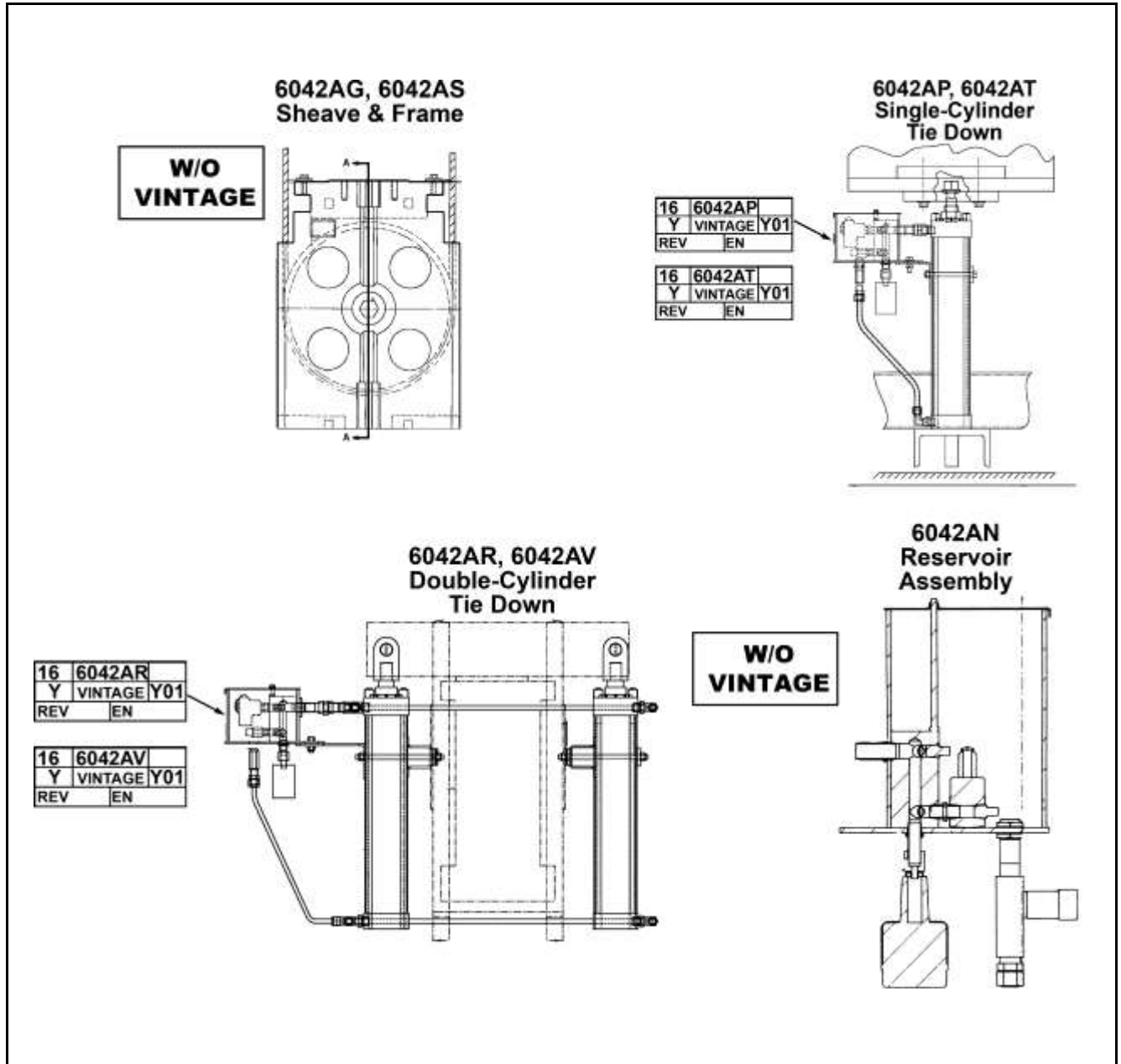


**Free Compensation,
Hydraulic Tie Down,
Single and Dual Cylinder**

Spare Parts Leaflet

16-6042AP

November 17, 2021 / Page 1 of 18



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 addresses the spare parts required for use in the maintenance of compensating sheave frame assemblies. In addition, components used in single and dual hydraulic tie-down compensating sheave frame assemblies are listed. The free compensation sheaves date back as far as 1915. Sheave assembly C-20-SH dates back to 1915. The A265BJ design began at approximately 1964.

Leaflet Revisions

Date Revised	Subject Matter Expert	Reason for Revision
January 1988	Jeff Costley, Technical Writer	New SPL
May 18, 2009	Gary Mendrala	Added hydraulic cylinders and check, throttle, and relief valves.
March 24, 2010	Gary Mendrala	Changed document title; added new sheave assemblies on pages 4, 6–10.
June 20, 2012	Gary Mendrala	Added parts 177CP1, C3059X12, and C3059X8 on p. 15
July 10, 2013	Gary Mendrala	Added AAA6042CK
February 21, 2018	Gary Mendrala	Added new type 6042AN arrangements on p. 18
July 3, 2019	Gary Mendrala	Added p/n 237CC1 on p. 8
April 1, 2020	Gary Mendrala	Corrected p/n 441CN3 on p. 13
November 17, 2021	Gary Mendrala	Added lubricant information

Related Drawings

Drawing No.	Title	Drawing No.	Title
6042AG–AS	Assembly, Compensating Sheave and Frame	6042AP, AT	Assembly and Arrangement, Hydraulic Tie Down, Single Cylinder
6042BY		6042AV, AR	Assembly and Arrangement, Hydraulic Tie Down, Dual Cylinders
6042D–F		6042AN	Assembly, Reservoir
A6042C, E, F		346ABE 346AEF	Cover, Bearing
B6042C–G		265BJ	Sheave
C-20-SH			
207AF	Bearing	495CC 77PY	Shaft
462W	Sleeve	---	---
AAA6042CK	Comp Frame		

(Continued on next page)

History (continued)

16-6042AP

Related Documents

Document ID	Title
SPL 16-AAA25870G	2:1 Counterweight Sheave Assembly
TIP 10.4.1-1	Mono-Mass Device 6042 Hydraulic Tie-Down Compensating Sheave
SWP N-10.4-1	Rope Hydraulic Compensation

Subject Matter Expert

Name	Department
Gary Mendrala	OSC Service Engineering

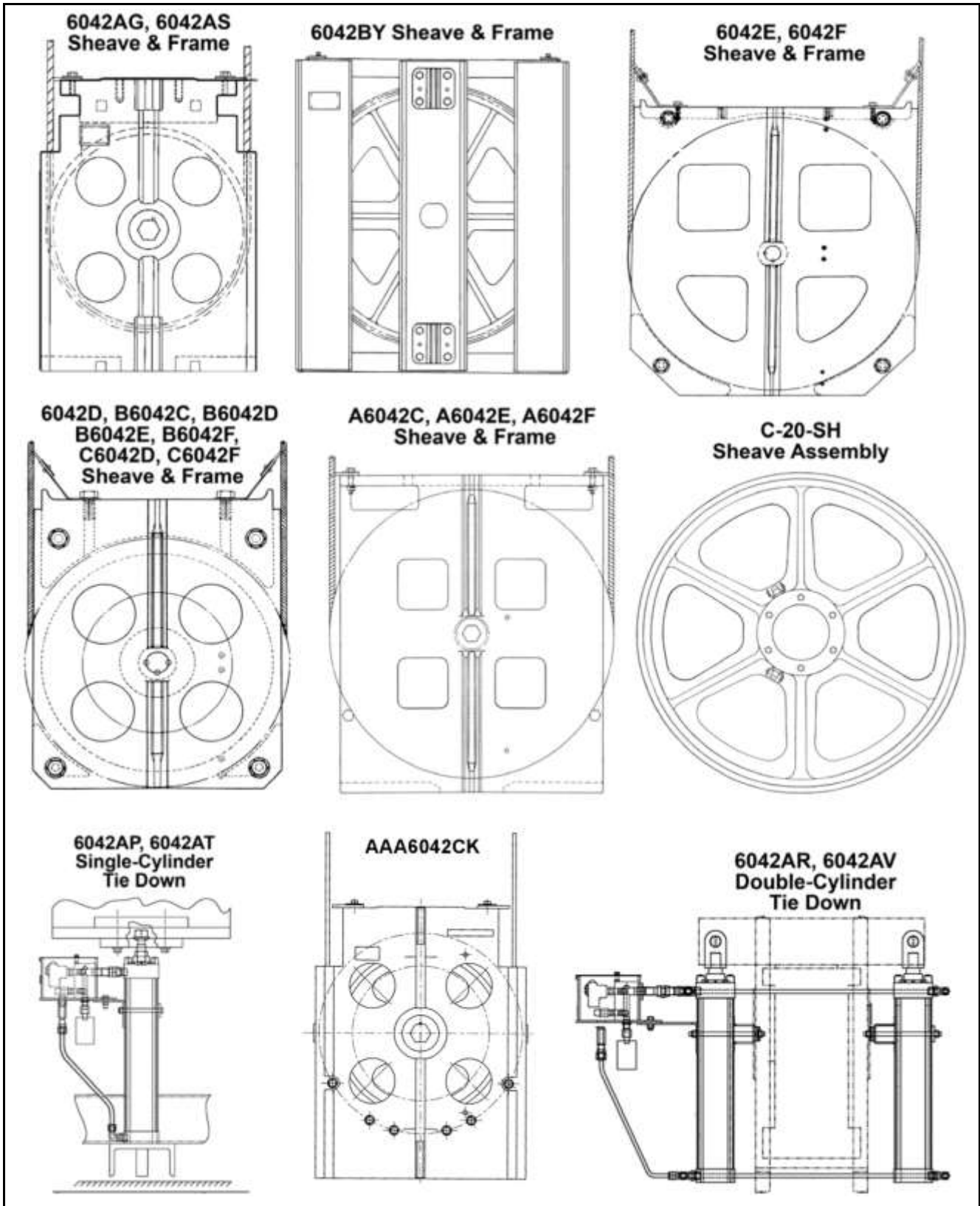
About Spare Parts Leaflets...

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.

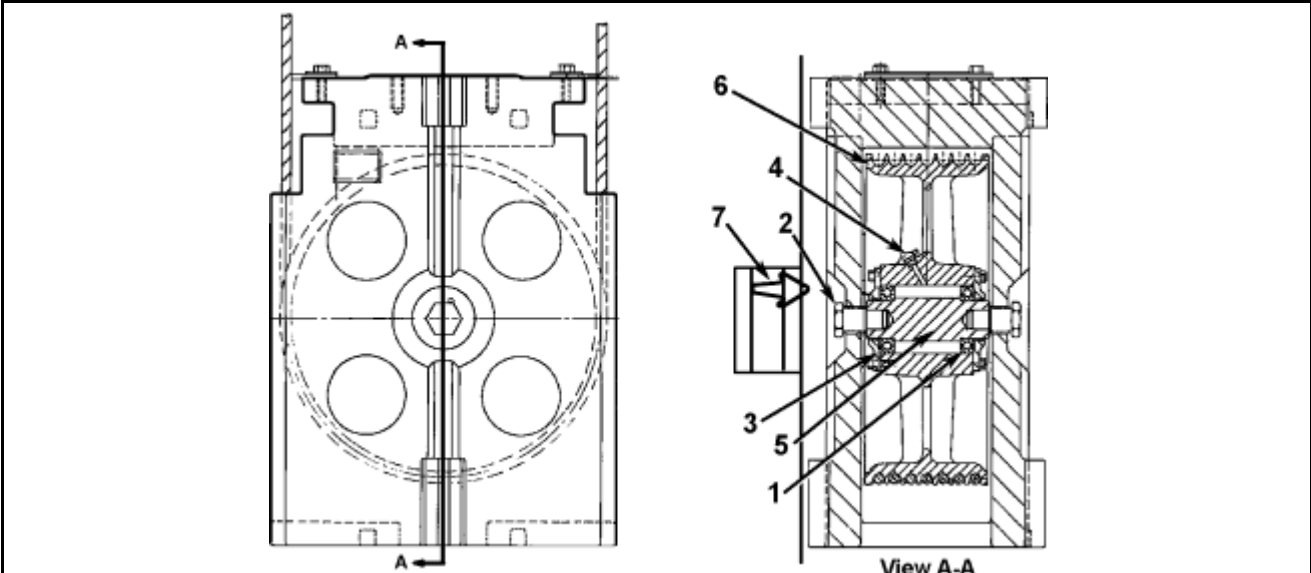
If you have any suggestions about this document, please contact the subject matter expert listed on this page.

Pictorial Depiction of Compensating Sheave and Frame



Compensating Sheave and Frame 6042AG, 6042AS

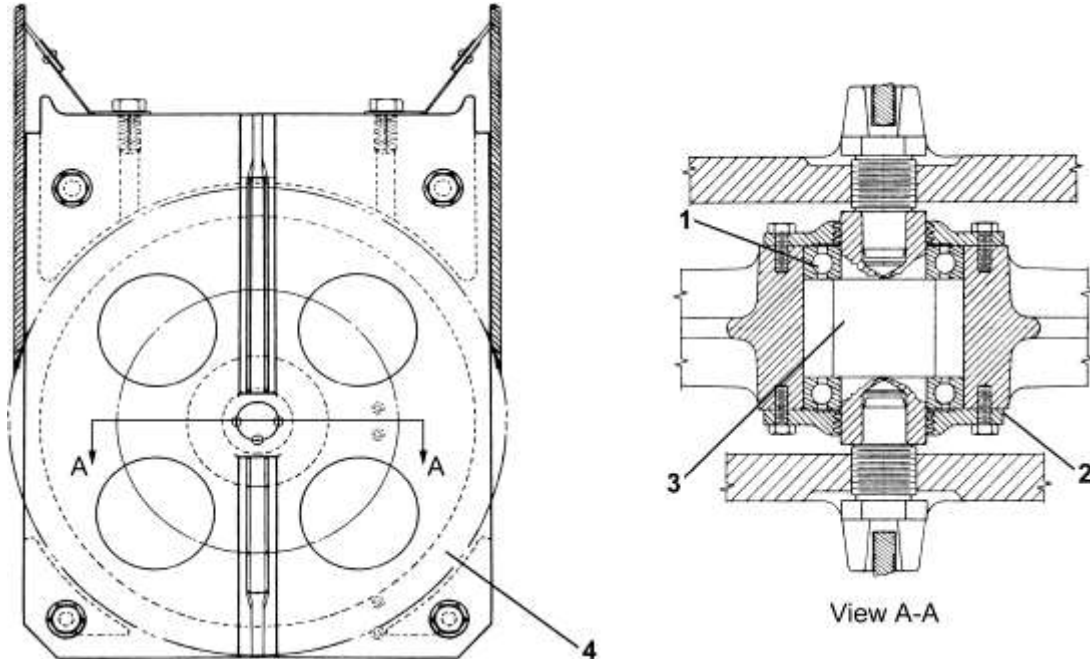
16-6042AP



REF. No.	W/O VINTAGE PART No.	DESCRIPTION
1	207AF4	Bearing
2	59BK1	Bolt, Shaft End
3	346AEF1	Cover, Bearing
4	435B1	Fitting, Lubricator
5	495CC1	Shaft, 6.25 in. Length
	495CC2	Shaft, 7.75 in. Length
6	A265BJ1	Sheave, 24 in. \varnothing , 5, 5/8 in. Ropes
	A265BJ3	Sheave, 24 in. \varnothing , 6, 5/8 in. Ropes
	A265BJ9	Sheave, 30 in. \varnothing , 5, 5/8 in. Ropes
	A265BJ11	Sheave, 30 in. \varnothing , 6, 5/8 in. Ropes
	A265BJ17	Sheave, 35 in. \varnothing , 5, 5/8 in. Ropes
	A265BJ19	Sheave, 35 in. \varnothing , 6, 5/8 in. Ropes
	A265BJ25	Sheave, 20 in. \varnothing , 5, 5/8 in. Ropes
	A265BJ27	Sheave, 20 in. \varnothing , 6, 5/8 in. Ropes
	A265BJ29	Sheave, 28 in. \varnothing , 5, 5/8 in. Ropes
	A265BJ31	Sheave, 28 in. \varnothing , 6, 5/8 in. Ropes
	265BR1	Sheave, 26 in. \varnothing , 5, 5/8 in. Ropes
	265BR2	Sheave, 26 in. \varnothing , 6, 5/8 in. Ropes
265BR3	Sheave, 26 in. \varnothing , 7, 5/8 in. Ropes	
7	6098D3	Switch, Tripper, Detail SPL 05-6098

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Free Compensation 6042D, B6042C, B6042D, B6042E, B6042F, C6042D, C6042F

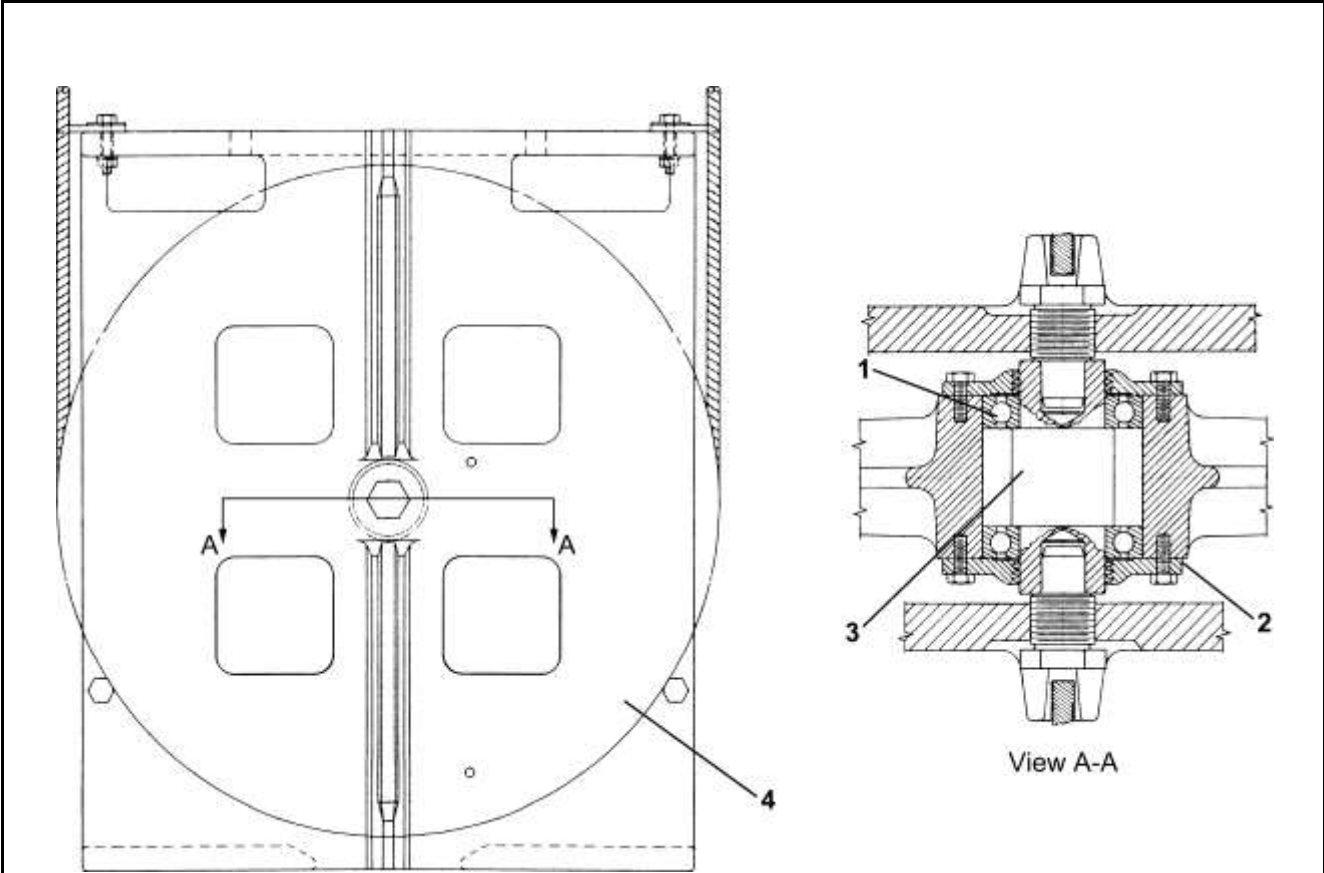


W/O VINTAGE

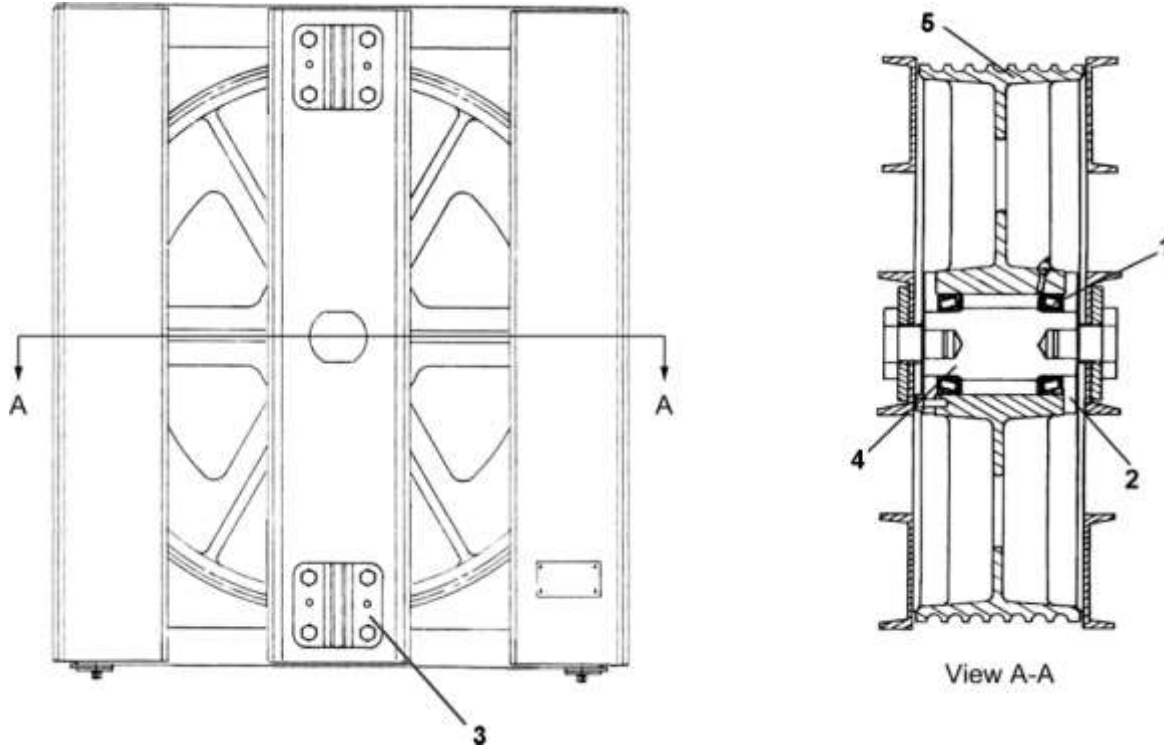
REF. No.	PART No.	DESCRIPTION
1	207AF4	Bearing
2	346AEF1	Cover, Bearing
3	495CC1	Shaft, 6.25 in. Length
4	---	Sheave, 265BJ, for Assy 6042D and B6042C, Contract Specific
	265BJ1	Sheave, for Assy B6042D, 24 in. \varnothing , 5, 5/8 in. Ropes
	265BJ3	Sheave, for Assy B6042D, 24 in. \varnothing , 6, 5/8 in. Ropes
	265BJ9	Sheave, for Assy B6042E, 30 in. \varnothing , 5, 5/8 in. Ropes
	265BJ11	Sheave, for Assy B6042E, 30 in. \varnothing , 6, 5/8 in. Ropes
	265BJ17	Sheave, for Assy B6042F, 35 in. \varnothing , 5, 5/8 in. Ropes
	265BJ19	Sheave, for Assy B6042F, 35 in. \varnothing , 6, 5/8 in. Ropes
	265BJ1	Sheave, for Assy C6042D, 24 in. \varnothing , 5, 5/8 in. Ropes
	265BJ3	Sheave, for Assy C6042D, 24 in. \varnothing , 6, 5/8 in. Ropes
	265BJ17	Sheave, for Assy C6042F, 35 in. \varnothing , 5, 5/8 in. Ropes
	265BJ19	Sheave, for Assy C6042F, 35 in. \varnothing , 6, 5/8 in. Ropes

Free Compensation A6042C, A6042E, A6042F

16-6042AP



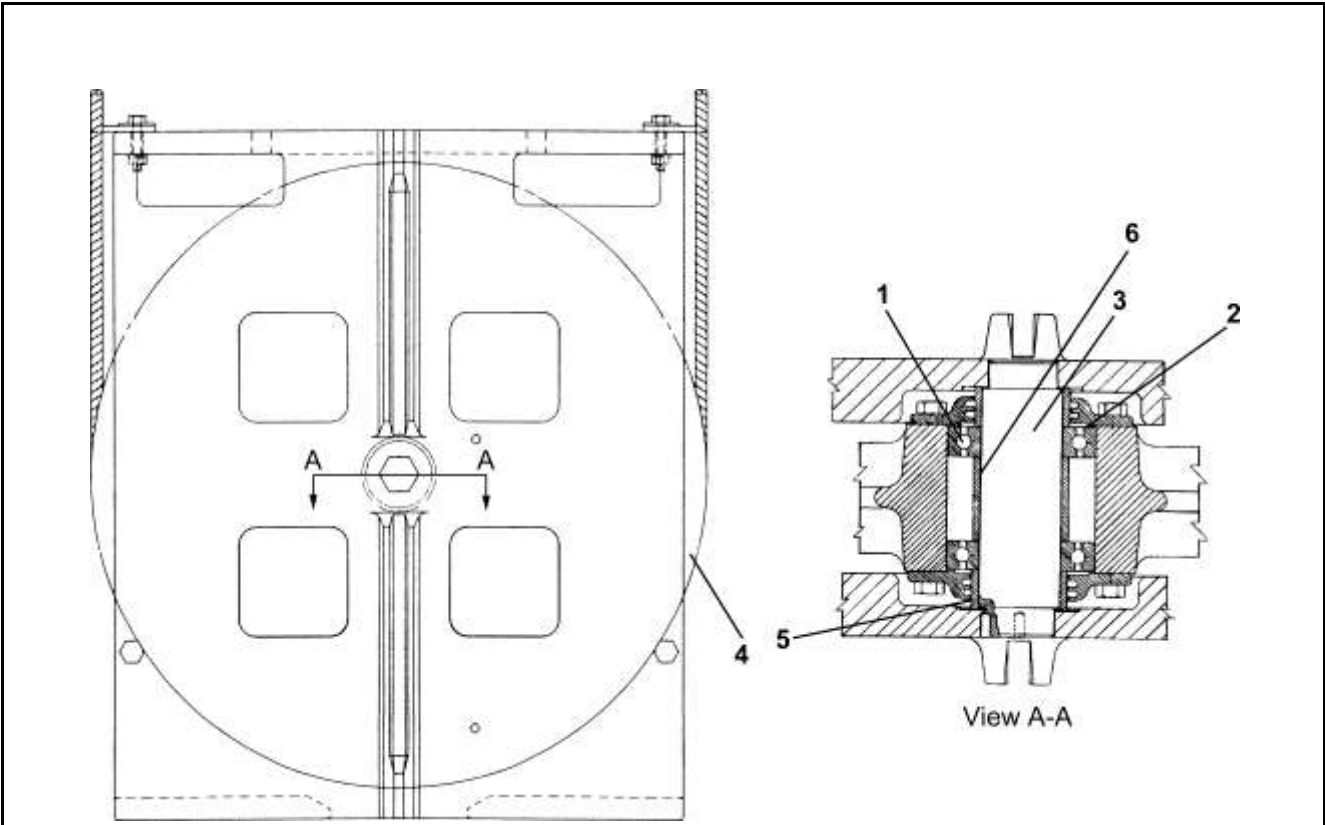
W/O VINTAGE		
REF. No.	PART No.	DESCRIPTION
1	207AF4	Bearing
2	346AEF1	Cover, Bearing
3	495CC1	Shaft, 6.25 in. Length
4	---	Sheave, 265BJ, for Assy A6042C
	265BJ1	Sheave, for Assy B6042D, 24 in. \varnothing , 5, 5/8 in. Ropes
	265BJ9	Sheave, for Assy B6042E, 30 in. \varnothing , 5, 5/8 in. Ropes
	265BJ11	Sheave, for Assy B6042E, 30 in. \varnothing , 6, 5/8 in. Ropes
	265BJ17	Sheave, for Assy B6042F, 35 in. \varnothing , 5, 5/8 in. Ropes



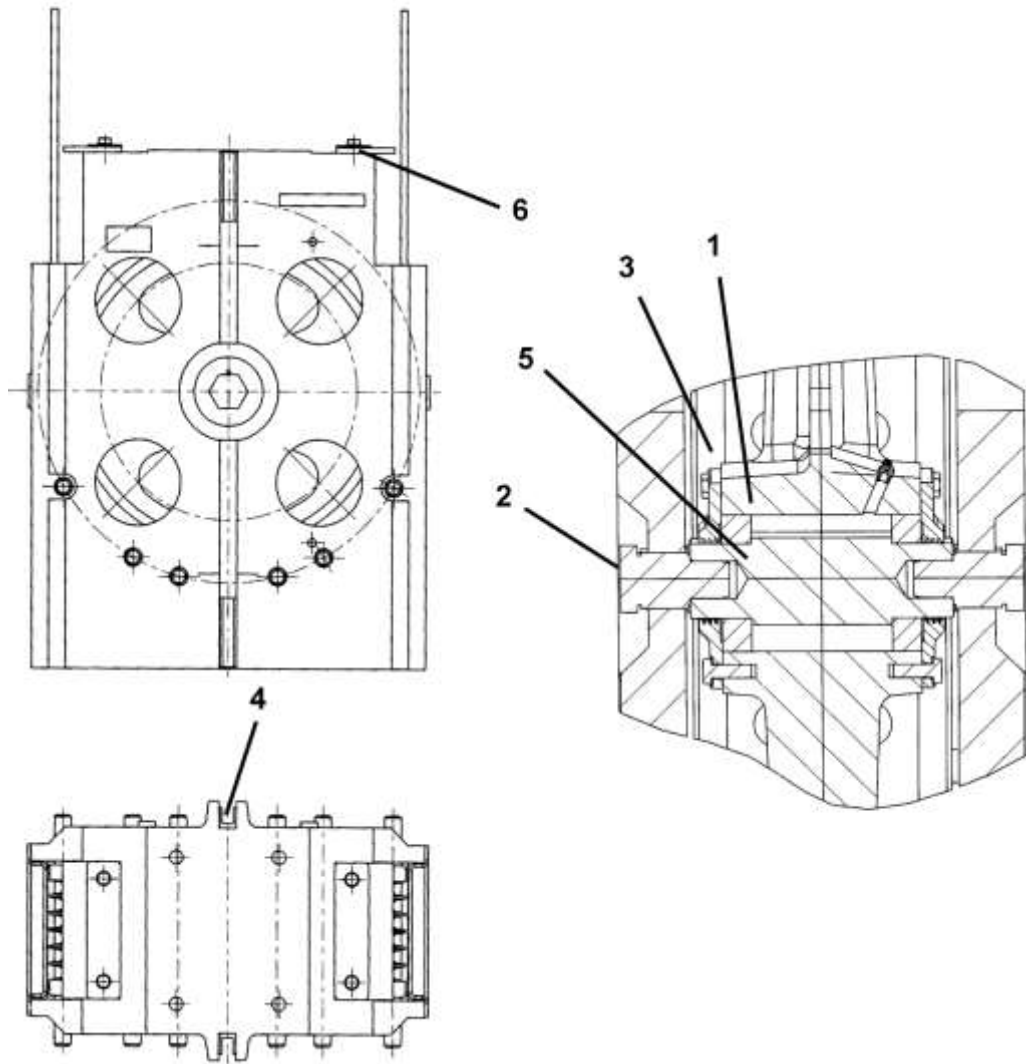
W/O VINTAGE		
REF. No.	PART No.	DESCRIPTION
1	209B15	Bearing
2	346ANN1	Cover, Bearing
3	237CC1	Guide
4	495DR1	Shaft, 11.40 in. Length
5	265BV1	Sheave, 38 in. \varnothing , 5, 5/8–11/16 in. Ropes
	265BV2	Sheave, 38 in. \varnothing , 6, 5/8–11/16 in. Ropes
	265BV3	Sheave, 38 in. \varnothing , 7, 5/8–11/16 in. Ropes
	265BV4	Sheave, 40 in. \varnothing , 5, 5/8–11/16 in. Ropes
	265BV5	Sheave, 40 in. \varnothing , 6, 5/8–11/16 in. Ropes
	265BV6	Sheave, 40 in. \varnothing , 7, 5/8–11/16 in. Ropes

**Free Compensation 6042E,
6042F, B6042G**

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W/O VINTAGE		
REF. No.	PART No.	DESCRIPTION
1	207AF4	Bearing
2	346ABE1	Cover, Bearing
3	77PY1	Shaft, 8.19 in. Length
4	265BJ9	Sheave, for Assy 6042E, B6042G, 30 in. \varnothing , 5, 5/8 in. Ropes
	265BJ11	Sheave, for Assy 6042E, B6042G, 30 in. \varnothing , 6, 5/8 in. Ropes
	265BJ17	Sheave, for Assy 6042F, B6042G, 35 in. \varnothing , 5, 5/8 in. Ropes
	265BJ19	Sheave, for Assy 6042F, B6042G, 35 in. \varnothing , 6, 5/8 in. Ropes
	265BJ1	Sheave, for Assy B6042G, 24 in. \varnothing , 5, 5/8 in. Ropes
	265BJ3	Sheave, for Assy B6042G, 24 in. \varnothing , 6, 5/8 in. Ropes
5	462W50	Sleeve, Outer
6	462W51	Sleeve, Inner



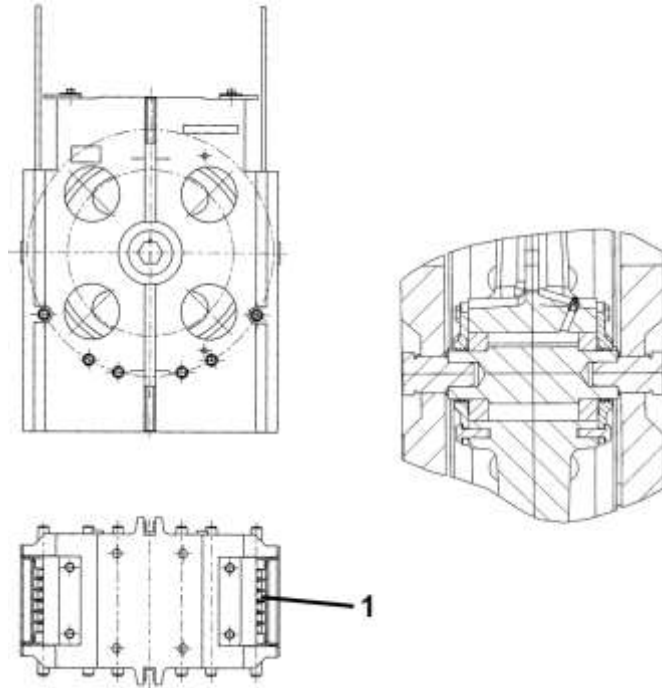
W/O VINTAGE

REF. No.	PART No.	DESCRIPTION
1	207AF4	Bearing
2	AAA65GG1	Bolt
3	AAA346BCG1	Cover, Bearing
4	AAA380CE1	Gib
5	AAA495FC2	Shaft
6	AAA298TG2	Strip

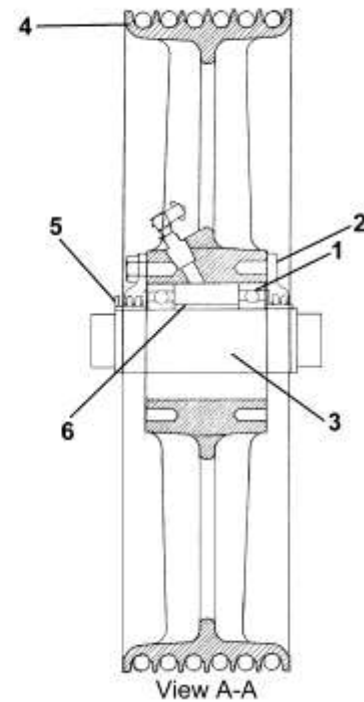
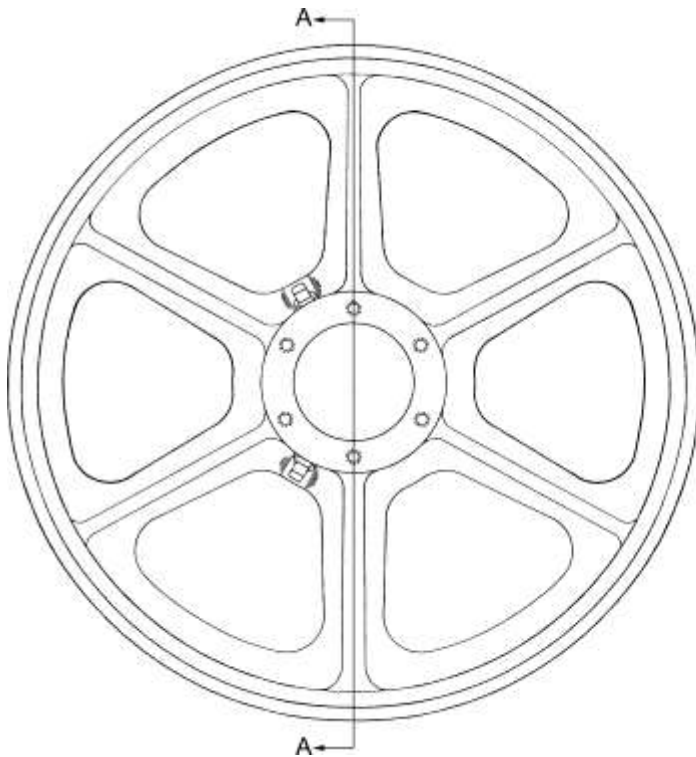
Tied Down Compensation

16-6042AP

AAA6042CK



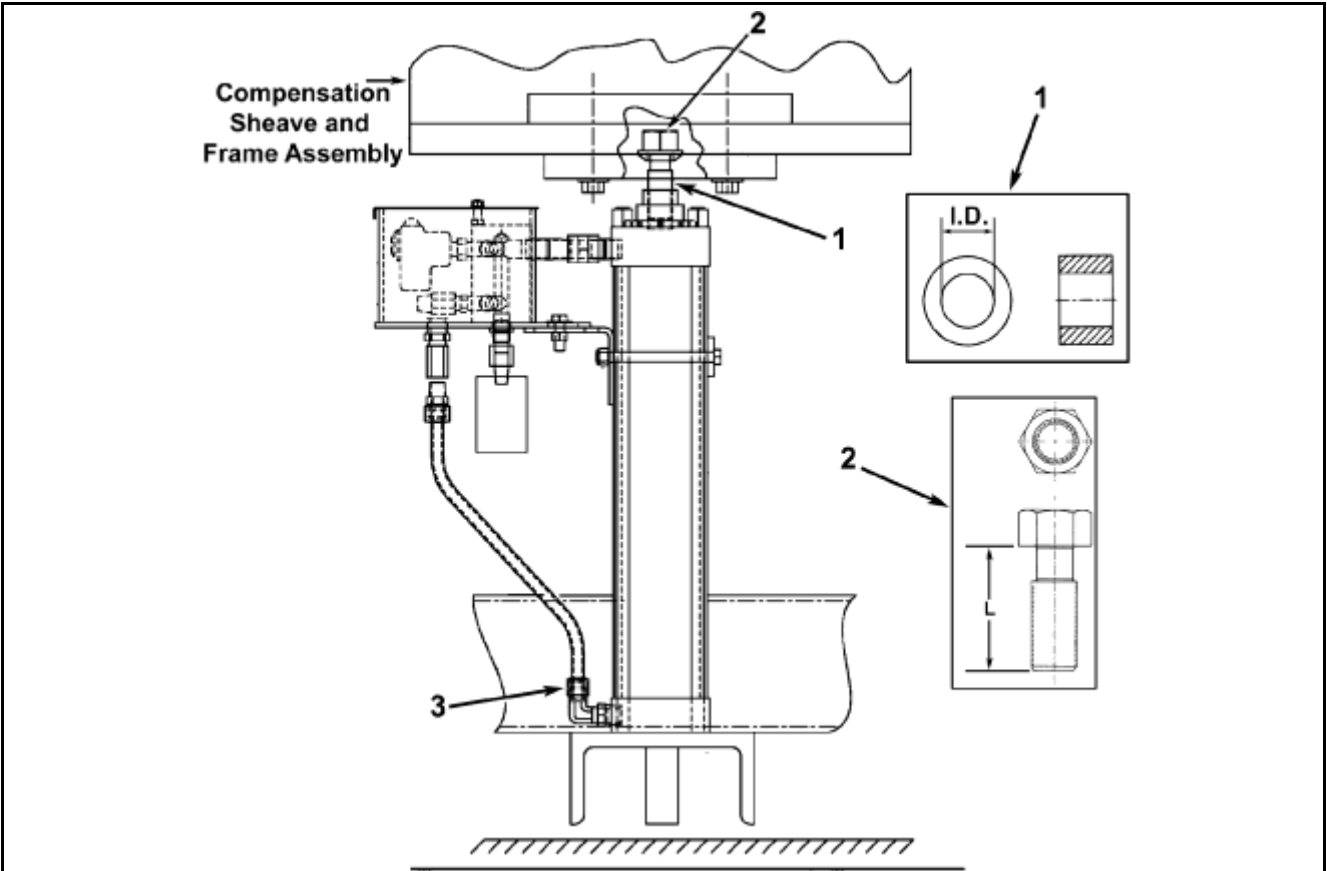
W/O VINTAGE					
REF. No.	PART No.	DESCRIPTION	SHEAVE DIAMETER (in.)	NUMBER OF ROPES	ROPE DIAMETER (in.)
1	AAA265CH1	Sheave	20	5	5/8
	AAA265CH2	Sheave	20	6	5/8
	AAA265CH3	Sheave	20	7	5/8
	AAA265CH4	Sheave	22	5	5/8-11/16
	AAA265CH5	Sheave	22	6	5/8-11/16
	AAA265CH6	Sheave	22	7	5/8-11/16
	AAA265CH7	Sheave	24	5	5/8-11/16
	AAA265CH8	Sheave	24	6	5/8-11/16
	AAA265CH9	Sheave	24	7	5/8-11/16
	AAA265CH10	Sheave	26	5	5/8-11/16
	AAA265CH11	Sheave	26	6	5/8-11/16
	AAA265CH12	Sheave	26	7	5/8-11/16
	AAA265CH13	Sheave	28	5	5/8-11/16
	AAA265CH14	Sheave	28	6	5/8-11/16
	AAA265CH15	Sheave	28	7	5/8-11/16
	AAA265CH16	Sheave	30	5	5/8-11/16
	AAA265CH17	Sheave	30	6	5/8-11/16
	AAA265CH18	Sheave	30	7	5/8-11/16
	AAA265CH19	Sheave	35	5	5/8-11/16
	AAA265CH20	Sheave	35	6	5/8-11/16
	AAA265CH21	Sheave	35	7	5/8-11/16



W/O VINTAGE			
REF. No.	PART No.	DESCRIPTION	
1	207AF4	Bearing	
2	346ABE1	Cover, Bearing	
3	77PY1	Shaft, 8.19 in. Length	
4	800374	265BJ3	Sheave, 24 in. \varnothing , 6, 5/8–11/16 in. Ropes
	800372	265BJ7	Sheave, 27 in. \varnothing , 6, 5/8–11/16 in. Ropes
	800373	265BJ11	Sheave, 30 in. \varnothing , 6, 5/8–11/16 in. Ropes
	800374	265BJ15	Sheave, 33 in. \varnothing , 6, 5/8–11/16 in. Ropes
	800375	265BJ19	Sheave, 35 in. \varnothing , 6, 5/8–11/16 in. Ropes
	800376	265BJ23	Sheave, 37 in. \varnothing , 6, 5/8–11/16 in. Ropes
	800377	265BJ1	Sheave, 24 in. \varnothing , 5, 5/8–11/16 in. Ropes
	800378	265BJ5	Sheave, 27 in. \varnothing , 5, 5/8–11/16 in. Ropes
	800379	265BJ9	Sheave, 30 in. \varnothing , 5, 5/8–11/16 in. Ropes
	800380	265BJ13	Sheave, 33 in. \varnothing , 5, 5/8–11/16 in. Ropes
	800381	265BJ17	Sheave, 35 in. \varnothing , 5, 5/8–11/16 in. Ropes
800382	265BJ21	Sheave, 37 in. \varnothing , 5, 5/8–11/16 in. Ropes	
5	800443	Sleeve, Outer	
6	800444	Sleeve, Inner	

Hydraulic Single-Cylinder Tie Down 6042AP, 6042AT

16-6042AP

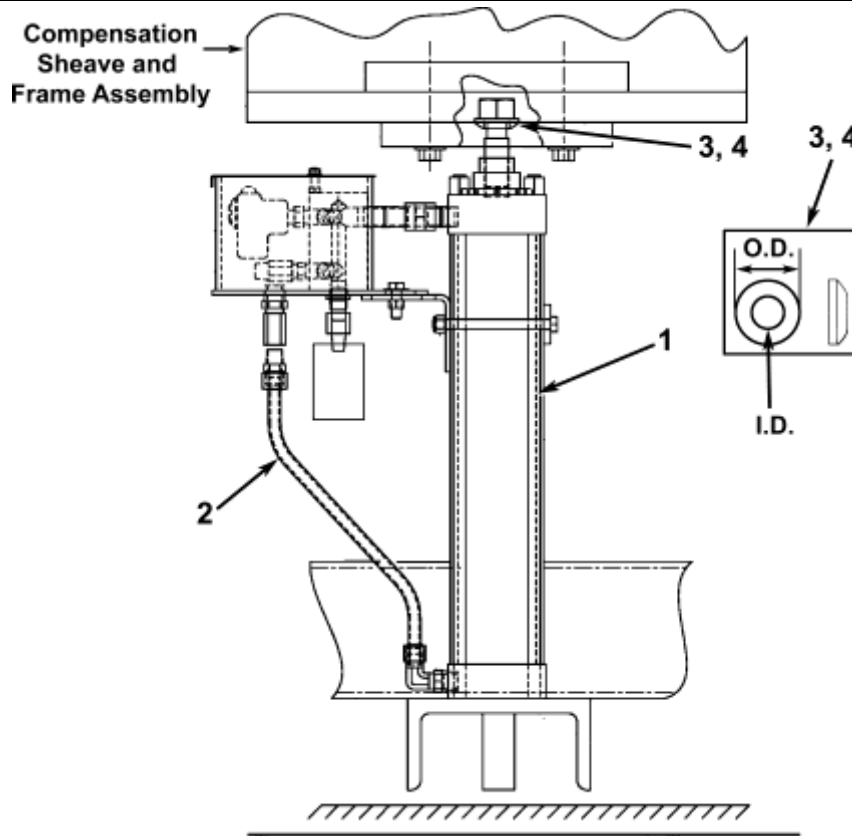


REF. No.	With & W/O VINTAGE PART No.	DESCRIPTION
1	335E100	Bearing, 1.25 in. Ⓢ
	335E125	Bearing, 2.50 in. Ⓢ
	335E126	Bearing, 3.25 in. Ⓢ
	335E127	Bearing, 1.95 in. Ⓢ
2	65JA1	Bolt, 1.25-12 x 3.5 in. L
	65JA2	Bolt, 1.25-12 x 4.0 in. L
	65JA3	Bolt, 1.875-12 x 5.5 in. L
	65JA4	Bolt, 2.5-12 x 4.57 in. L
	65JA5	Bolt, 3.25-12 x 5.31 in. L
3	441CN1	Fitting, Pipe Connector, 0.5 in NPT
	441CN3	Fitting, Pipe Connector, 1.0 in. NPT

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16-6042AP

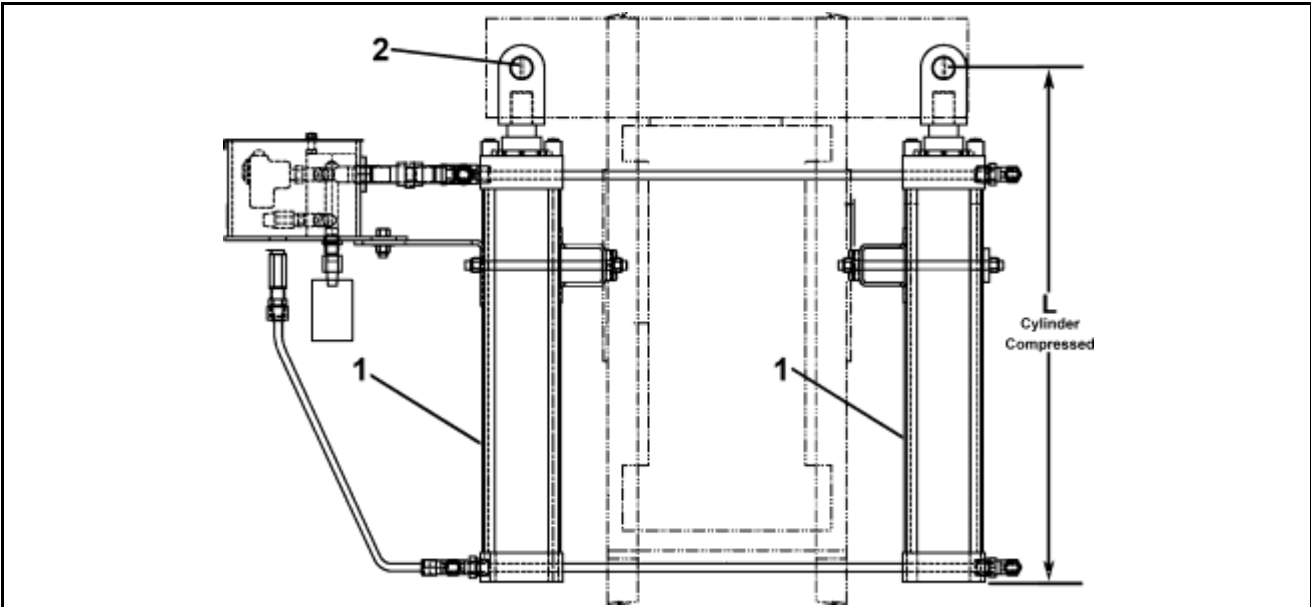
**Hydraulic Single-Cylinder
Tie Down 6042AP, 6042AT**



REF. No.	With & W/O VINTAGE PART No.	DESCRIPTION
1	AAA350DZ1	Hydraulic Cylinder, 4 in. Bore x 20.0 in. Stroke
	AAA350EB1	Hydraulic Cylinder, 6 in. Bore x 20.0 in. Stroke
	AAA350EC1	Hydraulic Cylinder, 8 in. Bore x 20.0 Stroke
	AAA350ED1	Hydraulic Cylinder, 10 in. Bore x 20.0 in. Stroke
2	AAA377FY16	Tubing, Steel, Hydraulic, 0.62 in. \varnothing , 0.083 in. Wall, 20.0 in. L.
	AAA377FY17	Tubing, Steel, Hydraulic, 0.62 in. \varnothing , 0.083 in. Wall, 20.0 in. L.
	AAA377FY18	Tubing, Steel, Hydraulic, 1.0 in. \varnothing , 0.120 in. Wall, 20.0 in. L.
	AAA377FY19	Tubing, Steel, Hydraulic, 1.0 in. \varnothing , 0.120 in. Wall, 20.0 in. L.
3	131BR2	Washer, 2.25 in. \varnothing , 1.25 in. \odot
4	131P11	Washer, 2.25 in. \varnothing , 1.31 in. \odot
	131P12	Washer, 3.50 in. \varnothing , 1.94 in. \odot
	131P13	Washer, 5.0 in. \varnothing , 2.56 in. \odot
	131P14	Washer, 6.0 in. \varnothing , 3.31 in. \odot

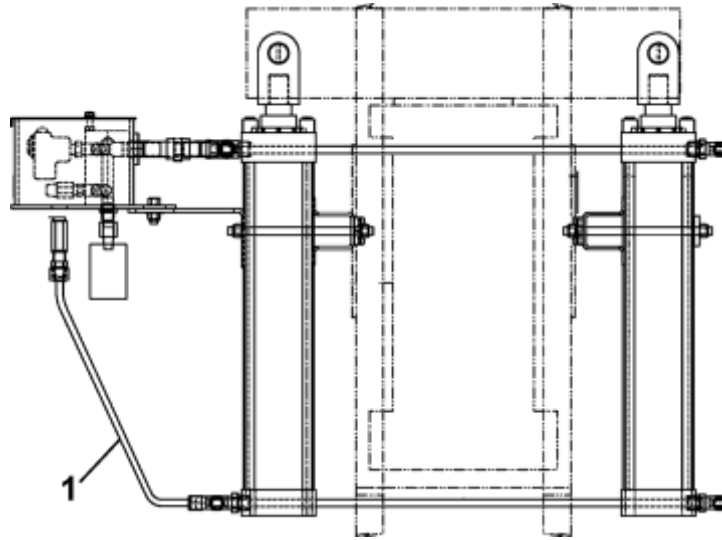
Hydraulic Dual-Cylinder Tie Down 6042AR, 6042AV

16-6042AP



REF. No.	With & W/O VINTAGE PART No.	DESCRIPTION
1	6942FE2	Hydraulic Cylinder, 2.5 in. Bore x 20 in. Stroke L= 40.18 in.
	6942FE3	Hydraulic Cylinder, 2.5 in. Bore x 20 in. Stroke L = 28.18 in.
	6942FE4	Hydraulic Cylinder, 2.5 in. Bore x 20 in. Stroke L = 30.18 in.
	6942FE5	Hydraulic Cylinder, 2.5 in. Bore x 20 in. Stroke L = 31.18 in.
	6942FE6	Hydraulic Cylinder, 2.5 in. Bore x 20 in. Stroke L = 36.18 in.
	AAA350DU1	Hydraulic Cylinder, 4 in. Bore x 20 in. Stroke L = 31.06 in.
	AAA350DU2	Hydraulic Cylinder, 4 in. Bore x 20 in. Stroke L = 34.06 in.
	AAA350DU3	Hydraulic Cylinder, 4 in. Bore x 20 in. Stroke L = 39.06 in.
	AAA350DU4	Hydraulic Cylinder, 4 in. Bore x 30 in. Stroke L = 41.06 in.
	AAA350DV1	Hydraulic Cylinder, 5 in. Bore x 20 in. Stroke L = 32.25 in.
	AAA350DV2	Hydraulic Cylinder, 5 in. Bore x 30 in. Stroke L = 42.25 in.
	AAA350DW1	Hydraulic Cylinder, 7 in. Bore x 20 in. Stroke L = 36.56 in.
	AAA350DW2	Hydraulic Cylinder, 7 in. Bore x 30 in. Stroke L = 46.56 in.
AAA350EC2	Hydraulic Cylinder, 8 in. Bore x 30 in. Stroke L = 41.75 in.	
2	82A81	Pin, Dia = 0.750 in.
	AAA81LB2	Pin, Dia = 1.375 in.
	AAA81LB3	Pin, Dia = 1.744 in.
	AAA81LB4	Pin, Dia = 2.492 in.
	AAA81LB5	Pin, Dia = 3.498 in.

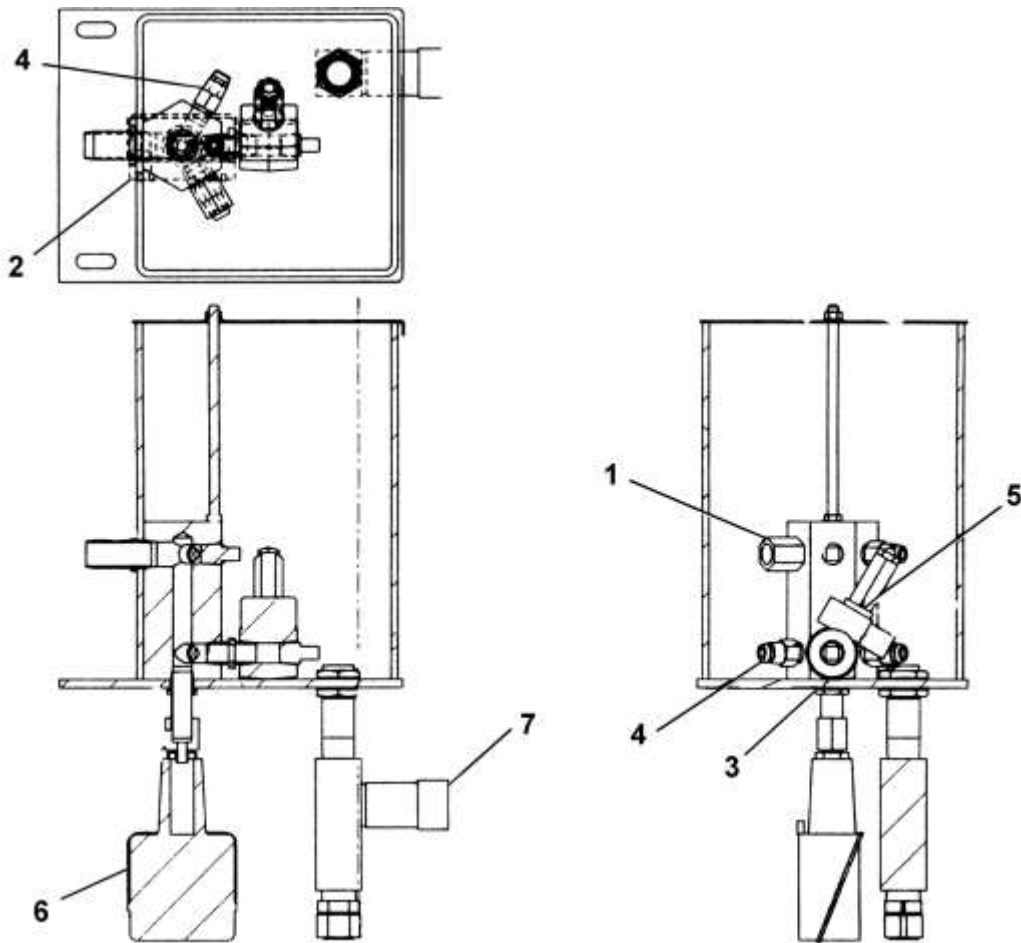
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16-6042AP**Hydraulic Dual-Cylinder
Tie Down 6042AR, 6042AV**

REF. No.	With & W/O VINTAGE PART No.	DESCRIPTION
1	AAA377FY1	Tubing, Steel, Hydraulic, 0.62 in. \varnothing x 0.083 in. Wall, 25.0 in. L
	AAA377FY2	Tubing, Steel, Hydraulic, 0.62 in. \varnothing x 0.083 in. Wall, 61.0 in. L
	AAA377FY3	Tubing, Steel, Hydraulic, 0.62 in. \varnothing x 0.083 in. Wall, 55.0 in. L
	AAA377FY4	Tubing, Steel, Hydraulic, 0.62 in. \varnothing x 0.083 in. Wall, 65.0 in. L
	AAA377FY5	Tubing, Steel, Hydraulic, 0.62 in. \varnothing x 0.083 in. Wall, 70.0 in. L
	AAA377FY6	Tubing, Steel, Hydraulic, 0.62 in. \varnothing x 0.083 in. Wall, 62.0 in. L
	AAA377FY7	Tubing, Steel, Hydraulic, 0.62 in. \varnothing x 0.083 in. Wall, 56.0 in. L
	AAA377FY8	Tubing, Steel, Hydraulic, 0.62 in. \varnothing x 0.083 in. Wall, 66.0 in. L
	AAA377FY9	Tubing, Steel, Hydraulic, 0.62 in. \varnothing x 0.083 in. Wall, 71.0 in. L
	AAA377FY10	Tubing, Steel, Hydraulic, 0.62 in. \varnothing x 0.083 in. Wall, 26.0 in. L
	AAA377FY11	Tubing, Steel, Hydraulic, 0.62 in. \varnothing x 0.083 in. Wall, 36.0 in. L
	AAA377FY12	Tubing, Steel, Hydraulic, 1.00 in. \varnothing x 0.120 in. Wall, 26.0 in. L
	AAA377FY13	Tubing, Steel, Hydraulic, 1.00 in. \varnothing x 0.120 in. Wall, 36.0 in. L
	AAA377FY14	Tubing, Steel, Hydraulic, 1.00 in. \varnothing x 0.120 in. Wall, 28.0 in. L
	AAA377FY15	Tubing, Steel, Hydraulic, 1.00 in. \varnothing x 0.120 in. Wall, 38.0 in. L
	AAA377FY16	Tubing, Steel, Hydraulic, 0.62 in. \varnothing x 0.083 in. Wall, 19.0 in. L
	AAA377FY17	Tubing, Steel, Hydraulic, 0.62 in. \varnothing x 0.083 in. Wall, 20.0 in. L
	AAA377FY18	Tubing, Steel, Hydraulic, 1.00 in. \varnothing x 0.120 in. Wall, 20.0 in. L
	AAA377FY19	Tubing, Steel, Hydraulic, 1.00 in. \varnothing x 0.120 in. Wall, 21.0 in. L
	AAA377FY20	Tubing, Steel, Hydraulic, 1.00 in. \varnothing x 0.120 in. Wall, 146.0 in. L
	AAA377FY21	Tubing, Steel, Hydraulic, 1.00 in. \varnothing x 0.120 in. Wall, 38.0 in. L

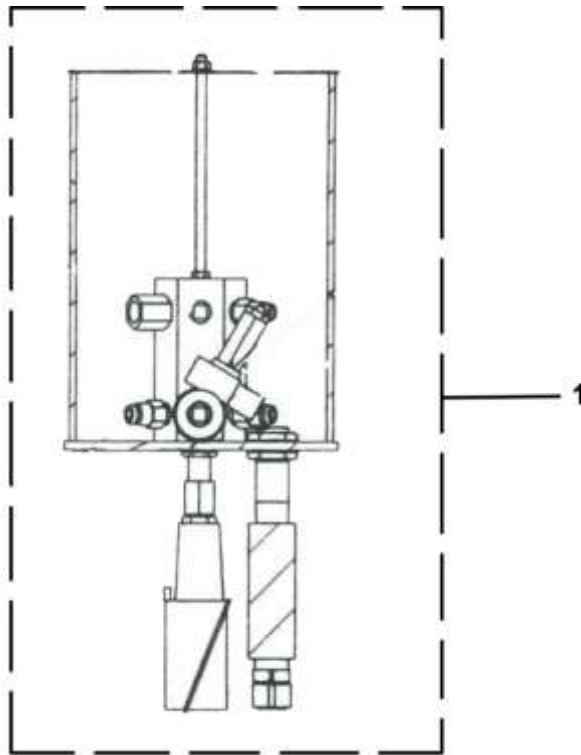
Reservoir Assembly 6042AN

16-6042AP



W/O VINTAGE		
REF. No.	PART No.	DESCRIPTION
1	6042AN500	Check Valve, (Gresen, LT-50-OW)
	6042AN509	Check Valve (Parker, LT-50-OW)
2	C3059X12	Nut, Seal 3/4 NPT
3	C3059X8	Nut, Seal 1/2 NPT
*	VP-418935	Oil, Spec No. 10 (1 Gal.), Typical Reservoir Vol. 3-Gal.
4	6042AN501	Power Pack Flow Fuse (Enerpac, VF-34033100)
	6042AN502	Power Pack Flow Fuse (Parker, VLS-50M1-38M1-10)
	6042AN510	Power Pack Flow Fuse (Parker, VLS-50M1-50M1-15)
5	6042AN503	Relief Valve (Parker, WJL-10-A-3000)
	6042AN508	Relief Valve (Parker, WJL-50-A-3000)
6	177CP1	Switch, Pressure
7	6042AN504	Throttle Valve, Beige Pin
	6042AN505	Throttle Valve, Orange Pin
	6042AN506	Throttle Valve, Purple Pin
	6042AN507	Throttle Valve (Parker, QLS-75-1F38)
	6042AN511	Throttle Valve (Parker, F16005)

* Part not shown.



		With & W/O VINTAGE		
REF. No.	PART No.	CYLINDER BORE	CYLINDER STROKE	# OF CYLINDERS
1	6042AN1	2.5	20	2
	6042AN2	4.0	20	
		4.0	30	
	6042AN3	5.0	20	
		5.0	30	
	6042AN5	7.0	20	
		7.0	30	
	6042AN7	4.0	20	1
	6042AN1	6.0	20	
	6042AN2	8.0	20	
6042AN5	8.0	30		

		With & W/O VINTAGE	
REF. No.	PART No.	DESCRIPTION	
* See NOTE	VP-418935	Otis Oil Specification #10 (1 gallon)	
	VP-418940	Otis Oil Specification #10 (5 gallons)	

* Part not shown.

NOTE: Hydraulic oil is used for hydraulic tie down assemblies. Approximately 11.5 quarts are required for full replacement. See SWP N-10.4-1 for maintenance instructions.