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EXPLODED VIEWS & REPAIR/SERVICE TIPS

- Handpiece Control Block (RPI Part #ADK142)
- Air Cover Valve Kit (RPI Part #ADK143)
- Water Cover Valve Kit (RPI Part #ADK144)
- Master Control Block Kit (RPI Part #ADK150)
- Control Block Service Kit (RPI Part #ADK094)

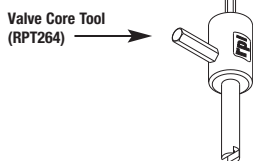
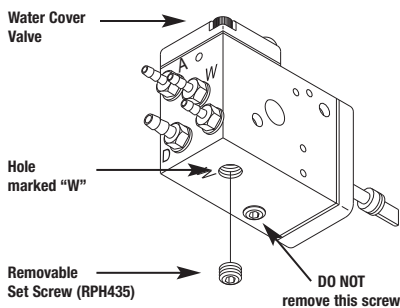
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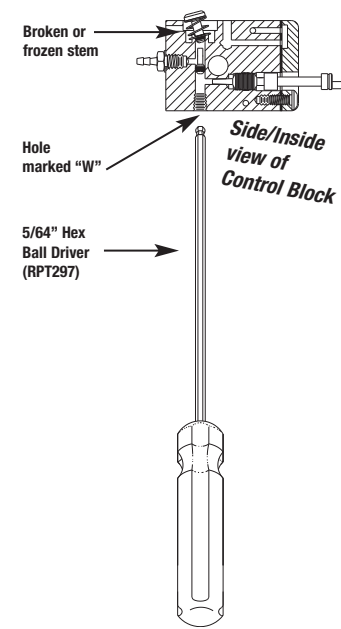
REMOVAL OF A BROKEN STEM IS AS EASY AS 1-2-3 WITH RPI'S CONTROL BLOCK

1 Remove set screw (RPI Part #RPH435) from the hole marked "W" using the Valve Core Tool (RPI Part #RPT264).

2 Remove the water cover valve.



3 Gently insert the 5/64" Hex Ball Driver (RPI Part #RPT297) through the hole marked "W" and push the broken or frozen stem out of the block.



EXPLODED VIEW OF CONTROL BLOCK & KITS MOST FREQUENTLY USED

ADK142	HANDPIECE CONTROL BLOCK RPI Part #ADK142 OEM Part #38-0223-00 <i>Includes assembled control block, plus:</i> (1) Sleeve Clamp (RPI Part #ADC035) (2) Gasket (RPI Part #ADG031) (3) Uni-Clamp (RPI Part #ADC034)
ADK150	MASTER CONTROL BLOCK KIT RPI Part #ADK150 OEM Part #N/A <i>Includes parts listed with NOTE, plus:</i> (1) Air Cover Valve Kit (RPI Part #ADK143) (1) Water Cover Valve Kit (RPI Part #ADK144)
ADK143	AIR COVER VALVE KIT RPI Part #ADK143 OEM Part #90-0304-00 <i>Includes:</i> (1) Air Cover Valve (1) Diaphragm (RPI Part #ADD024) (2) Button Head Screw (RPI Part #ADS097) (2) O-Ring (RPI Part #RPO312)
ADK144	WATER COVER VALVE KIT RPI Part #ADK144 OEM Part #N/A <i>Includes:</i> (1) Water Cover Valve with Truss Head Screw (1) Diaphragm (RPI Part #ADD022) (1) Stem (New Style) (RPI Part #ADS123) (1) Helical Comp Spring (RPI Part #ADS046) (2) Socket Head Cap Screw (RPI Part #ADS116)
ADK094	CONTROL BLOCK SERVICE KIT RPI Part #ADK094 OEM Part #90-0321-00 <i>Includes:</i> (1) Helical Comp Spring (RPI Part #ADS046) (1) Stem (New Style) (RPI Part #ADS123) (1) Diaphragm (RPI Part #ADD022) (1) Diaphragm (RPI Part #ADD024) (2) Gasket (RPI Part #ADG031) (2) Button Head Screw (RPI Part #ADS097) (2) O-ring (RPI Part #RPO312)
ADK152	3-BLOCK TIE BOLT KIT RPI Part #ADK152 OEM Part #38-0193-00 <i>Includes:</i> (1) Threaded Rod (#6-32 x 3-1/4") (1) #6-32 Hex Nut (1) #6 Washer (RPI Part #ADW039)

Service Tip: Align Cover Water Valve so that the truss head screw aligns with the non-threaded hole in the block. Install until tight then "back off" a 1/4" of a turn.

Service Tip: Install by hand each of the (4) Barbs then use a 1/4" nut driver. Do not overtighten.

Service Tip: Apply a light film of High Temperature Lubricant (RPI Part #RPL090). Then move the stem up and down several times. The stem should move up and down freely and spring back without getting stuck.

Service Tip: Align cover with small screw.

Service Tip: Place Diaphragm over the needle valve stem and the adjusting screw. Install Air Valve Cover and tighten.

Service Tip: Install set screw into the hole marked "W" until flush with body. (Note: this set screw comes already installed in the ADK142 kit.)

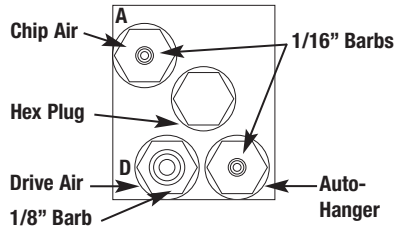
Service Tip: Before installing the Drive Air Adjusting Screw and the Water Flow Needle Valve Stem, be sure to lubricate the O-rings (RPI Part #RPO312) with High Temp Lubricant (RPI Part #RPL090).

Service Tip: For a sure grip and soft touch, replace the knobs with the RPI Knob Sets (grey or black) - See reverse side, page 6.

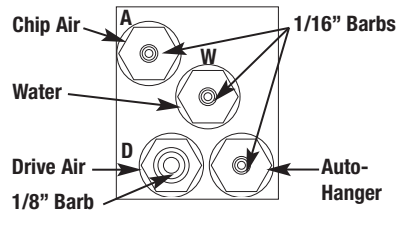
NOTE: Additional parts included in MASTER CONTROL BLOCK KIT: Adjusting Screw (RPI Part #ADS055) & Needle Valve Stem (RPI Part #ADS007)

TUBING HOOK-UP & CALIBRATION GUIDE

PORT IDENTIFICATION REAR VIEW FOR SLOW SPEED HANDPIECE DRY BLOCK

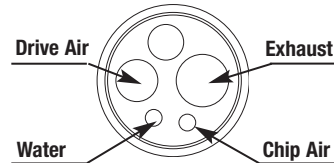


PORT IDENTIFICATION REAR VIEW FOR HIGH SPEED HANDPIECE WET BLOCK

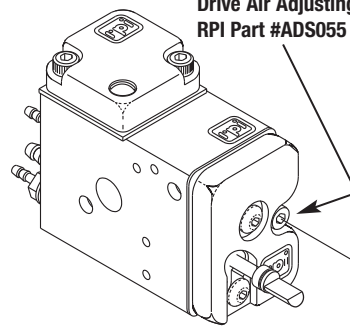


Service Tip: After installing and before calibrating, verify proper hook-up of handpiece tubing. See "Handpiece Tubing Connection - End View" to the right.

HANDPIECE TUBING CONNECTOR END VIEW



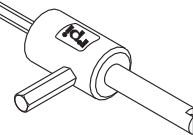
Drive Air Adjusting Screw RPI Part #ADS055



After each installation or servicing of the Handpiece Control Block, calibrate the Drive Air Adjusting Screw (RPI Part #ADS055). Using the Valve Core Tool (RPI Part #RPT264), adjust the Drive Air by turning clockwise to decrease and counter-clockwise to increase. Then, using a calibration gauge to adjust the Drive Air to conform to what headpiece is being used.

CALIBRATION GUIDE

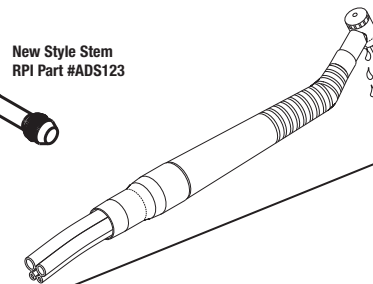
- HIGH SPEED use 32 - 38 PSI
 - SLOW SPEED use ~45 PSI
- For specific air pressure calibration, see manufacturer specifications.



Valve Core Tool RPI Part #RPT264

USING THE RIGHT STEM

When replacing the handpiece control block stem, use the new style stem (RPI Part #ADS123) because it helps prevent saliva draw-back into the handpiece and handpiece tubing (i.e. non-retraction). It also has a smaller top for easier replacement. And when using this stem, be sure to remind the operator that there will be a three second delay while the water drips before shut-down.



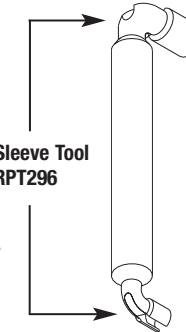
Remind the operator that there will be a three second delay while the water drips before shut-down.

Old Style Stem RPI Part #ADS005

When replacing the handpiece control block stem **do not** use the old style stem (RPI Part #ADS005).

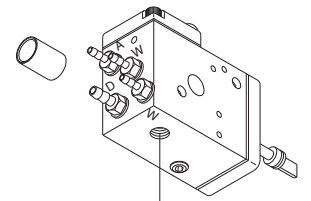
USING THE RIGHT TOOL & LUBE

Use this end to install Sleeve Clamps (RPI Part #ADC035)



Universal Sleeve Tool RPI Part #RPT296

Use this end to install Uni-Clamps (RPI Part #ADC034)



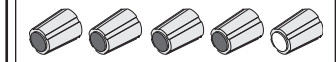
Water Stem Set Screw RPI Part #RPH435

Valve Core Tool RPI Part #RPT264

Use to remove the Water Stem Set Screw (RPI Part #RPH435). **NOTE: The RPI Water Stem Set Screw (RPI Part #RPH435) is re-useable.**



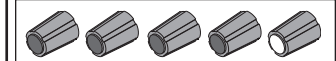
5/64" Hex x 7" Long Balldriver RPI Part #RPT297
Use to remove and install the Air Valve Cover



GREY KNOB SET RPI Part #ADK172

- Includes (4) Grey Knobs with Blue Dot (RPI Part #ADK146) and (1) Grey Knob with Yellow Dot (RPI Part #ADK148)

Fits Models: Decade®, Excellence & Mini-Trol



BLACK KNOB SET RPI Part #ADK171

- Includes (4) Black Knobs with Blue Dot (RPI Part #ADK145) and (1) Black Knob with Yellow Dot (RPI Part #ADK147)

Fits Models: Decade®, Excellence & Mini-Trol



High Temp Lubricant RPI Part #RPL090

- Non-silicone lubricant
- 5 units per package (1/2 gram per unit)
- Recommended use: Liberally lubricate non-silicone o-rings