# MS Implant System

2013 PRODUCT CATALOG



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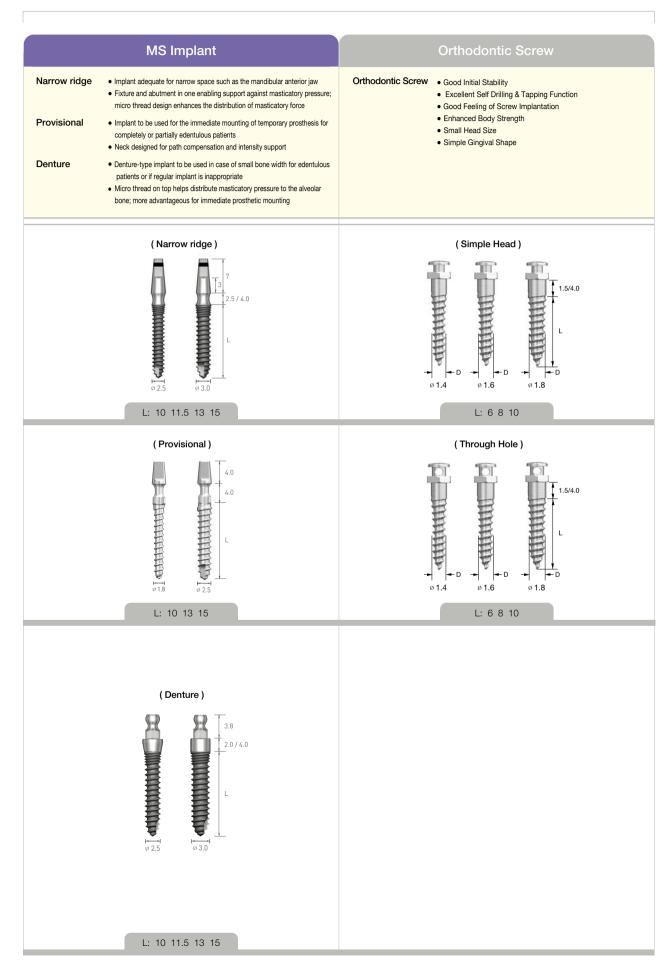
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### **OSSTEM HISTORY**

12	Nov	Hosts 'OSSTEM ATC Forum 2012 Seoul'	2008	Mar Opens ATC Training Center
	Jul	Registers and obtains approval from FDA in Mexico		Jan Establishes OSSTEM Bone Science Institute
	Jun	Established OSSTEM Dental Equipment Research Institute Develops and begins commercial production of TSIII CA	2007	Oct Establishes subsidiary offices in Sydney, Australia [Ossten
		Develops and begins commercial production of ESSET Kit for Ridge Split		Australia PTY Ltd.]  Jun Registers and obtains approval from the TGA in Australia
	May	Develops and begins commercial production of MS SA		May Develops and begins commercial production of US Ultra-
	Apr	Hosts 'OSSTEM World Meeting 2012 Taipei'		wide
		Develops and begins commercial production of TSIII BA		Apr Hosts 'OSSTEM World Meeting 2007 in Seoul'
		Registers and obtains approval from Ministry of Health in		Begins commercial production of V-ceph
		Indonesia  Develops and begins commercial production of USIII SA		Mar Develops and begins commercial production of MS Lists on KOSDAQ (KRX: Korea Exchange)
	Mar			Lists of NOSDAQ (N.N. Notea Exchange)
		Develops and begins commercial production of SSIII HA	2006	Dec Establishes subsidiary offices in Bangkok, Thailand and K
		Registers and obtains approval from Ministry of Health and		Lumpur,
		Welfare in Kazakhstan		Malaysia [OSSTEM Thailand Co., Ltd. and OSSTEM Mala
11	Dec	Introduces and commences commercial production of K2		SDN, BHD]  Nov Registers and obtains approval from the SFDA in China
		Unit & Chair		Sep Establishes subsidiary office in Philadelphia, U.S.A [HiOss
	Nov	Develops and begins commercial production of Smart		Inc.]
	١	Membrane		Aug Establishes subsidiary offices in Beijing, China / Singapor
	Oct	Registers and obtains approval from Health Canada  Develops and begins commercial production of USII SA and		and Hong Kong [OSSTEM China Co., Ltd. / OSSTEM Singapore Pte Ltd. and OSSTEM Hong Kong Ltd.]
		123 Kit		Jul Establishes subsidiary office in Tokyo, Japan [OSSTEM Ja
	Sep	Establishes subsidiary offices in Dacca , Bangladesh and Ho		Corp.]
		Chi Minh City, Vietnam [OSSTEM Bangladesh Ltd. and		Apr Registers and obtains the GOST-R certification in Russia
		OSSTEM IMPLANT Vina Co., Ltd.]		Opens 'OSSTEM World Meeting 2006 in Seoul'
		Develops and begins commercial production of SSIII SA Registers and obtains approval from the Ministry of Health		Publishes the 「2006 OSSTEM IMPLANT SYSTEM」 - Introduction and particulars of implant system
		and Society in Vietnam		Jan Establishes the subsidiary offices in Moscow, Russia and
	Aug	Establishes subsidiary offices in Manila, Philippines and		Mumbai, India [OSSTEM LLC. and OSSTEM IMPLANT Ind
		Vancouver, Canada [OSSTEM Philippines Inc. and HiOssen		Pvt Ltd.]
	Jul	Implant Canada Inc.]  Develops and begins commercial production of CustomFit	2005	Dec Registers and obtains approval by the DOH in Taiwan
		Abutment		Establishes the subsidiary office in Ashborn, Germany
		Establishes subsidiary offices in Almaty, Kazakhstan		[OSSTEM Germany GmbH]
	lun	[OSSTEM IMPLANT LLP] Develops and begins commercial production of TSII SA		May Develops and begins commercial production of GSII  Apr Hosts 'OSSTEM World Meeting 2005 in Seoul'
	Juli	Hosts 'OSSTEM World Meeting 2011 in Seoul'		Apr Hosts 'OSSTEM World Meeting 2005 in Seoul'  Mar Obtains KGMP(Korean Good Manufacturing Practice) in
	Apr	Develops and begins commercial production of LAS Kit		Korea
		Establishes subsidiary offices in Jakarta, Indonesia [PT		Jan Establishes the subsidiary office in Taipei, Taiwan [OSSTE
	Mar	OSSTEM Indonesia] Establishes subsidiary offices in Guadalajara, Mexico		Corporation]
	IVICI	[HiOssen de Mexico]	2004	Nov Develops and begins commercial production of SSIII
	Feb	Develops and begins commercial production of TSIV SA		Jul Develops and begins commercial production of USIII
10				Apr Opens 'OSSTEM World Meeting 2004 in Seou'
	Nov Aug	Develops and begins commercial productions of SSII SA  Develops and begins commercial productions of TSIII Ultra-	2002	Oct Develops and begins commercial production of SSII
	7.09	wide		Aug Registers and obtains approval by the FDA in the USA
	Jun	Develops and begins commercial productions of TSIII HA and		Develops and begins commercial production of USII
		CAS Kit		Jan Establishes OSSTEM Implant R&D Center
	Apr	Opens 'OSSTEM World Meeting 2010 in Beijing'  Develops and begins commercial productions of Osstem	2001	Mar Establishes AIC(Apsun Dental Implant Research & Educat
	, ,	Guide		Center)
	Mar	Develops and begins commercial productions of TSIII SA		Jan Obtains CE-0434 certification
09	Oct	Registers and obtains approval from Health, Labor and	1999	Dec Obtains ISO-9001 certification
	300	Welfare in Japan	4007	
	May		1997	Dec Begins commercial production under the brand name of
	Jan	Certifies PEP7 (the world's first new Osseo-inductive		OSSTEM
	ļ	compound)	4005	Jan Establishes OSSTEM IMPLANT Co., Ltd. in Seoul, Korea
80	Nov	·	1995	Develops dental implants and acquires industrial license
		wide	1992	
	Jun	Develops and begins commercial productions of GSIII		Initiates the development of dental implant system

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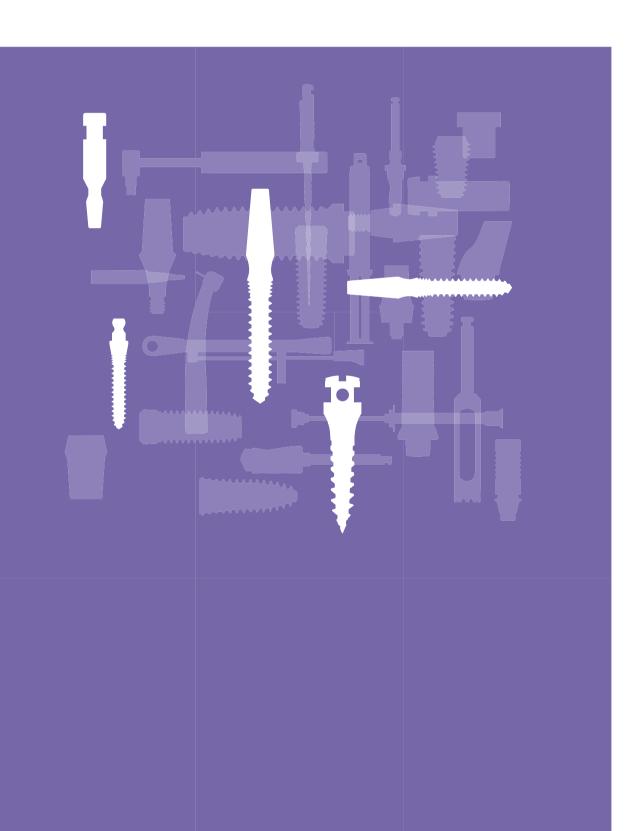
### OSSTEM Implant System Flow



## **OSSTEM** IMPLANT SYSTEM

**MS SYSTEM** 

**Fixture and Restorative Components** 



### **MS SYSTEM**

# **EARLY** & **ESTHETIC**OSSTEM IMPLANT

#### 08 MS Implant Components

Narrow ridge Components

Provisional Components

Port Components

Denture Components

- 14 Drilling Sequence for MS Implant
- 16 Orthodontic Components

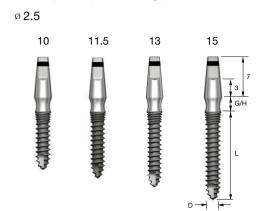
Simple Head

Through Hole

## MS Implant Components

\* The following labeled dimension may differ from the actual dimension.

#### MS Implant (Narrow ridge)



ø 2.5		
2.5	4.0	
MSP25103R	MSP25104R	
MSP25113R	MSP25114R	
MSP25133R	MSP25134R	
MSP25153R	MSP25154R	
	2.5 MSP25103R MSP25113R MSP25133R	

<b>3.0</b>			
10	11.5	13	15
			G/H

D	ø 3.0		
L G/H	2.5	4.0	
10	MSP30103R	MSP30104R	
11.5	MSP30113R	MSP30114R	
13	MSP30133R	MSP30134R	
15	MSP30153R	MSP30154R	

- Implant adequate for narrow space such as the mandibular anterior jaw
- Fixture and abutment in one enabling support against masticatory pressure;
   micro thread design enhances the distribution of masticatory force
- RBM surface design for quick osseointegration
- Optimized shape and size of abutment enabling cutting-free prosthetic work
- Optimal design of body, thread, and drilling to enhance initial boding and bone penetration
- Packing unit : MS Implant (Narrow ridge)
- Recommended torque : 30Ncm

#### **Impression Coping** (Narrow ridge)



Code	MSPIC

- Use for precise impression work
- In case of non-modification of abutments: after taking an impression using an impression cap, make the prosthesis after creating a model using an analog
- In case of modification of abutment height only: after taking an impression using an impression cap, create a model using an analog and make the prosthesis by modifying the model shape according to the modification of abutment
- Packing unit : Impression Coping

#### **Temporary Cap** (Narrow ridge)



#### Code MSPTC

- Use for making temporary prosthesis
- One-touch locking design
- Packing unit : Temporary Cap (Narrow ridge)





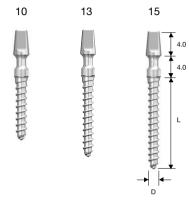
nde	MSPL A

- Make an MS Implant (narrow ridge) abutment of the oral cavity onto a working model
- Packing unit : Lab Analog

# SSYSTE

#### **MS Implant** (Provisional)

ø 1.8

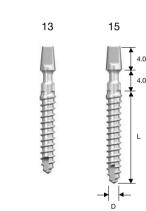


L D	ø 1.8
10	MST18104
13	MST18134
15	MST18154

• Recommended torque : 25Ncm

Ø	2	.5
V	, _	.0

10



L D	ø 2.5
10	MST25104
13	MST25134
15	MST25154

- Implant to be used for the immediate mounting of temporary prosthesis for completely or partially edentulous patients
- Neck designed for path compensation and intensity support
- Simple system to make temporary prosthesis using titanium provisional caps and lab analogs
- Provisional cap facilitating prosthetic work on the chairside
- Rectangular structure to connect a driver to the bottom of the neck, thereby facilitating removal
- Optimized design of body, thread, and drilling to enhance initial bonding and bone penetration
- Packing unit : MS Implant (Provisional)
- Recommended torque : 30Ncm

#### Lab Analog (Provisional)



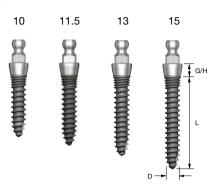
Code	MSTLA

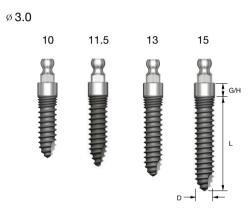
 Make an MS Implant (provisional) abutment of the oral cavity on a working model

• Packing unit : Lab Analog

#### MS Implant (Denture)

ø 2.5





D	ø 2.5		
L G/H	2.0	4.0	
10	MSD25102R	MSD25104R	
11.5	MSD25112R	MSD25114R	
13	MSD25132R	MSD25134R	
15	MSD25152R	MSD25154R	

D	ø 3.0	
L G/H	2.0	4.0
10	MSD30102R	MSD30104R
11.5	MSD30112R	MSD30114R
13	MSD30132R	MSD30134R
15	MSD30152R	MSD30154R

- Denture-type implant to be used in case of small bone width for edentulous patients or if regular implant is inappropriate
- Micro thread on top helps distribute masticatory pressure to the alveolar bone; more advantageous for immediate prosthetic mounting
- Easy and convenient denture work through the possible use of retainer and lab analogs
- Ball-type structure for the connection of the O-ring attachment
- Use by selecting 2/4mm depending on the gingival height
- Packing unit : MS Implant (Denture)
- Recommended torque: 30Ncm

#### **O-ring Retainer Cap Set**





Name	Code
O-ring Retainer cap set	RCS01
O-ring set	OAON01S

- Use for making stud-type overdenture
- Packing unit : Retainer Cap+ O-ring

#### Lab Analog (Denture)



Code	MSDLA

- Make an MS Implant (denture) abutment of the oral cavity on a working model
- Packing unit : Lab Analog

# IS SYSIEM

#### **MS KIT**



Code OMSK

#### • MS Implant KIT

#### • KIT Components (basic)

#### 5-drill set

- ø 1.5mm Lance Drill
- Ø 1.8mm Twist Drill Long
- Ø 1.8mm Twist Drill Short
- Ø 2.3mm Twist Drill Long
- Ø 2.3mm Twist Drill Short

#### 2-Drivers for the Narrow Ridge and Provisional types

- Machine Driver Long
- Torque Driver Long

#### 2-Drivers for the Denture types

- Machine Driver Short
- Torque Driver Short

#### 1 set of 3 other types

- Parallel Pin
- Driver Separator
- Depth Gauge

#### KIT Components (optional)

- 2-Drivers for the Narrow Ridge and Provisional types
- Machine Driver Short
- Torque Driver Short

#### 2-Drivers for the Denture types

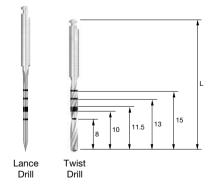
- Torque Driver Long

#### 1 set of 2 other types

- Torque Handle
- Torque Wrench

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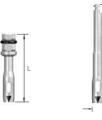
#### **Drill for MS Implant**



Name	D	L	Code
ø 1.5mm Lance Drill	ø 1.5	35	OSLD15
ø 1.8mm Twist Drill Long	ø 1.8	42	OSMSD18L
ø 1.8mm Twist Drill Short	ø 1.8	32	OSMSD18S
ø 2.3mm Twist Drill Long	ø 2.3	42	OSMSD23L
ø 2.3mm Twist Drill Short	ø 2.3	32	OSMSD23S
ø 2.5mm Twist Drill Long	ø 2.5	42	OSMSD25L
ø 2.5mm Twist Drill Short	ø 2.5	32	OSMSD25S

 Same specification as implant length for easy identification; laser marking on 8/10/11.5/13/15mm For lance drilling, drilling only the cortical bone is recommended; enables drilling up to the laser marking line depending on the surgeon's work environment

### **Driver for Narrow Ridge & Provisional Type**



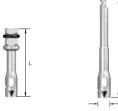
Torque Driver Machine Driver

#### Name D Code Torque Driver (Short) Ø 3.4 16.5 MSPTS Torque Driver (Long) Ø 3.4 21.5 MSPTL Machine Driver (Short) Ø 3.4 24.4 **MSPMS** Machine Driver (Long) Ø 3.4 29.4 MSPML

• Special-purpose driver for MS Implant (Narrow Ridge and Provisional)

The triangle mark is used by aligning with the implant cross section

#### **Driver for Denture type**



Torque Driver Machine Driver

Name	D	L	Code
Torque Driver (Short)	ø 3.8	13.5	MSDTS
Torque Driver (Long)	ø 3.8	18.5	MSDTL
Machine Driver	Ø 3.8	21.4	MSDMS

Special-purpose driver for MS Implant (denture)
 The triangle mark is used by aligning with the implant cross section

#### Gauge for MS Implant



ivaille	Code
Depth Gauge	MSDG
Parallel Pin	MSPP

Depth gauge
 Left: For depth checking upon drilling
 Right: Use for MS implant bending

Code

16

• The parallel pin is used for path checking upon drilling

#### **Torque Handle**



• Use for manual torque after connecting to the connected part of a torque	
drivor	

MSTH

#### **Driver Separator**

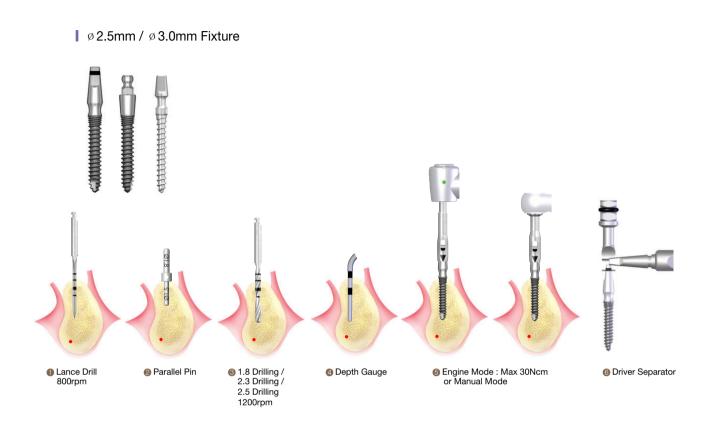


Code	MSDS

 In case a driver is stuck during grafting, separate based on the lever principle (inserting a driver separator into the driver groove)

### Drilling Sequence for MS Implant

### MS Fixture



ø 1.8mm Fixture



# **OSSTEM** IMPLANT SYSTEM

Orthodontic screw & Bone screw Fixture and Restorative Components

ORTHODONTIC

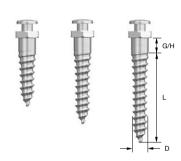
SCREW &

BONE SCREW

D	ø 1.4
L G/H	1.5
6	OSSH1406
8	OSSH1408

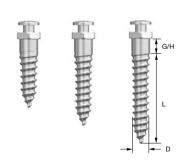
ø **1.4** 

ø 1.6



D	ø 1.6
L G/H	1.5
6	OSSH1606
8	OSSH1608
10	OSSH1610

ø 1.8



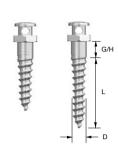
D	ø 1.8
L G/H	1.5
6	OSSH1806
8	OSSH1808
10	OSSH1810

Machined Surface

Material : Ti-6AI-4V

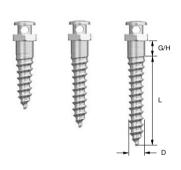
#### **Orthodontic Screw (Through Hole)**

ø 1.4



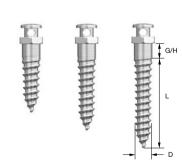
ø 1.4
1.5
OSTH1406
OSTH1408
_

ø 1.6



D	ø 1.6
L G/H	1.5
6	OSTH1606
8	OSTH1608
10	OSTH1610

ø 1.8



ø 1.8
1.5
OSTH1806
OSTH1808
OSTH1810

 Machined Surface Material : Ti-6AI-4V • Through Hole size : Ø 0.8

#### Ortho KIT



Code OOKS

• A surgical KIT for use an orthodontic treatment

#### KIT Components (basic)

#### 2-drill set

- ø 1.3 drill [Short]
- -ø 1.5 drill [Short]

#### • 3-driver set

- Driver tip [Hex type long]
- Machine driver [Hex type short]
- Hand driver [Hex type]

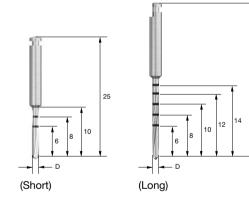
#### • 2-handle set

- Universal Handle
- Driver Handle

#### KIT Components (optional)

- Driver tip [Hex type short]
- Machine driver [Hex type long]
- Hand drill
- Driver separator
- -ø 1.3 drill [long]
- -ø1.5 drill [long]

#### Drill



	ø 1.3	ø 1.5
D	y 1.3	y 1.5
Short	OSODR130S	OSODR150S
Long	OSODR130C	OSODR150C

- Laser marking has been appeared for 6, 8, 10, 12 and 14 mm.
- Recommendation drilling RPM : 800rpm
- For Ø 1.6mm screw surgery, use Ø 1.3mm drill and for Ø 1.8mm screw surgery, use Ø 1.5mm drill, respectively to drill only cortical bone or drill according to the length of an orthodontic screw.

#### **Hand Drill**



D	ø 1.3	
Code	OSHDR130	

- Use for only cortical bone drilling by coupling with the Universal handle
- Drill depth : 4mm
- Optional purchase

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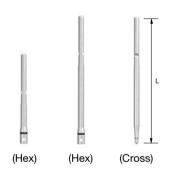
[Caution] Do not apply bending load with the hand drill

#### **Universal Handle**



- Use after connecting with a driver tip
- Easy to use, the middle of the handle part has knurling treatment

#### **Driver Tip**

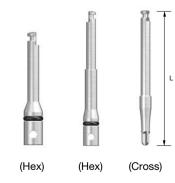


Type	Hex		Cross
турс	Short	Long	01033
L	48	70	69
Code	OSDTS	OSDT	OCDT

- Use for the placement of orthodontic screws by coupling with the universal handle
- Hex and cross types are available, use the hex type for applying torque, and the cross type for correcting the through hole path of the screw

(Caution) Do not apply excessive torque with the cross type driver

#### **Machine Driver**

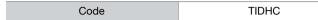


Type	Hex		Cross
Турс	Short	Long	01033
L	23.4	33.4	26.4
Code	OSMDA	OSMDB	OCMD

- Use for the orthodontic screw insertion or removal by connecting to the surgical engine
- Hex and cross types are available, use the hex type for applying torque, and the cross type for correcting the through hole path of the screw

(Caution) Do not apply excessive torque with the cross type driver

#### **Driver Handle**



• Use for connecting a hand driver and for the manual tightening of screws



#### **Hand Driver**



Туре	Hex	Cross
Code	OSTDA	OCHD

- Use for the orthodontic screw insertion or removal by connecting to a driver handle and torque wrench
- Hex and cross types are available, use the hex type for applying torque, and the cross type for correcting the through hole path of the screw

(Caution) Do not apply excessive torque with the cross type driver

#### **Driver Separator**



Code OSST75
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 If the driver is not removed after implantation of an orthodontic screw, insert a driver separator in the hole at the front part of the driver and remove the screw with lever action.