

Intraoral Arm Cable Field Replacement Kit

30-A1071-5 Compact Arm / 56 inches (142	2 cm)				
	Cable Replacement Instructions 00-02-1686				
	Horizontal Extension Arm Cable 30-08166-L055				
	Articulated Arm Cable 30-08167-L187				
	Yoke Cable 30-08168-L315				
30-A1071-6 Short Arm / 66 inches (167 cm	n)				
	Cable Replacement Instructions 00-02-1686				
	Horizontal Extension Arm Cable 30-08166-L080				
	Articulated Arm Cable 30-08167-L187				
	Yoke Cable 30-08168-L315				
30-A1071-7 Long Arm / 76 inches (193 cm	n)				
	Cable Replacement Instructions 00-02-1686				
	Horizontal Extension Arm Cable 30-08166-L106				
	Articulated Arm Cable 30-08167-L187				
	Yoke Cable 30-08168-L315				
30-A1071-8 Mobile or Extra Long Arm / 82	2 inches (208 cm)				
	Cable Replacement Instructions 00-02-1686				
	Horizontal Extension Arm Cable 30-08166-L120				
	Articulated Arm Cable 30-08167-L187				
	Yoke Cable 30-08168-L315				
	Initials/Date				



Midmark Corporation 675 Heathrow Drive Lincolnshire, Illinois 60069-4206 USA +1-847-415-9800 Fax 847-415-9801 midmark com

Technical Advisory Notice

Product: Bulletin Number: Revision: Intraoral Cable Replacement Procedure 1057 A

Summary:

Below is the detailed procedure on how to replace the yoke cable, articulated arm cable and the horizontal arm cables on the Preva and VetPro® Intraoral X-rays.

Intraoral Cable Replacement Procedure

The required kit part depends on the length of the horizontal extension arm.

Choose the appropriate kit part number. The kit contains the horizontal extension arm, articulated arm, and yoke cables.

X-ray Reach	Horizontal Extension Arm Type	Horizontal Extension Arm Length	Kit part #
56 inches (142 cm)	Compact	14 inches (36 cm)	30-A1071-5
66 inches (167 cm)	Short	24 inches (61 cm)	30-A1071-6
76 inches (193 cm)	Long	34 inches (86 cm)	30-A1071-7
82 inches (208 cm)	Extra Long	40 inches (102 cm)	30-A1071-8
Mobile System	N/A	N/A	30-A1071-8

Overview:

Kits with part numbers 30-A1071-x offer an improved intraoral cable assembly with integrated connectors for the articulated arm of the Preva family of products. This guide provides instructions for the installation technician on how to remove the original cable, and install the replacement upgrade cable.

Models Affected: All Preva and VetPro® intraoral X-rays

Required tools:

Metric Allen wrench set (2.5 mm and 3 mm) Needle nose pliers Phillips and flat head screw driver #2 Wire Cutters Paper towels

Table of Contents

l.	Removing the Covers	. 2
II.	Removing the Horizontal Arm Cable	. 4
III.	Removing the Articulated Arm Cable	. 4
IV.	Removing the Yoke Cable	. 5
٧.	Installing the New Horizontal Arm Cable	. 5
VI.	Installing the New Articulated Arm Cable	. 6
VII.	Installing the New Yoke Cable	. 8
VIII.	Testing the Machine on Diagnostic Mode	. 9
IX.	Placing the Covers Back	11

Below is an image of the articulated arm cable, yoke cable, and horizontal extension arm cable.

Articulated Arm Cable 30-08167-L187



Horizontal Extension Arm Cable

30-01866-L055 Compact Cable 30-01866-L080 Short Cable 30-08166-L106 Long Cable 30-08166-L120 Extra Long or Mobile



Figure 1

I. Removing the Covers

- 1. Power off the X-ray unit.
- 2. Carefully remove the wall mount cover and the pivot joint covers on the 4 sections of the articulated arm. Use a flat head screw driver to split open the joint covers.

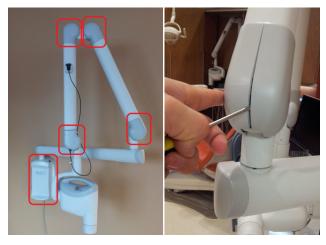


Figure 2

3. If the operator panel is mounted on the wall mount cover, carefully grab the operator panel from both ends. Remove the screw using a Phillips screw driver. If the Progeny® insert is on the cradle, remove the Progeny® insert using a flat head screw driver.



Figure 3

4. Remove the curved plastic cover at the yoke by using a 2.5 mm hex key to remove the 2 screws. Carefully remove the yoke end cover.



Figure 4

5. Remove the access cover underneath the horizontal extension arm using a Phillips screw driver.



Figure 5

6. By using the flat head screw driver, carefully remove the round cover on the side of the tube head. Using a Phillips screw driver, remove the large Phillips screw and the small Phillips screw holding the clamp harness.



Figure 6

II. Removing the Horizontal Extension Arm Cable

1. By using a Phillips screw driver, carefully remove the screw on the logic board.



Figure 7

2. Open the logic board as shown below and disconnect the black connector from the logic board and the white connector from the power board. Cut the black and the white connectors on the horizontal extension arm cable.



Figure 8

3. Take out the black and the white connectors where the articulated and horizontal extension arms meet. Pull the cable away from the end of the horizontal extension arm as shown on Figure 9.



Figure 9

III. Removing the Articulated Arm Cable

4. Cut the black and the white connectors on the articulated arm cable. Extend the articulated arm and pull the articulated arm cable where the articulated arm and horizontal extension arm meet.



Figure 10

IV. Removing the Yoke Cable

1. Disconnect the black and the white connectors from the tube-head.



Figure 11

2. Using a 3 mm hex key remove the 2 hex key screws holding the yoke ground cables



Figure 12

3. Carefully remove the yoke cable.



Figure 13

V. Installing the New Horizontal Extension Arm Cable

1. Feed the cable on the horizontal extension arm. Leave a slack of 1 foot (30 cm) at the controller side as shown below.



Figure 14

VI. Installing the New Articulated Arm Cable

1. Straighten the articulated arm and feed the articulated arm cable as shown below. It does not matter what end is fed first, both are male connectors. Begin at the end of the horizontal extension arm where the articulated arm and horizontal extension arm meet.



Figure 15

2. Once the articulated arm cable has been fed up to the first joint on the articulated arm cable, make sure to rotate the cable and use the thin side as shown on Figure 16. If the cable gets stuck, carefully use a screw driver, if necessary, release the cable and feed it the correct way.



Figure 16

3. Once the cable has been fed through the first joint, rotate the cable as shown on Figure 17. This allows the cable to be fed through the articulated arm channel. You may use a flat screw driver to direct the cable.



Figure 17

4. Feed the articulated arm cable through the second and third joints using the same technique as in steps 2 and 3 above.



Figure 18

5. Extend the articulated arm as shown on Figure 19. Carefully feed the cable in the following manner. Use the technique from steps 2 and 3 above.



Figure 19

6. Connect the articulated arm cable and horizontal extension arm cable. The cable can only be connected one way.



Figure 20

VII. Installing the New Yoke Cable

1. Put the tube head facing down. Connect the black and the white connectors to the tube head and dress the cable as shown below. Feed the yoke cable through the yoke assembly. Reattach the large and small Phillips screws.



Figure 21

2. Connect the articulated arm cable and yoke cable. Verify that the green wire is not crossed.



Figure 22

3. Connect the white connector to the power board and the black connector to the logic board. Reinstall the screw on the logic board.



Figure 23

VIII. Testing the X-ray Unit in Diagnostic Mode

- 1. Energize the X-ray unit.
- 2. Press and hold the *Tooth Selector* and the *Patient Size Selector* buttons for five seconds.



Figure 24

3. Select *CONFIGURE UNIT* option by using the down arrow. Press the right arrow to select it (Enter).

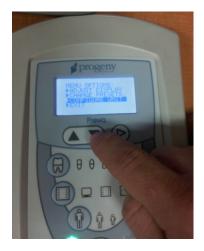


Figure 25

4. Select the SET CONFIG option. You will see the Set Configuration menu.



Figure 26

5. Press the down arrow to highlight the *DIAG. MODE ON* option, and press the right arrow to select it (Enter).



Figure 27

6. Press the down arrow to highlight the EXIT option, and press the right arrow to select it (Enter).



Figure 28

7. Press the down arrow to highlight the *EXIT* option, and press the right arrow to select it (Enter). This returns the display to operational mode.



Figure 29

- 8. Make note of the current kV and mA Values.
- 9. Observe normal radiation protection procedures in preparation for the following steps.
- 10. Take an X-ray exposure.
- 11. Observe the feedback values.

- 12. Ensure that the feedback values are within ±5% of the selected kV value and within ±1 mA of the selected mA value.
- 13. Turn off the X-ray unit and turn it back on to exit diagnostic mode.

IX. Reinstalling the Covers

At this point the articulated arm cable, horizontal extension arm cable and yoke cable replacement is complete. Reinstall the covers. Use Figure 2 and Figure 3 as a reference.

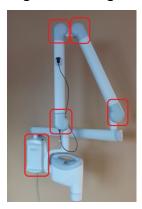


Figure 30