



**INDUSTRIAL AIR
COMPRESSOR**

TS-20

**125-150HP/ 93-112KW
WATER-COOLED**

ADDENDUM

**ILLUSTRATIONS
AND
PARTS LIST**

**KEEP FOR
FUTURE
REFERENCE**

Part Number

02250150-157

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AIR CARE SEMINAR TRAINING

Sullair Air Care Seminars are courses that provide hands-on instruction in the proper operation, maintenance and service of Sullair equipment. Individual seminars on Industrial compressors and compressor electrical systems are presented at regular intervals throughout the year at a dedicated training facility at Sullair's corporate headquarters in Michigan City, Indiana.

Instruction includes discussion of the function and installation of Sullair service parts, troubleshooting of the most common problems, and actual equipment operation. The seminars are recommended for maintenance and service personnel.

For detailed course outlines, schedule and cost information contact:

Sullair Corporate Training Department

1-888-SULLAIR or 219-879-5451 (ext. 5363)

www.sullair.com

Or Write -

Sullair Corporation

3700 E. Michigan Blvd.

Michigan City, IN 46360

Attn: Service Training Department

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**OPERATOR IS REQUIRED TO READ
ENTIRE INSTRUCTION MANUAL**

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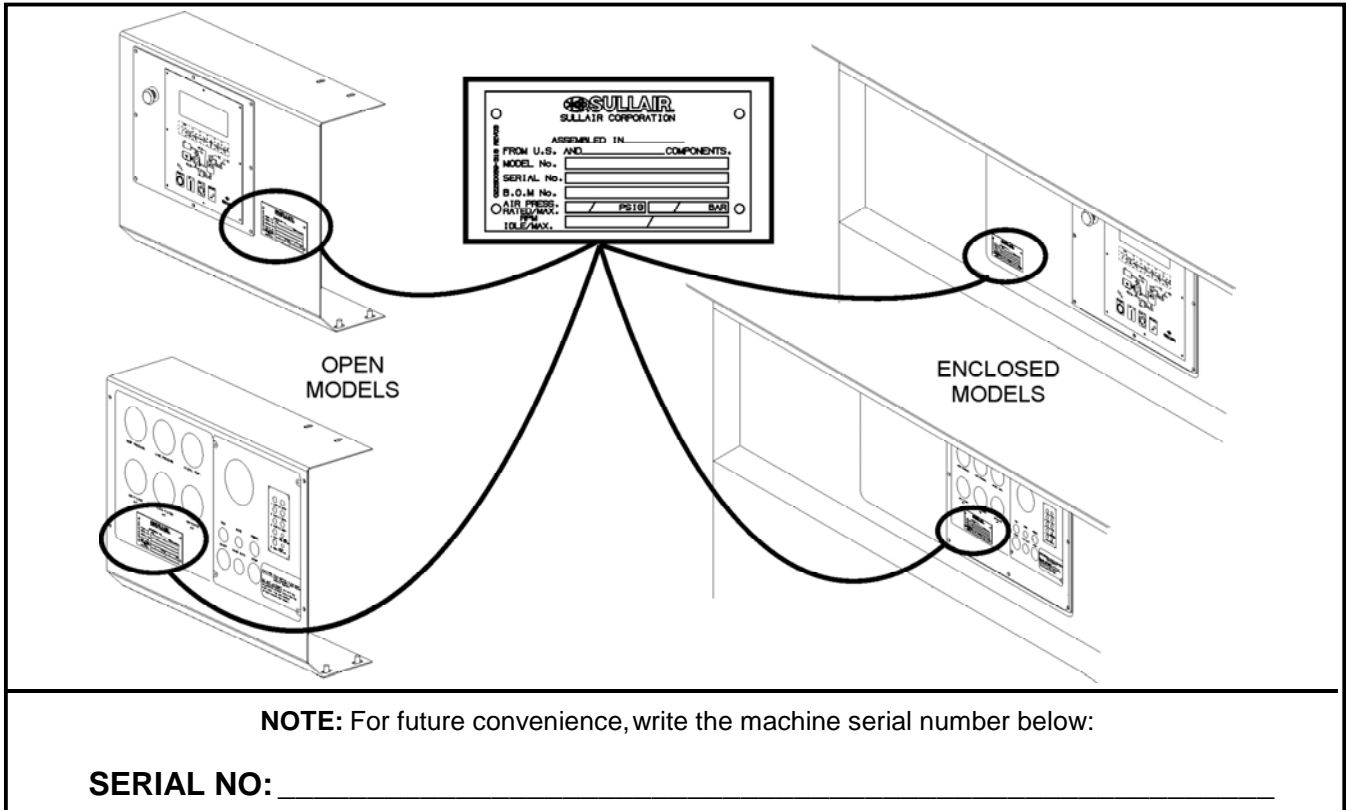
Section 1 ILLUSTRATION AND PARTS LIST

1.1 PROCEDURE FOR ORDERING PARTS

Parts should be ordered from the nearest Sullair Representative. If for any reason parts cannot be obtained in this manner, contact the factory directly at the addresses, fax or phone numbers below.

Refer to Figure 1-1 for Serial Plate location. When ordering parts always indicate the Serial Number of the compressor. This can be obtained from the Bill of Lading for the compressor or from the Serial Number Plate located on the compressor.

Figure 1-1 Serial Plate Location- Typical Instrument Panel Locations



SULLAIR ASIA, LTD.
Sullair Road, No. 1
Chiwan, Shekou
Shenzhen, Guangdong PRV.
PRC POST CODE 518068
☎: 755-6851686
Fax: 755-6853473
www.sullair-asia.com

SULLAIR CORPORATION
3700 East Michigan Boulevard
Michigan City, Indiana 46360 U.S.A.
www.sullair.com
☎: 1-800-SULLAIR (U.S.A. & Canada Only)
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Fax: (219) 874-1273
PARTS DEPARTMENT
☎: 1-888-SULLAIR
Fax: (219) 874-1835
www.sullair.com
SERVICE DEPARTMENT
☎: 1-888-775-1604 (U.S.A. & Canada Only)
Fax: (219) 874-1205
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SULLAIR EUROPE,
S.A.
Zone Des Granges BP 82
42602 Montrbrison Cedex,
France
☎: 33-477968470
Fax: 33-477968499
www.sullaireurope.com

Section 1

ILLUSTRATION AND PARTS LIST

1.2 RECOMMENDED SPARE PARTS LIST

DESCRIPTION	KIT NUMBER	QTY
element for air filter no. 02250140-798	02250135-150	1
repair kit for fluid filter no. 02250136-534	02250136-888	1
repair kit for primary separator element 250034-121	250034-122	1
repair kit for secondary separator element 250034-133	250034-134	1
repair kit for Sullicon Control no. 011682-003	250020-353	1
replacement seal for compressor shaft seal	02250057-037	1
tool kit for shaft seal installation	02250078-494	1
repair kit for 175° thermal valve no. 049542	001168	1
repair kit for 190° thermal valve no. 250028-762	02250112-709	1
repair kit for fluid stop valve no. 016742	001684	1
reducing regulator valve no. 02250046-568	02250055-911	1
repair kit for minimum pressure/check valve no. 242405	001176	1
repair kit for minimum pressure/check valve no. 250033-821	250018-262	1
repair kit for water separator no. 410144	250033-038	1
repair kit for moisture separator no. 02250106-113	02250144-791	1
repair kit for moisture separator no. 02250144-632	02250144-732	1
replacement kit for blowdown valve no. 02250100-042	02250100-042	1
repair kit for control air filter no. 02250112-032	02250112-031	1
repair kit for air cylinder 250016-183 (I)	608311-001	1
repair kit for discharge check valve 018435	606206-001	1
repair kit for solenoid valve no. 02250125-653	02250125-843	1
replacement coil for solenoid valve no. 02250125-653	02250125-855	1
repair kit for solenoid valve no. 02250125-656	02250125-828	1
replacement coil for solenoid valve no. 02250125-656	02250125-858	1
repair kit for solenoid valve no. 02250125-657	02250125-829	1
replacement coil for solenoid valve no. 02250125-657	02250125-861	1
repair kit for solenoid valve no. 02250125-653	02250125-843	1
replacement coil for solenoid valve no. 02250125-653	02250125-855	1
repair kit for pressure regulator valve no. 406929	250028-693	1
repair kit for pressure regulator valve no. 408275	041742	1
filter, scavenge line no. 02250117-782	02250117-782	2
repair kit for strainer no. 241771	241772	1

Continued on page 3

(I) Order actuator diaphragm repair tool kit no. 02250052-625.

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 1

ILLUSTRATION AND PARTS LIST

1.2 RECOMMENDED SPARE PARTS LIST (CONTINUED)

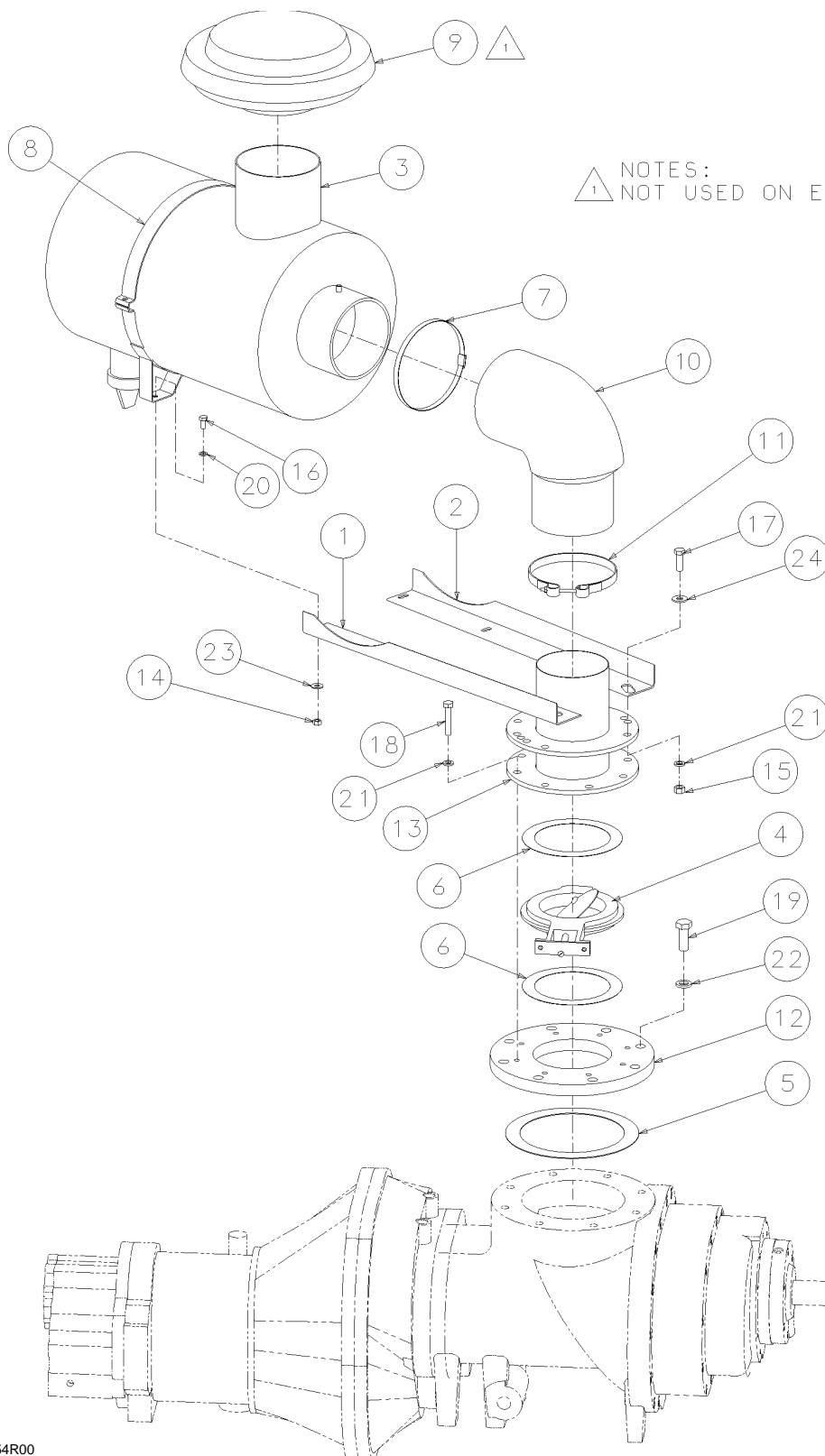
DESCRIPTION	KIT NUMBER	QTY
FLUIDS		
<div style="border: 1px solid black; padding: 5px; margin: 5px auto; width: fit-content;"> <p style="text-align: center;">NOTE</p> <p style="text-align: center;">Mixing, changing or adding other lubricants within the compressor unit may void the air-end warranty.</p> </div>		
lubricant, Sullube (Std.) (5 gal/ 19 liters)	250022-669	(II)
lubricant, Sullube (Std.) (55 gal/ 208 liters)	250022-670	(II)
lubricant, 24 KT (5 gal/ 19 liters)	02250051-153	(II)
lubricant, 24 KT (55 gal/ 208 liters)	02250051-150	(II)
fluid, SRF 1/4000 (5 gal/ 19 liters)	250019-662	(II)
fluid, SRF 1/4000 (55 gal/ 208 liters)	250019-663	(II)

(II) Fluid capacity is 10 gallons.

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 1 ILLUSTRATION AND PARTS LIST

1.3 AIR FILTER



02250150-154R00

Section 1

ILLUSTRATION AND PARTS LIST

1.3 AIR FILTER

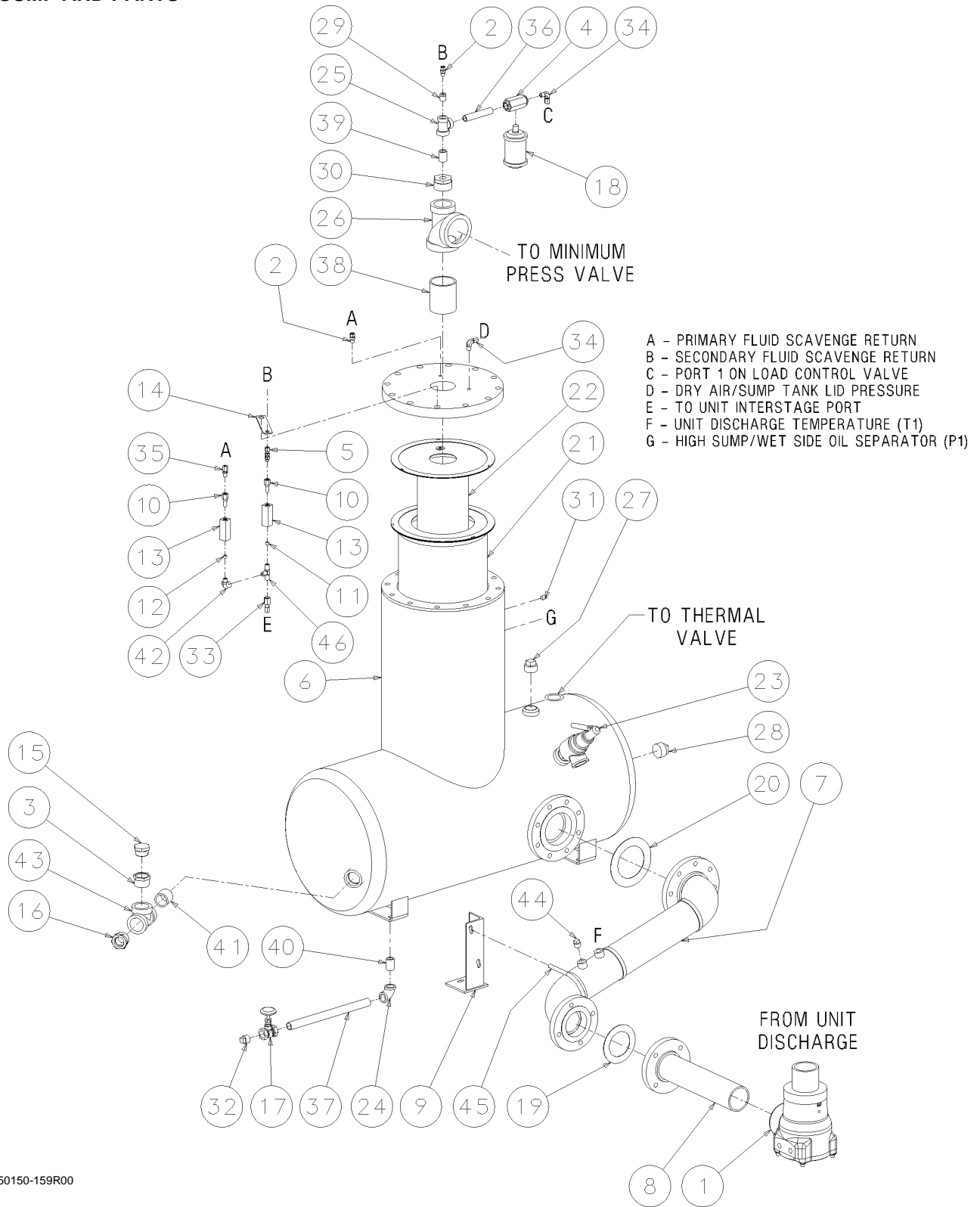
<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
1	anl, hfd rh supt ts20/ls25-200	02250114-282	1
2	anl, hfd lh supt ts25/ls25-200	02250114-283	1
3	fltr, inl optimalair 16odx7inl (I)	02250140-798	1
4	valve, butterfly 6"	040336	1
5	gasket, 8 5/8 x 11 x 1/16	040422	1
6	gasket, 1/32 x 6 1/4idx8 1/4od	040696	2
7	clamp, hose 7"	041992	1
8	band, mounting 16"	044248	1
9	cap, air inlet 7"	046307	1
10	elbow, rubber 90 deg red 7x6	049625	1
11	clamp, hose 7"	240817	1
12	adapter, air inlet reducer 8"-6"	250002-615	1
13	adapter, air inlet	250034-068	1
14	nut, hex pltd 3/8-16	825206-337	2
15	nut, hex pltd 1/2-13	825208-448	4
16	capscr, hex gr5 3/8-16 x 3/4	829106-075	2
17	capscr, hex gr5 1/2-13 x 1 1/2	829108-150	4
18	capscr, hex gr5 1/2-13 x 2 1/2	829108-250	8
19	capscr, hex gr5 3/4-10 x 2	829112-200	8
20	washer, spr lock reg pltd 3/8	837806-094	2
21	washer, spr lock reg pltd 1/2	837808-125	12
22	washer, spr lock reg pltd 3/4	837812-188	8
23	washer, pl-b reg pltd 3/8	838206-071	2
24	washer, pl-b reg pltd 1/2	838208-112	4

(I) For maintenance on air filter no. 02250140-798, order replacement element no. 02250135-150.

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 1 ILLUSTRATION AND PARTS LIST

1.4 SUMP AND PARTS



02250150-159R00

Section 1

ILLUSTRATION AND PARTS LIST

1.4 SUMP AND PARTS

key number	description	part number	quantity
1	valve, disch assy dxx20	018435-003	1
2	connector, flex 1/4t x 1/4p	020169	2
3	adpt, receiver oil fill 185dpq	02250064-595	1
4	vlv, 1/2 bldwn 1.8:1 250 psig (I)	02250100-042	1
5	conn, tube male bhd 1/4 x sae	02250101-490	1
6	tnk, oil sep 20" flanged	02250108-073	1
7	joint, exp. disch/tnk ts20 leak-free	02250114-067	1
8	pipe assembly, disch/tnk ts20 - 20"dia tank	02250114-084	1
9	support, ts20 discharge pipe	02250115-689	1
10	filter, asembly genesis filter (II)	02250117-782	2
11	orifice, plug brass 1/8"npt x 1/32"	02250125-774	1
12	orifice, plug brass 1/8"npt x 1/16"	02250125-775	1
13	sightglass, orf block sae	02250126-129	2
14	bracket, oil return/sightglass line	02250128-598	1
15	plug, o-ring boss sae 1 1/4	040029	1
16	glass, oil level sight 1-1/2"	040279	1
17	valve, globe 3/4" 200lb.	040520	1
18	silencer, air 1/2"	041006	1
19	gasket, asa flange 150# 3"	240621-008	1
20	gasket, asa flange 150# 4"	240621-010	1
21	element, primary 25-200 (III)	250034-121	1
22	element, sep/sec (IV)	250034-133	1
23	valve, rlf 1-14"175# 1250cfm	410103	1
24	elbow, pipe 90 deg 3/4" 150#	801515-030	1
25	tee, reducing 3/4 x 1/2 x 1/2	802203-022	1
26	tee, reducing 3 x 2 x 3	802212-082	1
27	plug, pipe 1 1/4" 150#	802815-050	1
28	plug, pipe 1 1/2" 150#	802815-060	1
29	bushing, red stl 1/2 x 1/4	807602-010	1
30	bushing, red stl 2 x 3/4	807608-030	1
31	plug, pipe 1/4" 3000# stl	807800-010	1

Continued on page 9

(I) For maintenance on blowdown valve no. 02250100-042, order replacement valve no. 02250100-042.

(II) For maintenance on scavenge line filter no. 02250117-782, order replacement filter no. 02250117-782.

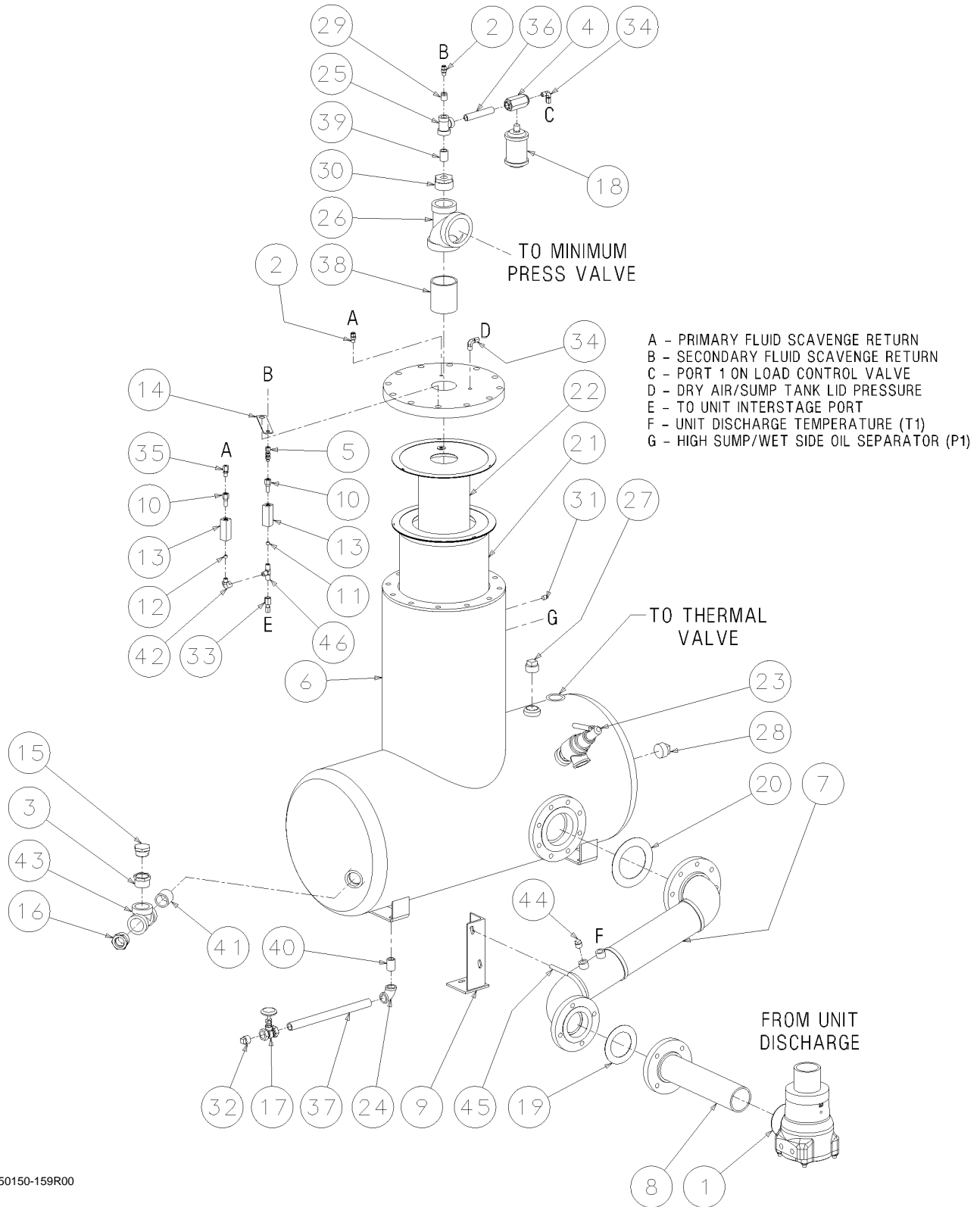
(II) For maintenance on primary separator element no. 250034-121, order replacement element no. 250034-122.

(III) For maintenance on secondary separator element no. 250034-133, order replacement element no. 250034-134.

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 1 ILLUSTRATION AND PARTS LIST

1.4 SUMP AND PARTS



02250150-159R00

Section 1

ILLUSTRATION AND PARTS LIST

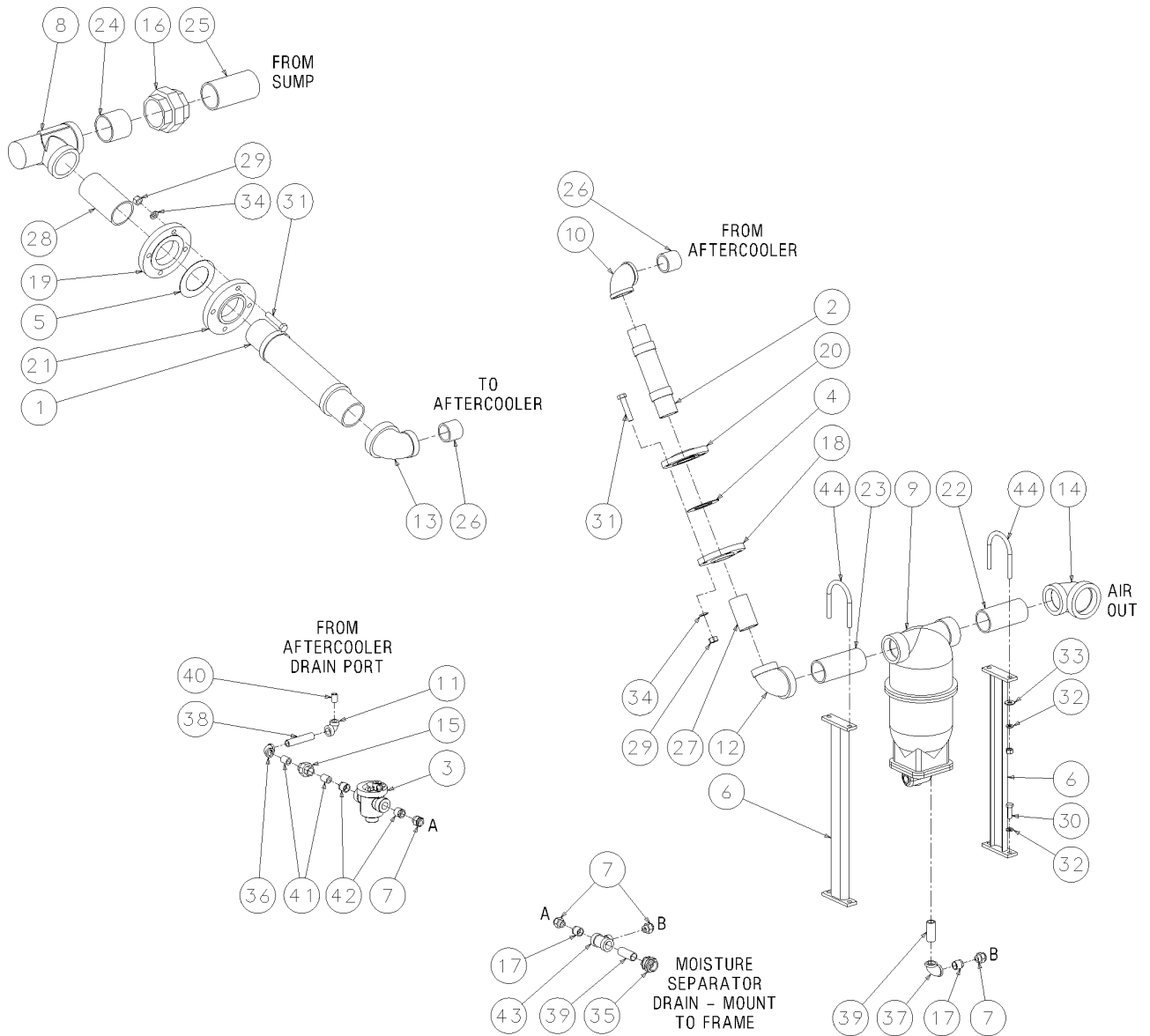
1.4 SUMP AND PARTS (CONTINUED)

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
32	plug, pipe 3/4" 3000# stl	807800-030	1
33	connector, tube-f 1/4 x 1/4	810104-025	1
34	elbow, tube 90 deg m 1/4 x 1/4	810504-025	2
35	connector, tube str thd 1/4 x 7/16	811804-044	1
36	nipple, pipe 1/2 x 4 1/2	822108-045	1
37	nipple, pipe 3/4 x 13 1/2	822112-135	1
38	nipple, pipe 3 x 4	822148-040	1
39	nipple, pipe-xs 3/4 x cl	822212-000	1
40	nipple, pipe-xs 3/4 x 1 1/2	822212-015	1
41	nipple, pipe-xs 1 1/2 x cl	822224-000	1
42	elbow, pipe 90m/f 1/4 x 1/4	860704-025	1
43	tee, pipe 150# plt 1 1/2	866815-060	1
44	plug, pipe 1/2" 3000# stl plt	866900-020	1
45	u-bolt, 1/2" x 4" pipe pltd	868308-400	1
46	tee, male pipe brass 1/4	869825-025	1

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 1 ILLUSTRATION AND PARTS LIST

1.5 AIR PIPING



Section 1 ILLUSTRATION AND PARTS LIST

1.5 AIR PIPING

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
1	joint, expansion ts-20 discharge to tank	02250058-939	1
2	joint, expansion 2"	02250087-928	1
3	trap, inverted bucket type	42034	1
4	gskt, asa flg 150# 2"	240621-006	1
5	gskt, asa flg 150# 3"	240621-008	1
6	support, moisture separator 3"	250023-077	2
7	conn, tube-strt 1/2mnpt x1/2"t	250024-695	4
8	valve, min press check 3" (spl) (I)	250033-821	1
9	separator, water wa comb 2 1/2" (II)	410144	1
10	elbow, pipe 90 deg 2" 150#	801515-080	1
11	elbow, red 1/2 x 3/8 150#	801602-015	1
12	elbow, red 2 1/2 x 2 150#	801610-080	1
13	elbow, red 3 x 2 150#	801612-080	1
14	elbow, red 3 x 2 1/2 150#	801612-100	1
15	union, pipe galv 1/2	802315-020	1
16	union, pipe-brs seat 3 150#	802515-120	1
17	bushing, red stl 3/4 x 1/2	807603-020	2
18	flange, slp-on 2" 150#	819215-032	1
19	flange, slp-on 3" 150#	819215-048	1
20	flange, thrd 2" 150# rf	819315-032	1
21	flange, thrd 3" 150# rf	819315-048	1
22	nipple, pipe 2 1/2 x 6	822140-060	1
23	nipple, pipe 2 1/2 x 6 1/2	822140-065	1
24	nipple, pipe 3 x 3	822148-030	1
25	nipple, pipe 3 x 6 1/2	822148-065	1
26	nipple, pipe-xs 2 x cl	822232-000	2
27	nipple, half 2 x 4	822832-040	1
28	nipple, half 3 x 6 1/2	822848-065	1
29	nut, hex pltd 5/8-11	825210-559	8
30	capscr, hex gr5 1/2-13 x 1 1/2	829108-150	4
31	capscr, hex gr5 5/8-11 x 3	829110-300	8
32	washer, spr lock reg pltd 1/2	837808-125	8
33	washer, pl-b reg pltd 1/2	838208-112	4
34	washer, spr lock reg pltd 5/8	838510-156	8

Continued on page 13

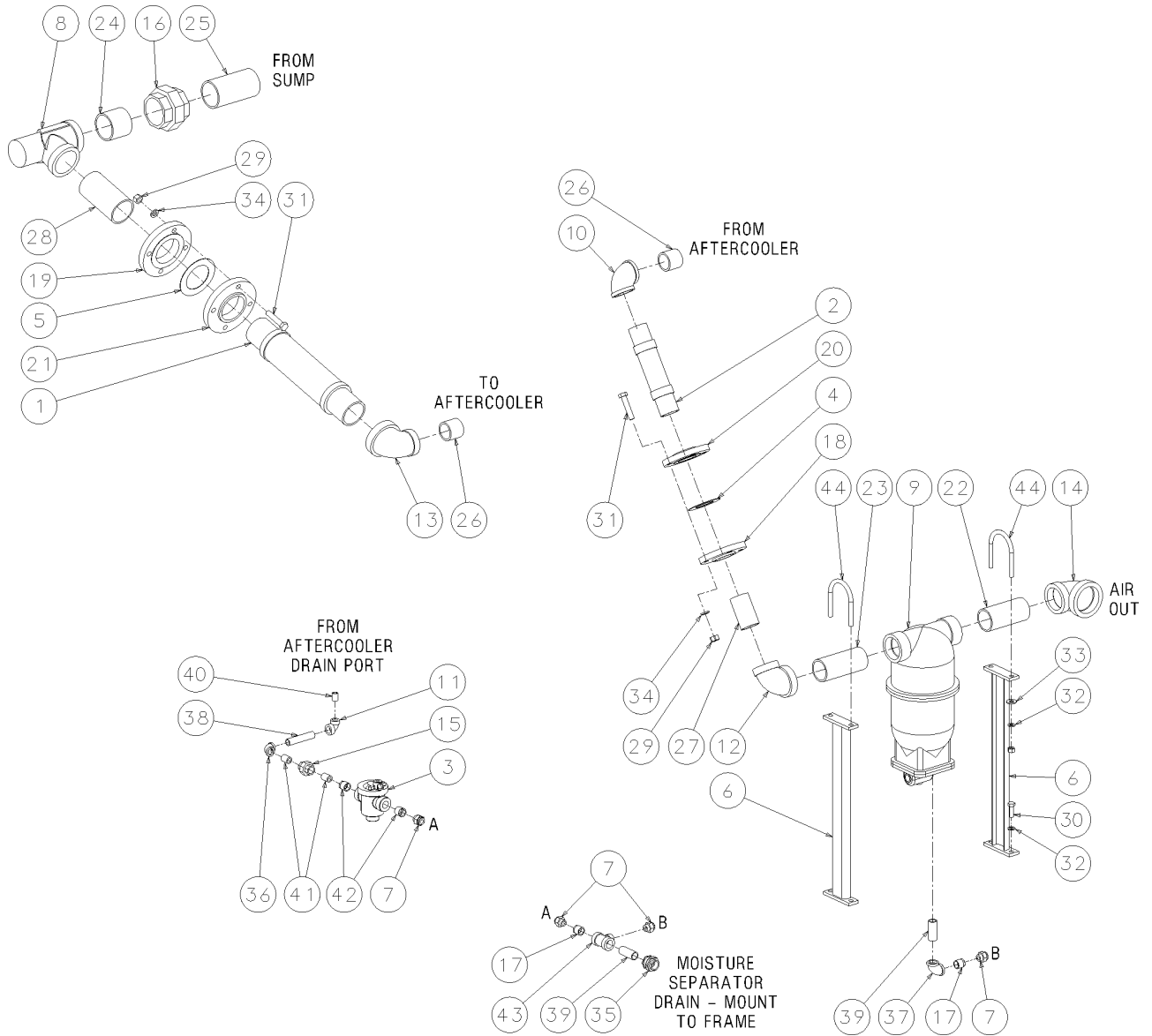
(I) For maintenance on minimum pressure check valve no. 250033-821, order repair kit no. 250018-262.

(II) For maintenance on water separator no. 410144, order repair kit no. 250033-038.

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 1 ILLUSTRATION AND PARTS LIST

1.5 AIR PIPING



Section 1 ILLUSTRATION AND PARTS LIST

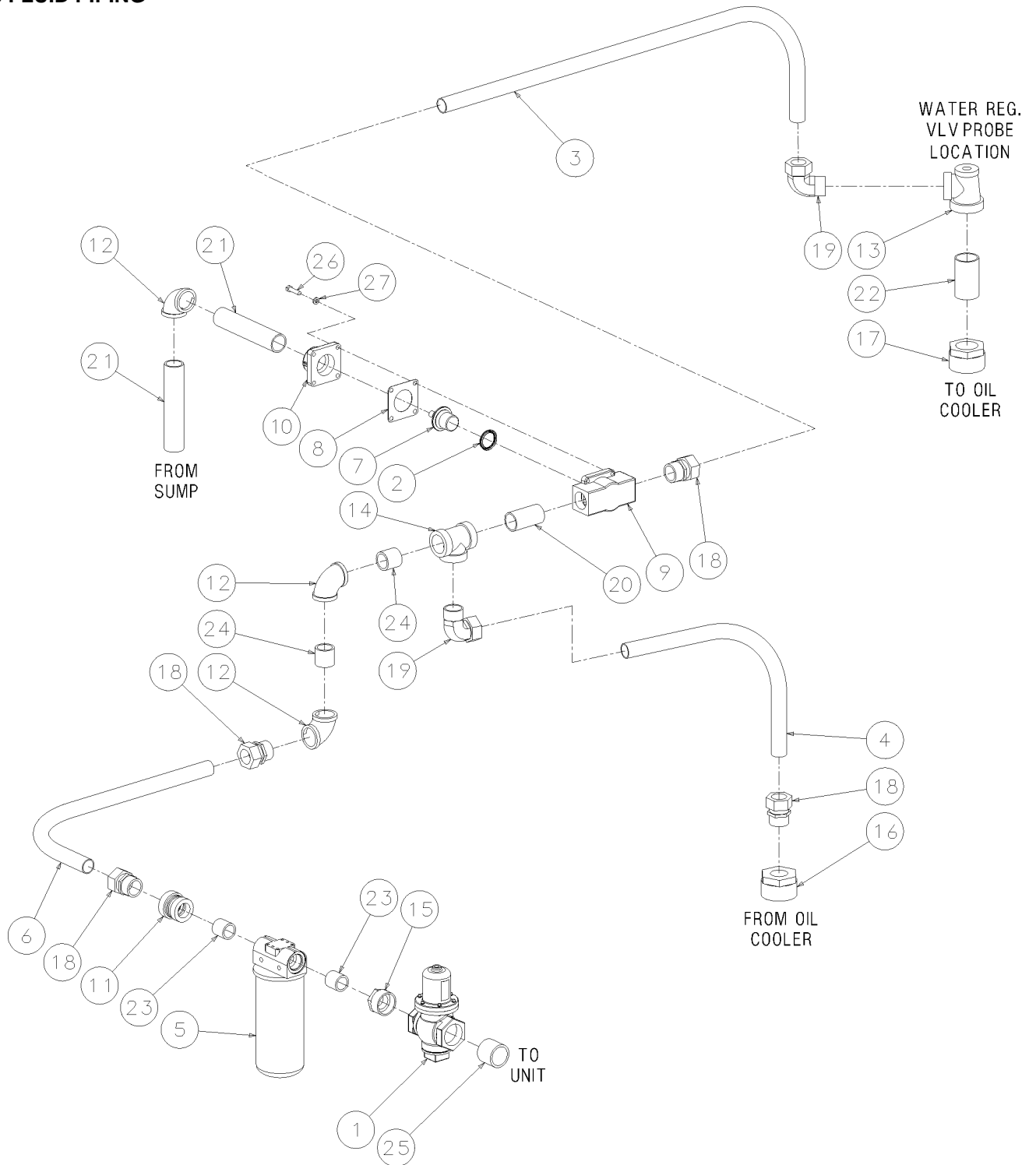
1.5 AIR PIPING (CONTINUED)

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
35	bulkhead, pipe 3/4" npt	841500-012	1
36	elbow, pipe 90 deg plt 1/2"	866215-020	1
37	elbow, pipe 90 deg plt 3/4"	866215-030	1
38	nipple, pipe pltd 1/2 x 4	866308-040	1
39	nipple, pipe pltd 3/4 x 2 1/2	866312-025	2
40	nipple, pipe-xs plt 3/8 x cl	866406-000	1
41	nipple, pipe-xs plt 1/2 x cl	866408-000	2
42	bushing, red pltd 3/4 x 1/2	867103-020	2
43	tee, red pltd 3/4 x 3/4 x 1/2	867503-032	1
44	u-bolt, 1/2" x 3" pipe pltd w/nuts	868308-300	2

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 1 ILLUSTRATION AND PARTS LIST

1.6 FLUID PIPING



02250150-161R00

Section 1

ILLUSTRATION AND PARTS LIST

1.6 FLUID PIPING

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
1	vlv, oil stop ci 2" npt (I)	16742	1
2	seal, u-cup therm vlv	02250101-372	1
3	tube, clr/tv 1-1/2" o.d.	02250114-314	1
4	tube, clt/tee 1-1/2" o.d.	02250114-316	1
5	filter, fluid 1-1/4"-npt (II)	02250136-534	1
6	tube, tee/filter 1-1/2"	02250150-210	1
7	element, 175° thermal vlv (III) •element, 190° thermal vlv (IV)	049542 250028-762	1 1
8	gasket, thermal valve	049812	1
9	hsg, therm valve	221947	1
10	flange, therm valve	221956	1
11	coupling, red 1 1/2 x1 1/4 150#	801012-010	1
12	elbow, pipe 90 deg 1 1/2" 150#	801515-060	3
13	tee, reducing 2 x 1/2 x 1 1/2	802208-026	1
14	tee, pipe straight 1 1/2	802415-060	1
15	bushing, red stl 2 x 1 1/4	807608-050	1
16	bushing, red stl 3 x 1 1/2	807612-060	1
17	bushing, red stl 3 x 2	807612-080	1
18	conn, tube-m 1 1/2 x 1 1/2	810224-150	4
19	elbow, tube 90 deg m 1 1/2 x 1 1/2	810524-150	2
20	nipple, pipe 1 1/2 x 3 1/2	822124-035	1
21	nipple, pipe 1 1/2 x 9	822124-090	2
22	nipple, pipe 2 x 4	822132-040	1
23	nipple, pipe-xs 1 1/4 x cl	822220-000	2
24	nipple, pipe-xs 1 1/2 x cl	822224-000	2
25	nipple, pipe-xs 2 x cl	822232-000	1
26	capscr, hex gr5 3/8-16 x 1 1/2	829106-150	4
27	washer, spr lock reg pltd 3/8	837806-094	4

(I) For maintenance on fluid stop valve no. 016742, order repair kit no. 001684.

(II) For maintenance on fluid filter no. 02250136-534, order replacement element no. 250025-526.

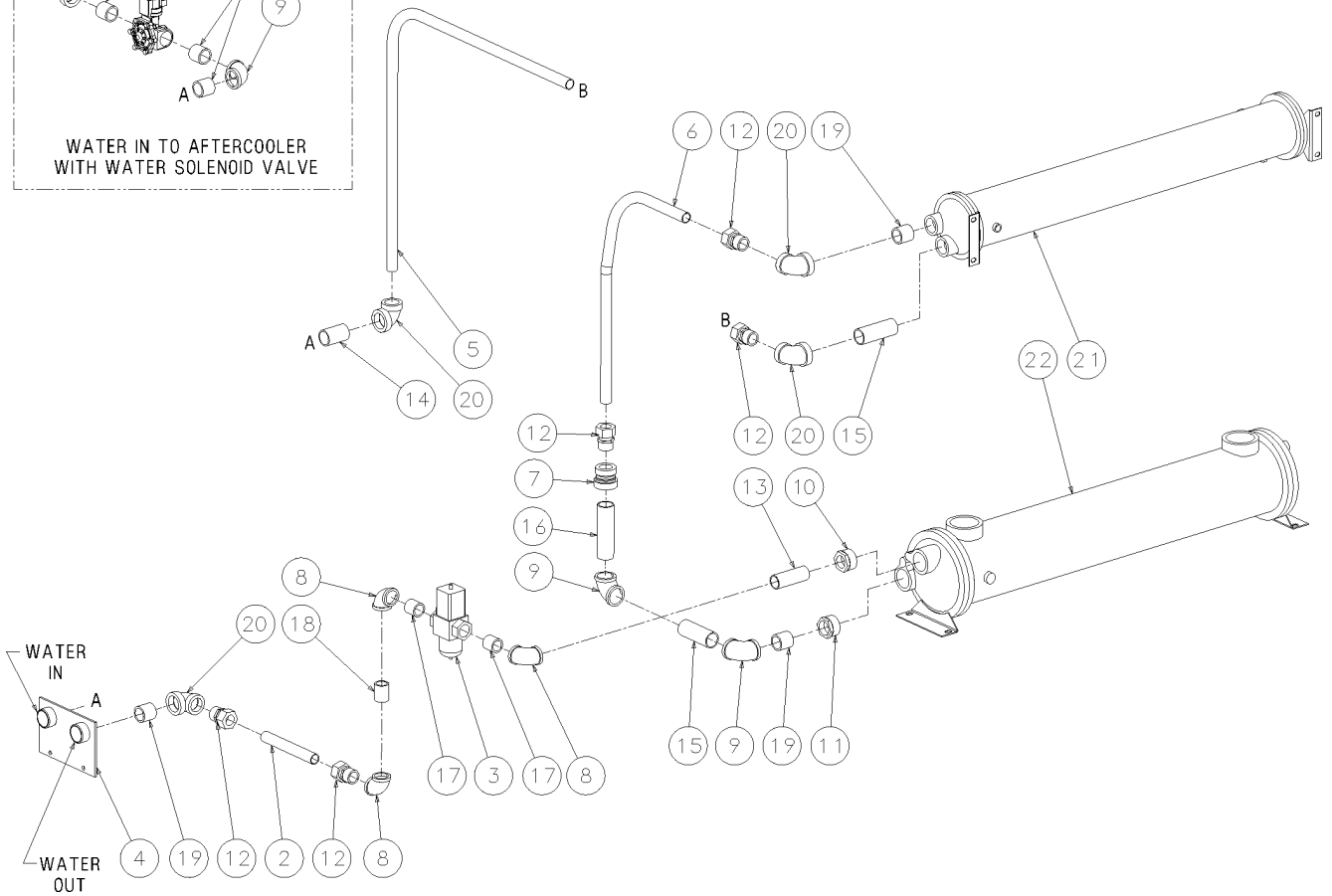
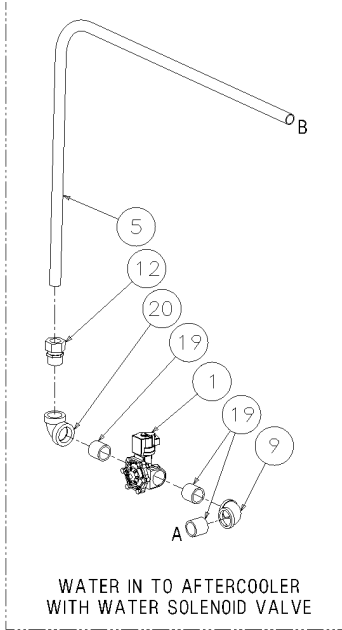
(III) For maintenance on (175°) thermal valve no. 049542, order repair kit no. 001168.

(IV) For maintenance on (190°) thermal valve no. 250028-762, order repair kit no. 02250112-709.

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 1 ILLUSTRATION AND PARTS LIST

1.7 WATER PIPING



02250150-162R00

Section 1 ILLUSTRATION AND PARTS LIST

1.7 WATER PIPING

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
1	vlv, sol 2w nc 1 1/2" 150#vac n4 (I)	02250125-653	1
2	tube, wtr reg vlv/wtr out 1-1/4"	02250150-204	1
3	valve, wtr reg 1-1/4" npt	049474	1
4	bracket, water conn. 1-1/2"	250027-022	1
5	tube, wtr in/aftclr 1-1/4"	250033-969	1
6	tube, aftclr/oilclr 1-1/4"	250033-970	1
7	coupling, red 1 1/2 x1 1/4 150#	801012-010	1
8	elbow, pipe 90 deg 1 1/4" 150#	801515-050	3
9	elbow, pipe 90 deg 1 1/2" 150#	801515-060	3
10	bushing, red stl 2 x 1 1/4	807608-050	1
11	bushing, red stl 2 x 1 1/2	807608-060	1
12	connector, tube-m 1 1/4 x 1 1/4	810220-125	6
13	nipple, pipe 1 1/4 x 4 1/2	822120-045	1
14	nipple, pipe 1 1/2 x 3	822124-030	1
15	nipple, pipe 1 1/2 x 5	822124-050	2
16	nipple, pipe 1 1/2 x 6 1/2	822124-065	1
17	nipple, pipe-xs 1 1/4 x cl	822220-000	2
18	nipple, pipe-xs 1 1/4 x 2	822220-020	1
19	nipple, pipe-xs 1 1/2 x cl	822224-000	6
20	elbow, red 1 1/2 x 1 1/4 150# plt	869206-050	5
21	clr, aftclr 2" npt air/ 1 -1/2 npt wtr port (II)	-	1
22	cooler, oil 3" npt oil/ 2" npt wtr ports (II)	-	1

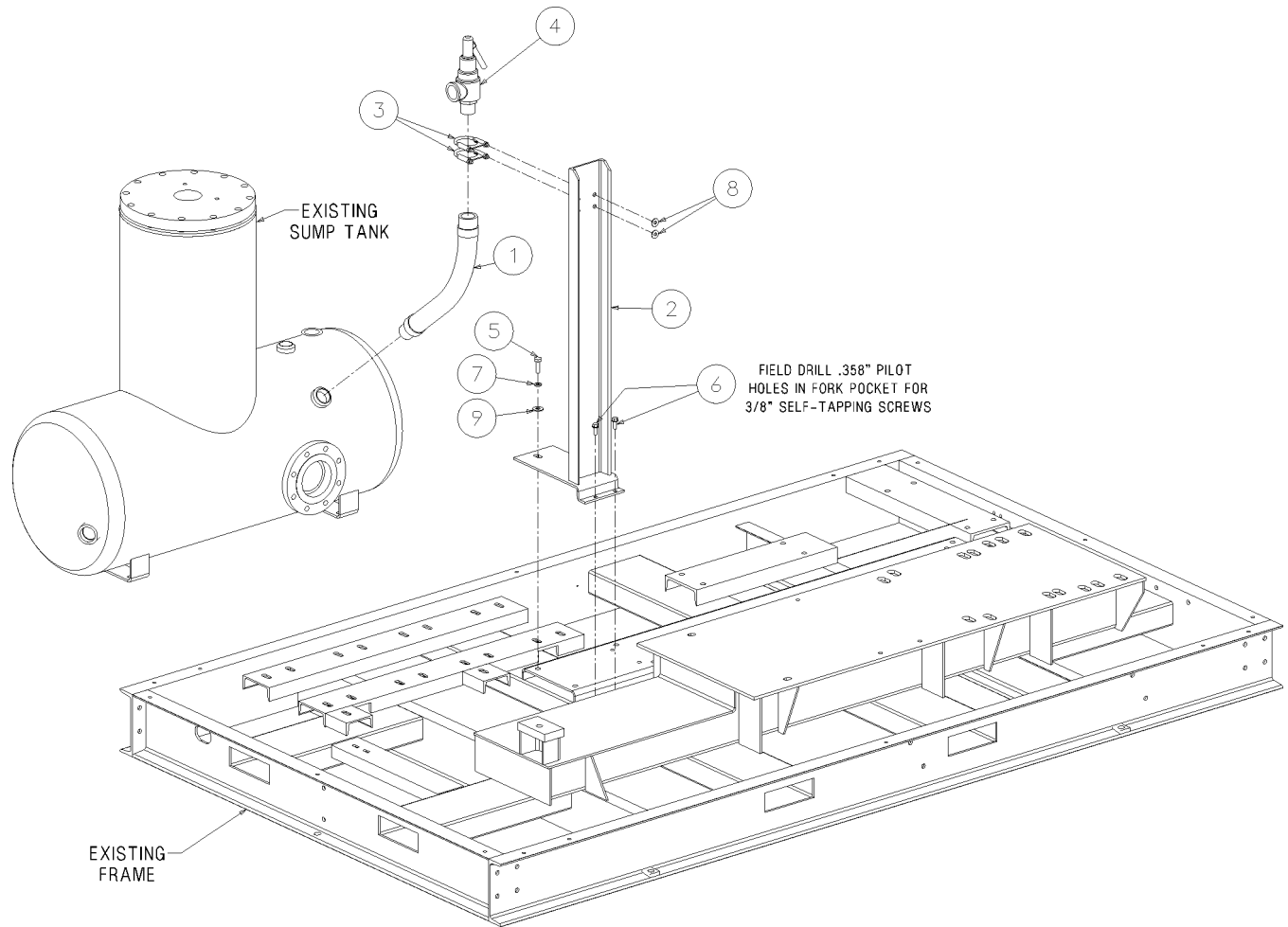
(I) For maintenance on solenoid valve no. 02250125-653, order repair kit no. 02250125-843, and replacement coil no. 02250125-855.

(II) This part may vary per machine specifications. To determine correct part number, consult factory with machine serial number.

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 1 ILLUSTRATION AND PARTS LIST

1.8 REMOTE-MOUNTED RELIEF VALVE



02250149-626R01

Section 1

ILLUSTRATION AND PARTS LIST

1.8 REMOTE-MOUNTED RELIEF VALVE

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
1	jnt, exp 1-1/2" x 24"	02250149-616	1
2	supt, rem mtd rlf vlv	02250149-617	1
3	clamp, exhaust 2"	44135	2
4	valve, rlf 1-14"175# 1250cfm	410103	1
5	capscr, hex gr5 1/2-13 x 1 1/2	829108-150	2
6	screw, tc-hex 3/8-16 x 1	834206-100	2
7	washer, spr lock reg pltd 1/2	837808-125	2
8	washer, pl-b reg pltd 3/8	838206-071	4
9	washer, pl-b reg pltd 1/2	838208-112	2

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

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