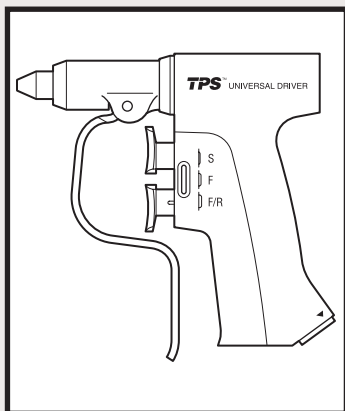


2008/07  
5100-99-700 Rev-B

# TPS™

## Universal Driver

### REF 5100-99



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## R<sub>x</sub> ONLY

# stryker®

TPS Universal Driver 5100-99



**The TPS Universal Driver is intended for use with the Total Performance System.**

The TPS Universal Driver, when used in conjunction with a number of attachments, is intended for surgical procedures involving drilling, reaming, driving wire or pins, cutting bone and hard tissue.



**WARNING: Before using any TPS component, read and understand its instructions and review the important User/Patient Safety information provided in the TPS Console User's Guide.**

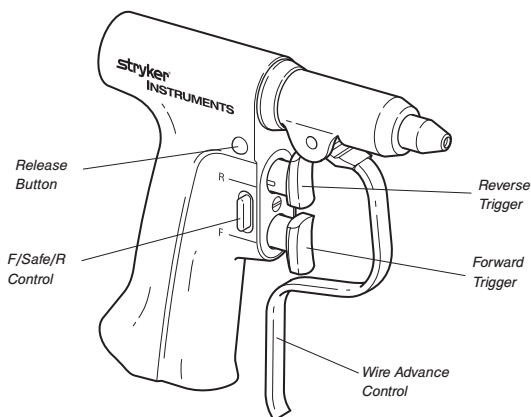
Familiarization with the Total Performance System prior to use is important. If you have any questions, contact your Stryker Instruments representative or Stryker Customer Service at 1-800-253-3210.



**WARNING:** Prior to use, handpiece and accessories should be operated and inspected for any damage. Do not use if damage is apparent.

**Prior to first and every use, clean and sterilize handpiece and accessories. Refer to your *TPS Cleaning, Maintenance, and Sterilization Recommendations* for instrument care information.**

## Features and Symbol Definition



TPS Universal Driver shown with Wire Collet.

- **Wire Advance Control**

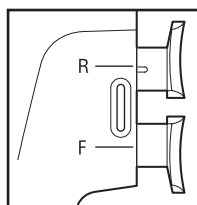
The TPS Universal Driver comes equipped with Wire Collet REF 4100-62. The wire or pin loads into the distal end of the accessory or back cap of handpiece. Squeezing the wire advance control holds the wire at the desired length. Releasing it allows movement of the wire or pin.

- **Release Button** Press to release an accessory.

- **Triggers** Pressure sensitive triggers provide variable speed operation.

**R** Reverse trigger - operates the handpiece in the counterclockwise direction.

**F** Forward trigger - operates the handpiece in the clockwise direction.



## Features and Symbol Definition

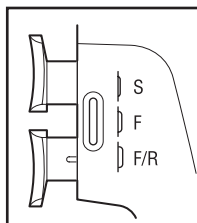
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- **Function Switch** - These symbols represent three different switch positions and the resulting functions. The switch position and function are determined by viewing the side of the handpiece containing the graphics.

**S** **SAFETY** - When the switch is fully depressed, both triggers are locked.\*

**F** **FORWARD** - When the switch is centered, the reverse trigger is locked. Only the forward trigger functions.

**F/R** **FORWARD/REVERSE** - When the switch protrudes, both triggers are unlocked.



**An oscillating function can be selected from the TPS Console. This is explained on the following pages.**

**\*WARNING:** When using a footswitch, use extreme caution when changing a handpiece accessory. Accidental pressure on the footswitch will over-ride the trigger lock and activate the handpiece.

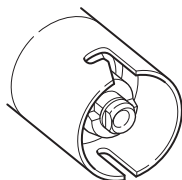
## Accessory Information

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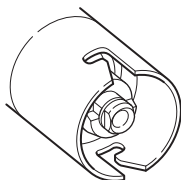
Several accessories are available for use with the TPS Universal Driver. Each has a specialized retainer for blades, drills, reamers, wires, or pins. For details, refer to the Cordless Driver and Universal Driver Accessories booklet.



**WARNING:** Accessories must have two J-slots to properly fit in the Universal Driver. Earlier versions of some Stryker accessories contain only one J-slot and should not be used with this handpiece because they can not be fully retained.



Do not use earlier versions of Stryker's Wire Collet 4100-62 or Pin Collet 4100-125. They have only one J-slot.



Only use accessories with two J-slots.



**WARNING:** If "wobble" is encountered while using an accessory, the wire or pin may extend too far from the distal end of the accessory, is the wrong size, or is not properly centered in the accessory. Re-insert the wire or pin. If wobble persists, a problem with the instrumentation exists. Do not use these instruments. An accessory that wobbles could result in inaccurate wire or pin placement and/or bone or tissue damage. Return the handpiece and accessory to Stryker for inspection and repair. Refer to Repair/Loaner Program detailed in your TPS Console User's Guide.

# Instructions for Use

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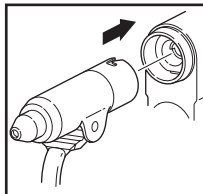


**WARNING:** Set the function switch in the safety position before passing the handpiece to another person or attaching and removing accessories to prevent inadvertent operation. Activating the footswitch will over-ride the safety setting of the handpiece.

## Accessory Installation

Position the accessory's J-slot at the top of the handpiece. Insert until it "snaps" into position.

**NOTE:** Refer to the *Accessories for Use with Cordless Drivers and Universal Driver* booklet for specific accessory instructions.



## Accessory Removal

Depress the release button and withdraw the accessory.

## Handpiece Operation

1. Plug the handpiece cord into the console and handpiece.
2. At the TPS console, change the default settings of the Universal Driver screen if desired.
3. Activate the handpiece using either the triggers or a footswitch.  
**NOTE:** Depending on user preference, footswitch pedals may be assigned different functions (such as the oscillate mode) using the TPS console.

## Regard the following when making selections from the Universal Driver Screen:

- The Forward/Reverse buttons do not function. Handpiece direction is selected with triggers or by the footswitch.
- The oscillate button activates a turn-based oscillate mode which defaults to a one-turn oscillation. More turns can be selected from the console. In the oscillate mode, either trigger operates the handpiece and pressure on the trigger controls speed.

**Refer to the section entitled Handpiece Adjustment Screen in your TPS Console User's Guide.**

# Troubleshooting

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**Problem** Universal Driver will not run.

**Cause**

Handpiece set  
in SAFE position

**Solution**

Set at "F" or "R" position.

---

**Problem** Accessory "wobbles."

**Cause**

Wire or pin extends too  
far from distal end of  
handpiece, is the wrong  
size, or is not properly  
centered in accessory.

**Solution**

Re-insert wire or pin. If wobble  
persists, return for repair.\*

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**Problem** Pin slips in Pin Collet REF 4100-125

**Cause**

Design limitations.

**Solution**

Use Pin Collet REF 4100-126.

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**Problem** Handpiece mode is different than  
expected from 3-way switch setting.

**Cause**

User is referencing  
switch from the  
wrong side of the  
handpiece.

**Solution**

Reference switch from the  
side of the handpiece with symbols.

---

**Problem** Accessory is difficult to install and connection feels  
"sticky."

**Cause**

Release button  
mechanism is  
worn.

**Solution**

Apply one (1) drop of  
mineral in the location  
shown indicated.

Place oil here.



**Problem** Handpiece operation is rough or slow or  
handpiece does not run at all.

**Cause**

Electrical malfunction.

**Solution**

Return for repair.

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The Universal Driver is not field repairable.

\*See *Instrument Repair/Loaner Program* in the TPS Console User's Guide. Outside  
the U.S.A., contact your nearest Stryker Subsidiary.



# Specifications

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## REF 5100-99 Universal Driver

**Size:** 5.34 in. [136 mm] High  
1.02 in. [26 mm] Wide  
5.47 in. [139 mm] Long

**Weight:** 1.04 lbs [0.47 Kg]

**Maximum  
Speed:** 1,500 RPM

C E 0197

### Duty Cycle



**WARNING:** If the recommended duty cycle is not followed, the handpiece may overheat and cause burn injury to exposed patient tissue in the surgical site and/or user.



**CAUTION:** Stryker recommends the following duty cycle to ensure safe handpiece operating temperatures:

#### **Sagittal Saw 4100-400**

**Cycle Time:** 20 seconds on / 20 seconds off

**Cycle Frequency:** 4 times

**Break Between Cycles:** 30 minutes

#### **All other attachments**

**Cycle Time:** 20 seconds on / 20 seconds off

**Cycle Frequency:** 10 times

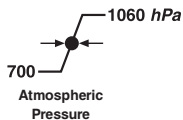
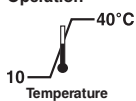
**Break Between Cycles:** 30 minutes

## Specifications cont'd

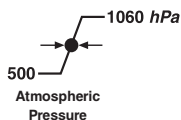
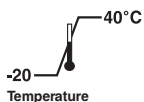
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### Environmental Conditions

#### Operation



#### Storage and Transportation





<i>ES/DE/FR/IT/NL</i>	5100-99-713
<i>JA</i>	5100-99-721
<i>SV/DA/FI/PT/NO</i>	5100-99-731

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