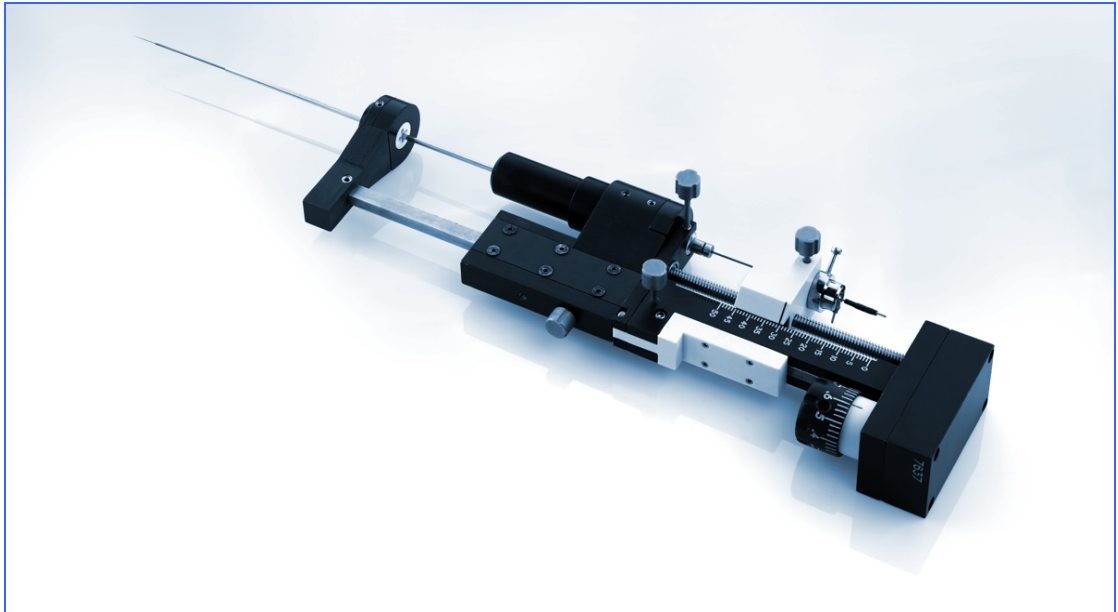




Medtronic

microTargeting[®] Drive

Stereotactic System Adaptations



Appendix A

CAUTION In the United States, Federal Law restricts this device to sale by or on the order of a physician or licensed practitioner.



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Table of Contents

Table of Contents.....	3
Introduction	4
Stereotactic System Adaptations	4
9033G0631 Radionics Adaptation	5
Assembly Instructions	5
9033G0641 Leksell Adaptation	7
Assembly Instructions	7
9033G0651 Brainlab Adaptation	9
Assembly Instructions	9
9033G0661 Leibinger RM Adaptation.....	11
Assembly Instructions	11
9033G0671 Leibinger ZD Adaptation	13
Assembly Instructions	13
9033G0681 Laitinen Stereoguide Adaptation	15
Assembly Instructions	15
Technical Data.....	17
Frame and Drive Mount Adapters	17
Service Centers.....	18

Introduction

Stereotactic System Adaptations

The adaptation of the microTargeting Drive System to common stereotactic systems follows the same basic principles of design in all cases.

The geometry and concept differences in stereotactic systems do require some design adjustments. Specifications, minor specific differences in standard target distances and in mounting, or operating directions are included in this appendix for each adapted system.

The general directions for use are in described in the section on *Procedural Information* in the User Guide.

9033G0631

Radionics

Adaptation

Target distance using the standard microTargeting Stereotactic adaptor with the microTargeting Drive set at zero and fully advanced microelectrodes 13S83, 13S84, or others is set as shown in Fig. 1.

Assembly Instructions

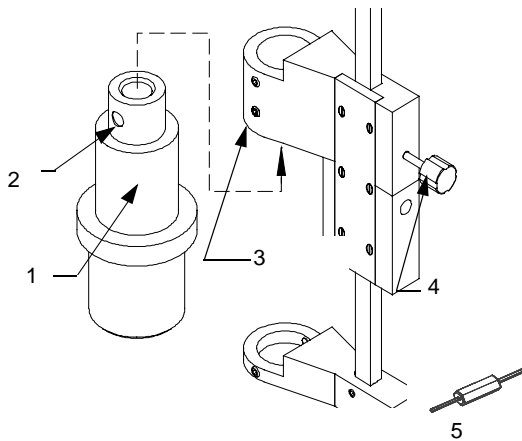


Figure 1

- | | |
|---------------------|-----------------------|
| 1 Radionics Adaptor | 2 Detent |
| 3 Locking Set Screw | 4 Pylon Locking Screw |
| 5 Hex Wrench | |

- Secure the adapter to the drive mount using the hex wrench provided. Make sure that the detent of the adaptor is on the same side as the locking screw.
- Slide the drive onto the pylon, and secure it with the pylon locking screw and the drive locking screw.
- Mount the assembled system onto the stereotactic system and secure it.

NOTE Following each use, all mechanical components of the system should be thoroughly cleaned, and then rinsed in distilled water.

NOTE See the section on Sterilization in the User Guide in the microTargeting Drive manual.

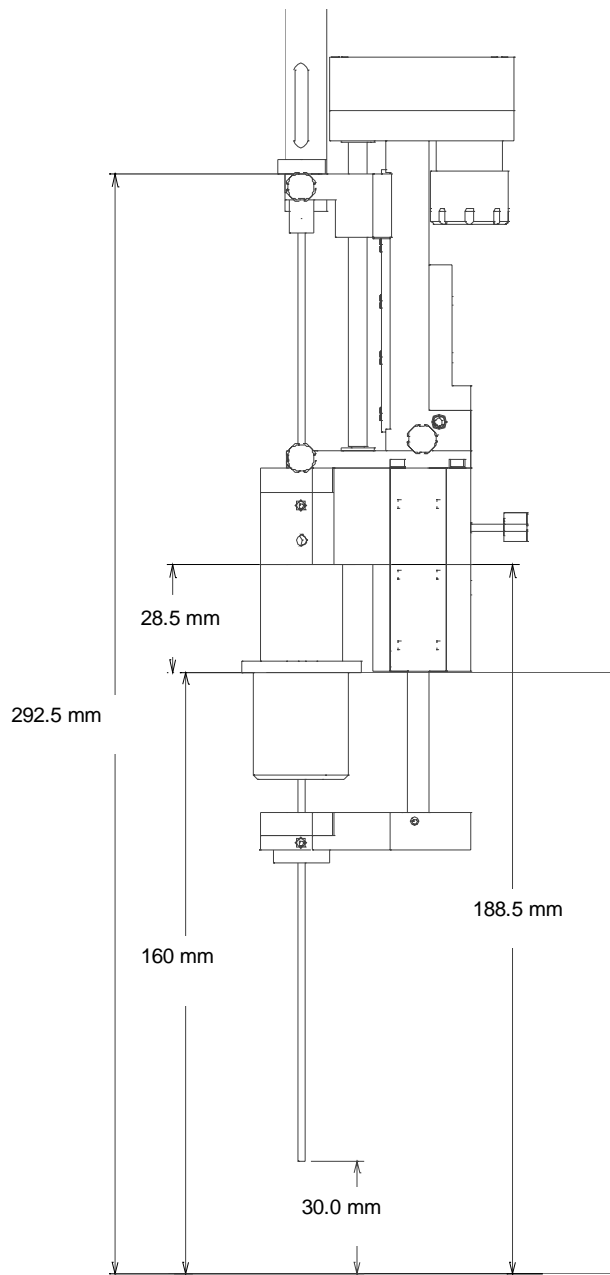


Figure 2

*The Distance to the Target from the electrode tip:
30mm*

*Available travel below the Target:
20mm*

9033G0641 Leksell Adaptation

Target distance using the standard microTargeting Stereotactic adaptor with the microTargeting Drive set at zero and fully advanced microelectrodes 13S83, 13S84, or others is set as shown in Fig.3 below.

Assembly Instructions

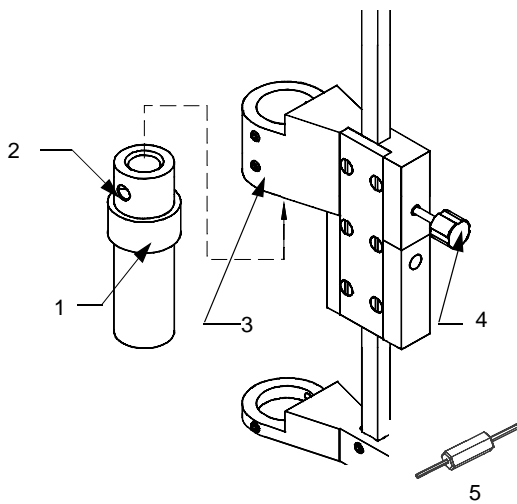


Figure 3

- | | |
|---------------------|-----------------------|
| 1 Radionics Adaptor | 2 Detent |
| 3 Locking Set Screw | 4 Pylon Locking Screw |
| 5 Hex Wrench | |

- Secure the adapter to the drive mount using the hex wrench provided. Make sure that the detent of the adaptor is on the same side as the locking screw.
- Slide the locking screw and the drive locking screw.
- Mount the assembled system onto the stereotactic system and secure it.

NOTE Following each use, all mechanical components of the system should be thoroughly cleaned, and then rinsed in distilled water.

NOTE See the section on Sterilization in the microTargeting Drive User Guide.

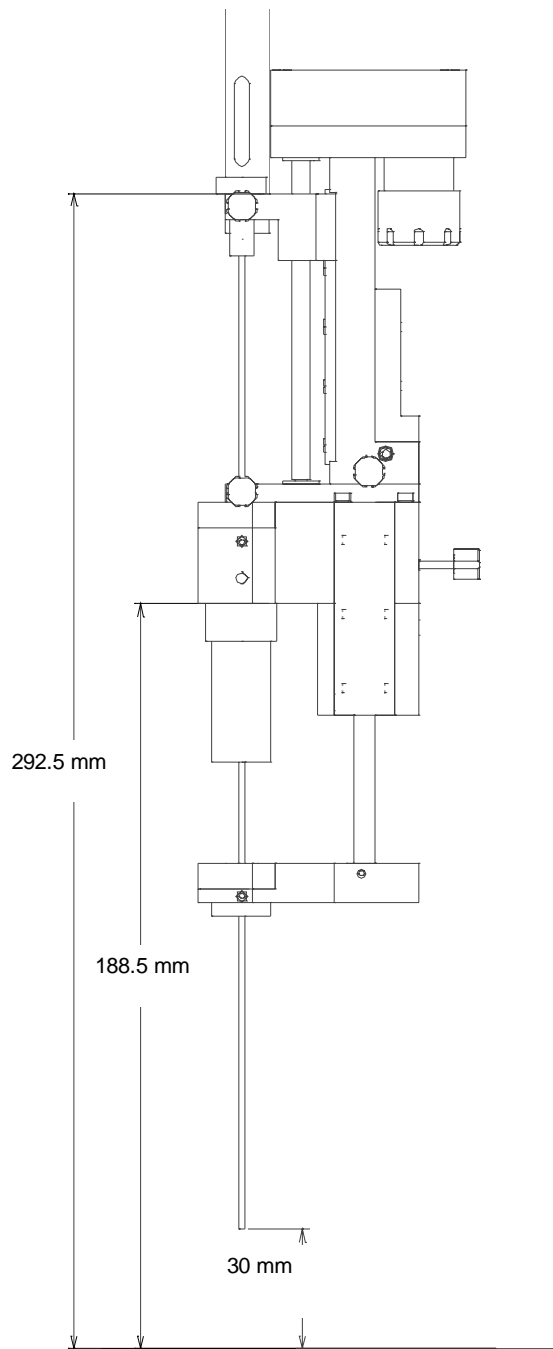


Figure 4

*The distance to the target from the electrode tip:
30mm*

*Available travel below the target:
20mm*

9033G0651 Brainlab Adaptation

Target distance using the standard microTargeting Stereotactic adaptor with the microTargeting Drive set at zero and fully advanced micro-electrodes 13S83, 13S84, or others is set as shown in Fig. 5 below.

Assembly Instructions

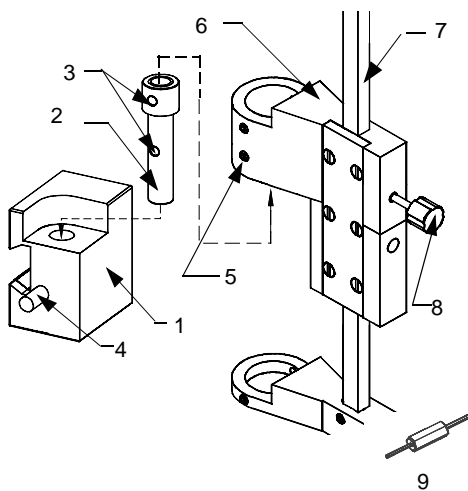


Figure 5

- | | |
|---------------------|-----------------------|
| 1 Frame Adapter | 2 Drive Mount Adaptor |
| 3 Detent | 4 Locking Knob |
| 5 Locking Set Screw | 6 Drive Mount |
| 7 Pylon | 8 Pylon Locking Screw |
| 9 Hex Wrench | |

- Secure the drive mount adaptor to the drive mount using the hex wrench provided. Make sure that the detent of the adaptor is on the same side as the locking screw.
- Slide the drive onto the pylon, and secure it with the pylon locking screw and the drive locking screw.
- Replace the Brainlab (instrument carrier) on the arc with the microTargeting/ Brainlab frame adaptor.
- Mount the assembled microTargeting drive system into the frame adaptor, and secure using the locking knob into the detent on the drive mount adaptor.

NOTE The distance from the tip of the microelectrode to the target using standard microTargeting electrodes is 35.4mm with the drive at zero. This is due to frame geometry limitations and differs from other microTargeting frame adaptations.

NOTE Following each use, all mechanical components of the system should be thoroughly cleaned, then rinsed in distilled water.

NOTE See the section on Sterilization instructions in the User Guide in the microTargeting Drive manual.

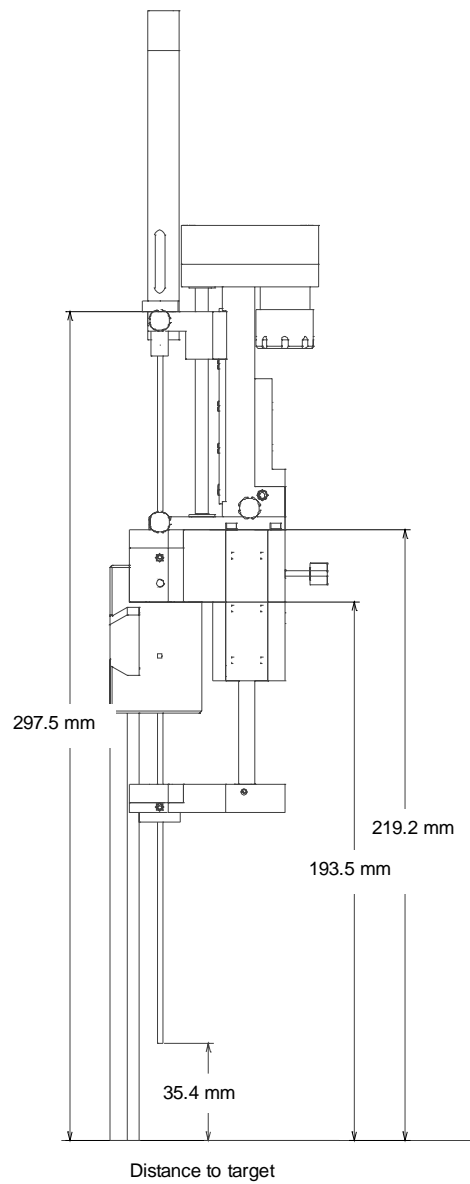


Figure 6

*Distance to the Target from the electrode tip:
35.4mm*

*Available travel below the target:
14.6mm*

9033G0661

Leibinger RM

Adaptation

Target distance using the standard microTargeting Stereotactic adaptor with the microTargeting Drive set at zero and fully advanced micro-electrodes 13S83, 13S84, or others is set as shown in Fig.7 below.

Assembly Instructions

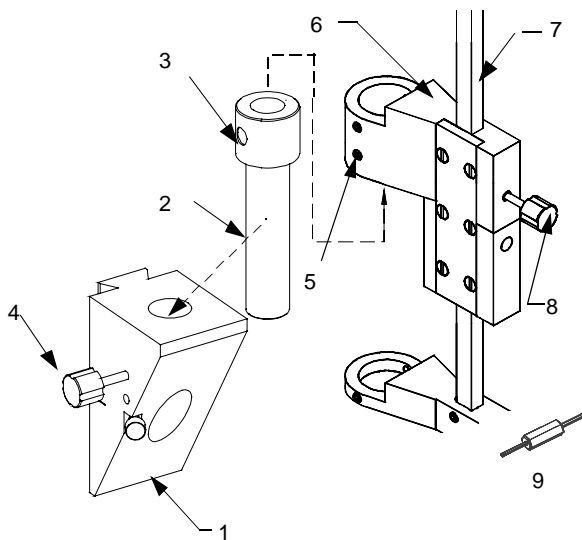


Figure 7

- | | |
|---------------------|-----------------------|
| 1 Frame Adapter | 2 Drive Mount Adapter |
| 3 Detent | 4 Locking Knob |
| 5 Locking Set Screw | 6 Drive Mount |
| 7 Pylon | 8 Pylon Locking Screw |

- Fit the microTargeting RM frame adapter on the frame.
- Secure the drive mount adaptor to the drive mount using the hex wrench provided. Make sure the detent of the adaptor is on the same side as the locking screw.
- Slide the drive onto the pylon, and secure it with the pylon locking screw and the drive locking screw.
- Mount the assembled microTargeting drive system into the frame adaptor and secure using the locking knob into the detent on the drive mount adaptor.

NOTE The distance from the tip of the microelectrode to the target using standard microTargeting electrodes is normally set in the RM Target Point Simulator for 30 mm.

NOTE Following each use, all mechanical components of the system should be thoroughly cleaned, then rinsed in distilled water.

NOTE See the section on Sterilization instructions in the User Guide in the microTargeting Drive manual.

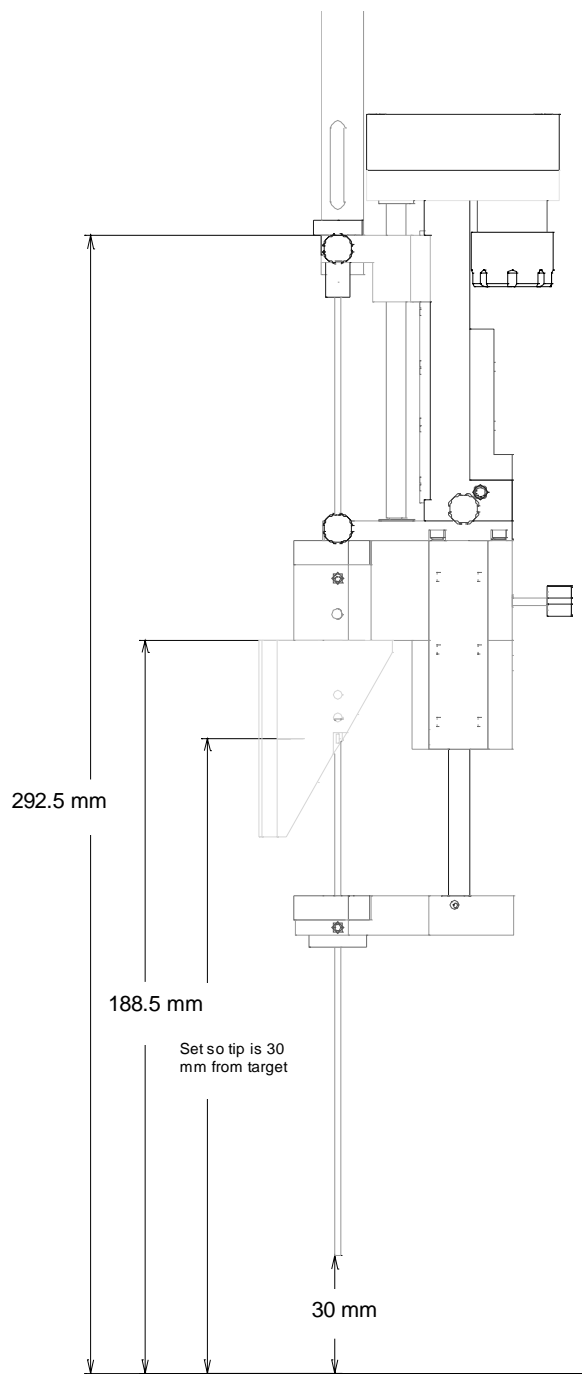


Figure 8

*Distance to the target from the electrode tip:
30mm (or as set).*

*Available travel below the target:
20mm (50mm minus the distance to the target).*

9033G0671

Leibinger ZD Adaptation

The target distance is set as shown in Fig. 9 below. Use the standard microTargeting Stereotactic adaptor with the microTargeting Drive set at zero, and the micro-electrodes 13S83, 13S84, or others fully advanced.

Assembly Instructions

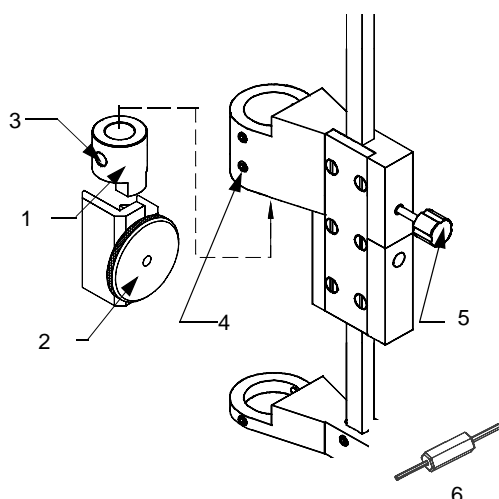


Figure 9

- | | |
|-----------------------------|--------------------------------------|
| 1 ZD Drive Motor
Adaptor | 2 ZD microTargeting
Locking Clamp |
| 3 Detent | 4 Locking Set Screw |
| 5 Pylon Locking
Screw | 6 Hex Wrench |

- Secure the ZD drive mount adaptor to the drive mount using the hex wrench provided. Make sure the detent of the adaptor is on the same side as the locking screw.
- Slide the drive onto the pylon and secure it with the pylon locking screw and the drive locking screw.
- Replace the Leibinger ZD locking clamp on the 8mm instrument carrier with the provided ZD microTargeting Locking Clamp.
- Mount the assembled system onto the ZD stereotactic system, engaging the tab on the drive mount adaptor in the ZD slot. Tighten the locking clamp securely.

NOTE Following each use, all mechanical components of the system should be thoroughly cleaned, and then rinsed in distilled water.

NOTE See the section on Sterilization instructions in the microTargeting Drive User Guide.

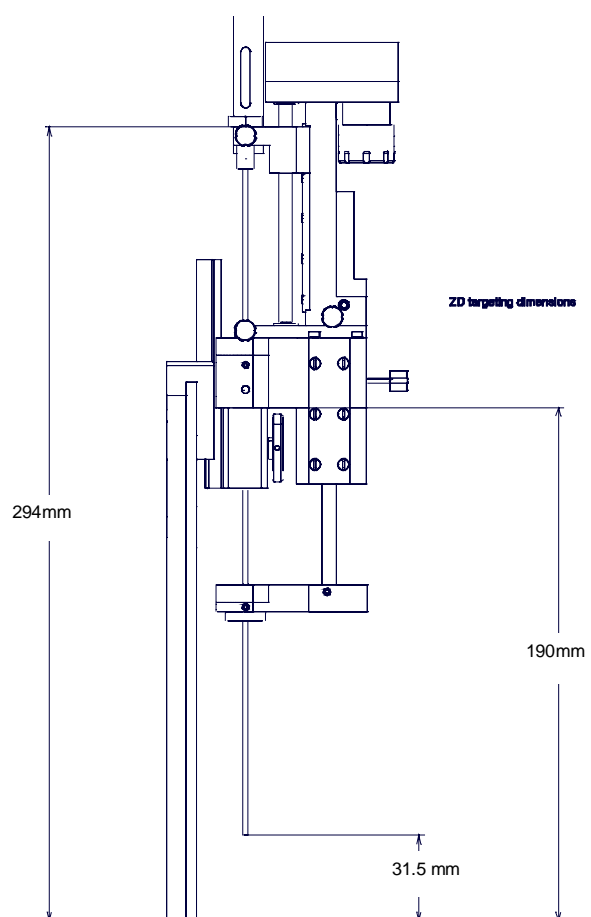


Figure 10

*Distance to the target from the electrode tip:
31.5mm (with the instrument carrier set at
zero).*

*Available travel below the target:
18.5mm.*

9033G0681

Laitinen

Stereoguide

Adaptation

Target distance using the standard microTargeting Stereotactic adaptor with the microTargeting Drive set at zero and fully advanced micro-electrodes 13S83, 13S84, or others is set as shown in Fig.11 below.

- Secure the drive mount adaptor to the drive mount using the hex wrench provided. Make sure the detent of the adaptor is on the same side as the locking screw.
- Slide the drive onto the pylon, and secure it with the pylon locking screw and the drive locking screw.
- Mount the assembled microTargeting drive system into the frame tool holder and secure using the locking knob.

NOTE Following each use, all mechanical components of the system should be thoroughly cleaned, then rinsed in distilled water.

NOTE See the section on Sterilization Instructions in the microTargeting Drive User Guide.

Assembly Instructions

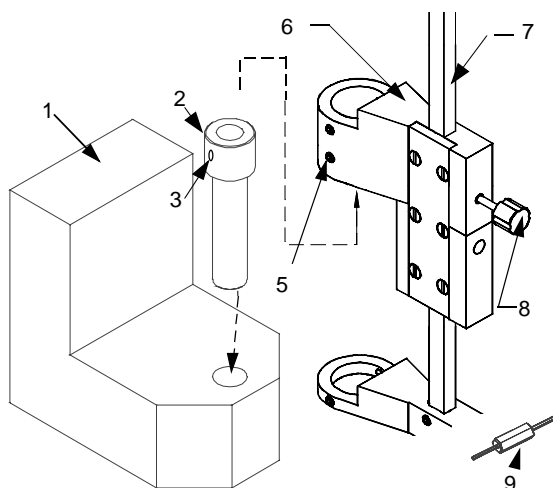


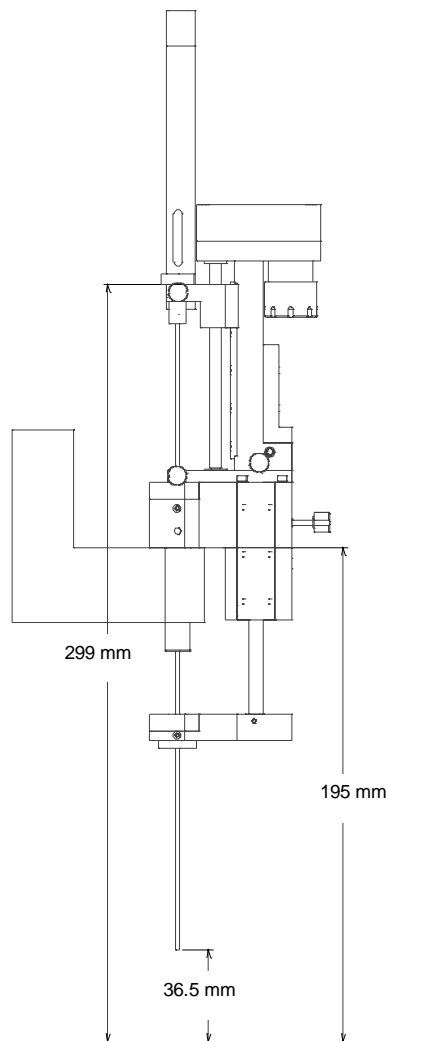
Figure 11

- | | |
|---------------------|------------------------|
| 1 Frame Tool holder | 2. Drive Mount Adapter |
| 3 Detent | 4 Locking Knob |
| 5 Locking Set Screw | 6 Drive Mount |
| 7 Pylon | 8 Pylon Locking Screw |
| 9 Hex Wrench | |

Figure 12

The distance to the target from the electrode tip: 36.5mm

Available travel below target: 13.5mm



Technical Data

Frame and Drive Mount Adapters

Type 6061 aluminum with Anodizing and Nickel plating, type 304 Stainless Steel, type 17-4Ph Stainless Steel.

Service Centers

USA +1 763 514 9700, +1 800 227 3191 **Canada** +1 905 826 6020 **Asia** +65 776 62 55 **Italy** +39 0266 1641
Germany +49 345 580810 **France** +33 1 5538 1700 **Belgium** +32 2 456 09 10 **Sweden** +46 8 462 6170



Medtronic

Manufactured by/for:

Medtronic A/S
Tonsbakken 16-18
DK-2740 Skovlunde
Denmark
Telephone: +45 44 57 90 00
Fax: +45 44 57 90 10
www.medtronic.com

US Office

Medtronic, Inc.
4000 Lexington Ave. North
Shoreview, MN 55126-9866 USA
Telephone: (763) 514-9700
Fax: (763) 514-9745
Toll-free: (800) 227-3191
www.medtronic.com

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