

500 Series 1000 Series 1400 Series

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Document Number: PD196-440R1



#### MODEL NUMBER:

### PDi Suspension Arm

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Maintenance Instructions

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#### **Important Safety Information**



This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.



RISK OF ELECTRIC SHOCK, DO NOT OPEN!



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL



Ce symbole indique qu'une tension dangereuse constituant un risque de choc électrique est présente dans cet appareil.



Ce symbole indique qu'il existe des instructions d'utilisation et d'entretien importantes dans la documentation accompagnant cet appareil.



#### AVERTISSEMENT

RISQUE DE CHOC ELECTRIQUE, NE PAS OUVRIR!



AVERTISSEMENT: AFIN DE REDUIRE LE RISQUE DE CHOC ÉLECTRIQUE, NE PAS RETIRER LE COUVERCLE. L'APPAREIL NE CONTIENT AUCUN COMPOSANT SUSCEPTIBLE D'ÊTRE RÉPARÉ PAR L'UTILISATEUR. CONFIER L'ENTRETIEN À DU PERSONNEL QUALIFIÉ



CAUTION: TO PREVENT POSSIBLE ACCIDENT, HAZARD SAFETY PIN MUST BE IN PLACE BEFORE REMOVING THE TV from the Arm OR, the Arm from the Wall Mount





Disconnect the power to the arm before completing any maintenance on the arm.



Regular maintenance on the PDi suspension arms should be performed quarterly or immediately should you notice anything unusual in the function of the arm. If you have reason to suspect improper installation of your arm, contact PDi.

If you are unsure of how to complete a specific maintenance item, do not perform the maintenance. Contact PDi ProServices for assistance.



#### **500 Series Spring Adjustment Procedure**

This adjustment is applicable on the 500 series arms if they are sagging or no longer holding position. **NOTE:** The 1400 Series & 1000 Series arms have no adjustable springs. If the arm is not holding position (and has the proper monitor/weight) see the Brake Adjustment Procedure below. Before adjusting, loosen the brake screws (See below) one (1) turn, retighten to 1 turn after adjusting the spring.

#### **Tool List**

**PDI-519** – Spring Adjustment Tool for 500 Series 7/16" Socket and Ratchet of 7/16" Nut Driver

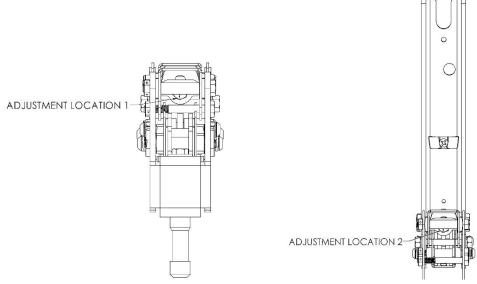




**CAUTION:** If the adjustment screw bottoms while adjusting or if after adjusting you hear a "clicking" noise, you may have drawn the spring against the pivot. If this happens, back off the adjustment one turn.

#### **Adjustment Location 1**

Adjustment Screw 1 is located above the base pin and is reached by extending the arm, so the rear arm section is parallel to the ground as shown below.



#### **Adjustment Location 2**

Adjustment Screw 2 is located at the elbow in the front arm section and is reached by extending the arm, so the rear section is parallel to the ground and the front arm section is perpendicular to the ground.

Adjustment screws all have 7/16" hex heads. These may be adjusted by using a 7/16" nut driver or 7/16" hex socket and ratchet drive. It is recommended that you do not use a drill or power driver. Increased tension is achieved by turning the adjusting screws clockwise.

Normally 4 to 6 turns of the spring adjusting screw will affect adjustment; this moves the spring.050 (1/20th) of an inch per turn.

It is recommended that both springs in an arm section (front or back) be adjusted equal amounts.



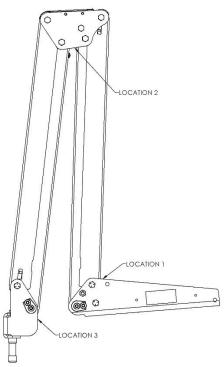
#### **Cable Inspection Points**

There are three primary areas to check all PDi arms for cable wear. For 1000 Series and 1400 Series ceiling mounted arms, only the first two are applicable. If the cable sheathing is showing signs of wear, PDi recommends replacing the cable. See below for specific instructions on how to replace the cables in each model of arm.

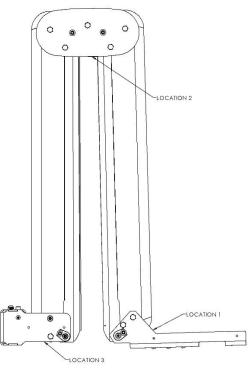
Location 1: Where the nose meets the front arm section.

Location 2: At the elbow.

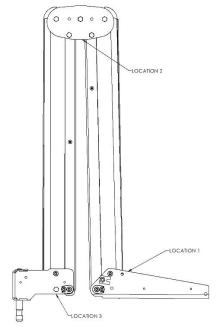
Location 3: Where the rear arm section meets the base.



**500 Series Cable Inspection Points** 



1000 Series Cable Inspection Points



1400 Series Cable Inspection Points



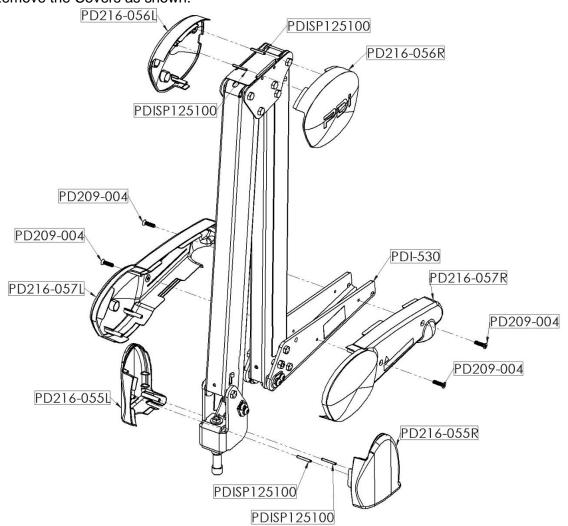
# Cable Replacement Procedure REMOVE POWER FROM ARM BEFORE MAKING ADJUSTMENTS TO THE CABLES IN THE ARM!

For the following procedures, PDi recommends testing any cables terminated in the field with a continuity tester to avoid futures problems.

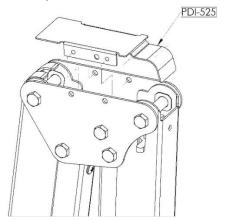
#### 500 Series

NOTE: A standard 500 Series arm can only have CAT or COAX cables.

1. Remove the Covers as shown.

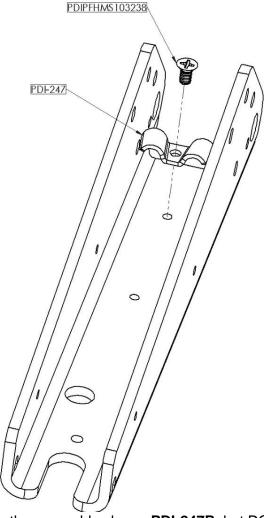


2. Remove the Elbow cover, PDI-525, as shown.





3. Remove the cable clamp, **PDI-247**, from the nose.



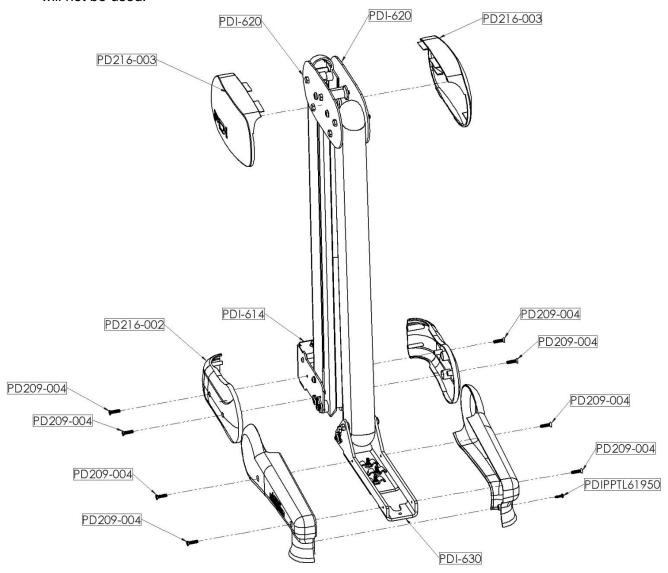
- 4. Loosen the screw holding the rear cable clamp, **PDI-247R**, but DO NOT remove the screw entirely.
- 5. Pull the damaged cable out through the nose and discard. This can be done by either cutting the damaged cable at the elbow and pulling from both ends, or, fully extending the arm, cutting the end of the cable off at the base and pulling the cable from the nose.
- 6. Feed the new cable, with the unterminated end, through the arm from the nose through the base.
- 7. Terminate the cable once the cable is through the arm.
- 8. Tighten the screw holding the rear cable clamp, PDI-247R.
- 9. Replace the cable clamp, **PDI-247**, in the nose.
- 10. Replace the Elbow cover, **PDI-525**, as shown above.
- 11. Replace the covers, as shown above.



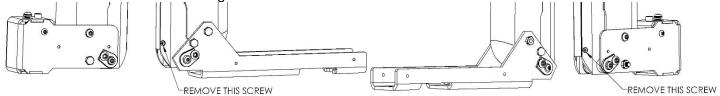
#### 1000 Series

**NOTE:** While ceiling mounted 1000 Series arms may not have the same sections as the wall mounted 1000 Series arms, the procedure to replace the cable inside the arm is the same once the arm is removed from the mount.

1. Remove the covers as shown. Note: If using the short bell version of the cover kit, **PDIPPTL6195** will not be used.

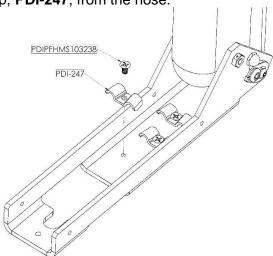


2. Remove the screws holding the wire shields and remove the wire shields.

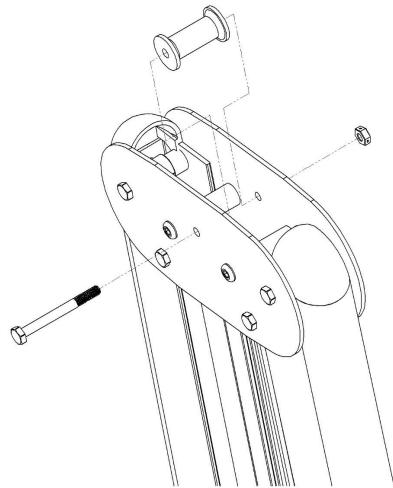




3. Remove the cable clamp, PDI-247, from the nose.



4. Remove the bolt holding the cable guide as shown.



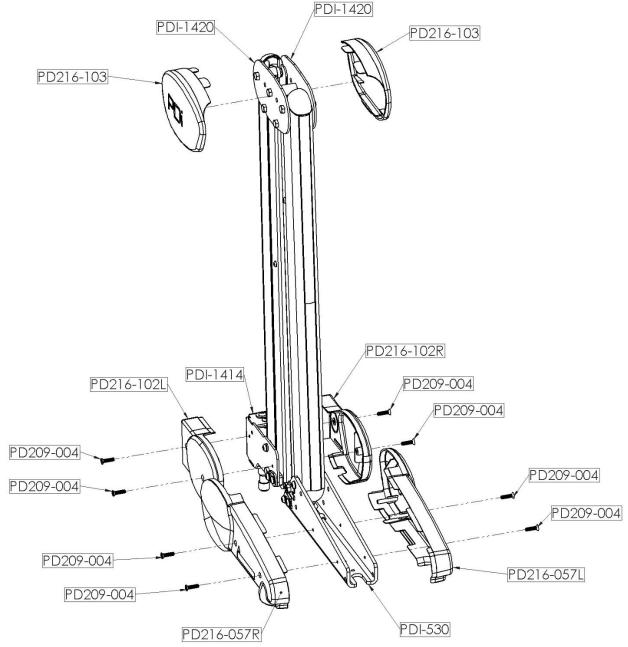
- 5. Remove wire ties and discard the old cables.
- 6. Place the new cables around the cable guide and replace the wire ties as shown above.
- 7. Replace the cable guide in the elbows as shown above and tighten the bolt.
- 8. Replace the wire guides and the covers as shown above.



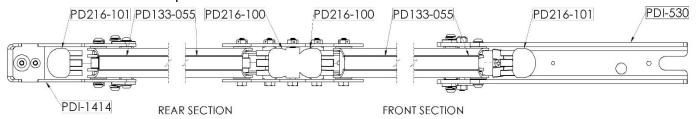
#### 1400 Series

**NOTE:** While ceiling mounted 1400 Series arms may not have the same sections as the wall mounted 1400 Series arms, the procedure to replace the cable inside the arm is the same once the arm is removed from the mount.

1. Remove the covers as shown.



2. Remove the endcaps as shown and slide the wire covers out of the arm.





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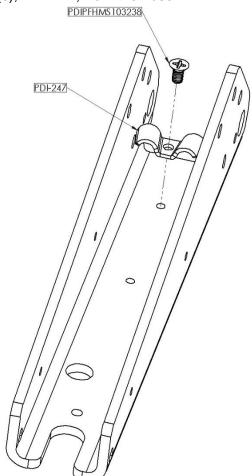
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3. Cut the wire ties that are holding the cables in place in the elbow, as shown.



4. Remove the cable clamp(s), **PDI-247**, from the nose.



- 5. Remove the cable to be replaced.
- 6. Feed the new cable back through the same channel.
- 7. Replace the cable clamp(s), PDI-247, as shown in Step 4.
- 8. Replace the wire ties in the elbow so they match as shown in Step 3.
- 9. Replace the end caps and elbow covers as shown in Step 2.
- 10. Replace the covers.



#### **Brake Adjustment Procedure**

**NOTE:** If a 1000 Series or a 1400 Series arm is not able to balance the rated weight after the brakes have been adjusted, the arm must be removed and serviced to replace the gas spring(s).

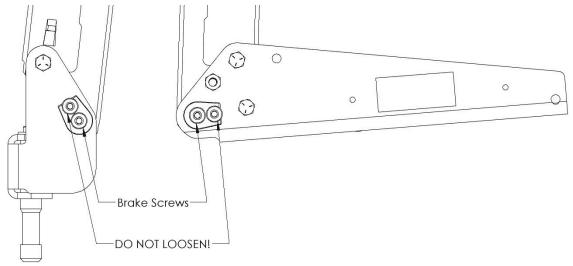
#### **Tool List:**

5/32" Allen Wrench

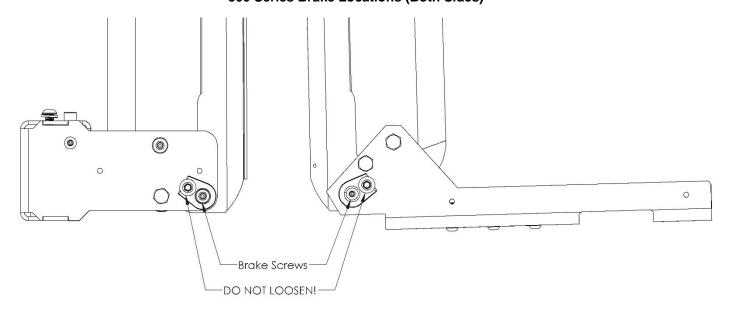
Phillips Screwdriver (To remove cover kits, if necessary)



**CAUTION:** These adjusting screws turn quite easily, if force is required you are either at the limit of adjustment on that screw or you have interference. **DO NOT FORCE**.

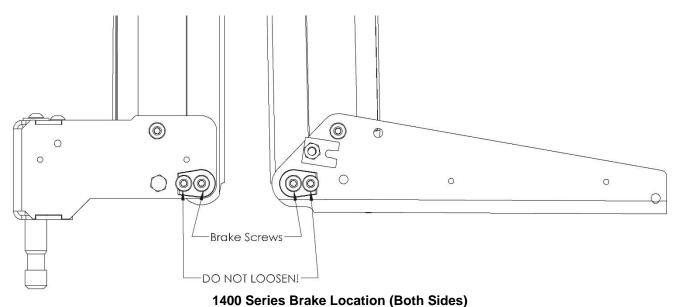


500 Series Brake Locations (Both Sides)



1000 Series Brake Locations (Both Sides)





**NOTE**: The only brake locations for the 1400 Series and 1000 Series Ceiling Mounted arms are located at the nose (right side of both images).

If the arm is not holding the rated capactiy double check the tension on the brake screws on the arm, see above. If the brake screws are loose, tighten them no more than 1/16 of a turn at a time until the arm is holding the rated weight. If any of the screws are missing, immediately remove the arm from operation and contact PDi ProServices to have the arm repaired.

#### **Inspection and Lubrication Points**

Check arm sections and the arm base for signs of bending, damage, or missing hardware. Apply oil in areas shown below. For ceiling mounted 1000 Series and 1400 Series arms, only apply oil to locations at the elbows and nose.

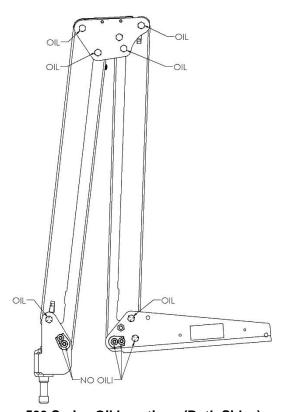


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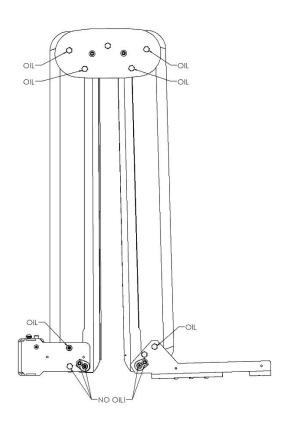
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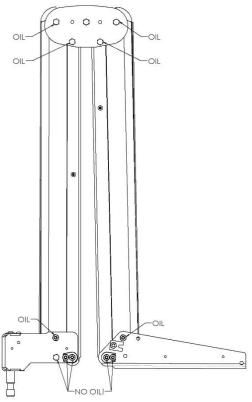
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500 Series Oil Locations (Both Sides)



1000 Series Oil Locations (Both Sides)



1400 Series Oil Locations (Both Sides)



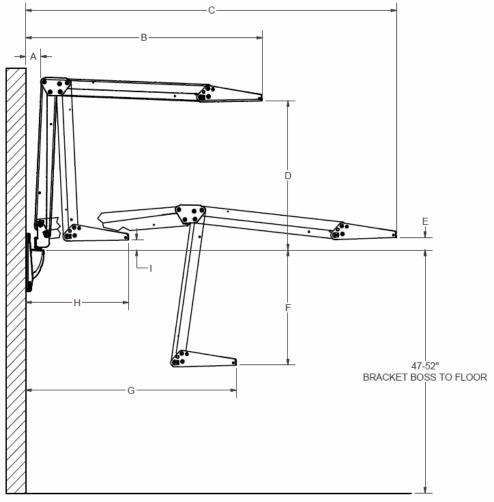
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**Operating Envelopes** 



Dims.	500 Series	1000 Series	1400 Series
Α	4"	5"	6"
В	39"	47.20"	43.7"
С	56"	71.56"	68.2"
D	21"	30.94"	23.8"
E	1"	0"	0"
F	20"	20.50"	24.6"
G	36"	47.08"	43.7"
Н	17"	22.69"	19.7"
I	1"	0"	0"
Max Capacity	13#	21#	13#
Arm Weight	14#	16.5#	16.6#