

# TECH2000/45000

## OWNER'S MANUAL

Please take a moment to read this manual prior to operation!



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# CONTENTS

INSTRUCTIONS FOR CHANGING BRUSHES .....	1
INSTRUCTIONS FOR CHANGING CHUCKS .....	2
MAINTENANCE .....	2
PRECAUTIONS .....	3
PARTS LIST FOR HANDPIECE .....	4
SCHEMATIC DIAGRAM .....	5

## A. INSTRUCTIONS FOR CHANGING BRUSHES FOR TECH2000 / 45,000 RPM HANDPIECE

The brushes are located in the back of the handpiece, in the section closest to the power cord.

- 1) Hold the front section of the handpiece with one hand and unscrew the rear cover (1¼" long ring) at the back of the handpiece with the other hand.
- 2) Remove both of the old brushes using a small Phillips head screwdriver. Remove the two screws holding the brushes - one on each side and the brushes are easily removed.
- 3) Insert the new brushes and secure with the two Phillips head screws and attach the rear cover.
- 4) New brushes may take several hours during the break in period where the handpiece may run slightly warmer than usual.

## B. INSTRUCTIONS FOR CHANGING CHUCKS FOR TECH2000 / 45,000 RPM HANDPIECE

The Tech 2000 and 45,000 RPM handpiece were designed for ease and simplicity in changing chucks.

- 1) Turn set ring (part #102WL-10) clockwise to open the chuck (towards you).
- 2) Using the wrench tool (included with handpiece), place the triangle section of the wrench over the top of the chuck turning counter-clockwise until the chuck is completely unscrewed and is loosened from the spindle.
- 3) Insert a different size chuck or replacement chuck and using the chuck wrench tool with the triangle section over the top of the chuck, turn the wrench tool clockwise until the chuck is completely tightened. (Before adjusting the chuck, make sure there is a blank bur inside).
- 4) Final adjustment of the chuck is needed by turning the wrench tool approximately ¼ turn counter-clockwise (to loosen the chuck).
- 5) Turn set ring counter-clockwise (away from you) to lock or secure chuck and bur or mandrel.

- 6) Check carefully to make sure the bur is securely held by the chuck by gently pulling on the bur or mandrel. The bur should be firmly locked in place.
- 7) If the bur is not tightened properly and secured, repeat steps 4 and 5. If the bur is easily removed while the chuck is closed, the chuck needs to be tightened. If the chuck does not properly lock the bur or if it is difficult to remove the bur when the chuck is locked then the chuck needs to be loosened slightly by using the wrench tool counter-clockwise.

Note: Please do not remove nose cone section or remove the complete spindle assembly.



Replacement chucks:    3/32" - 2.35mm — Part #T02L-13  
                                   3mm                    — Part #T02L-13A  
                                   1/8" - 3.17mm    — Part #T02L-13B

## C. SUGGESTED MAINTENANCE

1. Carbon brushes in the handpiece motor are designed for long life (approximately 1,000 hours). Carbon brushes should be replaced periodically (approximately 1 year). Replacement part number is #8508.
2. Keep clean from dust and grindings as best as possible.
3. Wipe handpiece only with isopropyl alcohol and avoid getting inside wet. DO NOT use rusty or eccentric burs as this will cause excess wear on the bearings. Follow safety speeds and precautions recommended by the bur manufacturer. Always wear a dust mask, eye protection, and use adequate suction or ventilation.
4. Do not drop the handpiece at any time as this may cause damage to the bearings. In the event the handpiece is dropped, please check that the bur is not bent and resume use carefully, checking for excess noise or heat. If any damage, please return to manufacturer for service.

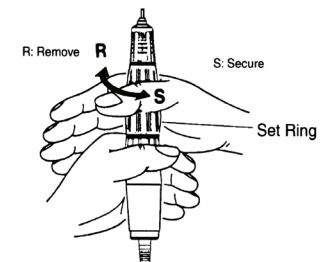
## D. PRECAUTIONS

The brushes are located in the back of the handpiece, in the section closest to the power cord.

1. When using electric tools, use basic safety precautions in order to reduce risk of fire, electric shock, and personal injury.
2. Do not expose electric tools to water, or use in damp or wet locations.
3. Do not wear loose clothing or jewelry as they can be caught in the drill.
4. Do not attempt to service or repair the handpiece, control box, or the foot pedal. There is no user serviceable part in the equipment other than changing the motor brushes or handpiece cord. Repair should be referred to the manufacturer, dealer or authorized service center.
5. Do not oil, lubricate, or grease the handpiece (This will only lead to further damage of the greased sealed bearings).
6. Do not attempt to open the collet (release bur) while handpiece is running.
7. Do not switch forward or reverse direction until motor has completely stopped.
8. Do not sterilize or autoclave. Do not get handpiece wet (except for the front-end attachments with the "E"-type motor).
9. When machine is not in use, power switch should be turned off.
10. Do not run the handpiece without a bur properly locked in place.

### WARNING:

NEVER TURN SET RING WHILE MOTOR IS ROTATING. PERMANENT DAMAGE TO THE MOTOR IS POSSIBLE.



# PARTS LIST FOR TECH2000 / 45000 HANDPIECE

NO.	PARTS NAME
1	HAND CAP COVER
2	HAND CAP SPACER
3	HAND CAP BODY
4	CHUCK HOUSING C-RING
5	COLLAR
6	BEARING FIX WASHER
7	1260 WAVE WASHER
8	1260 WASHER
9	BALL BEARING 1260ZZ
10	BUSH
11	BALL BEARING 1480ZZ
12	SPRING SHEET
13	COIL SPRING
14	TEST BUR
15	COLLET CHUCK 2.35
16	CHUCK HOUSING
17	CHUCK SPRING
18	SEALING O-RING
19	JOINT SHAFT PIN
20	JOINT SHAFT
21	CONNECTOR COIL SPRING
22	CONNECTOR
23	BEARING BUSH COLLAR
24	BEARING BUSH COLLAR COIL SPRING
25	ROLLER BODY
26	ROLLER BODY PIN
27	ROLLER GUIDE
28	SET RING
29	CAM
30	SLIDE WASHER
31	SLIDE BODY
32	BALL
33	MOTOR CASE C-RING
34	MOTOR CASE COIL SPRING
35	MOTOR CASE SPRING SHEET
36	1030 FIX O-RING

NO.	PARTS NAME
37	MOTOR CASE COVER
38	MOTOR CASE
39	MOTOR CASE BOLT
40	MAGNET
41	COPPER WASHER
42	1030 WAVE WASHER
43	BALL BEARING 1040ZZ
44	1030 COPPER WASHER
45	1030 TEFLON WASHER
46	1030 SPACER
47	SHAFT
48	CORE
49	FRONT SHAFT BUSH
50	REAR SHAFT BUSH
51	COMMUTATOR
52	COIL
53	WEDGE
54	FAN
55	830 SPACER
56	TEFLON WASHER
57	BEARING HOUSING
58	BACK BEARING SIT
59	BRUSH HOLDER
60	CARBON BRUSH
61	BRUSH SPRING
62	BRUSH CAP
63	TERMINAL (L)
64	TERMINAL (R)
65	CARBON BRUSH BOLT
66	BALL BEARING 1030ZZ
67	BR BRUSH BOLT
68	MOTOR CORD
69	CARBON HOUSING COVER (BLACK)
70	SPINDLE ASSEMBLY
71	ARMATURE ASSEMBLY

# TECH2000 HANDPIECE / 45000 HANDPIECE

