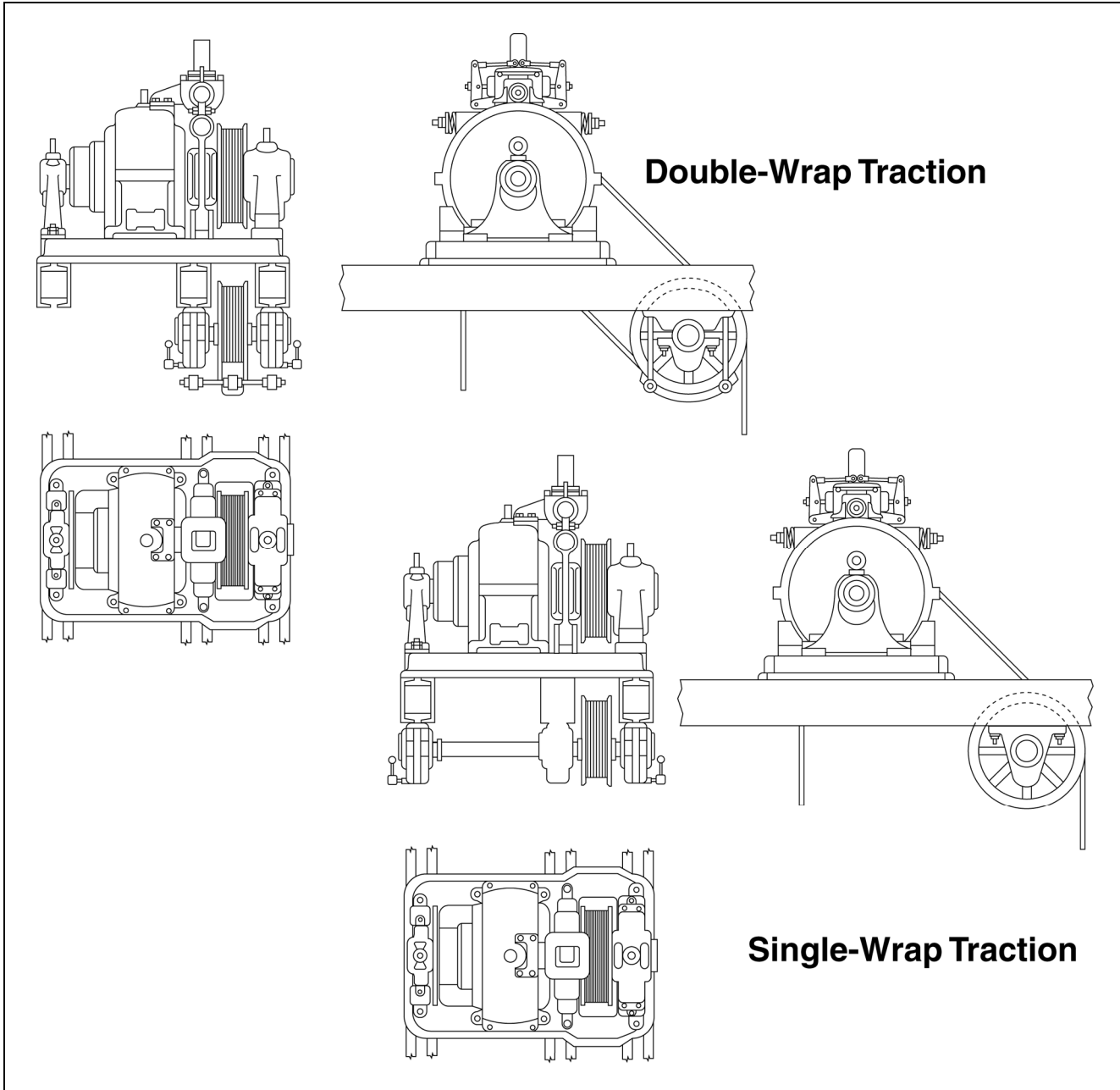


**#70 Machine
Single- & Double-Wrap
Traction**

Spare Parts Leaflet

06-6911E

January 16, 2013 / Page 1 of 17



Double-Wrap Traction

Single-Wrap Traction



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

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

Unpublished Work—© Otis Elevator Co.; 2013

Leaflet Description

This leaflet details the spare parts for both #70 single- and double-wrap traction machines. The cross-reference vintage table below lists the years a particular vintage machine was manufactured.

Vintages:

| <u>Type</u> | <u>Years</u> |
|--|--------------|
| <u>Double-Wrap Traction (DWT)</u> | |
| Type 466-TM..... | 1927–1940 |
| Type A466-TM | 1940–1954 |
| Type B466-TM | 1954–1956 |
| 6911E w/6911D Brake | 1956– |
| <u>Single-Wrap Traction (SWT)</u> | |
| Type 465-TM..... | 1926–1952 |
| Type 6911A..... | 1952– |

| Date Revised | Subject Matter Expert | Reason for Revision |
|---------------------|------------------------------|---|
| June 1998 | Val Sheynkman | New leaflet |
| May 8, 2009 | Val Sheynkman | Extensive revision and update of all parts information. |
| January 27, 2010 | Val Sheynkman | Corrected ref. 8 and illustration on p. 8 |
| May 18, 2011 | Val Sheynkman | Corrected references 3, 4, and 7 on p. 11 |
| March 14, 2012 | Val Sheynkman | Updated parts list on p. 13 |
| January 16, 2013 | Val Sheynkman | Updated ref. 1 on p. 13 |

Related Drawings

| Drawing No. | Drawing No. | Drawing No. | Drawing No. |
|--------------------|--------------------|--------------------|--------------------|
| 105-SH | 210-SH | 521-TM | 631-SH |
| 133-TM | 463-TM | 568-SH | 5190B-EC |
| 134-TM | 464-TM | 579-SH | |
| 135-TM | 488-TM | 580-SH | |

Related Documents

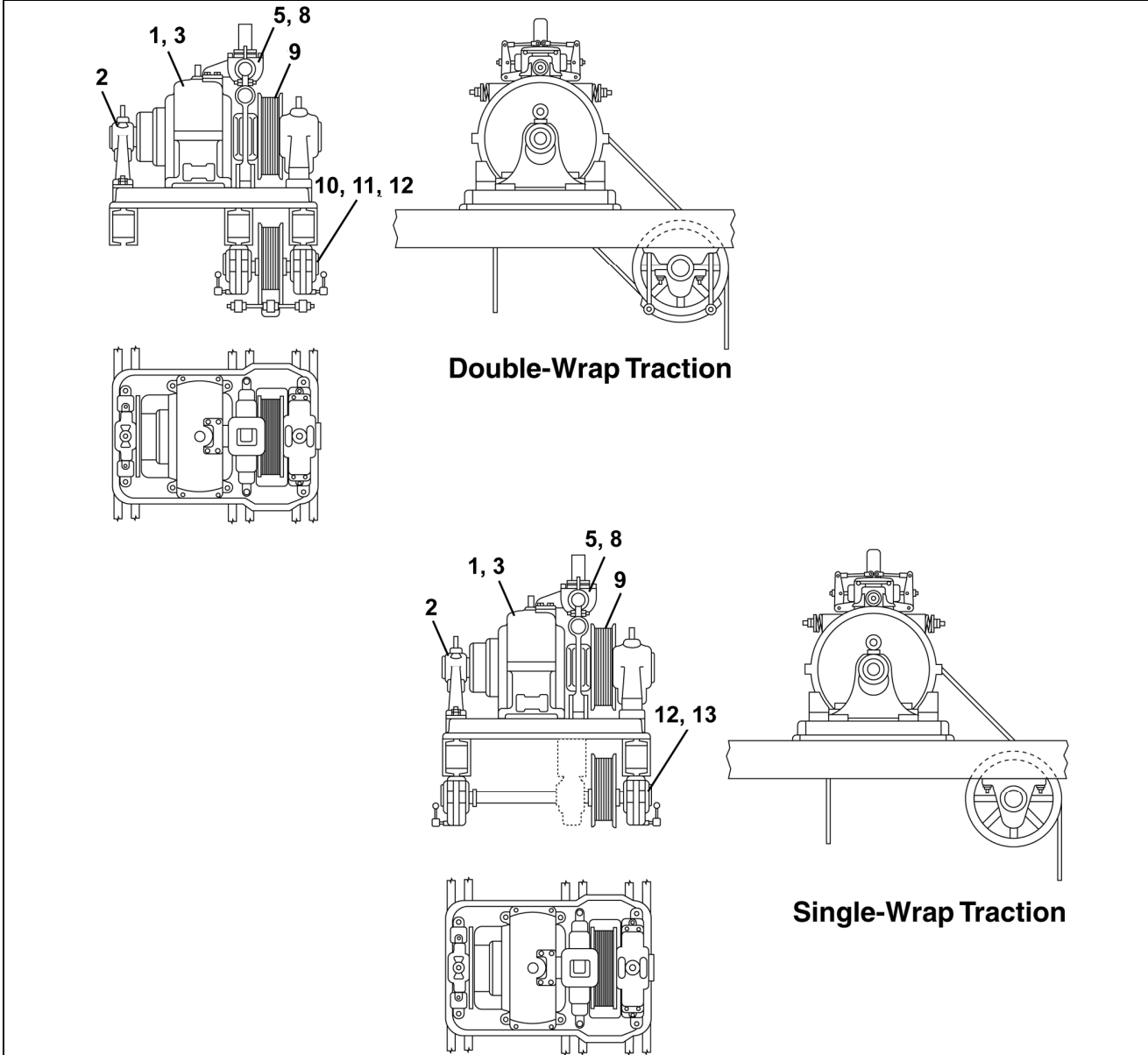
| Doc. No. | Title |
|-----------------|---|
| SPL C-195C | <i>Switch, Brake, Breaking & Making H</i> |
| SPL C-315E | <i>Switch, Brake, Breaking & Making O</i> |
| TIP 6.1.1-15 | <i>Installation Procedure for Sheave Full Cover Guard (w/Carpet Wiper) for 70 & 72 Machines</i> |

Subject Matter Expert

| Name | Department |
|---------------|-------------------------|
| Val Sheynkman | OSC Service Engineering |

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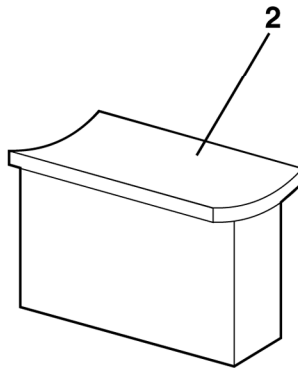
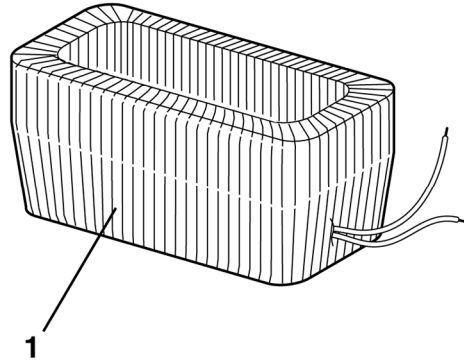
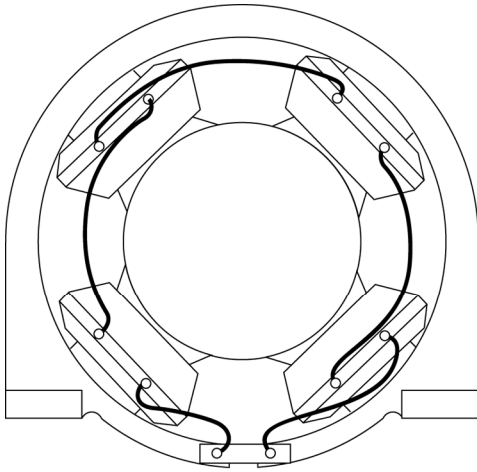
06-6911E



| REF. No. | PAGE No. | DESCRIPTION |
|----------|----------|--|
| 1 | 4 | Motor Field Coils |
| 2 | 5 | Armature Shaft |
| 3 | 6 | Brush Holder Parts |
| 4 | 7 | Brush Stem Rigging Parts |
| 5 | 8 | Brake Assembly Arm Parts |
| 6 | 9 | Brake Shoes |
| 7 | 10 | Upgraded Brake (Upper Pivots & Lever Arms) |
| 8 | 11 | Brake Assembly Magnets & Coil |
| 9 | 12 | Drive Sheave |
| 10 | 13 | Secondary Sheave & Shaft with Babbitted Bearings |
| 11 | 14 | Secondary Sheave & Shaft with Roller Bearings |
| 12 | 15 | Secondary Sheave Babbitted to Roller Bearings Conversion |
| 13 | 16 | Deflector Sheave & Shaft with Babbitted Bearings |
| --- | 17 | Sheave Guard |

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Motor Field Coils

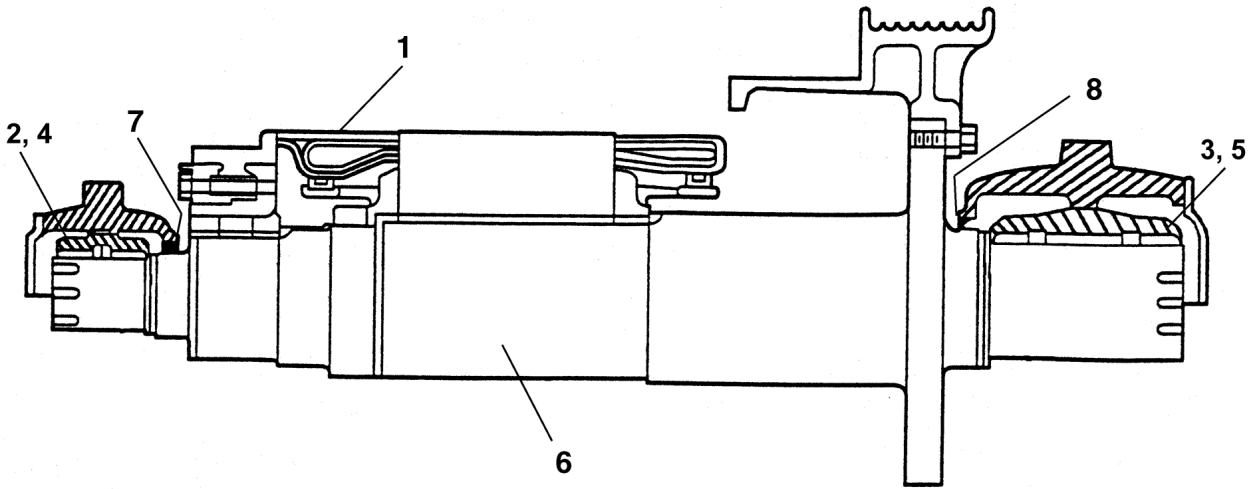


| | | VINTAGE | |
|-----------------|--------------------------------|--|--------------|
| | | 466-TM, 6911A | 6911E |
| REF. No. | PART No. | DESCRIPTION | |
| 1 | 5402-III-2 148714 | Coil, Field, Set of 4. See Note . | |
| | 178745 5402-III-5 | | |
| | 5402-III-3 157300 | | |
| | 5402-III-4 142614 | | |
| | 5402-III-6 185836 221AW1 | | |
| 2 | 106846 | 355AD1 | Piece, Pole |

NOTE: If field dataplate does not show the field coil identity, consult original Otis machine records for the correct coil part number.

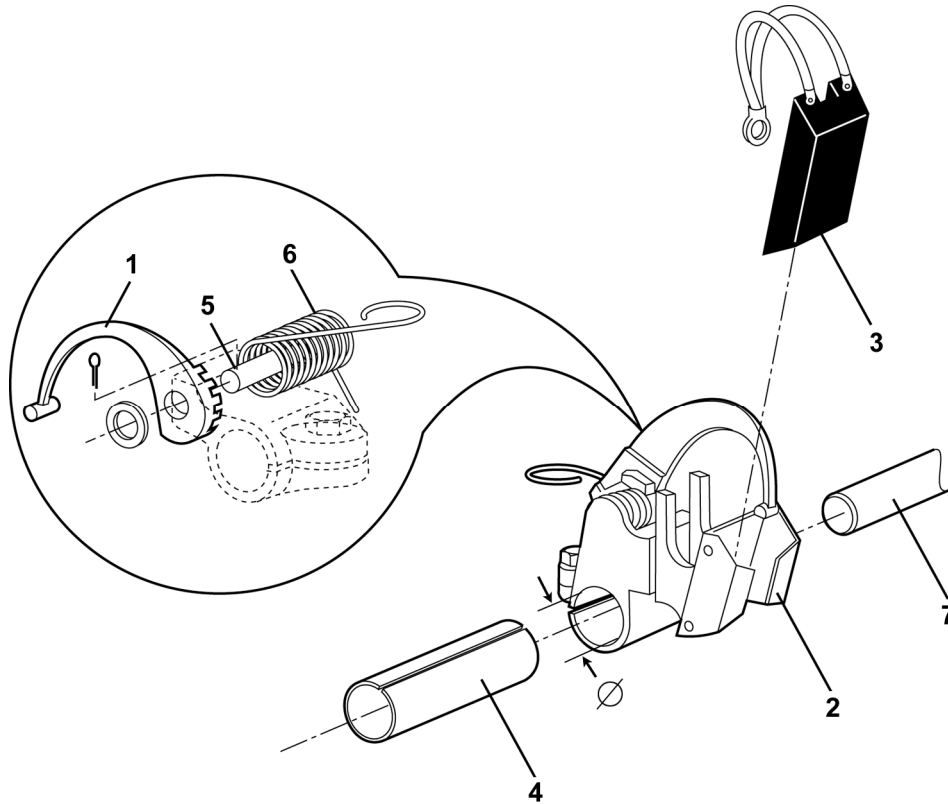
Armature Shaft

06-6911E

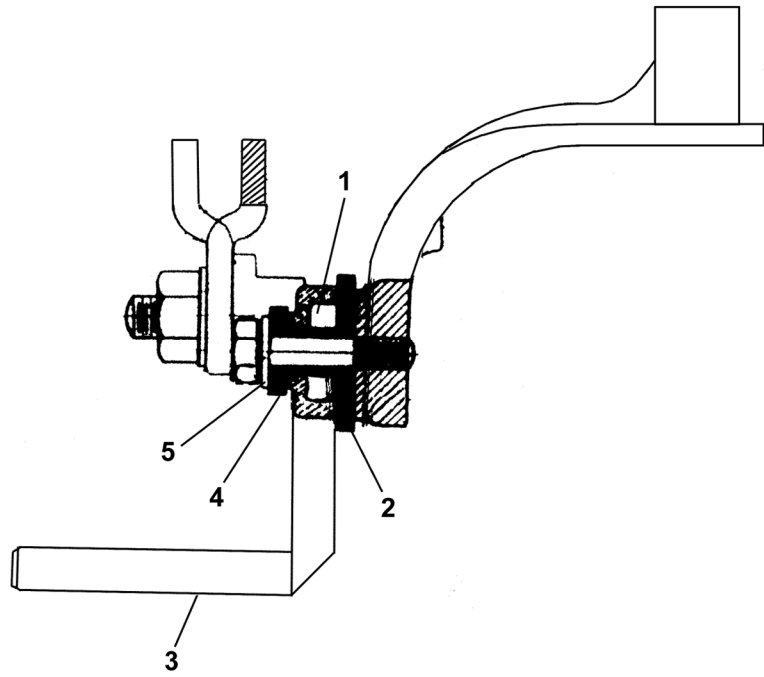


| | | VINTAGE | |
|-----------------|-------------------------|---|--------------|
| | | 466-TM | 6911E |
| REF. No. | PART No. | DESCRIPTION | |
| 1 | --- | Armature, Coil-Contact Set, Contact OSC Spare Lending | |
| 2 | 404522 104522A | Bearing, Front End, Machine Above | |
| 3 | 404524 104524A | Bearing, Rear End, Machine Above | |
| 4 | 474093 174093A | Bearing, Front End, Machine Below | |
| 5 | 473947 173947A | Bearing, Rear End, Machine Below | |
| --- | AAA332BP1 | Chain, 1/4 in., Brass Oil | |
| 6 | 460K | Shaft, Solid Armature | |
| 7* | AAA488M2 | Strip, Felt, Front End (3/8 in. x 5/8 in. x 19-5/8 in.), Pre-1933 | |
| | 33E4 33A1 | Seal, Oil, Front End, Post-1933 | |
| 8* | AAA488M2 | Strip, Felt, Rear End (3/8 in. x 5/8 in. x 29 in.), Pre-1933 | |
| | 33E3 33A4 | Seal, Oil, Rear End, Post-1933 | |

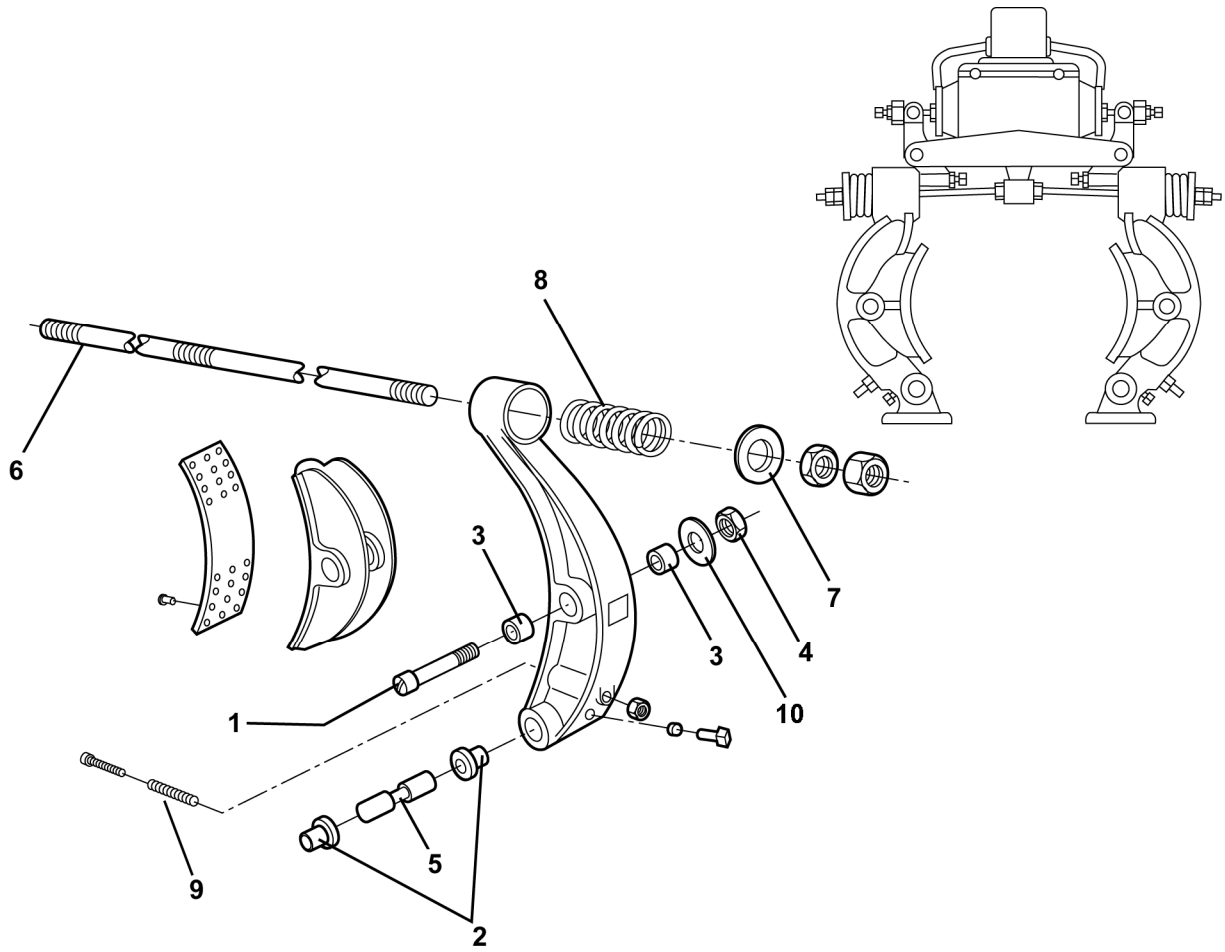
***NOTE:** Pre-1933 machines had hollow shafts and had no oil seals. Local alteration may have taken place on pre-1933 units, but specify seals then based on size only.



| REF. No. | VINTAGE | | DESCRIPTION |
|----------|----------------------|-------|--|
| | 466-TM | 6911E | |
| REF. No. | PART No. | | DESCRIPTION |
| 1 | 288CD1 | | Arm, Brush Holder |
| 2 | 5278-III-7 6134G1 | | Assembly, Brush Holder, 0.625 in. \varnothing . Use with 240F25 Brush. |
| | 440596 6134G6 | | Assembly, Brush Holder, 0.625 in. \varnothing . Use with 240F26 Brush. |
| | 6134G7 | | Assembly, Brush Holder, 0.650 in. \varnothing . Use with 240F26 Brush. |
| 3 | 240F26 | | Brush, Carbon, 3/8 in. x 1 in. Use with 6134G6 & 6134G7. |
| | 240F25 | | Brush, Carbon, 5/8 in. x 1-1/2 in. Use with 6134G1. |
| 4 | 298DF128 | | Insulator (for 6134G7 Brush Holder) |
| 5 | 808040 | | Pin |
| 6 | 92A2 | | Spring |
| 7 | 131145 | | Stem, Brush |



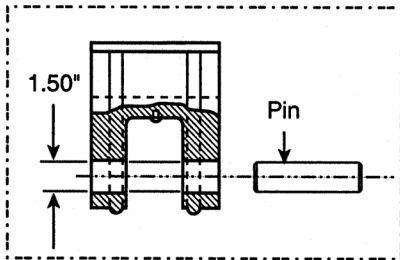
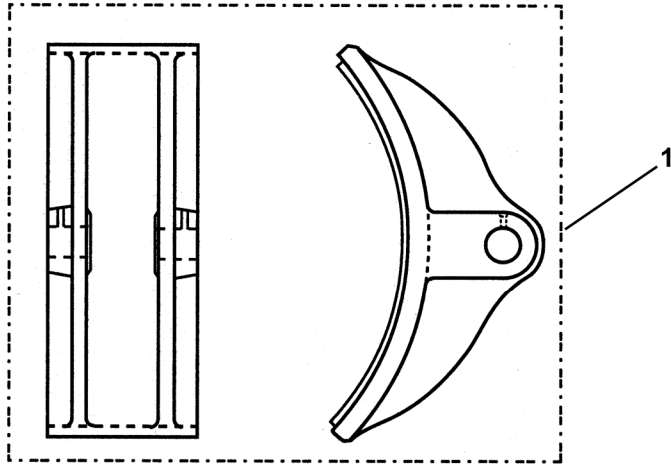
| REF. No. | VINTAGE PART No. | DESCRIPTION |
|----------|---------------------|--------------------------------------|
| 1 | 806655 | Bushing, Insulating (for brush stem) |
| 2 | 126085 | Plate, Insulating |
| 3 | 131145 | Stem, Brush |
| 4 | 10838 | Washer, Insulating |
| 5 | 85490 127AE8 | Washer, Standard, 1/2 in. |



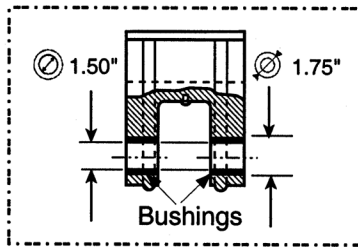
| REF. No. | VINTAGE | | DESCRIPTION |
|----------|---------|--------|--|
| | 466-TM | 6911E | |
| 1 | 59BH1 | | Bolt, Shouldered |
| 2 | 335H24 | | Bushing, Bronze (in machine's field frame) |
| 3 | --- | 335E73 | Bushing |
| 4 | 67G15 | | Nut, Elastic Stop |
| 5 | 77GB2 | | Pin |
| 6 | 13868 | | Rod |
| 7 | 80198 | | Seat, Spring |
| 8 | 90HD4 | 90LD6 | Spring |
| 9 | 90JC12 | | Spring |
| 10 | --- | | Washer, 1/4 S.A.E. |

Brake Shoes

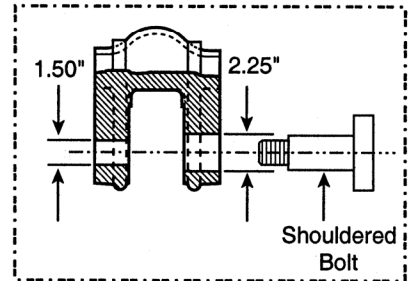
06-6911E



415J5



415J7



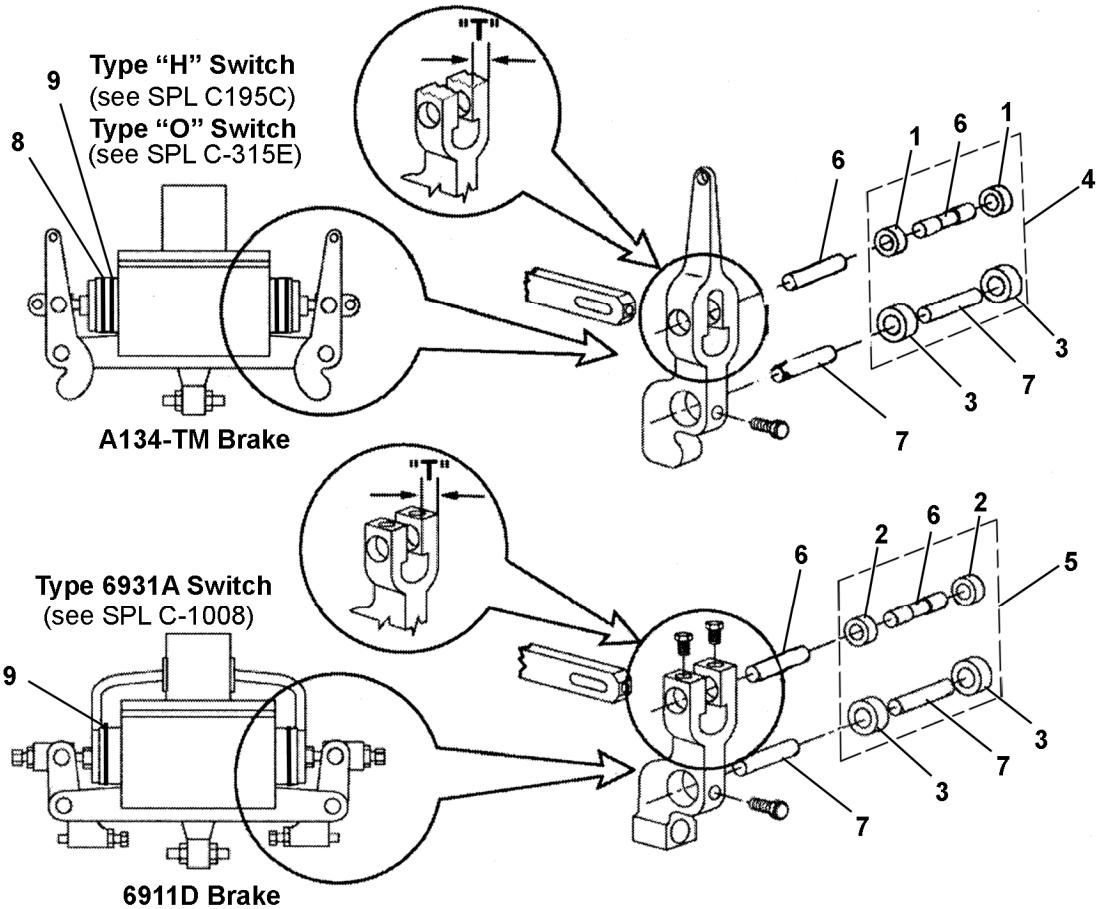
415J2

| VINTAGE | | DESCRIPTION |
|----------------------|-----------------|---|
| 466-TM, 6911E | | |
| REF. No. | PART No. | |
| 1 | 415J5 | Shoe, Brake, with Lining (Refer to illustrations above for differences) |
| | 415J7 | |
| | 415J2 | |

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

06-6911E

Upgraded Brake (Upper Pivots & Lever Arms)

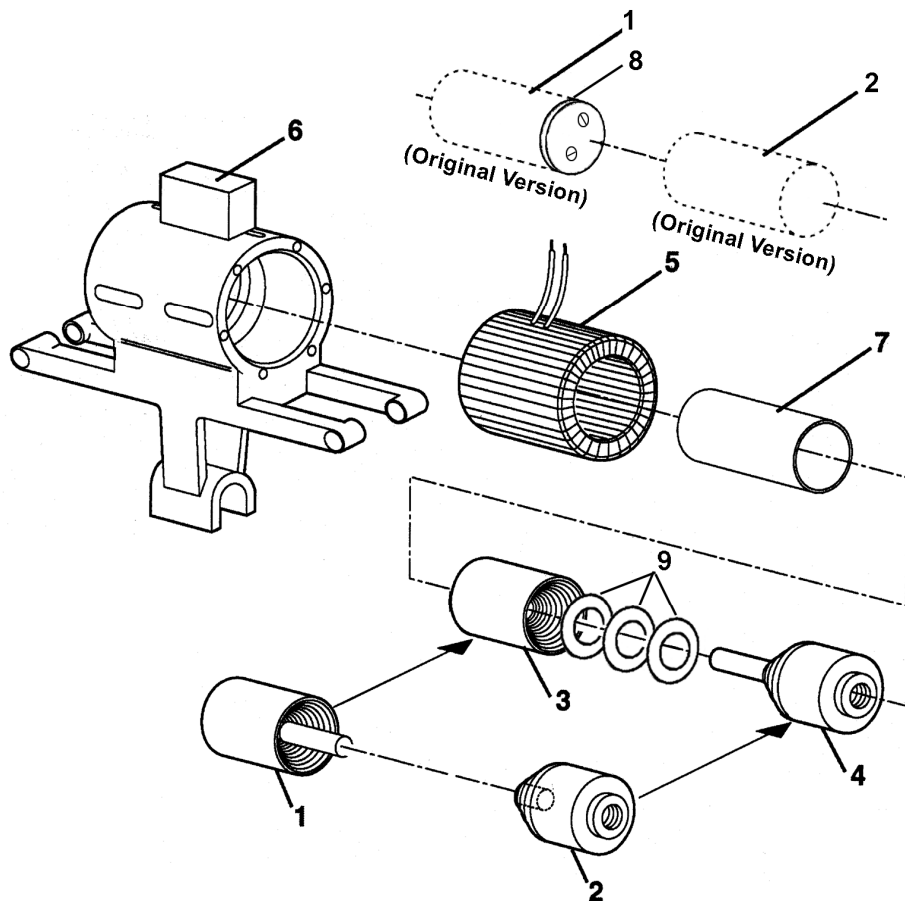


| VINTAGE | | |
|---------|-------|-------------------------------------|
| A134-TM | 6911D | Needle Bearing Upgrade (see Note 2) |

| REF. No. | PART No. | | DESCRIPTION | "T" |
|----------|----------|-----------|---|---------|
| 1 | --- | 209A6 | Bearing, Needle | --- |
| 2 | --- | 209A15 | Bearing, Needle | 3/4 in. |
| 3 | --- | 209A16 | Bearing, Needle | 1 in. |
| 4 | --- | 2700AD3 | Kit for Both Levers, Consisting of Ref. 1, 3, 6, 7 | |
| 5 | --- | 2700AD6 | Kit for Both Levers, Consisting of Ref. 2, 3, 6, 7 | |
| 6 | 82AH1 | --- | Pin (original version) | |
| | --- | GS1-82AH1 | Pin (upgraded version for ref. 5, See NOTE 1) | |
| | --- | GS1-82AH3 | Pin (upgraded version, for ref. 4, See NOTE 1) | |
| 7 | 806743 | --- | Pin (original version) | |
| | --- | GS1-82R2 | Pin (needle bearing, upgraded version for ref. 4 or ref. 5, See NOTE 1) | |
| 8 | 85291 | 128AF5 | Washer, Brass (for A134-TM, 8 pieces for each side; for 6911D, 10 pieces for each side) | |
| | 128AG24 | 128AG58 | | |
| 9 | 803919 | --- | Washer, Leather | |

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

NOTE 2: Contact OSC for brake upgrade. Refer to service eng. letter #9A, dated 1/15/1965.

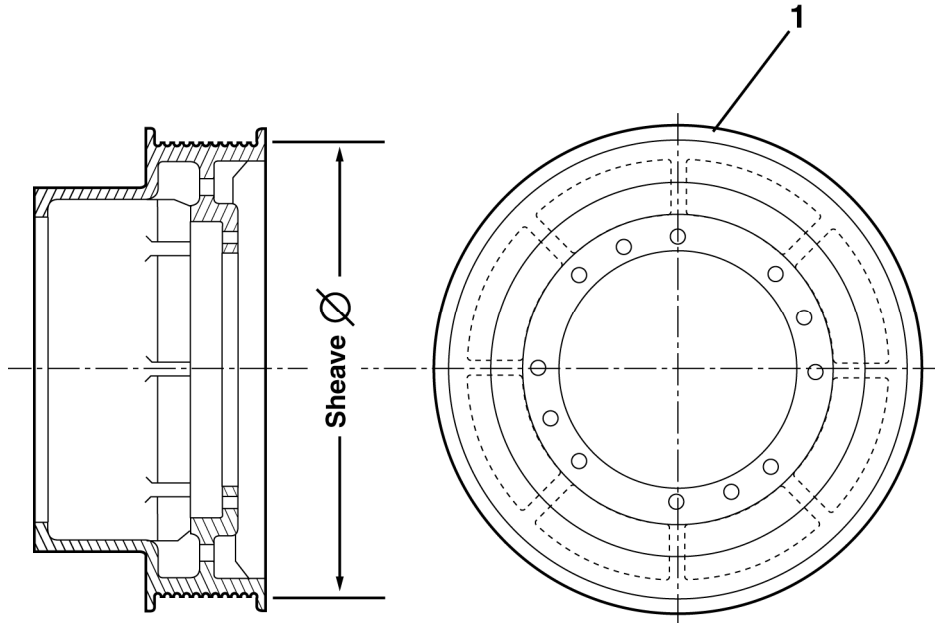


| | | VINTAGE | |
|-----------------|---------------------|----------------|---|
| | | 466-TM | 6911E |
| REF. No. | PART No. | | DESCRIPTION |
| 1 | --- | | Assembly, Magnet Core, Female with Pin. See NOTE. |
| | 425443 | --- | Assembly, Magnet Core (Original Version). See NOTE. |
| 2 | --- | | Assembly, Magnet Core, with Liner Insert. See NOTE. |
| | 425444 | --- | Assembly, Magnet Core (Original Version). See NOTE. |
| 3 | 400CV GS1-400CV1 | | Assembly, Magnet Core, Female, with Switch Arm |
| 4 | 400CX GS1-400CX1 | | Assembly, Magnet Core, Male, with Switch Arm |
| 5 | 159574 | | Coil, Brake (Res. = 7.05 Ohms) |
| | 185783 | | Coil, Brake (Res. = 16.5 Ohms) |
| | 143061 | | Coil, Brake (Res. = 26 Ohms) |
| 6 | --- | 6931A1 | Switch, Brake |
| | --- | --- | Switch, "H". See SPL C-195C. |
| | --- | --- | Switch, "O". See SPL C-315E. |
| 7 | 136AG1 | | Tube, Magnet Core |
| 8 | 806747 | --- | Washer, Brass |
| 9 | GS2-128AG2 | | Washer, Brass |

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

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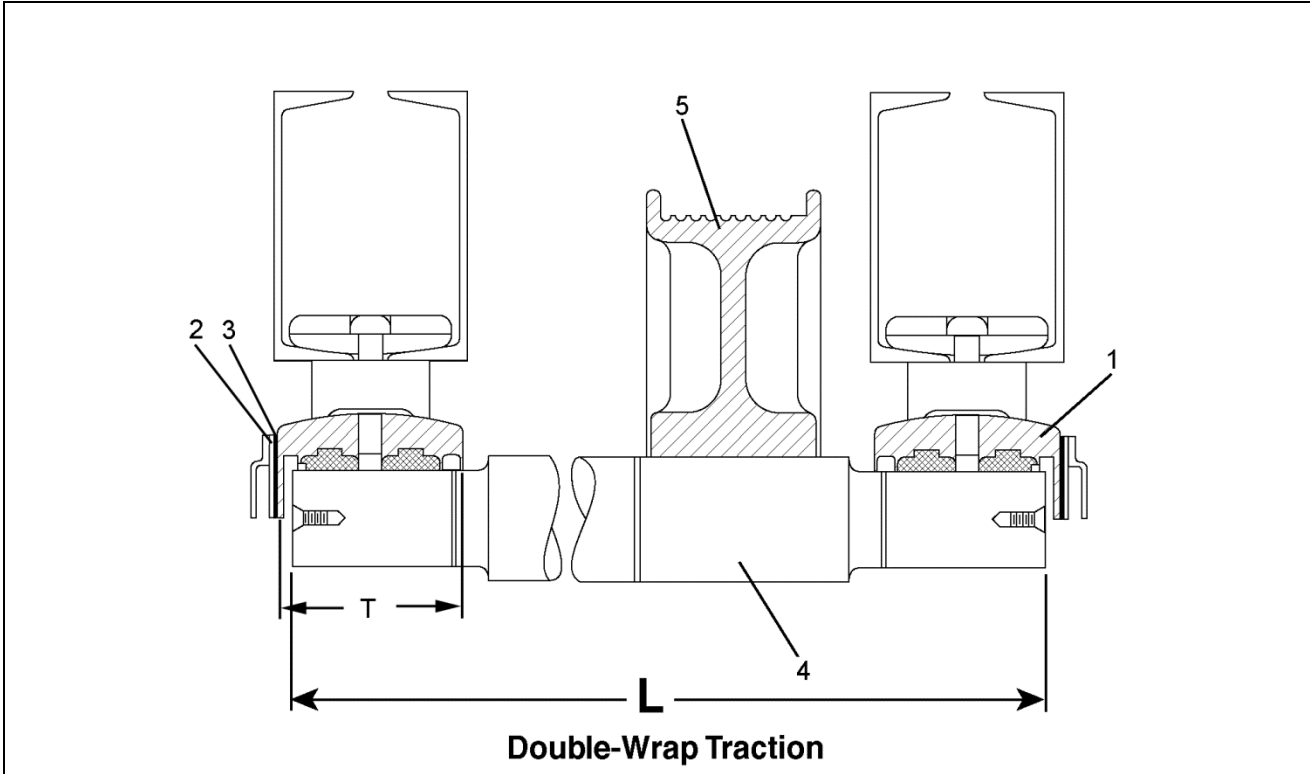
Drive Sheave



| REF. No. | VINTAGE 395-TM, 622-TM, 6913 D | | GROOVES | | | |
|----------|-----------------------------------|---------------|---------|-----------|-------------|----------------|
| | PART No. | GROOVING TYPE | QTY. | ROPE Ø | SHEAVE Ø | CASTING NO. |
| 1 | 809089 | Round Seat | 10 | 1/2 in. | 26 in. | 579-SH-1 |
| | 809090 | 105° Undercut | 6 | | | |
| | 186087 | 105° Undercut | 5 | | | |
| | 186089 | 90° Undercut | 6 | | | |
| | 186088 | 90° Undercut | 5 | | | |
| | 810553 | Round Seat | 10 | 1/2 in. | 30 in. | 631-SH-1 |
| | 810554 | 105° Undercut | 6 | | | |
| | 186028 | 105° Undercut | 5 | | | |
| | 186029 | 90° Undercut | 6 | | | |
| | 186030 | 90° Undercut | 5 | | | |

Secondary Sheave & Shaft w/Babbitted Bearings

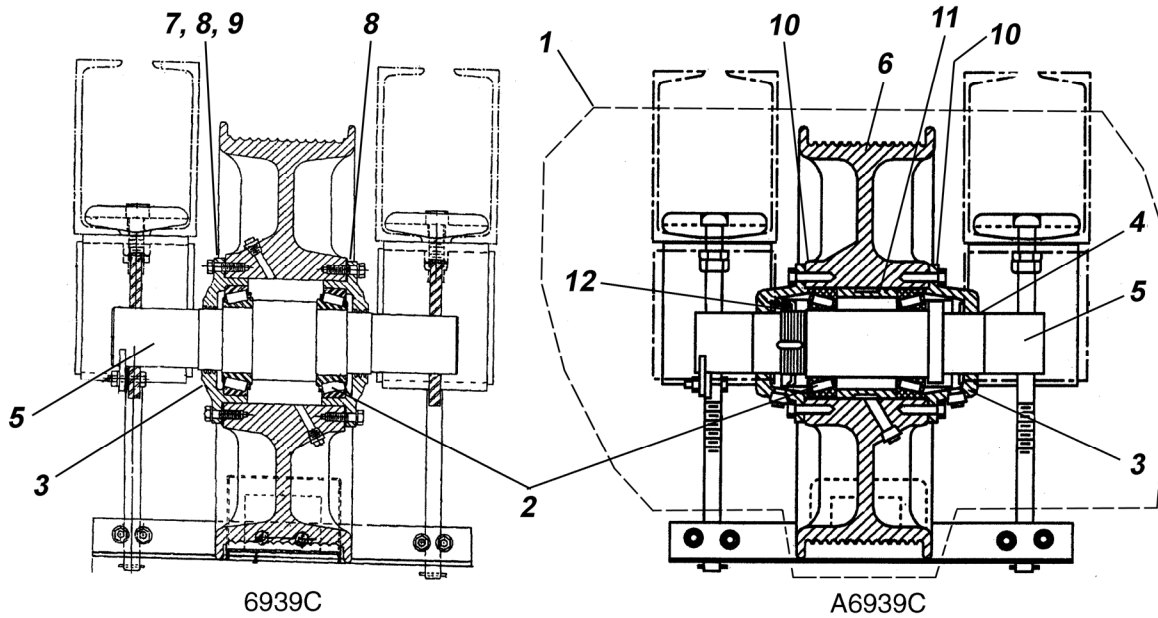
06-6911E



| VINTAGE 466-TM, 6913E | | |
|--------------------------|------------------|---|
| Production Pre 1948 | | Production Post 1948 |
| REF. No. | PART No. | DESCRIPTION |
| 1 | 405230 210AJ1 | --- |
| | --- | A210AJ2 |
| 2 | 105233 | Gasket, Vellumoid, 1/8 in. Thick |
| 3 | 105232 | Guard, Inside Oil, 1/16 in. Thick |
| 4 | 131150 | Shaft, Secondary Sheave (Long), 61 in. L |
| | 144646 | Shaft, Secondary Sheave (Short), 27 in. L |

| REF. No. | VINTAGE 466-TM, 6913E | DESCRIPTION | GROOVES | | SHEAVE \varnothing |
|----------|--------------------------|-------------------|---------|--------------------|----------------------|
| | PART No. | | QTY. | ROPE \varnothing | |
| 5 | 809088 | Sheave, Secondary | 10 | 1/2 in. | 26 in. |
| | 810570 | Sheave, Secondary | 10 | 1/2 in. | 28 in. |

Secondary Sheave & Shaft w/Roller Bearings



| VINTAGE | |
|---------|--------|
| 6939C | A6939C |

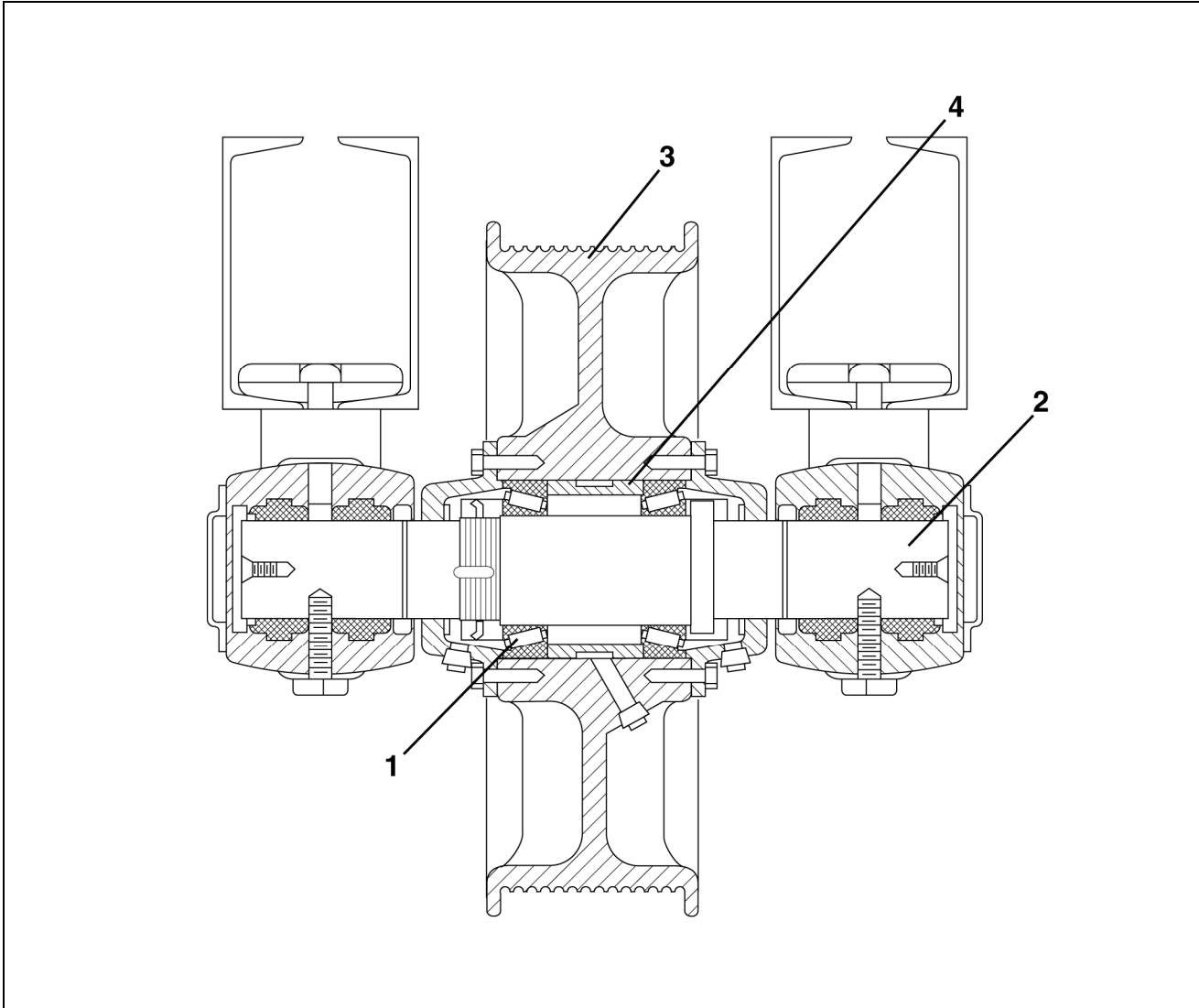
| REF. No. | PART No. | DESCRIPTION | |
|----------|-------------------|---|--|
| 1 | A6939C400 | Assembly, Secondary Sheave (p/n A262P1) & Shaft w/Roller Bearings | |
| 2 | 209B27 | Bearing Roller | |
| 3 | --- | A346XR1 | Cover |
| | 346XR4 346AFM1 | --- | Cover. See NOTE 1 . |
| 4 | --- | 33D21 | Seal |
| 5 | --- | A495BM2 | Shaft, L = 23 in. |
| | 495BM1 | --- | Shaft, L = 23 in. |
| 6 | --- | A262P1 | Sheave, Secondary, \varnothing 28 in. (1/2 in. Rope, 10 Grooves) |
| | 262P... | --- | Sheave, Secondary. See NOTE 2 . |
| 7 | 255SC1 | --- | Shim, Green, 0.003 in. Thick |
| 8 | 255SC2 | --- | Shim, Trans-Matte, 0.0075 in. Thick |
| 9 | 255SC3 | --- | Shim, Yellow, 0.020 in. Thick |
| 10 | --- | 255HB39 | Shim, Green, 0.003 in. Thick |
| 11 | --- | 172KL1 | Sleeve, Spacer |
| 12 | --- | 130AA5 | Washer |

NOTE 1: For replacement instructions, see TA-III-7-1 and use cover p/n 346AFM1.

NOTE 2: This sheave is no longer available individually. To replace this sheave, order secondary sheave/shaft assembly: A6939C400 (sheave with 10 grooves), or A6939C401 (sheave with 12 grooves and groove pitch 5/8 in.), or A6939C402 (sheave with 12 grooves and groove pitch 9/16 in.)

Secondary Sheave Babbitted To Roller Bearings Conversion

06-6911E



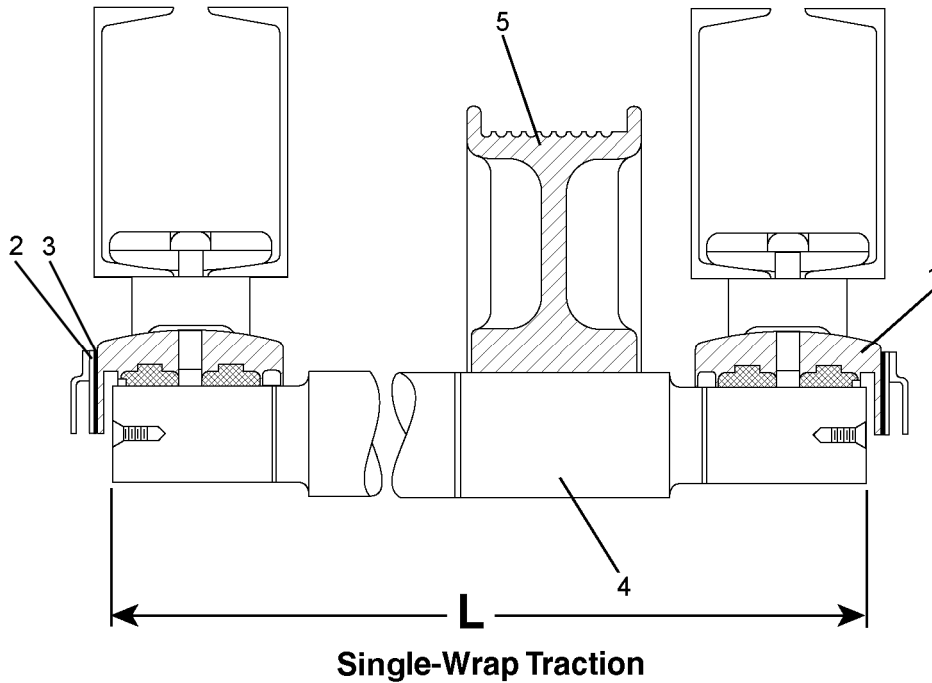
| VINTAGE GS1-B11TM | | |
|--------------------------|-----------------|--------------------|
| REF. No. | PART No. | DESCRIPTION |
| 1 | 209B27 | Bearing, Roller |
| 2 | GS1-A495BM2 | Shaft |
| 4 | GS1-172KL1 | Sleeve |

| REF. No. | VINTAGE GS1-B11TM | DESCRIPTION | GROOVES | | SHEAVE ∅ |
|-----------------|--------------------------|--------------------|----------------|---------------|-----------------|
| | PART No. | | QTY. | ROPE ∅ | |
| 3 | A6800CP1 | Sheave, Secondary | 10 | 1/2 in. | 24 in. |
| | A6800CP2 | Sheave, Secondary | 12 | 1/2 in. | 24 in. |

NOTE: Contact OSC Service Engineering for assistance with upgrade.

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Deflector Sheave & Shaft w/Babbitted Bearings

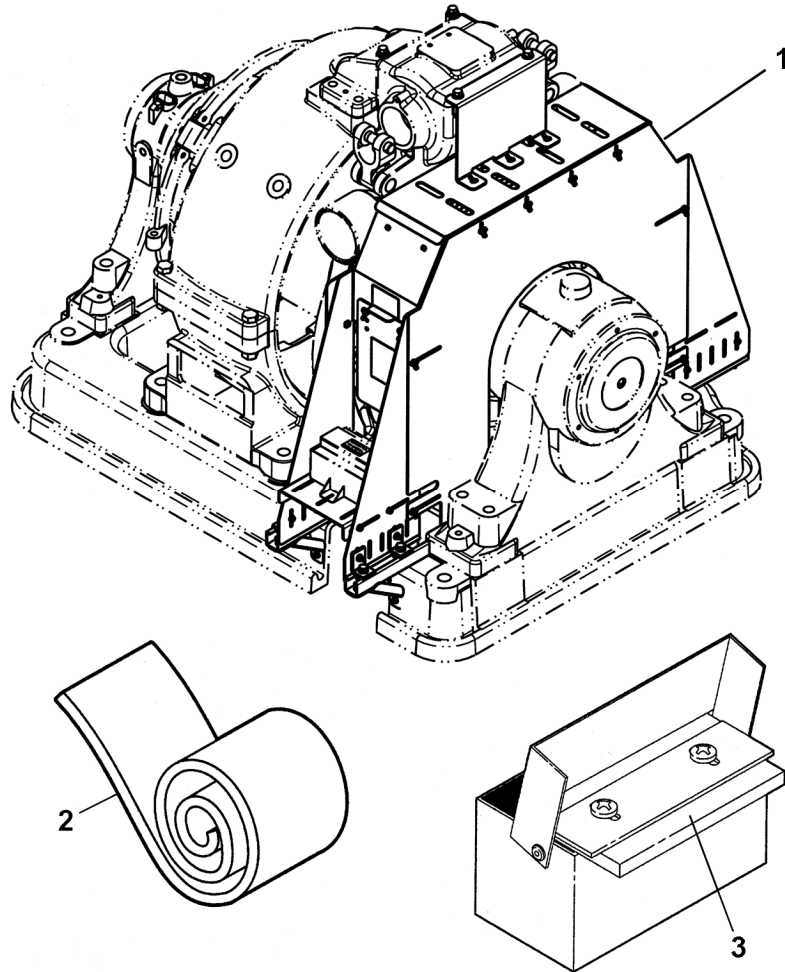


| REF. No. | VINTAGE | | DESCRIPTION |
|----------|----------|-------|---|
| | 466-TM | 6911E | |
| REF. No. | PART No. | | DESCRIPTION |
| 1 | 122855 | | Bearing, Deflector Sheave Shaft |
| 2 | 122860 | | Gasket, Vellumoid, 1/8 in. Thick |
| 3 | 122858 | | Guard, Inside Oil, 1/16 in. Thick |
| 4 | 131152 | | Shaft, Deflector Sheave (Long), 60.5 in. L |
| | 807704 | | Shaft, Deflector Sheave (Short), 26.5 in. L |

| REF. No. | VINTAGE | | DESCRIPTION | GROOVES | | SHEAVE \varnothing |
|----------|----------|-------|-------------------|---------|--------------------|----------------------|
| | 466-TM | 6911E | | QTY. | ROPE \varnothing | |
| REF. No. | PART No. | | DESCRIPTION | QTY. | ROPE \varnothing | SHEAVE \varnothing |
| 5 | 809091 | | Sheave, Deflector | 6 | 1/2 in. | 30 in. |

Sheave Guard

06-6911E



| W/O VINTAGE | | |
|-------------|-----------|---|
| REF. No. | PART No. | DESCRIPTION |
| 1 | --- | Guard, Sheave (to order sheave guard, see TIP 6.1.1-15) |
| 2 | AAA297AY3 | Strip, Carpet |
| 3 | AAA488M5 | Wick, Lubricator Replacement |