

**Gen2® 5T AC Permanent
Magnet Gearless Machine:
ANSI-Compliant**

(Extended Duty & Next Generation High Rise)

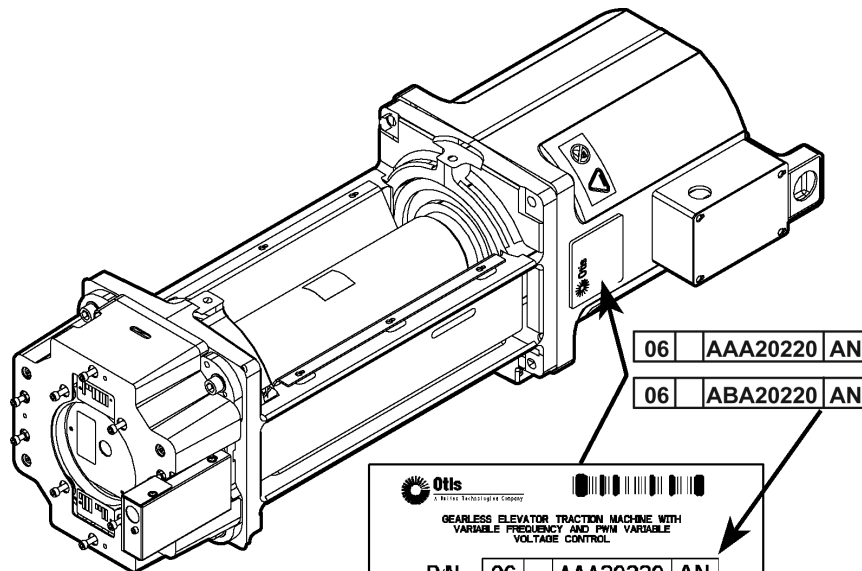
Spare Parts Leaflet

06-AAA20220AN

October 23, 2024 / Page 1 of 9

OBSOLESCENCE NOTICE

The product listed in this SPL is obsolete. Some components may still be available, but Otis recommends an upgrade (see TIP 32.2-1 for potential upgrade).



GEARLESS ELEVATOR TRACTION MACHINE WITH VARIABLE FREQUENCY AND PWM VARIABLE VOLTAGE CONTROL			
P/N: 06 AAA20220 AN			
NOMINAL RATINGS			
AC 3Ø	TIME RATING IPR	<input type="checkbox"/> HZ CONTRACT NO.	
<input type="checkbox"/> VOLTS	<input type="checkbox"/> STARTS-HOUR	<input type="checkbox"/> KW OUTPUT	
<input type="checkbox"/> CLASS F	<input type="checkbox"/> °C AMBIENT	<input type="checkbox"/> AMPS	
<input type="checkbox"/> /ED		<input type="checkbox"/> RPM	
CAUTION USE SUPPLY WIRES SUITABLE FOR 90°C ENCLOSURE IP20, NON-VENTILATED NO RELUBRICATION REQUIRED			
SERIAL NUMBER: <input type="text"/>			
	MANUFACTURED BY KOLLMORGEN		
C FILE 219464	MADE IN <input type="text"/>		
TOTAL MACHINE WEIGHT <input type="checkbox"/> KG (REF)			



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Unpublished Work—© Otis Elevator Co.; 2024

Leaflet Description

This SPL details spare parts for the Gen2® R2 five ton (5T) sheave shaft load, extended duty, permanent magnet (PM) AC three-phase motor gearless machine for **ANSI-compliant** North and South American Area (NSAA) markets.

Leaflet Revisions

Date Revised	Subject Matter Expert	Reason for Revision
March 17, 2003	Amer Aziz	New SPL
April 30, 2004	James Draper	Updated SPL number in reference 2, on page 4
March 10, 2005	Ben Watson	Changed parts list on pages 3-5; added imperial units conversion; updated illustrations.
March 25, 2006	Ben Watson	Added ABA20220AN arrangement.
July 25, 2006	Ben Watson	Added AAA341BBV1 and AAA283AVA1.
Jan. 15, 2006	Ben Watson	Added AAA20220AQ2 and AAA270CJ1.
April 2, 2007	Scott Boulanger	Update view to show new sheave cover and p. 5 part numbers.
February 4, 2008	Ben Watson	Updated duty load in ref.1 on p. 3 for p/ns ABA20220AN21 and ABA20220AN41
November 20, 2008	David Torai	Added sheave cover guard to p.5
September 22, 2010	Michael Lang	Updated brake part numbers on p. 4 (TBA... to TCA20236G...
August 17, 2011	Val Sheynkman	Added new p. 7
September 5, 2012	Val Sheynkman	Corrected callouts 3 and 4 on p. 6
January 7, 2015	Kyle Pereira	Updated pp. 5–6
August 3, 2016	Kyle Pereira	Updated p. 7; Added new p. 8
September 14, 2022	Juan Murillo	Updated to include OBSOLESCENCE note on cover
October 23, 2024	Juan Murillo	Revised Obsolescence note.

Related Drawings

Drawing No.	Title	Drawing No.	Title
AAA20220AN	AC Gearless Machine (PM) 3 Phase Motor (5.0T ANSI)	ABA20220AN	AC Gearless Machine (PM) 3 Phase Motor (5.0T ANSI)
AAA633AE	Encoder (3-channel)	---	---

Continued on next page.

History

06-AAA20220AN

Related Documents

Document ID	Title
Otis Doc. 54694	Functional Requirements for Gen2 R2 (extended duties) PM AC Gearless Machine
Otis Doc. 55763	Gen2—5T Machine Basic Data
SPL 07-TAA20236G	5T NAA/ANSI Brake for Gen2 System
TIP 6.1.11-15	Gen2® Main and Rescue Encoder Retrofit

Subject Matter Expert

Name	Department
Juan Murillo	OSC Service Engineering

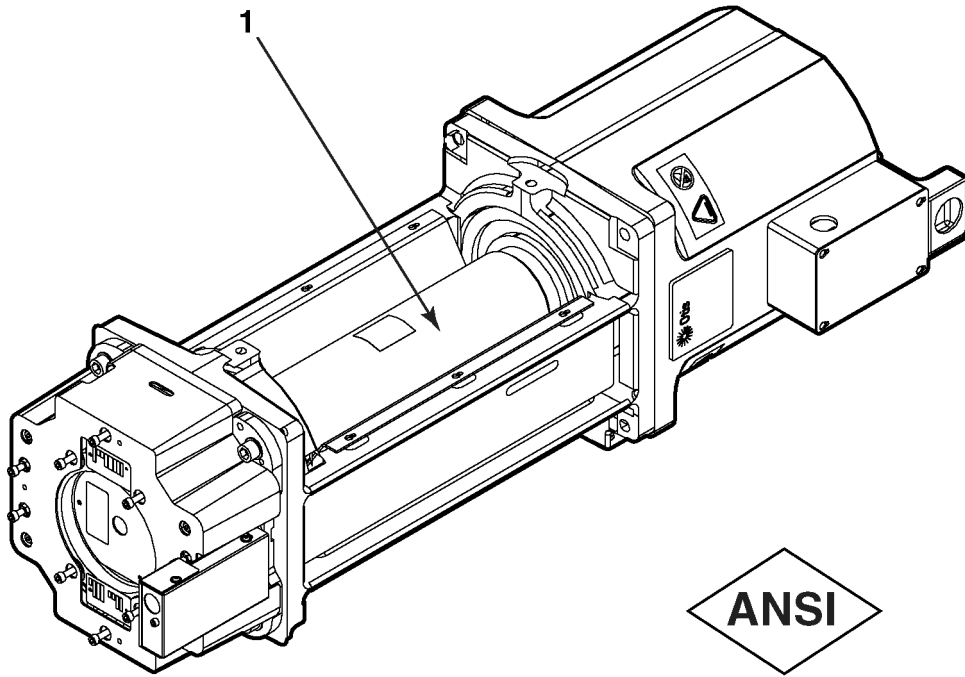
About Spare Parts Leaflets...

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.

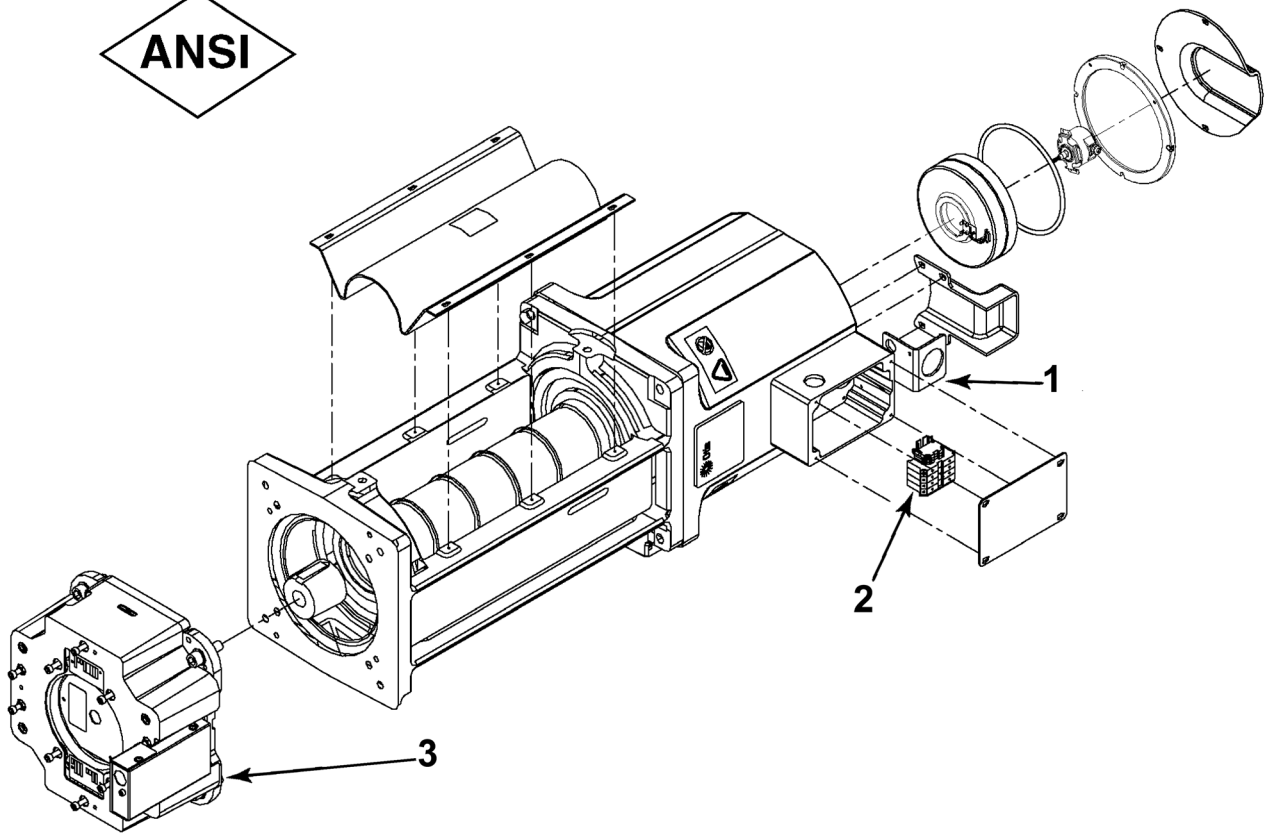
**NSAA Machine Assembly with
ASME A17.1 Compliant Brake**




AAA20220AN
ABA20220AN

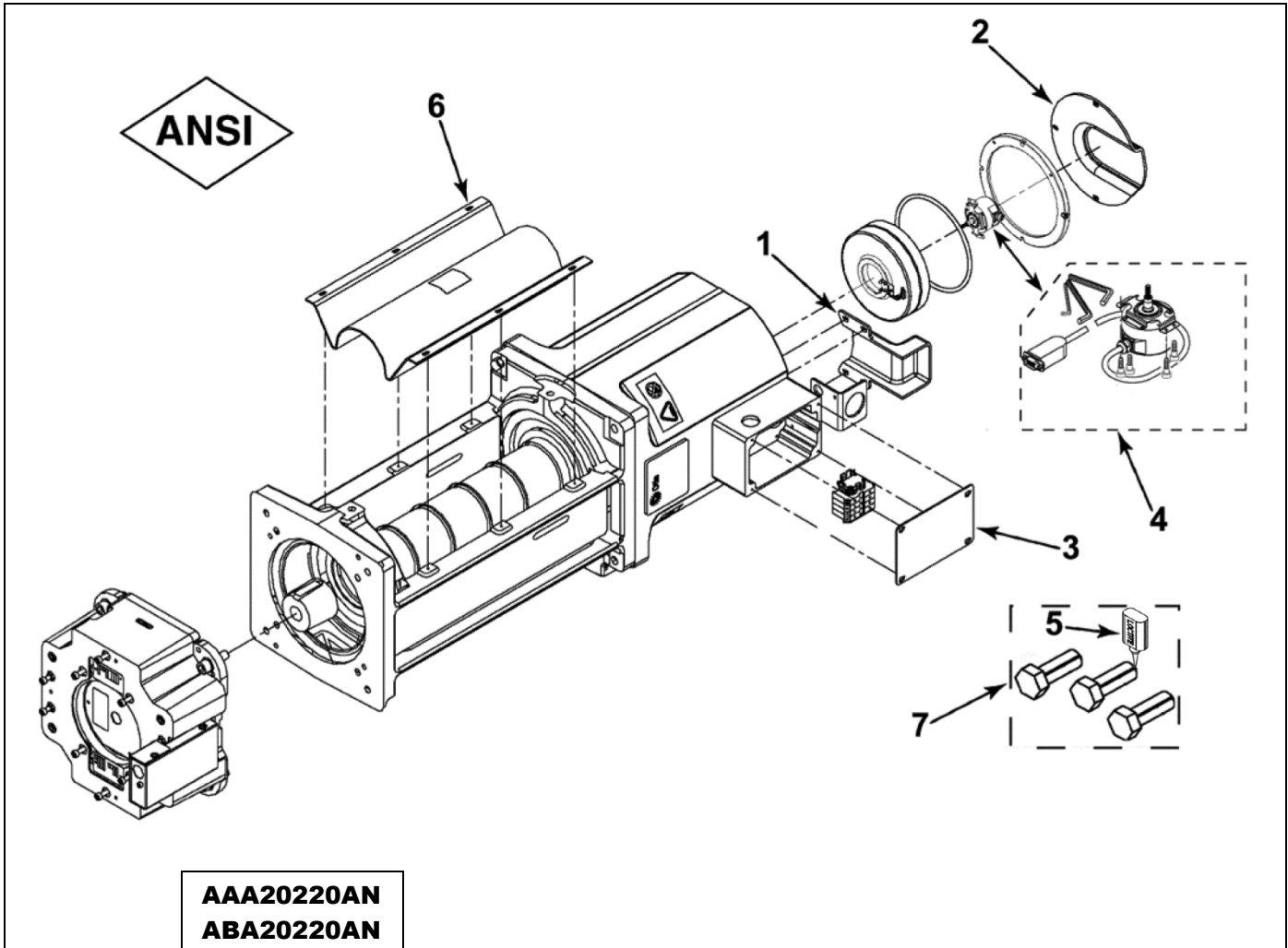
REF. No.	PART No.	APPLICATION	DUTY LOAD (kg)	SPEED (m/s)	DESCRIPTION	REMARKS
1	AAA20220AN1 AAA20220AN3 ABA20220AN3	ANSI	2500-3000 lb. (1135-1360)	200-350 FPM (1.02- 1.78)	10 V Three- Channel Incremental Encoder (A_A633AE1)	5TA, Gen2, ED (Non-REGEN)
	AAA20220AN2 AAA20220AN4 ABA20220AN4		3500 lb. (1588)			5TB, Gen2, ED (Non-REGEN)
	AAA20220AN11 AAA20220AN12 ABA20220AN12		4000-5000 lb. (1814-2268)	400-500 FPM (2.03-2.54)		5TC, NGH, R1 (Non-REGEN)
	AAA20220AN24 ABA20220AN21		2500-3000 lb. (1135-1360)			5TD, NGH, R1 (Non-REGEN)
	AAA20220AN41 ABA20220AN41		3500			

NOTE: Data plates on some machines have been imprinted with part no. that indicates motor with 2-channel encoder (e.g., AAA20220AN1). The field replacement assembly should have a 3-channel encoder (e.g., AAA20220AN3), shown as a substitution for each of these identities / applications.



		AAA20220AN ABA20220AN	
REF. No.	DESCRIPTION	PART No.	Where Used
1	Angle, Formed	AAA283AVA1	---
2	Assembly, Terminal Block	AAA21303CW1	---
3	Brake, Dual Coil, ASME ANSI A17.1,  SPL 07-TAA20236G for Details	TBA20236G13 TCA20236G13	AAA20220AN1 AAA20220AN3 ABA20220AN3
		TBA20236G12 TCA20236G12	AAA20220AN2 AAA20220AN4 ABA20220AN4
		TBA20236G14 TCA20236G11	AAA20220AN11 AAA20220AN12 ABA20220AN12
		TBA20236G11 TBA20236G14 TCA20236G14	AAA20220AN21 ABA20220AN21 AAA20220AN41 ABA20220AN41

(Continued on next page)

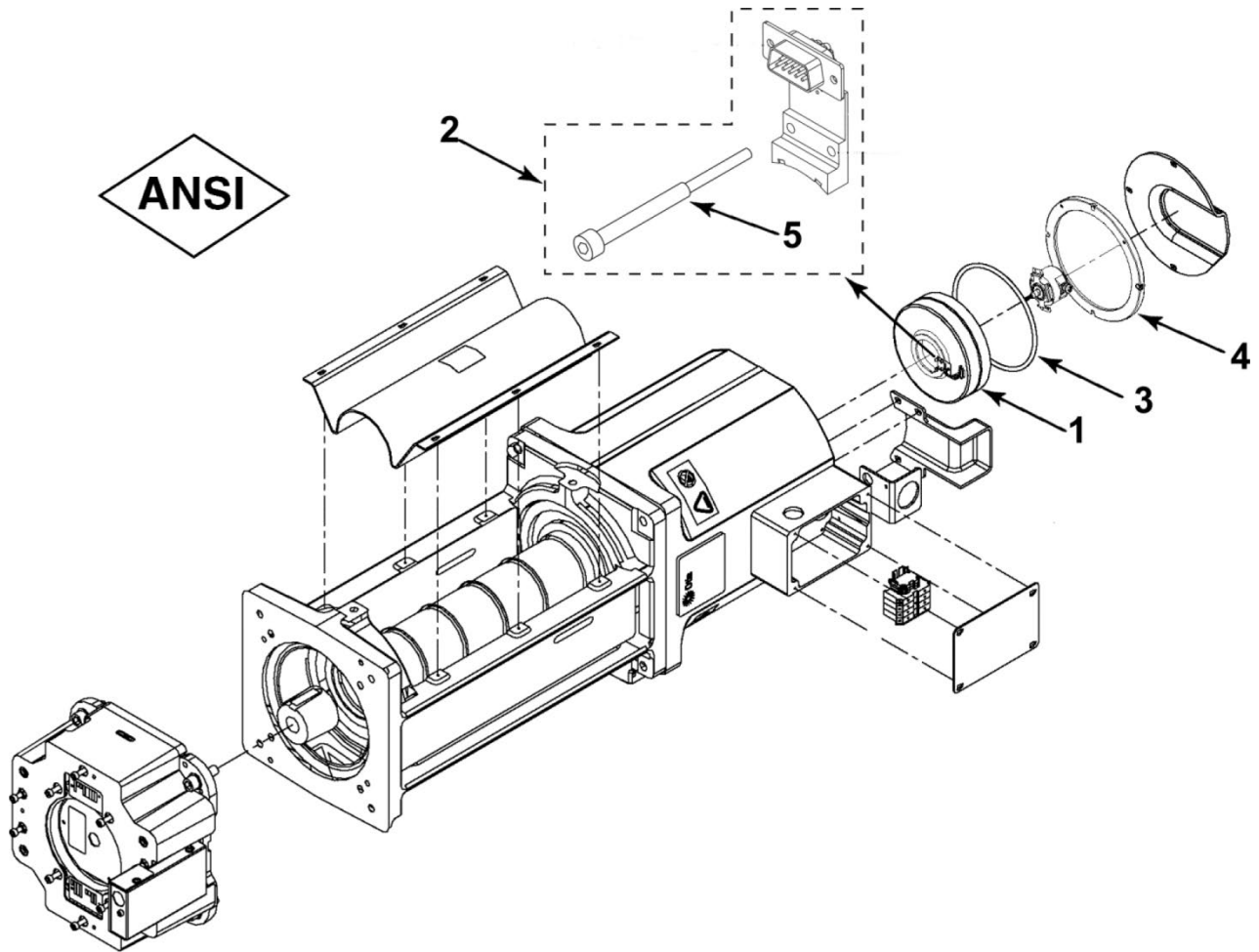


AAA20220AN
ABA20220AN

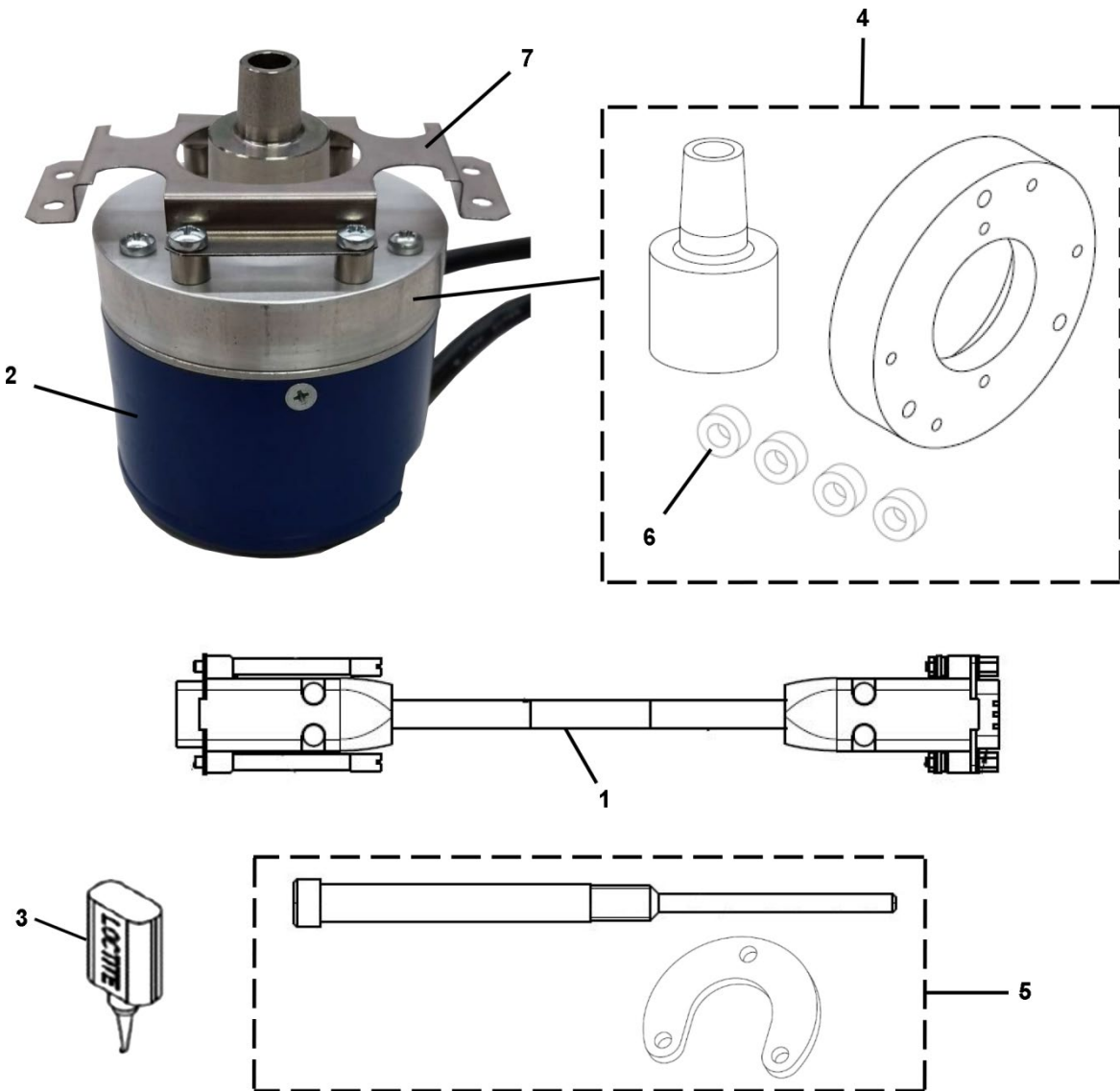
REF. No.	PART No.	DESCRIPTION	REMARKS
1	AAA346BBV1	Cover, Conduit	---
	AAA346BBT1	Cover, End (w/ 5TA, B, and C machines)	---
2	AAA346BBT2	Cover, End (w/ 5TD machine (1588 kg duty = 3500 lb., & 2.03-2.54 m/s = 400-500 FPM))	---
3	AAA346BBS2	Cover, Terminal Block, ANSI	---
4	AAA633AE1	Encoder, Main (10 V Three-Channel Incremental with (1) M5 x 70 mm L and (3) M3 x 8 Hex Head Cap Screws, (1) Jack Bolt Tool, (1 ea.) 2.5, 4.0, and 5.0 mm Allen Wrenches	---
5	AAA180JB1	Glue, Loctite® 243 Threadlocker, 10 ml Bottle	Sealant
6	AAA384AHX20	Guard, Sheave (seismic)	with Label
7	AAA27076AJ3	Kit, Hardware (for new machine), Includes (3) M20 x 55 Hex Head Screws, Ref. 5	See NOTE

NOTE: Mounting hardware for new machines.


(Continued on next page)



AAA20220AN ABA20220AN		
REF. No.	PART No.	DESCRIPTION
1	AAA20220AQ1	Encoder w/Rescue Sensors
	AAA20220AQ2	Encoder w/o Rescue Sensors
2	AAA27076CJ4	Kit, Rescue Sensor Encoder (includes jack screw tool), p. 8
3	AAA182AZ1	Packing, O-Ring
4	AAA172UJ1	Ring, Clamp
5	AAA27DP1	Screw, Jack, M6, 97 mm L

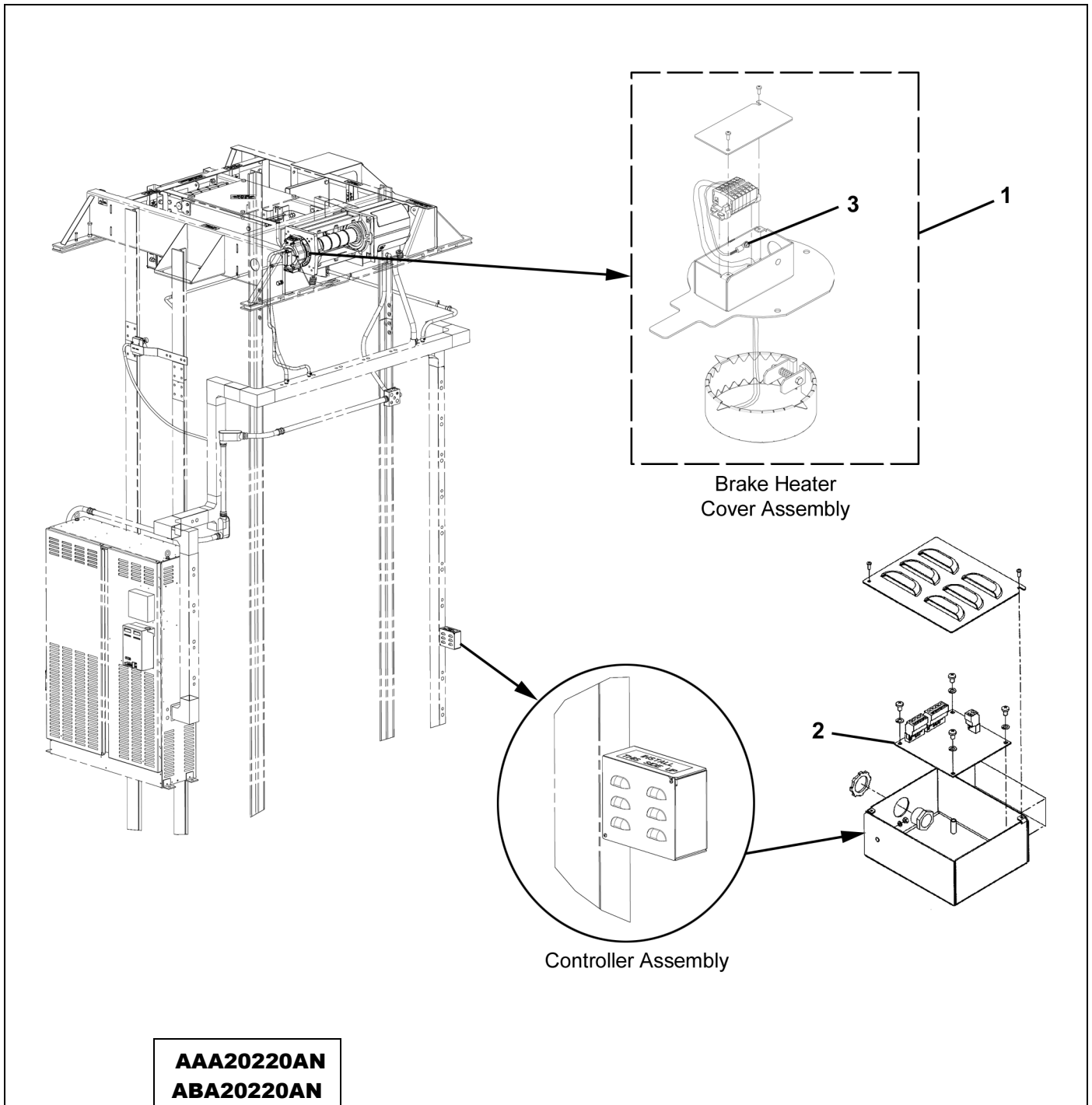


**AAA20220AN
ABA20220AN**

REF. No.	PART No.	DESCRIPTION	REMARKS
1	AAA174BVG2	Cable, Adaptor, 9-Pin to 15-Pin, 8 ft.	 TIP 6.1.11-15 for installation instructions and further details.
2	AAA633AJ402	Encoder	
3	AAA180JB1	Glue, Loctite® 243 Threadlocker, 10 ml Bottle	
4	AAA27076HD400	Kit, Adaptors and Hardware	
5	AAA27076HD402	Kit, Encoder Removal and Hardware	
6	AAA462FD2	Spacer, 5 mm	
7	*	Spring, Attaching (reuse existing from AAA633AE1)	

Brake Heater Assembly

06-AAA20220AN



AAA20220AN ABA20220AN			
REF. No.	PART No.	DESCRIPTION	REMARKS
1	AAA24430T3	Assembly, Brake Heater Cover	ANSI / CSA
2	ABA26800ANC1	Assembly, Controller PCB	ANSI / CSA
3	AAA660A16	Thermistor	

NOTE: For details, see SWP N-1.1.18.0-3.