

E U R O —
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PRODUCT DOSSIER

ELU

SCREWDRIVERS

**BS20EK, BS25EK
BS40EK, BS45EK**

June 1997

Contents

Attached to this dossier:

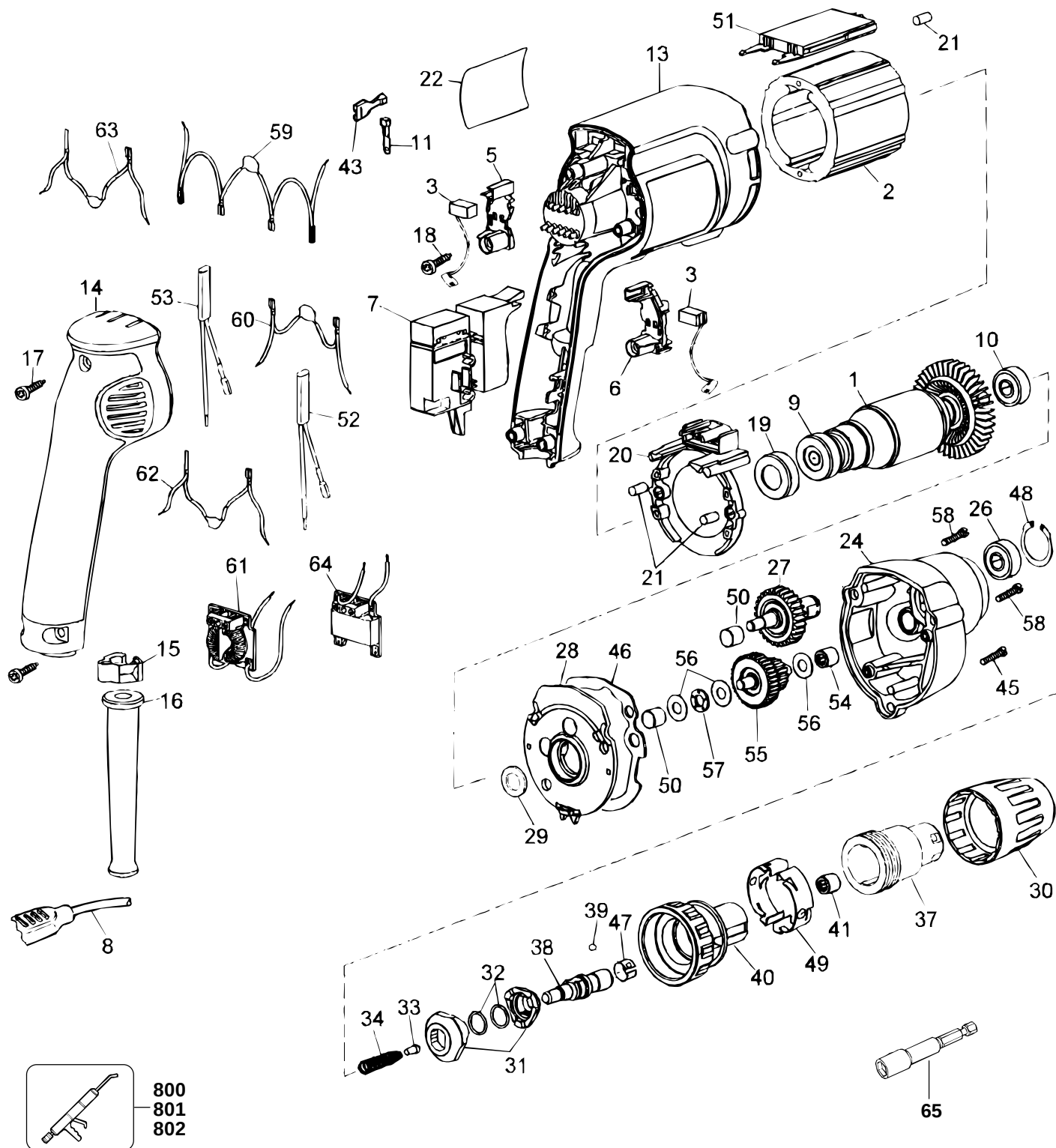
Copy of service parts lists	BS20EK----A, BS25EK----A BS40EK----A, BS45EK----A				
Copy of service parts drawings	E12265, E12254, E12255, E12256				
Repair Instructions	R11113, R11115				
Copy of service wiring diagram To follow (mailed)		BS20EK	BS25EK	BS40EK	BS45EK
	EUROPE	383716-00	176888-00	383716-00	383716-00
	GB 115	383679-00	383679-00		383679-00
	CH	383716-00			383716-00
Marketing Information/Specification	To follow (mailed)				

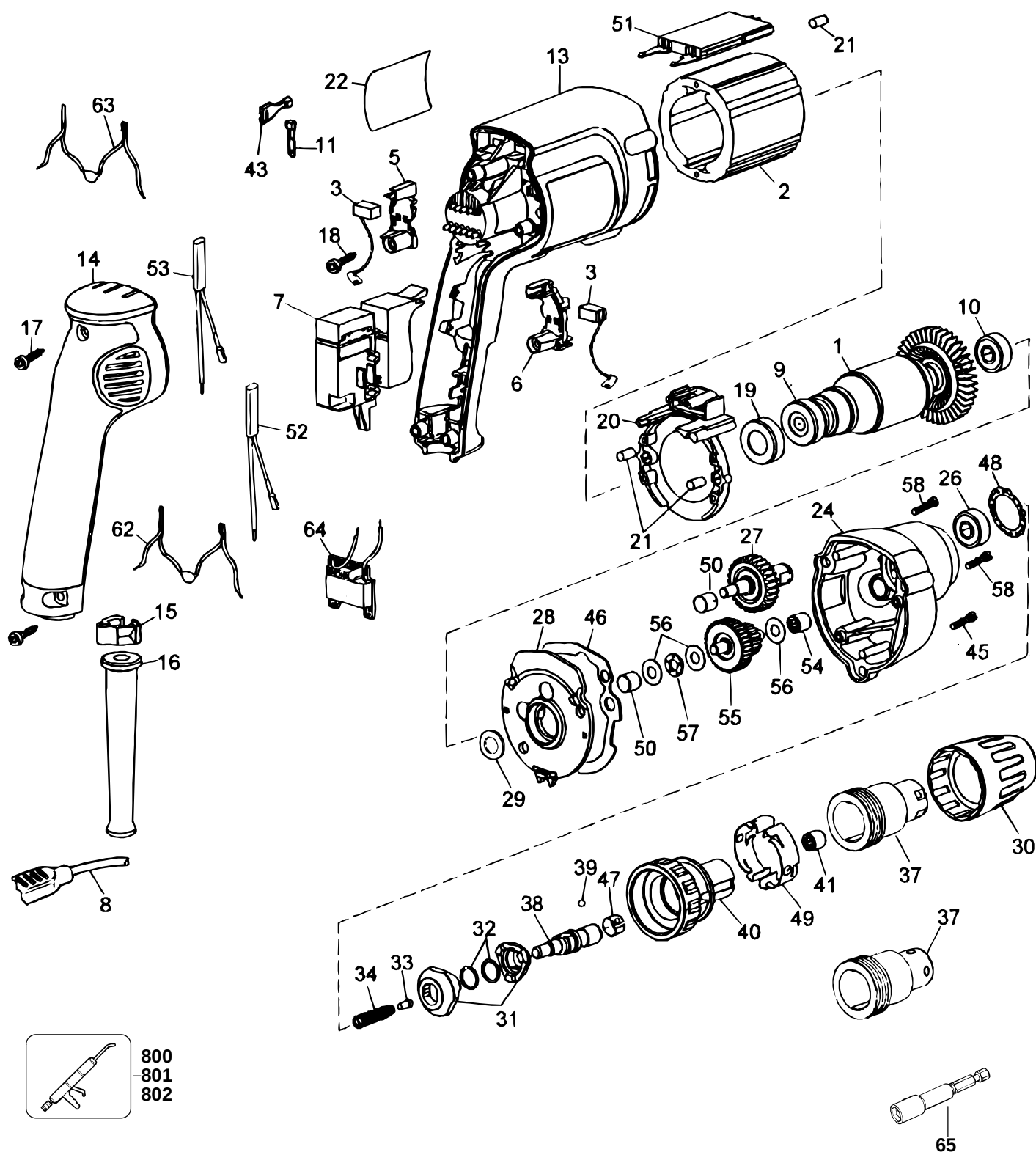
INTRODUCTION

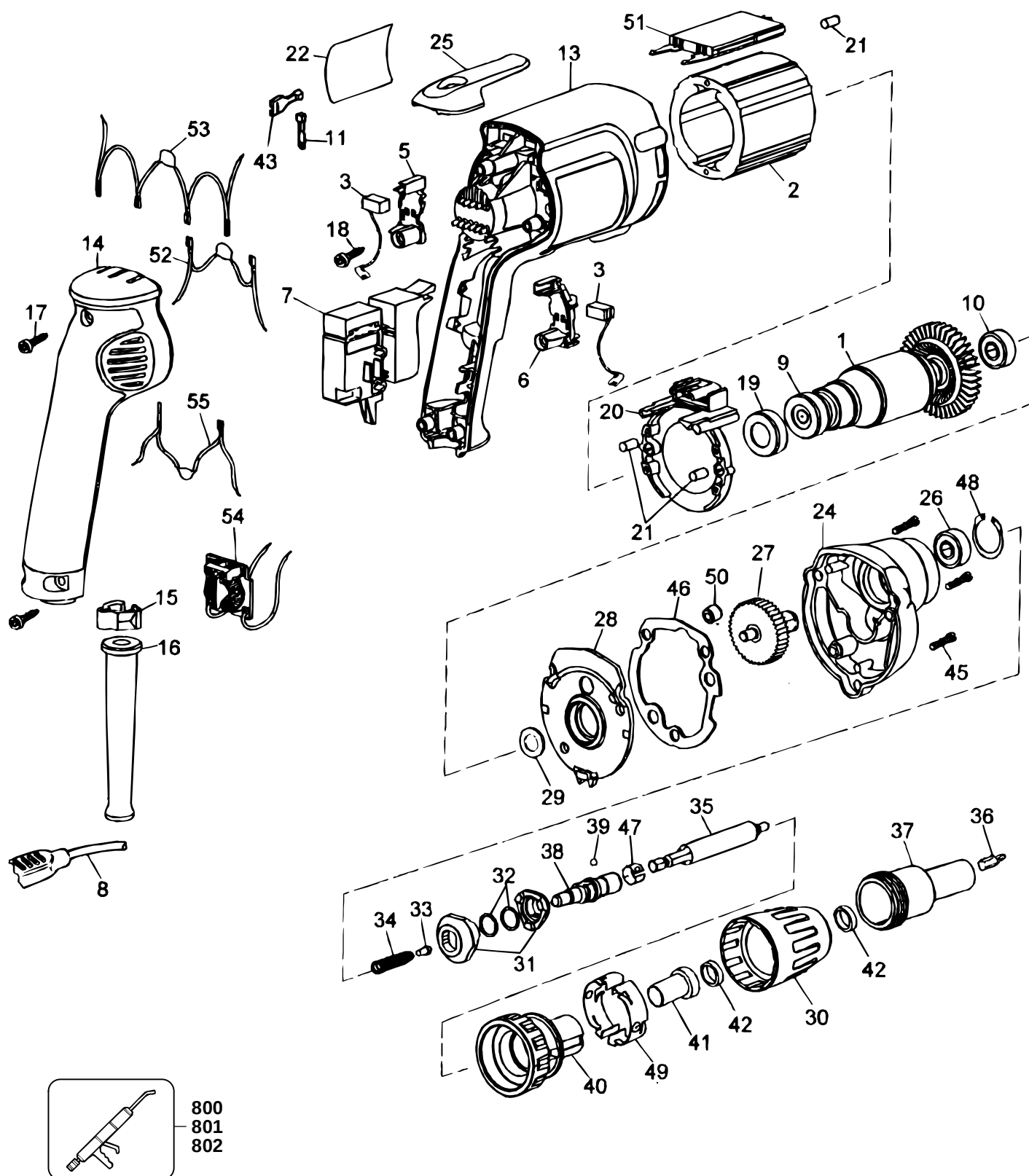
Introduce a new range of screwdrivers in Elu brand for Europe. The range consists of a two depth sensitive drivers, a drywall driver and a torque sensitive clutch driver (versaclutch). The product will be launched in July across Europe.

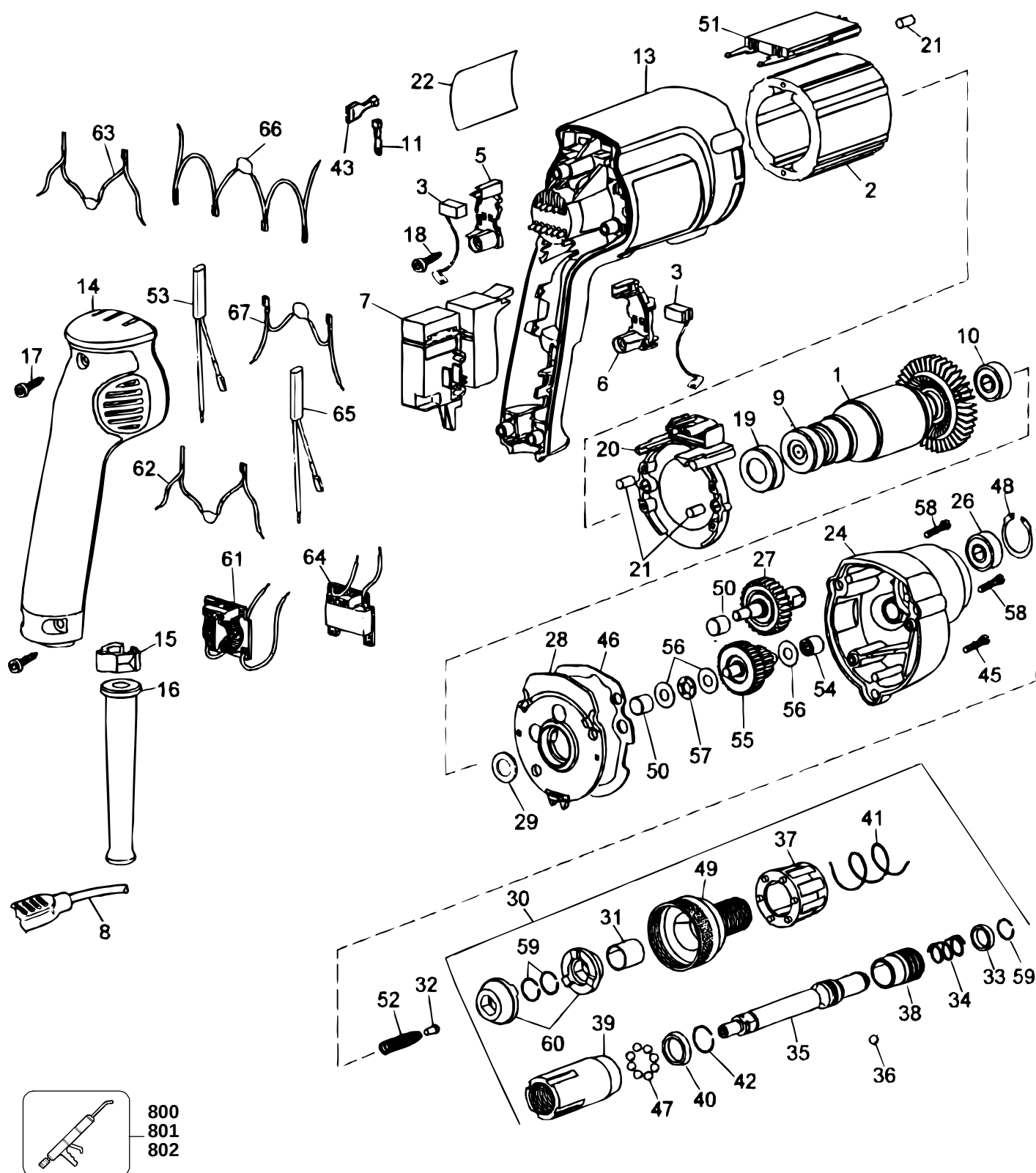
Catalogue number(s)	BS20EK	BS25EK	BS40EK	BS45EK
Type number	1	1	1	1
Description	Depth Sensitive - Drywall - Versaclutch for self drilling screws			
Max Torque (Nm)	18	14.5	10	4 - 26
Power - Watts (Input)	540			
Voltage	230, 115			
No Load Speed	2000	2500	4000	2500
Manufacturing plant	Easton, USA			
Service parts warehouse	Perth Ave, Slough, UK			
Launch markets	Europe			

bs20dos.sam









ITEM	DESCRIPTION	PART NO.	QTY	VARIANT DESCRIPTION
1	ARMATURE & FAN	176853-01	1	M-AT-BE-DE-ES-FR-GR-IT
1	ARMATURE & FAN	176853-01	1	M-CH
1	ARMATURE & FAN	176853-01	1	M-DK-FI-NO-SE-NL-PT
1	ARMATURE & FAN	176853-00	1	T-GB 115V
2	FIELD	176849-01	1	M-AT-BE-DE-ES-FR-GR-IT
2	FIELD	176849-01	1	M-CH
2	FIELD	176849-01	1	M-DK-FI-NO-SE-NL-PT
2	FIELD	176849-00	1	T-GB 115V
3	BRUSH	176949-00	1	M-AT-BE-DE-ES-FR-GR-IT
3	BRUSH	176949-00	1	M-CH
3	BRUSH	176949-00	1	M-DK-FI-NO-SE-NL-PT
3	BRUSH	176949-01	1	T-GB 115V
5	BRUSH HOLDER	176801-03	1	
6	BRUSH HOLDER	176800-03	1	
7	SWITCH	176830-09	1	M-AT-BE-DE-ES-FR-GR-IT
7	SWITCH	176830-09	1	M-CH
7	SWITCH	176830-09	1	M-DK-FI-NO-SE-NL-PT
7	SWITCH	176830-20	1	T-GB 115V
8	CORDSET	330080-39	1	M-AT-BE-DE-ES-FR-GR-IT
8	CORDSET	330080-40	1	M-CH
8	CORDSET	330080-39	1	M-DK-FI-NO-SE-NL-PT
8	CORDSET	330061-14	1	T-GB 115V
9	BEARING	330003-04	1	
10	BEARING	330003-04	1	
11	TERMINAL	449192-00	2	
13	FIELD CASE	176815-01	1	
14	HANDLE COVER	176898-02	1	
15	CORD CLAMP	176832-00	1	
16	CORD PROTECTOR	330005-01	1	
17	SCREW	330019-13	3	
18	SCREW	176951-00	2	
19	SLEEVE	949721-03	1	
20	BAFFLE	176811-00	1	
21	DAMPER	949638-02	3	
22	LABEL	152529-00	1	
24	GEAR CASE	176709-00	1	
26	BEARING	330003-09	1	
27	SPINDLE & GEAR SA	176710-00	1	
28	GEAR CASE COVER	176651-00	1	
29	WASHER	23813-00	1	
30	COLLAR	152492-03	1	
31	CLUTCH	96558-00	2	
32	RETAINER	89210-00	2	
33	GUIDE	21287-00	1	
34	SPRING	86211-00	1	
37	LOCATOR	448862-00	1	T-3/8"
37	LOCATOR	448862-01	1	T-5/16"
38	SPINDLE	176697-00	1	
39	BALL	696631-00	1	
40	HOUSING	176632-01	1	
41	SLEEVE BEARING	448848-00	1	

ITEM	DESCRIPTION	PART NO.	QTY	VARIANT DESCRIPTION
43	TERMINAL	136086-02	4	
45	SCREW	330019-14	1	
46	GASKET	176655-00	1	
47	RETAINER	94518-00	1	
48	RETAINER	87692-00	1	
49	DETENT	152494-00	2	
50	BEARING NEEDLE	93128-00	2	
51	MODULE	176917-00	1	
52	LEAD WHITE	176890-00	1	T-GB115V
53	LEAD RED	176890-01	1	T-GB115V
54	BEARING	330004-00	1	
55	SPINDLE & GEAR SA	176711-00	1	
56	WASHER	176732-00	3	
57	WASHER	143079-00	1	
58	SCREW.TEMP	330019-16	2	
59	CAPACITOR SA	384022-00	1	M-AT-BE-DE-ES-FR-GR-IT
59	CAPACITOR SA	384022-00	1	M-CH
59	CAPACITOR SA	384022-00	1	M-DK-FI-NO-SE-NL-PT
60	CAPACITOR SA	384021-00	1	M-AT-BE-DE-ES-FR-GR-IT
60	CAPACITOR SA	384021-00	1	M-CH
60	CAPACITOR SA	384021-00	1	M-DK-FI-NO-SE-NL-PT
61	ELECTRONIC	383714-00	1	M-AT-BE-DE-ES-FR-GR-IT
61	ELECTRONIC	383714-00	1	M-CH
61	ELECTRONIC	383714-00	1	M-DK-FI-NO-SE-NL-PT
62	CAPACITOR & BOX SA	383663-01	1	T-GB 115V
63	CAPACITOR SA	383663-00	1	M-CH
63	CAPACITOR SA	383663-00	1	T-GB 115V
64	CAPACITOR SA	383670-00	1	T-GB 115V
65	HOLDER BIT	340558-01	1	M-AT-BE-DE-ES-FR-GR-IT
65	HOLDER BIT	340558-01	1	M-CH
65	HOLDER BIT	340558-01	1	M-DK-FI-NO-SE-NL-PT
800	GREASE	761995-00	1	
801	GREASE	283484-00	1	
802	GREASE	69542-00	1	
	CE LPA SOUND PRESSURE		DB(A)	74.0
	CE LWA ACOUSTIC POWER		DB(A)	83.0
	VOLTAGE #1		VOLTS	230
	AMPERE #1		AMPS	2.3
	INPUT WATTS #1		WATTS	540
	RPM #1			0-2000
	FREQUENCY #1		HZ	50
	VOLTAGE #2		VOLTS	115
	AMPERE #2		AMPS	4.6
	INPUT WATTS #2		WATTS	540
	RPM #2			2000
	FREQUENCY #2		HZ	50

ITEM	DESCRIPTION	PART NO.	QTY	VARIANT DESCRIPTION
1	ARMATURE & FAN	176853-01	1	M-AT-BE-DE-ES-FR-GR-IT
1	ARMATURE & FAN	176853-01	1	M-CH
1	ARMATURE & FAN	176853-01	1	M-DK-FI-NL-NO-PT-SE
1	ARMATURE & FAN	176853-00	1	T-UK 115V
2	FIELD	176849-01	1	M-AT-BE-DE-ES-FR-GR-IT
2	FIELD	176849-01	1	M-CH
2	FIELD	176849-01	1	M-DK-FI-NL-NO-PT-SE
2	FIELD	176849-00	1	T-UK 115V
3	BRUSH	176949-00	2	M-AT-BE-DE-ES-FR-GR-IT
3	BRUSH	176949-00	2	M-CH
3	BRUSH	176949-00	2	M-DK-FI-NL-NO-PT-SE
3	BRUSH	176949-01	1	T-UK 115V
5	BRUSH HOLDER	176801-03	1	
6	BRUSH HOLDER	176800-03	1	
7	SWITCH	176830-09	1	M-AT-BE-DE-ES-FR-GR-IT
7	SWITCH	176830-09	1	M-CH
7	SWITCH	176830-09	1	M-DK-FI-NL-NO-PT-SE
7	SWITCH	176830-20	1	T-UK 115V
8	CORDSET	330080-39	1	M-AT-BE-DE-ES-FR-GR-IT
8	CORDSET	330080-40	1	M-CH
8	CORDSET	330080-39	1	M-DK-FI-NL-NO-PT-SE
8	CORDSET	330061-14	1	T-UK 115V
9	BEARING	330003-04	1	
10	BEARING	330003-04	1	
11	TERMINAL	449192-00	2	
13	FIELD CASE	176815-01	1	
14	HANDLE COVER	176898-02	1	
15	CORD CLAMP	402647-00	1	
16	CORD PROTECTOR	330005-01	1	
17	* SCREW	330019-13	3	
18	* SCREW	176951-00	2	
19	SLEEVE	949721-03	1	
20	BAFFLE	176811-00	1	
21	DAMPER	949638-02	3	
22	LABEL	152529-00	1	
24	GEAR CASE	176706-00	1	
26	BEARING	330003-09	1	
27	SPINDLE & GEAR	176708-00	1	
28	GEAR CASE COVER	176651-00	1	
29	WASHER	23813-00	1	
30	COLLAR	176728-01	1	M-AT-BE-DE-ES-FR-GR-IT
30	COLLAR	176728-01	1	M-CH
30	COLLAR	176728-01	1	M-DK-FI-NL-NO-PT-SE
30	COLLAR	152492-03	1	T-UK 115V
31	CLUTCH	96558-00	1	
32	RETAINER	89210-00	2	
33	GUIDE	21287-00	1	
34	SPRING	86211-00	1	
37	LOCATOR	448862-00	1	T-QS-CH 3/8
37	LOCATOR	448862-01	1	T-QS-CH 5/16
37	LOCATOR	383740-00	1	T-UK 115V

ITEM	DESCRIPTION	PART NO.	QTY	VARIANT DESCRIPTION
38	SPINDLE	176697-00	1	
39	BALL	696631-00	1	
40	HOUSING	176632-01	1	
41	SLEEVE BEARING	448848-00	1	
43	TERMINAL	136086-02	2	
45	* SCREW	330019-14	1	
46	GASKET	176655-00	1	
47	RETAINER	94518-00	1	
48	RETAINER	176689-00	1	
49	DETENT	152494-00	2	
50	BEARING NEEDLE	93128-00	2	
51	MODULE	176917-00	1	
52	LEAD WHITE	176890-00	1	M-AT-BE-DE-ES-FR-GR-IT
52	LEAD WHITE	176890-00	1	M-CH
52	LEAD WHITE	176890-00	1	M-DK-FI-NL-NO-PT-SE
53	LEAD RED	176890-01	1	M-AT-BE-DE-ES-FR-GR-IT
53	LEAD RED	176890-01	1	M-CH
53	LEAD RED	176890-01	1	M-DK-FI-NL-NO-PT-SE
54	BEARING	330004-00	1	
55	SPINDLE & GEAR	176731-00	1	
56	WASHER	176732-00	3	
57	WASHER	143079-00	1	
58	* SCREW TEMP	330019-16	2	
62	CAPACITOR & BOX SA	383663-01	1	T-UK 115V
63	CAPACITOR SA	383663-00	1	T-UK 115V
64	* CAPACITOR SA	383670-00	1	T-UK 115V
65	HOLDER	340558-01	1	M-AT-BE-DE-ES-FR-GR-IT
65	HOLDER	340558-01	1	M-CH
65	HOLDER	340558-01	1	M-DK-FI-NL-NO-PT-SE
800	GREASE	761995-00	1	
801	GREASE	283484-00	1	
802	GREASE	69542-00	1	
	CE LPA SOUND PRESSURE		DB(A)	74.0
	CE LWA ACOUSTIC POWER		DB(A)	83.0
	VOLTAGE #1		VOLTS	230
	AMPERE #1		AMPS	2.3
	INPUT WATTS #1		WATTS	540
	RPM #1			0-2500
	FREQUENCY #1		HZ	50
	VOLTAGE #2		VOLTS	115
	AMPERE #2		AMPS	4.6
	INPUT WATTS #2		WATTS	540
	RPM #2			0-2500
	FREQUENCY #2		HZ	50

* = SEE REPAIR INSTRUCTIONS

ITEM	DESCRIPTION	PART NO.	QTY	VARIANT DESCRIPTION
1	ARMATURE & FAN	176851-01	1	
2	FIELD	176849-01	1	
3	BRUSH	176949-00	2	
5	BRUSH HOLDER	176801-03	1	
6	BRUSH HOLDER	176800-03	1	
7	SWITCH	176830-09	1	
8	CORDSET	330080-39	1	M-AT-BE-DE-ES-FR-GR-IT
8	CORDSET	330080-40	1	M-CH
8	CORDSET	330080-39	1	M-DK-FI-NL-NO-PT-SE
9	BEARING	330003-04	1	
10	BEARING	330003-04	1	
11	TERMINAL	449192-00	3	
13	FIELD CASE	176815-01	1	
14	HANDLE COVER	176898-02	1	
15	CORD CLAMP	402647-00	1	
16	CORD PROTECTOR	330005-01	1	
17	* SCREW	330019-13	3	
18	* SCREW	176951-00	2	
19	SLEEVE	949721-03	1	
20	BAFFLE	176811-00	1	
21	DAMPER	949638-02	3	
22	LABEL	152529-00	1	
24	GEAR CASE	176624-00	1	
25	CLIP	176856-00	1	
26	BEARING	330003-09	1	
27	SPINDLE & GEAR	176695-00	1	
28	GEAR CASE COVER	176622-00	1	
29	WASHER	23813-00	1	
30	COLLAR	152492-03	1	
31	CLUTCH	96558-00	2	
32	RETAINER	89210-00	2	
33	GUIDE	21287-00	1	
34	SPRING	86211-00	1	
35	HOLDER	340363-00	1	
36	BIT	352624-02	1	
37	LOCATOR	450770-03	1	
38	SPINDLE	176697-00	1	
39	BALL	696631-00	1	
40	* CLUTCH SA	176632-00	1	
41	SLEEVE	450907-00	1	
42	SEAL	696534-00	2	
43	TERMINAL	136086-02	1	
45	* SCREW	330019-14	3	
46	GASKET	176655-00	1	
47	RETAINER	94518-00	1	
48	RETAINER	87692-00	1	
49	DETENT	152494-00	2	
50	BEARING NEEDLE	93128-00	1	
51	MODULE	176917-00	1	
52	CAPACITOR SA	384021-00	1	
53	CAPACITOR SA	384022-00	1	

ITEM	DESCRIPTION	PART NO.	QTY	VARIANT DESCRIPTION
54	* ELECTRONIC	383714-00	1	
55	CAPACITOR SA	383663-00	1	
800	GREASE	761995-00	1	
801	GREASE	283484-00	1	
802	GREASE	69542-00	1	
	CE LPA SOUND PRESSURE		DB(A)	74.0
	CE LWA ACOUSTIC POWER		DB(A)	83.0
	VOLTAGE #1		VOLTS	230
	AMPERE #1		AMPS	2.3
	INPUT WATTS #1		WATTS	540
	RPM #1			0-4000
	FREQUENCY #1		HZ	50

* = SEE REPAIR INSTRUCTIONS

ITEM	DESCRIPTION	PART NO.	QTY	VARIANT DESCRIPTION
1	ARMATURE & FAN	176853-01	1	M-AT-BE-DE-ES-FR-GR-IT
1	ARMATURE & FAN	176853-01	1	M-CH
1	ARMATURE & FAN	176853-01	1	M-DK-FI-NL-NO-PT-SE
1	ARMATURE & FAN	176853-00	1	T-UK 115V
2	FIELD	176849-01	1	M-AT-BE-DE-ES-FR-GR-IT
2	FIELD	176849-01	1	M-CH
2	FIELD	176849-01	1	M-DK-FI-NL-NO-PT-SE
2	FIELD	176849-00	1	T-UK 115V
3	BRUSH	176949-00	2	M-AT-BE-DE-ES-FR-GR-IT
3	BRUSH	176949-00	1	M-CH
3	BRUSH	176949-00	2	M-DK-FI-NL-NO-PT-SE
3	BRUSH	176949-01	2	T-UK 115V
5	BRUSH HOLDER	176801-03	1	
6	BRUSH HOLDER	176800-03	1	
7	SWITCH	176830-09	1	M-AT-BE-DE-ES-FR-GR-IT
7	SWITCH	176830-09	1	M-CH
7	SWITCH	176830-09	1	M-DK-FI-NL-NO-PT-SE
7	SWITCH	176830-20	1	T-UK 115V
8	CORDSET	330080-39	1	M-AT-BE-DE-ES-FR-GR-IT
8	CORDSET	330080-40	1	M-CH
8	CORDSET	330080-39	1	M-DK-FI-NL-NO-PT-SE
8	CORDSET	330061-14	1	T-UK 115V
9	BEARING	330003-04	1	
10	BEARING	330003-04	1	
11	TERMINAL	449192-00	2	M-AT-BE-DE-ES-FR-GR-IT
11	TERMINAL	449192-00	3	M-CH
11	TERMINAL	449192-00	2	M-DK-FI-NL-NO-PT-SE
13	FIELD CASE	176815-01	1	
14	HANDLE COVER	176898-02	1	
15	CORD CLAMP	402647-00	1	
16	CORD PROTECTOR	330005-01	1	
17	* SCREW	330019-13	3	
18	* SCREW	176951-00	2	
19	SLEEVE	949721-03	1	
20	BAFFLE	176811-00	1	
21	DAMPER	949638-02	3	
22	LABEL	152529-00	1	
24	GEAR CASE	176709-00	1	
26	BEARING	330003-09	1	
27	SPINDLE & GEAR	176708-00	1	
28	GEAR CASE COVER	176651-00	1	
29	WASHER	23813-00	1	
30	NOSE SA	450556-00	1	
31	BEARING	90626-00	1	
32	GUIDE	21287-00	1	
33	WASHER	90866-00	1	
34	SPRING	86134-00	1	
35	SPINDLE	450360-00	1	
36	BALL	99047-01	1	
37	COLLAR	90639-02	1	
38	RETAINER	90865-00	1	

ITEM	DESCRIPTION	PART NO.	QTY	VARIANT DESCRIPTION
39	STOP	450555-00	1	
40	SEAL	90596-00	1	
41	SPRING	87928-00	1	
42	RETAINER	21360-00	1	
43	TERMINAL	136086-02	1	M-CH
43	TERMINAL	136086-02	1	M-CH
43	TERMINAL	136086-02	2	T-UK115V
43	TERMINAL	136086-02	2	T-UK115V
45	* SCREW	330019-14	1	
46	GASKET	176655-00	1	
47	BALL	903-00	8	
48	RETAINER	87692-00	1	
49	* HOUSING	93105-01	1	
50	BEARING NEEDLE	93128-00	2	
51	MODULE	176917-00	1	
52	SPRING	86211-00	1	
53	LEAD RED	176890-01	1	T-UK115V
54	BEARING	330004-00	1	
55	SPINDLE & GEAR	176731-00	1	
56	WASHER	176732-00	3	
57	WASHER	143079-00	1	
58	* SCREW. TEMP	330019-16	2	
59	RETAINER	89210-00	2	
60	CLUTCH	96558-04	1	
61	* ELECTRONIC	383714-00	1	M-AT-BE-DE-ES-FR-GR-IT
61	* ELECTRONIC	383714-00	1	M-CH
61	* ELECTRONIC	383714-00	1	M-DK-FI-NL-NO-PT-SE
62	CAPACITOR & BOX SA	383663-01	1	T-UK 115V
63	CAPACITOR SA	383663-00	1	T-UK115V
64	* CAPACITOR SA	383670-00	1	T-UK115V
65	LEAD WHITE	176890-00	1	T-UK 115V
66	CAPACITOR SA	384022-00	1	M-AT-BE-DE-ES-FR-GR-IT
66	CAPACITOR SA	384022-00	1	M-CH
66	CAPACITOR SA	384022-00	1	M-DK-FI-NL-NO-PT-SE
67	CAPACITOR SA	384021-00	1	M-AT-BE-DE-ES-FR-GR-IT
67	CAPACITOR SA	384021-00	1	M-CH
67	CAPACITOR SA	384021-00	1	M-DK-FI-NL-NO-PT-SE
800	GREASE	761995-00	1	
801	GREASE	283484-00	1	
802	GREASE	69542-00	1	
	CE LPA SOUND PRESSURE		DB(A)	74.0
	CE LWA ACOUSTIC POWER		DB(A)	83.0
	VOLTAGE #1		VOLTS	230
	AMPERE #1		AMPS	2.3
	INPUT WATTS #1		WATTS	540
	RPM #1			0-2500
	FREQUENCY #1		HZ	50
	VOLTAGE #2		VOLTS	115
	AMPERE #2		AMPS	4.6
	INPUT WATTS #2		WATTS	540
	RPM #2			0-2500

ITEM	DESCRIPTION	PART NO.	QTY	VARIANT	DESCRIPTION
	FREQUENCY #2			HZ	50
* = SEE REPAIR INSTRUCTIONS					

R11113

BS40EK V.S.R. Screwdriver

Items 17, 45 : Tighten to 2.0 - 2.6 Nm .

Item 18, : Tighten to 1.5 Nm .

Item 40 : Tighten to 13.7 Nm.

items 54 : Tighten to 0.3 - 0.6 Nm.

Lubrication:

Lubricate clutch with approx 3 gms of clutch grease.

Distribute 8 gms of grease in the gearcase.

R11115

BS25EK V.S.R. Screwdriver

Items 17, 45 , 58 : Tighten to 2.0 - 2.6 Nm .

Item 18, : Tighten to 1.5 Nm .

Item 64 : Tighten to 0.3 - 0.6 Nm.

Lubrication:

Lubricate clutch with approx 3 gms of clutch grease.

Distribute 20 gms of grease in the gearcase.