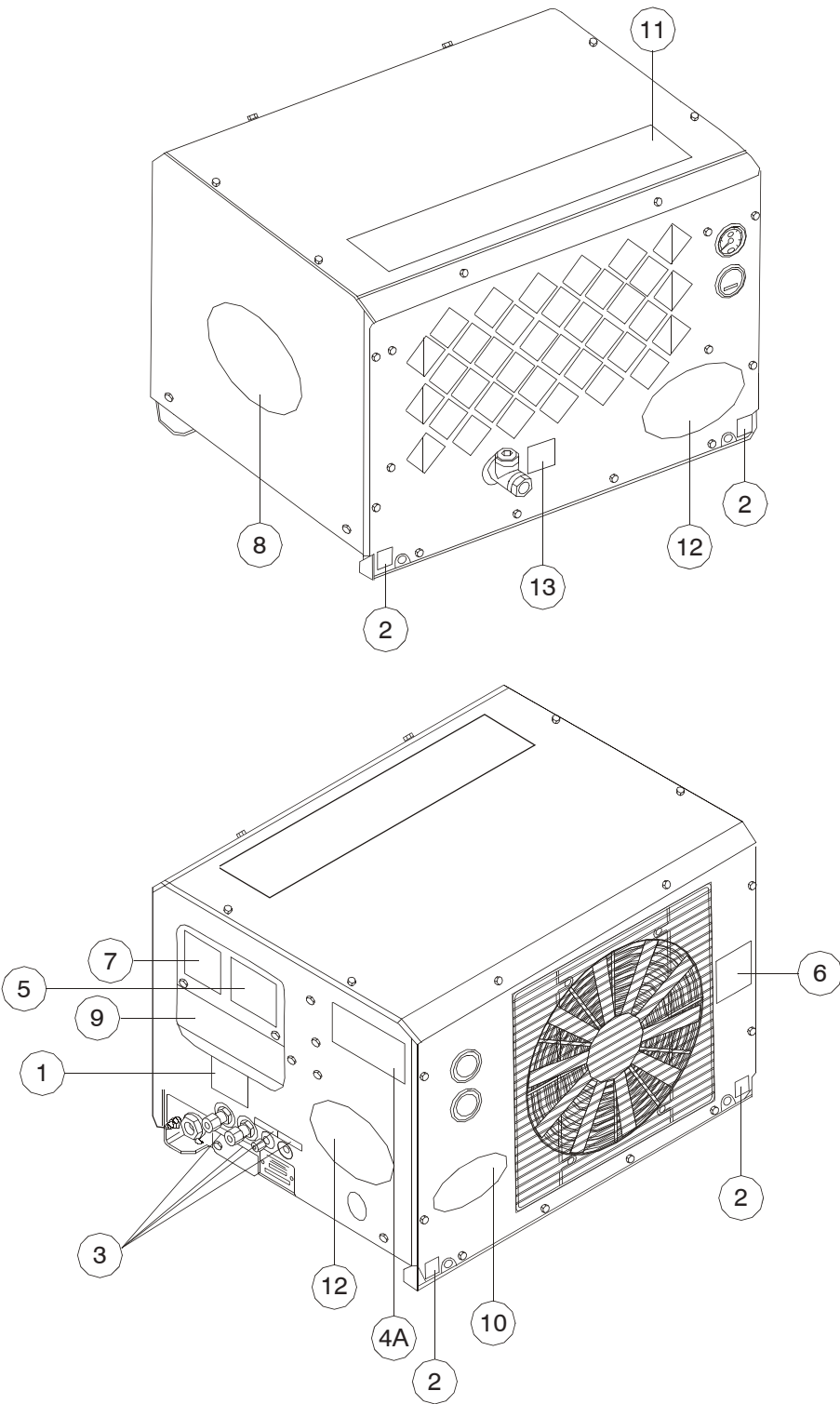


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Piping Assembly

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
18	22173561	Air Cleaner		4.5"
19	95946059	Nipple		.13 NPT X 1.50"
20	39124722	Restiction, Indicator		
21	22381750	Reducer, Hose		1.75 to 1.50
22	35221662	Clamp, Hose		1.312 dia
23	95951414	Coupling		1.00 NPT X 1.94"
24	95946117	Nipple		1.00 NPT X 1.50"
25	9595428	Tee		1.00 fem NPT
26	24909244	Nipple		1.00 NPT X 1.0 BARB
27	22394753	Hose, Air Inlet		5.375"
28	95235131	Clamp, Hose		
29	95928180	Elbow, Street		1.00 fem NPT X 1.00 NPT
30	16545006	Airend, Bare		TS10
31	22394746	Hose, Air Inlet		14.75"
32	95928164	Elbow, Street		.50 fem NPT X .50 NPT
33	95944708	Tee, Street		.50 fem NPT X .50 NPT
34	95944567	Bushing, Reducer		.50 NPT X .25 fem NPT
35	32174286	Valve, Safety		325 PSIG
36	95380077	Elbow, Reducing Street		.50 NPT X .75 FNPT
37	22392757	Hose, Assy Steel Braided		
38	95928172	Elbow, Street		.75 fem NPT X .75 NPT
39	22222095	Valve, Check		.75 fem NPT X 1.0 NPT
40	95011300	Conn		.25 Flareless Tube
41	22418453	Tube, Presure Feedback		
42	95937439	Bushing, Reducer		1.25 NPT X 1.00 fem NPT
43	22365712	Manifold, Discharge		
44	95940912	Bushing, Reducer		1.25 NPT X .50 FNPT
45	35283472	Conn		.25 Tube X .25 NPT
46	35369354	Elbow		90 X .25 NPT X .25 NPT
47	35356484	Tubing		.375 OD Synflex
48	35370386	Elbow		.13 NPT X .13 NPT
49	95935599	Coupling		.13 NPT X .75"
50	36891216	Gauge, Pressure		
51	22390934	Switch		Temp 480° F (N-C)
52	95944567	Nipple		.25 NPT X 1.50"
53	56288764	Switch		Pressure, 175 PSI
54	95928230	Plug, Socket		.25 NPT

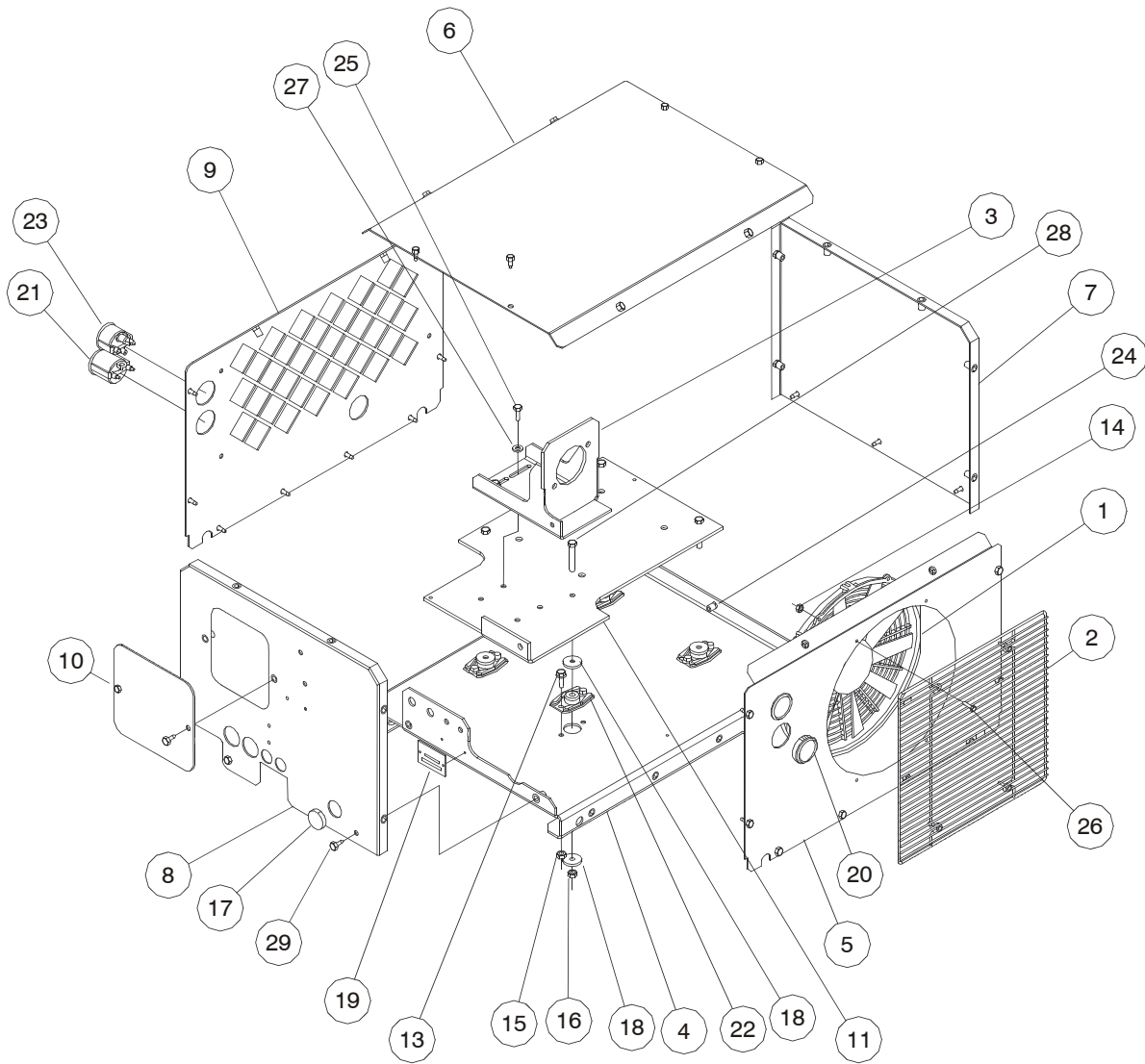
Decal Location



Decal Location

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	22126734	Decal	1	Warning Hyd Motor Adaptor
2	22182315	Decal	4	ISO Lift Point
3	22184261	Decal	1	Hyd Supply Return
4A	22406235	Decal	1	Gen Data 40
4B	22406243	Decal	1	Gen Data 30
5	43215037	Decal	1	Max Speed
6	54568779	Decal	1	ISO Rotating Fan
7	54568787	Decal	1	ISO Imprp Oper
8	54627716	Swoosh	1	6.25" IR
9	54629902	Decal	1	ISO Horz 3-Part
10	54640024	Decal	1	Genuine Parts
11	54640388	Ingersoll Rand Logo	1	20"
12	54672175	Swoosh	2	5" IR
13	93178945	Decal	1	Oil Fill

Housing Assembly

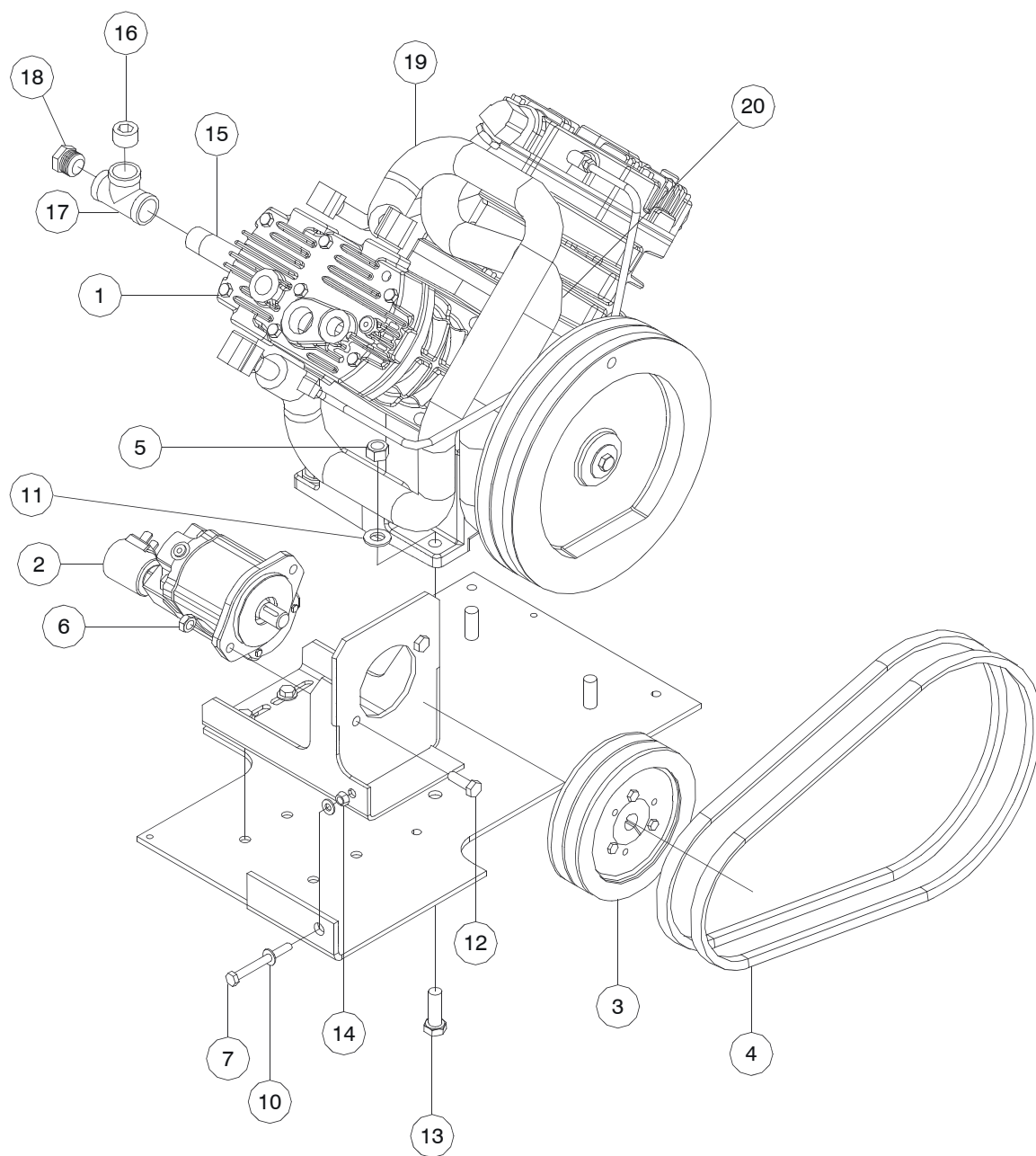


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Housing Assembly

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	22357230	Fan	1	Axial Motor 14 inch
2	22359491	Guard	1	Fan
3	22361091	Support, Motor	1	
4	22366116	Base	1	
5	22366124	Panel	1	Rear
6	22366157	Panel	1	Top
7	22366173	Panel	1	Left
8	22366181	Panel	1	Right
9	22383384	Panel	1	Front (VHP40)
9B	22366140	Panel	1	Front (VHP30)
10	22384184	Panel	1	Access
11	22384192	Base	1	Motor/Airend
13	35144344	Screw	8	Whiz Lock .38 X 1.00 Long Zinc Plated
14	35144492	Nut	4	Whiz Lock .25 Zinc
15	35145077	Nut	8	Whiz Lock .38 Zinc Plated
16	35273366	Nut	4	M10
17	35285543	Plug	1	Hole 1.5
18	35603489	Washer	8	Flat .19 X .41 X 1.50
19	36523306	Serial Number Plate	1	
20	36767440	Cover	2	Blind
21	36841245	Hourmeter	1	52MM Dia.
22	36857191	Mount	4	ISO Later
23	36891216	Gauge	1	Pressure 250 PSI
24	36895746	Nutsert, Hex	33	M8 -1.25, (14GA - 4GA)
25	95920674	Screw, Cap Hex Head	4	.38 X 1.00 Long Zinc
26	95934816	Screw, Hex Head	4	.25 X 1.00 Long Zinc
27	95935037	Washer	4	Plane Type A Flat Narrow, .38
28	96730411	Screw, Hex Head	4	M10 X 60.0 Long
29	96738802	Screw, Tapping	31	M8 X 20.00 Long

Motor Assembly

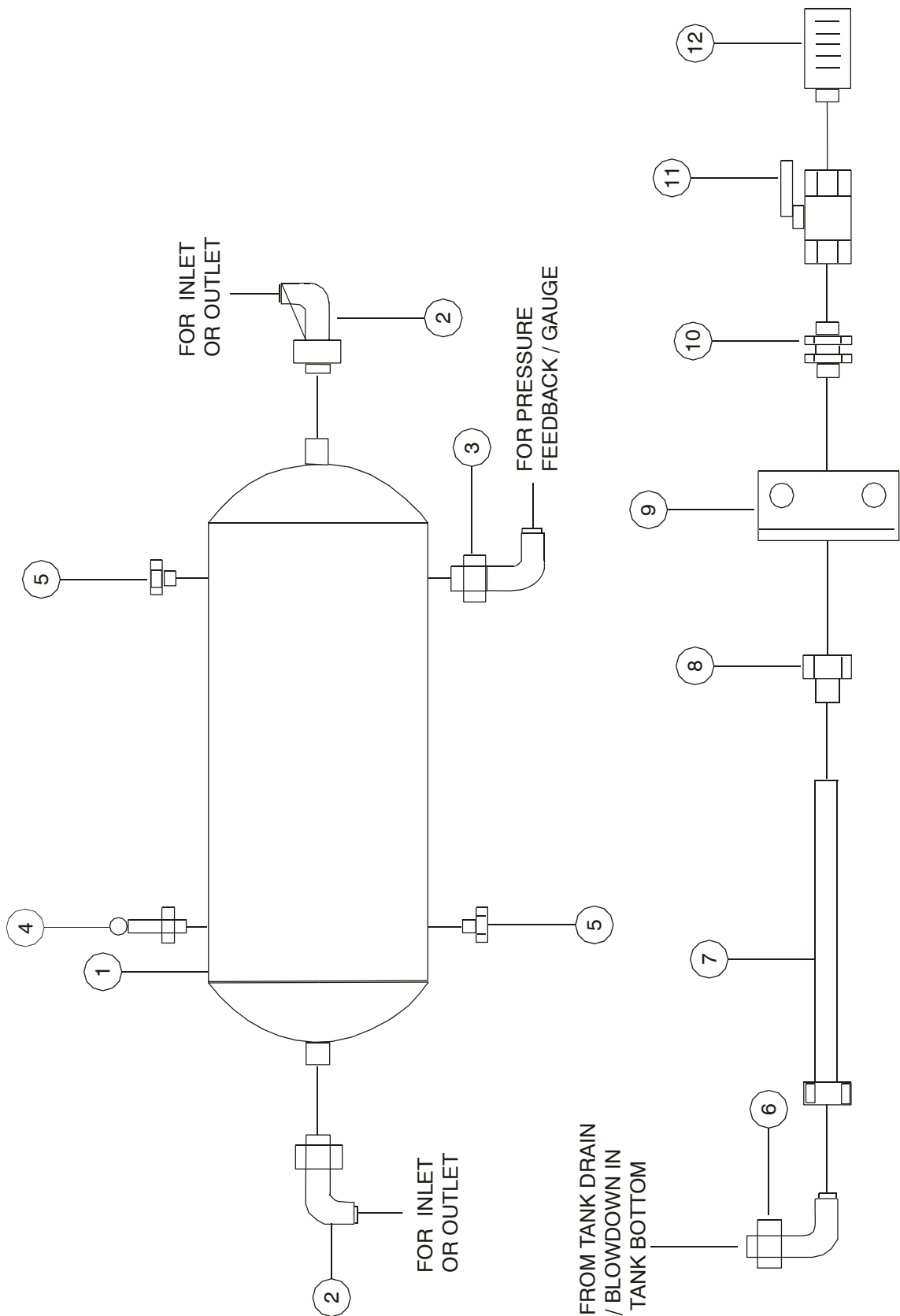


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Motor Assembly

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	16545006	Bare	1	TS10 CSC (ENCL) Shrinkwrap
2	22369615	Motor	1	16 CC/REV, 40 CFM
2B	22369607	Motor	1	VHP 30 Open Center
2C	22396873	Motor	1	VHP 30 Closed Center
2D	22396865	Motor	1	VHP 40 Closed Center
3	22371165	Sheave, Assembly	1	
4	22376032	Belt	2	V 21/32 X 47.00
5	22435804	Nut, Hex	4	M14-2
6	35273366	Nut	2	M10
7	36884187	Screw, Hex Head	1	M8 X 80.0 Long Zinc
10	95934998	Washer	2	Plain Type A Flat Narrow, .31
11	95935045	Washer	4	Plain Type A Flat Narrow, .56
12	96701917	Screw, Hex Head	2	M10 X 30.0 Long
13	96719810	Screw, Hex Head	4	M14 X 40.0 Long
14	96735543	Nut, Hex	1	1 Course Thread M8
15	95330395	Nippl	1	Standard .75 NPT X 4.00 Long
16	95947149	Plug	1	Socket .75 NPT
17	95954210	Tee	1	150# .75 FNPT
18	97334270	Sightglass	1	Oil NPT
19	85581437	Tube Assembly	1	Intclr - Right
20	85581429	Tube Assembly	1	Intclr Left
For Alternate Unit Configurations				
N/S	85582385	Kit	1	Valve/Gasket
N/S	85582393	Kit	1	Ring/Gasket
N/S	85588234	Kit	1	Bearing/Conn. Rod
N/S	85588226	Kit	1	Overhaul
N/S	72062185	Valve	2	Safety (80 PSI)

10 - Gallon Receiver Tank Kit Piping

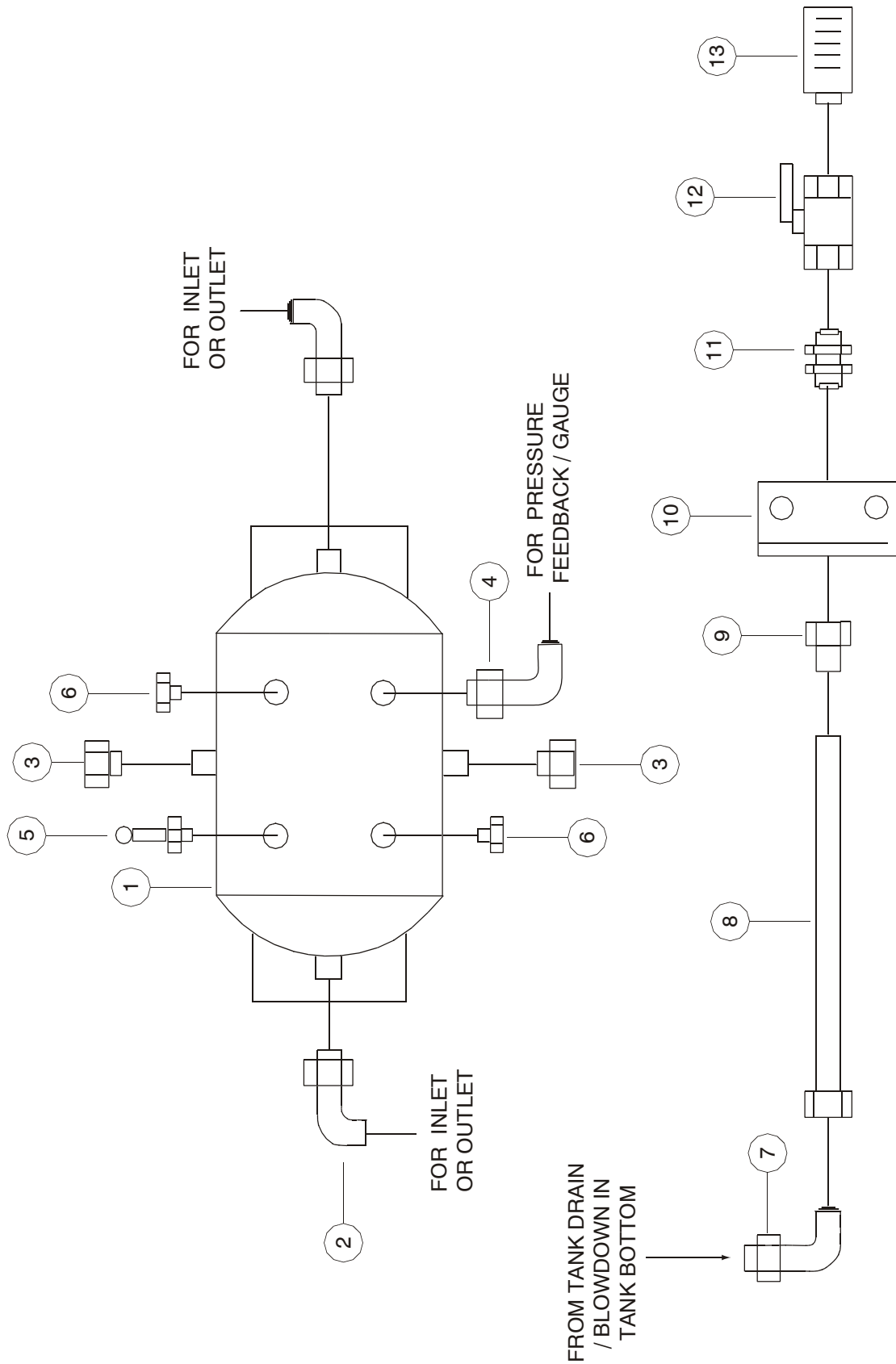


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10 - Gallon Receiver Tank Kit Piping

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		Piping for Kit 36087344		
1	22456222	Tank Air Receiver		10 Gallon
2	95937637	Elbow		90 X .75 Tube X .75 NPT
3	35283464	Elbow		90 X .25 NPT X .25 SAE
4	39588074	Valve, Pressure Relief		
5	95954038	Plug		.25 NPT
6	35309210	Elbow		90 X .50 Tube X .50 NPT
7	22459697	Hose		.50 Tube X 6.0 ft. long
8	22459689	Swivel, Reuseable		.50 Tube
9	22455711	Bracket, Tank Blowdown		
10	95149969	Conn		Bulkhead .50 NPT X .75 SAE
11	35581792	Valve		Ball .50 NPT
12	35132299	Silencer		Blowdown EPA

22 - Gallon Receiver Tank Kit Piping

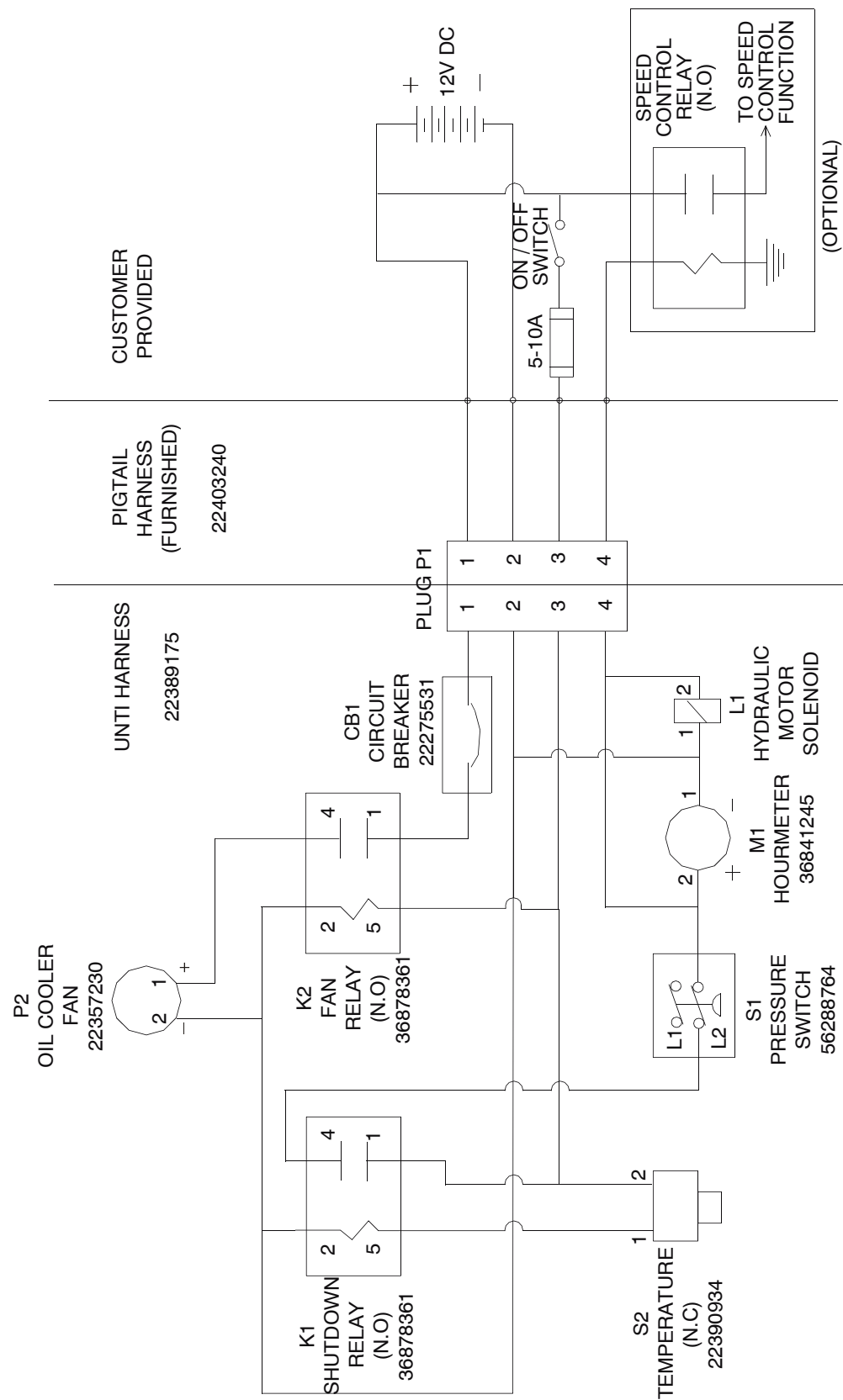


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22 - Gallon Receiver Tank Kit Piping

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		Piping for Kit 36087351		
1	22473474	Tank Air Receiver		22 Gallon
2	95937637	Elbow		90 X .75 Tube X .75 NPT
3	95947149	Plug		.75 Npt
4	35283464	Elbow		90 X .25 NPT X .25 SAE
5	39588074	Valve, Pressure Relief		
6	95954038	Plug		.25 NPT
7	35309210	Elbow		90 X .50 Tube X .50 NPT
8	2245697	Hose		.50 Tube X 6.0 ft. long
9	22459689	Swivel		Reuseable .50 Tube
10	22455711	Bracket		Tank Blowdown
11	95149969	Conn		Bulkhead .50 NPT X .75 SAE
12	35581792	Valve		Ball .50 NPT
13	35132299	Silencer		Blowdown EPA

Wiring Diagram



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*****Always use Ingersoll Rand Replacement parts!*****

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22384192	23	35356484	19	29
22390934	19	35369354	19	95938049	17
22392757	19	35370386	19	95940912	19
22393367	15	35581792	27	95944567	19
.....	17	29	95944708	19
22393375	15	35603489	23	95946059	19
.....	17	36523306	23	95946117	19
22393383	15	36767440	23	95947149	25
.....	17	36841245	23	29
22393391	17	36857191	23	95951414	19
22394746	19	36884187	25	95954038	27
22394753	19	36891216	19	29
22396865	15	23	95954210	25
.....	17	36895746	23	9595428	19
.....	25	39124722	19	95981429	17
22396873	15	39171962	15	95985933	17
.....	17	17	96701917	25
.....	25	39588074	27	96719810	25
22406235	21	29	96730411	23
22406243	21	43215037	21	96735543	25
22418453	19	54568779	21	96738802	23
22435804	25	54568787	21	97334270	25
22455711	27	54627716	21		
.....	29	54629902	21		

*****Always use Ingersoll Rand Replacement parts!*****



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