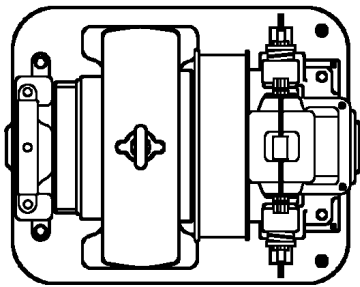
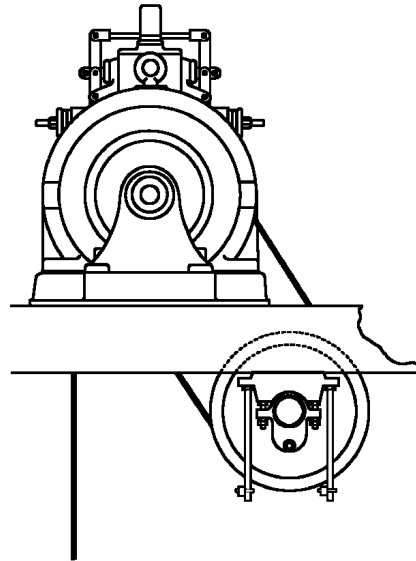
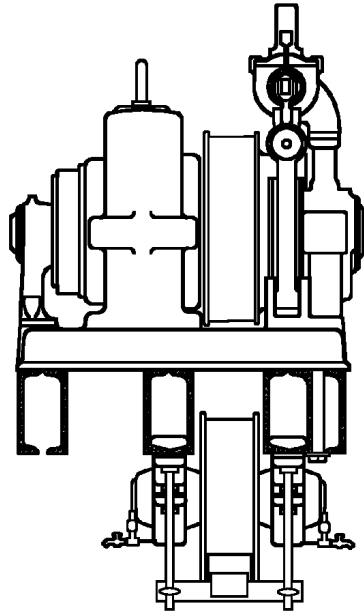


**#77A Machine  
Double-Wrap Traction**

**Spare Parts Leaflet**

**06-6289E**

**March 12, 2014 / Page 1 of 15**



**77 Double-Wrap Traction**

Type A178-TM (1920-1927)

**77A**

Type A178-TM (1920-1927)

Type 6289A (1935-1948)

Type A6289A (1948-1954)

Type 6289E (1954-end of production)

**OTIS**

**SERVICE ENGINEERING**

**Otis Elevator Company**

**Bloomfield, Connecticut USA**

Unpublished Work—© Otis Elevator Co.; 2014

**Leaflet Description**

The #77 & #77A are DC gearless machines. A standard #77 or #77A is arranged for double-wrap traction (DWT). This leaflet covers the service parts for the NSAA manufactured #77 & 77A machines. The vintages of this type of machines are covered with contract 20/20 forms.

**Leaflet Revisions**

<b>Date Revised</b>	<b>Subject Matter Expert</b>	<b>Reason for Revision</b>
July 1, 2003	Nicholas Grant	New SPL
August 30, 2005	Jesse Richter	Add p. 11, 77 gearless machine brush rigging parts
August 27, 2009	Val Sheynkman	Updated parts and illustrations throughout
October 12, 2011	Val Sheynkman	Updated desc. Of 128AG56 on p. 10 & added GS2-128AG1 on p. 11
January 23, 2013	Val Sheynkman	Added new page 14
February 19, 2014	Val Sheynkman	Corrected ref. 1 and illustration on p. 8
March 12, 2014	Val Sheynkman	Corrected date information

**Related Drawings**

<b>Drawing No.</b>	<b>Title</b>	<b>Drawing No.</b>	<b>Title</b>
A-178-TM	#77 & 77A General Arrangement	6289A	#77A Assembly Drawing
A6289A	#77A Assembly Drawing	6289E	#77A Assembly Drawing
6289F	#77A Brake	B-15-SH	Drive Sheave
232-MO	Brush Yoke, Brush Stem, Brush Stem Bold, Washer	B-436-ED	Brush Stem Insulators and Washers

**Related Documents**

<b>Document ID</b>	<b>Title</b>
TIP 6.0-1	Replacement of Brake Linings
TIP 6.1.0-5	Gearless Machines with Hollow Armature Shaft
Service Engineering Letter 9A	Application of Brakes for Service Work

**Subject Matter Expert**

<b>Name</b>	<b>Department</b>
Val Sheynkman	OSC Service Engineering

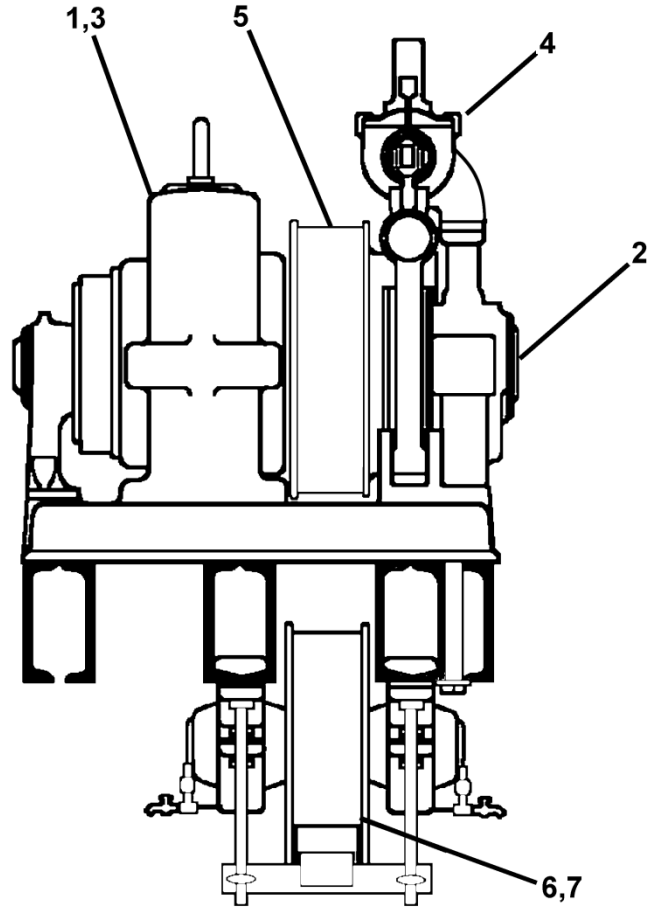
**About Spare Parts Leaflets...**



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.

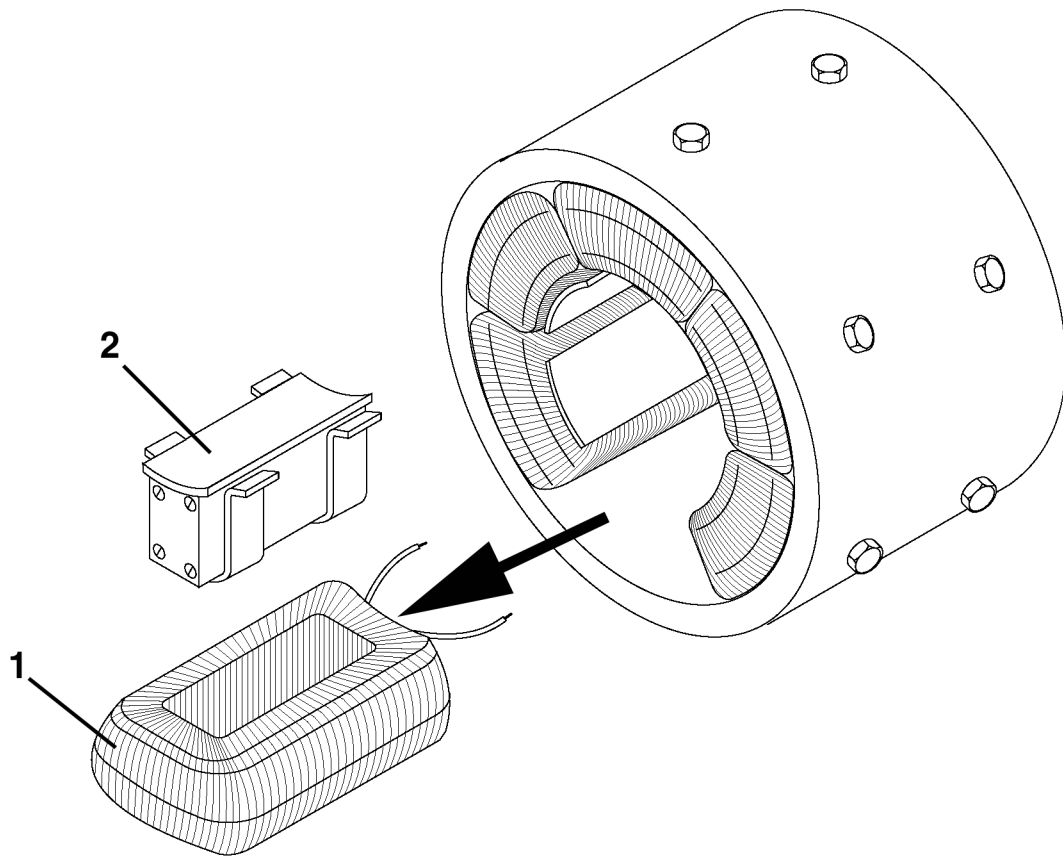
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2	5	Shaft, Armature
--	6	Brush Holder Parts
3	7	Brush Rigging Parts
4	8-11	Brake Parts
---	14	Sheave, Guard for Machine
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6	---	Sheave, Type 6751B Secondary, & Shaft w/Babbitted Bearings,  SPL 06-6913F
	---	Sheave, Type A6751B Secondary, & Shaft w/Babbitted Bearings,  SPL 06-6913F
7	13	Sheave, Type 6939B Secondary, & Shaft w/Roller Bearings

# Motor Field Coils



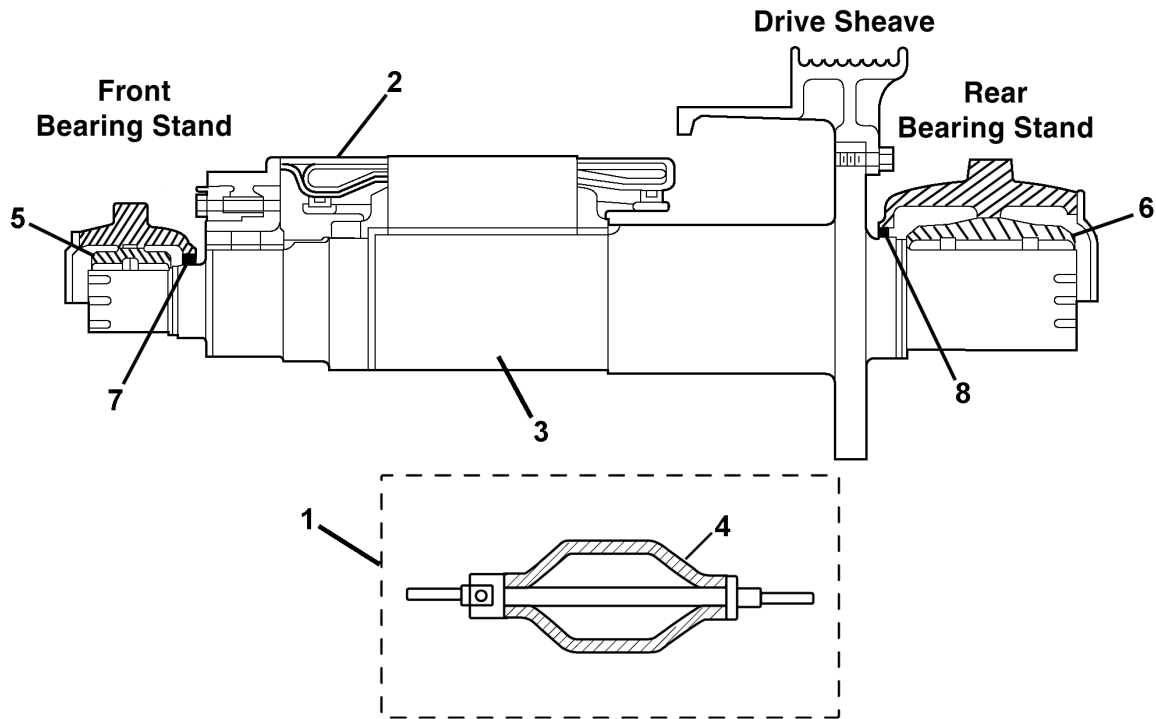
<b>VINTAGE</b>
<b>A178-TM, 6289A, A6289A, 6289E</b>

REF. No.	PART No.	DESCRIPTION	 NOTE
1	--	Coil, Field (5248-III-*)	
	221AZ1	Coil, Field (set of 8) 1954–End-of-Production	
2	355AG1	Piece, Pole	

**NOTE:** The listing of field coils and pole pieces is not complete. Many of these machines were contract specific designs for specific designs, for specific control systems, and for specific building DC power supplies. When ordering, provide the material list (M.L.) number.

# Armature Shaft

**06-6289E**

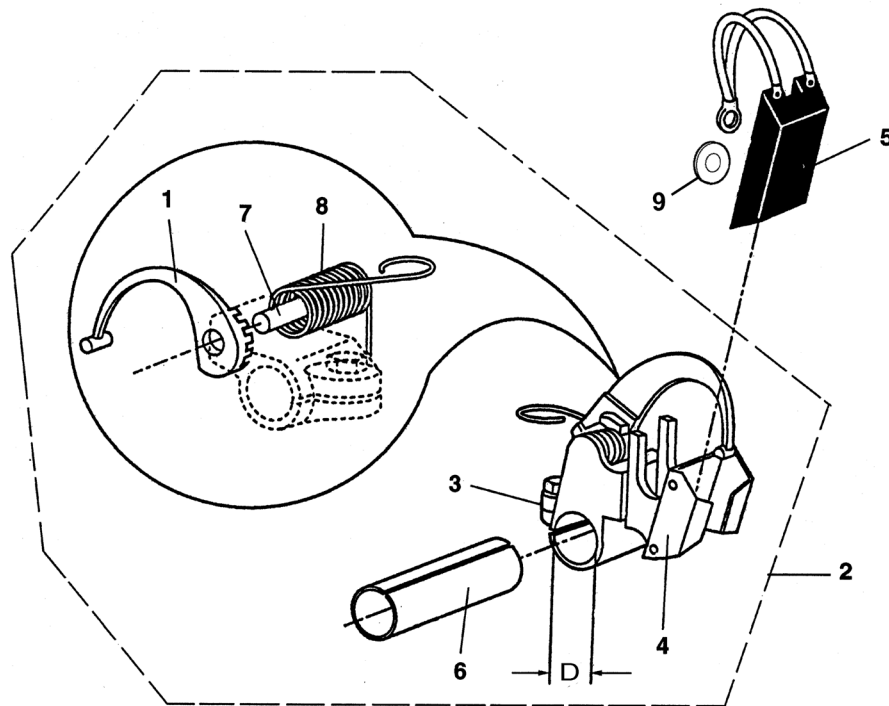


**VINTAGE**

**A178-TM, 6289A,  
A6289A, 6289E**

REF. No.	PART No.	DESCRIPTION	PRODUCTION
---	AAA332BP1	Chain, 1/4 in. Oil	---
1	<del>2700DB2</del> AAA21410E3	Kit, for Reinforcing Hollow Armature Shaft 👁 TIP 6.1.05	---
2	---	Set, Armature Coil (contact OSC Spare Lending)	---
3	A460B5	Shaft, Armature, Solid	Post 1933
4	---	Shaft, Armature, Hollow (hollow shaft is not part of the repair bolt kit)	---
5	130999	Sleeve, Motor Shaft Front Bearing (Cadtex babbitt)	Pre-1927
	166783A		Post 1927
6	130998	Sleeve, Motor Shaft Rear Bearing (Cadtex babbitt)	Pre-1927
	166785A		Post 1927
7	AAA488M2	Strip, Felt, Front End	Pre-1933
	33A2	Seal, Oil, Front End	Post 1933
8	AAA488M9	Strip, Felt, Rear End	Pre-1933
	33A7	Seal, Oil, Rear End	Post 1933

**Brush Holder Parts**

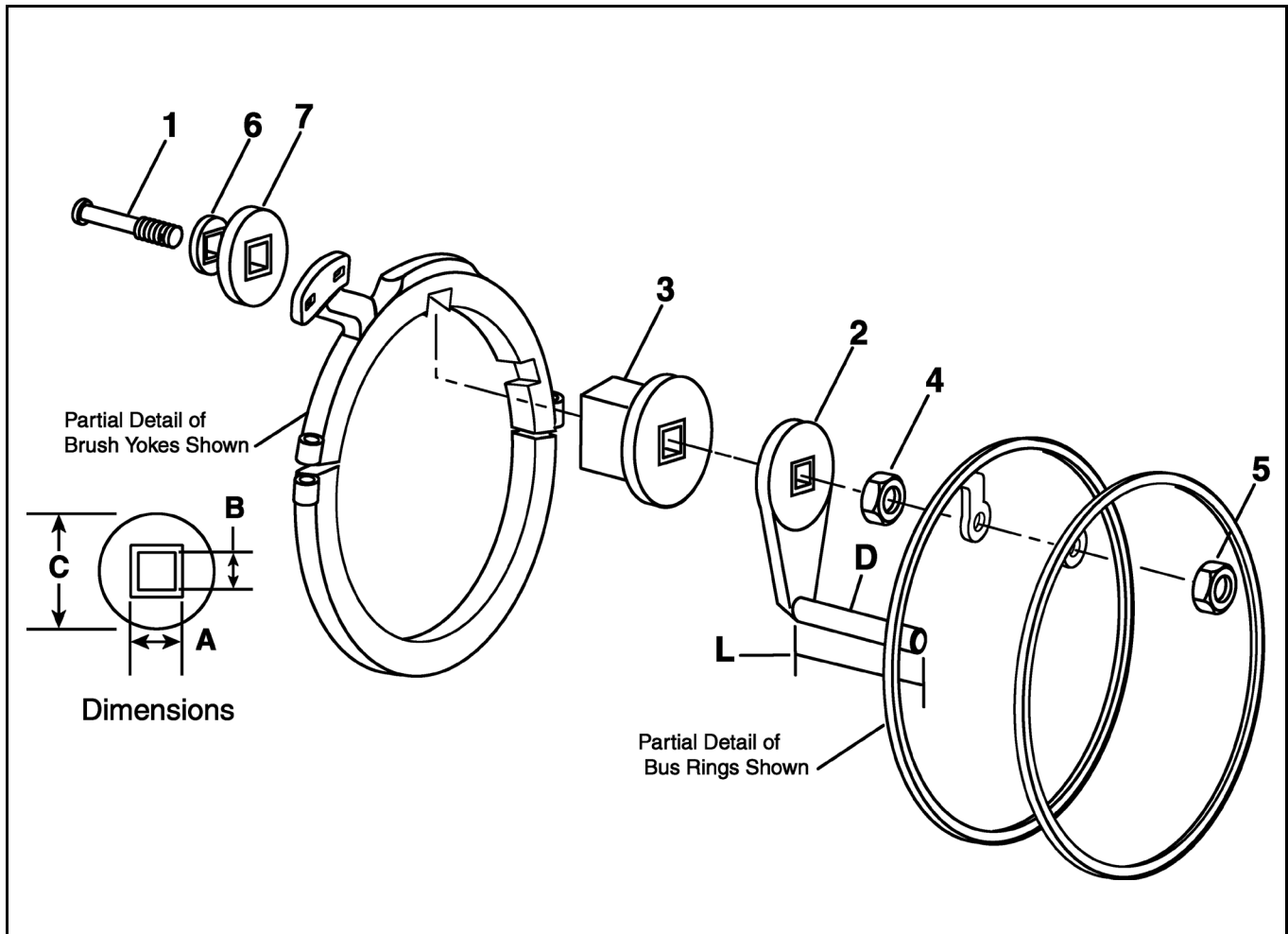


**VINTAGE**  
**A178-TM, 6289A,**  
**A6289A, 6289E**

REF. No.	PART No.	DESCRIPTION
1	288CD1	Arm, Brush Holder
2	6134G1	Assembly, Brush Holder for 5/8 in. x 1-1/2 in. Brush, Diameter D = 0.625 in.
	6134G4	Assembly, Brush Holder for 3/8 in. x 1 in. Brush, Diameter D = 0.625 in.
	6134G5	Assembly, Brush Holder for Voltage Feedback 3/8 in. x 1 in. Brushes, Diameter D = 0.650 in.
3	<del>430622</del> 306GM1	Base, Brush Holder for p/n 6134G1 & 4
	306GM2	Base, Brush Holder for p/n 6134G5
4	<del>430620</del> 178T2	Box, Brush Holder for p/n 6134G1
	178H2	Box, Brush Holder for p/n 6134G4 & 5
5	240F25	Brush, Carbon 5/8 in. x 1-1/2 in.
	240F26	Brush, Carbon 3/8 in. x 1 in.
6	298DF128	Insulating Strip, Mylar for p/n 6134G5 Brush Holder
7	808040	Pin
8	92A4	Spring
9	<del>840374</del> 128A8	Washer, Brass

# Brush Rigging Parts

06-6289E

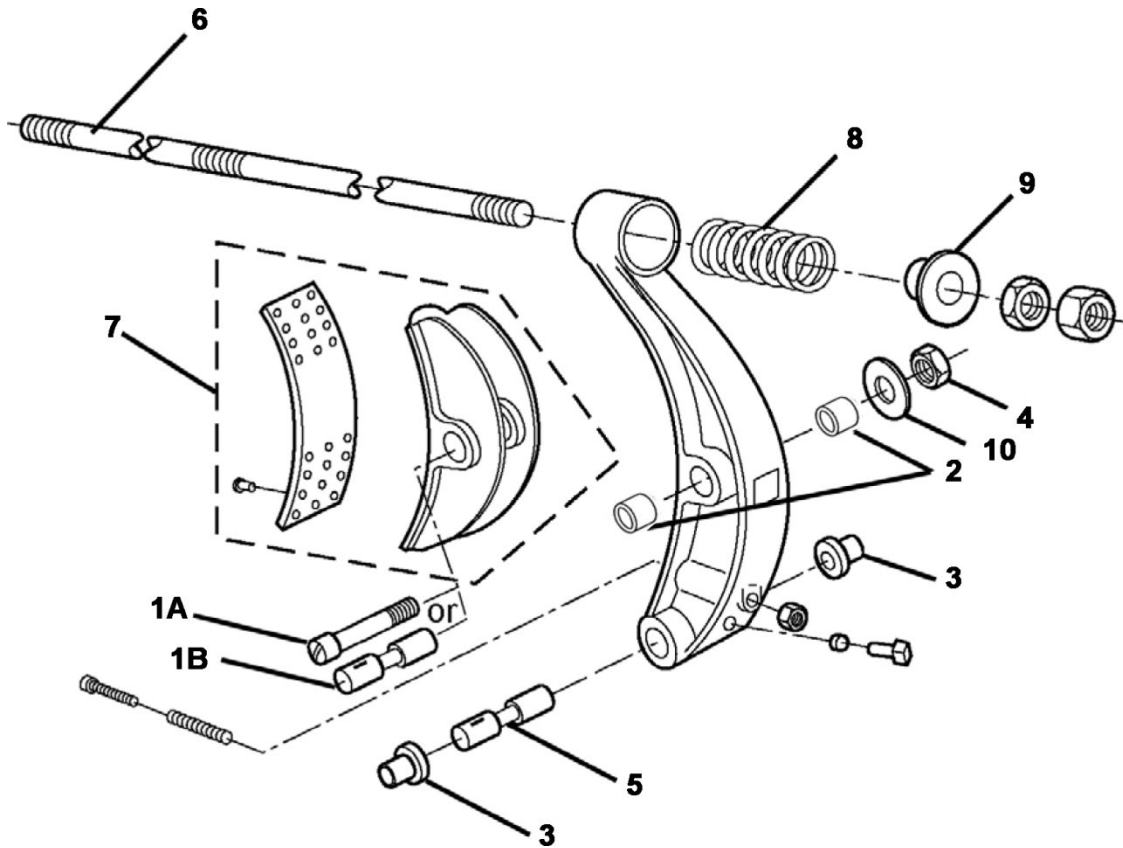


W/O VINTAGE		
A178-TM, 6289A, A6289A, 6289E		
REF. No.	PART No.	DESCRIPTION
1	102488	Bolt, Brass Finish, 4-5/8 in. L (for brush stem)
2	102490	Brush Stem, B = 0.89 in., Diameter D = 0.625 in., L = 3.875 in. L
3	18048	Bushing, Insulating (for brush stem) A = 1.375 in., B = .89 in.
4	81106	Nut, Hex, Brass, 7/8-9 in. Thread
5	8185	Nut, Hex, Jamb, Brass, 7/8-9 in. Thread
6	102487	Washers, Insulating, (for brush stem) B = 0.89 in., Diameter C = 2.0 in.
7	10916	Washers, Insulating, (for brush stem) B = 1.27 in., Diameter C = 2.625 in.

NOTE: Reference: M.L. 5250-III -1, -2)

**06-6289E**

# Brake Assembly Arm Parts



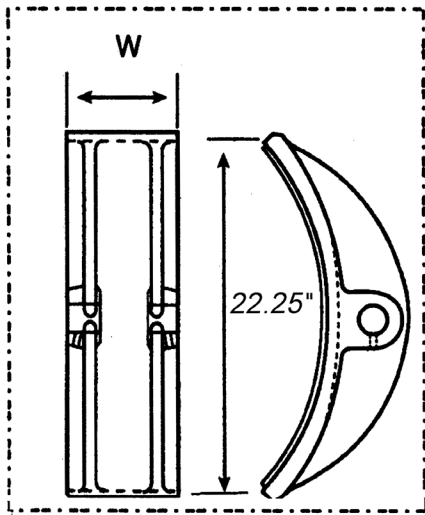
VINTAGE	
A-178TM 6289A A6289A	6289E

REF. No.	PART No.		DESCRIPTION
1A	---	59BF1	Bolt, Shouldered
1B	83364 77GB5	---	Pin, 1.75 in. Diameter, 7 in. L
2	---	335E71	Bushing, Bronze
3	---	335H28	Bushing, Bronze (in machine's field frame)
4	67G16		Nut, Elastic Stop
5	<del>83366</del> 77GB6		Pin, 1.75 in. Diameter, 7.50 in. L
6	114851		Rod
7	---		Shoe, Brake and Lining ( p. 9 for details)
8	82546 90TD1		Spring, 5.5 in. Diameter, 9.5 in. L
9	80430		Washer (spring seat)
10	---		Washer, 1-1/2 in. Diameter, (SAE)

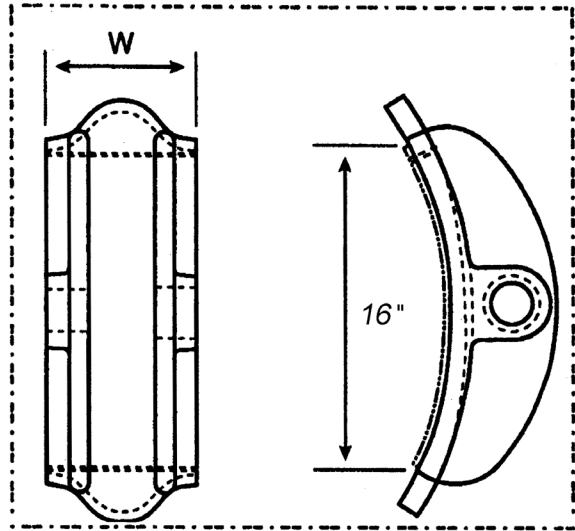


# 77 Machine Brake Shoe and Lining Assembly

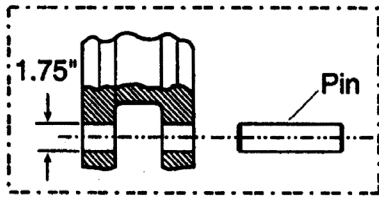
**06-6289E**



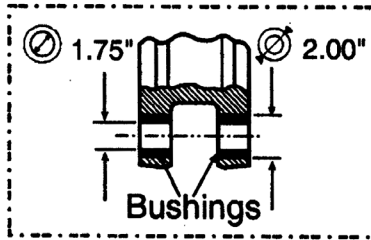
415T5, 415T7



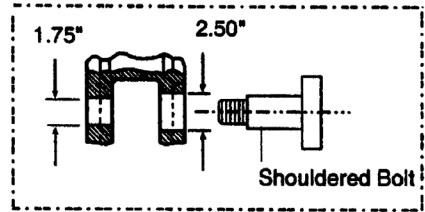
415T2



415T5



415T7



415T2

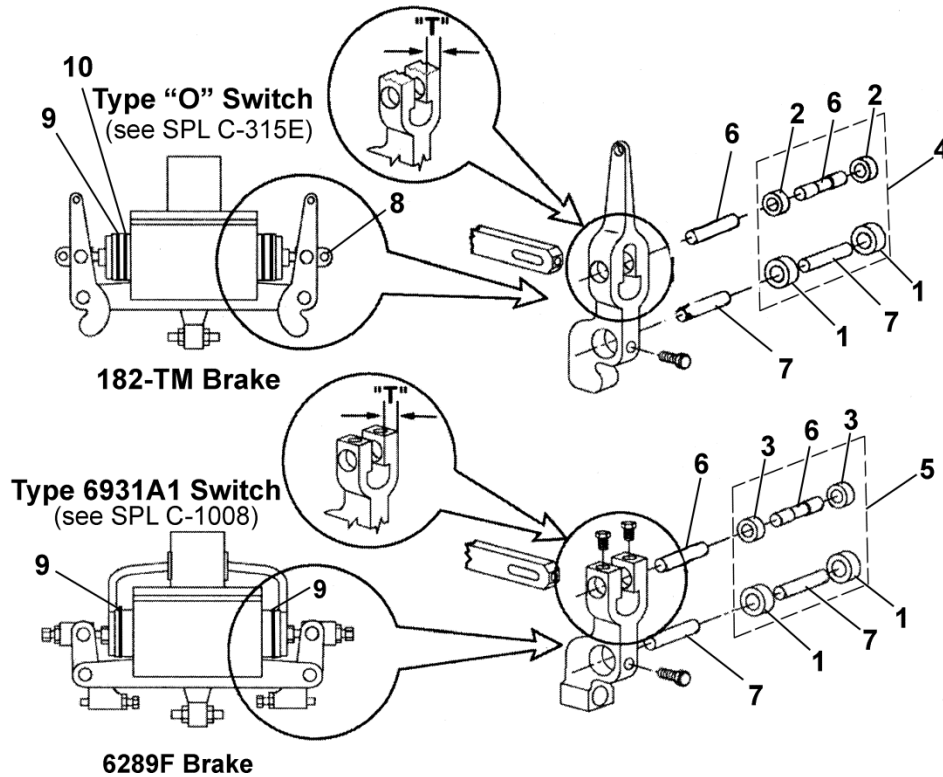
<b>VINTAGE</b>		
<b>182-TM 6289F</b>		
<b>REF. No.</b>	<b>PART No.</b>	<b>DESCRIPTION</b>
1	415T2	Shoe, Brake W = 6.50 in.
	415T5*	Shoe, Brake W = 6.625 in.
	415T7*	Shoe, Brake W = 6.50 in.

**NOTE:** All gearless machines must use brake arms that are lined with Green Gripper® lining supplied factory-bonded by OSC for US offices.

\* Returned and re-worked upon receipt by OSC per individual machine number. Customers get the same arms in return.

**06-6289E**

# 77, 77A Machine Brake Assembly— Upper Lever



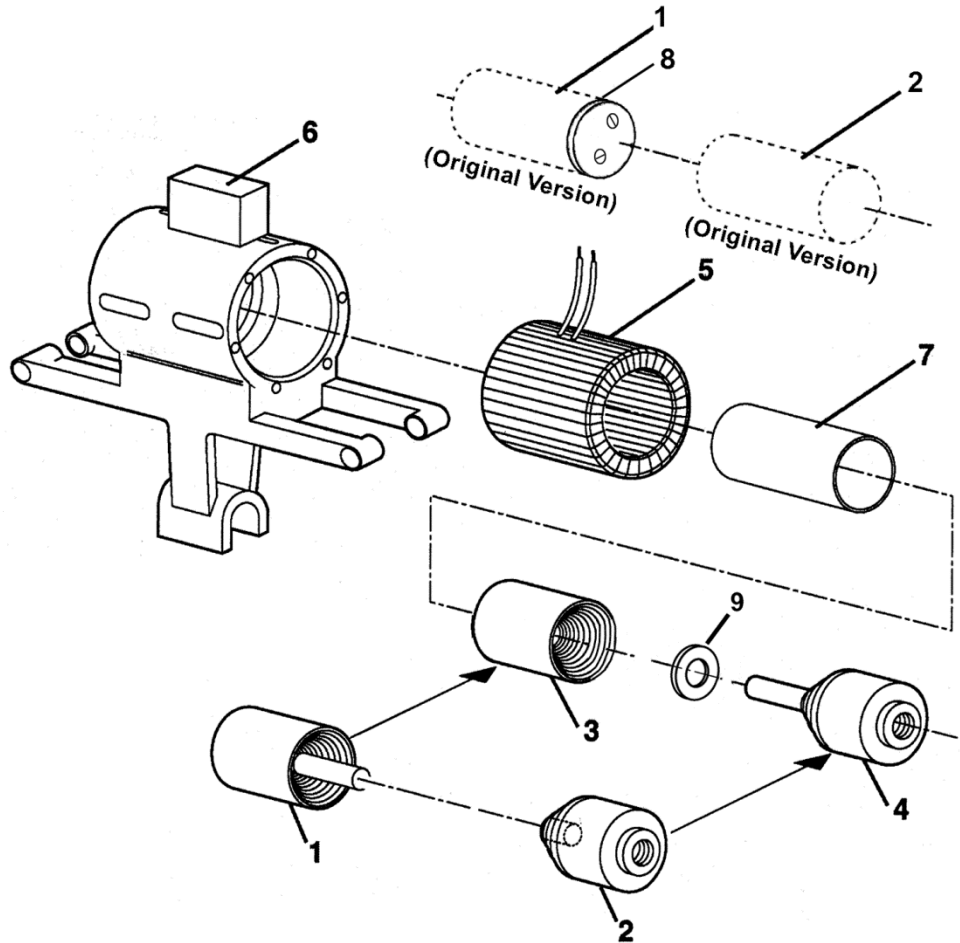
VINTAGE				
REF. NO.	PART or ML		DESCRIPTION	"T"
1	---	209A4	Bearing, Needle	1 in.
2	---	209A15	Bearing, Needle	3/4 in.
3	---	209A18	Bearing, Needle	1-3/16 in.
4	---	2700AD4	Kit for Both Levers, Consisting of References 1, 2, 6, 7	
5	---	2700AD1	Kit for Both Levers, Consisting of References 1, 3, 6, 7	
6	83326	82AH2	Pin (original version)	
	---	GS1-82AH2	Pin (needle bearing, upgraded version for ref. 4 or ref. 5,  NOTE 1)	
7	83352	---	Pin (original version)	
	---	GS1-82R3	Pin (needle bearing, upgraded version for ref. 4 or ref. 5,  NOTE 1)	
8	810863	---	Pin	
9	80119 128AG56		Washer, Brass (Maximum 10 pieces for each side)	
10	80470	---	Washer, Leather	

**NOTE 1:** Only order if ref. 1, 2, and 3 are present.

**NOTE 2:** Contact OSC for brake upgrade. Refer to service engineering letter #9A, dated 01/15/1965.

# Brake Assembly Magnets & Coil

**06-6289E**



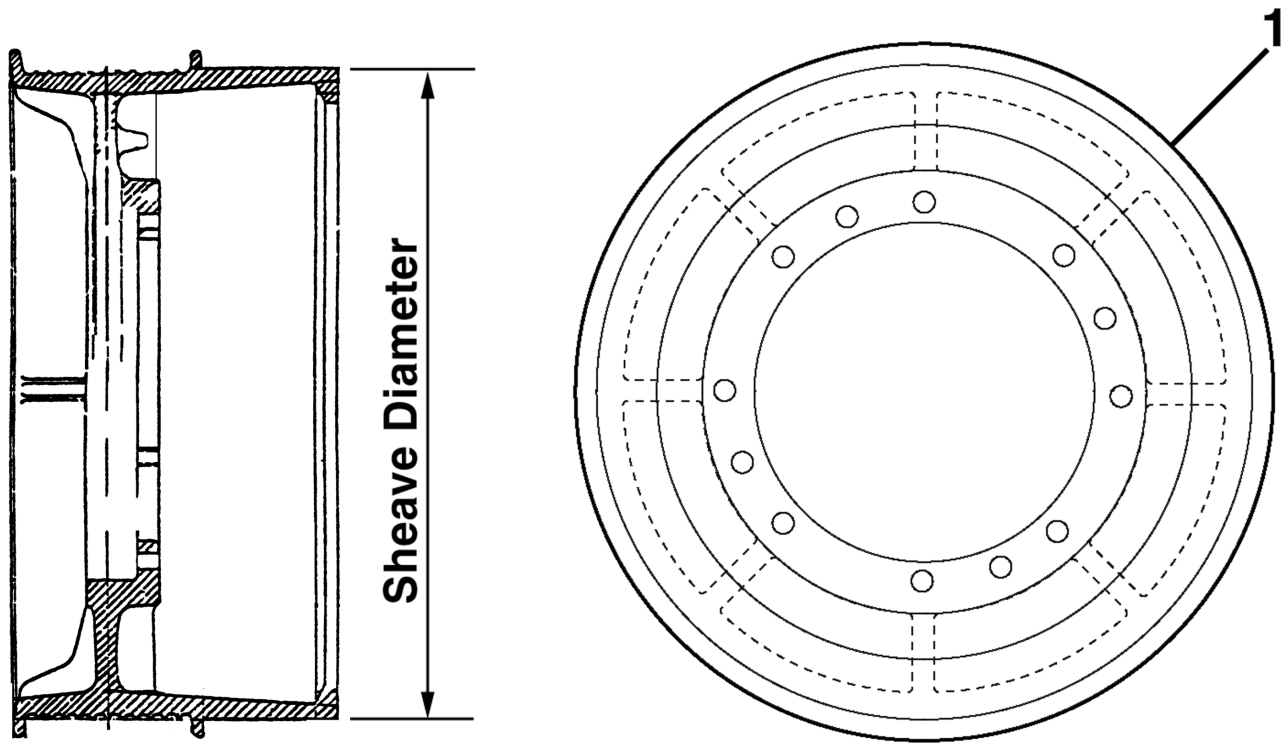
REF. No.	VINTAGE		DESCRIPTION
	182-TM	6289F	
	PART No.		
1	---		Assembly, Magnet Core, Female w/Pin, Type 400CL_,  NOTE 1
	46030	---	Assembly, Magnet Core (original version),  NOTE 1
2	---		Assembly, Magnet Core, Male, w/Liner Insert, Type 400CK_,  NOTE 1
	402628	---	Assembly, Magnet Core (original version),  NOTE 1
3	GS1-400CL5		Assembly, Magnet Core, Female, w/Switch Arm
4	GS1-400CK6		Assembly, Magnet Core, Male, w/Switch Arm
5		---	Coil, Brake (663-III-*)  NOTE 2
	222EJ1		Coil, Brake
6	6931A1		Switch, Brake
7	136AG4		Tube, Magnet Core
8	19706	---	Washer, Brass
9	GS2-128AG1	---	Washer, Brass. For upgraded brakes.

**NOTE 1:** Contact OSC for brake upgrade. Refer to service engineering letter #9A, dated 1/15/1965.

**NOTE 2:** There are multiple coil possibilities. To order proper coil, provide data plate information, or coil resistance, or send coil to OSC for evaluation.

# Drive Sheave, Double-Wrap Traction

**06-6289E**

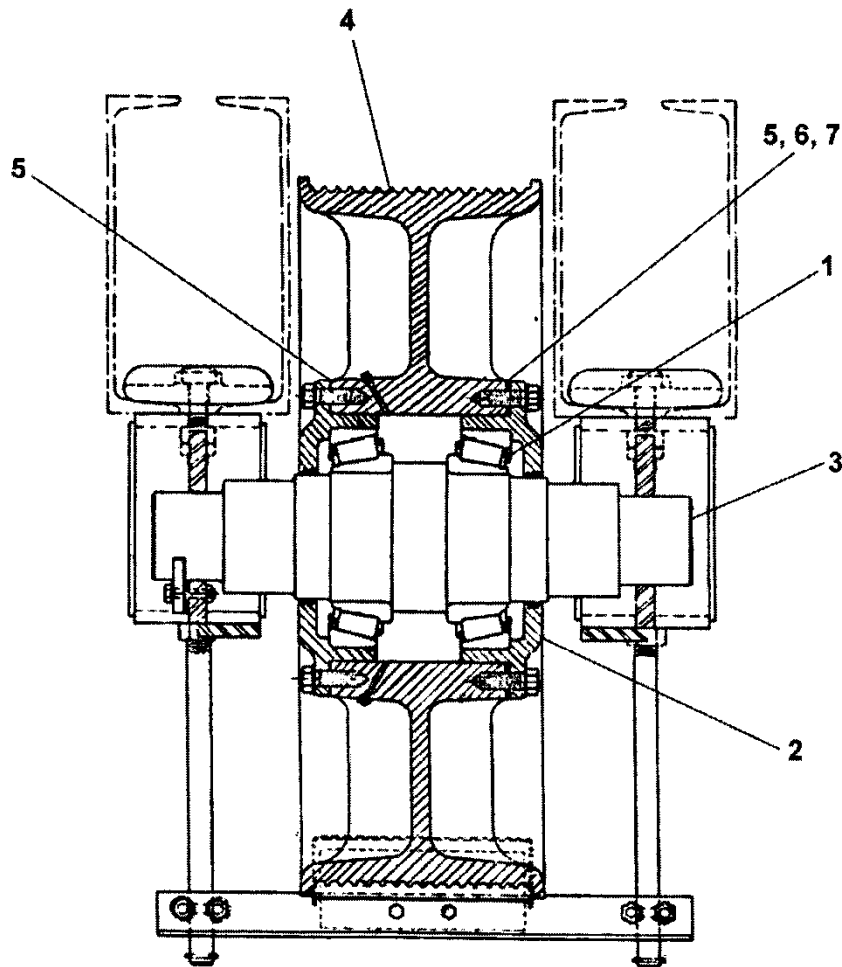


**W/O VINTAGE**  
**A178-TM, 6289A,**  
**A6289A, 6289E**

REF No.	PART No.	DESCRIPTION			
		SHEAVE DIAMETER	ROPE DIAMETER	GROOVES	REMARKS
1	811169	36 in.	1/2 in.	12	Pattern 15-SH-1
	85306		5/8 in.		
	85306A		11/16 in.		

**06-6289E**

# Type 6939B Secondary Sheave Assembly with Roller Bearings

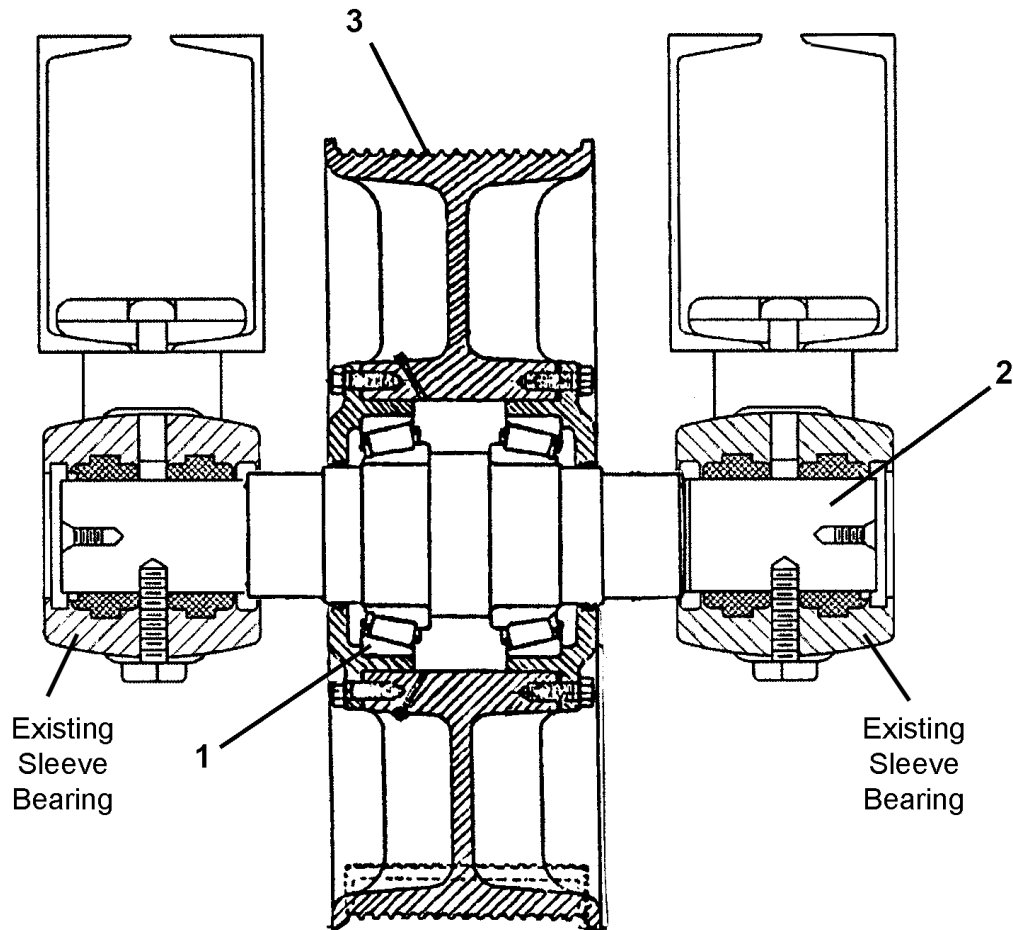


VINTAGE		DESCRIPTION			
REF. NO.	PART OR ML		SHEAVE DIAMETER	ROPES DIAMETER	GROOVES
	A178-TM, 6289A A6289A, 6289E				
1	206B26 209B34	Bearing, Roller, Diameter = 10 in.			
2	346XH4 2-346XH1	Cover,  NOTE			
3	495BK1	Shaft, Secondary Sheave			
4	262J1	Sheave, Secondary	33 in.	5/8 in.	12
	262J 2		33 in.	1/2 in.	16
	262J4		33 in.	1/2 in.	12
5	255VB22	Shim, Green, 0.003 in. Thick			
6	255VB23	Shim, Trans-Matte, 0.0075 in. Thick			
7	255VB24	Shim, Yellow, 0.020 in. Thick			

**NOTE:** For replacement instructions, TA-III-7-1.

**06-6289E**

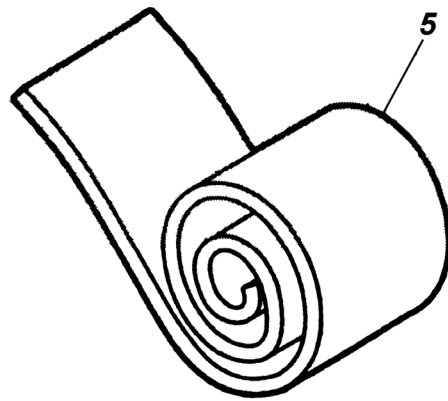
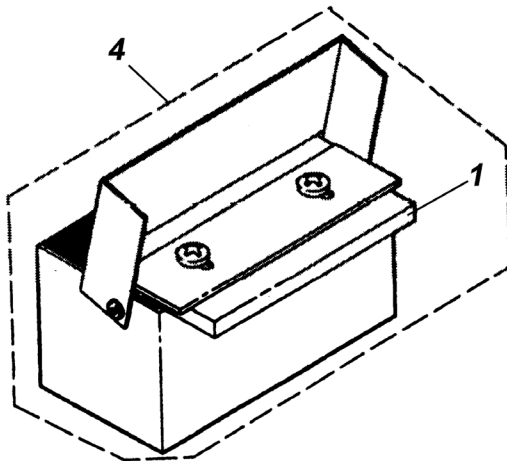
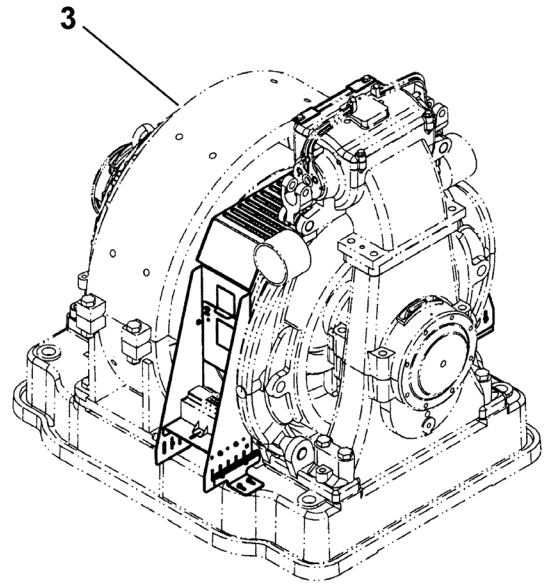
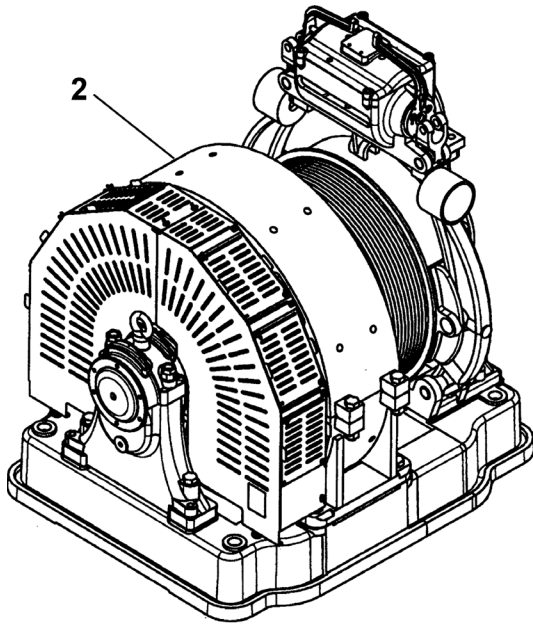
## Secondary Sheave Babbitted To Roller Bearings Conversion





REF. NO.	VINTAGE		GROOVES		
	PART or ML	DESCRIPTION	QTY.	ROPES (in.)	SHEAVE
1	209B34	Bearing, Roller			
2	495BK1	Shaft			
3	262J1	Sheave, Secondary	12	5/8 in.	33 in.
	262J2	Sheave, Secondary	16	1/2 in.	33 in.
	262J4	Sheave, Secondary	12	1/2 in.	33 in.

**06-6289E**

# Sheave Guard for Machine



<b>W/O VINTAGE</b>		
<b>REF. No.</b>	<b>PART No.</b>	<b>DESCRIPTION</b>
1	AAA488M5	Felt, Wick
2	---	Guard, Commutator End,  TIP 6.1.0-19
3	---	Guard, Sheave,  TIP 6.1.1-16
4	AAA508AH3	Lubricator
5	AAA297AY3	Strip, Carpet