

**Hydraulic Elevator  
w/ Type 35BA  
Hydraulic Machine**

**Spare Parts Leaflet**

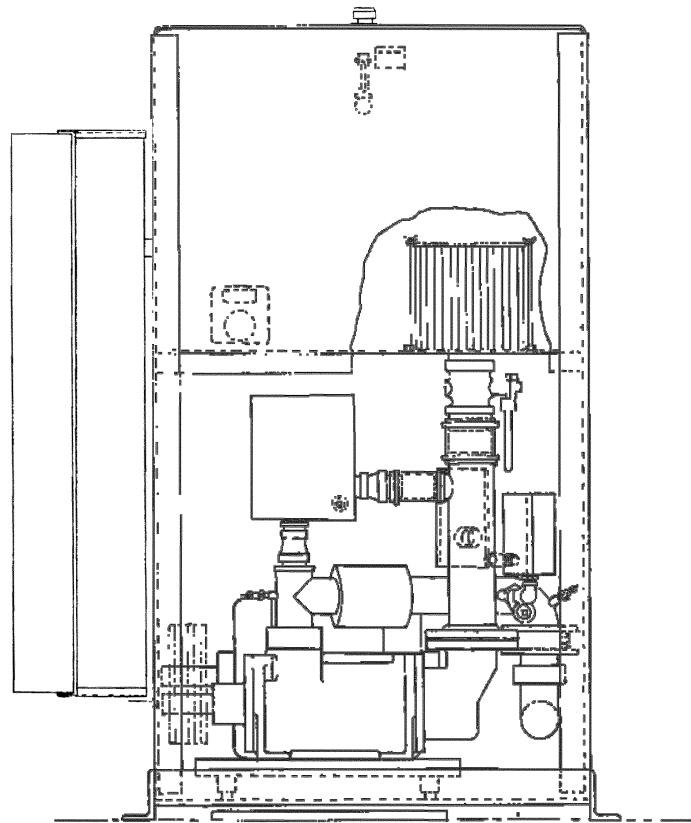
**C-1080**

**September 28, 2022 / Page 1 of 14**

# OBSOLESCENCE NOTICE

The product covered in this SPL has been designated as obsolete and is no longer supported. See TIP 32.2-1, *Obsolete Components*, for potential upgrade. Replacement lower-level parts listed within and unique to this design will be reviewed for obsolescence.

New York Design



**Typical Illustration**

NOTE: For Lubrication and Hydraulic Oil, see Lubrication Chart #2422H.  
Order Form O-352H

**OTIS**

This document does not contain any  
technical data subject to EAR or ITAR

**SERVICE ENGINEERING**

**Otis Elevator Company**

**Bloomfield, Connecticut USA**

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**Leaflet Description**

This leaflet provides information for replacement parts for the New York Design hydraulic elevator, also known as plunger electric elevator, with type 35BA machine, belt driven pump and EECO valves.

**Leaflet Revisions**

<b>Date Revised</b>	<b>Subject Matter Expert</b>	<b>Reason for Revision</b>
December 31, 1970	---	---
July 01, 1997	---	---
July 31, 2003	Troy Chicoine	Add minor repair kits (p/n AAA27076AX15-17).
May 1, 2004	Troy Chicoine	Corrected typo on page 10.
September 28, 2022	Juan Murillo	Updated to include OBSOLESCENCE note on cover

**Related Drawings**

<b>Drawing No.</b>	<b>Title</b>	<b>Drawing No.</b>	<b>Title</b>
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**Related Documents**

<b>Document ID</b>	<b>Title</b>
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**Subject Matter Expert**

<b>Name</b>	<b>Department</b>
Brian Regan	OSC Service Engineering

**About Spare Parts Leaflets...**

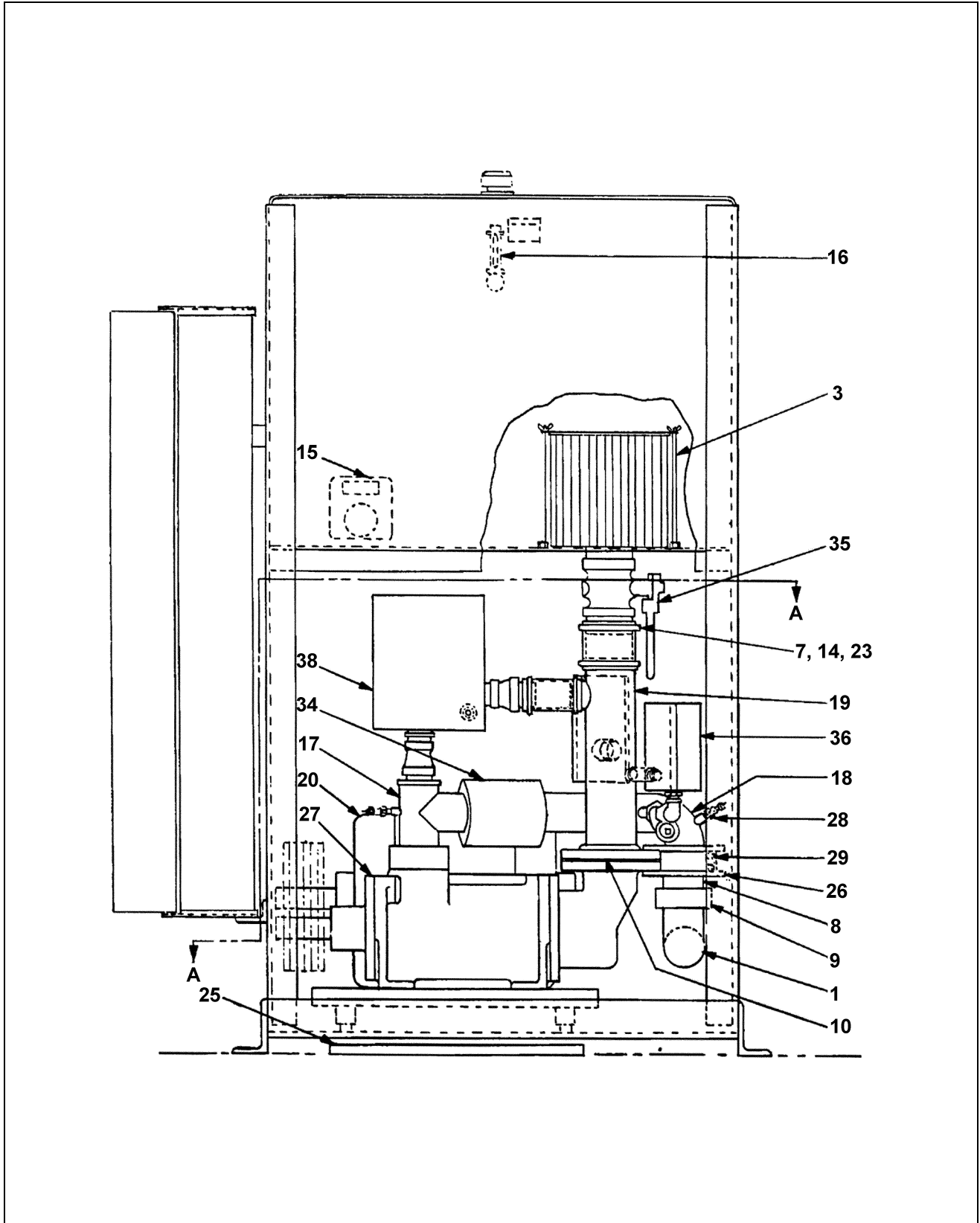
This document lists the lowest replaceable units (LRUs) for the standard version of the product. The LRUs are chosen by a team of Otis associates representing engineering and manufacturing.

While goal of this document is to make parts identification as easy as possible, the document cannot be all-inclusive. Elevator and escalator contracts classified as “special” or “custom” are not addressed here. For such contracts, please refer to specified information, the contract folder, TIPS, Field Education Articles, Construction Letters, etc. for further information.

If you have any suggestions about this document, please contact the subject matter expert listed on this page.

# Type 35BA Hydraulic Machine

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**C-1080****Type 35BA Hydraulic Machine**

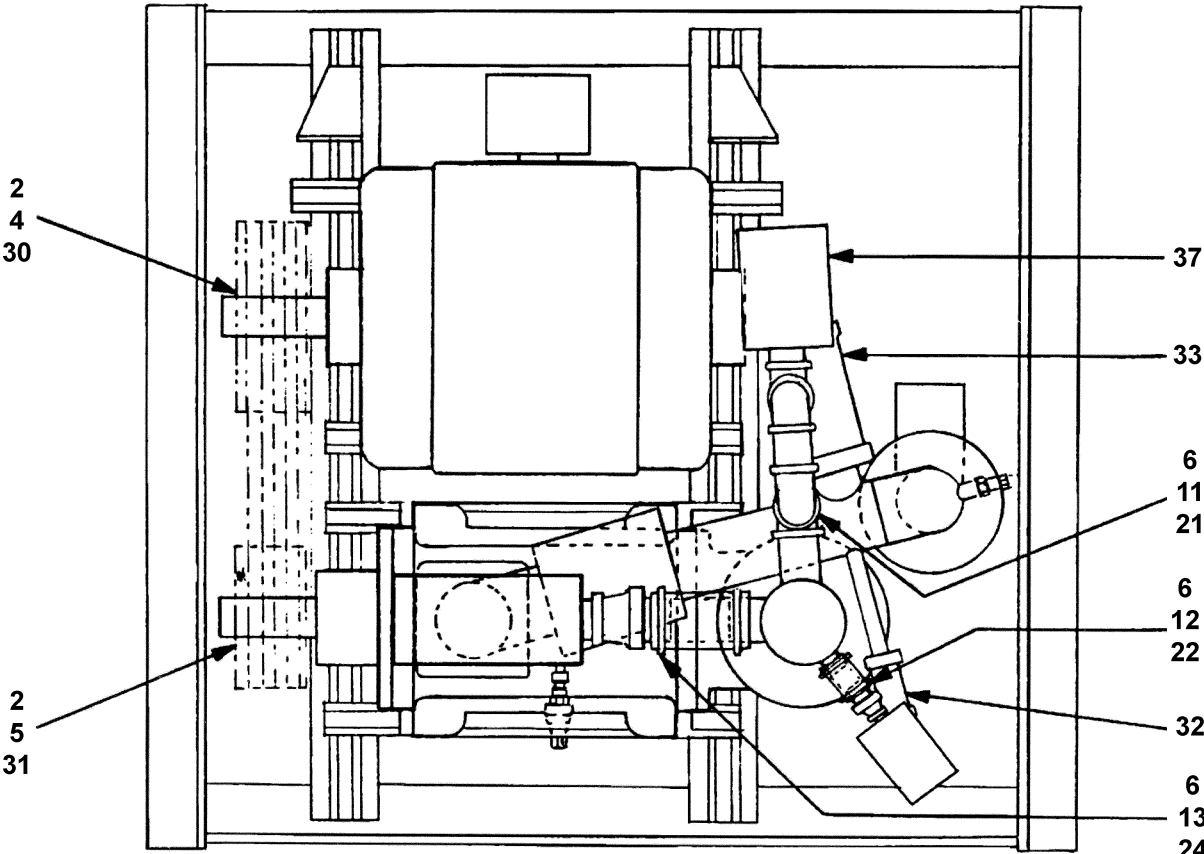
**Type 35BA Hydraulic Machine**  
**Order Form O-352H, R-352H, and R-352H1-2**  
**Material List 2223F31**  
**Drawings 7121A, A7121H**

<b>REF. NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>
1	441AT5	Adapter, Victaulic, 90°, 3" Elbow
3	A254D1	Bonnet, Oil Filter
7	336DY2	Clamp, Hose (Tank Shut-Off Valve)
8	377BX5	Fitting, Isoline, Size 3"
9	441AS5	Fitting, Victaulic, Size 3" Coupling
10	376H13	Gasket, Vellumoid, 9" OD, 4.625" ID, 0.0625" Thick
14	134A41	Hose, Oil, Thermoid, 4.5" ID, 4.125" Long (Tank Shut-Off Valve)
15	2223A63	Heater, Immersion
16	269AW1	Indicator, Oil Level
17	377BT7	Manifold, Vertical Discharge Pipe, 3"
18	A377CB7	Manifold, Horizontal Discharge Pipe, 3"
19	A377BV10	Manifold, Return Pipe, 4" (Used with 1.5" Inlet, Up Valve)
19	A377BV9	Manifold, Return Pipe, 4" (Used with 2" Inlet, Up Valve)
20	---	Motor, 1800 RPM, 3 HP, 60 Hz. See page 9.
23	441AH43	Pipe, Half-Nipple, Std. Steel, 4" x 2" (Tank Shut-Off Valve)
25	437AP1	Pan, Drip
26	386AYR5	Plate, Clamp
27	6962AM4	Pump, Hydraulic IMO-A3DB DeLaval Type 312. See page 10.
28	---	Plug, Shut-Off, Two-Way Hansen 0.25" (2-K16)
29	182W5	Ring, Packing, Neoprene, 4.75" OD, 3.5" ID, 0.625" Thick
34	271W5	Valve, Check, EECO Series 3000, Size 3". See page 10.
35	271AB5	Valve, Butterfly, Tank Shut-Off, 4"
36	---*	Valve, Down-Leveling, EECO DL-3. See page 11.
38	---*	Valve, Bypass, EECO BP-3 (without up-leveling). See page 7.
38	---*	Valve, Up-Leveling, EECO UV-2B. See page 8.
38	---*	Valve, Up-Leveling, EECO UV-3A. See page 8.

\* Part to be used is determined by the car up speed, gross load or empty car weight and plunger. For replacement, give elevator sales number.

# Type 35BA Hydraulic Machine

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Section A-A

**Type 35BA Hydraulic Machine**

**Type 35BA Hydraulic Machine**  
**Order Form O-352H, R-352H and R-352H1-2**  
**Material List 2223F31**  
**Drawings 7121A, A7121H**

<b>REF. NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>
2	---	Belts, V Woods. See page 12.
4	---	Bushing, Motor. See page 12.
5	321DE15	Bushing, Pump. See page 12.
6	336DY1	Clamp, Hose
11*	134A34	Hose, Oil, Thermoid, 1.875" ID, 3.75" Long (Down Valve)
12	134A24	Hose, Oil, Thermoid, 1" ID, 2.25" Long (Down-Leveling Valve)
12	134A25	Hose, Oil, Thermoid, 1" ID, 3.25" Long (Down-Leveling Valve)
13	134A37	Hose, Oil, Thermoid, 2.25" ID, 3.75" Long (Up Valve)
13	134A44	Hose, Oil, Thermoid, 2.75" ID, 5" Long (Up Valve)
21*	441AH18	Pipe, Half-Nipple, Std. Steel, 1.5" x 3.25" (Down Valve)
22	441AH32	Pipe, Half-Nipple, Std. Steel, 0.75" x 1.5" (Down-Leveling Valve)
24	441AH20	Pipe, Half-Nipple, Std. Steel, 2" x 3" (Bypass Valve)
24	441AH41	Pipe, Half-Nipple, Std. Steel, 2.5" x 2" (Bypass Valve)
24	441AH40	Pipe, Half-Nipple, Std. Steel, 2" x 5" (Up Valve)
24	441AH24	Pipe, Half-Nipple, Std. Steel, 2.5" x 4" (Up Valve)
30	---	Sheave, Motor. See page 12.
31	---	Sheave, Pump. See page 12.
32	A441AV2	Strainer, Pipe Line, 0.75" (Down-Leveling Valve)
33	A441AV6	Strainer, Pipe Line, 2" (Down Valve)
37	271BA7	Valve, Down, EECO DL-3. See page 11.

\* Reference indicates location only; part not shown in illustration.

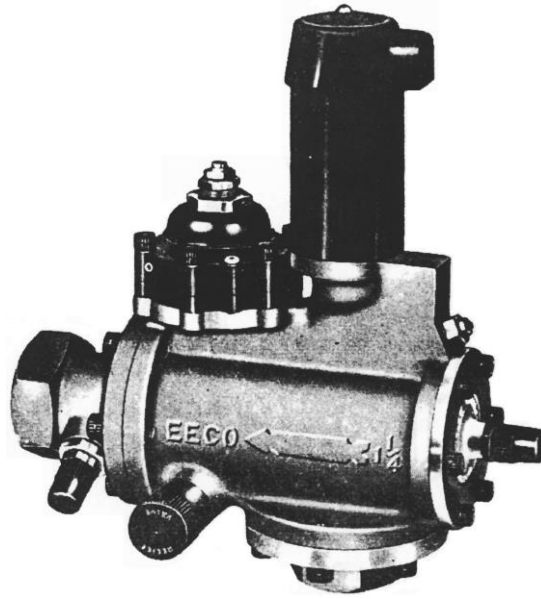
# BP3 Bypass Valve

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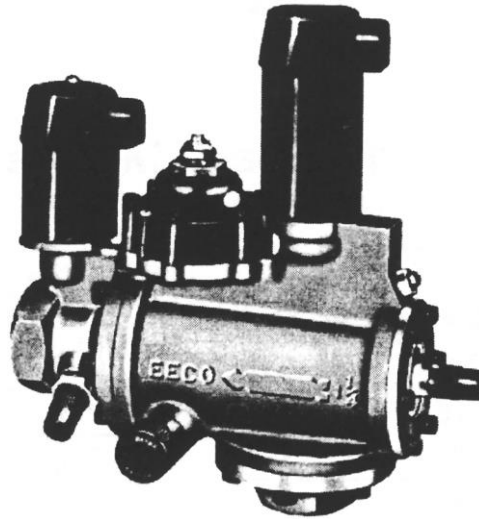


**By-Pass Valve**  
EECO Type BP-3

<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
271J5	1-1/2	Valve, Bypass, EECO Type BP-3
271J6	2	Valve, Bypass, EECO Type BP-3

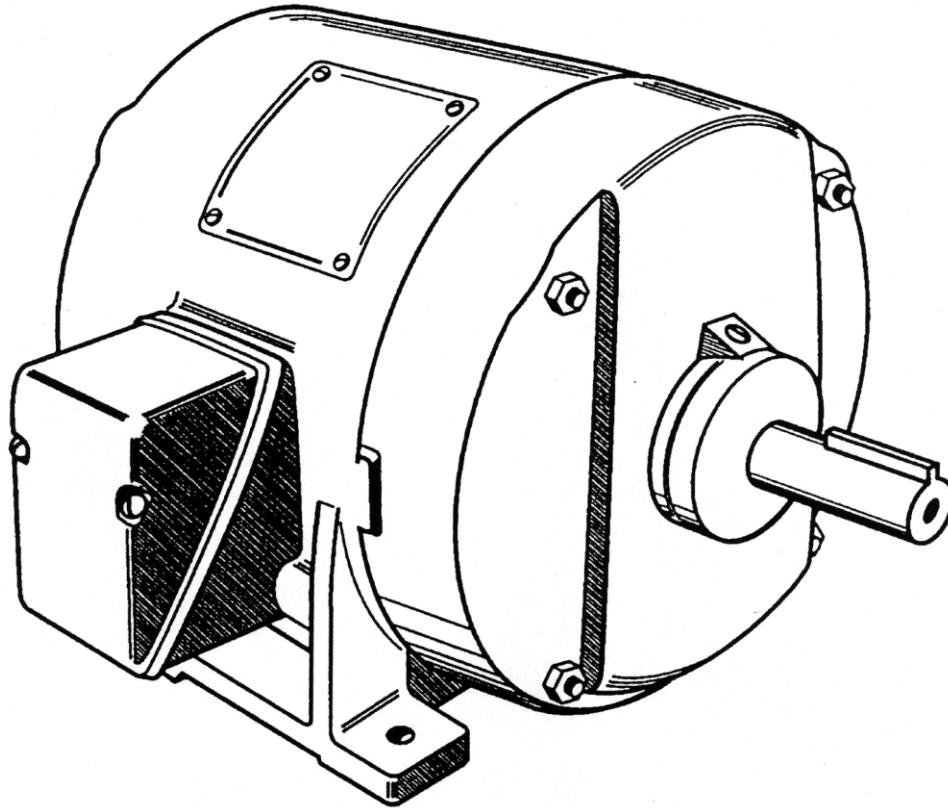
**UV-2B & UV-3A Up-Leveling Valves**

<b>PART NO.</b>	<b>SIZE</b>	<b>INLET</b>	<b>OUTLET</b>	<b>DESCRIPTION</b>
A271P8	1-3/8	1.50"	2"	Valve, Up-Leveling, EECO Type UV-2B
A271P9	1-1/2	1.50"	2"	Valve, Up-Leveling, EECO Type UV-2B
A271P10	1-3/4	2"	2.50"	Valve, Up-Leveling, EECO Type UV-2B
A271P11	2	2"	2.50"	Valve, Up-Leveling, EECO Type UV-2B



<b>PART NO.</b>	<b>SIZE</b>	<b>INLET</b>	<b>OUTLET</b>	<b>DESCRIPTION</b>
A271AA7	1-3/8	1.50"	2"	Valve, Up-Leveling, EECO Type UV-3A
A271AA8	1-1/2	1.50"	2"	Valve, Up-Leveling, EECO Type UV-3A. For replacement, refer to TIP 6.3.0-12.
A271AA9	1-3/4	2"	2.50"	Valve, Up-Leveling, EECO Type UV-3A
A271AA10	2	2"	2.50"	Valve, Up-Leveling, EECO Type UV-3A



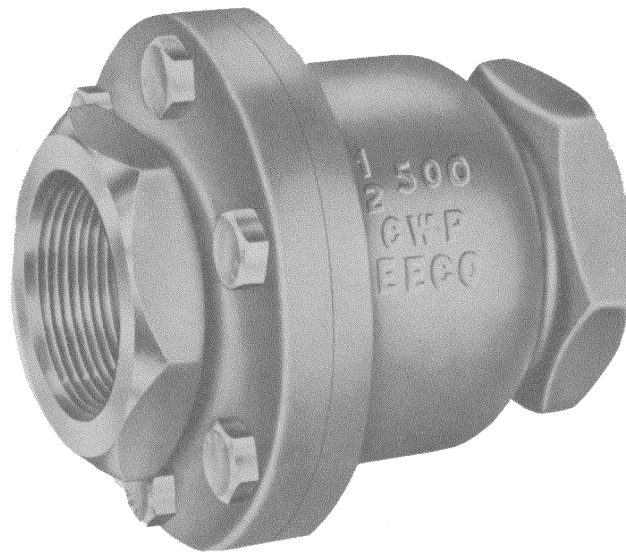


<b>PART NO.</b>	<b>VOLTAGE</b>	<b>NAME PLATE HP</b>	<b>FRAME NO.</b>	<b>DESCRIPTION</b>
6333BC25	208	40	286T	Motor, Single-Speed, 3-Phase, 60 Cycles, AC, 1800 RPM
6333BC26	230/460*	40	286T	
6333BC27	575	40	286T	
6333BC28	208	50	324T	
6333BC29	230/460*	50	324T	
6333BC30	575	50	324T	
6333BC31	208	60	326T	
6333BC32	230/460*	60	326T	
6333BC33	575	60	326T	

\* Specify Voltage.

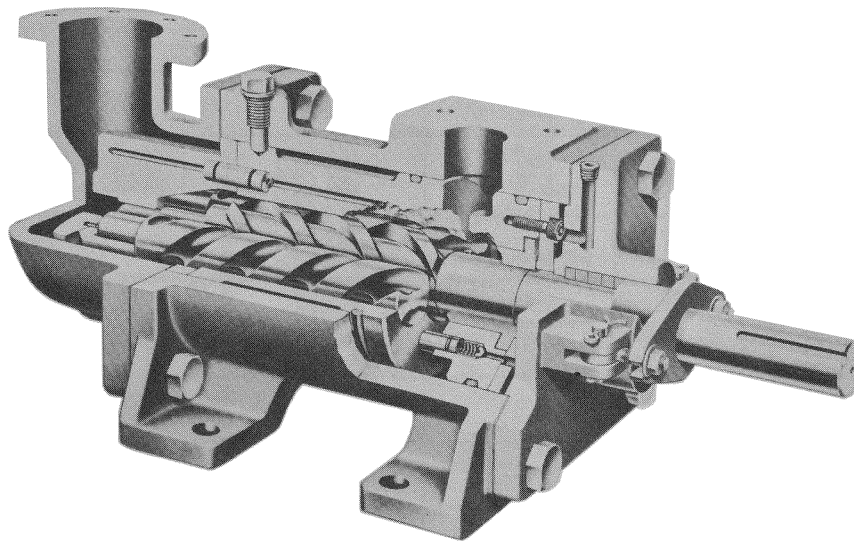
# Check Valve & Pump

**C-1080**

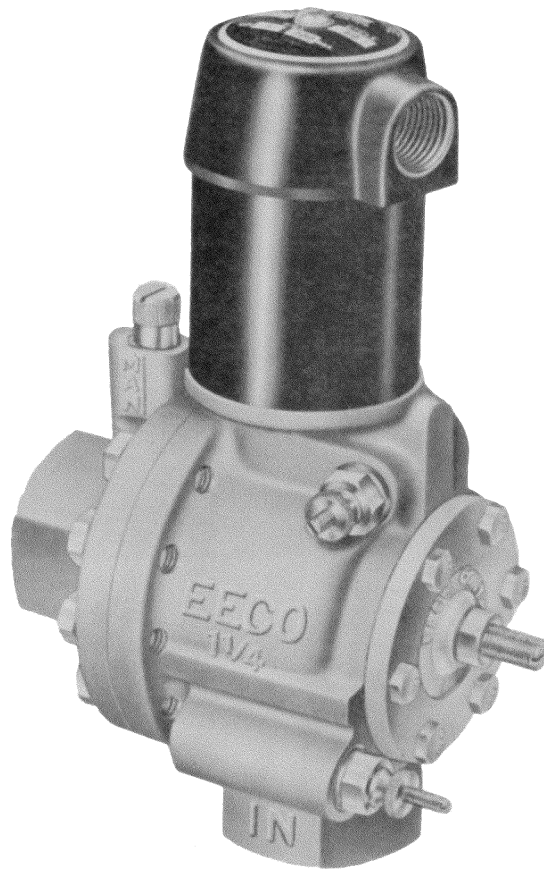


**Check Valve**  
EECO Series 3000

PART NO.	DESCRIPTION
271W5	Valve, Check, EECO Series 3000, Size 3



PART NO.	DESCRIPTION
6926AM4	Pump, DeLaval IMO A3DB Type 312, 222 Gallons per Minute at 2160 RPM; 229 Gallons per Minute at 2220 RPM; and 250 Gallons per Minute at 2400 RPM
AAA27076AX15	Minor Repair Kit, for IMO Pump Model 3DB-312
AAA27076AX16	Minor Repair Kit, for IMO Pump Model A3DB-312
AAA27076AX17	Minor Repair Kit, for IMO Pump Model AG3DB-312



<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
271BA7	1-1/2	Valve, Down, EECO Type DL-3. For replacement, refer to TIP 6.3.0-12.

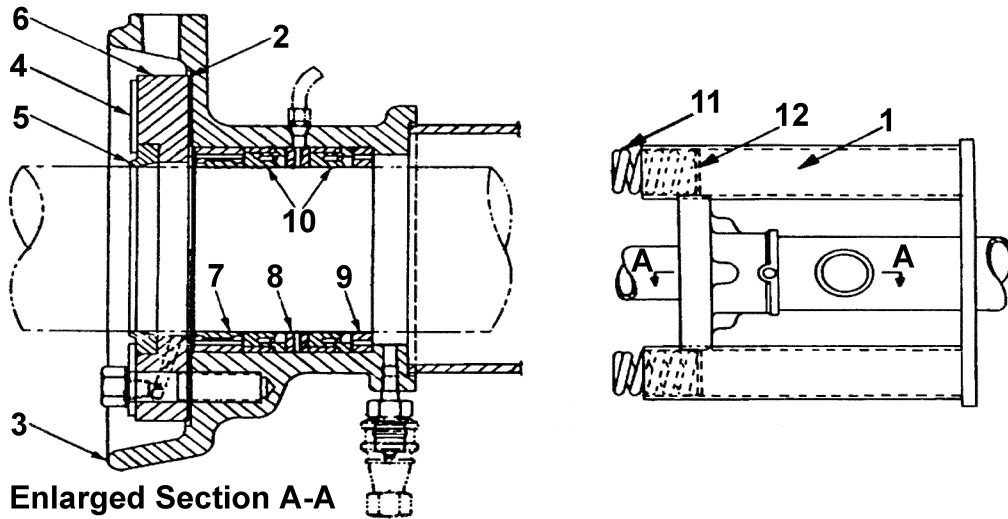
<b>PART NO.</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
271BA2	3/8	Valve, Down-Leveling, EECO Type DL-3.
271BA3	1/2	Valve, Down-Leveling, EECO Type DL-3. For replacement, refer to TIP 6.3.0-12.

## Belts, Bushings, and Sheaves for 35BA Pumping Unit 60 Hz Motor Form O-352H and R352H1

<b>PUMP RPM</b>	<b>BELT V WOODS P/N</b>	<b>MOTOR HP</b>	<b>MOTOR SHEAVE</b>	<b>MOTOR BUSHING</b>	<b>PUMP SHEAVE</b>	<b>PUMP BUSHING</b>
2160	<del>5V560</del> 717A12	40	265BM37	321DE17	265BM32	321DE15
2160	<del>5V560</del> 717A12	50, 60	265BM37	321DE18	265BM32	321DE15
2220	<del>5V560</del> 717A12	50, 60	265BM48	321DE18	265BM31	321DE15
2400	<del>5V560</del> 717A12	50, 60	265BM40	321DE18	265BM32	321DE15

# Cylinder Head Packing & Buffer Data

**C-1080**



**Material List 2223G and 1-2223G**  
**Drawings A6942AA, 1-A6942Y, C6942Y**  
**Order From O-351C, R-351C**

Cylinder Size Pipe ID	Plunger Size Nominal OD	Ref. 1	Ref. 2	8, 9, 10	Ref. 3	Ref. 4	Ref. 5	Ref. 6	Ref. 7	Ref. 8	Ref. 9	Ref. 10	Ref. 11	Ref. 12
		Block 2 Req.	Gasket 1 Req.	Packing	Cylinder Head 1 Req.	Clamp Wiper 1 Req.	Wiper Ring 1 Req.	Clamp Ring 1 Req.	Wear Ring 1 Req.	Jack Pack Lantern Ring 1 Req.	Space Ring 1 Req.	Seal Jack Pack 2 Req.	Spring ** Req.	Washer ** Req.
5"	4"	310C11 310C12*	376NG1	1-A6942Y5	A390AMI	172LK1	172LG1	172LL1	A172KN1	1-172KP1	2-172KP1	4-182R1	* 90KD8 90ND5	127VD14
6"	4.5"	310C11 310C12*	376NG2	1-A6942Y6	A390ANI	172LK2	172LG12	172LL2	A172KN2	1-172KP2	2-172KP2	4-182R2	* 90KD8 90ND5	127VD14
7"	4.5"	310C11 310C12*	376NG2	1-A6942Y6	A390ANI	172LK2	172LG2	172LL2	A172KN2	1-172KP2	2-172KP2	4-182R2	* 90KD8 90ND5	127VD14
8"	5.5"	310C13	376NG3	1-A6942Y7	A390API	172LK3	172LG3	172LL3	A172KN3	1-172KP3	2-172KP3	4-182R3	* 90ND5 90TD4	127VD15
8"	6.5"	310C14	376NG4	1-A6942Y8	A390ARI	172LK4	172LG4	172LL4	A172KN4	1-172KP4	2-172KP4	4-182R4	* 90TD4 90AL2	127XA10
10"	7.5"	310C15	376NG5	1-A6942Y10	A390ASI	172LK5	172LG5	172LL5	A172KN5	1-172KP5	2-172KP16	4-182R5	* 90AL2 90ZD3	127VE8
10"	8.5"	310C15	376NG6	1-A6942Y17	A390ATI	172LK6	172LG6	172LL6	A172KN6	1-172KP6	2-172KP17	4-182R6	* 90AL2 90ZD3	127VE8
12"	9.5"	310C14	376NG7	1-A6942Y18	A390AVI	172LK7	172LG7	172LL7	A172KN7	1-172KP7	2-172KP18	4-182R7	* 90TD4 90AL2	127XA10
12"	10.5"	310C15	376NG8	1-A6942Y19	A390AWI	182LK8	172LG8	182LL8	A172KN8	1-172KP8	2-172KP19	4-182R8	* 90AL2 90ZD3	127VE8
16" (OD)	12.5"	310C15	376NG9	1-A6942Y20	A390AXI	182LK9	172LG9	182LL9	A172KN9	1-172KP9	2-172KP20	4-182R9	90ZD3	127VE8

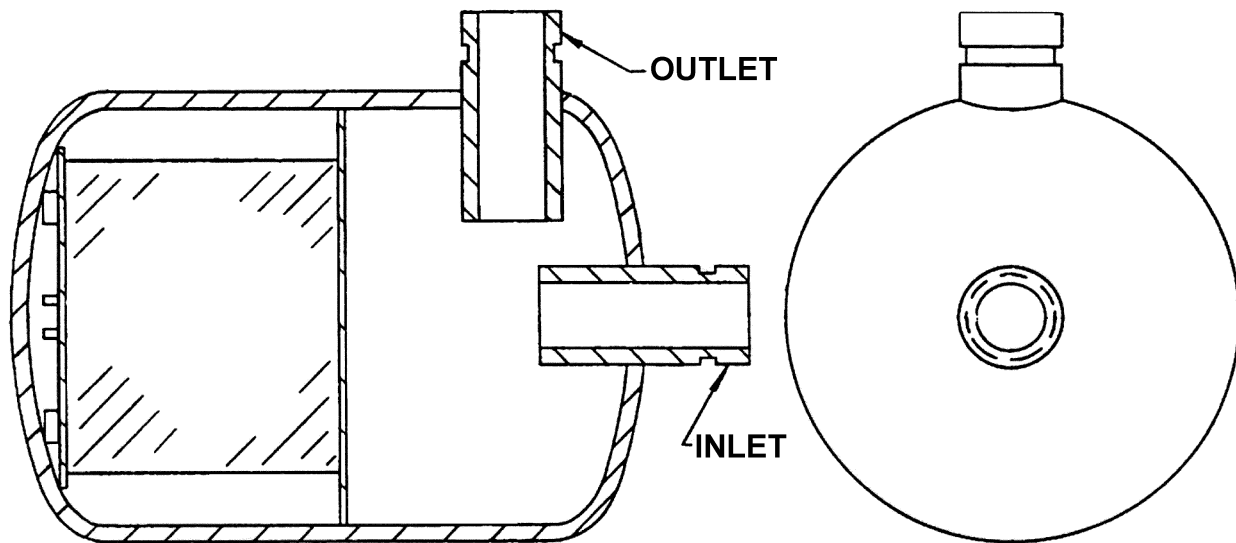
**NOTE:** For cylinder head packing replacement parts, see **SPL 03-6942Y**.

\* Part to be used is determined by the gross load. For replacement, give elevator sales number.

\*\* Quantity variable.

**C-1080**

# Hydraulic Muffler



<b>PART NO.</b>	<b>OD</b>	<b>LENGTH</b>	<b>PIPE SIZE</b>	<b>DESCRIPTION</b>
A441AM4	12.75"	17"	3"	Muffler, Hydraulic
B441AM4	10.75"	17"	3"	Muffler, Hydraulic