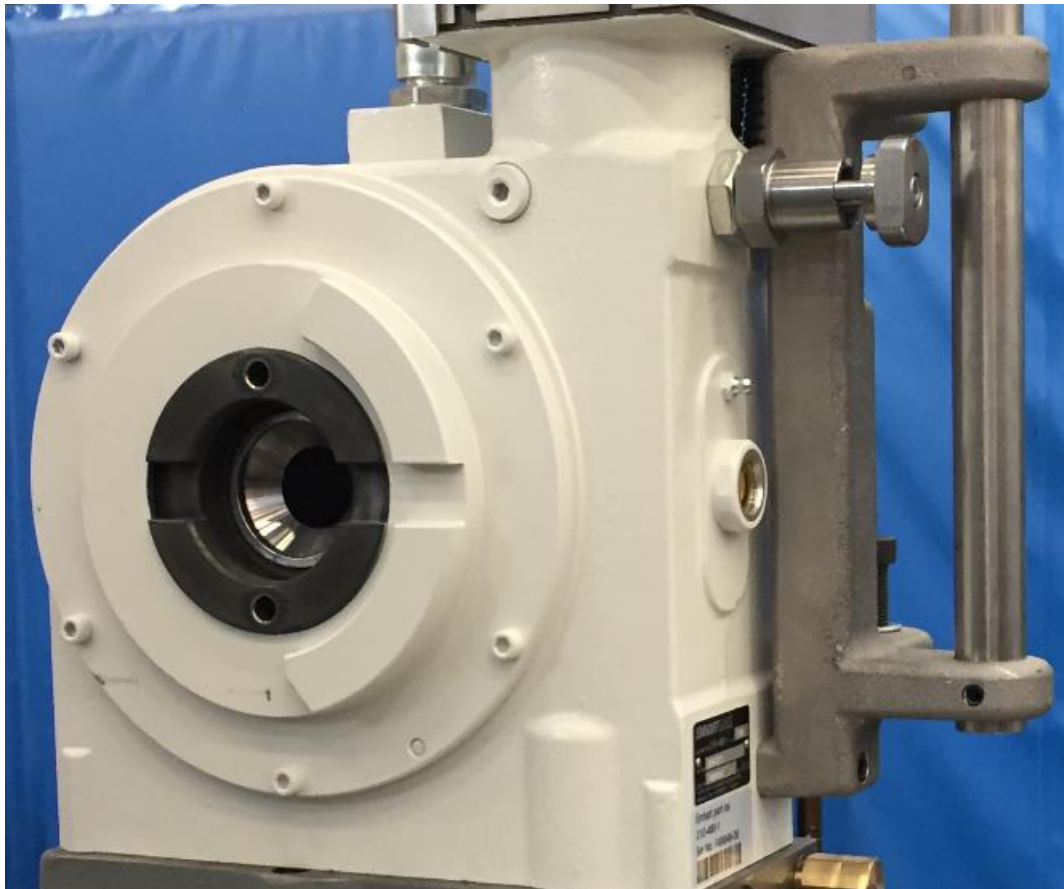


Technical News Bulletin

October 2016



Introduction

The Bucher Emhart Glass Servo Electric Takeout Mechanism (SETO) was introduced in 2003 and is a well proven design and has become an industry standard. It is designed to meet the Glass Industry requirements for precise and stable ware transfer from the molds to the conveyor dead plate. Newly formed containers are very susceptible to defects. This makes a controlled takeout motion critical for the ware handling process.

The SETO employs a straightforward mechanism design. In combination with Bucher Emhart Glass Servo control it makes the takeout motions precise and repeatable. The AC Servo control allows optimizing the speed and profiles of the takeout IN and OUT motions for each different container. This provides the appropriate balance between takeout motion and increased mold contact time.

The reliable and efficient ware handling provided by the Servo Electric Takeout is another way that Bucher Emhart Glass is making the Glass Industry more productive.

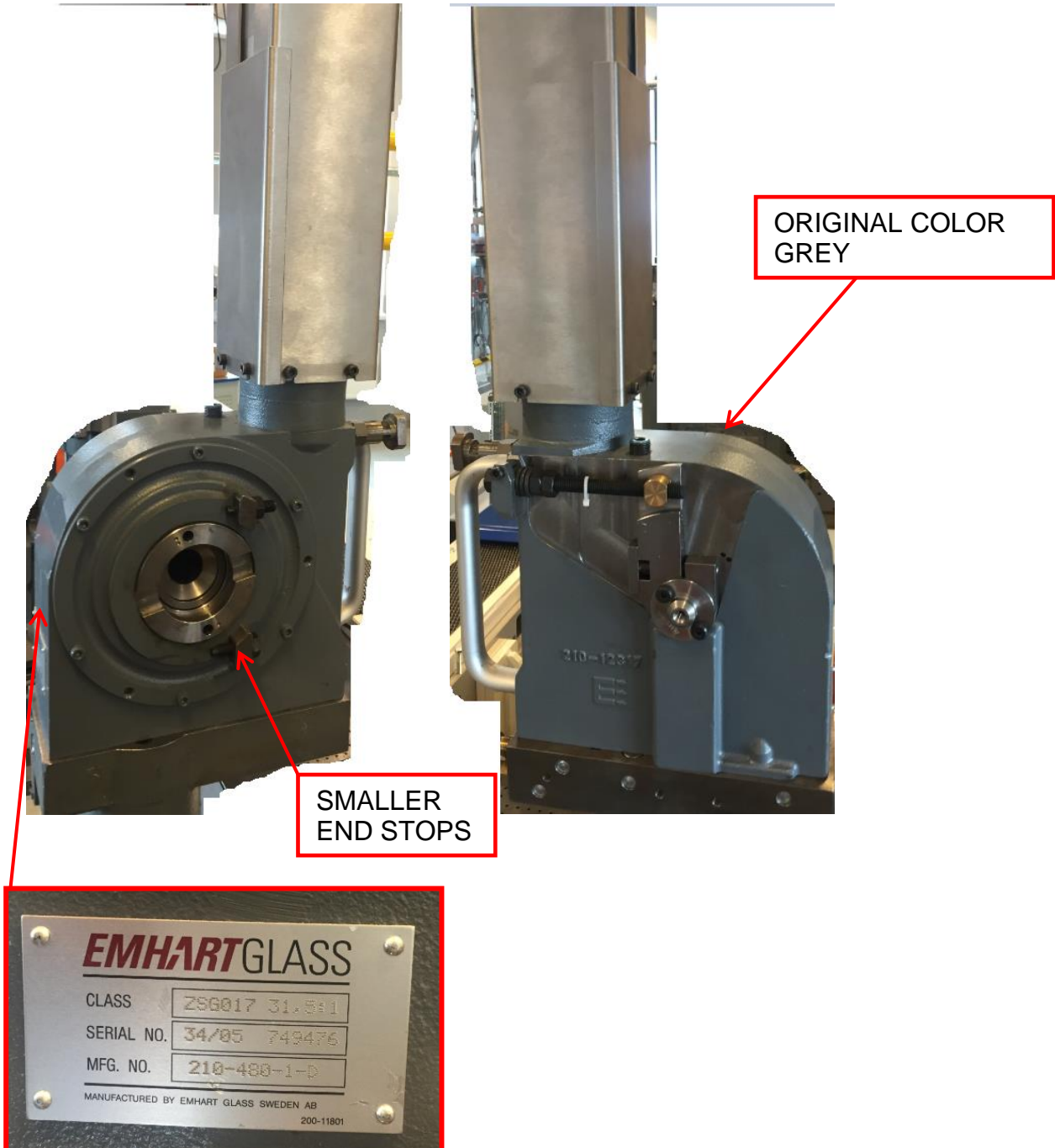
Information

Information regarding the SETO gearbox to clarify spare parts identification and specification on installed base. The Servo Take out gear box 210-480-1 was introduced in January 2003. From January 2012 the Gear box was updated. As a complete gearbox it was a 1:1 replacement, but components within the gearbox assembly are different and this TNB is to inform of differences. Having sub-components different has caused logistic problems when receiving requests for spare parts. To improve the situation we like to inform about the differences between the two gearboxes and how to identify which one is which.

For spare parts orders and further communication contact Bucher Emhart glass Sales.

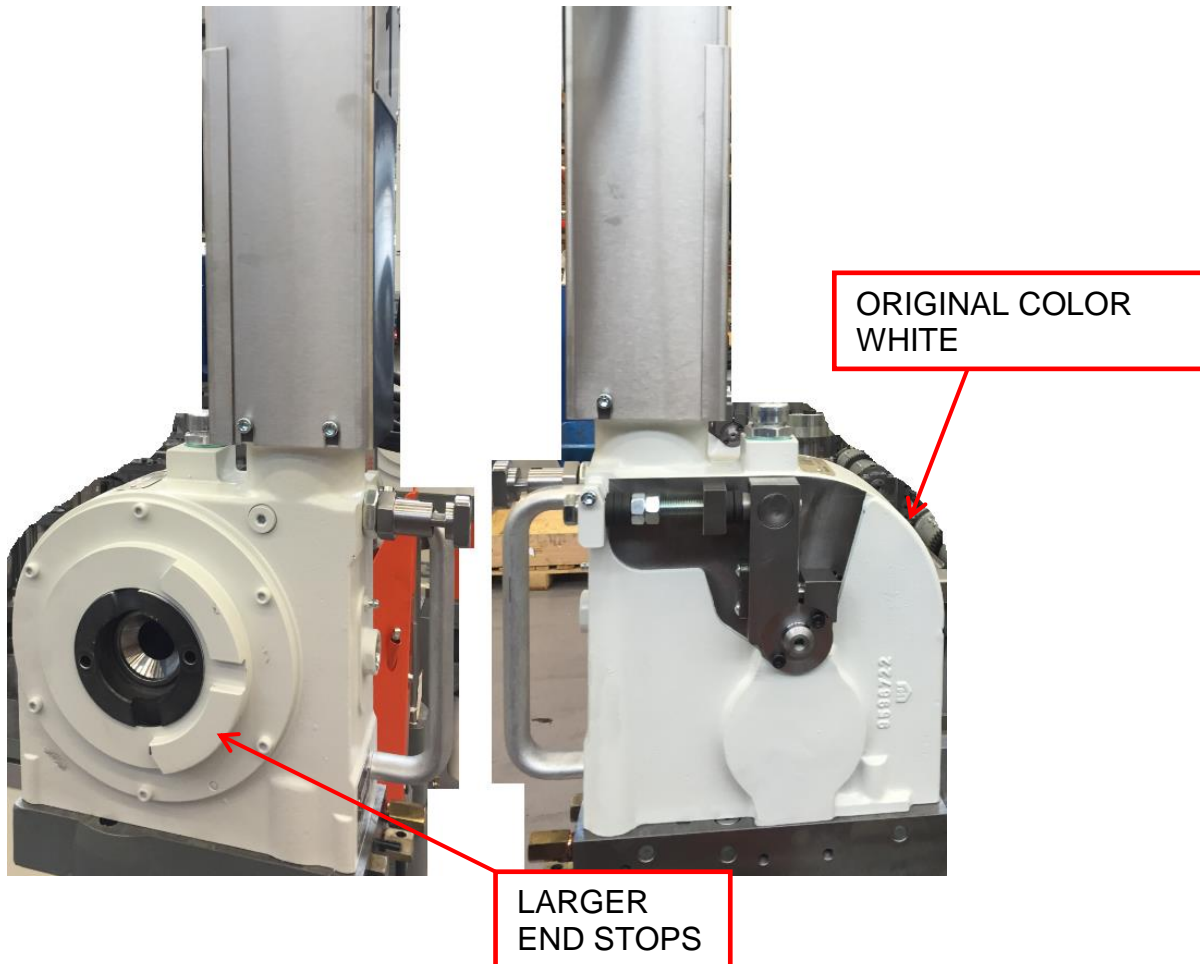
See following pages for identifying the two versions.

Below showing pictures of SETO gearbox Version 1 delivered between Jan 2003 to Jan 2014



Serial number and Manufacturing number plate

Below showing pictures of SETO gearbox Version 2 delivered from Jan 2012 and to this date.



Serial number and Manufacturing number plate:

Documentation specifying replacements:

SETO (Servo Electric Take Out)	Part Number
210-480-1 Gearbox complete from 2003 to 2012 Jan replaced by:	210-480-03
ED-7295 Gearbox complete from 2008 to 2012 Jan replaced by:	210-480-04 (210-480-02 for ref)
Spare parts for 210-480-1 from 2003 to 2012 & ED-7295 from 2008 to 2012	Part Number
OIL LEVEL GAUGE GLASS	59-18072
SLEEVE	210-12701
LEVER	210-475-01
VENT SCREW	210-487-01
NOSE SPRING PLUNGER	210-478-01
NUT	210-12197
COUPLING	59-19554
HEXNUT M10	1180-3318
HEX XOC PIPE PLUG G1/8	2260-1095
HEX SOC SET SCREW M10x40	2640-5177
LUBRICATION FITTING NPTF 1/8	1780-30
NOSE SPRING PLUNGER	210-478-01
PIPE PLUG R1/4	2260-1043
SOCHD SCREW M6x30	2640-1563
SOCHD SCREW M6x35	2640-1840
COVER, MOTOR	210-12349
COVER, MOTOR	210-12429
HANDLE	59-94637
SOCHD SCREW M6x12	2640-1718
SOCHD SCREW M6x20	2640-1719

SETO (Servo Electric Take Out)		Part Number
210-480-1 Gearbox complete from 2012 and onward replaced by:		210-480-03
ED-7295 Gearbox complete from 2012 and onward replaced by:		210-480-04
Spare parts for 210-480-1 & ED-7295 from 2012 and onward		Part Number
Parts represented on drawing 210-479-03		
LEVER ASSEMBLY		210-475-02
AIR PLUG		59-27877
OIL LEVEL GLASS		59-27875
SPRING PLUNGER ASSY		210-478-02
SEALING KIT		59-27879
COUPLING		59-19554

For reference:

TNB093 SETO (Servo Electric Take Out)

IS/AIS machine

11 GEARBOX CUSTOMER SPECIAL
 10 GEARBOX
 9 GEARBOX CUSTOMER SPECIAL
 8 SOCKET SCREW M6 X 20
 7 SOCKET SCREW M6 X 12
 6 MOTOR FLANGE
 5 HANDLE
 4 GEARBOX
 3 COVER
 2 COVER
 1 -

INDEX
BUCHER
 emhart glass
 EMHART GLASS SA
 GEARBOX COMPLETE

RELEASE LEVEL: K
 RELEASED PUB: K
 CREATED BY: Zdenko Kuz
 CREATED ON: 20-OCT-2003
 REVISED BY: Matthias Zornig
 REVISED ON: 06-SEP-2016

GROUP DESCRIPTION: GEARBOX COMPLETE
 DATE: 06-SEP-2016
 MASS: 31.48 kg
 ASSY NR.: 210-480-00
 SETO SERIES 200

ALL DIMENSIONS SHOWN IN MILLIMETERS
 AMERICAN PRODUCTION

NOTE:
 USE FOR MOTOR: 601-10197
 AND MOTOR WITH EQUAL INTERFACE

LUBRICATION GROUP 1 & 2:
 FILL GEAR BOX WITH SYNTHETIC OIL
 MOBIL SHC 634 OR EQUIVALENT
 COLORED SYNTHETIC OIL ONLY

LUBRICATION GROUP 3 & 4:
 FILL GEAR BOX WITH SYNTHETIC OIL
 MOBIL OL 600-600 OR EQUIVALENT
 COLORED SYNTHETIC OIL ONLY

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1:4

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 4
 3
 2

Gearbox

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THIS DRAWING WAS MADE ON THE PROENGINEER CAD/CAM SYSTEM.

ALL REFERENCES TO THIS DRAWING MUST BE MADE IN THE CAD/CAM SYSTEM.

NOTES

GROUP -03 SHOWN

GROUP -04 SHOWN WITH ADDITIONAL PARTS POS. 16+17 AND SCREWS

ITEM	QTY	DESCRIPTION	REF. PART NO.	UNIT
1	1	GEARBOX	210-679-00	1
2	1	COVER	210-679-01	1
3	1	WASHER	1335-2005	1
4	1	WASHER	1335-2005	1
5	1	WASHER	1335-2005	1
6	1	WASHER	1335-2005	1
7	1	WASHER	1335-2005	1
8	1	WASHER	1335-2005	1
9	1	WASHER	1335-2005	1
10	1	WASHER	1335-2005	1
11	1	WASHER	1335-2005	1
12	1	WASHER	1335-2005	1
13	1	WASHER	1335-2005	1
14	1	WASHER	1335-2005	1
15	1	WASHER	1335-2005	1
16	1	WASHER	1335-2005	1
17	1	WASHER	1335-2005	1
18	1	WASHER	1335-2005	1
19	1	WASHER	1335-2005	1
20	1	WASHER	1335-2005	1
21	1	WASHER	1335-2005	1
22	1	WASHER	1335-2005	1
23	1	WASHER	1335-2005	1
24	1	WASHER	1335-2005	1
25	1	WASHER	1335-2005	1
26	1	WASHER	1335-2005	1
27	1	WASHER	1335-2005	1
28	1	WASHER	1335-2005	1
29	1	WASHER	1335-2005	1
30	1	WASHER	1335-2005	1
31	1	WASHER	1335-2005	1
32	1	WASHER	1335-2005	1
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90	1	WASHER	1335-2005	1
91	1	WASHER	1335-2005	1
92	1	WASHER	1335-2005	1
93	1	WASHER	1335-2005	1
94	1	WASHER	1335-2005	1
95	1	WASHER	1335-2005	1
96	1	WASHER	1335-2005	1
97	1	WASHER	1335-2005	1
98	1	WASHER	1335-2005	1
99	1	WASHER	1335-2005	1
100	1	WASHER	1335-2005	1

BUCHER emhart glass
GEARBOX
210-679-00
LISTED ON DRAWING 210-680-00

NIS machine

GROUP 2

GROUP 1

SECURED
PICKUP

GROUP 2

SECURED
PICKUP

NOTE:
FOR MOUNTING MATERIAL REFER TO
SEALING AND MOUNTING KIT 400-5206-00

1	28440-0708	1500362		15	500-5200-00	0.120
2	1500-5200-00			16	1500-5200-00	0.020
3	1500-5200-00	1500362	1500362	17	1500-5200-00	0.020
4	1500-5200-00			18	1500-5200-00	0.020
5	1500-5200-00			19	1500-5200-00	0.020
6	1500-5200-00			20	1500-5200-00	0.020
7	1500-5200-00			21	1500-5200-00	0.020
8	1500-5200-00			22	1500-5200-00	0.020
9	1500-5200-00			23	1500-5200-00	0.020
10	1500-5200-00			24	1500-5200-00	0.020
11	1500-5200-00			25	1500-5200-00	0.020
12	1500-5200-00			26	1500-5200-00	0.020
13	1500-5200-00			27	1500-5200-00	0.020
14	1500-5200-00			28	1500-5200-00	0.020

BUCHER
emhart glass

TAKEOUT MECHANISM

REF: DRAWING: 400-5211-00
REV: 01/21
DATE: 01/21/21

ITEM NO: 400-5211-00
REV: 01/21
DATE: 01/21/21

FORM NO: 400-5211-00
REV: 01/21
DATE: 01/21/21

SCALE: 1:1

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NIS machine

GROUP 1 SHOWN

COUPLING ASSEMBLED STRICTLY IN THE MIDDLE OF THE SCREWS - 10mm

LISTED ON PART NUMBER 400-5210-00

NOTE:
USE FOR MOTOR 601-10977
AND MOTOR WITH EQUAL INTERFACE

LUBRICATION GROUP 1
FILL GEAR BODY WITH SYNTHETIC OIL
COLORED SYNTHETIC OIL ONLY

LUBRICATION GROUP 2
FILL GEAR BODY WITH SYNTHETIC OIL
COLORED SYNTHETIC OIL ONLY

1	270-120-01	GEARBOX
2	270-120-02	GEARBOX
3	270-120-03	GEARBOX
4	270-120-04	GEARBOX
5	270-120-05	GEARBOX
6	270-120-06	GEARBOX
7	270-120-07	GEARBOX
8	270-120-08	GEARBOX
9	270-120-09	GEARBOX
10	270-120-10	GEARBOX
11	270-120-11	GEARBOX
12	270-120-12	GEARBOX
13	270-120-13	GEARBOX
14	270-120-14	GEARBOX
15	270-120-15	GEARBOX
16	270-120-16	GEARBOX
17	270-120-17	GEARBOX
18	270-120-18	GEARBOX
19	270-120-19	GEARBOX
20	270-120-20	GEARBOX
21	270-120-21	GEARBOX
22	270-120-22	GEARBOX
23	270-120-23	GEARBOX
24	270-120-24	GEARBOX
25	270-120-25	GEARBOX
26	270-120-26	GEARBOX
27	270-120-27	GEARBOX
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29	270-120-29	GEARBOX
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31	270-120-31	GEARBOX
32	270-120-32	GEARBOX
33	270-120-33	GEARBOX
34	270-120-34	GEARBOX
35	270-120-35	GEARBOX
36	270-120-36	GEARBOX
37	270-120-37	GEARBOX
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42	270-120-42	GEARBOX
43	270-120-43	GEARBOX
44	270-120-44	GEARBOX
45	270-120-45	GEARBOX
46	270-120-46	GEARBOX
47	270-120-47	GEARBOX
48	270-120-48	GEARBOX
49	270-120-49	GEARBOX
50	270-120-50	GEARBOX

BUCHER
emhart glass
GEARBOX COMPLETE

GROUP CLASS SA

DATE: 11/11/11

REV. 0001

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REV. 0003

REV. 0004

REV. 0005

REV. 0006

REV. 0007

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REV. 0401

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REV. 0408

REV. 0409

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REV. 0421

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REV. 0500