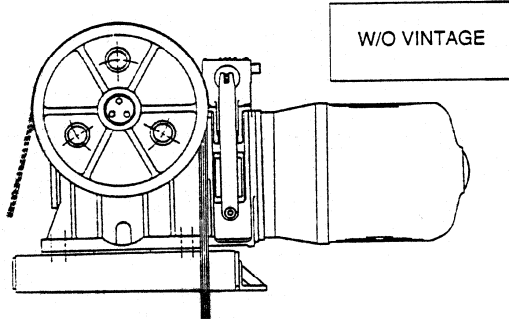


# 22 CT Machine

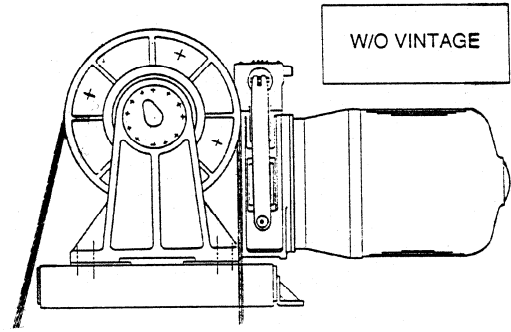
## Spare Parts Leaflet

### 06-C7078A

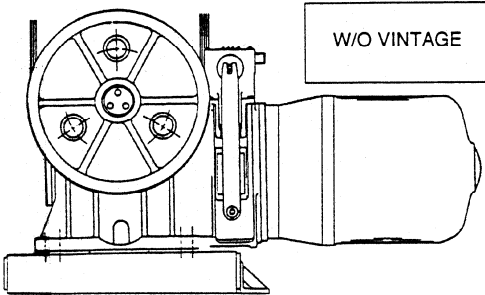
December 23, 2009 / Page 1 of 37



Machine Above w/Overhung Drive Sheave



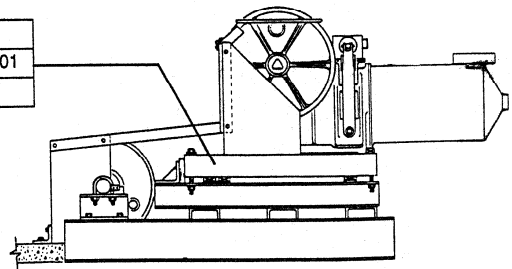
Machine Above w/Inboard Drive Sheave



Machine Below w/Overhung Drive Sheave

08	IF-7078CB	
	W/O VINTAGE	

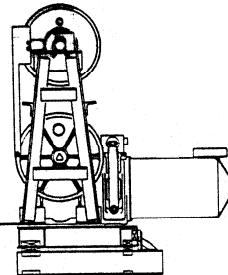
06	7078CB	
	VINTAGE	Y01



Machine Above Arrangement (Long Wrap)

06	IF-7078CB	
	W/O VINTAGE	

06	7078CB	
	VINTAGE	Y01



Machine Below w/Deflector (Single Wrap)

# OTIS

**SERVICE ENGINEERING**  
**Otis Elevator Company**  
**Bloomfield, Connecticut USA**

## Leaflet Description

This SPL provides spare parts information for 22CT machines. Previously, this information was divided between documents for each manufacturing location, Yonkers and Hamilton. The differences between the two are minimal. The differences are easily discernable by features of the parts themselves. Although most of these machines do not carry vintage tags, there are several references throughout this document to vintages as defined by the original assembly drawings. These vintage designations can be found in the machine records or 20/20 sheets, or identified by features of the machine itself as follows:

**7078A**—Inboard drive sheave machine was produced until early 1967. It is identifiable by flat thrust bearing cover with no pipe plug. The outboard sheave shaft bearing housing is one piece. There is no separate cover. The gearcase has one side inspection cover on the side away from the drive sheave.

**7078C**—Overhung drive sheave machine was produced until early 1967. It is identifiable by flat thrust bearing cover with no pipe plug. The gearcase side sheave shaft bearing housing is one piece. There is no separate cover. The gearcase has side inspection cover on both sides.

**A7078A**—Inboard drive sheave machine was produced from early 1967 through early 1968. It is identifiable by thrust bearing cover with a low, flat dome (1/2 in. tall compared to the rest of the surface) and a 1/4 in. pipe plug. The gearcase has two side inspection covers.

**A7078C**—Overhung drive sheave machine was produced from early 1967 through early 1968. It is identifiable by thrust bearing cover with a low, flat dome (1/2 in. tall compared to the rest of the surface) and a 1/4 in. pipe plug. The gearcase has two side inspection cover.

**B7078A**—Inboard or overhung drive sheave machine was produced from early 1968 to early 1969. It is identifiable by domed thrust bearing cover (3/4 in. tall compared to the rest of the surface) with 1/2 in. pipe plug. The gearcase has two side inspection covers. This is the only vintage of 22CT machine to have the thrust bearing retained on the worm shaft by a bearing nut and a tabbed washer.

**C7078A**—Inboard or overhung drive sheave machine was produced from early 1969 to the end of Yonkers production. It is identical to the B7078A vintage, except that the thrust bearing retainer was returned to the disc type with three screws. The gearcase side inspection covers were eliminated in 1977, so examples of this vintage exist with or without them.

**RYC7078A**—Inboard or overhung drive sheave machine was produced from early 1982 in Hamilton primarily for use in Canada. It differentiated from the C7078A machines by the availability of drive sheaves with selector tape grooves on overhung drive sheave type machines. If any inboard drive sheave type machines were produced to this drawing, they would be essentially the same as the C7078A type.

**1F-7078CB**—Overhung drive sheave machine, early production version of the redesign that Hamilton produced from mid 1986. It is essentially identical to 7078CB type machines. This type was predominantly used in long wrap machine above and nosed-in machine below applications.

**7078CB**—Overhung drive sheave machine was produced in Hamilton from 1986 to production end. It is essentially identical to 1F-7078CB type machines. Predominantly used in long wrap machine above and nosed-in machine below applications.

**NOTE:** OSC only supplies worm and gear sets that are made to the latest standard. For earlier vintage machines, additional upgrade kits (as noted throughout this SPL) are necessary to install these gear sets. For future service part needs, such as bearings and seals, once these kits are installed, the machine will essentially be the latest vintage of its type (C7078A or 7078CB), and the original replacement parts will no longer work. For subsequent service parts needs after a worm and gear change, always order parts per the latest vintage.

(Continued on next page)

# History (continued)

**06-C7078A**

## Leaflet Revisions

Date Revised	Subject Matter Expert	Reason for Revision
June 30, 2006	Tom Charney	New Leaflet
November 4, 2009	Tom Charney	Updated coupling parts and illustrations on pages 26–27.
December 23, 2009	Tom Charney	Corrected typo on page 26; updated illustrations on pages 26 and 27.

## Related Drawings

Drawing No.	Title	Drawing No.	Title
C7078A	Assembly & Arrangement of 22CT Machine	A7078B	Assembly, Flexible Brake Coupling
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## Related Documents

Document ID	Title
SPL C-1064	Type 7078D Brake
SPL 06-7078CB	22 CT Machine, Hamilton Manufacture
TIP 6.2.0-21	CT Machine Bushing Removal Tool

## Subject Matter Expert

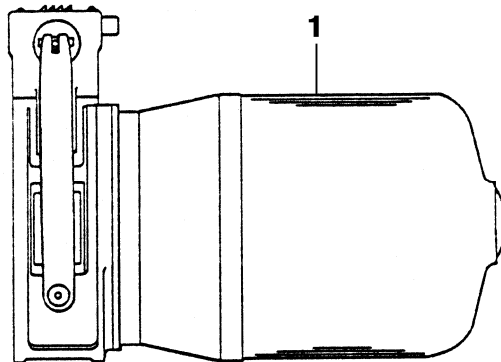
Name	Department
Tom Charney	OSC Service Engineering












## About Spare Parts Leaflets...

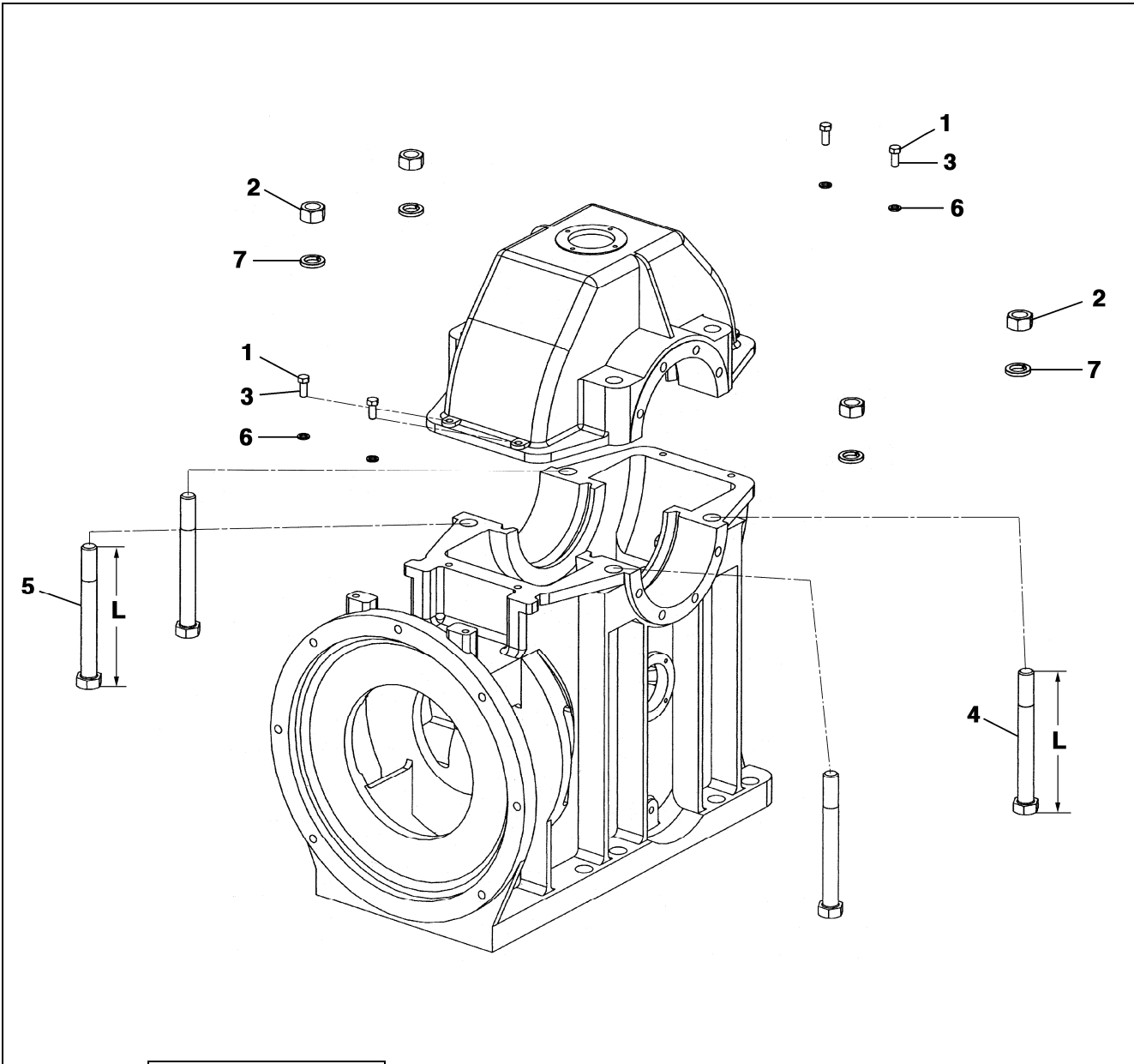
This document lists the lowest replaceable units (LRUs) for the standard version of the product. The LRUs are chosen by a team of Otis associates representing engineering and manufacturing.

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.

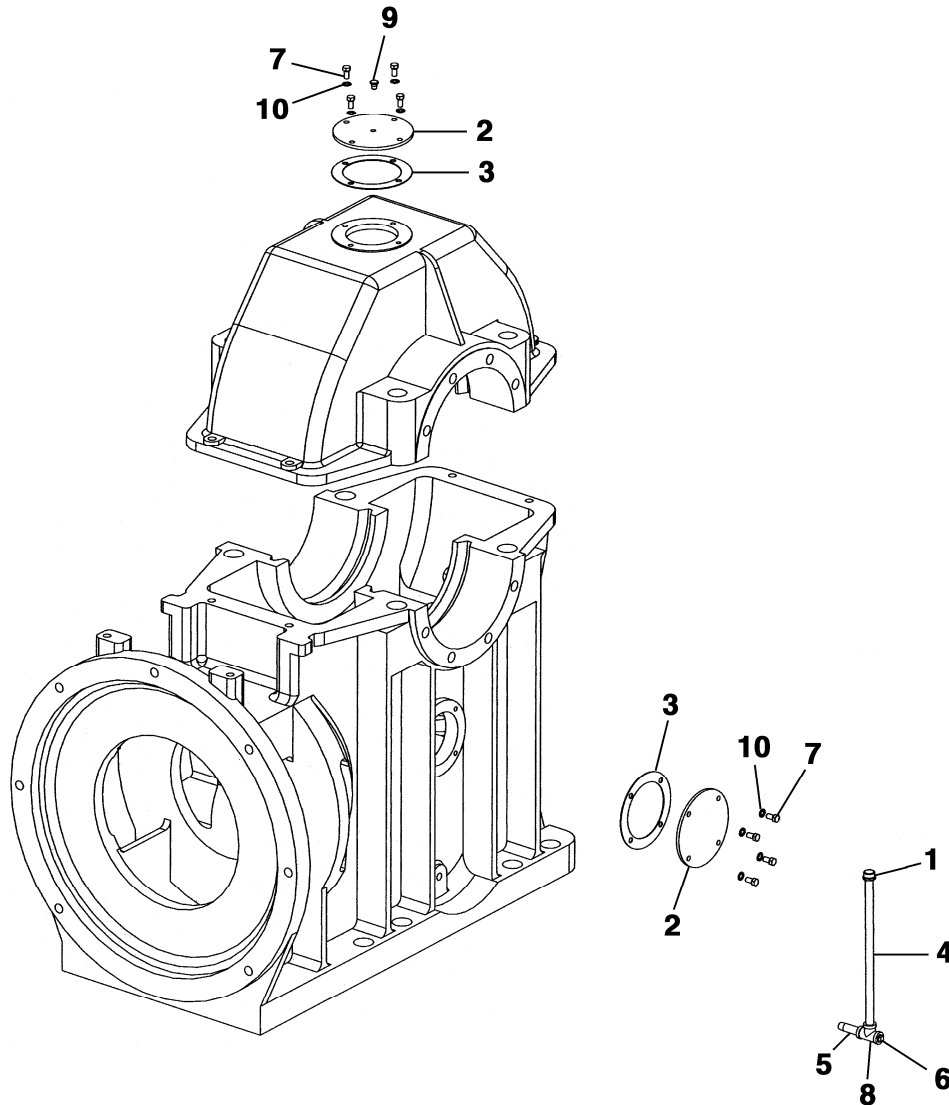


REF. No.	W/O VINTAGE MOTOR TYPE	DESCRIPTION
1	Type 60KSL	AC Motor,  SPL C-1054
	Type 76KS	AC Motor,  SPL C-1055
	Type 83KS	AC Motor,  SPL C-1056
	Type 95KS	AC Motor,  SPL C-1057
	Type 101KS	AC Motor,  SPL C-1058
	Type 77L	UMV Motor,  SPL C-1060A
	Type 89L	UMV Motor,  SPL C-1061
	Type 98L	UMV Motor,  SPL C-1062
	Type 6333CN, DN	UMV Motor,  SPL 08-6333CK-LS
	Type 6333DK, DM, DN, DS	UMV Motor,  SPL 08-6333CK-IMP
	Reuland	ACVF Motor, Call OSC (AAA20570E)
	Reivaj	ACVF Motor,  SPL 08-AAA20570A



ALL VINTAGES		
REF. No.	PART No.	DESCRIPTION
1	NUT FH1/2CP	Nut, 1/2 in.-13, Zinc Plated
2	---	Nut, 1-1/8 in. -7, Zinc Plated
3	96H244	Stud
4	96CB1	Stud, L = 10.5 in.
5	96CB3	Stud, L = 12.0 in.
6	130F29	Washer, 1/2 in. Spring Lock, Zinc Plated
7	130F34	Washer, 1-1/8 in. Spring Lock, Zinc Plated

# 22 CT Machine Gear Case Covers and Stand Pipe



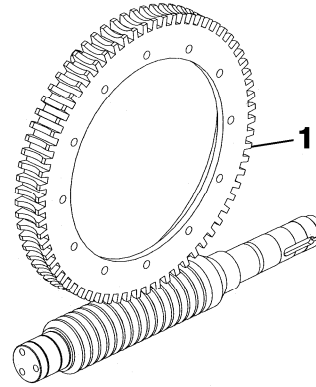
**ALL VINTAGES**

REF. No.	PART No.	DESCRIPTION
1	377DE3	Cap
2	AAA20141C11	Cover, Clear, Complete with Hardware and Vent
	353CB1	Cover, Solid
3	376H10	Gasket
4	377KA2	Pipe, Length = 9 in.
5	377KA8	Pipe, Length = 2-1/2 in.
6	377DF3	Plug, Drain
7	---	Bolt, 3/8 in. – 16 x 3/4 in., Zinc Plated, Grade 5 (or higher)
8	377EG3	Tee
9	435AT1	Vent
10	130A9	Washer, 3/8 in. Internal Lock, Zinc Plated

# 22 CT Machine Worm & Gear Sets

**06-C7078A**

**NOTE:** When replacing a worm and gear set, order worm shaft sundries kit p/n AAA27076BE1 (see p. 8) and sheave shaft sundries kit p/n AAA27076BE5 for overhung sheave (see p. 15) or p/n AAA27076BE8 for inboard sheave (see p. 18).



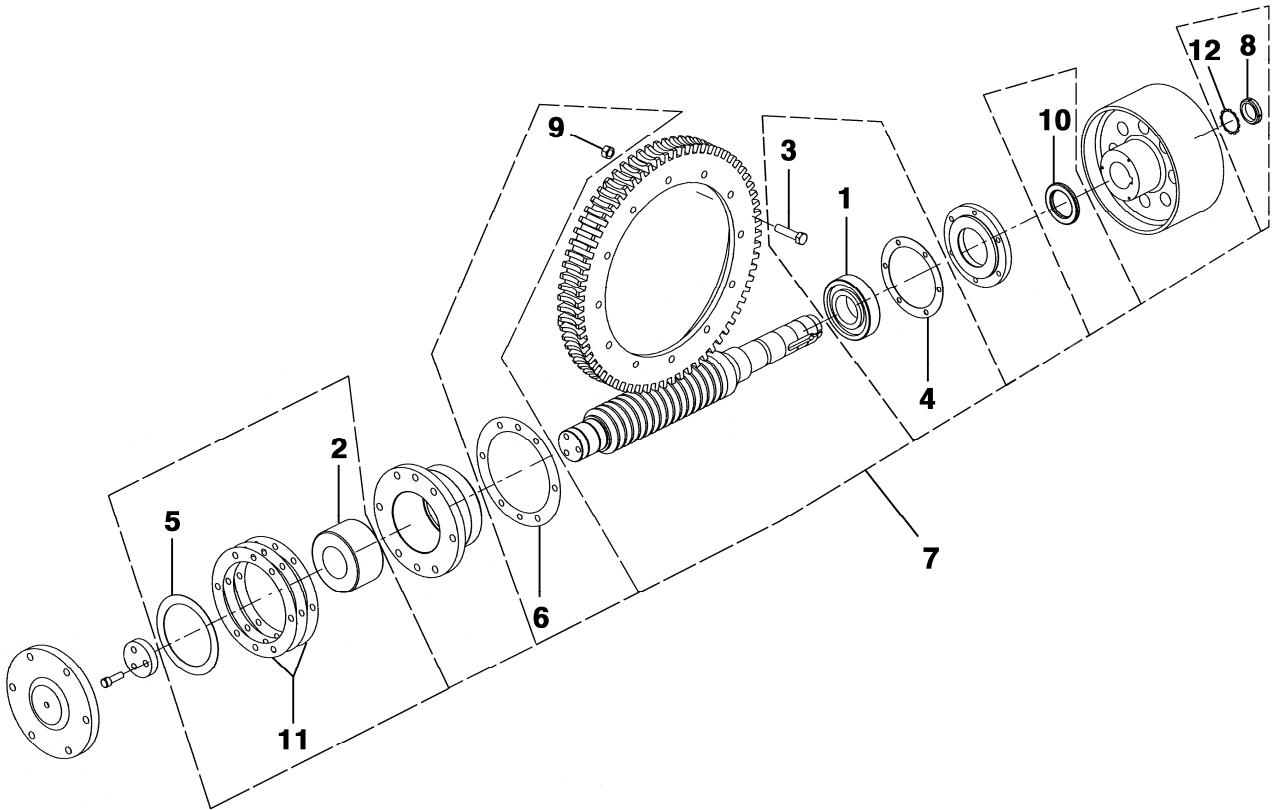
REF. No.	GEAR RATIO	COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5
		VINTAGE Y01 & W/O VINTAGE (C7078A, RYC7078A, 7078CB)	W/O VINTAGE (see NOTE 1) (C7078A, F-7078CB)	W/O VINTAGE (see NOTE 2) (B7078A)	W/O VINTAGE (see NOTE 3) (A7078A, A7078C)	W/O VINTAGE (see NOTE 3) (7078A, 7078C)
1	12-1/6:1	490HH1/ 200BL1	A490HC1/ 200BL1	490HC1/ 200BL1	A490GN1/ 200BL1	490GN1/ 200BL1
	17-3/4:1	490HH2/ 200BL2	A490HC2/ 200BL2	490HC2/ 200BL2	A490GN2/ 200BL2	490GN2/ 200BL2
	20-1/4:1	490HH11/ 200BL11	A490HC11/ 200BL11	490HC11/ 200BL11	A490GN11/ 200BL11	490GN11/ 200BL11
	23-2/3:1	490HH3/ 200BL3	A490HC3/ 200BL3	490HC3/ 200BL3	A490GN3/ 200BL3	490GN3/ 200BL3
	24:1	490HV1/ 200BT1	1F-490HV2/ RX200BL3	---	---	---
	28-1/3:1	490HH4/ 200BL4	A490HC4/ 200BL4	490HC4/ 200BL4	A490GN4/ 200BL4	490GN4/ 200BL4
	34:1	490HV2/ 200BT2	1F-490HV3/ RX200BL5	---	---	---
	34-1/2:1	490HH5/ 200BL5	A490HC5/ 200BL5	490HC5/ 200BL5	A490GN5/ 200BL5	490GN5/ 200BL5
	42-1/2:1	490HH6/ 200BL6	A490HC6/ 200BL6	490HC6/ 200BL6	A490GN6/ 200BL6	490GN6/ 200BL6
	46-1/2:1	490HH12/ 200BL12	A490HC12/ 200BL12	490HC12/ 200BL12	---	---
	47:1 (NOTE 4)	---	---	---	A490GN7/ 200BL7 (see NOTE 4)	490GN7/ 200BL7 (see NOTE 4)
	57:1	490HH8/ 200BL8	A490HC8/ 200BL8	490HC8/ 200BL8	A490GN8/ 200BL8	490GN8/ 200BL8
	71:1	490HH9/ 200BL9	A490HC9/ 200BL9	490HC9/ 200BL9	A490GN9/ 200BL9	490GN9/ 200BL9
	85:1	490HH10/ 200BL10	A490HC10/ 200BL10	490HC10/ 200BL10	A490GN10/ 200BL10	490GN10/ 200BL10

**NOTE 1:** When replacing worm and gear sets shown in this column, use part numbers shown in **column 1**.

**NOTE 2:** When replacing worm and gear sets shown in this column, use part numbers shown in **column 1** and also supply thrust retainer upgrade p/n AAA27076BE3.

**NOTE 3:** When replacing worm and gear sets shown in this column, use part numbers shown in **column 1** and also supply thrust housing upgrade p/n AAA27076BE2.

**NOTE 4:** Replace 47:1 ratio with 46-1/2:1 ratio.



<b>W/O VINTAGE (C7078A, RYC7078A, 1F-7078CB)</b>	<b>VINTAGE Y01 (7078CB)</b>
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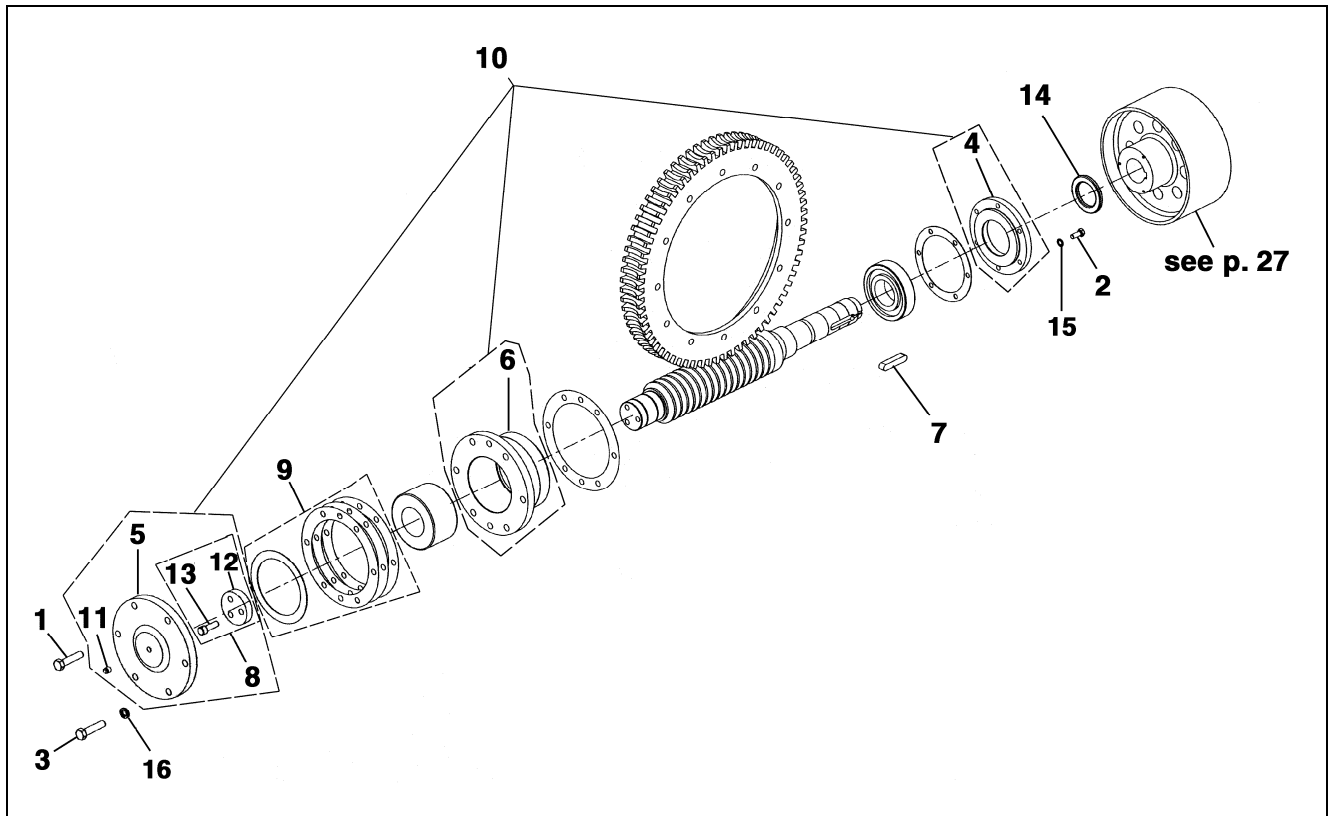
REF. No.	PART No.	DESCRIPTION
1	207Z56	Bearing, Inside
2	209AB4	Bearing, Thrust
3	84D14	Bolt, Body Fit
4	255HB50	Gasket, Inside Cover
5	376J53	Gasket, Thrust Cover
6	376J51	Gasket, Thrust Housing
7	AAA27076BE1	Kit, Worm Shaft Sundries, Includes Gear Mounting Hardware
8	72BV11	Nut, Spanner
9	67H9	Nut, Elastic Stop
10	33AA2	Seal, Solid, Worm Shaft, see <b>NOTE</b>
11	255HB81	Shim, Thrust Cover, 0.003 in. Thick
	255HB86	Shim, Thrust Cover, 0.0075 in. Thick
12	130AA11	Washer, Tabbed

**NOTE:** Solid seal for use during complete repair only. For service replacement split seal, see page 9.



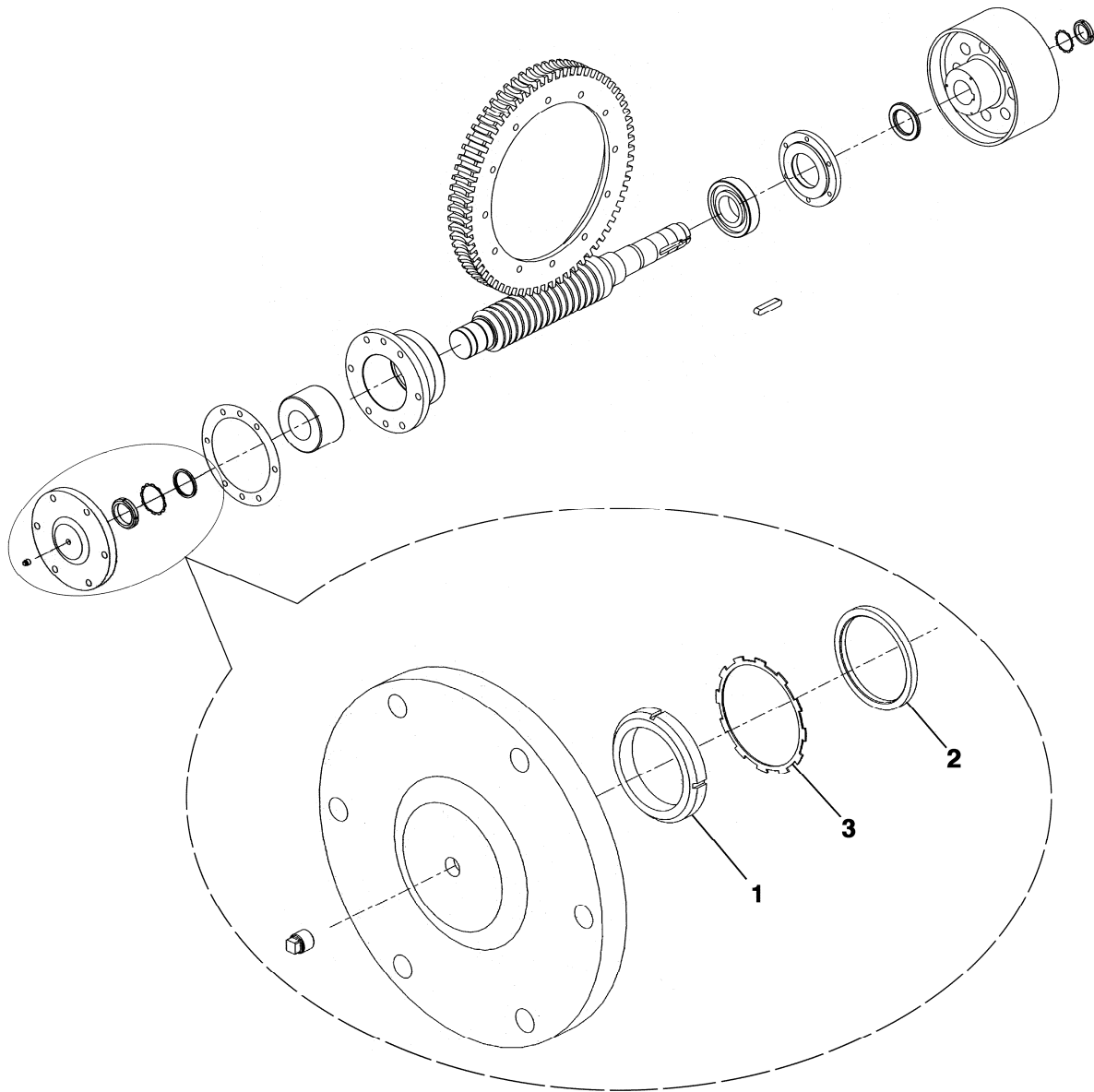
# 22 CT Machine Worm Shaft Parts

**06-C7078A**



W/O VINTAGE (C7078A, RYC7078A, 1F-7078CB)	VINTAGE Y01 (7078CB)
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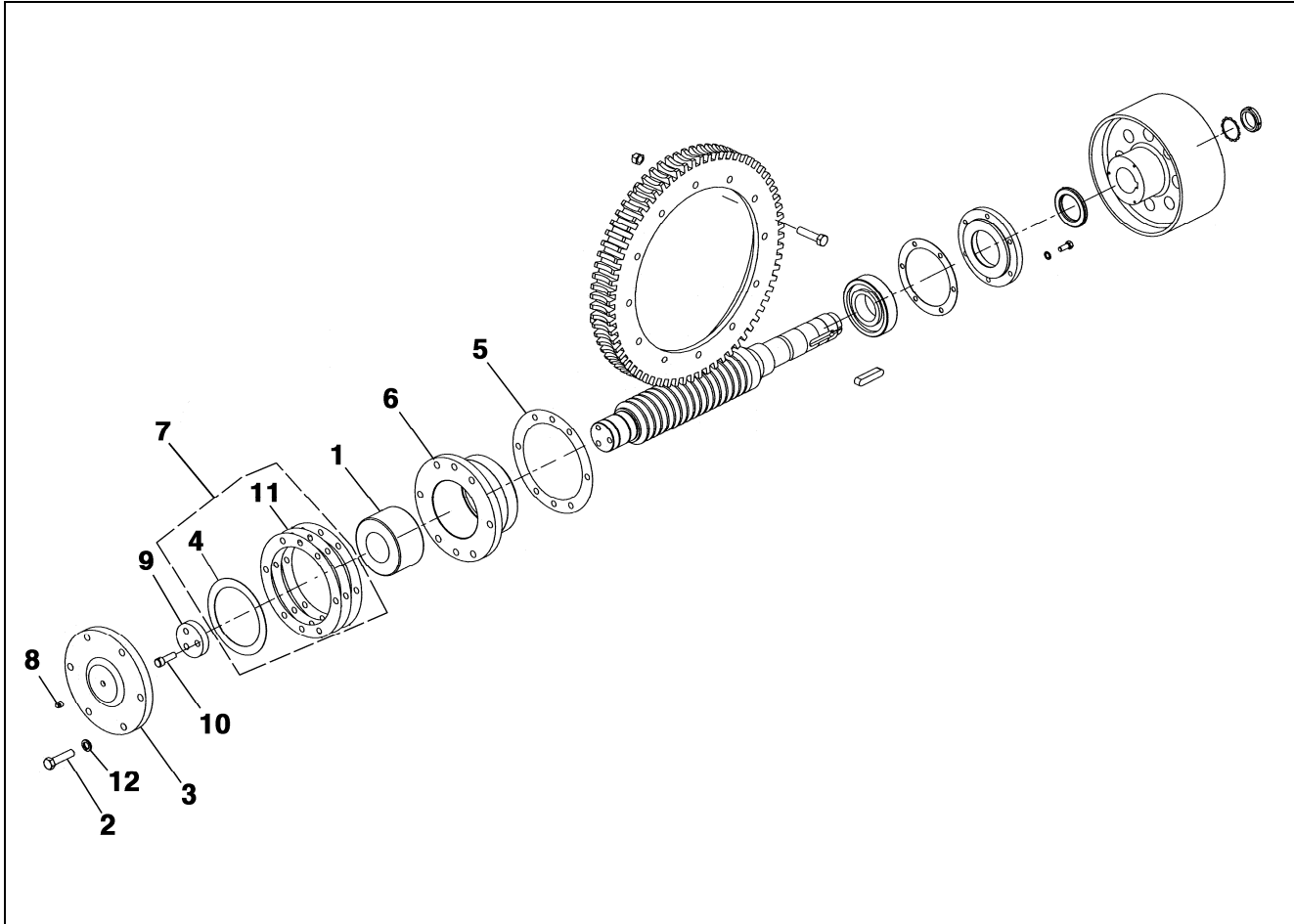
REF. No.	PART No.	DESCRIPTION
1	BTFH 5/8X1-1/4	Bolt, 5/8 in. – 11 x 1-1/4 in., Grade 8 (jack-screw for thrust housing removal)
2	VP-711285	Bolt, 3/8 in. – 16 x 1 in., Zinc Plated, Grade 5 (or higher)
3	VP-711300	Bolt, 5/8 in. – 11 x 2-1/2 in., Zinc Plated, Grade 5 (or higher)
4	A346ALP2 A346AFW1	Cover, Inside Bearing
5	B346AFV1	Cover, Thrust Bearing
6	B396FM1	Housing, Thrust Bearing
7	192G44	Key, Worm Shaft
8	AAA27076BE3	Kit, Retainer
9	2700CAT1	Kit, Shim, Thrust Cover
10	AAA27076BE2	Kit, Thrust Housing Upgrade
11	377DF3	Plug, Thrust Bearing Cover (1/2 NPT)
12	353W23	Retainer, Thrust Bearing
13	124CN6	Screw, Thrust Bearing Retainer
14	AAA33AQ3	Seal Kit, Split, Worm Shaft
15	130F28	Washer, 3/8 in. Spring Lock, Zinc Plated
16	130F30	Washer, 5/8 in. Spring Lock, Zinc Plated



**W/O VINTAGE  
(B7078A)**

REF. No.	PART No.	DESCRIPTION
1	72BV16	Nut, Bearing
2	462EP3	Spacer, Thrust
3	130AA16	Washer, Tabbed

**NOTE:** For use only when existing worm shaft is retained. When replacing worm and gear, use thrust retainer upgrade kit p/n AAA27076BE3 and sundries p/n AAA27076BE1. All other parts same as later vintage (C7078A).

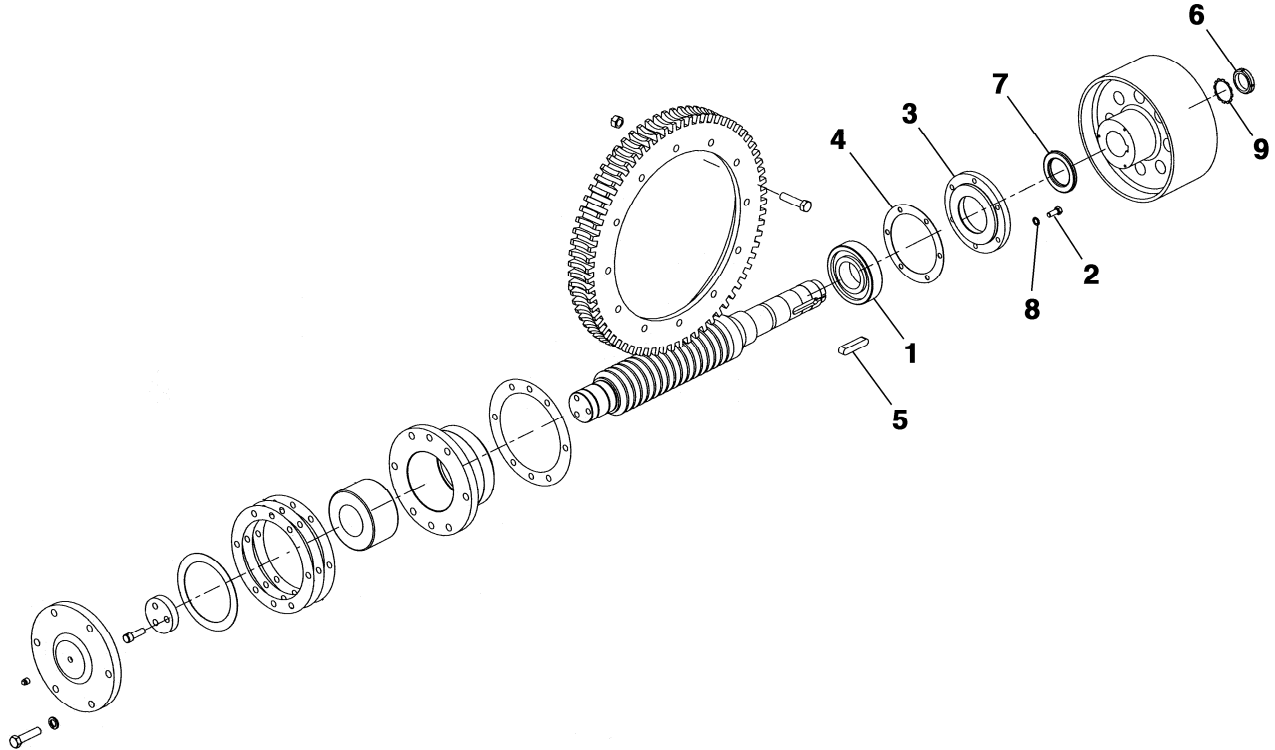


**W/O VINTAGE  
(A7078A, A7078C)**

REF. No.	PART No.	DESCRIPTION
1	209AB1	Bearing, Thrust
2	BTFH 5/8X2	Bolt, 5/8 in. – 11 x 2 in., Zinc Plated, Grade 5 (or higher)
3	A346AFV1	Cover, Thrust Bearing
4	376J53	Gasket, Thrust Cover
5	376J51	Gasket, Thrust Housing
6	A396FM1	Housing, Thrust Bearing
7	2700CAT1	Kit, Shim, Thrust Cover
8	377DF1	Plug, Thrust Bearing Cover (1/4 NPT)
9	353W12	Retainer, Thrust Bearing
10	124CN3	Screw, Thrust Bearing Retainer
11	255HB81	Shim, Thrust Cover, 0.003 in. Thick
	255HB86	Shim, Thrust Cover, 0.0075 in. Thick
12	130F30	Washer, 5/8 in. Spring Lock, Zinc Plated

**NOTE:** For use only when existing worm shaft is retained. When replacing worm and gear, use thrust housing upgrade kit p/n AAA27076BE2 and sundries kit p/n AAA27076BE1.

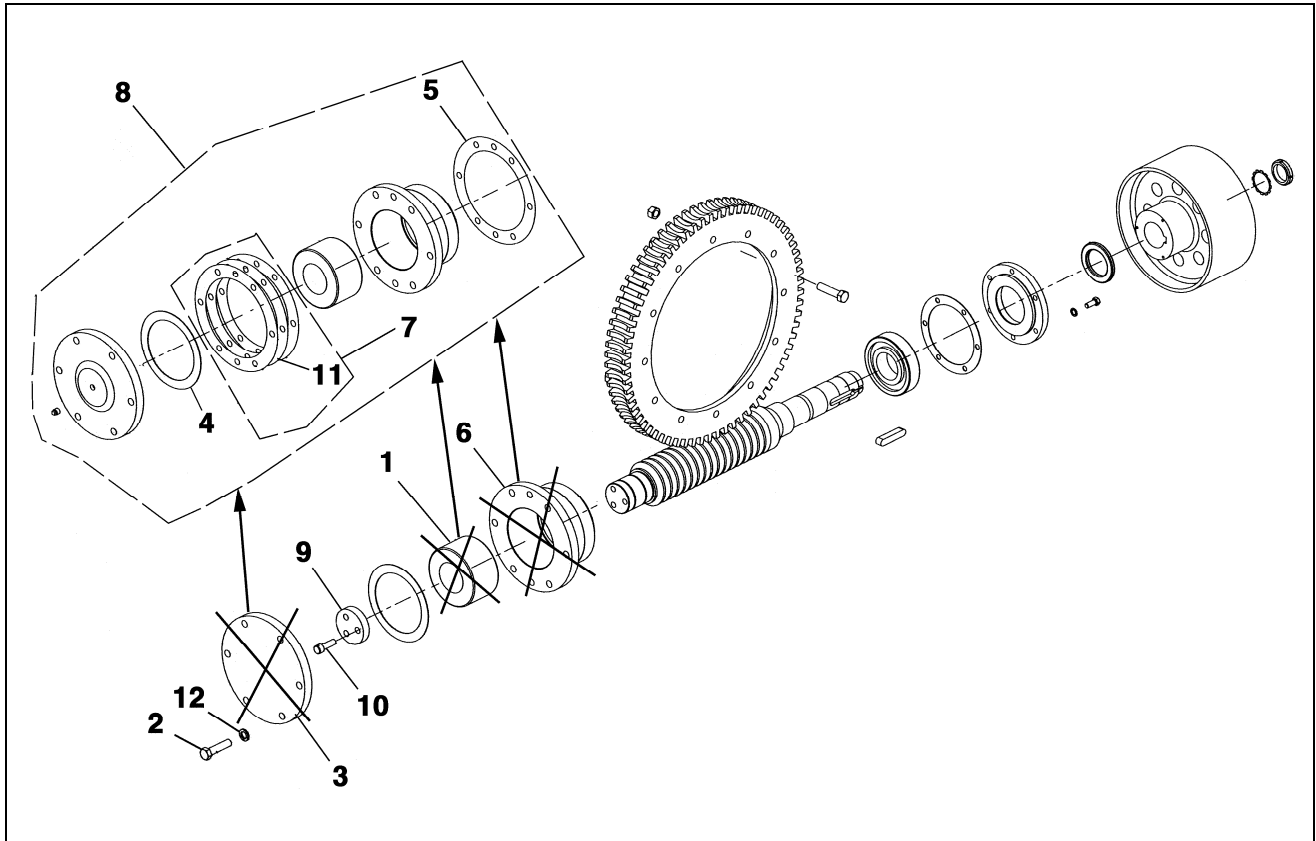
(Continued on next page)



**W/O VINTAGE  
(A7078A, A7078C)**

REF. No.	PART No.	DESCRIPTION
1	207Z56	Bearing, Inside
2	VP-711285	Bolt, 3/8 in. – 16 x 1 in., Zinc Plated, Grade 5 (or higher)
3	A346AFW1	Cover, Inside Bearing
4	255HB50	Gasket, Inside Cover
5	192G44	Key, Worm Shaft
6	72BV11	Nut
7	AAA33AQ3	Seal, Split, Worm Shaft
8	130F28	Washer, 3/8 in. Spring Lock, Zinc Plated
9	130AA11	Washer, Tabbed

**NOTE:** For use only when existing worm shaft is retained. When replacing worm and gear, use thrust housing upgrade kit p/n AAA27076BE2 and sundries kit p/n AAA27076BE1.



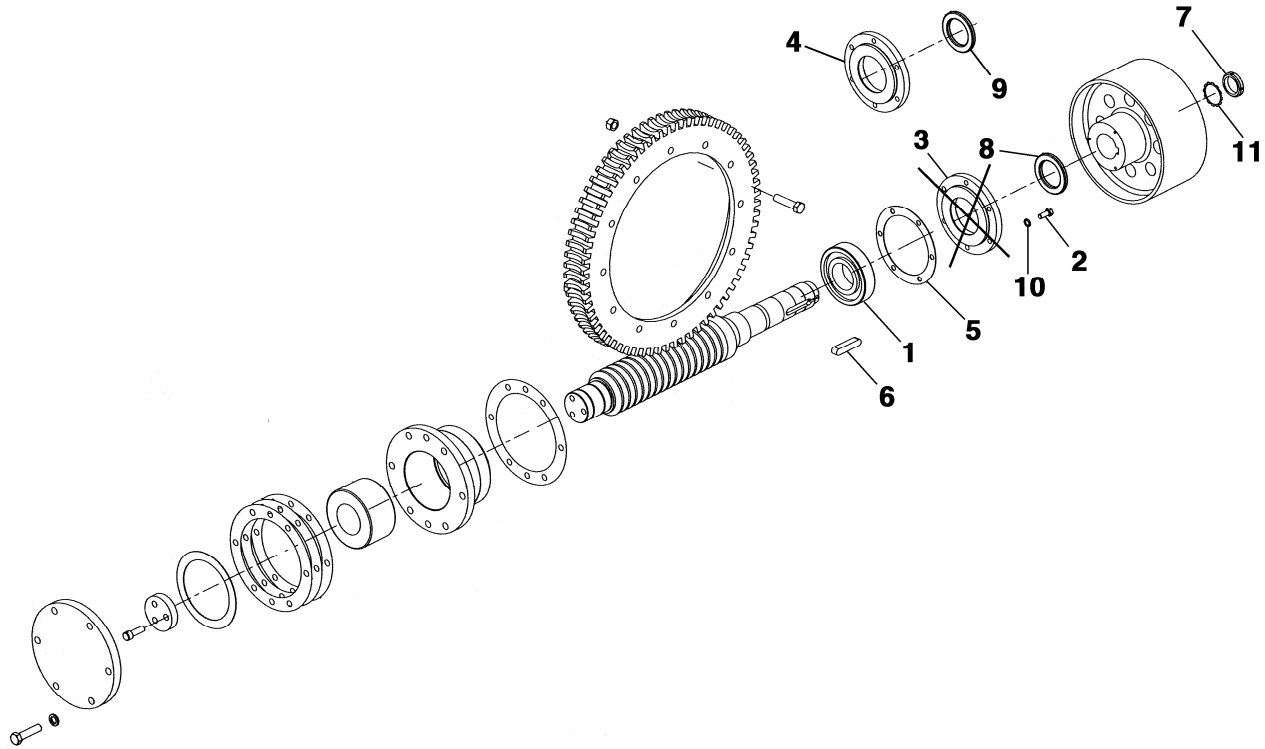
**W/O VINTAGE  
(7078A, 7078C)**

REF. No.	PART No.	DESCRIPTION
1	(2) 209B34	Bearing, Thrust, see <b>NOTE 2</b>
2	VP-711300	Bolt, 5/8 in.-11 x 2-1/2 in., Zinc Plated, Grade 5 (or higher)
3	346AFV4	Cover, Thrust Bearing, see <b>NOTE 2</b>
4	376J53	Gasket, Thrust Cover
5	376J51	Gasket, Thrust Housing
6	396FM4	Housing, Thrust Bearing, see <b>NOTE 2</b>
7	2700CAT1	Kit, Shim, Thrust Cover
8	AAA27076BE4	Kit, Thrust Bearing and Housing Upgrade, see <b>NOTE 1</b>
9	353W12	Retainer, Thrust Bearing, see <b>NOTE 1</b>
10	58AD30 124CN3	Screw, Thrust Bearing Retainer, See <b>NOTE 1</b>
11	255HB81	Shim, Thrust Cover, 0.003 in. Thick
	255HB86	Shim, Thrust Cover, 0.0075 in. Thick
12	130F30	Washer, 5/8 in. Spring Lock, Zinc Plated

**NOTE 1:** For use only when existing worm shaft is retained. When replacing worm and gear, use thrust housing upgrade kit p/n AAA27076BE2 and sundries kit p/n AAA27076BE1.

**NOTE 2:** No longer available. For first replacement, use thrust bearing and housing upgrade kit p/n AAA27076BE4. For subsequent replacement, use parts per newer vintage (A7078A, A7078C).

(Continued on next page)



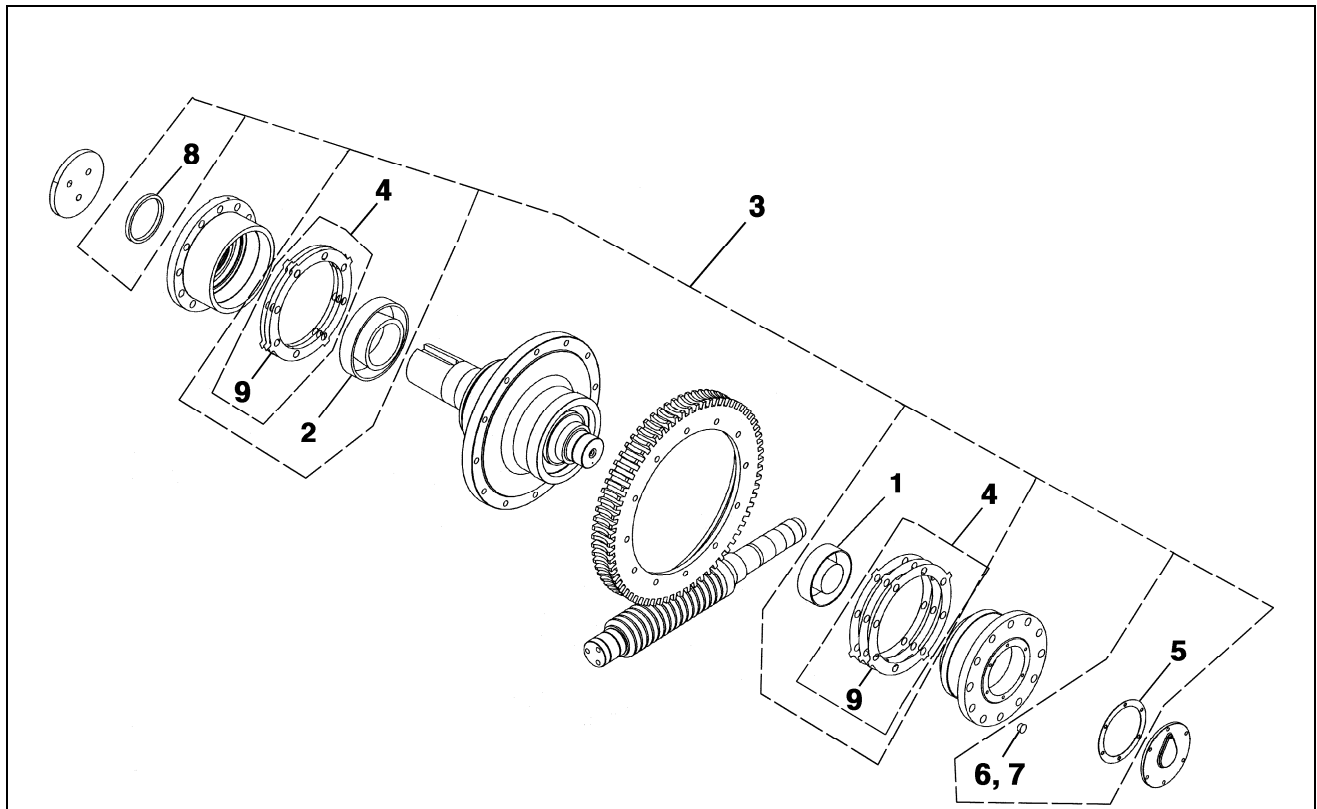
**W/O VINTAGE  
(7078A, 7078C)**

REF. No.	PART No.	DESCRIPTION
1	207Z56	Bearing, Inside
2	VP-711285	Bolt, 3/8 in.-16 x 1 in., Zinc Plated, Grade 5 (or higher)
3	346AFW1	Cover, Inside Bearing, see <b>NOTE</b>
4	A346AFW1	
5	255HB50	Gasket, Inside Cover
6	492D70 192G44	Key, Worm Shaft
7	72BV11	Nut
8	33P2 AAA33AQ5	Seal, Split, Worm Shaft, $\varnothing$ 3-1/4 in., <b>W</b> → p/n 346AFW1 Cover
9	AAA33AQ3	Seal, Split, Worm Shaft, $\varnothing$ 3 in., <b>W</b> → p/n A346AFW1 Cover
10	130F28	Washer, Spring Lock, Zinc Plated, 3/8 in.
11	130AA11	Washer, Tabbed

**NOTE:** p/n 346AFW1 cover is no longer available. For replacement, use housing p/n A346AFW1 and seal AAA33AQ3.

# 22 CT Sheave Shaft Parts, Overhung Drive Sheave

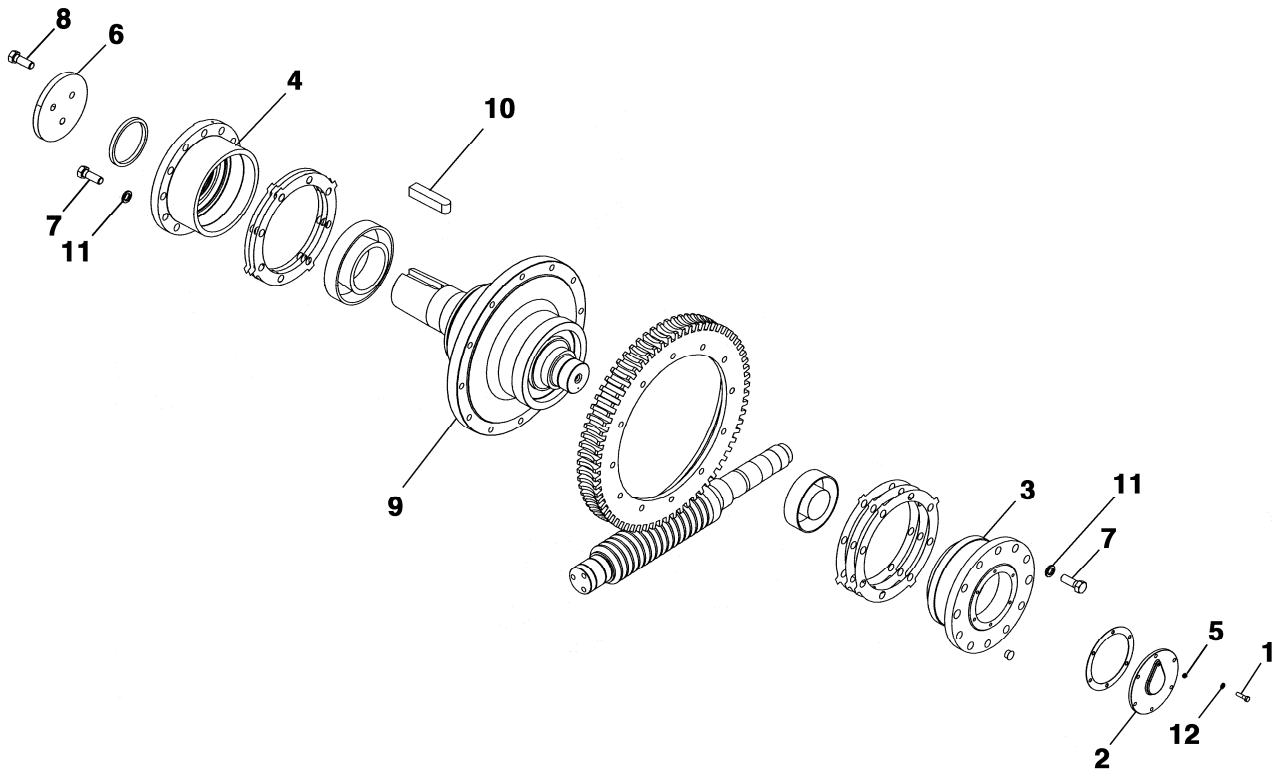
06-C7078A



**W/O VINTAGE  
(7078CB, 1F-7078CB, C7078A  
RYC7078A, B7078A, A7078C, 7078C)**

REF. No.	PART No.	DESCRIPTION
1	209B30	Bearing, Sheave Shaft, Gearcase Side
2	209B29	Bearing, Sheave Shaft, Sheave Side
3	AAA27076BE5	Kit, Sheave Shaft Bearings & Sundries, Overhung
4	2700CAT2	Kit, Shims For Bearing Housing
5	376J43	Gasket, Sheave Shaft Bearing Cover
6	444AX34	Plug, Plain Adjustment Hole
7	444AX35	Plug, Tapped Adjustment Hole
8	33AB1	Seal, Sheave Shaft, see <b>NOTE</b>
9	255HB69	Shim, Bearing Housing, 0.003 in. Thick
	255HB70	Shim, Bearing Housing, 0.0075 in. Thick
	255HB71	Shim, Bearing Housing, 0.020 in. Thick

**NOTE:** Not used on all machines.

**06-C7078A****22 CT Sheave Shaft Parts,  
Overhung Drive Sheave**

**W/O VINTAGE  
(7078CB, 1F-7078CB, C7078A,  
RYC7078A, B7078A, A7078C)**

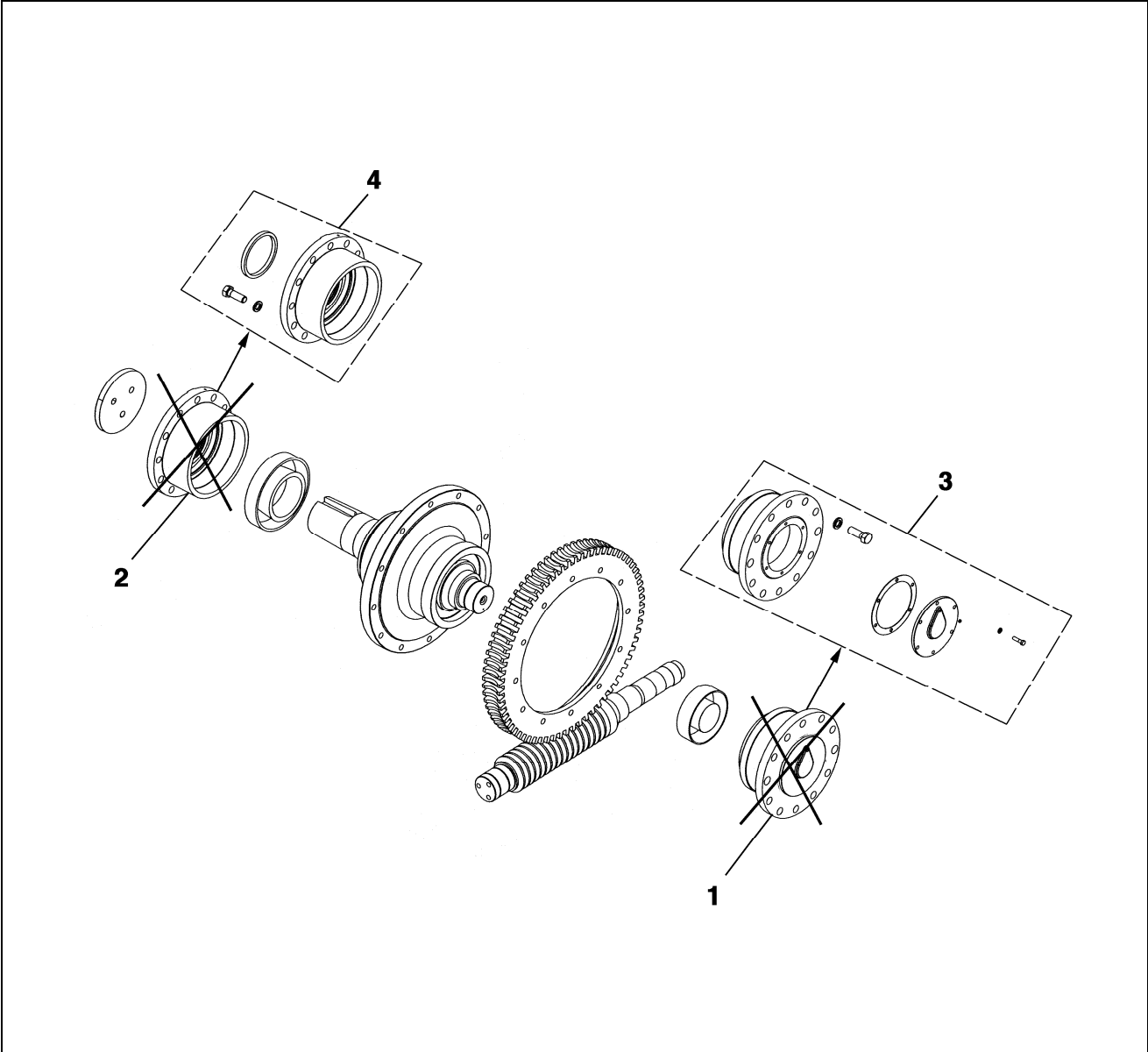
<b>REF. No.</b>	<b>PART No.</b>	<b>DESCRIPTION</b>
1	BTFH 3/8X1-1/2F	Bolt, 3/8 in. – 16 x 1-1/2 in., Zinc Plated, Grade 5 (or higher)
2	346AJF1	Cover, Gearcase Side Bearing
3	396GV1	Housing, Gearcase Side Bearing
4	396KL1	Housing, Sheave Side Bearing
5	377DF13	Plug, Grease
6	353W9	Retainer, Sheave
7	SCCP HS0C 5/8-11X2	Screw, 5/8 in. – 11 x 2 in. Flanged Socket Hex Head Cap
8	124CN5	Screw, Sheave Retainer
9	500AV2	Sheave Shaft
10	192D69	Sheave Shaft Key
11	130F30	Washer, 5/8 in. Spring Lock, Zinc Plated
12	130F28	Washer, 3/8 in. Spring Lock, Zinc Plated



# 22 CT Sheave Shaft Parts

## Overhung Drive Sheave

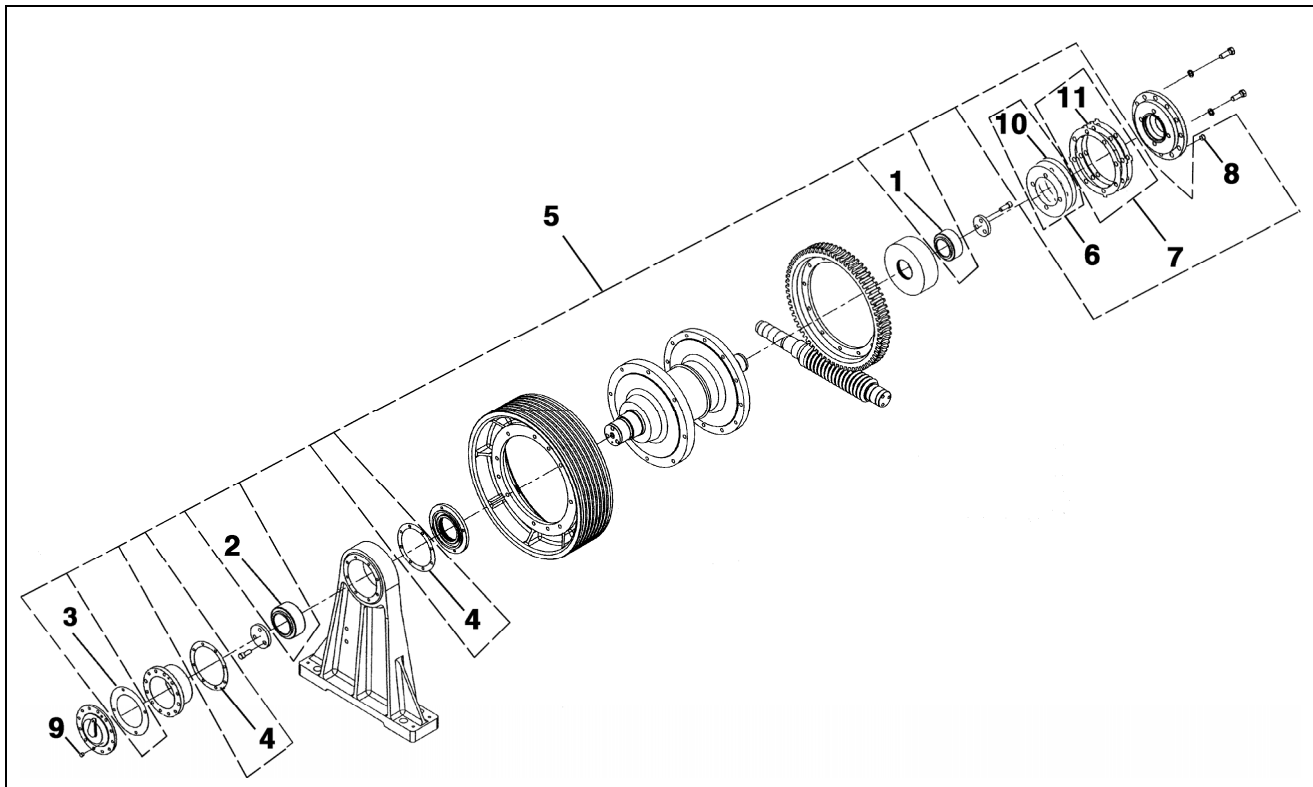
**06-C7078A**



W/O VINTAGE		
(C7078A, RYC7078A, B7078A, A7078C, 7078C)		(A7078C, 7078C)
REF. No.	PART No.	DESCRIPTION
1	---	396FN4 Housing, Gearcase Side Bearing
2	396FK4	Housing, Sheave Side Bearing
3	AAA27076BE6	Kit, Bearing Housing Upgrade, Gearcase Side
4	AAA27076BE7	Kit, Bearing Housing Upgrade, Sheave Side

**06-C7078A**

## 22 CT Sheave Shaft Parts, Inboard Drive Sheave

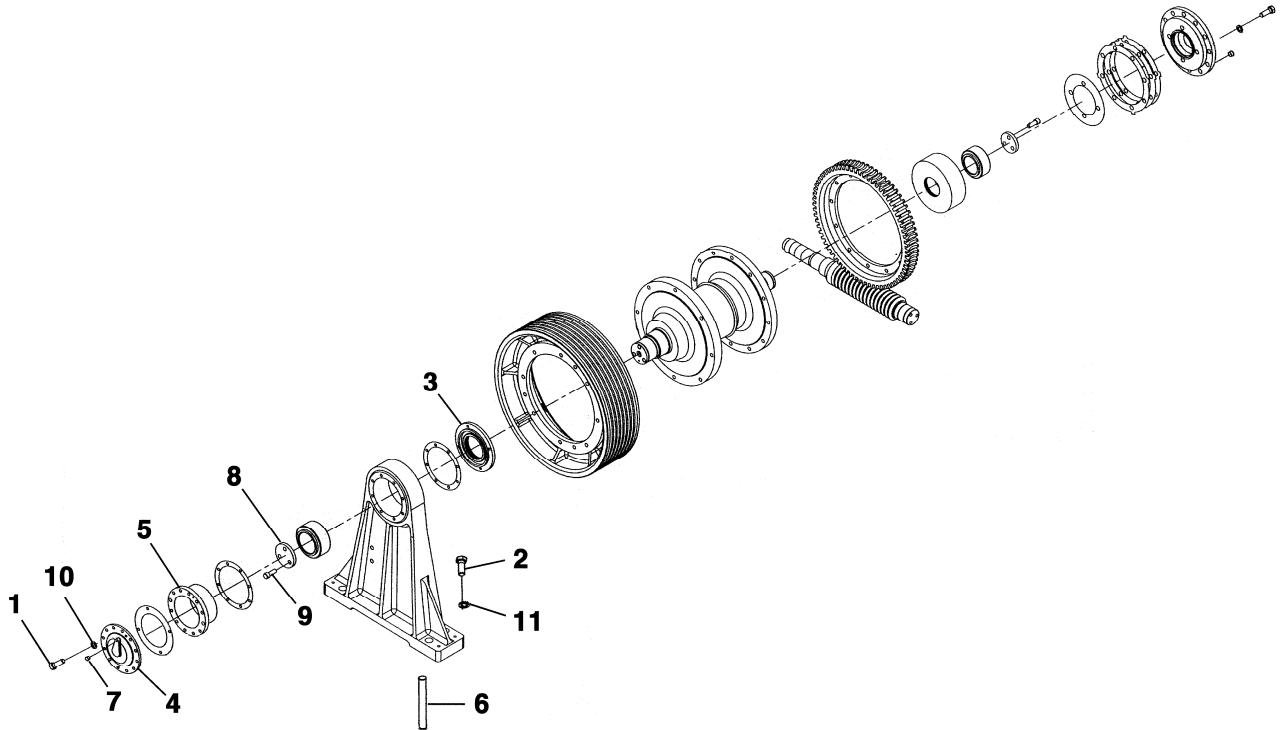


**W/O VINTAGE  
(C7078A, RYC7078A,  
B7078A, A7078A, 7078A)**

REF. No.	PART No.	DESCRIPTION
1	209AD2	Bearing, Gearcase Side
2	209AD1	Bearing, Sheave Side
3	376J41	Gasket, Bearing Cover
4	376J22	Gasket, Bearing Housing
5	AAA27076BE8	Kit, Sheave Shaft Bearing and Sundries, Inboard
6	2700CAT3	Kit, Shims for Gearcase Side Bearing
7	2700CAT4	Kit, Shims for Gearcase Side Housing
8	444AX10	Plug, Tapped Adjustment Hole
	444AX26	Plug, Plain Adjustment Hole
9	444AX28	Plug, Plain Adjustment Hole
	444AX29	Plug, Tapped Adjustment Hole
10	255HB53	Shim, Bearing Housing, 0.003 in. Thick
	255HB54	Shim, Bearing Housing, 0.0075 in. Thick
11	255HB69	Shim, Bearing Housing, 0.003 in. Thick
	255HB70	Shim, Bearing Housing, 0.0075 in. Thick
	255HB71	Shim, Bearing Housing, 0.020 in. Thick

# 22 CT Sheave Shaft Parts, Inboard Drive Sheave

**06-C7078A**



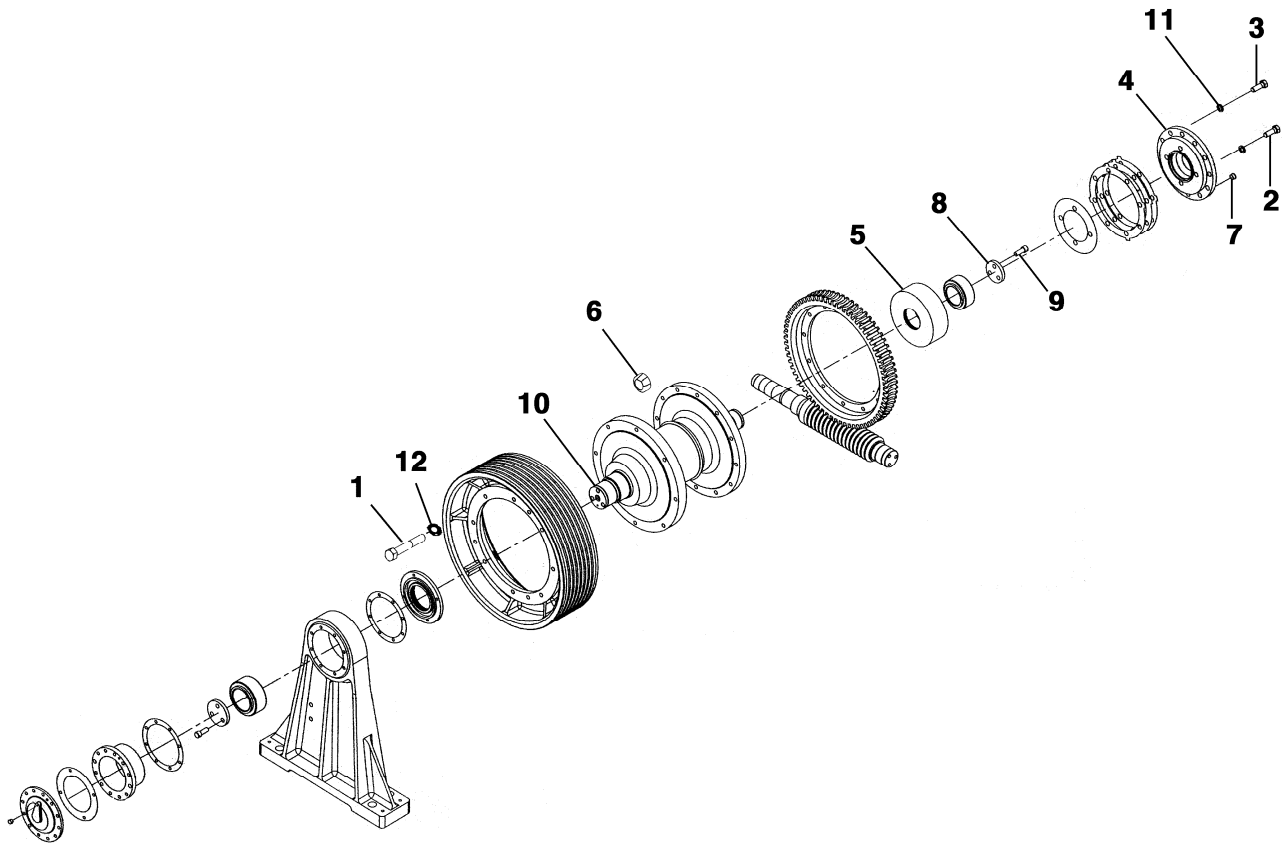
**W/O VINTAGE  
(C7078A, RYC7078A,  
B7078A, A7078A, 7078A)**

REF. No.	PART No.	DESCRIPTION
1	BTFH 1/2X5-1/2	Bolt, 1/2 in. – 13 x 5-1/2 in., Zinc Plated, Grade 5 (or higher)
2	---	Bolt, 1-1/4 in. – 7 x 3-1/2 in., Zinc Plated, Grade 5 (or higher)
3	346AFX1	Cover, Inner, Outboard Bearing
4	346AJE1	Cover, Outer, Outboard Bearing
5	396GR1	Housing, Outboard Bearing
6	81AX45	Pin, Outboard Bearing Stand
7	377DF13	Plug, Bearing Cover (1/8 NPT)
8	353W11	Retainer, Outboard Bearing
9	124CN3	Screw, Bearing Retainer
10	130F29	Washer, 1/2 in. Spring Lock, Zinc Plated
11	130F35	Washer, 1-1/4 in. Spring Lock, Zinc Plated

(Continued on next page)

**06-C7078A**

## 22 CT Sheave Shaft Parts, Inboard Drive Sheave

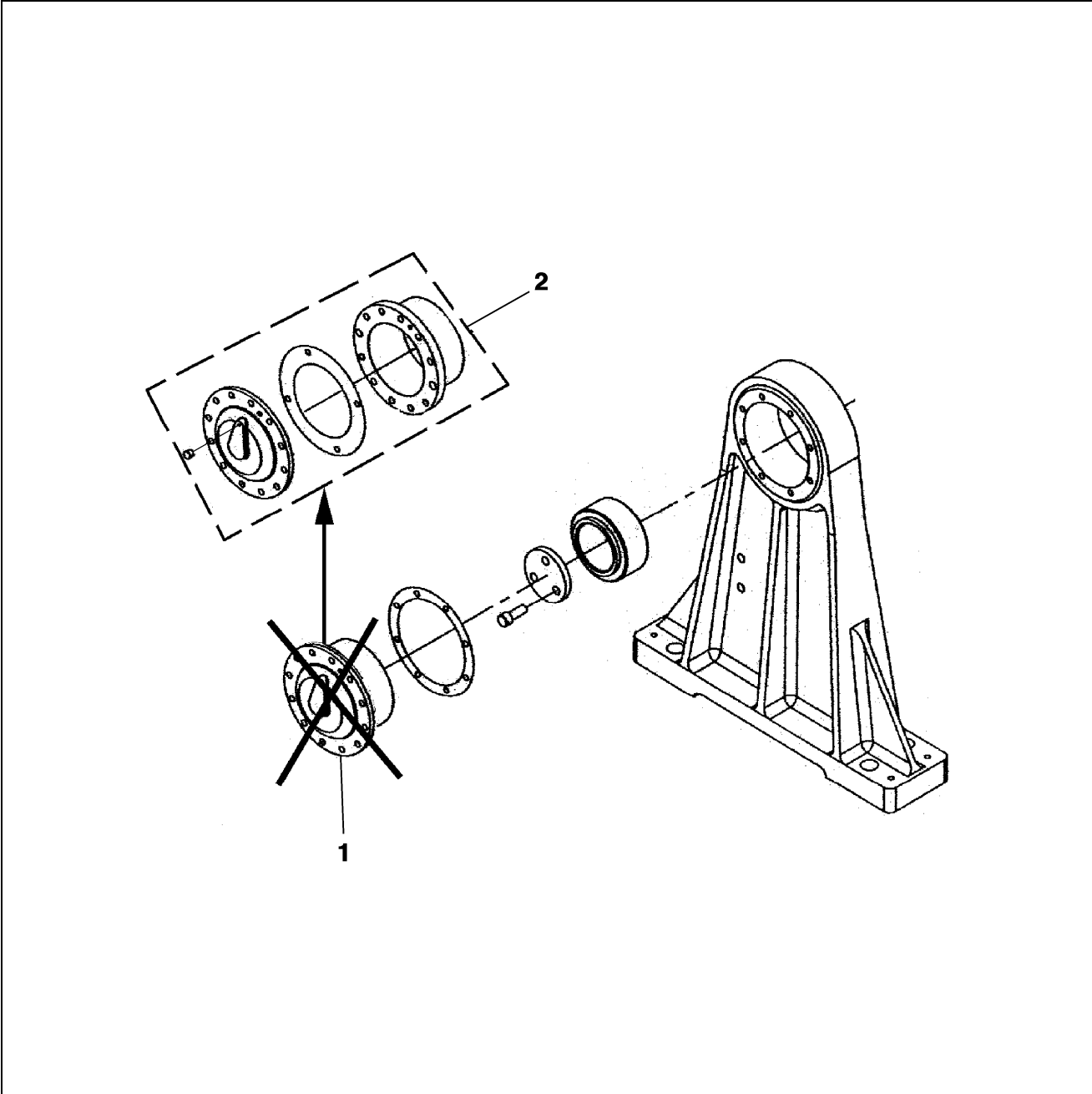


**W/O VINTAGE  
(C7078A, RYC7078A,  
B7078A, A7078A, 7078A)**

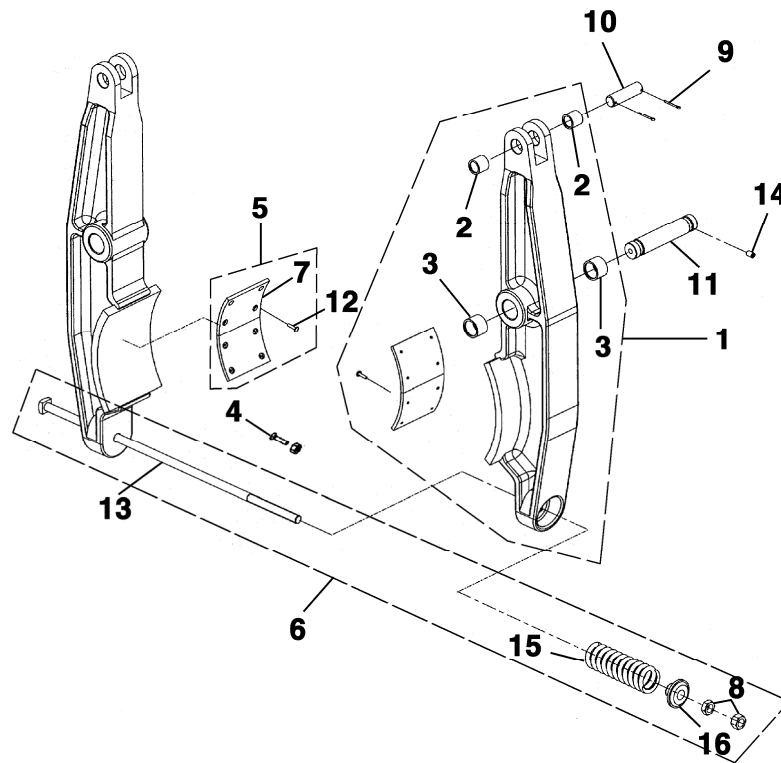
REF. No.	PART No.	DESCRIPTION
1	---	Bolt, 3/4 in. – 10 x 3–1/2 in., Zinc Plated, Grade 5 (or higher)
2	BTFH 5/8X2	Bolt, 5/8 in. – 11 x 2 in., Zinc Plated, Grade 5 (or higher)
3	BTFH 5/8X2-3/4	Bolt, 5/8 in. – 11 x 2–3/4 in., Zinc Plated, Grade 5 (or higher)
4	346AFY1	Cover, Gearcase Side Bearing
5	396FS1	Housing, Gearcase Side Bearing
6	NUT FH3/4-10	Nut, 3/4 in. – 10, Zinc Plated
7	377DF13	Plug, Bearing Cover
8	353W10	Retainer, Gearcase Side Bearing
9	124CN3	Screw, Bearing Retainer
10	500AT2	Sheave Shaft
11	130F30	Washer, 5/8 in. Spring Lock, Zinc Plated
12	130F31	Washer, 3/4 in. Spring Lock, Zinc Plated

# 22 CT Sheave Shaft Parts, Inboard Drive Sheave

**06-C7078A**



<b>W/O VINTAGE (7078A)</b>		
<b>REF. No.</b>	<b>PART No.</b>	<b>DESCRIPTION</b>
1	396FR4	Housing, Bearing Outboard
2	AAA27076BE9	Kit, Bearing Housing Upgrade

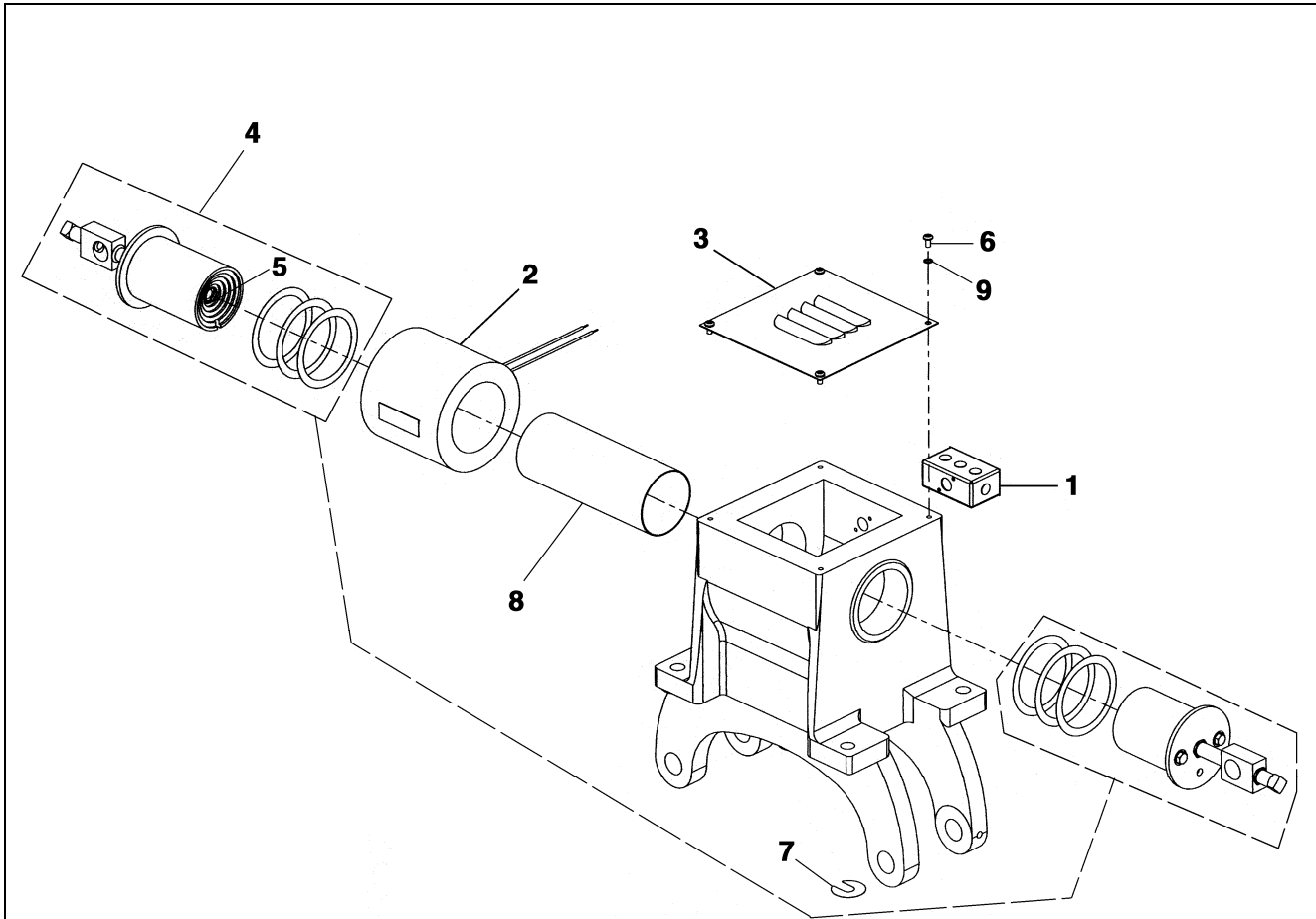
**06-C7078A****22 CT Brake Arms**

**W/O VINTAGE  
(A7078D, 7078D, 7078CG)**

<b>REF. No.</b>	<b>PART No.</b>	<b>DESCRIPTION</b>
1	286AS2	Arm, Brake, Complete
2	209A6	Bearing, Length = 1/2 in.
3	209A3	Bearing, Length = 1 in.
4	AAA124FH1	Bolt & Nut, Brake Lining
5	2700CAT6	Kit, Brake Lining
6	2700CAT5	Kit, Brake Spring & Rod
7	416AP1	Lining, Brake
8	NUT FHJ5/8	Nut, Jam, 5/8 in. – 11, Zinc Plated
9	---	Pin, Cotter, 1/8 in. x 1-1/4 in.
10	82R13	Pin, Length = 3.062 in.
11	81CC1	Pin, Length = 4.875 in.
12	145C2	Rivet, Brake Lining
13	60D54 60D49	Rod
14	---	Screw, Set, 3/8 in. – 16 x 5/8 in. Hex Socket, Half Dog Point
15	90XC10	Spring, Length = 5.0 in.
	90BD2	Spring, Length = 5.875 in.
16	133AH1	Washer

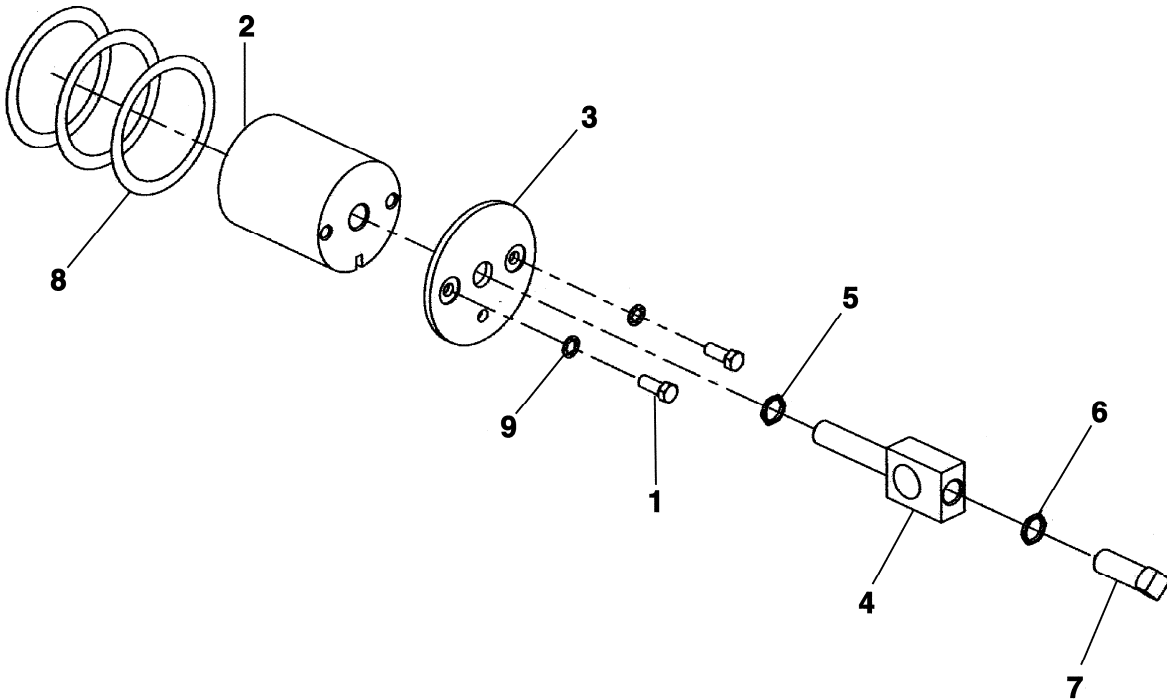
# 22 CT Brake Magnet

**06-C7078A**



REF. No.	W/O VINTAGE (A7078D, 7078CG, 1F-7078CG)		W/O VINTAGE (A7078D)		DESCRIPTION
	PART No.	LENGTH	PART No.	LENGTH	
1	309AV1				Box, with Cover
2	222J11	5.75 in.	222KA5	5.25 in.	Coil, Magnet
3	285BN1				Cover
4	2700CAT8		2700CAT9		Kit, Brake Cores, Complete
5	81BM1				Pin, Guide
6	---				Screw, 1/4 in. – 20 x 1/2 in. Pan Head Machine, Zinc Plated
7	255BN1				Shim, 0.006 in. Thick, Magnet Frame
	255BN2				Shim, 0.015 in. Thick, Magnet Frame
8	136R11	9.4 in.	136R12	8.2 in.	Tube, Magnet Core
9	130A7				Washer, 1/4 in. Internal Lock, Zinc Plated

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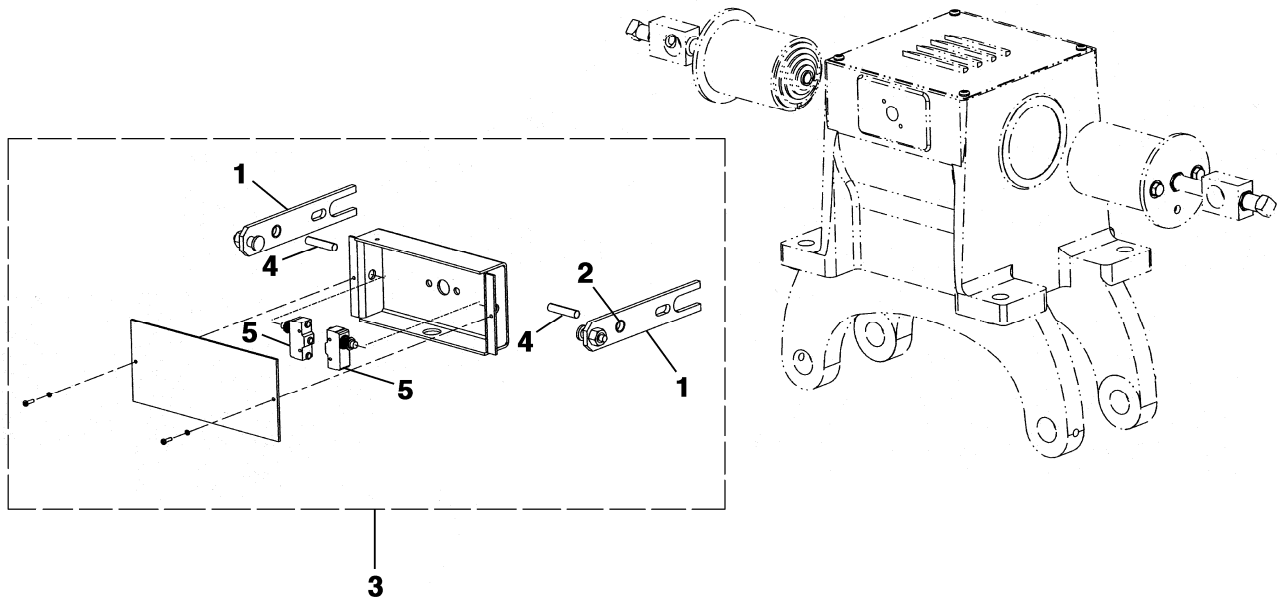


REF. No.	W/O VINTAGE (A7078D, 7078CG, 1F-7078CG)		W/O VINTAGE (A7078D)		DESCRIPTION
	PART No.	LENGTH	PART No.	LENGTH	
1	VP-711285				Bolt, 3/8 in. – 16 x 1 in., Zinc Plated, Grade 5 (or higher)
2	400DJ1	5.1 in.	400DP1	4.4 in.	Core, Female
	400DH1	5.1 in.	400DN1	4.4 in.	Core, Male
3	353BB3		353BB2		Disk, Brake Core
4	65GA4		65GA5		Eye Bolt
5	See Description		---		Nut, 5/8 in. – 18 Jam, Zinc Plated
	---		See Description		Nut, 3/4 in. – 16 Jam, Zinc Plated
6	---				Nut, 3/4 in. – 16 Jam, Zinc Plated
7	---				Set Screw, 3/4 in. – 16 x 2 in. Square Head Half Dog Point, Zinc Plated
8	255CK2		255CK3		Shim, Brake Core
9	130F28				Washer, 3/8 in. Spring Lock, Zinc Plated



# 22CT Brake Switch

06-C7078A

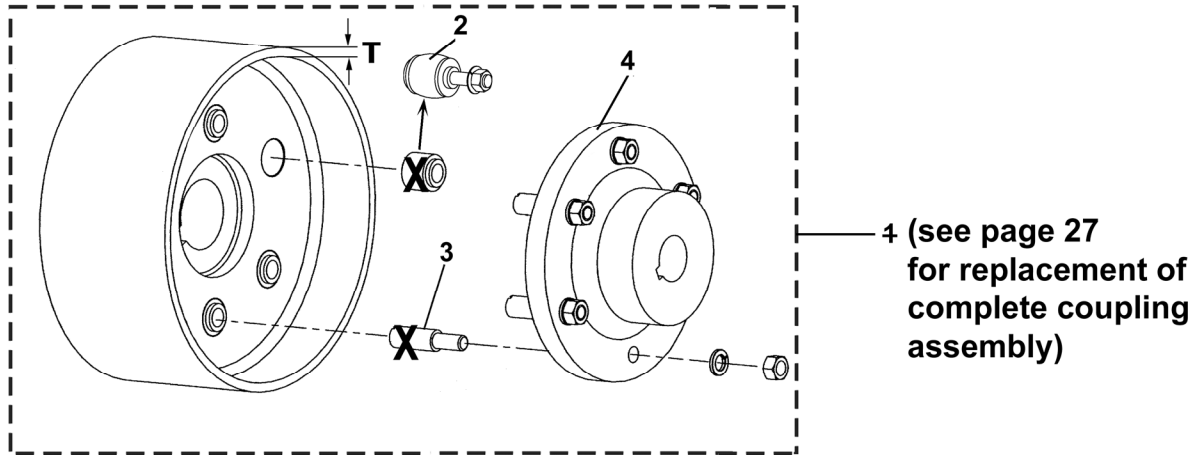


	W/O VINTAGE	
REF. No.	PART No.	DESCRIPTION
1	A288RL2	Arm
2	335E104	Bushing
3	2700ADE7	Kit, Brake Switch, Complete
4	81AX24	Pin
5	477Y4 AAA635L1	Switch

**06-C7078A**

# Type A7078B and 7078B Brake Coupling Assembly

For bushing replacement procedure, see TIP 6.2.0-21.

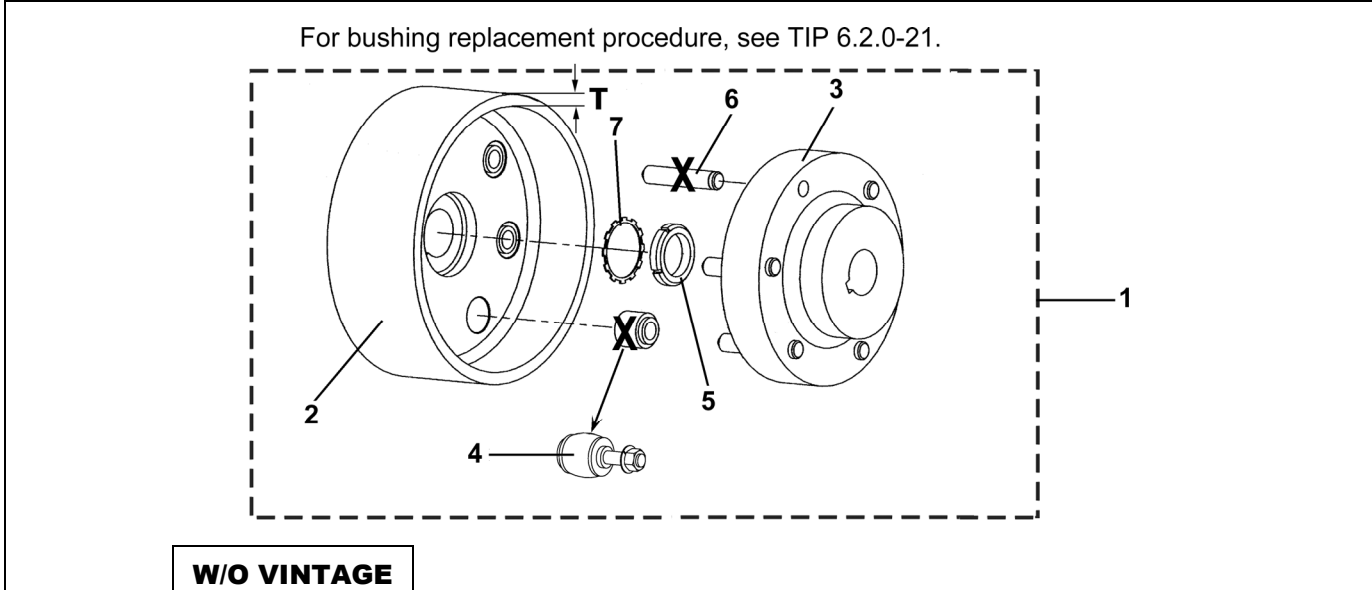


REF. No.	W/O VINTAGE PART No.	DESCRIPTION	"T" (in.)
1	7078B1	Coupling, Brake, Complete, Light Drum, 0.5 in. Motor Shaft Keyway	0.5
	7078B2	Coupling, Brake, Complete, Heavy Drum, 0.5 in. Motor Shaft Keyway	1
	7078B3	Coupling, Brake, Complete, Light Drum, 0.625 in. Motor Shaft Keyway	0.5
	7078B4	Coupling, Brake, Complete, Heavy Drum, 0.625 in. Motor Shaft Keyway	1
2	321CJ3	Bushing, Brass Center	
	AAA65KN2	Bushing Bolt	
3	95BT3	Stud (with Nut & Washer)	
4	215AS2 215AS5	Coupling, Male (Motor Coupling) w/Bushings, 0.5 in. Keyway	
	215AS4 215AS6	Coupling, Male (Motor Coupling) w/Bushings, 0.625 in. Keyway	

(Continued on next page)

# Type A7078B and 7078B Brake Coupling Assembly

**06-C7078A**

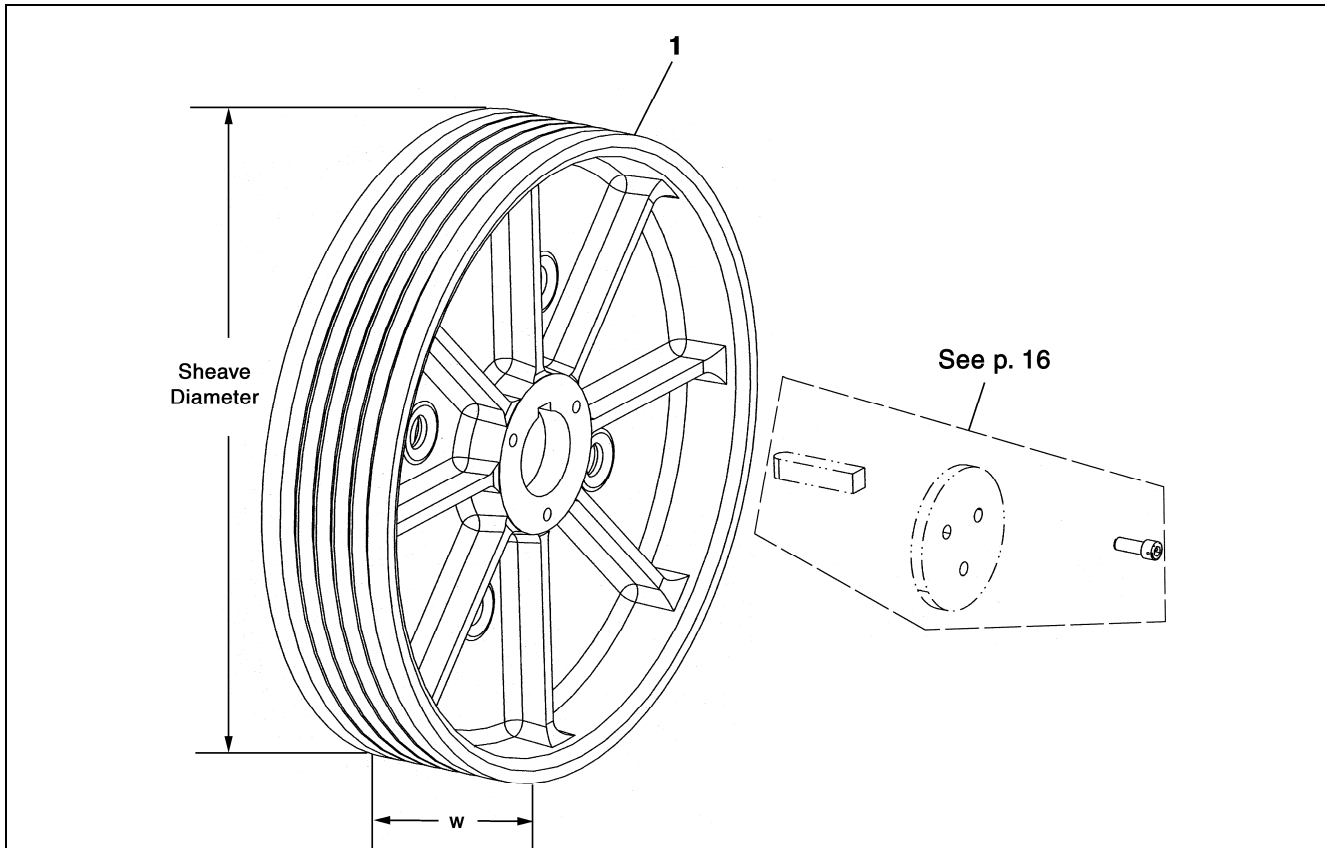


W/O VINTAGE			
REF. No.	PART No.	DESCRIPTION	"T" (in.)
1	A7078B4 A7078B5	Coupling, Brake, Complete, Light Drum, 0.5 in. Motor Shaft Keyway	0.5
	A7078B2 A7078B6	Coupling, Brake, Complete, Heavy Drum, 0.5 in. Motor Shaft Keyway	1
	A7078B3 A7078B7	Coupling, Brake, Complete, Light Drum, 0.625 in. Motor Shaft Keyway	0.5
	A7078B4 A7078B8	Coupling, Brake, Complete, Heavy Drum, 0.625 in. Motor Shaft Keyway	1
2	A215AV2 A215AV1	Coupling, Female (Brake Drum), 10 in. Inside Diameter	1
	A215AT2 A215AT1	Coupling, Female (Brake Drum), 11 in. Inside Diameter	0.5
3	A215AS2 A215AS5	Coupling, Male (Motor Coupling), 0.5 in. Keyway w/Bushing Bolts	
	A215AS4 A215AS6	Coupling, Male (Motor Coupling), 0.625 in. Keyway w/Bushing Bolts	
4	456C5	Bushing, Phenolic Center	
	AAA65KN4	Bushing Bolt	
5	72BV7	Nut (for Motor Shaft with 0.5 in. Keyway), See <b>NOTE</b>	
	72BV11	Nut (for Motor Shaft with 0.625 in. Keyway), See <b>NOTE</b>	
	72FJ4	Nut, Metric (for Motor Shaft with 0.5 in. Keyway), See <b>NOTE</b>	
	72FJ5	Nut, Metric (for Motor Shaft with 0.625 in. Keyway), See <b>NOTE</b>	
6	78FA44	Pin	
7	130AA10	Washer, Tabbed (for Motor Shaft with 0.5 in. Keyway), See <b>NOTE</b>	
	130AA11	Washer, Tabbed (for Motor Shaft with 0.625 in. Keyway), See <b>NOTE</b>	
	130AT4	Washer, Metric Tabbed (for Motor Shaft with 0.5 in. Keyway), See <b>NOTE</b>	
	130AT5	Washer, Metric Tabbed (for Motor Shaft with 0.625 in. Keyway), See <b>NOTE</b>	

**NOTE:** This hardware is only for use with original equipment motors. For Mod motors, see motor SPL for appropriate parts.

**06-C7078A**

# Overhung Drive Sheave 28 in. Diameter



W/O VINTAGE								
PART No.				DESCRIPTION				
REF. No.	UNDERCUT GROOVE TYPE		GROOVED FOR LINERS (See NOTE)	ROPES		RIM WIDTH "W" (in.)	TAPE GROOVE	SHEAVE DIAMETER (in.)
	90°	105°		No.	DIA. (in.)			
1	260AW1	260AW6	---	4	1/2	5.5	W/O	28
	260AW2	260AW7	---	5				
	260AW3	260AW8	---	6				
	260AW4	260AW9	---	4	5/8	6.5		
	260AW5	260AW10	---	5				
	A260AW1	A260AW6	260BX1	4	1/2	6.5		
	A260AW2	A260AW7	260BX4	5				
	A260AW3	A260AW8	260BX7	6				
	A260AW4	A260AW9	---	4	5/8	7.0		
	A260AW5	A260AW10	---	5				
	A260AW11	A260AW12	---	6				
	---	---	260CN1	4				

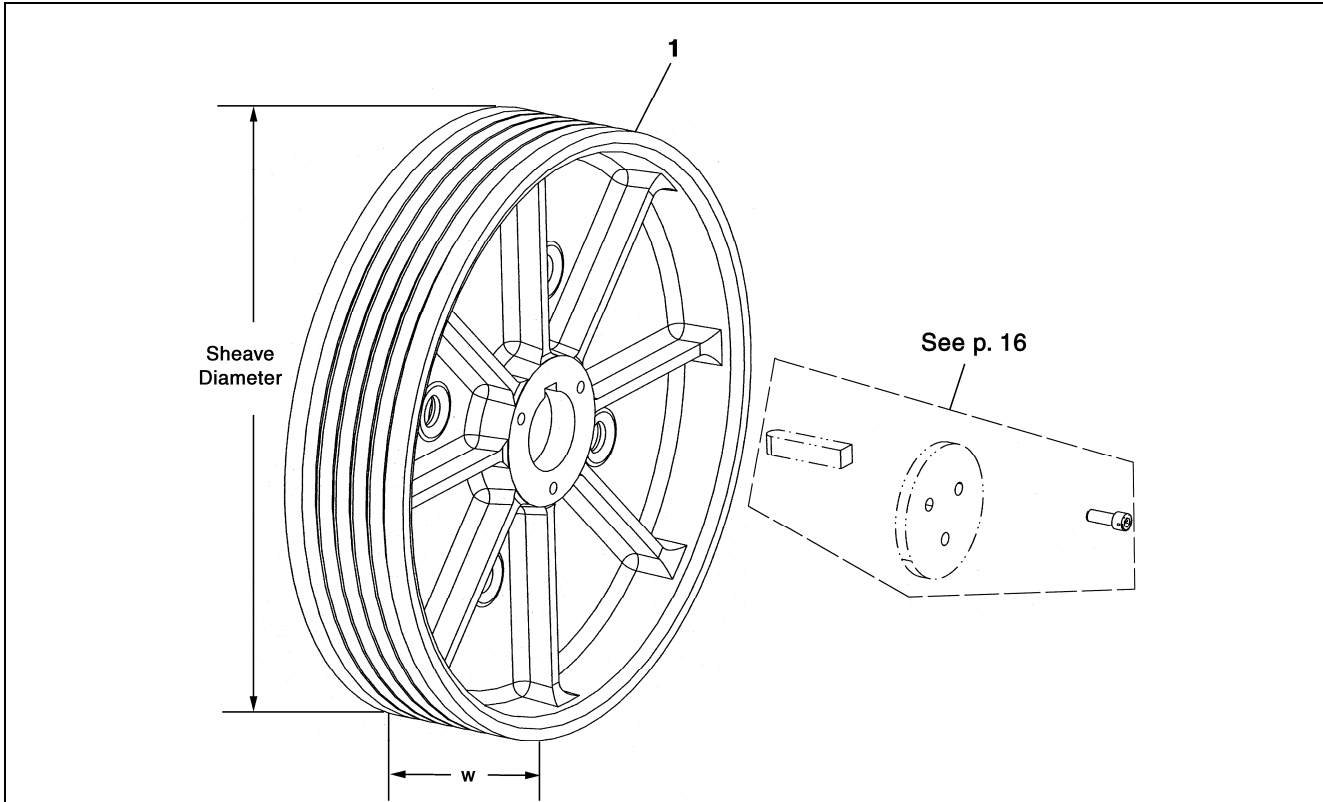
**NOTE:** Order sheave liners separately. See p. 31 for part numbers.

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# Overhung Drive Sheave

## 30 in. Diameter

**06-C7078A**



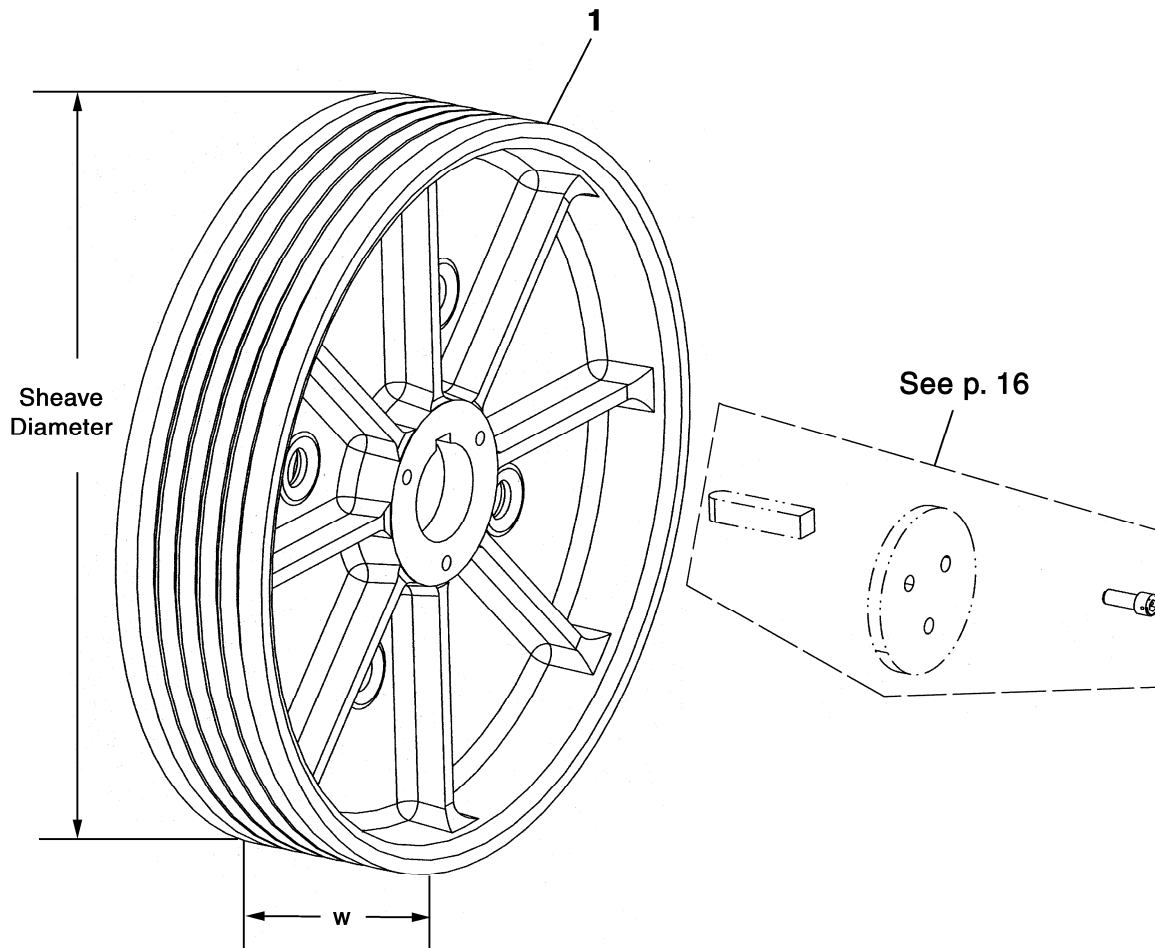
		W/O VINTAGE							
		PART No.					DESCRIPTION		
		UNDERCUT GROOVE TYPE		GROOVED FOR LINERS (See NOTE)	ROPES		RIM WIDTH "W" (in.)	TAPE GROOVE	SHEAVE DIAMETER (in.)
REF. No.		90°	105°		No.	DIA. (in.)			
1		260AX1	260AX6	---	4	1/2	5.5	W/O	30
		260AX2	260AX7	---	5				
		260AX3	260AX8	---	6				
		260AX4	260AX9	---	4	5/8			
		260AX5	260AX10	---	5				
		A260AX1	A260AX6	260BR1	4	1/2			
		A260AX2	A260AX7	260BR4	5				
		A260AX3	A260AX8	260BR7	6				
		A260AX4	A260AX9	---	4	5/8			
		A260AX5	A260AX10	---	5				
		A260AX11	A260AX12	---	6	5/8			
		RX260AX502	RX260AX503	---	4		1/2		
		RX260AX504	RX260AX505	---	3		5/8		
		RX260AX500	RX260AX501	---	4				

**NOTE:** Order sheave liners separately. See p. 31 for part numbers.

(Continued on next page)

**06-C7078A**

# Overhung Drive Sheave 32 in. Diameter

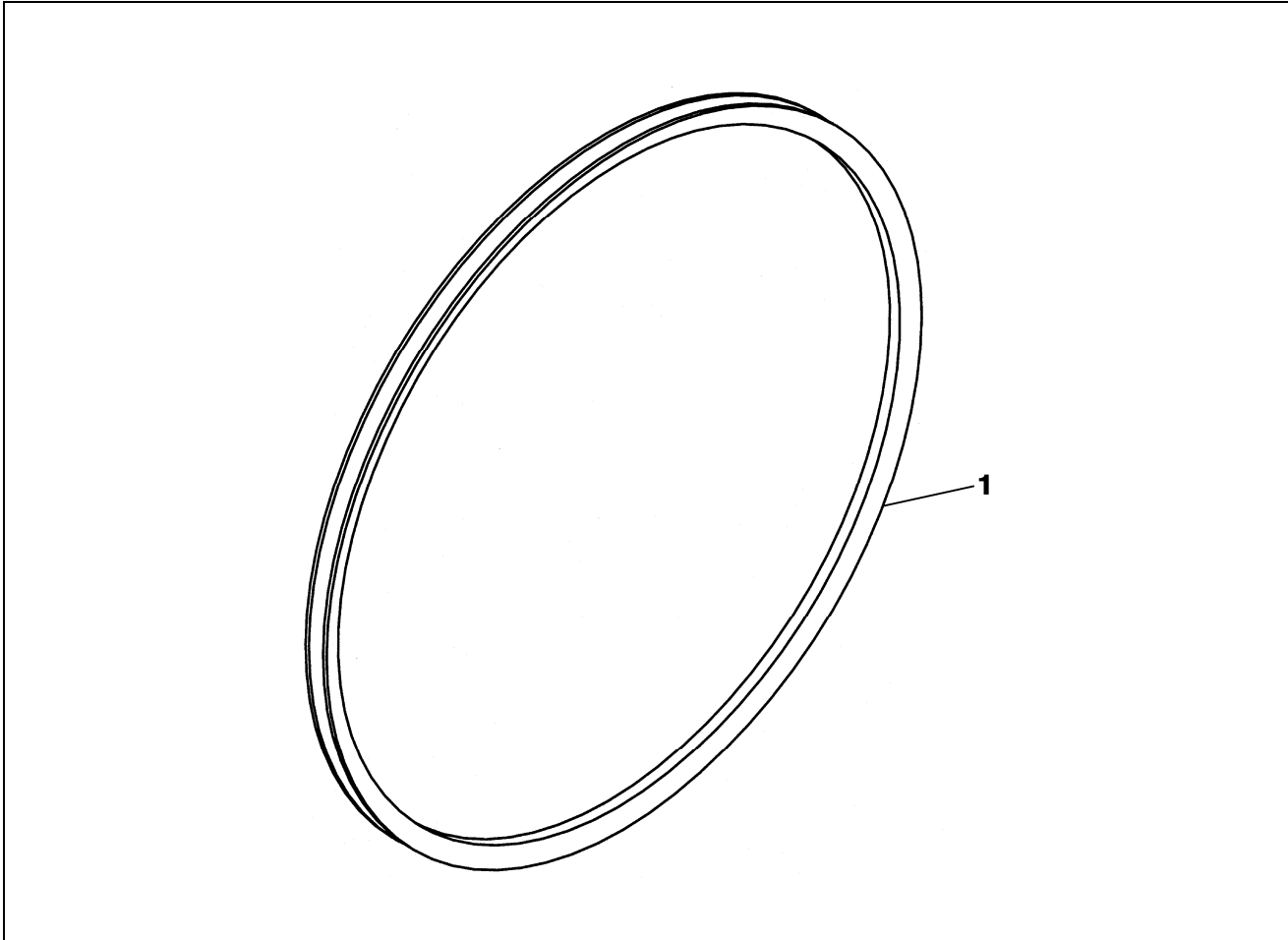


W/O VINTAGE								
PART No.			DESCRIPTION					
REF. No.	UNDERCUT GROOVE TYPE		GROOVED FOR LINERS (See NOTE)	ROPES		RIM WIDTH "W" (in.)	TAPE GROOVE	SHEAVE DIAMETER (in.)
	90°	105°		No.	DIA. (in.)			
1	---	---	260BT7	3	1/2	5.5	W/O	32
	260BL1	260BL6	260BT1	4				
	260BL2	260BL7	260BT4	5				
	260BL3	260BL8	---	6				
	260BL4	260BL9	---	4	5/8	6.0	With	
	260BL5	260BL10	---	5				
	RX260BL500	RX260BL501	---	3				
	---	---	1-260BL1	4				
	---	---	1-260BL3	5				

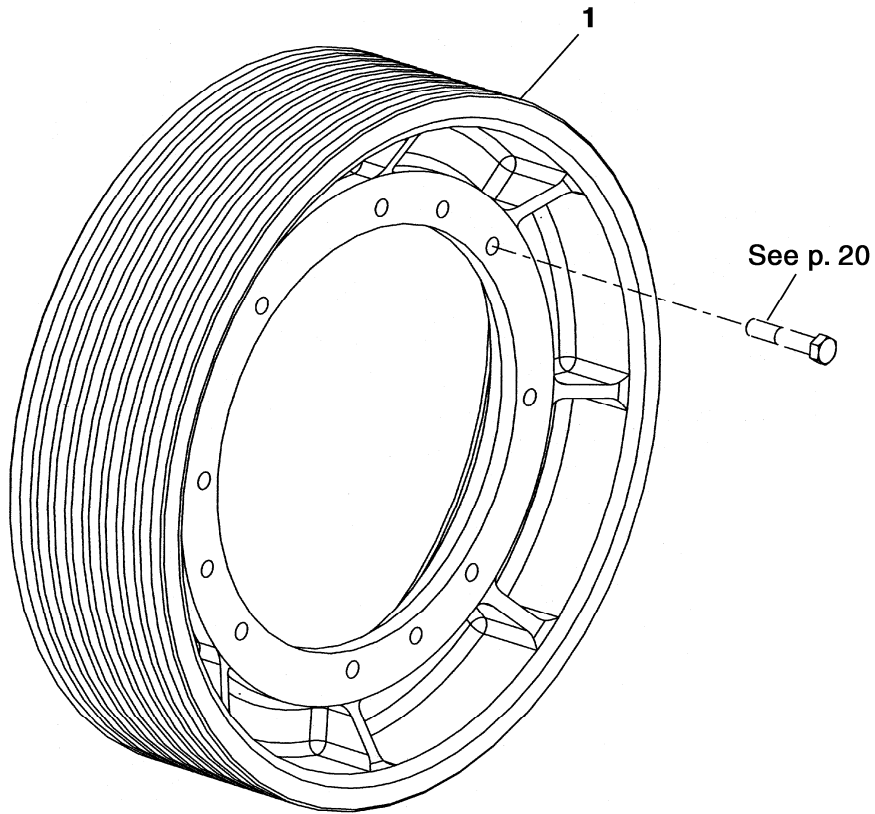
**NOTE:** Order sheave liners separately. See p. 31 for part numbers.

# Sheave Liners

**06-C7078A**

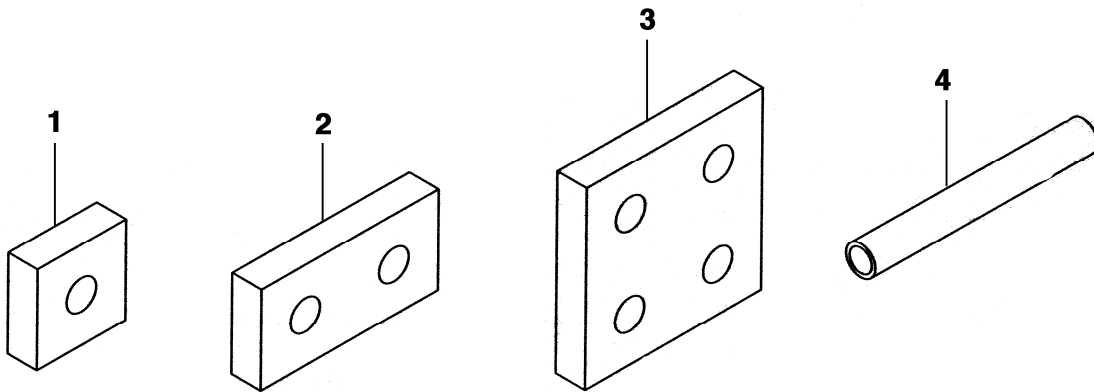


		<b>W/O VINTAGE</b>		
<b>REF. No.</b>	<b>PART No.</b>	<b>DESCRIPTION</b>	<b>SHEAVE DIAMETER (in.)</b>	<b>ROPE DIAMETER (in.)</b>
1	B251BT7 AAA251BT9	Liner, Treaded	28	1/2
	251BT8	Liner, Smooth		
	B251BV5 AAA251BV9	Liner, Treaded		5/8
	251BV6	Liner, Smooth		
	B251BT5 AAA251BT10	Liner, Treaded	30	1/2
	251BT6	Liner, Smooth		
	B251BT9 AAA251BT11	Liner, Treaded	32	1/2
	251BT10	Liner, Smooth		
B251BV4 AAA251BV11	Liner, Treaded	5/8		



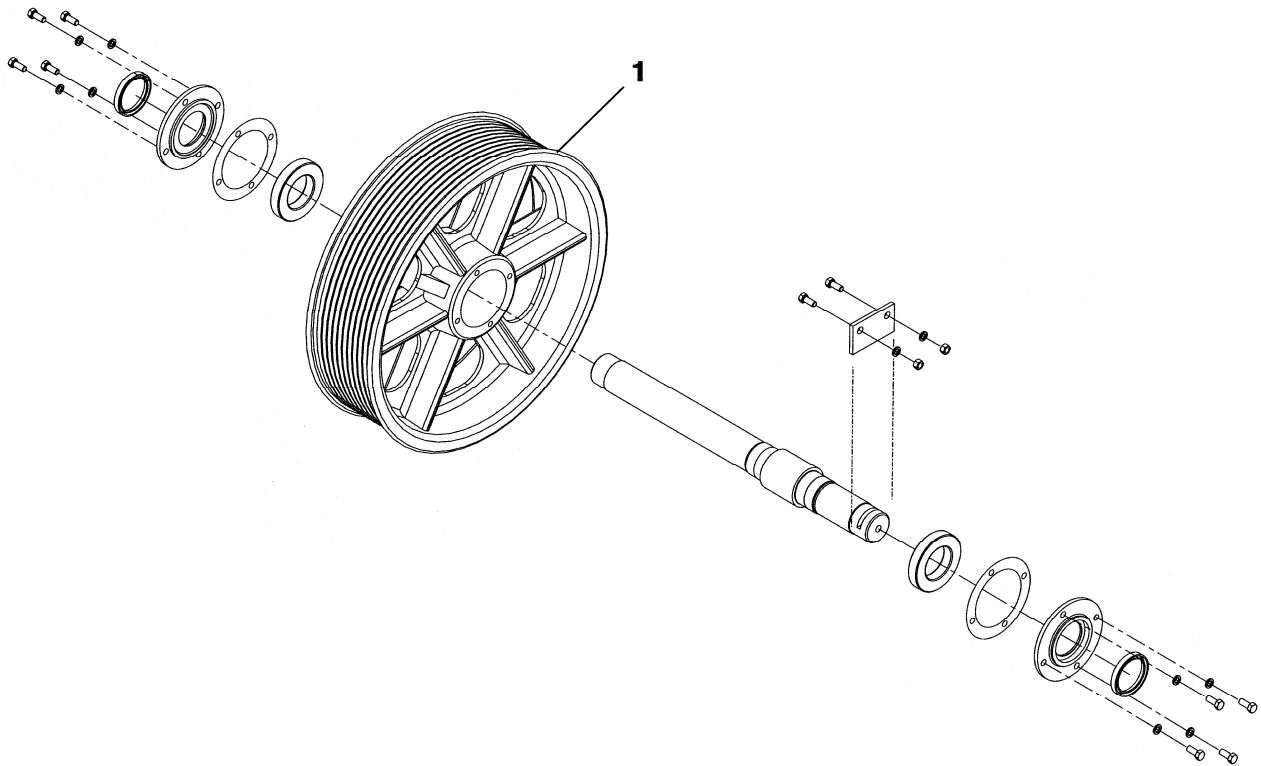
<b>W/O VINTAGE</b>					
<b>PART NUMBER</b>					
<b>UNDERCUT GROOVE TYPE</b>			<b>ROPES</b>		<b>SHEAVE DIAMETER (in.)</b>
<b>REF. No.</b>	<b>90°</b>	<b>105°</b>	<b>No.</b>	<b>DIAMETER (in.)</b>	
1	260AY1	260AY8	4	1/2	28
	260AY2	260AY9	5		
	260AY3	260AY10	6		
	260AY4	260AY11	4	5/8	
	260AY5	260AY12	5		
	260AY6	260AY13	6		
	260AY7	260AY14	7		
	260BA1	260BA8	4	1/2	30
	260BA2	260BA9	5		
	260BA3	260BA10	6		
	260BA4	260BA11	4	5/8	
	260BA5	260BA12	5		
	260BA6	260BA13	6		
	260BA7	260BA14	7		





		<b>W/O VINTAGE</b>
<b>REF. No.</b>	<b>PART No.</b>	<b>DESCRIPTION</b>
1	310JJ2	Pad, Isolation, Polyurethane, 3 in. x 3 in. w/ (1) 1 in. Hole
	310BE3	Pad, Isolation, Rubber, 3 in. x 3 in. w/ (1) 1 in. Hole
2	310JJ1	Pad, Isolation, Polyurethane, 6 in. x 3 in. w/ (2) 1 in. Holes
	310BE2	Pad, Isolation, Rubber, 6 in. x 3 in. w/ (2) 1 in. Holes
	310BE9	Pad, Isolation, Rubber, 6 in. x 3 in. w/ (2) 1.25 in. Holes
3	310MX1	Pad, Isolation, Polyurethane, 6 in. x 6 in. w/ (2) 1 in. Holes
	310BE1	Pad, Isolation, Rubber, 6 in. x 6 in. w/ (4) 1 in. Holes
4	137AL2	Tube, Tie-Down Bolt Protection

**28 in. Deflector Sheave**

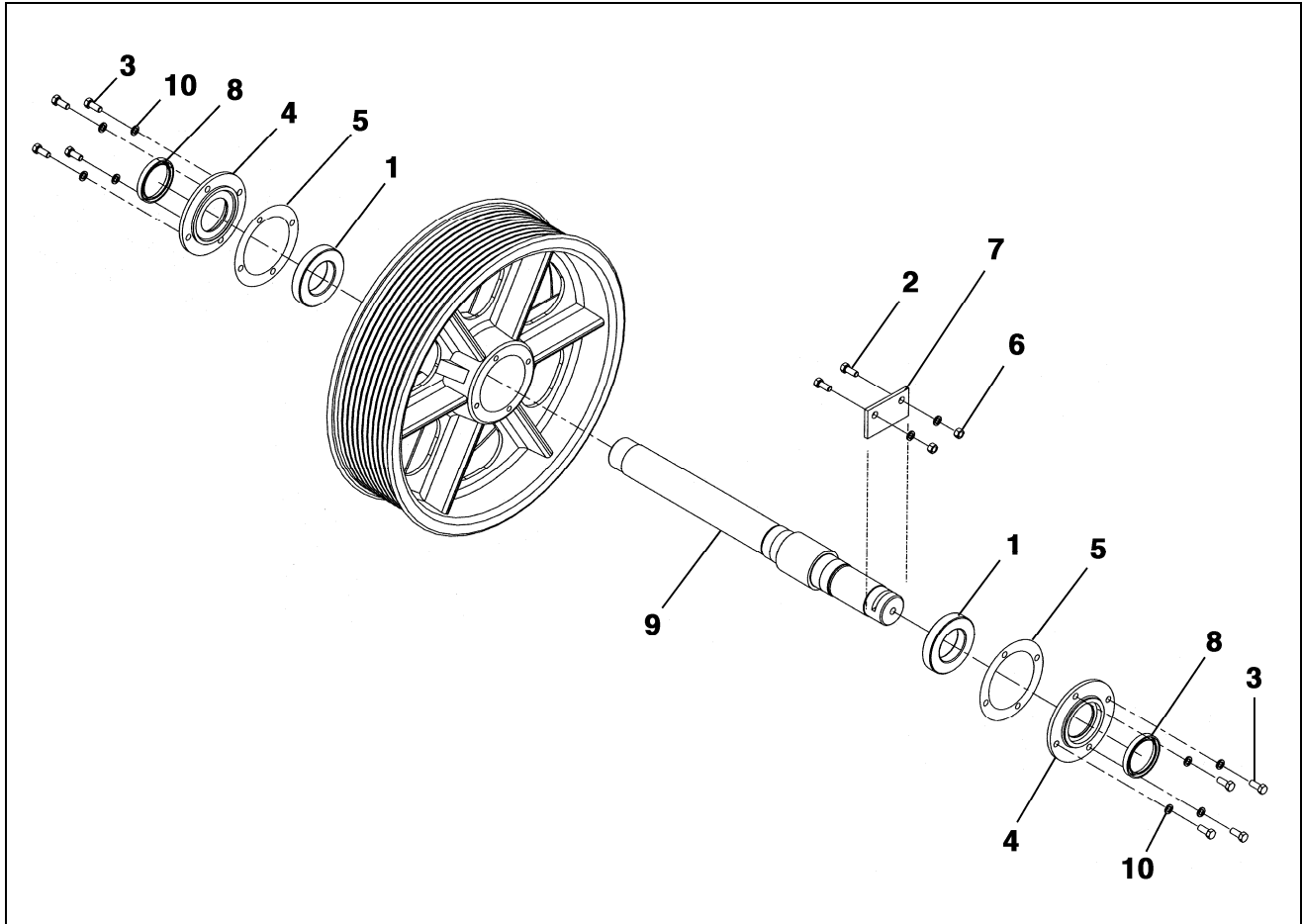


REF. No.	W/O VINTAGE (A7078G)	ROPES		DESCRIPTION		
	PART NUMBER	No.	SIZE (in.)			
1	263BB1	4	1/2	Use where Drive Sheave has Undercut Grooves	Sheave, Deflector, 28 in. Diameter	
	263BB2	5				
	263BB3	6				
	263BB4	4	5/8			Use where Drive Sheave has Undercut Grooves
	263BB5	5				
	263BB6	6				
	263BB7	7	1/2			Use where Drive Sheave has Sheave Liners
	263BB8	4				
	263BB9	5				
	263BB10	6				
	263BB11	5				
	263BB12	4	5/8			See <b>NOTE</b>

**NOTE:** Do not use with 260CN1 drive sheave.

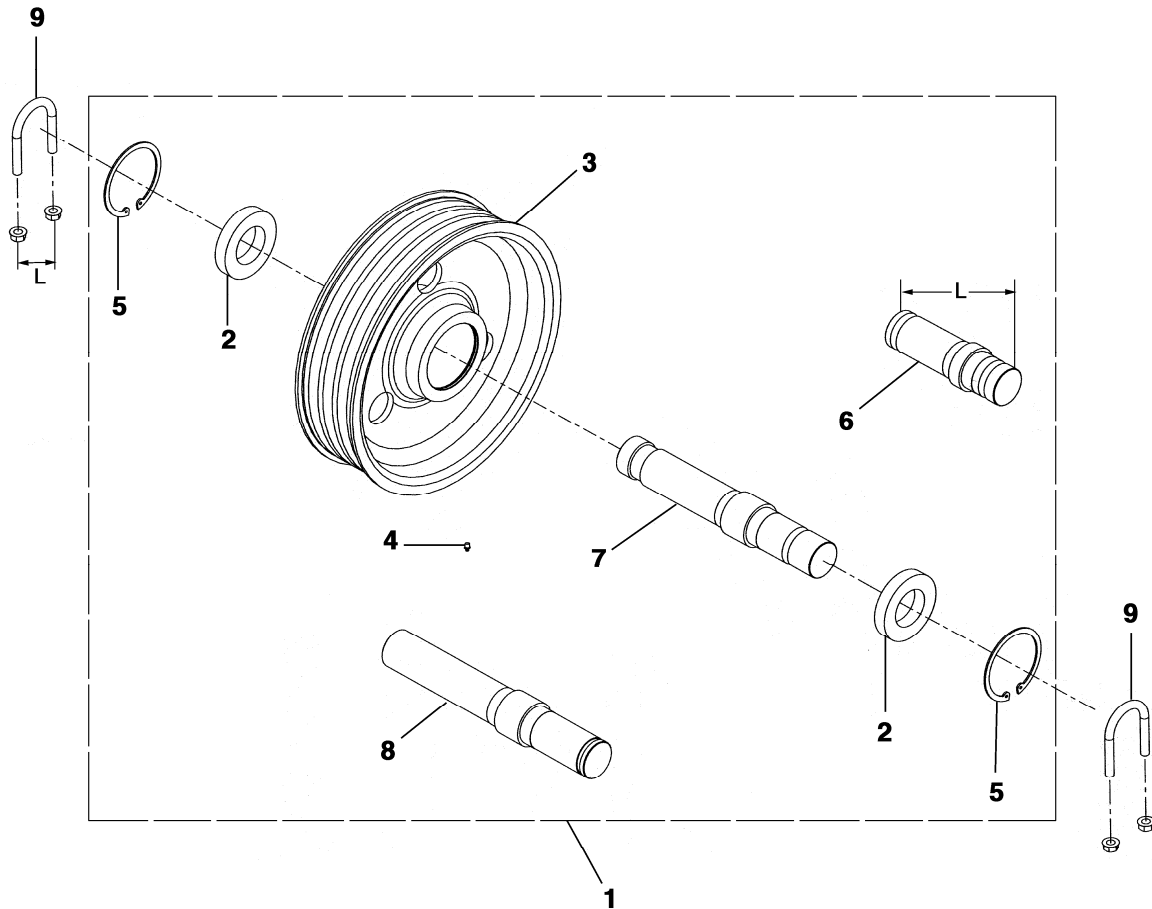
# 28 in. Deflector Sheave Supporting Parts

**06-C7078A**



REF. No.	W/O VINTAGE (A7078G)	DESCRIPTION
	PART NUMBER	
1	209T2	Bearing
2	---	Bolt, 1/2 in. -13 x 1-3/4 in., Zinc Plated, Grade 5 (or higher)
3	---	Bolt, 1/2 in. - 13 x 1-3/8 in., Zinc Plated, Grade 5 (or higher)
4	346AGC1	Cover
*	435C1	Fitting, Grease
5	376J23	Gasket
6	NUT FH1/2CP	Nut, 1/2 in. - 13, Zinc Plated
7	386VH1	Plate, Retainer
8	33D24	Seal
9	495CK2	Shaft, Length = 29.62 in.
	495CK3	Shaft, Length = 33.88 in.
10	130F29	Washer, 1/2 in. Spring Lock, Zinc Plated

\* Part not shown.

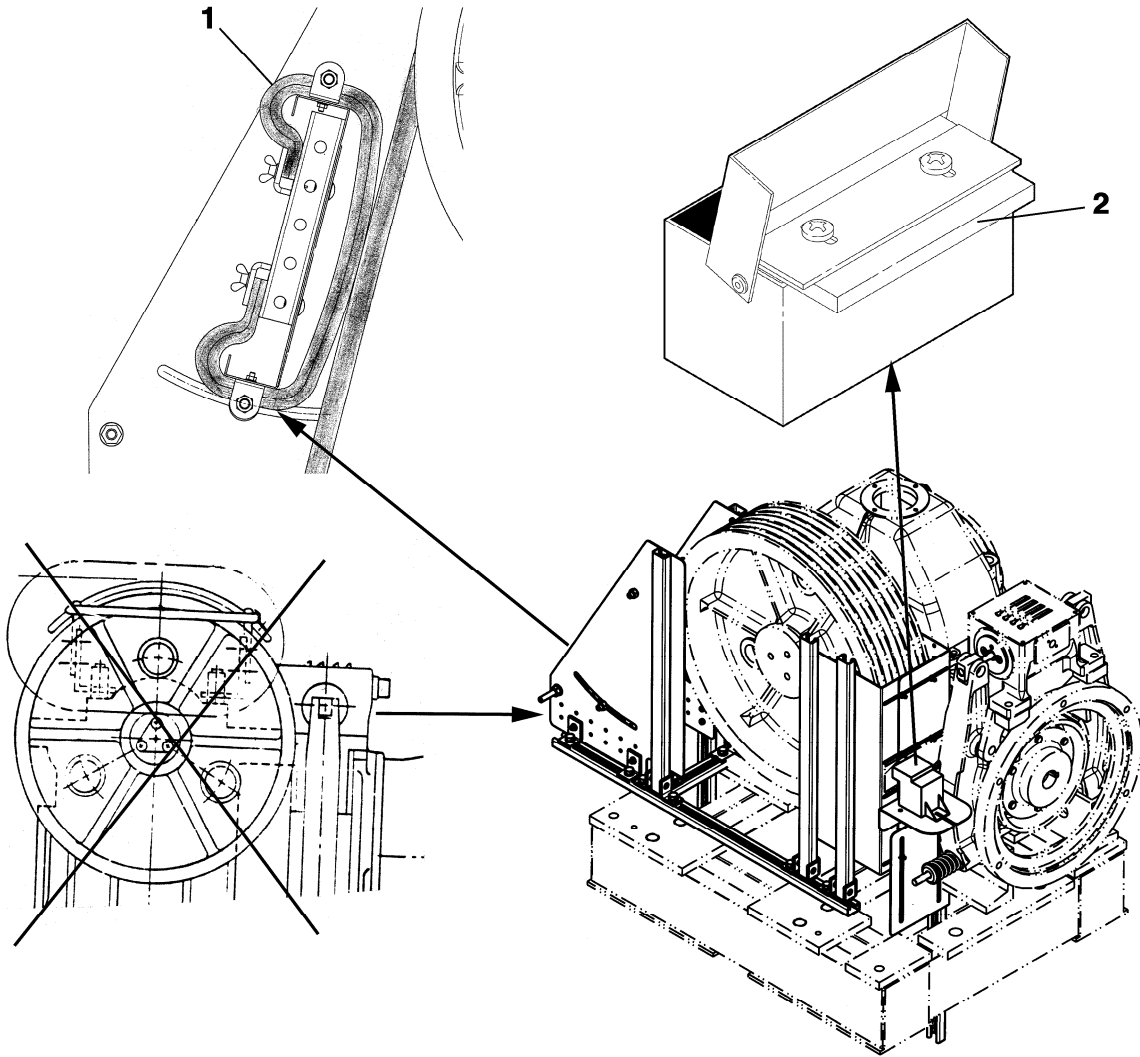


REF. NO.	PART NUMBER			DESCRIPTION	"L"	MACHINE LOCATION
	W/O VINTAGE	W/O VINTAGE	VINTAGE Y01			
1	1F-7078BP1	---	---	Assembly, Deflector Sheave	26.88	Above
	---	2F-7078BP1	7078CX1		24.50	Below
	1F-7078BP2	2F-7078BP2	7078CX2		16.00	---
2	207Z76			Bearing		
3	263BF1			Deflector, Sheave, 25 in. Diameter, see NOTE		
4	435C1			Fitting, Grease		
5	172CY21			Retaining Ring		
6	1F-495DH1	---	---	Shaft	26.88	Above
	1F-495DH2	-	---		16.00	Below
7	---	2F-495DH1	---		24.50	Above
	---	2F-495DH2	---		16.00	Below
8	---	---	495DP1		24.50	Above
	---	---	495DP2		16.00	Below
9	---	65EF11	---	U-Bolt	3.18	---
	65EF16	---	65EF16		3.54	---

**NOTE:** Only for use with 260CN1 drive sheave.

# Sheave Guards

06-C7078A



**NOTE:** See TIP 6.2.0-15, *Geared Machine Sheave Guard Installation (w/Carpet Wiper)*, for sheave guard, carpet wiper, and rope lubricator installation instructions.

W/O VINTAGE		
REF. No.	PART No.	DESCRIPTION
1	AAA297AY1	Strip, Carpet, 3 in. Wide
	AAA297AY2	Strip, Carpet, 5 in. Wide
	AAA297AY3	Strip, Carpet, 7 in. Wide
2	AAA488M3	Wick, Lubricator, 3 in. Wide
	AAA488M4	Wick, Lubricator, 5 in. Wide
	AAA488M5	Wick, Lubricator, 7 in. Wide