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**GARDNER DENVER®**

13-10-511  
3rd Edition  
May, 1998

**ELECTRA-SAVER®**  
**STATIONARY BASE-MOUNTED**  
**COMPRESSORS**

**WITH CONSTANT SPEED OR**  
**AUTOMATIC START/TIMED STOP**  
**CONTROL – 50/60 HZ**

**MODELS**

**350 HP**

**EAYQSF & EAYSSF**

**400 HP**

**EAYQTF & EAYSTF**

**500 HP**

**EAYQVF & EAYSVF**

**PARTS LIST**

**Gardner**  

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**Denver**

## **INSTRUCTIONS FOR ORDERING REPAIR PARTS**

When ordering parts, specify Compressor MODEL, Method of Cooling, HORSE-POWER and SERIAL NUMBER (see nameplate on unit). The Serial Number is also stamped on top of the cylinder flange to the right of the inlet housing.

All orders for Parts should be placed with the nearest authorized distributor.

Where NOT specified, quantity of parts required per compressor or unit is one (1); where more than one is required per unit, quantity is indicated in parenthesis. SPECIFY EXACTLY THE NUMBER OF PARTS REQUIRED.

DO NOT ORDER BY SETS OR GROUPS.

To determine the Right Hand and Left Hand side of a compressor, stand at the motor end and look toward the compressor. Right Hand and Left Hand are indicated in parenthesis following the part name, i.e. (RH) & (LH), when appropriate.

**For Operating and Service Instructions see:**

**SERVICE MANUAL 13-10-606**

## TABLE OF CONTENTS

Page No.

---

Instructions For Ordering Repair Parts .....	Inside Front Cover
Maintain Compressor Reliability And Performance With Genuine Gardner Denver Compressor Parts and Support Services .....	2
Remanufactured Air Ends .....	2
Matrix/Menu .....	3
Total Product Support – Gardner Denver’s Continuing Commitment To Your Air Compressor Performance ....	4
Air End Selective .....	4
Bare Compressor .....	5
Oil Seal Detail .....	6
Compressor Tubing Group .....	7
Turn Valve Actuator and Mounting Group .....	8, 9
Inlet Valve .....	10
EAY80129 Repair Kit with Separator 55B30 .....	11
Dual Inlet Housing .....	12, 13
Oil Reservoir .....	14, 15
Air Filter .....	16
Minimum Pressure Valve .....	17
Oil Filter Piping .....	18, 19
Air Discharge Manifold .....	20, 21
Relief Valve Selective .....	21
Oil Filter And Mixing Valves (Component Parts) .....	22
Subtractive Pilot Valve – 2009398 .....	23
350 And 400 HP Water Cooled Oil Cooler .....	24, 25
500 HP Water Cooled Oil Cooler .....	26, 27
Aftercooler Group .....	28, 29
Selective Items – Water-cooled Units (Fresh Water Service) .....	30
Selective Items – Water-cooled Units (Salt Water Service) (Not Available for 500 H.P. Service) .....	31
Air Cooled Cooler Group .....	32, 33
Air Cooled Cooler Selectives (With Aftercooler Only) (50/60 Hz) .....	34
Discharge Piping Water-Cooled (Without Aftercooler) .....	35
Discharge Piping Air-Cooled (Without Aftercooler) .....	36
Base And Mounting .....	37
Control Mounting .....	38
Purge Valve .....	39
Coupling And Adaptor .....	40
Remote Cooler Fittings .....	41
Turn Valve Actuator .....	42
Compressor Fittings .....	43
Frame Group .....	44
Enclosure Group – Panels .....	45
Enclosure Group .....	46, 47
Mounting Group .....	48, 49
Controller Assembly .....	50
Control Items (Selective) .....	51
Oil Reservoir Pressure Switch .....	52
Tubing Schematic .....	53
Identification And Instruction Group .....	54, 55
Motor Mounting Group .....	56
Motor Mounting Group – 500 HP – 4160 Volt .....	57
Motor Selectives .....	58
Repair Kits .....	59 thru 61

**MAINTAIN COMPRESSOR RELIABILITY AND PERFORMANCE WITH  
GENUINE GARDNER DENVER® COMPRESSOR  
PARTS AND SUPPORT SERVICES**

Gardner Denver® Compressor genuine parts, engineered to original tolerances, are designed for optimum dependability — specifically for Gardner Denver compressor systems. Design and material innovations are the result of years of experience with hundreds of different compressor applications. Reliability in materials and quality assurance are incorporated in our genuine replacement parts.

Your authorized Gardner Denver® Compressor distributor offers all the backup you'll need. A worldwide network of authorized distributors provides the finest product support in the air compressor industry. Your local authorized distributor maintains a large inventory of genuine parts and he is backed up for emergency parts by direct access to the Gardner Denver Machinery Inc. Master Distribution Center (MDC) in Memphis, Tennessee.

Your authorized distributor can support your Gardner Denver® air compressor with these services:

1. Trained parts specialists to assist you in selecting the correct replacement parts.
2. Factory warranted new and remanufactured rotary screw air ends. Most popular model remanufactured air ends are maintained in stock at MDC for purchase on an exchange basis with liberal core credit available for the replacement unit.
3. A full line of factory tested AEON™ compressor lubricants specifically formulated for use in Gardner Denver compressors.
4. Repair and maintenance kits designed with the necessary parts to simplify servicing your compressor.

Authorized distributor service technicians are factory-trained and skilled in compressor maintenance and repair. They are ready to respond and assist you by providing fast, expert maintenance and repair services.

**For the location of your local authorized Gardner Denver Air Compressor distributor refer to the yellow pages of your phone directory or contact:**

Distribution Center:  
Gardner Denver Machinery Inc.  
Master Distribution Center  
5585 East Shelby Drive  
Memphis, TN 38141  
Phone: (901) 542-6100  
(800) 245-4946  
Fax: (901) 542-6159

Factory:  
Gardner Denver Machinery Inc.  
1800 Gardner Expressway  
Quincy, IL 62301  
Phone: (217) 222-5400  
Fax: (217) 224-7814

**REMANUFACTURED AIR ENDS**

Whenever an air end requires replacement or repair, Gardner Denver offers an industry unique, factory remanufactured air end exchange program. From its modern Remanufacturing Center in Indianapolis, IN, Gardner Denver is committed to supplying you with the highest quality, factory remanufactured air ends that are guaranteed to save you time, aggravation and money.

**Immediately Available**

Repair downtime costs you money, which is why there are over 200 remanufactured units in inventory at all times, ready for immediate delivery.

**Skilled Craftsmen**

Our Remanufacturing assembly technicians average over 20 years experience with air compression products.

**Precision Remanufacturing**

All potentially usable parts are thoroughly cleaned, inspected and analyzed. Only those parts that can be brought back to original factory specifications are remanufactured. Every remanufactured air end receives

a new overhaul kit: bearings, gears, seals, sleeves and gaskets.

**Extensive Testing**

Gardner Denver performs testing that repair houses just don't do. Magnaflux and ultrasonic inspection spot cracked or stressed castings, monochromatic light analysis exposes oil leaks, and coordinate measurement machine inspects to +/- .0001", insuring that all remanufactured air ends meet factory performance specifications.

**Warranty**

Gardner Denver backs up every remanufactured air end with a new warranty . . . 18 months from purchase, 12 months from service.

Gardner Denver remanufactured air ends deliver *quality without question . . . year in and year out.*

Call Gardner Denver for information on the air end exchange program and the name of your authorized distributor.

Phone Number: 800-245-4946 or  
FAX: 901-542-6159

**ELECTRA-SAVER® COMPRESSORS – MODELS EAY\_\_F**  
**350 HP – 400 HP – 500 HP – Matrix/Menu**

NOTICE TO CUSTOMER – To find the construction options for your compressor unit, FILL IN THE BALANCE OF LETTERS OR NUMBERS FROM YOUR UNIT NAMEPLATE. COLUMN NUMBER:

E	A	Y		F								
1	2	3	4	5	6	7	8	9	10	11	12	13

Follow the line down and over from each space thus filled in to find the appropriate construction option with which your machine is equipped. The number “9” in any column space indicates “NOT APPLICABLE.” The number “8” in any column space indicates SPECIAL DESIGN – REFER TO FACTORY ORDER TICKET.

COLUMNS 1, 2 & 3 – COMPRESSOR TYPE & SIZE

COLUMN 4 – TYPE OF CONSTRUCTION

- Q. Air-Cooled, Base Mounted
- S. Water-Cooled, Base Mounted

COLUMN 5 – HORSEPOWER

- S. 350 HP
- T. 400 HP
- V. 500 HP

COLUMN 6 – ENGINEERING SPECIFICATION

COLUMN 7 – OPERATING PRESSURE

- |                     |                     |
|---------------------|---------------------|
| D. 100 PSIG (60 HZ) | N. 100 PSIG (50 HZ) |
| F. 125 PSIG (60 HZ) | P. 125 PSIG (50 HZ) |
| H. 150 PSIG (60 HZ) | R. 150 PSIG (50 HZ) |

COLUMN 8 – CONTROL – *Letter varies with Voltage to Transformer*

COLUMN 9 – CONTROL ENCLOSURE & STARTER TYPE – *Letters vary with options*

- A thru D – Magnetic Starter (NEMA I)
- E thru H – Magnetic Starter (NEMA IV)
- I thru L – Manual Starter (NEMA I)
- M thru P – Manual Starter (NEMA IV)

COLUMN 10 – ENCLOSURE & AIR FILTER

- A – Standard Enclosure/Standard Air Filter

COLUMN 11 – COOLERS – *Letters vary with Material, Manufacturer & Aftercooler (if used)*

- A thru D – Air Cooled
- I thru O – Fresh Water Cooled
- U thru W – Salt Water Cooled

COLUMN 12 – COOLER ELECTRICAL – *Letters vary with Voltage*

- A thru H – Air Cooled NEMA I – 50/60 HZ
- J thru P – Air Cooled NEMA IV – 50/60 HZ
- Q & R – Less Fan Motor / Fan Motor Starter
- T thru X – Water Cooled – Fresh / Salt Water Service

COLUMN 13 – COMPRESSOR MOTOR DRIVE

**TOTAL PRODUCT SUPPORT – GARDNER DENVER’S  
CONTINUING COMMITMENT  
TO YOUR AIR COMPRESSOR PERFORMANCE**

Commitment to total product support continues long after the purchase of your quality Gardner Denver® rotary screw compressor.

Gardner Denver original parts incorporate years of experience and improvements in design, materials and quality assurance. Maintaining your compressor investment with Gardner Denver® parts will insure protection for the air compressor unit and long, dependable service life.

Your authorized Gardner Denver® compressor distributor maintains a complete stock of all common maintenance parts, factory approved AEON™ lubricants, and Gardner Denver® factory warranted exchange air ends. In addition, authorized distributor technicians are factory trained, and can provide complete diagnostic, compressor maintenance and repair services.

This manual is designed to assist you in maintaining high performance and receiving many years of dependable service you expect from your Gardner Denver compressor.

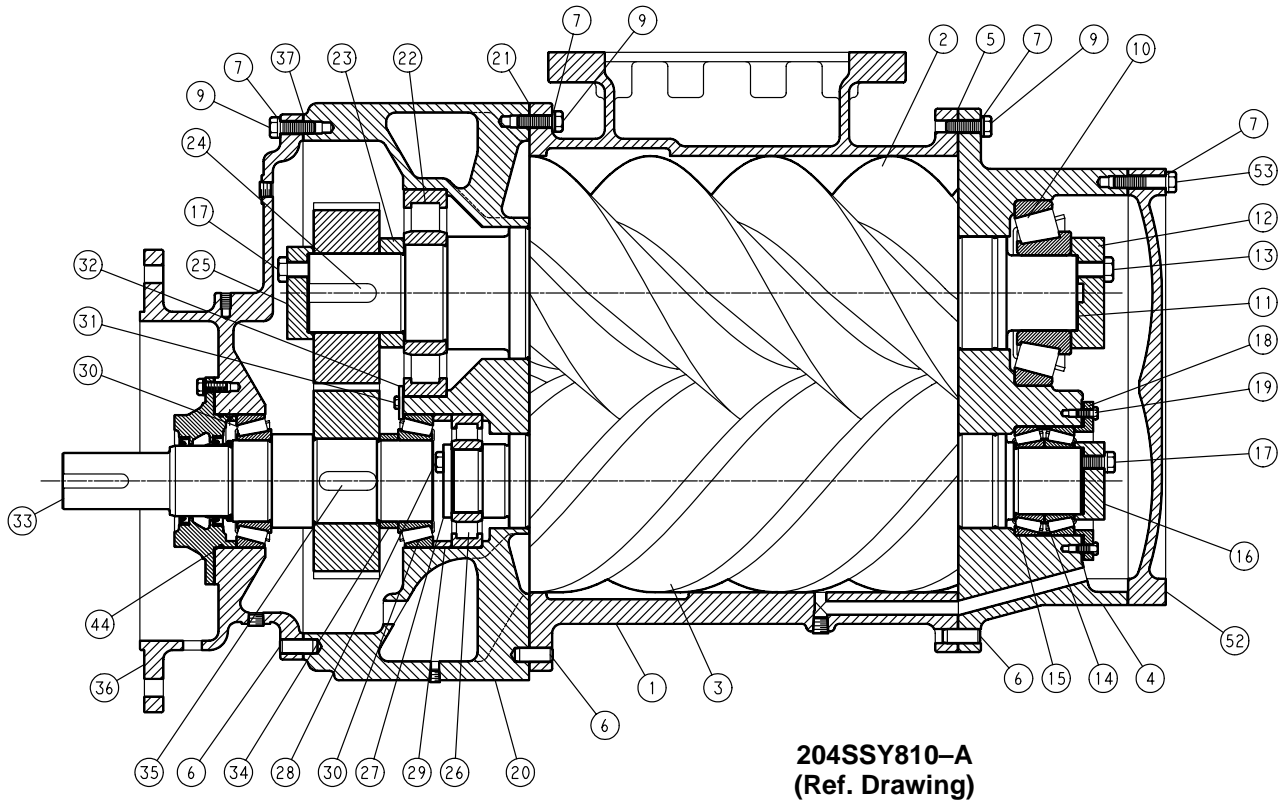
**AIR END SELECTIVE – 60 HZ**

<b>HP</b>	<b>100#</b>	<b>125#</b>	<b>150#</b>
350	SSYAAD01	SSYAAD04	SSYAAD04
400	SSYAAD02	SSYAAD01	SSYAAD04
500	SSYAAD03	SSYAAD06	SSYAAD01

**AIR END SELECTIVE – 50 HZ**

<b>HP</b>	<b>100#</b>	<b>125#</b>	<b>150#</b>
350	SSYAAD07	SSYAAD01	SSYAAD04
400	SSYAAD08	SSYAAD02	SSYAAD01
500	SSYAAD09	SSYAAD03	SSYAAD06

Refer to repair kit section, page 60, for ordering field replacement components.

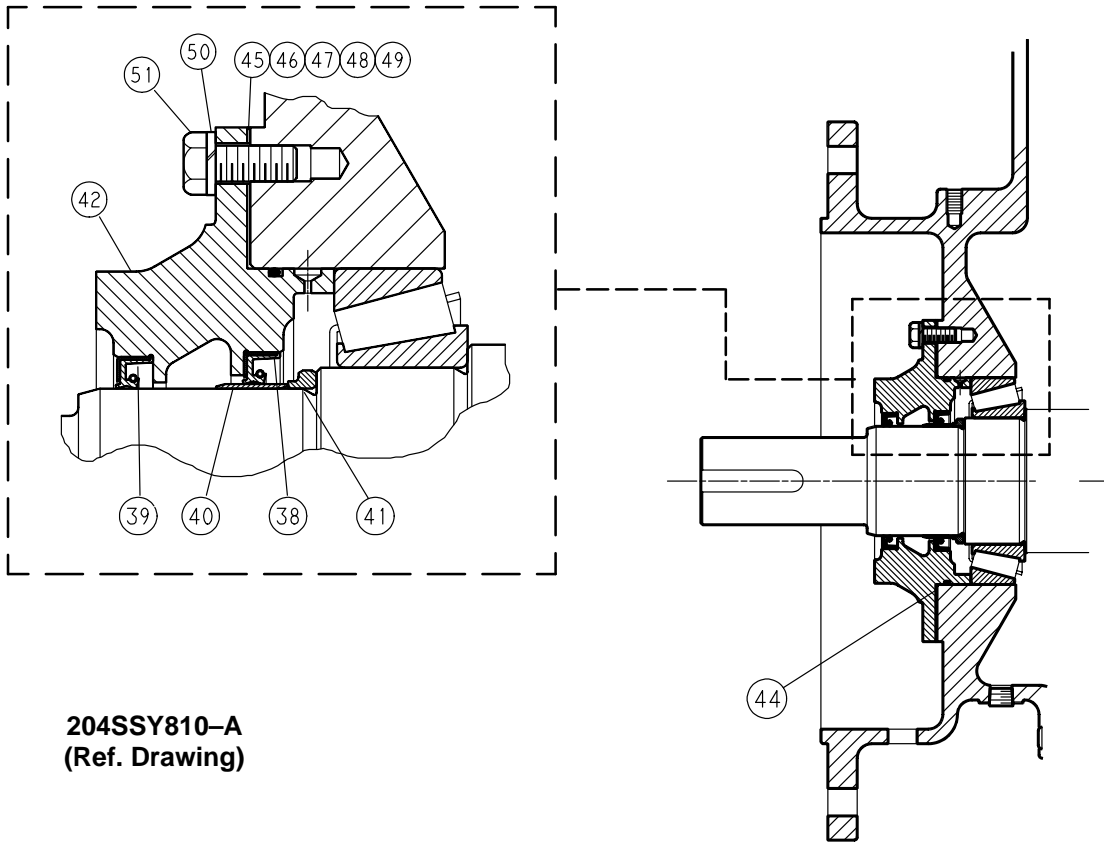


**BARE COMPRESSOR**

Ref. No.	Name of Part	Qty.	Ref. No.	Name of Part	Qty.
1	CYLINDER .....	1	* 21	GASKET .....	1
2	ROTOR .....	1	* 22	BEARING-ROLLER .....	1
3	ROTOR .....	1	23	SPACER-SHAFT .....	1
4	HOUSING-BEARING .....	1	* 24	KEY .....	1
* 5	GASKET .....	1	25	PLATE-BEARING RETAINER ..	1
6	PIN-DOWEL .....	6	* 26	BEARING .....	1
7	LOCKWASHER .....	106	27	PLATE-BEARING RETAINER ..	1
* 8	GASKET-RING (Not Shown) ...	5	28	SCREW .....	3
9	SCREW .....	83	29	SPACER .....	1
* 10	BEARING .....	1	* 30	BEARING-ROLLER .....	2
11	SHIM .....	1	31	SCREW .....	2
12	PLATE-BEARING RETAINER ..	1	32	WASHER .....	2
13	SCREW .....	3	33	SHAFT .....	1
* 14	BEARING .....	1	34	SPACER-SHAFT .....	1
* 15	SHIM .....	1	* 35	KEY .....	1
16	PLATE-BEARING RETAINER ..	1	36	HOUSING-GEAR .....	1
17	SCREW .....	6	* 37	GASKET .....	1
18	RETAINER .....	1	52	COVER .....	1
19	SCREW .....	1	53	SCREW .....	23
20	HOUSING-BEARING .....	1			

\* Parts included in Periodic Overhaul Kit. Refer to page 60.

Order by Part Number and Description. Reference Numbers are for your convenience only.



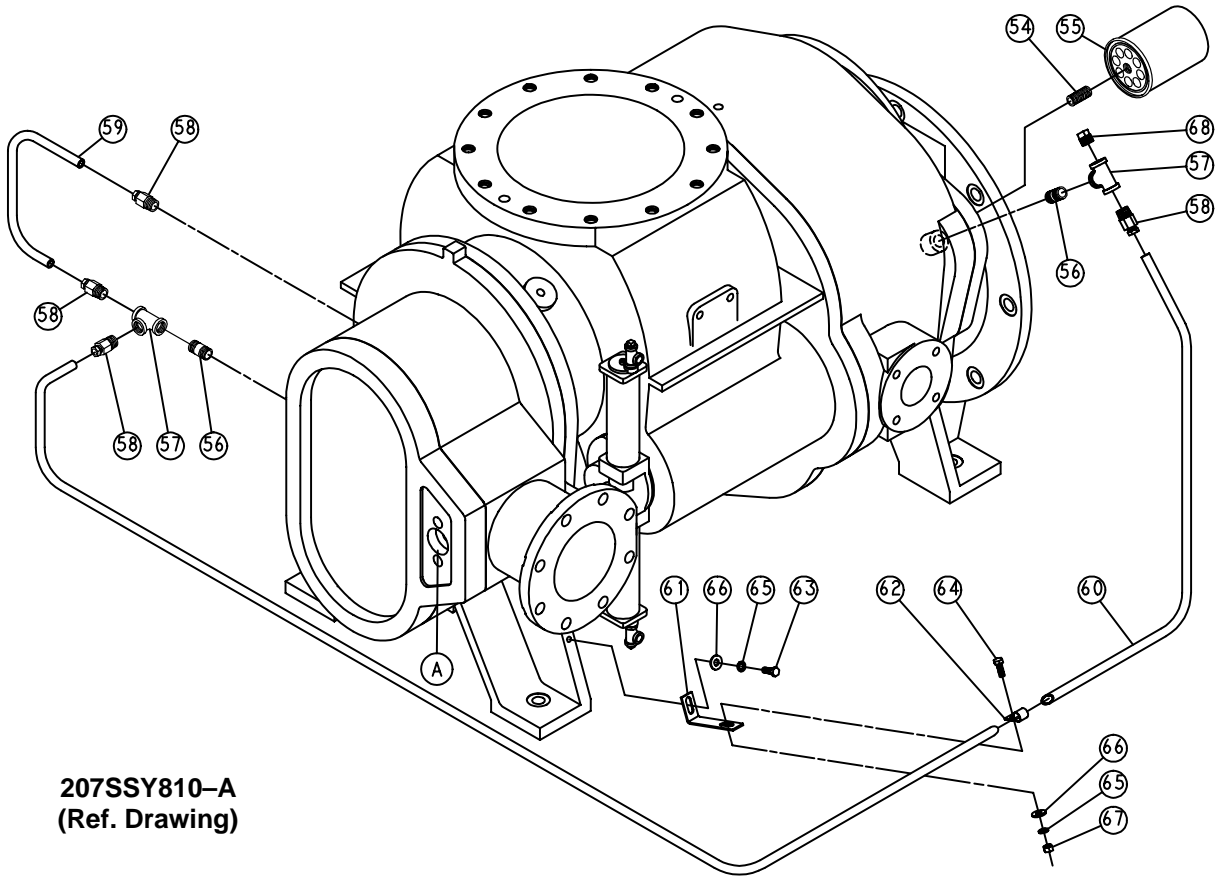
**204SSY810-A**  
(Ref. Drawing)

**OIL SEAL DETAIL**

Ref. No.	Name of Part	Qty.	Part No.
* 38	SEAL-OIL .....	1	60DD695
* 39	SEAL-OIL .....	1	60DD694
* 40	SLEEVE-WEAR .....	1	200SSY1458
41	SPACER-SHAFT .....	1	203SSY600
42	HOUSING-SEAL .....	1	203SSY362
44	O-RING .....	1	25BC109
* 45	SHIM .....	8	203SSY732
* 46	SHIM .....	16	204SSY732
* 47	SHIM .....	16	205SSY732
* 48	SHIM .....	8	207SSY732
* 49	SHIM .....	8	208SSY732
50	LOCKWASHER .....	8	95B5
51	SCREW .....	8	655EE050

\* Parts included in Periodic Overhaul Kit. Refer to page 60.  
Wear Sleeve Installation and Removal Kit # 200SSY4017 (Includes Wear Sleeve Puller and Installation Tool)

Order by Part Number and Description. Reference Numbers are for your convenience only.



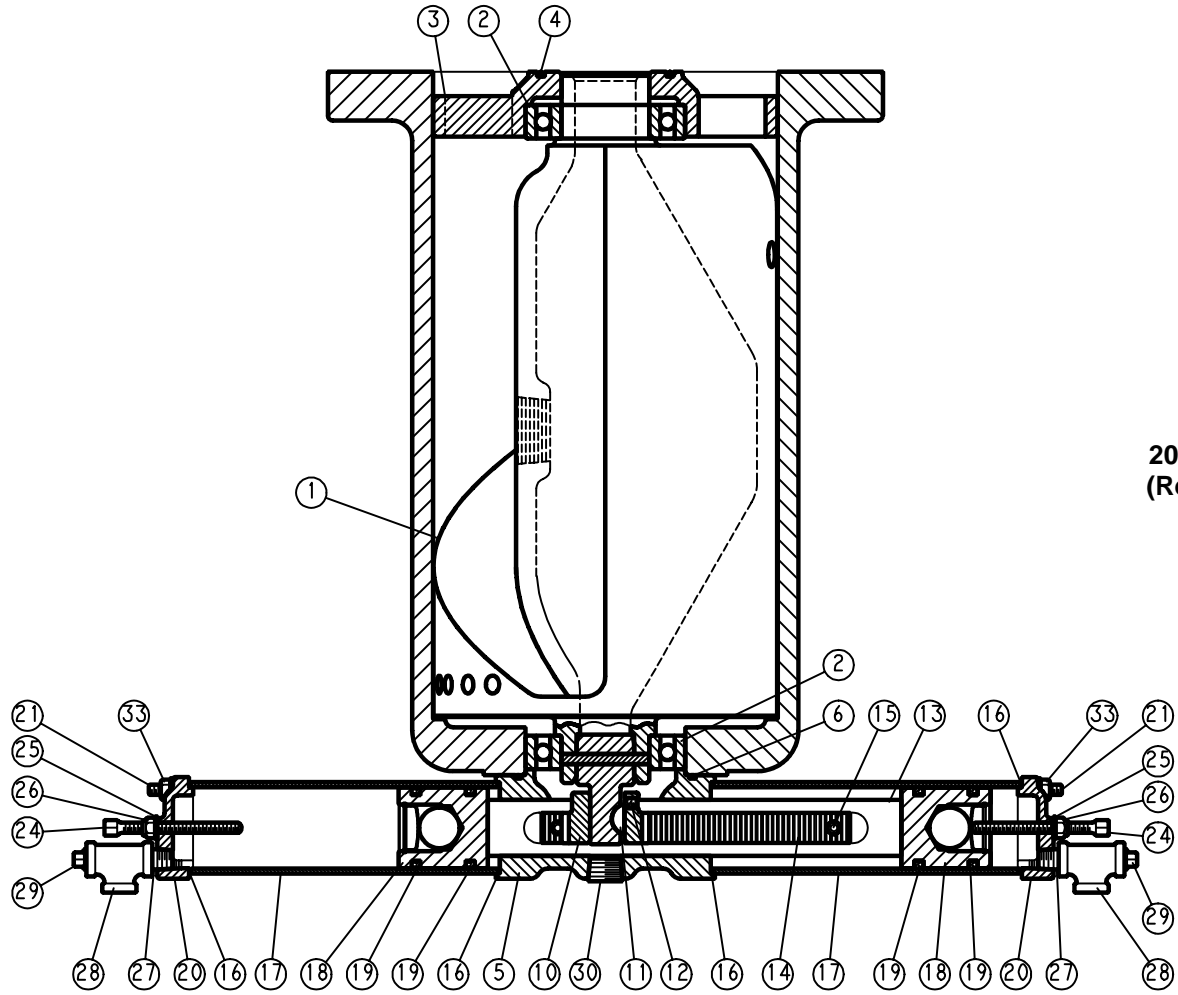
207SSY810-A  
(Ref. Drawing)

**COMPRESSOR TUBING GROUP**

Ref. No.	Name of Part	Qty.	Part No.
54	ADAPTOR-FILTER .....	1	200SSY070
55	FILTER-OIL .....	1	26A43
56	NIPPLE .....	2	63U8X14G
57	TEE-PIPE .....	2	64G6G
58	CONNECTOR-TUBE .....	4	86E20
59	TUBE .....	1	201SSY857
60	TUBE .....	1	202SSY857
61	BRACKET (FORMED) .....	1	201SSY142
62	CLAMP .....	1	98H13
63	SCREW .....	1	655ED030
64	SCREW .....	1	655ED040
65	LOCKWASHER .....	2	95B3
66	WASHER .....	2	95A3
67	NUT .....	1	50B3
68	PLUG .....	1	64AC4
*	NUT .....	1	50G8

\* Not shown.

# TURN VALVE ACTUATOR AND MOUNTING GROUP



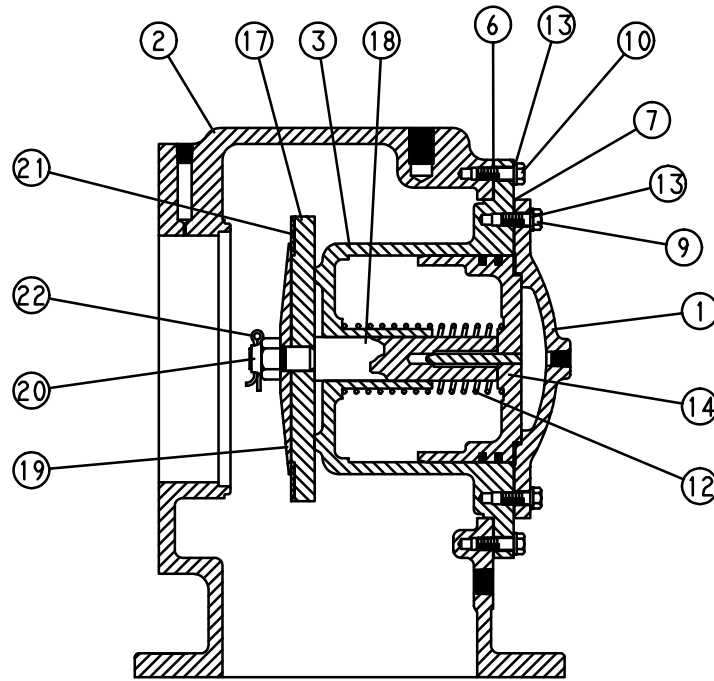
Order by part number and description. Reference numbers are for your convenience only.

TURN VALVE ACTUATOR AND MOUNTING GROUP

Ref. No.	Name of Part	Qty.	Part No.	Ref. No.	Name of Part	Qty.	Part No.
1	VALVE .....	1	202SSY238A	*	PLUG .....	1	66D15
2	BEARING .....	2	12J43	*	RETAINING RING .....	1	74D49
3	HOUSING-BEARING .....	1	210SSY006	19	PACKING-RING .....	4	60AM46
4	O-RING .....	1	54C210	20	HEAD-CONTROL CYLINDER	2	200RPA083
5	HOUSING-ACTUATOR .....	1	200SSY180	21	STUD .....	8	79AL5
6	O-RING .....	1	25BC114	24	SETSCREW .....	2	76D226
10	GEAR-AUXILIARY .....	1	200SSU031	25	SEAL-FASTENER .....	2	60DD65
11	KEY-WOODRUFF .....	1	35D2	26	NUT .....	2	50AW24
12	SETSCREW .....	1	76G21N	27	NIPPLE .....	2	63D1G
13	SHAFT-CONTROL .....	1	200SSU081	28	TEE-PIPE .....	2	64G3G
14	RACK .....	1	200SSU360	29	PLUG .....	2	64AA5
15	SCREW .....	2	75P11N	30	PLUG .....	6	64AC4
16	GASKET .....	4	25BC138N	33	NUT .....	8	50AW24
17	CYLINDER-CONTROL .....	2	200SSU082	*	SCREW .....	2	655ED040
18	CONTROL PISTON ASSEMBLY, Incl. next 4 items .	2	SSU80565	*	SCREW .....	1	655ED110
*	CONTROL PISTON .....	1	201SSU084	*	LOCKWASHER .....	3	95B3
*	BUMPER .....	1	32E15	*	PLUG .....	2	64AC3
				*	PLUG .....	9	64AC2

\* Not shown.

Order by Part Number and Description. Reference Numbers are for your convenience only.



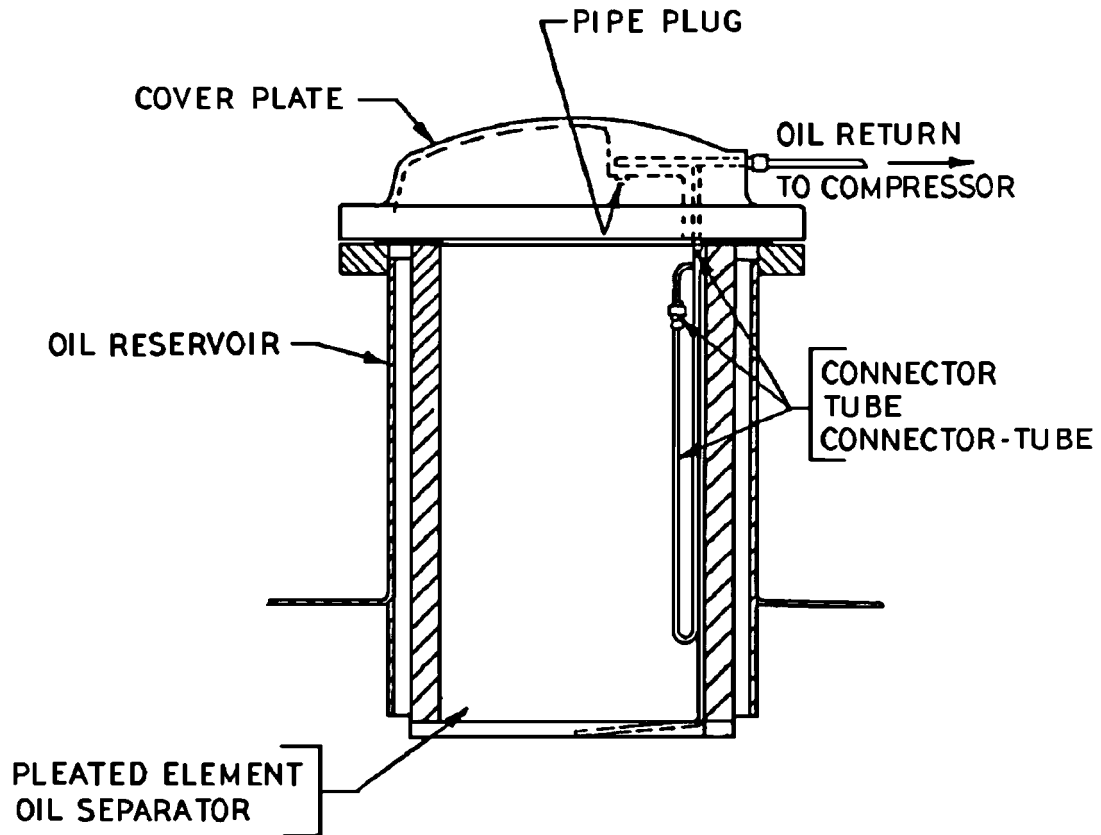
310EAY810  
(Ref. Drawing)

**INLET VALVE**

Ref. No.	Name of Part	Qty.	Part No.
1	CAP-CYLINDER .....	1	S115274
2	HOUSING-INLET .....	1	S11541
3	CYLINDER-INLET VALVE .....	1	S11542
6	GASKET .....	1	203SSU715N
7	GASKET .....	1	25C2683N
9	SCREW .....	6	655ED040
10	SCREW .....	8	655ED050
12	SPRING COMPRESSION .....	1	78A366
13	LOCKWASHER .....	14	95B3
14	INLET VALVE PISTON .....	1	S11543D
17	VALVE-INLET .....	1	200SSW044
18	GUIDE-VALVE .....	1	200SSW483
19	CLAMP-DISC .....	1	200SSW338
20	NUT-HEX CASTLE .....	1	50E9
21	DISC-VALVE .....	1	200SSW067
22	PIN-COTTER .....	1	62E30
*	PIN-SPRING ROLL .....	1	62R101

\* Not shown.

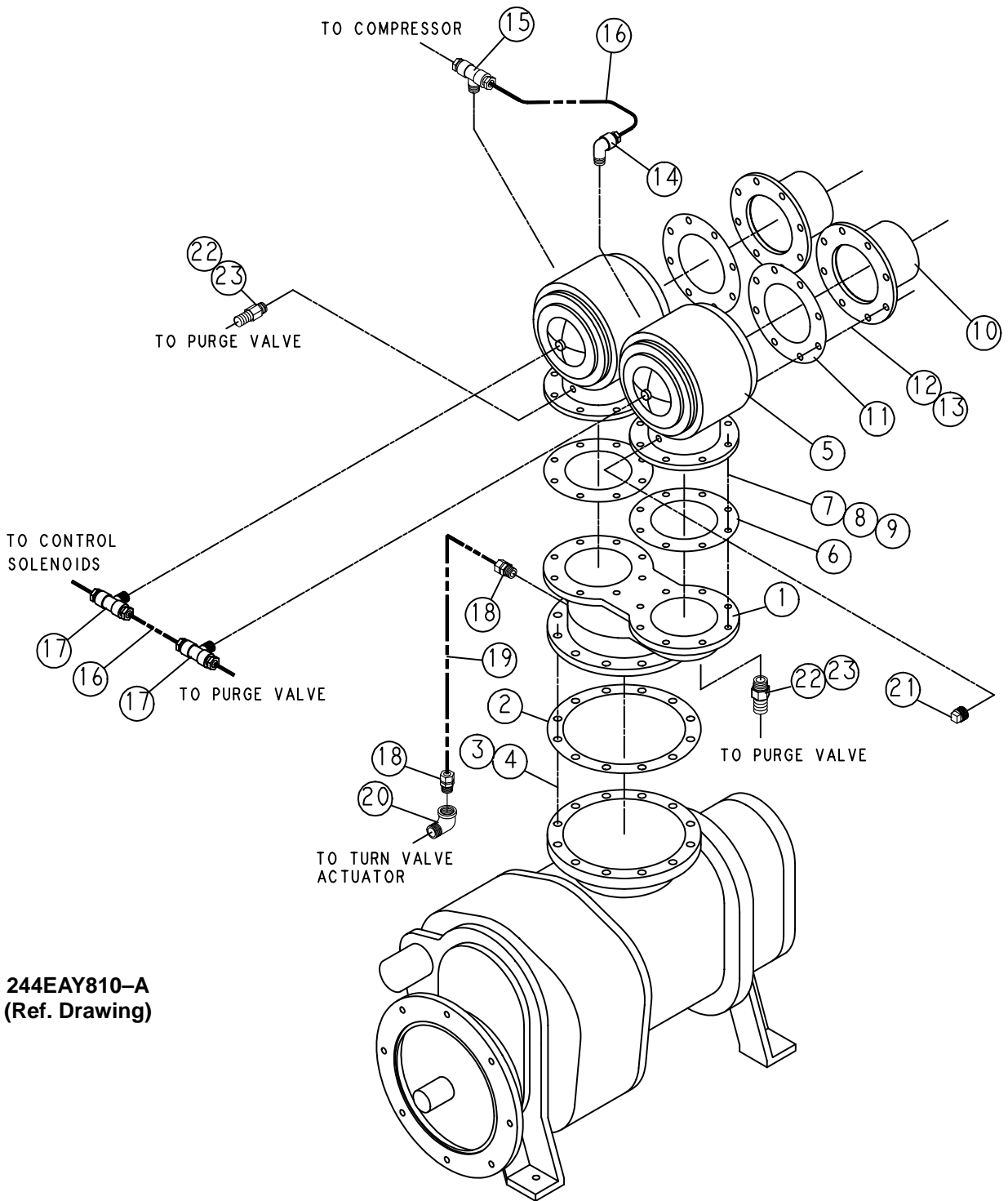
EAY80129 REPAIR KIT WITH SEPARATOR 55B30



NOTE: Repair Kit EAY80129 includes Separator, Discharge Flange Gasket and Internal Tubing as shown in illustration above. (See page 59.)

\* Gaskets are bonded to separators but may be purchased separately for repair. See page 59.

# DUAL INLET HOUSING



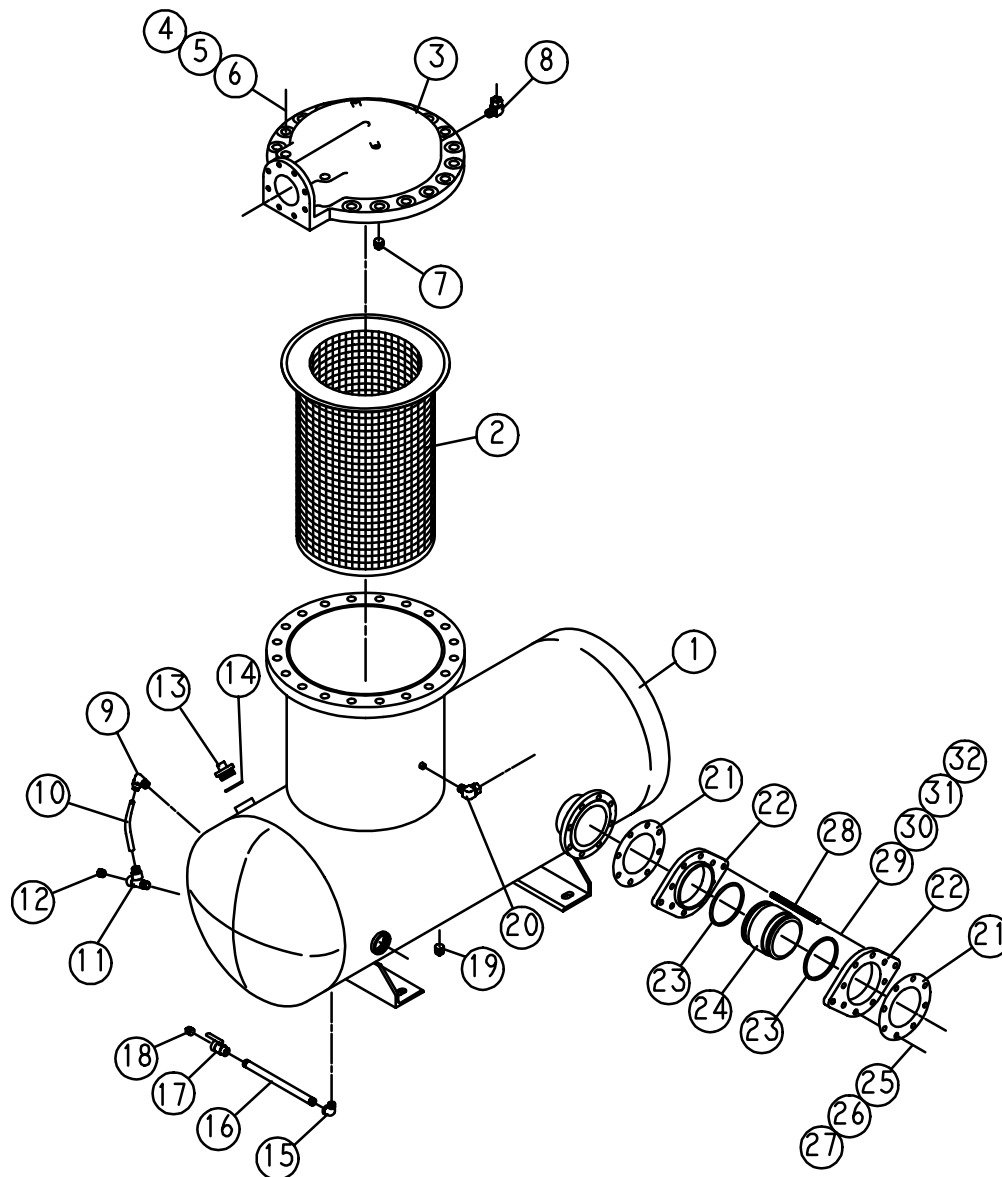
244EAY810-A  
(Ref. Drawing)

Order by Part Number and Description. Reference Numbers are for your convenience only.

DUAL INLET HOUSING

Ref. No.	Name of Part	Qty.	Part No.
1	MANIFOLD-INLET .....	1	200SSY690
2	GASKET RING .....	1	25C1996
3	SCREW .....	12	655ED050
4	LOCKWASHER .....	12	95B9
5	INLET HOUSING ASSEMBLY .....	2	S11541D
6	GASKET RING .....	2	25C730
7	SCREW .....	16	655EG070
8	LOCKWASHER .....	16	95B8
9	GASKET-RING .....	4	25F28
10	MANIFOLD-INLET .....	2	200ESV690
11	GASKET RING .....	2	25C730
12	SCREW .....	16	655EG060
13	LOCKWASHER .....	16	95B8
14	ELBOW-TUBE .....	1	86E64
15	TEE-TUBE .....	1	86E122
16	TUBE .....	3	85G5
17	TEE-TUBE .....	2	86E122
18	CONNECTOR-TUBE .....	2	86N155
19	TUBE .....	4 Ft.	85E10C
20	ELBOW .....	1	64D5G
21	PLUG .....	1	64AA7
22	NIPPLE-HOSE .....	2	29C26
23	CLAMP-HOSE .....	2	29B35

OIL RESERVOIR



235EAY810  
(Ref. Drawing)

Order by part number and description. Reference numbers are for your convenience only.

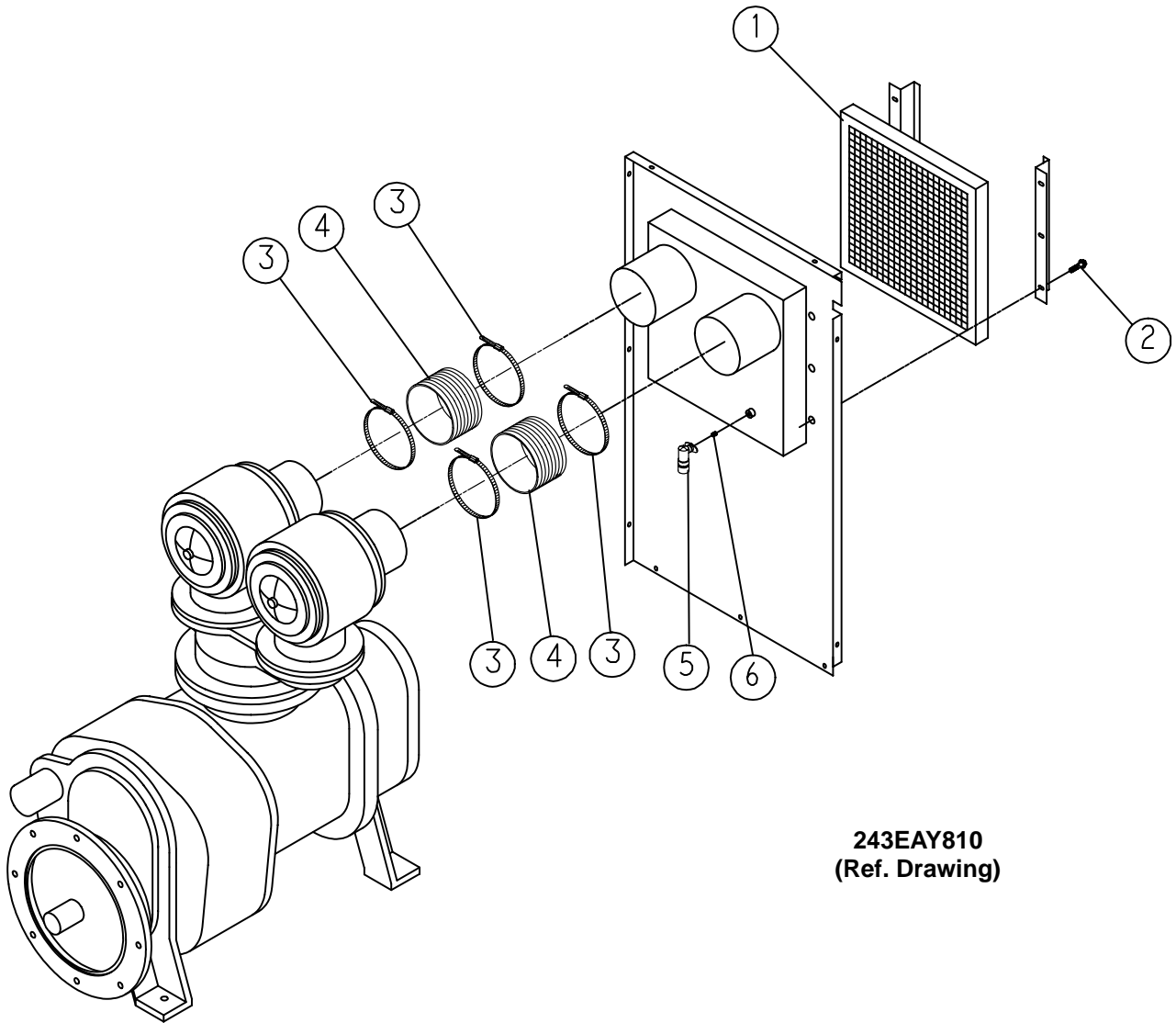
OIL RESERVOIR

Ref. No.	Name of Part	Qty.	Part No.	Ref. No.	Name of Part	Qty.	Part No.
1	RESERVOIR-OIL .....	1	200ESV037	19	PLUG .....	1	64AA3
2	SEPARATOR-OIL .....	1	55B30 **	20	ELBOW-TUBE .....	1	86E60
3	FLANGE .....	1	200ESV073	21	GASKET RING .....	2	25C2720N
4	SCREW .....	2	655EJ340	22	FLANGE .....	2	201ESV073
5	SCREW .....	17	655EJ160	23	O-RING .....	2	25BC115
6	LOCKWASHER .....	19	95B12	24	COUPLING .....	1	200ESV064
7	PLUG .....	1	64AA6	25	SCREW .....	16	655EG120
8	ELBOW-TUBE .....	1	86E64	26	LOCKWASHER .....	16	95B8
9	ELBOW-TUBE .....	1	86E60	27	NUT .....	16	50B8
10	TUBE .....	1	85G3	28	STUD .....	2	200ESV110
11	TEE-PIPE .....	1	2009284	29	ISOLATOR-VIBRATION .....	4	200ESV365
12	PLUG .....	1	86N142	30	WASHER .....	4	95A8
13	COVER-FILLER .....	1	200SPF156	31	NUT .....	4	50AW9
14	O-RING .....	1	54C214	32	NUT .....	4	50B3
15	ELBOW .....	1	64D6G				
16	NIPPLE .....	1	63G42G	*	UNION-TUBE .....	1	86E48
17	VALVE-BALL .....	1	90AR361	*	TUBE .....	3	85K3
18	PLUG .....	1	64AA3	*	CONNECTOR-TUBE .....	1	86E3

\* Not shown.

\*\* For Repair Kit see page 11.

Order by Part Number and Description. Reference Numbers are for your convenience only.

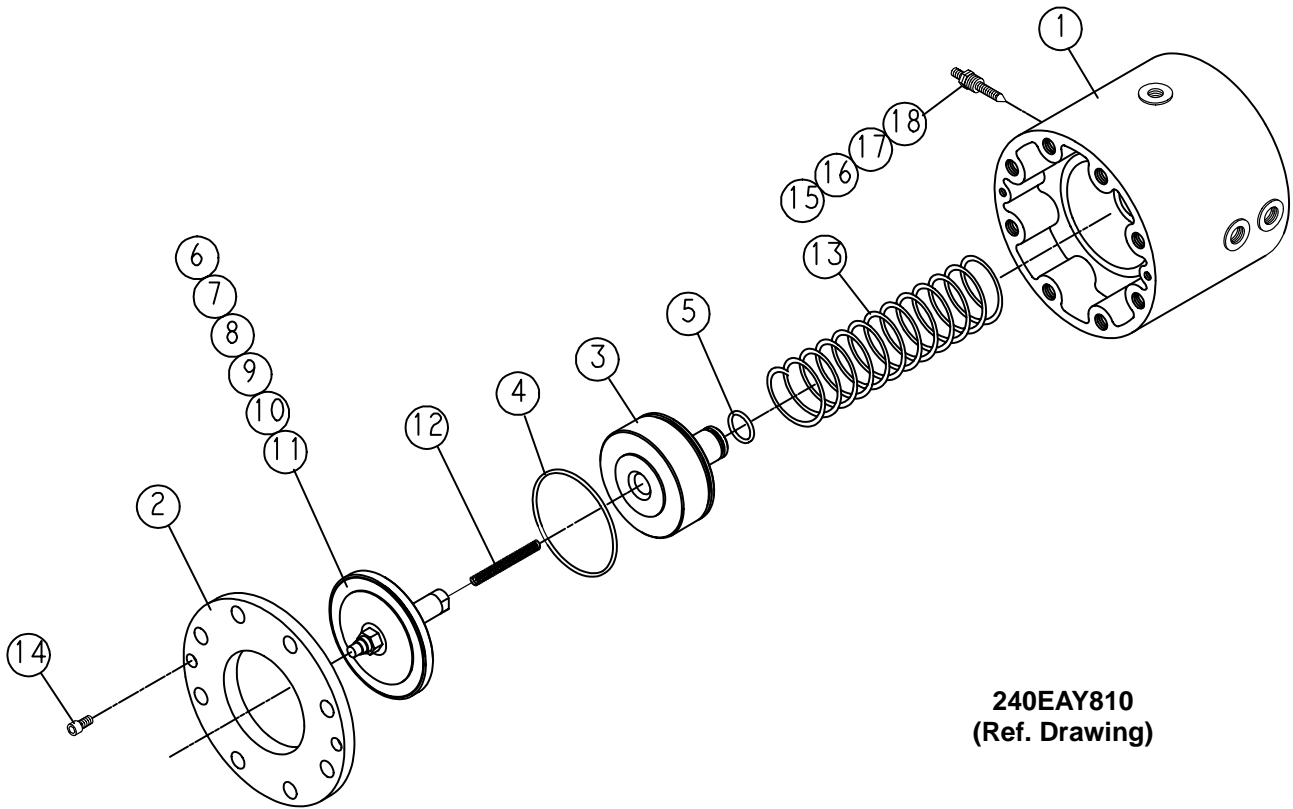


**243EAY810  
(Ref. Drawing)**

**AIR FILTER**

Ref. No.	Name of Part	Qty.	Part No.
1	FILTER-AIR .....	1	2009590
2	SCREW-FLANGED .....	6	75LM150
3	CLAMP-HOSE .....	4	29Z16
4	HOSE-COOLANT .....	2	29Z180
5	INDICATOR-FILTER .....	1	5L28
6	NIPPLE .....	1	63C1G

Order by Part Number and Description. Reference Numbers are for your convenience only.

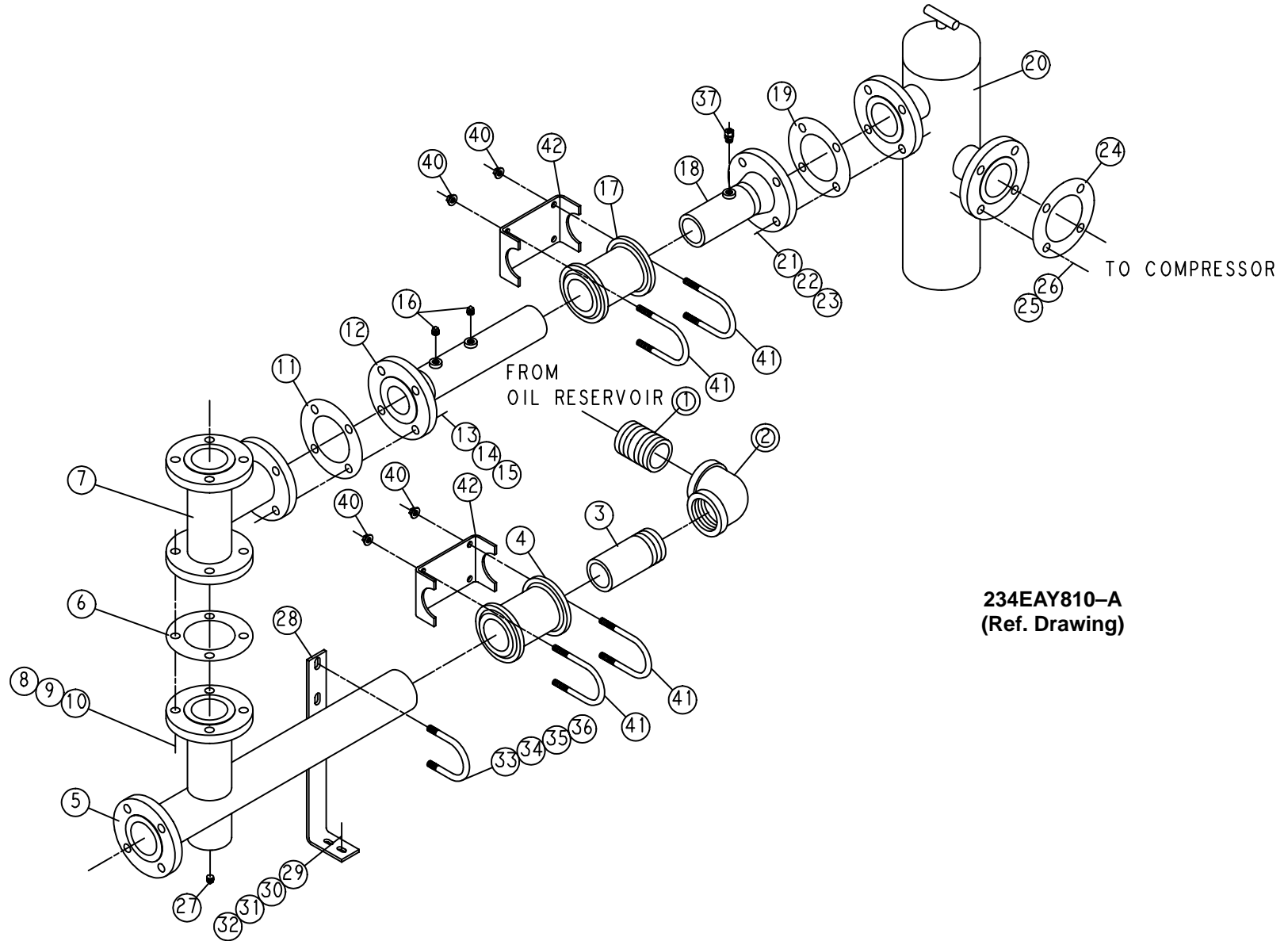


**240EAY810**  
**(Ref. Drawing)**

**MINIMUM PRESSURE VALVE**

Ref. No.	Name of Part	Qty.	Part No.
1	HOUSING-VALVE .....	1	200ESV182
2	SEAT .....	1	200ESV256
3	VALVE-MINIMUM PRESSURE .....	1	201ESV527
4	O-RING .....	1	25BC150
5	O-RING .....	1	25BC118
6	VALVE-INLET .....	1	200SSK044
7	CLAMP-DISC .....	1	200SSK338
8	GUIDE VALVE .....	1	200SSK483
9	DISC-VALVE .....	1	200SSY067
10	NUT-HEX CASTLE .....	1	50E7
11	PIN-COTTER .....	1	62E30
12	SPRING .....	1	78A365
13	SPRING .....	1	78W9
14	SCREW .....	2	75P6
15	ADAPTOR .....	1	200ESM170
16	SCREW-ADJUSTING .....	1	200ESV176
17	GASKET-RING .....	1	25F39
18	LOCKNUT .....	1	50AW17

# OIL FILTER PIPING



234EAY810-A  
(Ref. Drawing)

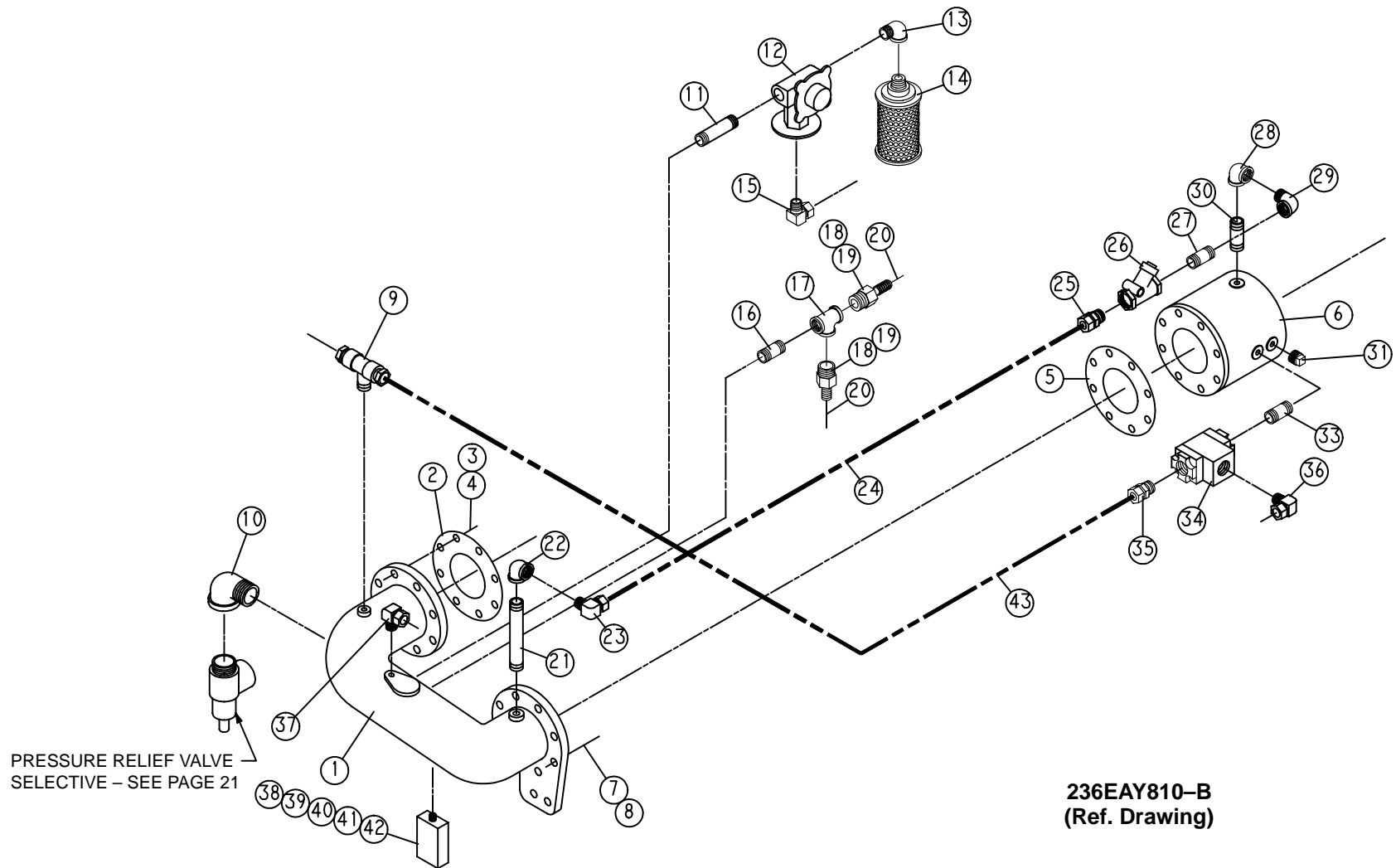
Order by part number and description. Reference numbers are for your convenience only.

OIL FILTER PIPING

Ref. No.	Name of Part	Qty.	Part No.	Ref. No.	Name of Part	Qty.	Part No.
1	NIPPLE .....	1	63M3G	19	GASKET .....	1	25C2722N
2	ELBOW .....	1	64C14G	20	FILTER-OIL .....	1	200ESV369
3	NIPPLE .....	1	63AJ40X50G	21	SCREW .....	4	655EF120
4 *	COUPLING-FLEXIBLE .....	1	64EB802	22	LOCKWASHER .....	4	95B7
5	MANIFOLD-OIL .....	1	200EAY116	23	NUT .....	4	50B7
6	GASKET .....	1	25C2722N	24	GASKET .....	1	25C2722N
7	VALVE-THERM .....	1	90AR969	25	SCREW .....	4	655EF080
8	SCREW .....	4	655EF100	26	LOCKWASHER .....	4	95B7
9	LOCKWASHER .....	4	95B7	27	PLUG .....	1	64AA7
10	NUT .....	4	50B7	28	BRACKET-PIPE .....	1	200EAY108
11	GASKET .....	1	25C2722N				
12	MANIFOLD .....	1	201EAY116	33	U-BOLT .....	3	15U88
13	SCREW .....	4	655EF120	37	ELBOW-TUBE .....	1	86E60
14	LOCKWASHER .....	4	95B7	38	NUT-FLANGED .....	6	50AW35
15	NUT .....	4	50B7	39	SCREW-FLANGED .....	2	75K48
16	PLUG .....	2	64AA5	40	NUT-FLANGED .....	8	50AW5
17 *	COUPLING-FLEXIBLE .....	1	64EB802	41	U-BOLT .....	4	15U57
18	MANIFOLD OIL .....	1	203EAY116	42	BRACKET-PIPE .....	2	300EAY108

\* For Repair – Reference Numbers 4 & 17: (2) Each 2117160 Gaskets are required.

# AIR DISCHARGE MANIFOLD



Order by part number and description. Reference numbers are for your convenience only.

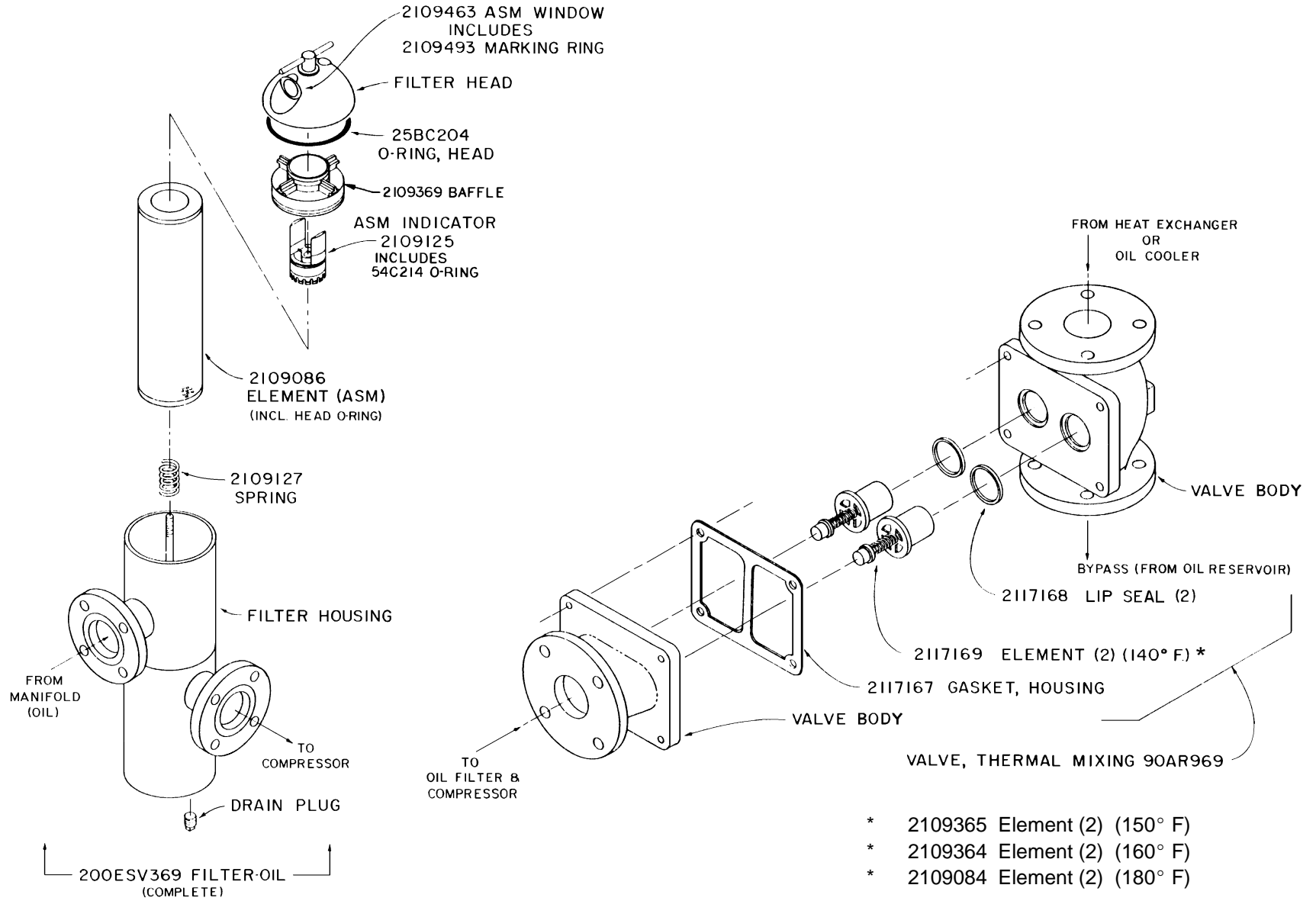
**AIR DISCHARGE MANIFOLD**

Ref. No.	Name of Part	Qty.	Part No.	Ref. No.	Name of Part	Qty.	Part No.
1	MANIFOLD-DISCHARGE . . . .	1	200ESV071	22	ELBOW-PIPE . . . . .	1	64S2G
2	GASKET . . . . .	1	25C2719N	23	ELBOW-TUBE . . . . .	1	86E70
3	SCREW . . . . .	8	655EG080	24	TUBE . . . . .	2	85M8
4	LOCKWASHER . . . . .	8	95B8	25	CONNECTOR-TUBE . . . . .	1	86E18
5	GASKET . . . . .	1	25C2719N	26	VALVE-CHECK (LIFT) . . . . .	1	90J121
6	MINIMUM PRESSURE VALVE ASSEMBLY (See page 17) .	1	200ESV527A	27	NIPPLE-PIPE . . . . .	1	63F21G
7	SCREW . . . . .	8	655EG110	28	ELBOW-PIPE ST . . . . .	1	64D5G
8	LOCKWASHER . . . . .	8	95B8	29	ELBOW-PIPE . . . . .	1	64S2G
9	TEE-TUBE . . . . .	1	86E122	30	NIPPLE-PIPE . . . . .	1	63E1G
10	ELBOW-PIPE ST . . . . .	1	64D9G	31	PLUG-SQHD PIPE . . . . .	1	64AA7
11	NIPPLE-PIPE GALVANIZED .	1	63H2G	33	NIPPLE-PIPE . . . . .	1	63E1G
12	VALVE-AIR CONTROL . . . . .	1	90AR114	34	VALVE-CONTROL . . . . .	1	90AR125
13	ELBOW . . . . .	1	64D10G	35	CONNECTOR-TUBE . . . . .	1	86E10
14	MUFFLER . . . . .	1	43E2	36	ELBOW-TUBE . . . . .	1	86E65
15	ELBOW-TUBE . . . . .	1	86E59	37	ELBOW-TUBE . . . . .	1	86E60
16	NIPPLE-PIPE GALVANIZED .	1	63H2G	38	KIT-CONVERSION . . . . .	1	EAQ82000
17	TEE-PIPE . . . . .	1	64G6G	39	COVER . . . . .	1	24CA795
18	NIPPLE-HOSE . . . . .	2	29C26	40	ENCLOSURE . . . . .	1	24CA794
19	CLAMP-HOSE . . . . .	2	29B35	41	O-RING . . . . .	1	24A383
20	HOSE-OIL . . . . .	22 Ft.	R14E	42	BUSHING-PIPE . . . . .	1	64E20
21	NIPPLE . . . . .	1	63E10G	43	TUBE . . . . .	3 Ft.	85G5

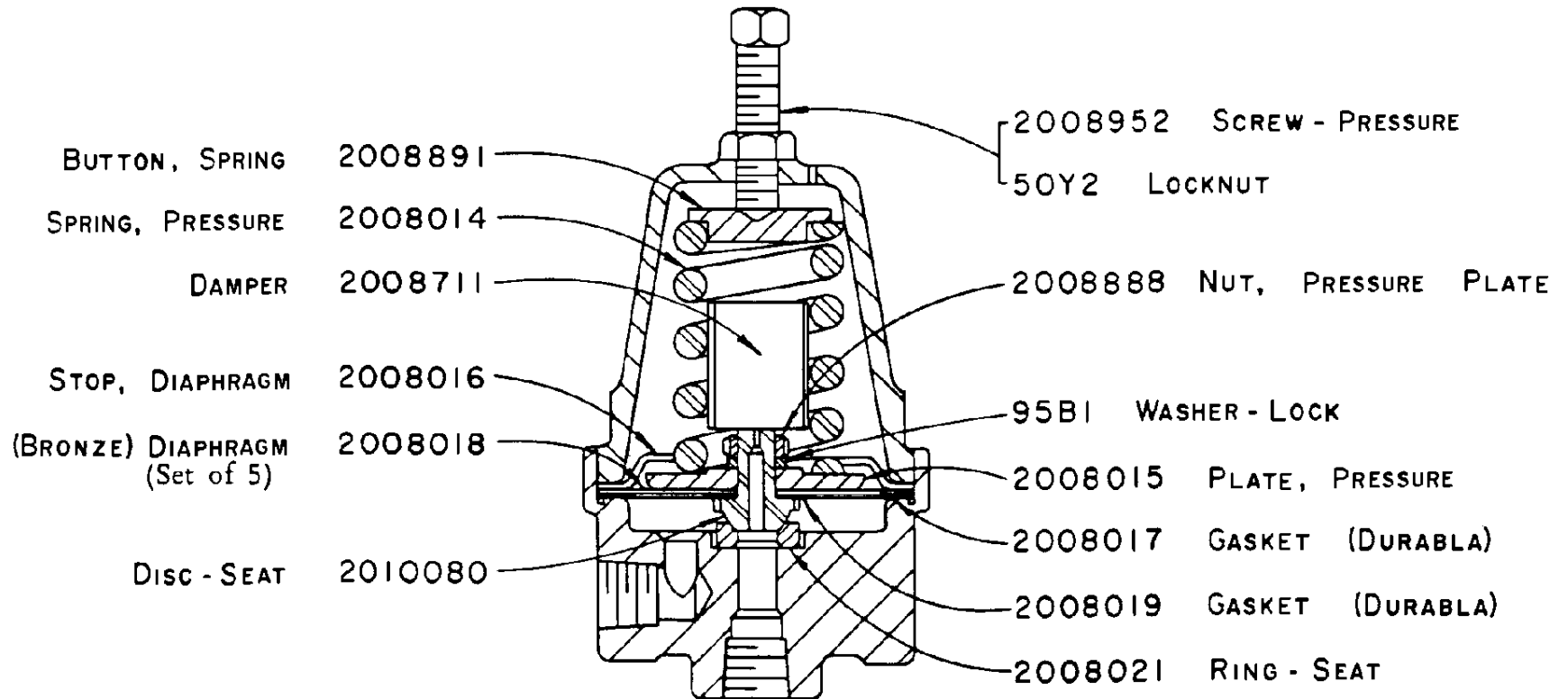
**RELIEF VALVE SELECTIVE**

Name of Part	350, 400 & 500 HP
VALVE-RELIEF (Set 125 Lbs.) . . . . .	90AR110
VALVE-RELIEF (Set 150 Lbs.) . . . . .	90AR110
VALVE-RELIEF (Set 175 Lbs.) . . . . .	90AR110

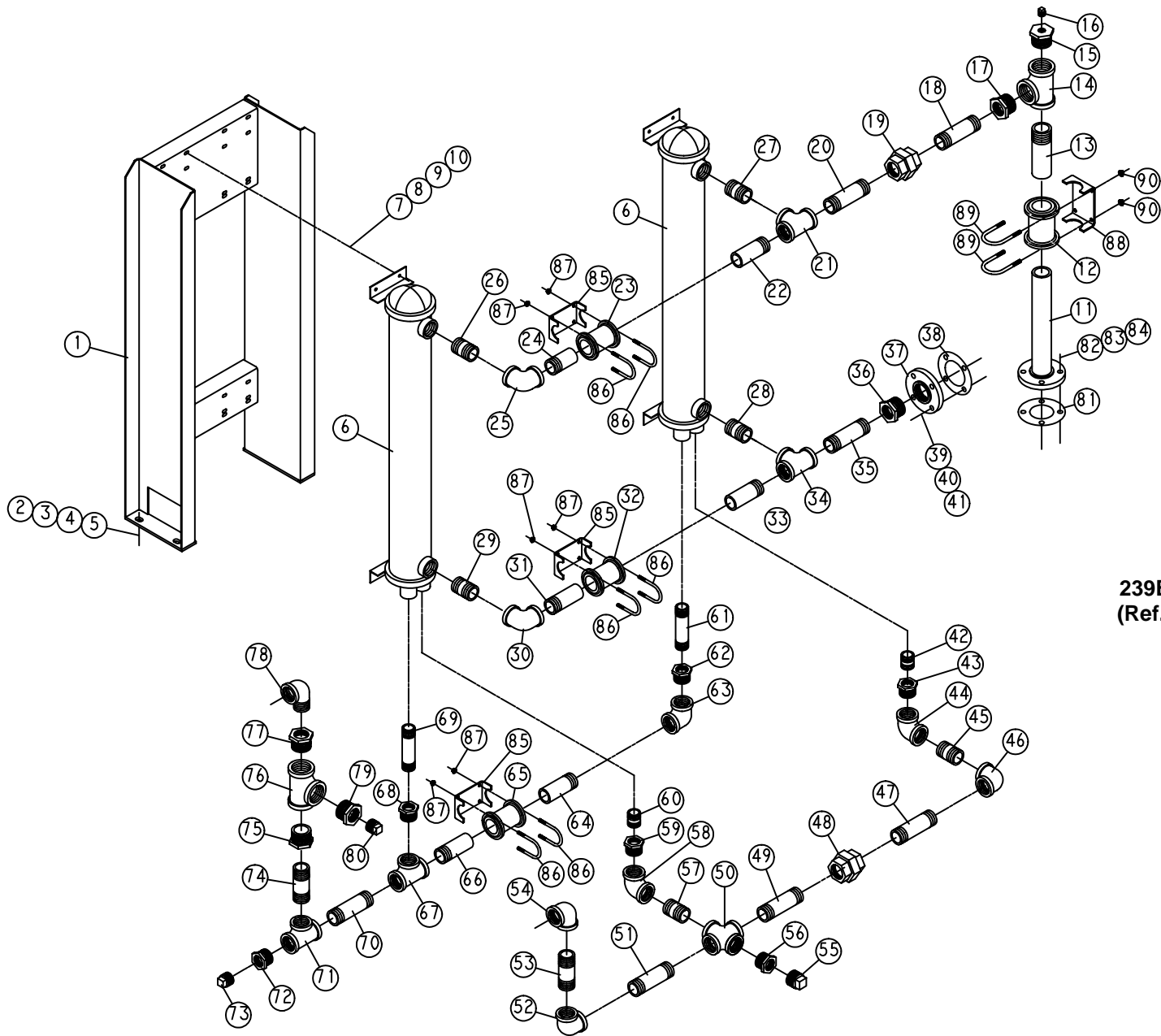
# OIL FILTER AND MIXING VALVES (Component Parts)



**SUBTRACTIVE PILOT VALVE - 2009398**  
 (See Note)



# 350 AND 400 HP WATER COOLED OIL COOLER



239EAY810-A  
(Ref. Drawing)

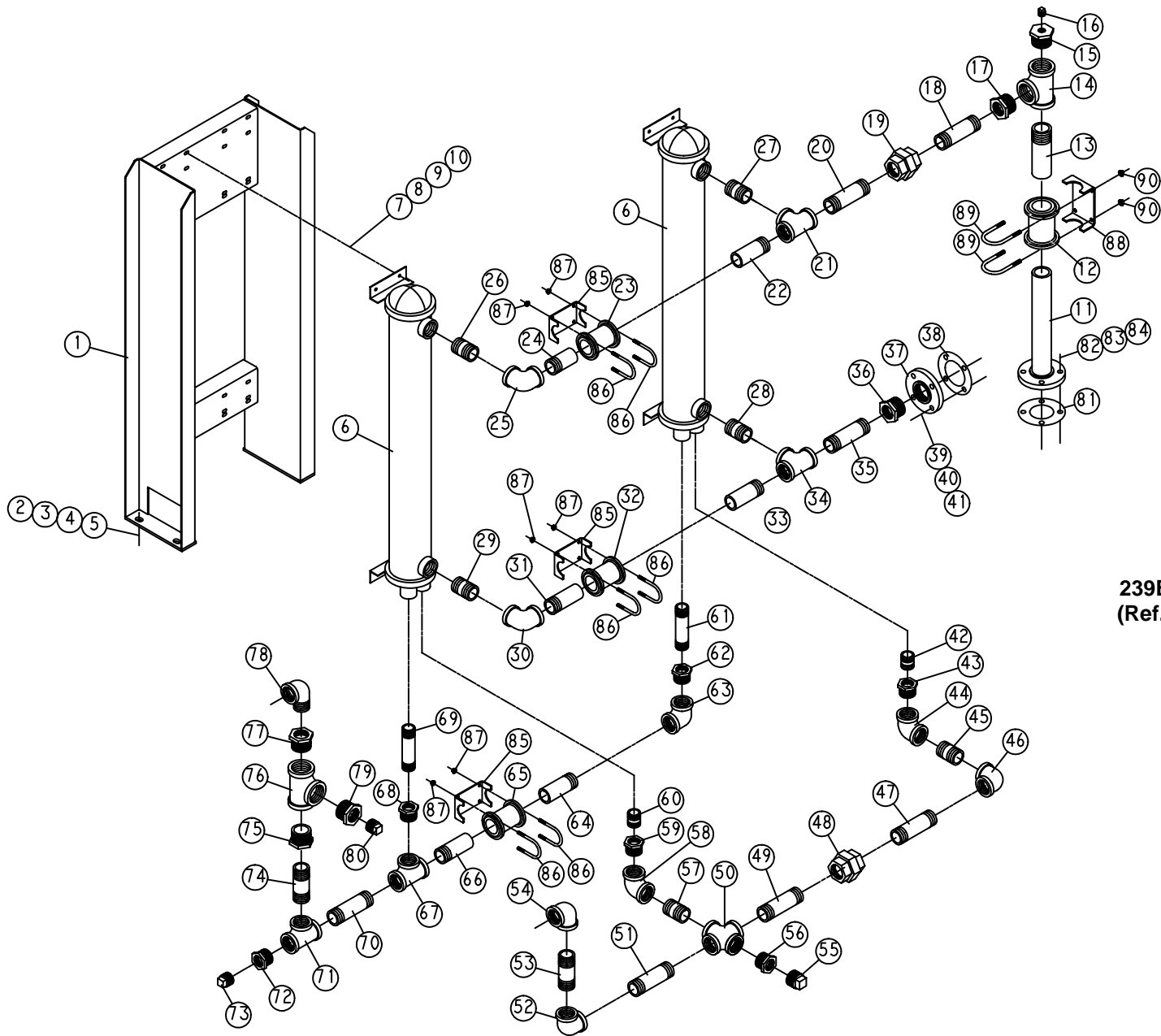
Order by part number and description. Reference numbers are for your convenience only.

350 AND 400 HP WATER COOLED OIL COOLER

Ref. No.	Name of Part	Qty.	Part No.	Ref. No.	Name of Part	Qty.	Part No.
1	SUPPORT .....	1	201ESV165	46	ELBOW .....	1	64C9G
2	SCREW .....	4	655EG080	47	NIPPLE .....	1	63L20G
3	WASHER .....	4	95A8	48	UNION-STRAIGHT .....	1	64Z2
4	LOCKWASHER .....	4	95B8	49	NIPPLE .....	1	63L18G
5	NUT .....	4	50B8	50	CROSS-PIPE .....	1	64K21G
6	HEAT EXCHANGER .....	2	*	51	NIPPLE .....	1	63L22G
7	SCREW .....	8	655ED040	52	ELBOW .....	1	64C9G
8	WASHER .....	16	95A3	53	NIPPLE .....	1	63L21G
9	LOCKWASHER .....	8	95B3	54	ELBOW .....	1	64C9G
10	NUT .....	8	50B3	55	PLUG .....	1	64A27
11	MANIFOLD-OIL .....	1	202EAY116	56	BUSHING-PIPE .....	1	64E12
12+	COUPLING-FLEXIBLE .....	1	64EB802	57	NIPPLE .....	1	63L15G
13	NIPPLE .....	1	63AJ40X52G	58	ELBOW .....	1	64C9G
14	TEE-PIPE .....	1	64G22G	59	BUSHING-PIPE .....	1	64E12
15	BUSHING-PIPE .....	1	64E58	60	NIPPLE .....	1	63K18G
16	PLUG .....	1	64AA3	61	NIPPLE .....	1	63K5G
17	BUSHING-PIPE .....	1	64E25	62	BUSHING-PIPE .....	1	64E12
18	NIPPLE .....	1	63L22G	63	ELBOW .....	1	64C9G
19	UNION-STRAIGHT .....	1	64Z2	64	NIPPLE .....	1	63AJ32X46G
20	NIPPLE-PIPE .....	1	63L5G	65++	COUPLING-FLEXIBLE .....	1	2117159
21	TEE-PIPE .....	1	64G1G	66	NIPPLE .....	1	63AJ32X46G
22	NIPPLE .....	1	63AJ32X46G	67	TEE-PIPE .....	1	64G1G
23++	COUPLING-FLEXIBLE .....	1	2117159	68	BUSHING-PIPE .....	1	64E12
24	NIPPLE .....	1	63AJ32X46G	69	NIPPLE .....	1	63K5G
25	ELBOW .....	1	64C9G	70	NIPPLE .....	1	63L24G
26	NIPPLE .....	1	63L13G	71	TEE-PIPE .....	1	64G1G
27	NIPPLE .....	1	63L13G	72	BUSHING-PIPE .....	1	64E12
28	NIPPLE .....	1	63L13G	73	PLUG .....	1	64A27
29	NIPPLE .....	1	63L13G	74	NIPPLE .....	1	63L4G
30	ELBOW .....	1	64C9G	75	BUSHING-PIPE .....	1	64E25
31	NIPPLE .....	1	63AJ32X46G	76	TEE-PIPE .....	1	64G22G
32++	COUPLING-FLEXIBLE .....	1	2117159	77	BUSHING-PIPE .....	1	64E25
33	NIPPLE .....	1	63AJ32X46G	78	ELBOW ST .....	1	64D9G
34	TEE-PIPE .....	1	64G1G	79	BUSHING-PIPE .....	1	64E85
35	NIPPLE .....	1	63L25G	80	PLUG .....	1	64A27
36	BUSHING-PIPE .....	1	64E25	81	GASKET .....	1	25C2722N
37	FLANGE-THREADED .....	1	64CA8	82	SCREW .....	4	655EF120
38	GASKET .....	1	25C2722N	83	LOCKWASHER .....	4	95B7
39	SCREW .....	4	655EF120	84	NUT-HEX .....	4	50B7
40	LOCKWASHER .....	4	95B7	85	BRACKET-PIPE .....	3	200EAP108
41	NUT .....	4	50B7	86	U-BOLT .....	6	15U111
42	NIPPLE .....	1	63K18G	87	NUT-FLANGE .....	12	50AW5
43	BUSHING-PIPE .....	1	64E12	88	BRACKET-PIPE .....	1	301EAY108
44	ELBOW .....	1	64C9G	89	U-BOLT .....	2	15U57
45	NIPPLE .....	1	63L15G	90	NUT-FLANGE .....	4	50AW5

- \* Selective item. See page 30.
- + For Repair Gasket - Order Part No. 2117160, (2) Required.
- ++ For Repair Gasket - Order Part No. 2117159, (2) Required.

# 500 HP WATER COOLED OIL COOLER



239EAY810-A  
(Ref. Drawing)

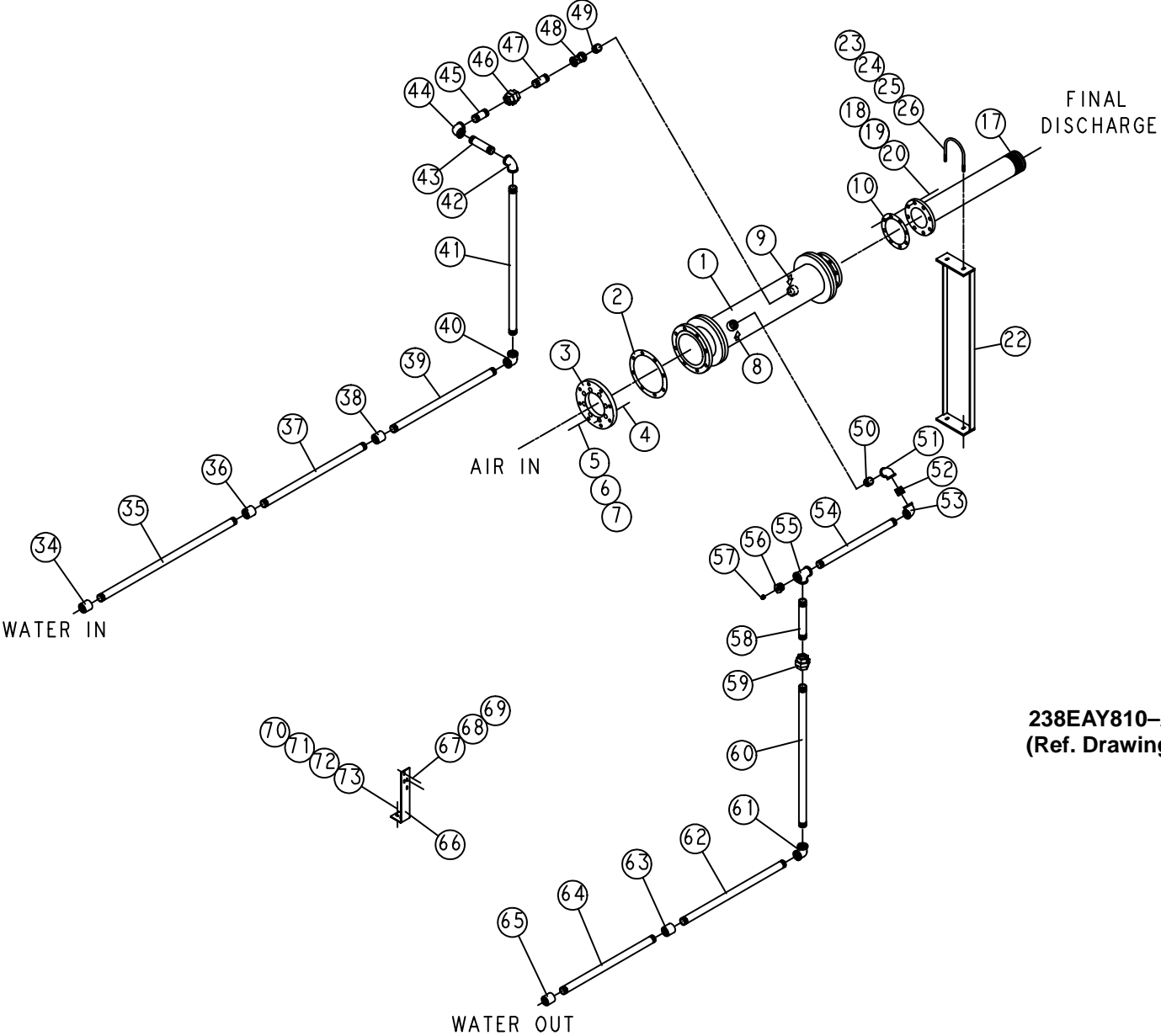
Order by part number and description. Reference numbers are for your convenience only.

500 HP WATER COOLED OIL COOLER

Ref. No.	Name of Part	Qty.	Part No.	Ref. No.	Name of Part	Qty.	Part No.
1	SUPPORT .....	1	201ESV165	46	ELBOW .....	1	64C9G
2	SCREW .....	4	655EG080	47	NIPPLE .....	1	63L20G
3	WASHER .....	4	95A8	48	UNION-STRAIGHT .....	1	64Z2
4	LOCKWASHER .....	4	95B8	49	NIPPLE .....	1	63L18G
5	NUT .....	4	50B8	50	CROSS-PIPE .....	1	64K21G
6	HEAT EXCHANGER .....	2	*	51	NIPPLE .....	1	63L22G
7	SCREW .....	8	655ED040	52	ELBOW .....	1	64C9G
8	WASHER .....	16	95A3	53	NIPPLE .....	1	63L21G
9	LOCKWASHER .....	8	95B3	54	ELBOW .....	1	64C9G
10	NUT .....	8	50B3	55	PLUG .....	1	64A27
11	MANIFOLD .....	1	201EAY116	56	BUSHING-PIPE .....	1	64E12
12+	COUPLING-FLEXIBLE .....	1	64EB802	57	NIPPLE .....	1	63L15G
13	NIPPLE .....	1	63AJ40X66G	58	ELBOW .....	1	64C9G
14	TEE-PIPE .....	1	64G22G	59	BUSHING-PIPE .....	1	64E12
15	BUSHING-PIPE .....	1	64E58	60	NIPPLE .....	1	63K18G
16	PLUG .....	1	64AA3	61	NIPPLE .....	1	63K5G
17	BUSHING-PIPE .....	1	64E25	62	BUSHING-PIPE .....	1	64E12
18	NIPPLE .....	1	63L23G	63	ELBOW .....	1	64C9G
19	UNION-STRAIGHT .....	1	64Z2	64	NIPPLE .....	1	63AJ32X46G
20	NIPPLE .....	1	63L5G	65++	COUPLING-FLEXIBLE .....	1	64EB801
21	TEE-PIPE .....	1	64G1G	66	NIPPLE .....	1	63AJ32X46G
22	NIPPLE .....	1	63AJ32X46G	67	TEE-PIPE .....	1	64G1G
23++	COUPLING-FLEXIBLE .....	1	64EB801	68	BUSHING-PIPE .....	1	64E12
24	NIPPLE .....	1	63AJ32X46G	69	NIPPLE .....	1	63K5G
25	ELBOW .....	1	64C9G	70	NIPPLE .....	1	63L24G
26	NIPPLE .....	1	63L14G	71	TEE-PIPE .....	1	64G1G
27	NIPPLE .....	1	63L14G	72	BUSHING-PIPE .....	1	64E12
28	NIPPLE .....	1	63L14G	73	PLUG .....	1	64A27
29	NIPPLE .....	1	63L14G	74	NIPPLE .....	1	63L22G
30	ELBOW .....	1	64C9G	75	BUSHING-PIPE .....	1	64E25
31	NIPPLE .....	1	63AJ32X46G	76	TEE-PIPE .....	1	64G22G
32++	COUPLING-FLEXIBLE .....	1	64EB801	77	BUSHING-PIPE .....	1	64E25
33	NIPPLE .....	1	63AJ32X46G	78	ELBOW ST .....	1	64D9G
34	TEE-PIPE .....	1	64G1G	79	BUSHING-PIPE .....	1	64E85
35	NIPPLE .....	1	63L25G	80	PLUG .....	1	64A27
36	BUSHING-PIPE .....	1	64E25	81	GASKET .....	1	25C2722N
37	FLANGE-THREADED .....	1	64CA8	82	SCREW .....	4	655EF120
38	GASKET .....	1	25C2722N	83	LOCKWASHER .....	4	95B7
39	SCREW .....	4	655EF120	84	NUT .....	4	50B7
40	LOCKWASHER .....	4	95B7	85	BRACKET-PIPE .....	3	200EAP108
41	NUT .....	4	50B7	86	U-BOLT .....	6	15U11
42	NIPPLE .....	1	63K18G	87	NUT-FLANGE .....	12	50AW5
43	BUSHING-PIPE .....	1	64E12	88	BRACKET-PIPE .....	1	300EAY108
44	ELBOW .....	1	64C9G	89	U-BOLT .....	2	15U57
45	NIPPLE .....	1	63L15G	90	NUT-FLANGE .....	4	50AW5

- \* Selective item. See page 30.
- + For Repair Gasket - Order Part No. 2117160, (2) Required.
- ++ For Repair Gasket - Order Part No. 2117159, (2) Required.

AFTERCOOLER GROUP



238EAY810-A  
(Ref. Drawing)

Order by part number and description. Reference numbers are for your convenience only.

**AFTERCOOLER GROUP**

Ref. No.	Name of Part	Qty.	Part No.	Ref. No.	Name of Part	Qty.	Part No.
1	AFTERCOOLER .....	1	48Z64	48	ELBOW .....	1	64C8G
2	GASKET RING .....	1	25C2721N	49	NIPPLE .....	1	63K2G
3	ADAPTOR .....	1	200ESV170	50	NIPPLE .....	1	63K18G
4	SCREW .....	8	75P199N	51	ELBOW .....	1	64C8G
5	SCREW .....	8	655EG130	52	NIPPLE .....	1	63K18G
6	LOCKWASHER .....	8	95B8	53	ELBOW .....	1	64C8G
7	NUT .....	8	50B8	54	NIPPLE .....	1	63N24X233G
8	DECAL .....	1	201ESP077	55	TEE .....	1	64G11G
9	DECAL .....	1	200ESP077	56	BUSHING-PIPE .....	1	64E8
10	GASKET RING .....	1	25C2501	57	PLUG .....	1	64A24
17	MANIFOLD-DISCHARGE .....	1	203EAY071	58	NIPPLE .....	1	63K16G
18	SCREW .....	8	655EG120	59	UNION-STRAIGHT .....	1	64Z1
19	LOCKWASHER .....	8	95B8	60	NIPPLE .....	1	63N24X357G
20	NUT .....	8	50B8	61	ELBOW .....	1	64C8G
22	BRACKET-PIPE .....	1	201ESV108	62	NIPPLE .....	1	63N24X300G
23	U-BOLT .....	1	15U48	63	COUPLING-PIPE .....	1	64BK8
24	WASHER .....	2	95A5	64	NIPPLE .....	1	63N24X270G
25	LOCKWASHER .....	2	95B5				
26	NUT .....	2	50B5	65	COUPLING-PIPE .....	1	64BK8
33	PLUG .....	2	64AA7	66	BRACKET-PIPE .....	1	201EAY108
34	COUPLING-PIPE .....	1	64BK8	67	U-BOLT .....	2	15U58
35	NIPPLE .....	1	63N24X400G	68	WASHER .....	4	95A3
36	COUPLING-PIPE .....	1	64BK8	69	NUT .....	4	50B3
37	NIPPLE .....	1	63N24X300G	70	SCREW .....	2	655ED070
38	COUPLING-PIPE .....	1	64BK8	71	WASHER .....	4	95A3
39	NIPPLE .....	1	63N24X300G	72	WASHER .....	2	95B3
40	ELBOW .....	1	64C8G	73	NUT .....	2	50B3
41	NIPPLE .....	1	63N24X374G	*	RELAY .....	1	24CA771
42	ELBOW .....	1	64C8G	*	SCREW-MACHINE .....	2	75LM172
43	NIPPLE .....	1	63K5G	*	LOCKWASHER .....	2	95H15
44	ELBOW .....	1	64C8G	*	WIRE .....	6	97H2R
45	NIPPLE .....	1	63K15G	*	GRP-MISC PARTS-Includes the following	1	201EAY4013
46	UNION-STRAIGHT .....	1	64Z1		SEPARATOR-MOISTURE .....	1	83C7
47	NIPPLE .....	1	63K15G		TRAP .....	1	83C41

\* Not shown on illustration.

**SELECTIVE ITEMS – WATER-COOLED UNITS  
(Fresh Water Service)**

Name of Part	350 HORSEPOWER	400 HORSEPOWER	500 HORSEPOWER
Heat Exchanger (2), Includes next 5 items .....	204ESS349	205ESP349	202ESV349
Bonnet, Inlet–Outlet (2) .....	2109065	2109065	2109065
Gasket, Inlet–Outlet (2) .....	2109063	2109063	2109063
Bonnet, Return (2) .....	2109066	2109066	2109061
Gasket, Return (2) .....	2109064	2109064	2109064
Anode–Zinc (4) .....	2109068	2109068	2109057
Regulator–Temperature (Tterice) .....	90AR152	90AR152	90AR152
* Stem Packing Assembly .....	2109051	2109051	2109051
* Thermal System Kit .....	2109490	2109490	2109490
Valve–Solenoid, Magnetic Water (Nema 1) .....	91B2	91B2	91B2
Valve–Solenoid, Magnetic Water (Nema 2) .....	91B23	91B23	91B23
Aftercooler, Includes next 3 items .....	48Z64	48Z64	48Z64
Gasket (2) .....	2109145	2109145	2109145
Ring–Packing (2) .....	2109146	2109146	2109146
Ring–Lantern (Nylon) .....	2109147	2109147	2109147
Separator, Moisture .....	83C3	83C3	83C3
Trap, Separator, Includes next 3 items .....	83C41	83C41	83C41
Gasket, Cap .....	2109518	2109518	2109518
Gasket, Retainer .....	2109519	2109519	210951
Screen, Strainer .....	2109520	2109520	2109520

\* Furnish as required for repair of complete temperature regulator (kit consists of remote bulb, capillary tube and bellows).

**SELECTIVE ITEMS – WATER–COOLED UNITS**  
**(Salt Water Service)**  
**(Not Available for 500 H.P. Service)**

Name of Part	350 HORSEPOWER	400 HORSEPOWER
Heat Exchanger, Includes next 6 items .....	203ESS349	204ESP349
Bracket, Mounting (2) .....	2109067	2109067
Gasket, Inlet–Outlet .....	2109063	2109063
Bonnet, Inlet–Outlet .....	2109077	2109077
Gasket, Return .....	2109064	2109064
Bonnet, Return .....	2109076	2109076
Anode–Zinc (2) .....	2109068	2109068
 Regulator–Temperature (Tterice) .....	 90AR106	 90AR106
*    Asm Stem Packing .....	2109051	2109051
*    Thermal System Kit .....	2109490	2109490

\*    Furnish as required for repair of complete temperature regulator (kit consists of remote bulb, capillary tube and bellows).



Order by part number and description. Reference numbers are for your convenience only.

AIR COOLED COOLER GROUP

Ref. No.	Name of Part	Qty.	Part No.
1	SUPPORT .....	1	204EAY165
2	SUPPORT .....	2	205EAY165
3	SUPPORT .....	2	206EAY165
4	COOLER-OIL-AIR .....	1	200EAY201
5	AFTERCOOLER .....	1	200EAY292
6	FAN .....	1	200EAY701
7	BUSHING-SHEAVE .....	1	2009277
8	GUARD-FAN .....	1	200EAY393
9	SCREW-FLANGED .....	32	75LM51
10	NUT-FLANGED .....	18	50AW5
11	SCREW-FLANGED .....	4	75LM50
12	NUT-FLANGED .....	4	50AW4
13	SCREW-FLANGED .....	4	75LM135
14	NUT-FLANGED .....	4	50AW35
15	SCREW-FLANGED .....	4	75LM53
16	NUT-FLANGED .....	4	50AW3
17	PLATE-NAME .....	1	69A138
18	RIVET .....	4	70E13
19	SCREW-FLANGED .....	8	75LM135
20	NUT-FLANGED .....	8	50AW35

NOTE: (1) each 83C10 Separator and 83C41 Trap are shipped loose with each Cooling Module.

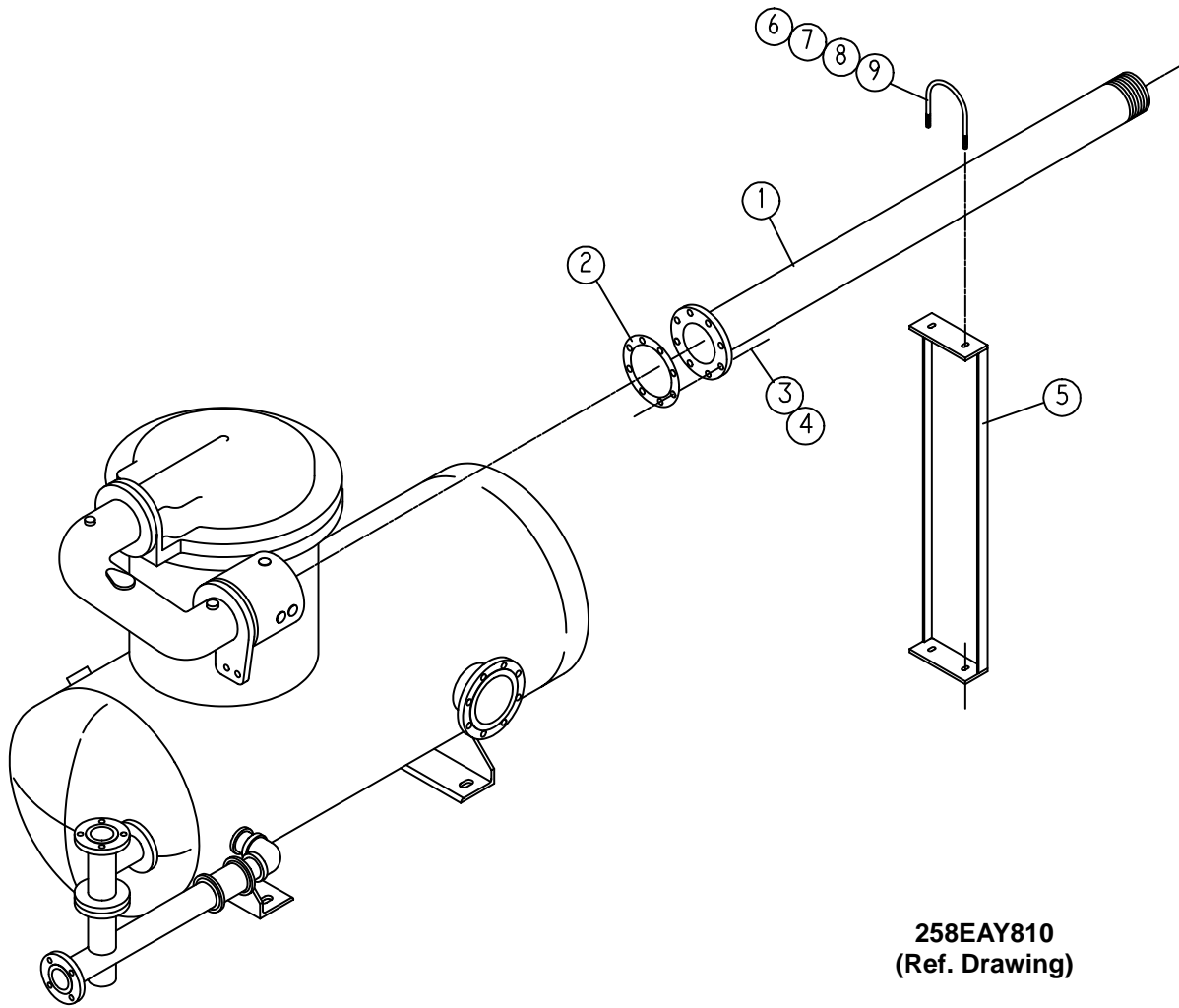
**AIR COOLED COOLER SELECTIVES**  
(With Aftercooler Only) (50/60 Hz)

	<b>Cooling Group</b>	<b>H.P.</b>	<b>Volt</b>	<b>NEMA</b>	<b>Fan Motor Starter</b>	<b>Fan Motor</b>	<b>O.L. Heaters (3)</b>	<b>Fuse (3)</b>
*	209EAY4003	350/400	230	1	24CA3668	24CA4065	24CA3684	24CA360
*	210EAY4003	350/400	460	1	24CA3670	24CA4065	24CA638	24CA564
*	211EAY4003	350/400	230	4	24CA3671	24CA4065	24CA3684	24CA360
*	212EAY4003	350/400	460	4	24CA3673	24CA4065	24CA638	24CA564
*	217EAY4003	500	230	1	24CA3668	24CA4065	24CA3684	24CA360
*	218EAY4003	500	460	1	24CA3670	24CA4065	24CA638	24CA564
*	219EAY4003	500	230	4	24CA3671	24CA4065	24CA3684	24CA360
*	220EAY4003	500	460	4	24CA3673	24CA4065	24CA638	24CA564
*	225EAY4003	350/400	575	1	24CA3670	24CA4066	24CA636	24CA555
*	226EAY4003	350/400	575	4	24CA3673	24CA4066	24CA636	24CA555
*	227EAY4003	500	575	1	24CA3670	24CA4066	24CA636	24CA555
*	228EAY4003	500	575	4	24CA3673	24CA4066	24CA636	24CA555
*	231EAY4003	350/400	380	1	24CA3670	24CA4067	24CA642	24CA2005
*	232EAY4003	350/400	380	4	24CA3673	24CA4067	24CA642	24CA2005
*	233EAY4003	500	380	1	24CA3670	24CA4067	24CA642	24CA2005
*	234EAY4003	500	380	4	24CA3673	24CA4067	24CA642	24CA2005

NOTE: (1) Each 83C10 Separator and 83C41 Trap are shipped loose with Cooling Module.

\* These cooling groups include reference numbers 1 thru 18 on page 33 and 1 thru 14 on page 36.

Order by Part Number and Description. Reference Numbers are for your convenience only.

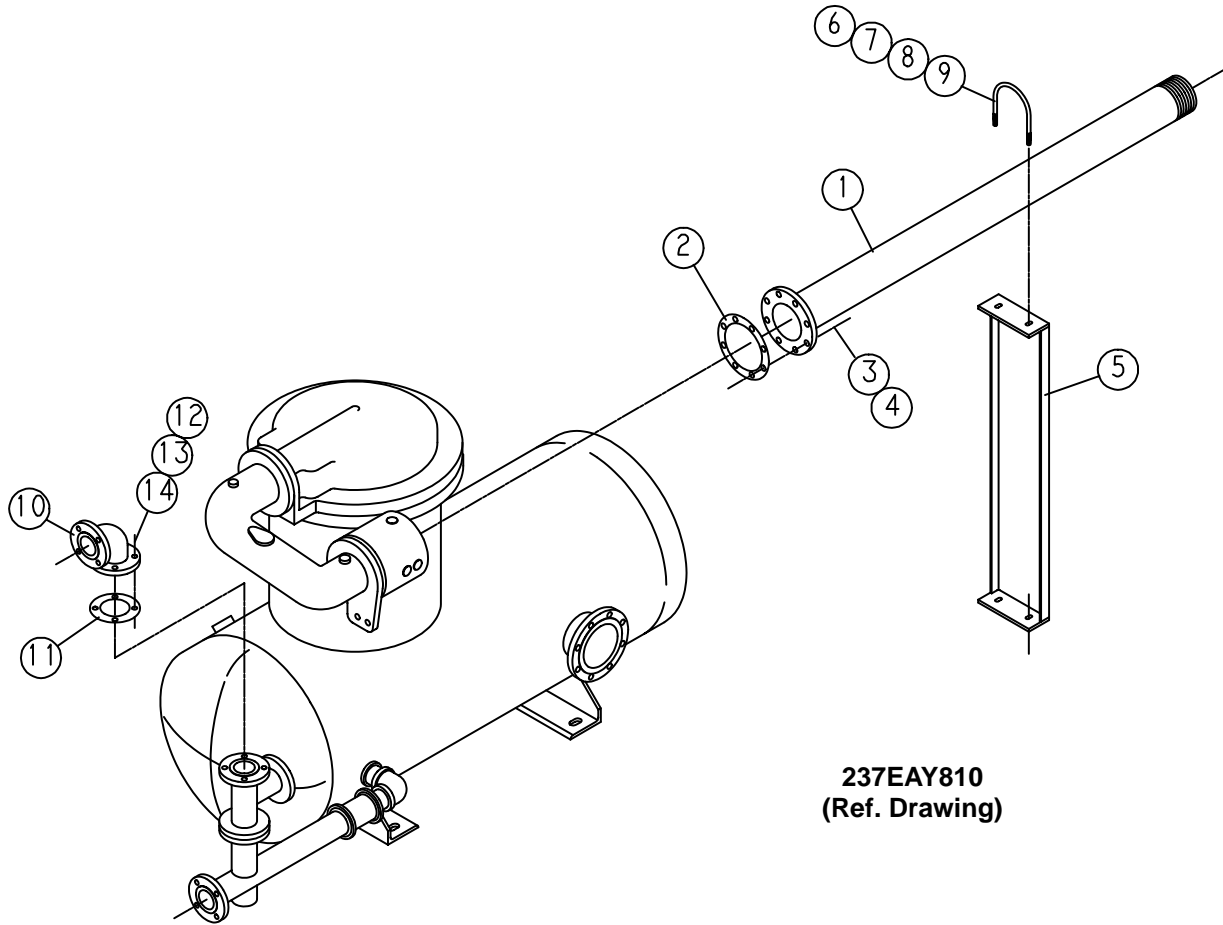


258EAY810  
(Ref. Drawing)

**DISCHARGE PIPING WATER-COOLED  
(Without Aftercooler)**

Ref. No.	Name of Part	Qty.	Part No.
1	MANIFOLD-DISCHARGE .....	1	200EAY071
2	GASKET RING .....	1	25C2501
3	SCREW .....	8	655EG070
4	LOCKWASHER .....	8	95B8
5	BRACKET .....	1	201ESV108
6	U-BOLT .....	1	15U48
7	WASHER .....	2	95A5
8	LOCKWASHER .....	2	95B5
9	NUT .....	2	50B5

Order by Part Number and Description. Reference Numbers are for your convenience only.

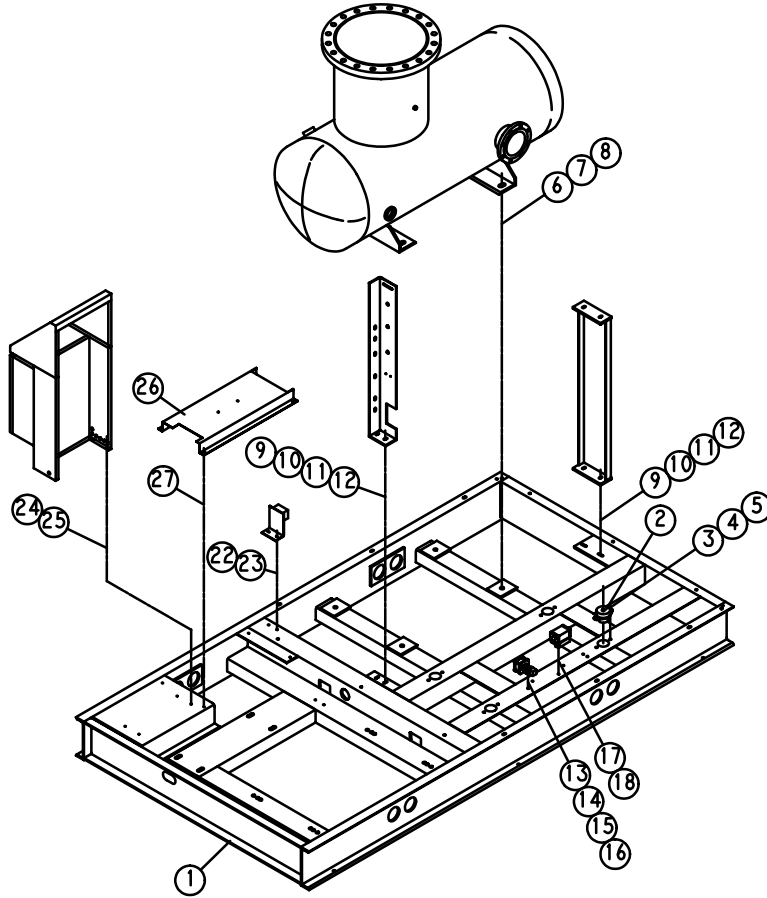


237EAY810  
(Ref. Drawing)

**DISCHARGE PIPING AIR-COOLED  
(Without Aftercooler)**

Ref. No.	Name of Part	Qty.	Part No.
1	MANIFOLD-DISCHARGE .....	1	200EAY071
2	GASKET RING .....	1	25C2501
3	SCREW .....	8	655EG070
4	LOCKWASHER .....	8	95B8
5	BRACKET .....	1	201ESV108
6	U-BOLT .....	1	15U48
7	WASHER .....	2	95A5
8	LOCKWASHER .....	2	95B5
9	NUT .....	2	50B5
10	MANIFOLD-OIL .....	1	202ESV116
11	GASKET .....	1	25C2722N
12	SCREW .....	4	655EF100
13	LOCKWASHER .....	4	95B7
14	NUT .....	4	50B7

Order by Part Number and Description. Reference Numbers are for your convenience only.

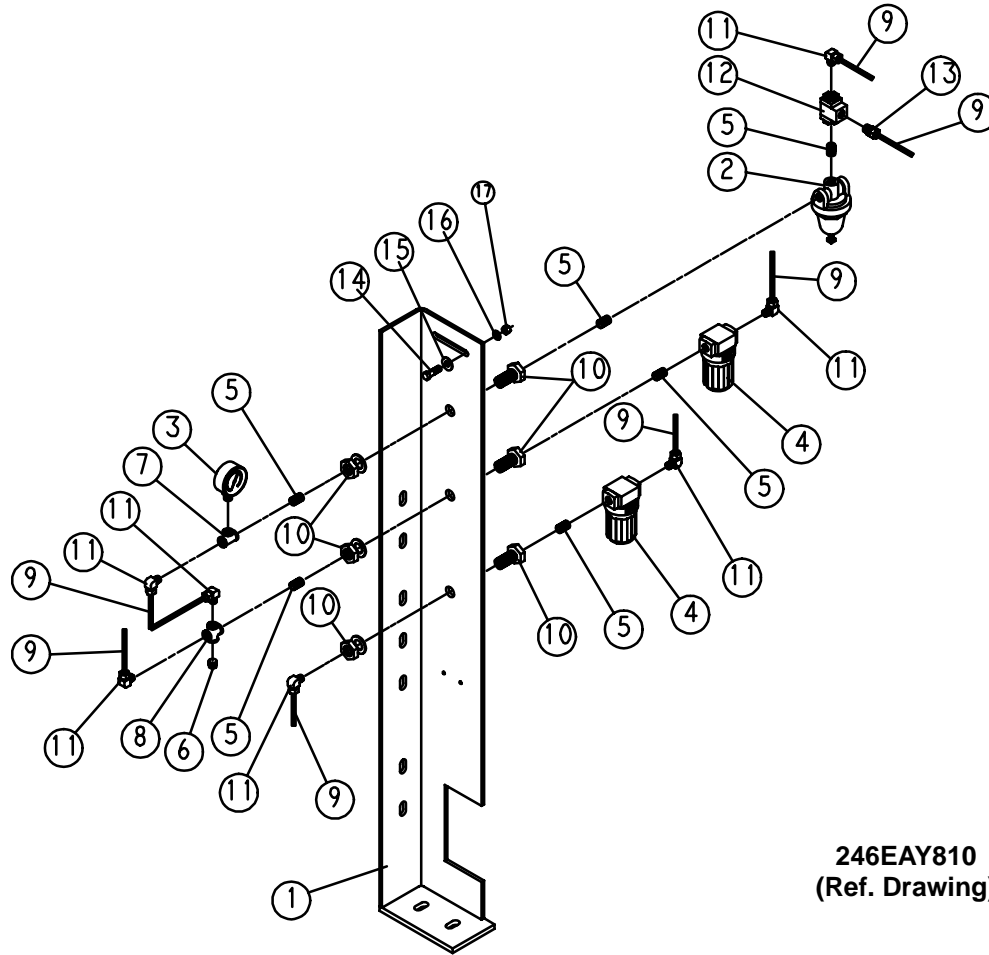


249EAY810-A  
(Ref. Drawing)

**BASE AND MOUNTING**

Ref. No.	Name of Part	Qty.	Part No.
1	BASE .....	1	204EAY285
2	ISOLATOR-VIBRATION .....	4	49C48
3	SCREW .....	8	655EE050
4	LOCKWASHER .....	8	95B5
5	NUT .....	8	50B5
6	SCREW .....	4	655EH080
7	WASHER .....	4	95A10
8	LOCKWASHER .....	4	95B10
9	SCREW .....	4	655EE080
10	WASHER .....	4	95A5
11	LOCKWASHER .....	4	95B5
12	NUT .....	4	50B5
13	SCREW .....	2	655EC060
14	WASHER .....	2	95A1
15	LOCKWASHER .....	2	95B1
16	NUT .....	2	50B1
17	SCREW-MACHINE .....	4	75G24
18	NUT-FLANGED .....	4	50AW2
22	SCREW-FLANGED .....	2	75LM97
23	NUT-FLANGED .....	2	50AW4
24	SCREW .....	4	655ED040
25	LOCKWASHER .....	4	95B3
26	COVER .....	1	203EAY225
27	SCREW .....	4	75K20

Order by Part Number and Description. Reference Numbers are for your convenience only.

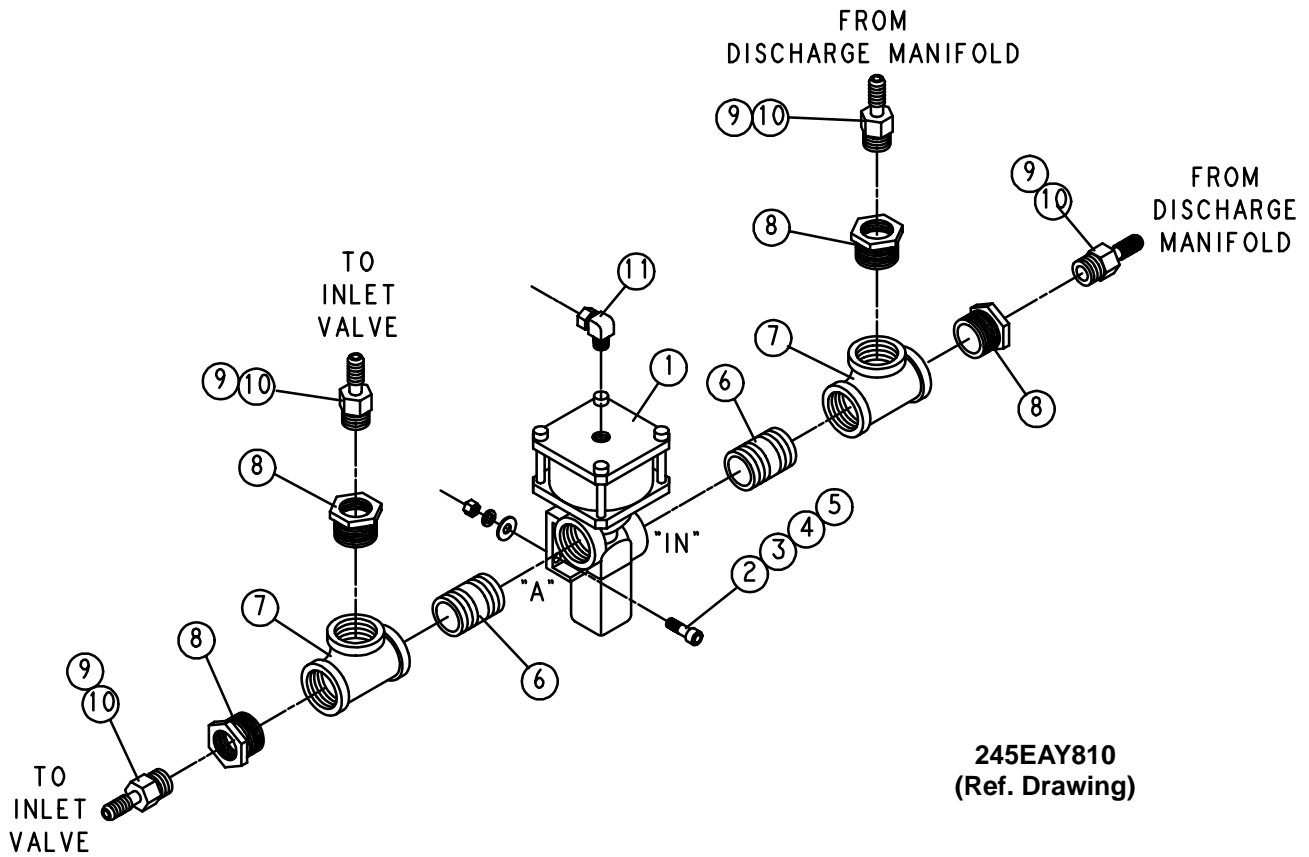


246EAY810  
(Ref. Drawing)

**CONTROL MOUNTING**

Ref. No.	Name of Part	Qty.	Part No.
1	BRACKET-AFTERCOOLER .....	1	200EAY118
2	VALVE-SUBTRACTIVE PILOT .....	1	2009398
3	GAUGE-PRESSURE .....	1	27P45
4	FILTER-LINE .....	2	5L110
5	NIPPLE-PIPE .....	6	63D1G
6	PLUG .....	1	64AA5
7	TEE-PIPE .....	1	64G3G
8	CROSS .....	1	64K1G
9	TUBE .....	75 Ft.	85G5
10	COUPLING-PIPE .....	3	64EB368
11	ELBOW .....	7	86E64
12	VALVE-CONTROL .....	1	90AR1006
13	CONNECTOR-TUBE .....	1	86E9
14	SCREW .....	2	655EG110
15	WASHER .....	2	95A8
16	LOCKWASHER .....	2	95B8
17	NUT .....	2	50B8

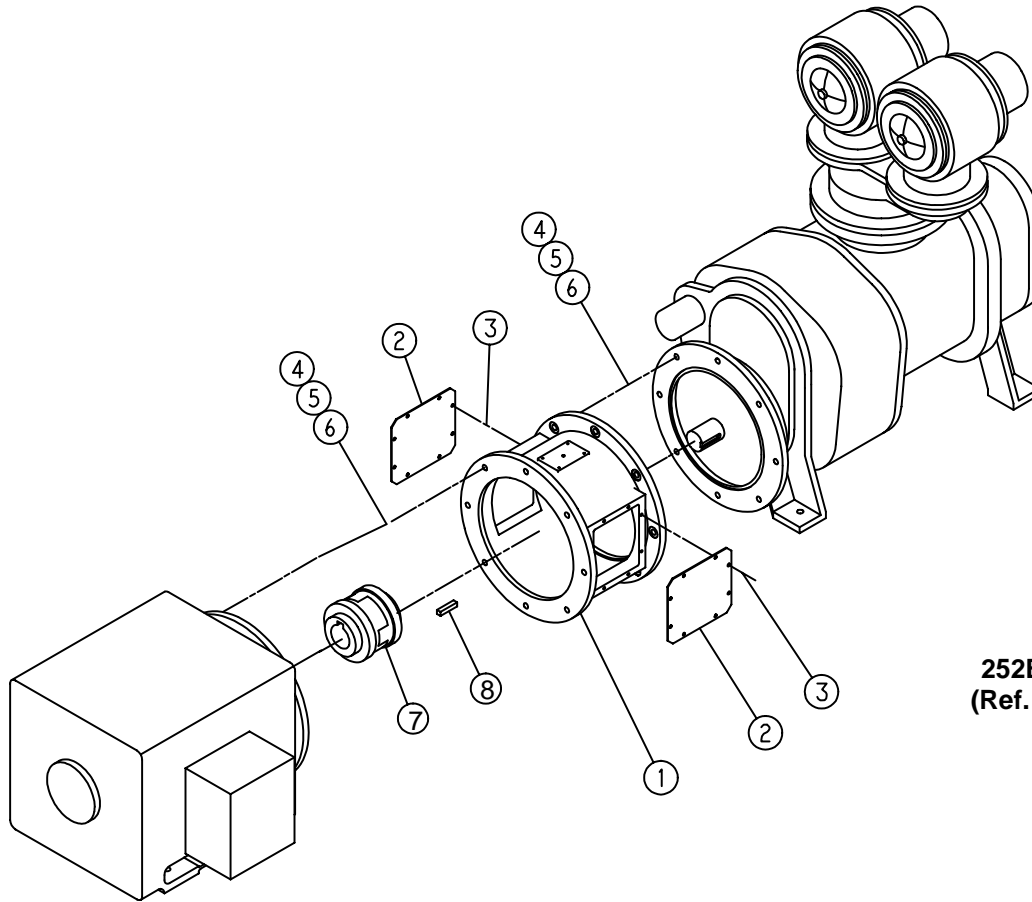
Order by Part Number and Description. Reference Numbers are for your convenience only.



**PURGE VALVE**

Ref. No.	Name of Part	Qty.	Part No.
1	VALVE-AIR CONTROL .....	1	90AR262
2	SCREW .....	2	75P42
3	WASHER .....	2	95A2
4	LOCKWASHER .....	2	95B2
5	NUT .....	2	50B2
6	NIPPLE .....	2	63H1G
7	TEE-PIPE .....	2	64G8G
8	BUSHING-PIPE .....	4	64E14
9	NIPPLE-HOSE .....	4	29C26
10	CLAMP-HOSE .....	4	29B35
11	ELBOW-TUBE .....	1	86E60

Order by Part Number and Description. Reference Numbers are for your convenience only.



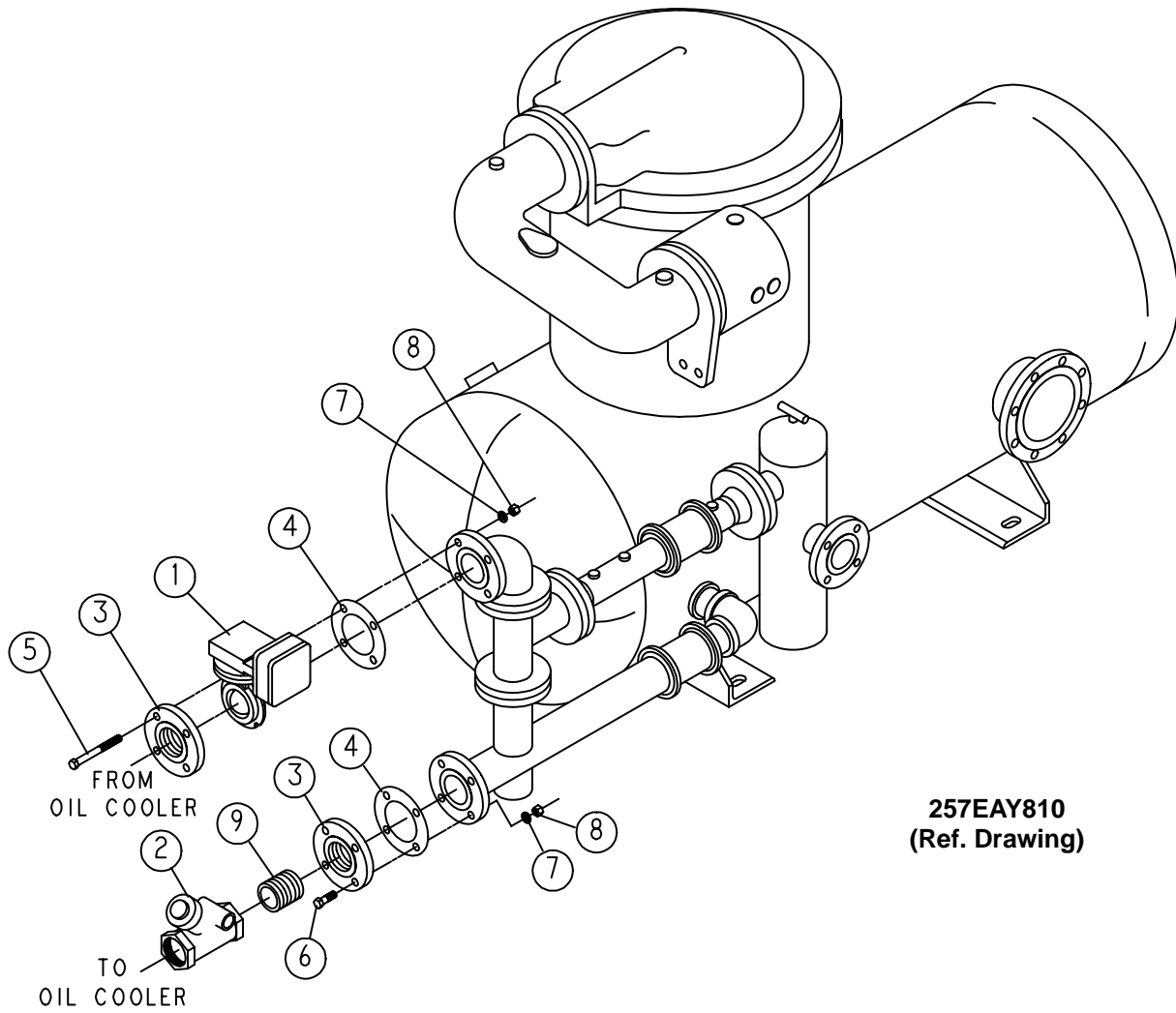
252EAY810-B  
(Ref. Drawings)

**COUPLING AND ADAPTOR**

Ref. No.	Name of Part	Qty.	Part No.
1	ADAPTOR .....	1	200SSW170
2	PLATE .....	2	201SSW247
3	SCREW .....	16	75LM51
4	SCREW .....	16	655EG130
5	LOCKWASHER .....	16	95B8
6	NUT .....	16	50B8
7*	COUPLING-FLEXIBLE .....	1	2011977
8	KEY-SQUARE .....	1	35L28

\* For Repair – Reference Number 7: Order (6) 2109118 Coupling Cushions.

Order by Part Number and Description. Reference Numbers are for your convenience only.



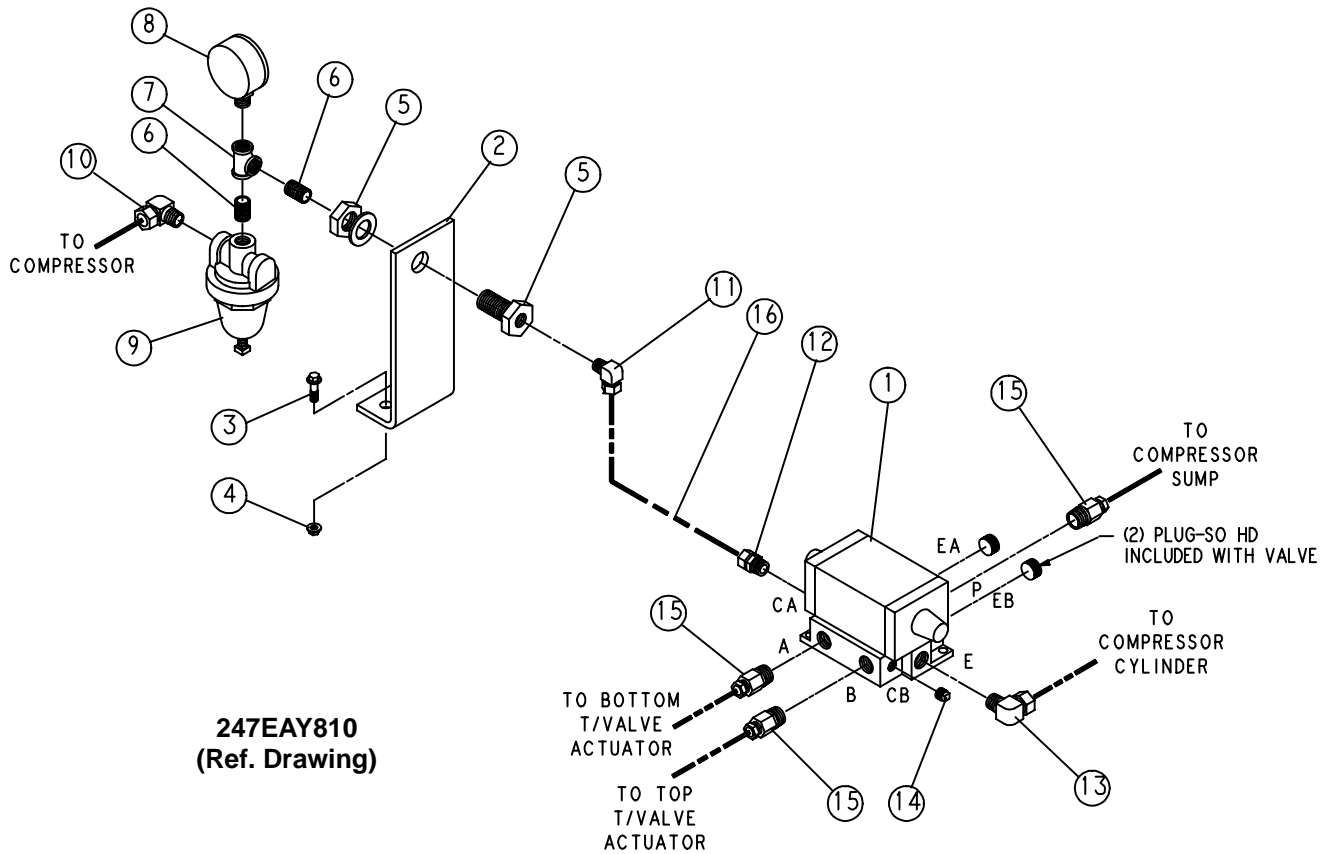
**257EAY810**  
(Ref. Drawing)

**REMOTE COOLER FITTINGS**

Ref. No.	Name of Part	Qty.	Part No.
1	VALVE-BUTTERFLY .....	1	90AR68
2	VALVE-CHECK .....	1	90J132
3	FLANGE-THREADED .....	2	64CA8
4	GASKET .....	2	25C2722N
5	SCREW .....	4	655EF200
6	SCREW .....	4	655EF120
7	LOCKWASHER .....	8	95B7
8	NUT .....	8	50B7
9	NIPPLE .....	1	63M2G
*	ELBOW-TUBE .....	2	86E60
*	TUBE .....	9.16 Ft.	85G3

\* Not shown.

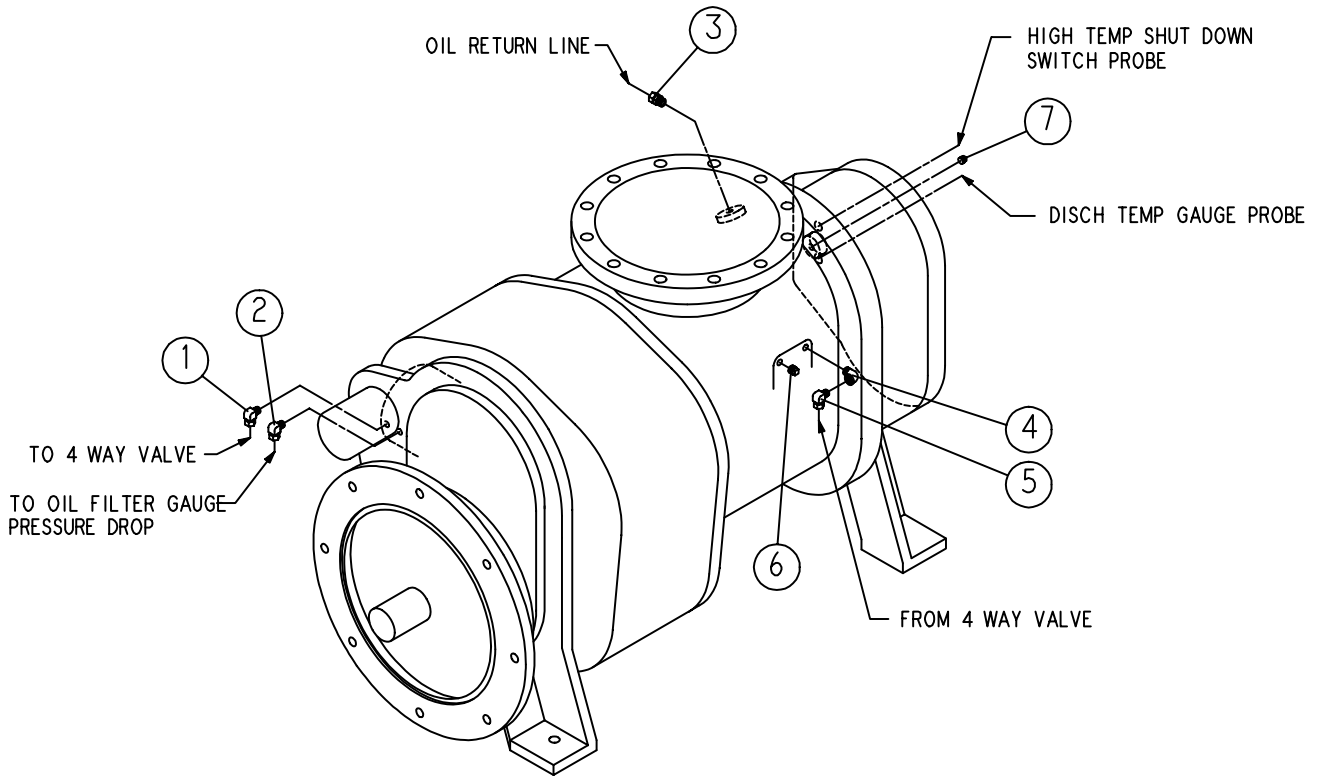
Order by Part Number and Description. Reference Numbers are for your convenience only.



**TURN VALVE ACTUATOR**

Ref. No.	Name of Part	Qty.	Part No.
1	VALVE-AIR CONTROL .....	1	90AR427
2	BRACKET .....	1	201EAY141
3	SCREW-FLANGED .....	2	75LM51
4	NUT-FLANGED .....	2	50AW5
5	COUPLING-PIPE .....	1	64EB368
6	NIPPLE-PIPE .....	2	63D1G
7	TEE-PIPE .....	1	64G3G
8	GAUGE-PRESSURE .....	1	27P48
9	VALVE-SUBTRACTIVE PILOT .....	1	2009398
10	ELBOW-TUBE .....	1	86E64
11	ELBOW-TUBE .....	1	86E60
12	CONNECTOR-TUBE .....	1	86E3
13	ELBOW-TUBE .....	1	86E65
14	PLUG .....	1	64AA6
15	CONNECTOR-TUBE .....	3	86E10
16	TUBE .....	2 Ft.	85G3

Order by Part Number and Description. Reference Numbers are for your convenience only.

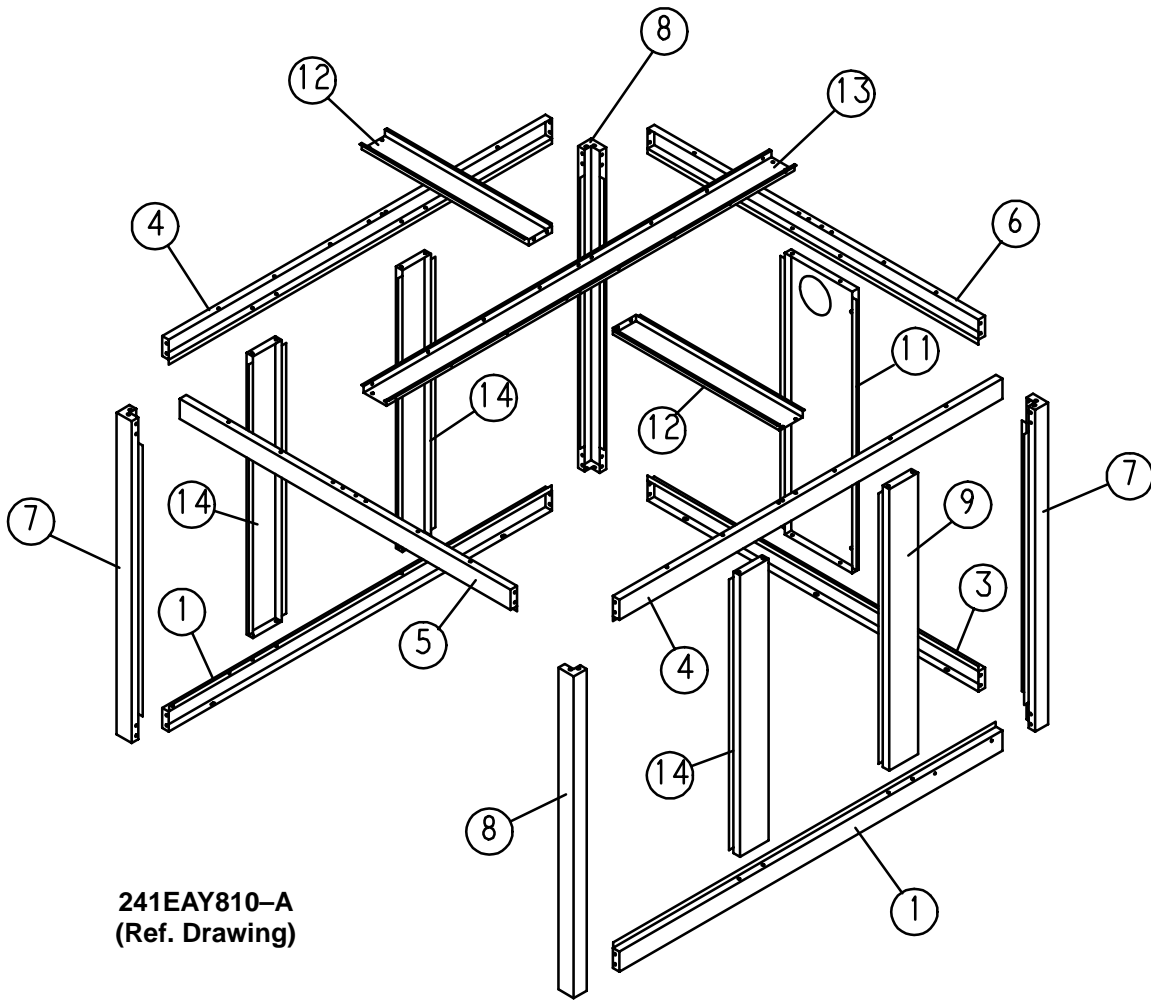


253EAY810-A  
(Ref. Drawing)

**COMPRESSOR FITTINGS**

Ref. No.	Name of Part	Qty.	Part No.
1	ELBOW .....	1	86E64
2	ELBOW-TUBE .....	1	86E60
3	CONNECTOR-TUBE .....	1	86E9
4	ELBOW-PIPE ST .....	1	64D4G
5	ELBOW-TUBE .....	1	86E65
6	PLUG .....	1	64AC3
7	PLUG .....	1	64AA5

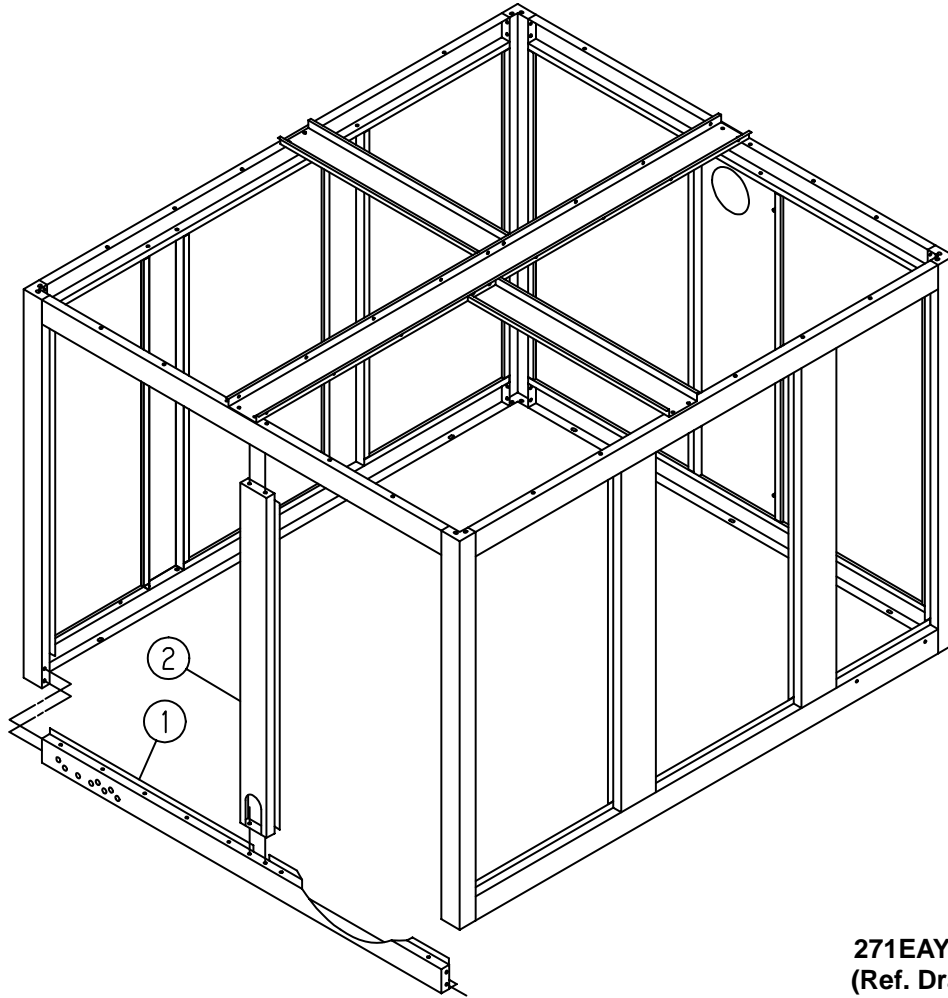
Order by Part Number and Description. Reference Numbers are for your convenience only.



**FRAME GROUP**

Ref. No.	Name of Part	Qty.	Part No.
1	FRAME .....	2	200EAY314
3	FRAME .....	1	203EAY314
4	FRAME .....	2	204EAY314
5	FRAME .....	1	205EAY314
6	FRAME .....	1	206EAY314
7	POST .....	2	201EAY313
8	POST .....	2	202EAY313
9	BRACE .....	1	200EAY326
11	BRACE .....	1	202EAY326
12	BRACE .....	1	203EAY326
13	BRACE-CHANNEL .....	1	204EAY326
14	BRACE .....	3	205EAY326

Order by Part Number and Description. Reference Numbers are for your convenience only.

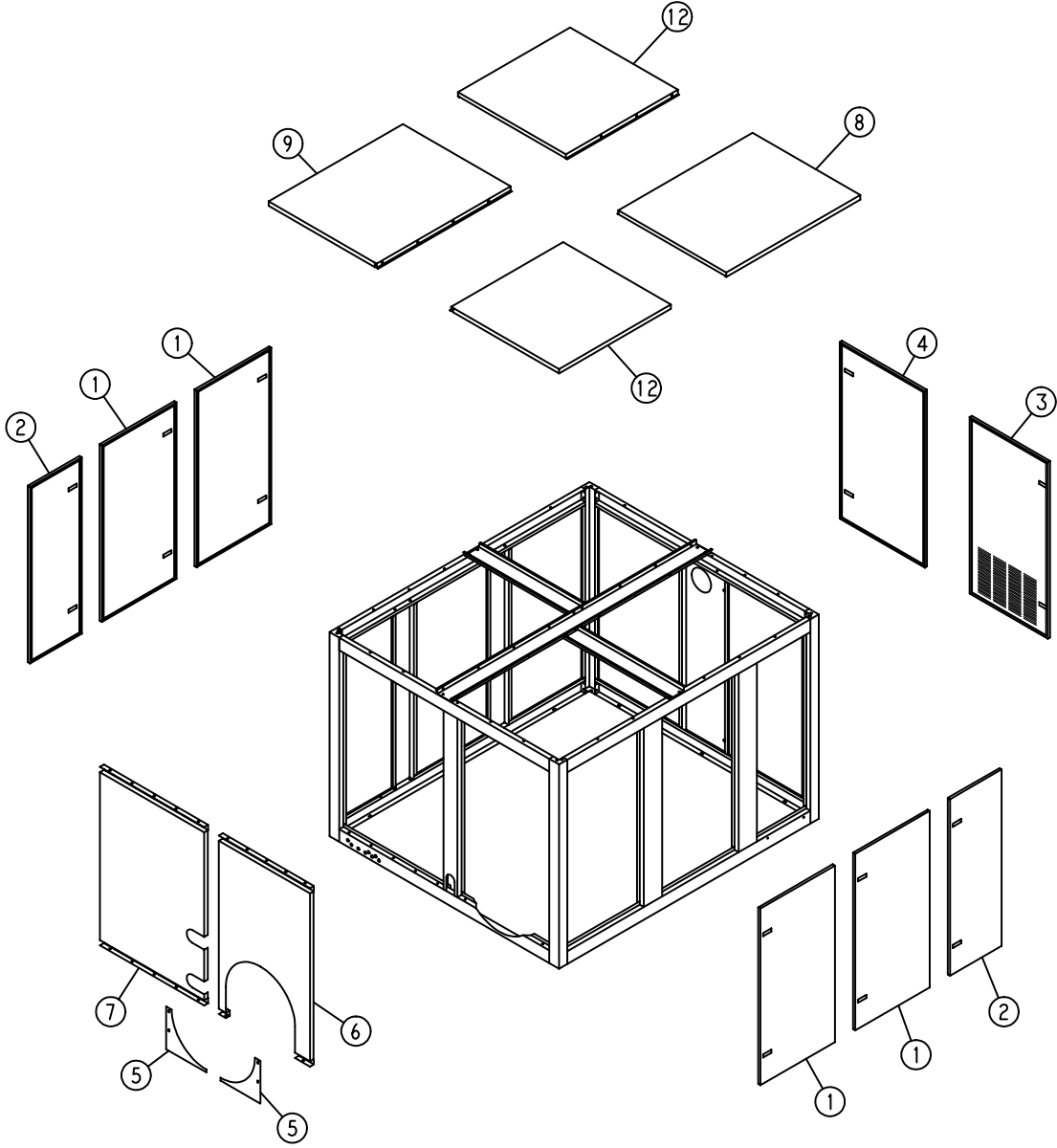


271EAY810-A  
(Ref. Drawing)

ENCLOSURE GROUP – PANELS

Ref. No.	Name of Part	Qty.	Part No.
1	FRAME .....	1	202EAY314
2	BRACE .....	1	201EAY326

ENCLOSURE GROUP



242EAY810-B  
(Ref. Drawing)

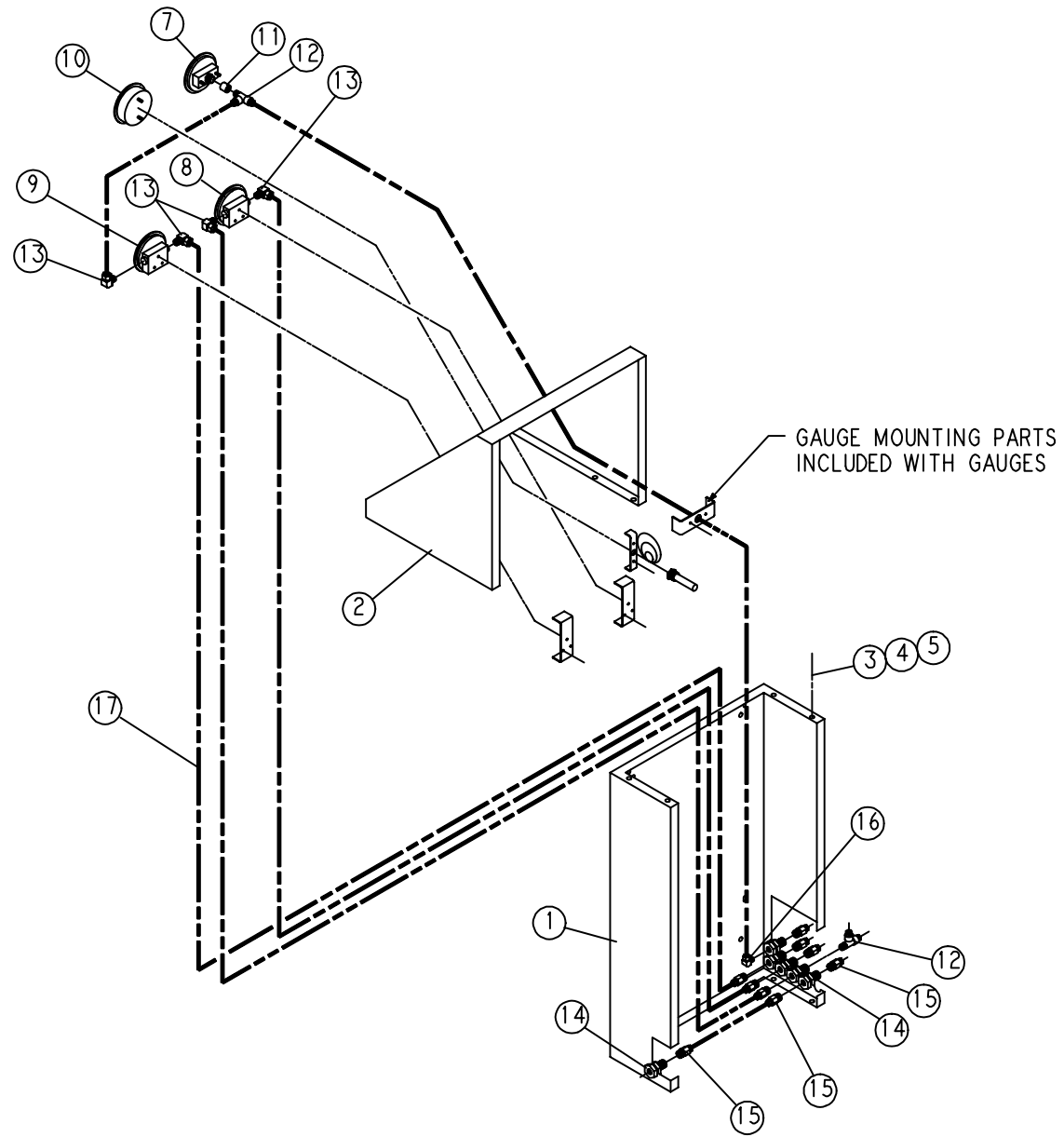
Order by part number and description. Reference numbers are for your convenience only.

ENCLOSURE GROUP

Ref. No.	Name of Part	Qty.	Part No.
1	DOOR .....	4	200EAY334
2	DOOR .....	2	201EAY334
3	DOOR .....	1	202EAY334
4	DOOR .....	1	203EAY334
5	PANEL .....	2	200EAY216
6	PANEL .....	1	202EAY216
7	PANEL .....	1	203EAY216
8	PANEL .....	1	204EAY216
9	PANEL .....	1	205EAY216
10	PANEL .....	1	206EAY216
11	PANEL .....	1	207EAY216
12	PANEL .....	2	212EAY216
13	DUCT .....	1	200EAY856
14	BRACKET .....	2	203ESV141
*	STRIP-FOAM .....	10 Ft.	00800736

\* Not shown.

# MOUNTING GROUP



248EAY810  
(Ref. Drawing)

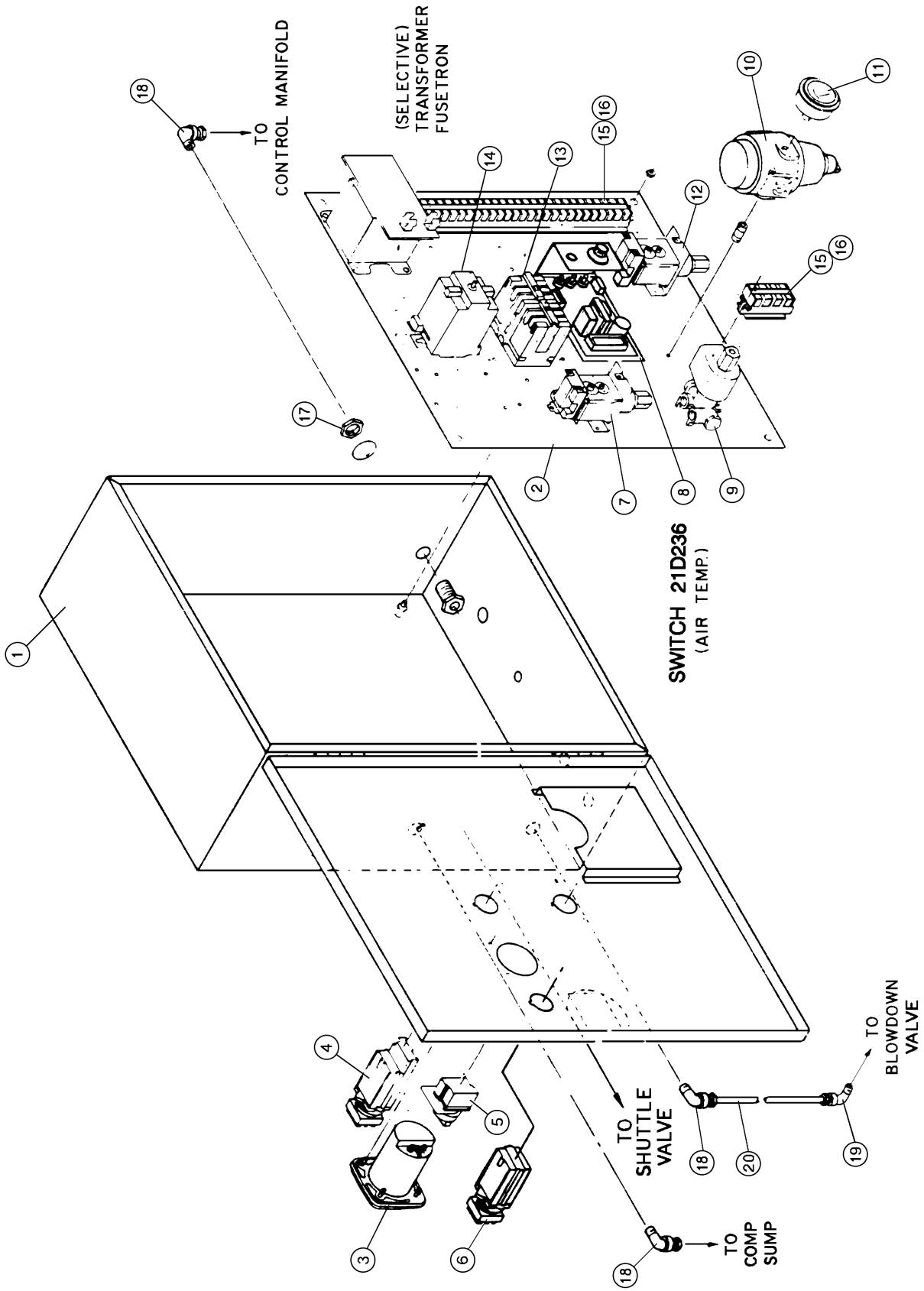
Order by part number and description. Reference numbers are for your convenience only.

MOUNTING GROUP

Ref. No.	Name of Part	Qty.	Part No.
1	SUPPORT-CONTROL .....	1	200ESV146
2	PANEL-INSTRUMENT .....	1	201ESV386
3	SCREW .....	4	655ED040
4	LOCKWASHER .....	4	95B3
5	NUT .....	4	50B3
*	DECAL .....	1	200ESV077
7	GAUGE .....	1	2009562
8	GAUGE-PRESSURE .....	1	27P77
9	GAUGE .....	1	27P11
10	THERMOMETER .....	1	93F2
11	COUPLING-PIPE .....	1	64BK2
12	TEE-TUBE .....	2	2009284
13	ELBOW-TUBE .....	4	86E59
14	COUPLING-PIPE .....	6	64EB368
15	CONNECTOR-TUBE .....	9	86E4
16	ELBOW-TUBE .....	1	86E60
17	TUBE .....	17 Ft.	85G3

\* Not shown.

**CONTROLLER ASSEMBLY**



**CONTROL ITEMS  
(Selective)**

Ref. No.	Name of Part	Constant Speed		Automatic Start– Timed Stop	
		Nema 1	Nema 4	Nema 1	Nema 4
1	BOX–CONTROL .....	200ESO179	201ESO179	203EAQ179	204EAQ179
2	PANEL, ELECTRICAL .....	207ESO216	208ESO216	207ESO216	208ESO216
*	BOOT, TRANSPARENT .....	_____	24CA281	_____	24CA281
*	O–RING, BULKHEAD (4) .....	_____	24A383	_____	24A383
*	GASKET, HOURMETER .....	_____	200EAQ715	_____	200EAQ715
*	SEAL–PLUG (2) .....	_____	24A509	_____	24A509
3	METER–HOUR (60 Hz) .....	24CA1994	24CA1994	24CA1994	24CA1994
3	METER–HOUR (50 Hz) .....	24CA1995	24CA1995	24CA1995	24CA1995
4	SWITCH, START/STOP–RESET ... (MOMENTARY) (See Note # 1)	24CA1793	24CA1793	_____	_____
4	SWITCH, ON/OFF/RESET .....	_____	_____	24CA1817	24CA1817
	(MAINTAINED) (See Note # 2)				
*	LAMP, INDICATOR .....	24CA40	24CA40	24CA40	24CA40
*	SWITCH, SELECTOR .....	24CA782	24CA782	24CA782	24CA782
	(LOW DEMAND MODE)				
6	LIGHT–PILOT (DUAL INDICATING) .	24CA552	24CA552	24CA552	24CA552
*	BOX–CONTROL (TIMER) .....	_____	_____	_____	200ESK179
*	GASKET (CONTROL BOX) .....	_____	_____	_____	202ESK715
*	COVER (TIMER) .....	_____	_____	_____	202ESK225
*	GASKET (TIMER COVER) .....	_____	_____	_____	203ESK715
*	TIMER .....	_____	_____	24A482	24A482
*	RELAY .....	24CA541	24CA541	24CA541	24CA541
7	SWITCH–PRESSURE (Oil) .....	88A301	88A301	88A301	88A301
8	SWITCH–TEMP .....	21D234	21D234	21D234	21D234
9	VALVE–SOLENOID .....	91B34	91B34	91B34	91B34
10	REGULATOR .....	88H26	88H26	88H26	88H26
11	GAUGE .....	27P104	27P104	27P104	27P104
12	SWITCH–PRESS (AIR) .....	88A299	88A299	88A299	88A299
13	RELAY, TIMING .....	24CA285	24CA285	24CA285	24CA285
14	RELAY, TIMING (WATER COOLED UNITS ONLY) .....	24CA771	24CA771	24CA771	24CA771
15	BLOCK, END (2) .....	24CA924	24CA924	24CA924	24CA924
16	BLOCK, END (36) .....	24CA925	24CA925	24CA925	24CA925
17	COUPLING–PIPE (5) (BULKHEAD)	64EB368	64EB368	64EB368	64EB368
18	ELBOW–TUBE (3) .....	86E60	86E60	86E60	86360
19	ELBOW–TUBE (1) .....	86E59	86E59	86E59	86359
20	TUBE (6 Ft.) .....	85K3	85K3	85K3	85K3

\* Not shown on illustration

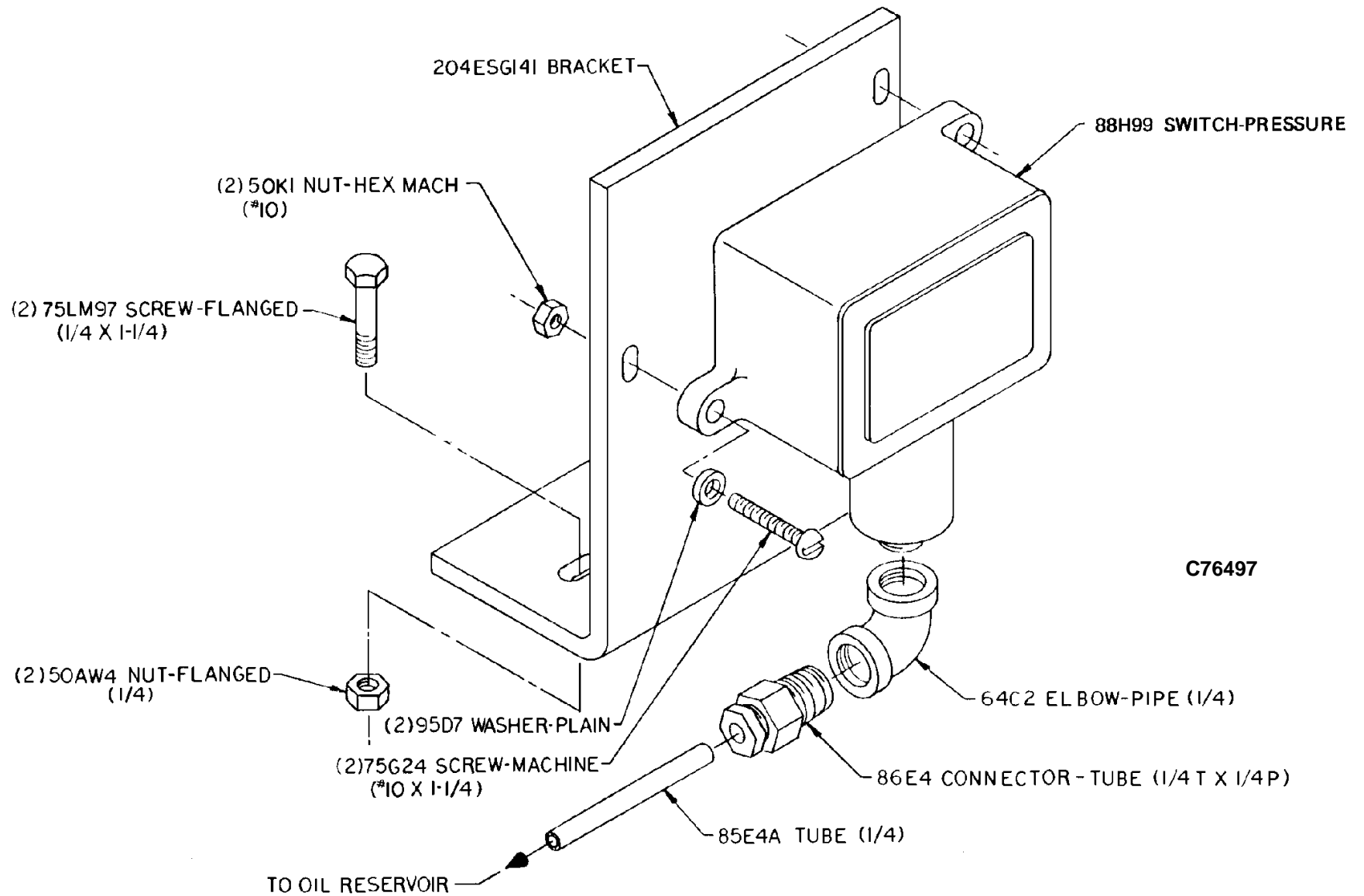
**LOW TORQUE CONTROL  
(Not Shown – See Note # 3)**

COMPLETE ASSEMBLY .....	202EAQ564
MAJOR COMPONENTS	
VALVE–CONTROL (Air) .....	90AR127
VALVE–CONTROL (Flow) .....	90J110
VALVE, SHUTTLE .....	90AR107

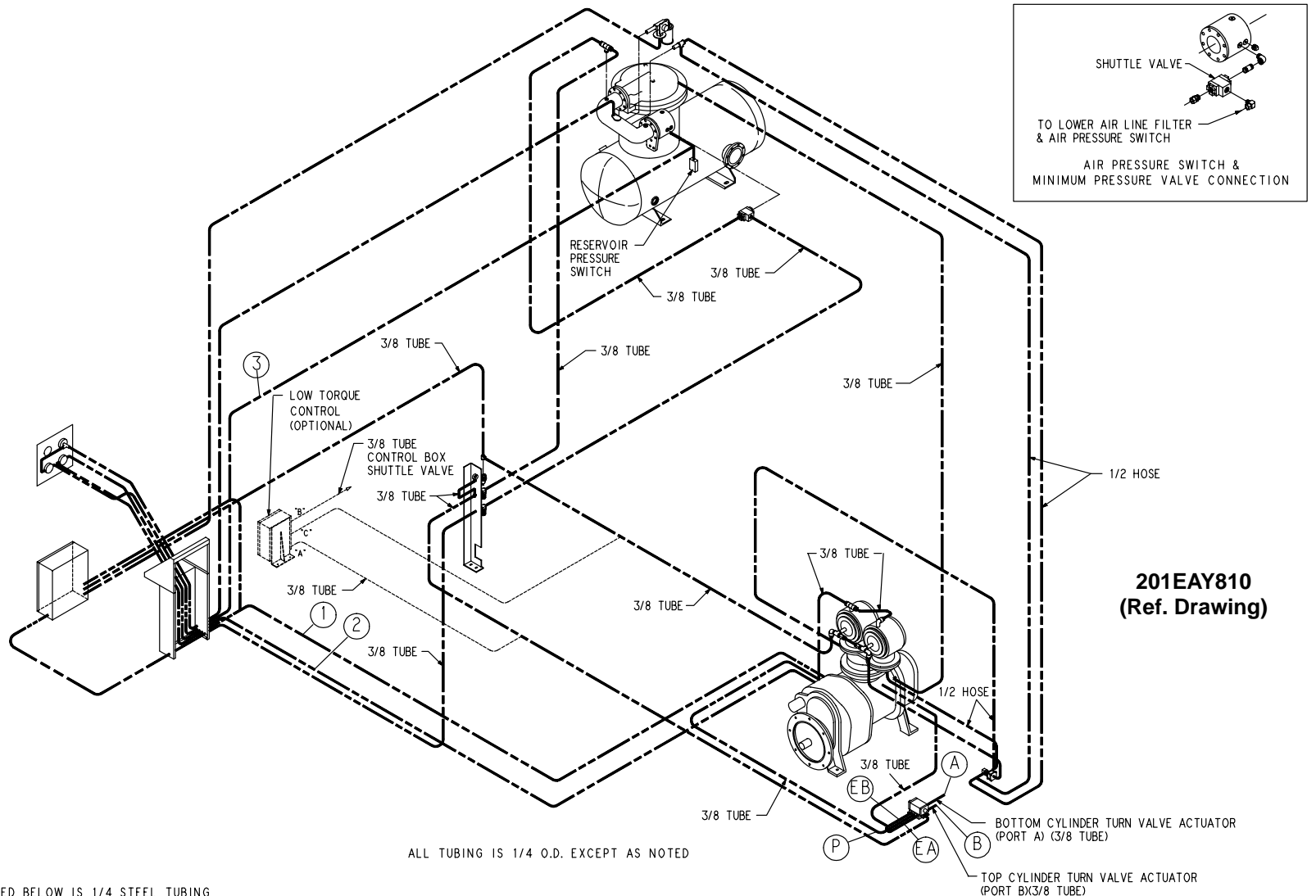
**NOTES:**

- Units equipped with manual starter use Stop/Reset Switch 24CA1478 with 24CA217 and 24CA1297 Contact Blocks.
- 24CA1817 Switch is "Maintained" ON, and "Momentary" RESET.
- Used only when specified on the Order Ticket (Optional Equipment). May be used with either NEMA 1 or NEMA 4 controls.

# OIL RESERVOIR PRESSURE SWITCH



# TUBING SCHEMATIC

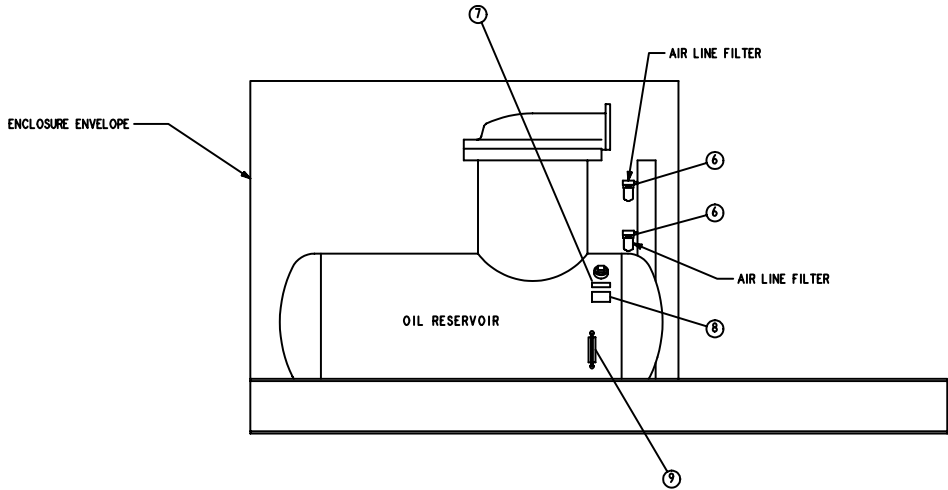


**201EAY810  
(Ref. Drawing)**

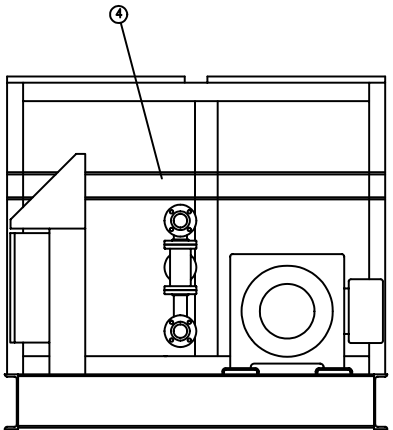
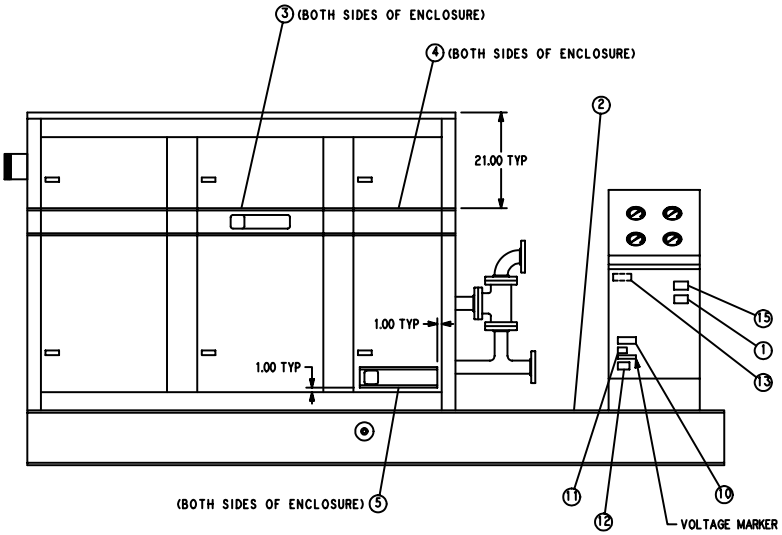
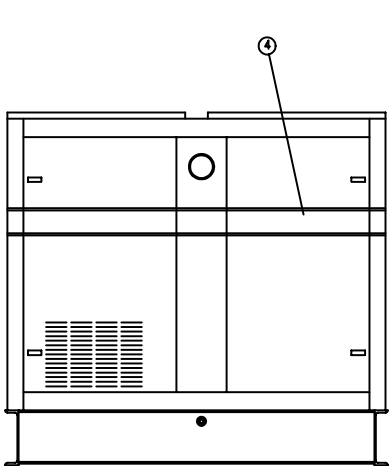
ALL TUBING IS 1/4 O.D. EXCEPT AS NOTED

- NOTE: TUBING LISTED BELOW IS 1/4 STEEL TUBING
1. BASE BULKHEAD TO SUPPORT TEE (ON OIL FILTER PRESSURE DROP LINE)
  2. BASE BULKHEAD TO CONTROL SUPPORT (ON OIL FILTER PRESSURE DROP LINE)
  3. BASE BULKHEAD TO CONTROL SUPPORT (ON OIL SEPARATOR PRESSURE DROP LINE)

IDENTIFICATION AND INSTRUCTION GROUP



256EAY810-B  
(Ref. Drawing)



Order by part number and description. Reference numbers for your convenience only.

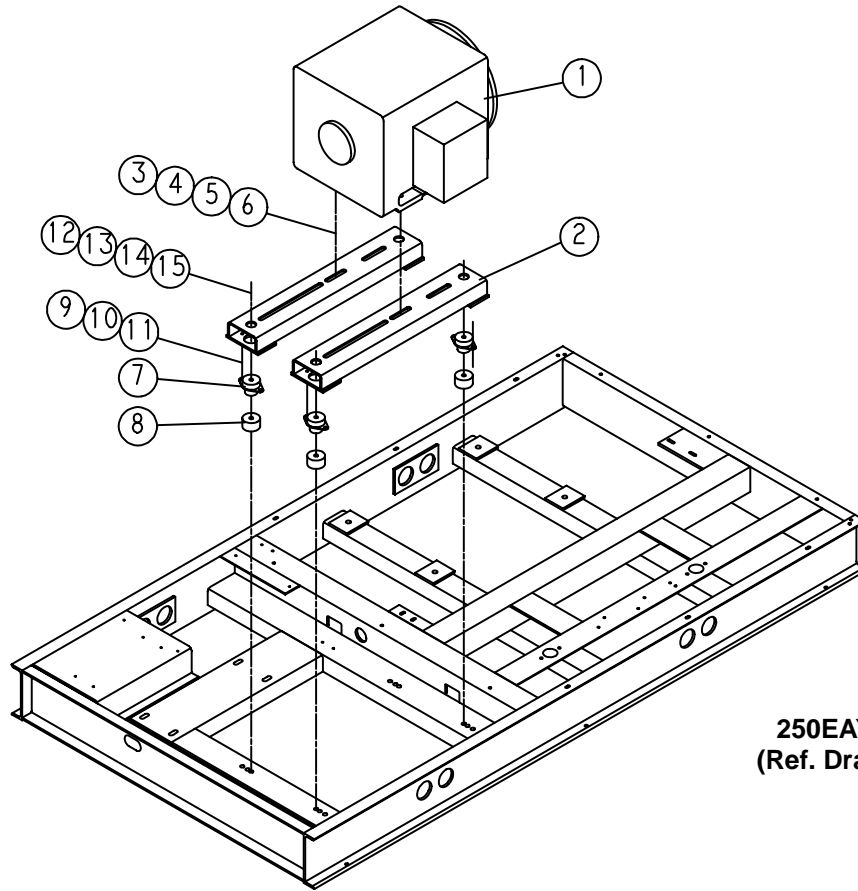
IDENTIFICATION AND INSTRUCTION GROUP

Ref. No.	Name of Part	Qty.	Part No.
1	DECAL-MADE IN USA MADE IN THE USA .....	1	69F64
2	RIVET .....	4	70E13
3 *	DECAL-SAVER .....	1	201EAP077
4 *	DECAL-RIBBON TRIM .....	9	203ESO077
5 *	DECAL-GD SYM/NAME .....	2	204ESO077
6	DECAL-DRAIN MOISTURE DAILY .....	2	205ESO077
7	DECAL .....	1	228EAQ077
8	DECAL-CAUTION .....	1	203ESF077
9	PLATE-DATA .....	1	200ESG454
10	DECAL-DANGER .....	1	209SPH077
11	DECAL-WARNING .....	1	202ESG077
12	DECAL-WARNING-LIVE CIRCUIT .....	1	203ECH077
13	DECAL-PARTS LIST & OPER/SERVICE .....	1	204EDE077
15	DECAL-QUALITY WITHOUT QUESTION .....	1	200EAQ077
16	DECAL-INSIDE CONTROL BOX .....	1	251EAQ077
**	TAG-INSTRUCTION .....	1	314EAQ077

\* Both sides of enclosure.

\*\* Not shown on illustration.

Order by Part Number and Description. Reference Numbers are for your convenience only.



250EAY810  
(Ref. Drawing)

**MOTOR MOUNTING GROUP**

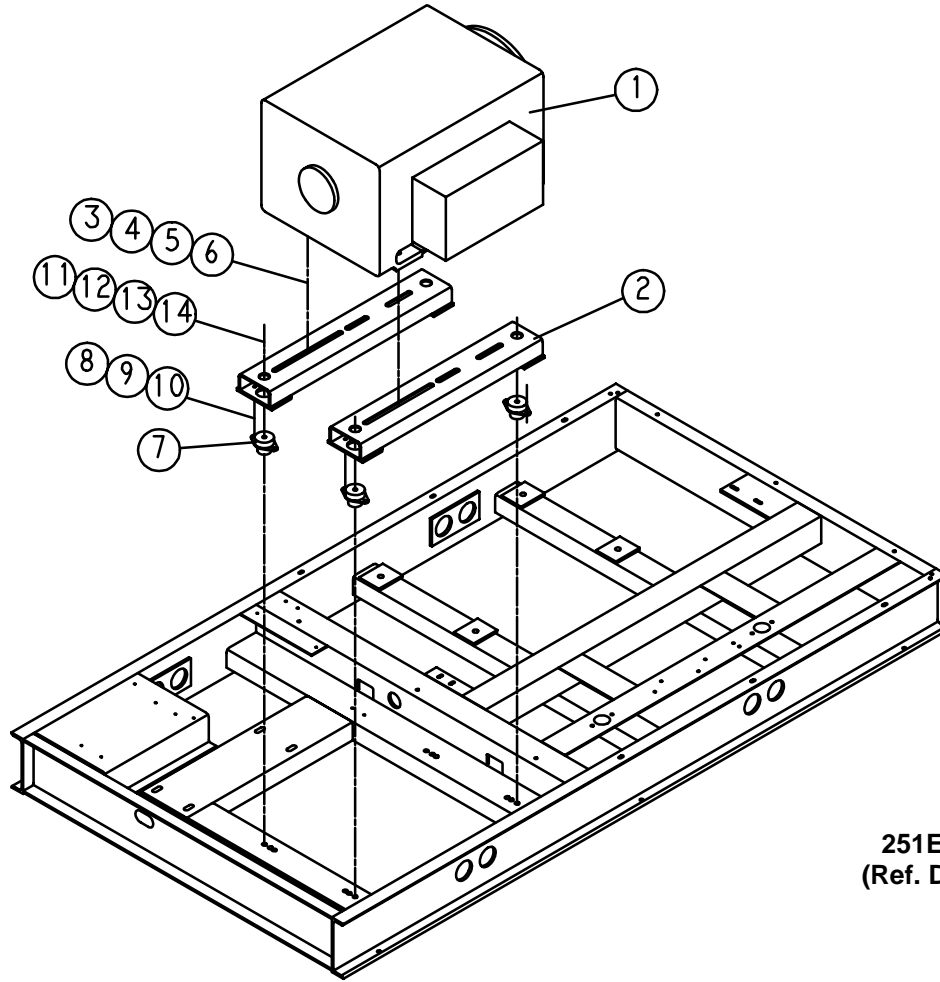
Ref. No.	Name of Part	Qty.	Part No.
1	MOTOR .....	1	*
2	RAIL .....	2	201EAY095
3	SCREW .....	4	655EG110
4	WASHER .....	8	95A8
5	LOCKWASHER .....	4	95B8
6	NUT .....	4	50B8
7	ISOLATOR-VIBRATION .....	4	49C48
8 **	SPACER .....	4	200ESV144
9	SCREW .....	8	655EE060
10	LOCKWASHER .....	8	95B5
11	NUT .....	8	50B5
12 ***	SCREW .....	4	655EG260
13	WASHER .....	8	95A8
14	LOCKWASHER .....	4	95B8
15	NUT .....	4	50B8

\* Selective item. See page 58.

\*\* Not used on 500 HP 4160V ODP Motor.

\*\*\* 655EG200 used on 500 HP 4160V ODP Motor.

Order by Part Number and Description. Reference Numbers are for your convenience only.



251EAY810  
(Ref. Drawing)

MOTOR MOUNTING GROUP – 500 HP – 4160 VOLT

Ref. No.	Name of Part	Qty.	Part No.
1	MOTOR .....	1	24CA2889
2	RAIL .....	2	201EAY095
3	SCREW .....	4	655EG110
4	WASHER .....	8	95A8
5	LOCKWASHER .....	4	95B8
6	NUT .....	4	50B8
7	ISOLATOR-VIBRATION .....	4	49C48
8	SCREW .....	8	655EE060
9	LOCKWASHER .....	8	95B5
10	NUT .....	8	50B5
11	SCREW .....	4	655EG200
12	WASHER .....	8	95A8
13	LOCKWASHER .....	4	95B8
14	NUT .....	4	50B8

**MOTOR SELECTIVES**

**(From page 56)**

350 HP, 460 VOLT, ODP, 60 HZ .....	24CA786
350 HP, 2300 VOLT, ODP, 60 HZ .....	24CA787
350 HP, 4000 VOLT, ODP, 60 HZ .....	24CA847
350 HP, 4160 VOLT, ODP, 60 HZ .....	24CA849
400 HP, 460 VOLT, ODP, 60 HZ .....	24CA788
400 HP, 2300 VOLT, ODP, 60 HZ .....	24CA789
400 HP, 4000 VOLT, ODP, 60 HZ .....	24CA1313
500 HP, 460 VOLT, ODP, 60 HZ .....	24CA791
500 HP, 2300 VOLT, ODP, 60 HZ .....	24CA1314
500 HP, 4000 VOLT, ODP, 60 HZ .....	24CA1314
500 HP, 4160 VOLT, ODP, 60 HZ .....	24CA2889

**REPAIR KITS**

Name of Part	Qty.	Part No.
ROUTINE MAINTENANCE KIT – HEAVY DUTY AIR FILTER		
(Includes next five items) .....		EAY68417
AIR FILTER .....	2	2009590
OIL FILTER .....	3	26A43
ELEMENT, OIL FILTER .....	3	2109086
O-RING, OIL FILTER .....	1	25BC140
INDICATOR-ASSEMBLY .....	1	2109125
SEPARATOR KIT (Includes next six items) .....		
OIL SEPARATOR .....	1	55B30
TUBE .....	3 FT.	85G3
PLUG, PIPE .....	1	64AA6
UNION, TUBE .....	1	86E48
CONNECTOR, TUBE .....	1	86E4
GASKET .....	1	25C807N
PNEUMATIC CONTROLS & GAUGES (Includes next eleven items) .....		
PRESSURE REGULATOR .....	1	88H26
GAUGE .....	1	2009562
THERMOMETER .....	1	93F2
PRESSURE GAUGE .....	1	27P45
ELEMENT .....	2	2109620
O-RING .....	2	2116000
CONTROL VALVE .....	1	90AR107
CONTROL VALVE .....	1	90AR262
AIR CONTROL VALVE .....	1	90AR114
AIR CONTROL VALVE .....	1	90AR427
SUBTRACTIVE PILOT VALVE .....	2	2009398
ELECTRICAL CONTROL KIT (Includes next seven items) .....		
PRESSURE SWITCH .....	1	88A299
RELAY .....	1	24CA285
PRESSURE SWITCH .....	1	88A301
SOLENOID VALVE .....	1	91B34
TEMPERATURE SWITCH .....	1	21D234
PRESSURE SWITCH .....	1	88H99
ELECTRICAL PROBE .....	2	21D235
DRIVE COUPLING KIT (Includes next item) .....		
CUSHION, COUPLING .....	6	2109118
LUBRICANT (AEON 9000 SP)		
5 GALLON PAIL .....		28H109
55 GALLON DRUM .....		28H110
TOUCH-UP PAINT		
5 GALLON PAIL .....		28H76
1 GALLON CAN .....		28H84
1 QUART CAN .....		28H83

**REPAIR KITS (Continued)**

Name of Part	Qty.	Part No.
PERIODIC OVERHAUL KIT (Includes next twelve items) .....		202SSY6013
GASKET KIT (See below) .....	1	200SSY6007
ROLLER BEARING .....	1	12BA109
ROLLER BEARING .....	1	12BA107
ROLLER BEARING .....	1	12BA108
KEY .....	1	35L20
ROLLER BEARING .....	1	12BA47
ROLLER BEARING .....	2	12BA37
KEY .....	1	35L14
OIL SEAL .....	1	60DD695
OIL SEAL .....	1	60DD694
BEARING .....	2	12J43
KEY-WOODRUFF .....	1	35D2
GASKET KIT (Includes next sixteen items) .....		200SSY6007
GASKET .....	1	208SSY715N
GASKET-RING .....	5	25F13
SHIM .....	1	77H65
GASKET .....	1	201SSY715N
GASKET .....	1	200SSY715N
O-RING .....	1	25BC109
SHIM .....	8	203SSY732
SHIM .....	16	204SSY732
SHIM .....	16	205SSY732
SHIM .....	8	207SSY732
SHIM .....	8	208SSY732
O-RING .....	1	54C210
O-RING .....	1	25BC114
GASKET .....	1	25BC138N
PACKING-RING .....	1	60AM46
SEAL-FASTENER .....	1	60DD65
PERIODIC MAINTENANCE (Includes next eight items) .....		EAY68806
ELEMENT, MIXING VALVE .....	2	2109366
O-RING, ELEMENT .....	2	25BC164
GASKET, HOUSING .....	1	2010695
VALVE-DISC .....	1	200SSW067
SPRING, INLET VALVE .....	1	78A365
SPRING, VALVE PISTON .....	1	78A366
RING-PISTON .....	2	65A319
VALVE-DISC .....	1	200SSY067

**REPAIR KITS (Continued)**

Name of Part	Qty.	Part No.
OIL SEAL KIT (Includes next ten items) .....		201SSY6013
OIL SEAL .....	1	60DD695
OIL SEAL .....	1	60DD694
CHECK VALVE .....	1	90AR923
O-RING .....	1	25BC109
SHIM .....	8	203SSY732
SHIM .....	16	204SSY732
SHIM .....	16	205SSY732
SHIM .....	8	207SSY732
SHIM .....	8	208SSY732
WEAR SLEEVE .....	1	200SSY1458
WEAR SLEEVE INSTALLATION AND REMOVAL KIT .....	1	200SSY4017
PULLER .....	1	200SSY219
PLATE-PULLER .....	1	200SSY340
SCREW .....	1	655EE030
SCREW .....	1	655EE120
SCREW .....	2	75D179
GUIDE .....	1	200SSY450
TOOL .....	1	200SSY074
WATER TEMPERATURE REGULATOR (OPTIONAL) .....		EAU77011
MAGNETIC WATER SHUTOFF VALVE – NEMA 1 (OPTIONAL .....		EAU77015
MAGNETIC WATER SHUTOFF VALVE – NEMA 4 (OPTIONAL .....		EAU77016

**Gardner**  

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