



## Bending or Breaking of Pitch Arms

**Product: Greensmaster® Flex DPA Cutting Units**

**November 15, 2013**

**Affected Units:**

**Models:**

**Serial Numbers:**

04251

312000101 – 313009999

04252

312000101 – 313009999

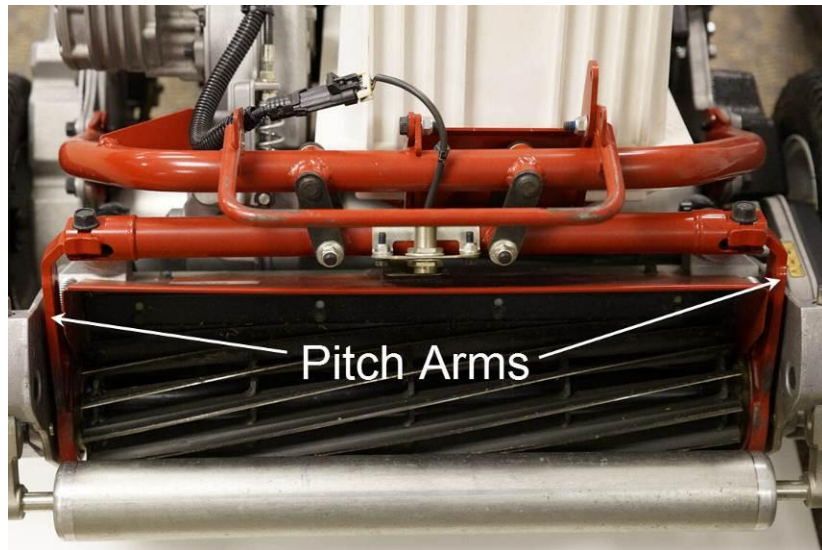
04253

312000101 – 313009999

04254

312000101 – 313009999

Some of the DPA Cutting Units used on Greensmaster® eFlex and Greensmaster® Flex 1800 and 2100 have some left or right pitch arms that have bent, cracked, or broken. The damage occurs near to the point where it mounts to the cross bar. The root cause of these failed parts is improper heat treatment. It is not possible to identify a heat-treated pitch arm by visual means.





## **Bending or Breaking of Pitch Arms**



**The image above illustrates the damage that may occur to the Pitch Arm**

**Correction:** If either pitch arm is found to be bent, cracked, or broken, replace both Pitch Arms (LH & RH) during the repair process.  
For any additional information, contact your local distributor.

## **Installation Instruction (Item numbers relate to drawing on last page)**

### **(Cutting Unit Only)**

#### **Disassembly**

Remove front and rear rollers.

Remove right side bedbar bolt.

Remove compression springs (3) both sides.

Remove Grass Shield (13).

Remove the Reel Drive Pulley on left side.

Remove the Shoulder Bolts (4) from right hand Side Plate (9).

Remove Side Plate (9) from Reel Assy (6).

Remove Reel Assy (6) from left Side Plate(2).

Remove Pitch Arms (7 & 15) and discard.

#### **Assembly**

Install Left pitch Arm (15) onto Left Side Plate (2).

Install Reel Assembly (6) into Left Side Plate.

**Note:** Ensure wave washer (14) is in place before installing reel.

Install Right Pitch Arm (7) on Right side plate (9).

Install Right Side Plate (9) on reel bearing and secure with Shoulder Bolts (4).

Install Grass Shield (13).

Install Compression Springs (3).

Install Left Reel Drive Pulley; Torque set Screws to 65 inch/pounds.

Install bedbar bolt, tighten adjusting nut so that the washers will just turn.

Install Rollers

Check parallel and reel-to-bedknife contact.

## **Installation Instruction (Item numbers relate to drawing on last page)**

### **(Cutting Unit w/ Groomer Installed)**

#### **Disassembly**

Remove front and rear roller.

Remove Right Side bedbar bolt.

Remove compression springs (3) both sides.

Remove Grass Shield (13).

Remove the Left Hand Reel Drive Pulley.

Remove the Groomer Housing Cover and drive belt.

Remove Groomer Drive Pulley from Reel shaft.

Remove Right Hand Shoulder bolts (4) and Right Hand Side Plate (9) with groomer drive and grooming reel attached.

Note: Groomer shaft will slip out of the bearing of the left hand support plate.

Remove Reel Assy (6) from Left Hand Side Plate(2).

Remove Pitch Arms (7 & 15) and discard.

#### **Assembly**

Install Left Hand pitch Arm (15) onto Left Hand Side Plate (2)

Install Reel Assembly (6) into Left Hand Side Plate.

Note: Ensure wave washer (14) is in place before installing reel.

Install Right Hand Pitch Arm (7) on Right Hand side plate (9).

Install Right Hand Side Plate (9) on reel bearing and secure with Shoulder Bolts (4).

Install Grass Shield (13)

Install the double Compression Springs (3)

Install Left Hand Reel Drive Pulley; Torque set Screws to 65 inch/pounds.

Install bedbar bolt, tighten adjusting nut so that the washers will just turn.

Install Groomer Drive Pulley into Reel Shaft; Torque to 100ft-lb (135 N-m)

Install the Groomer Belt and Housing Cover

Install rollers

Check parallel and reel-to-bedknife contact.

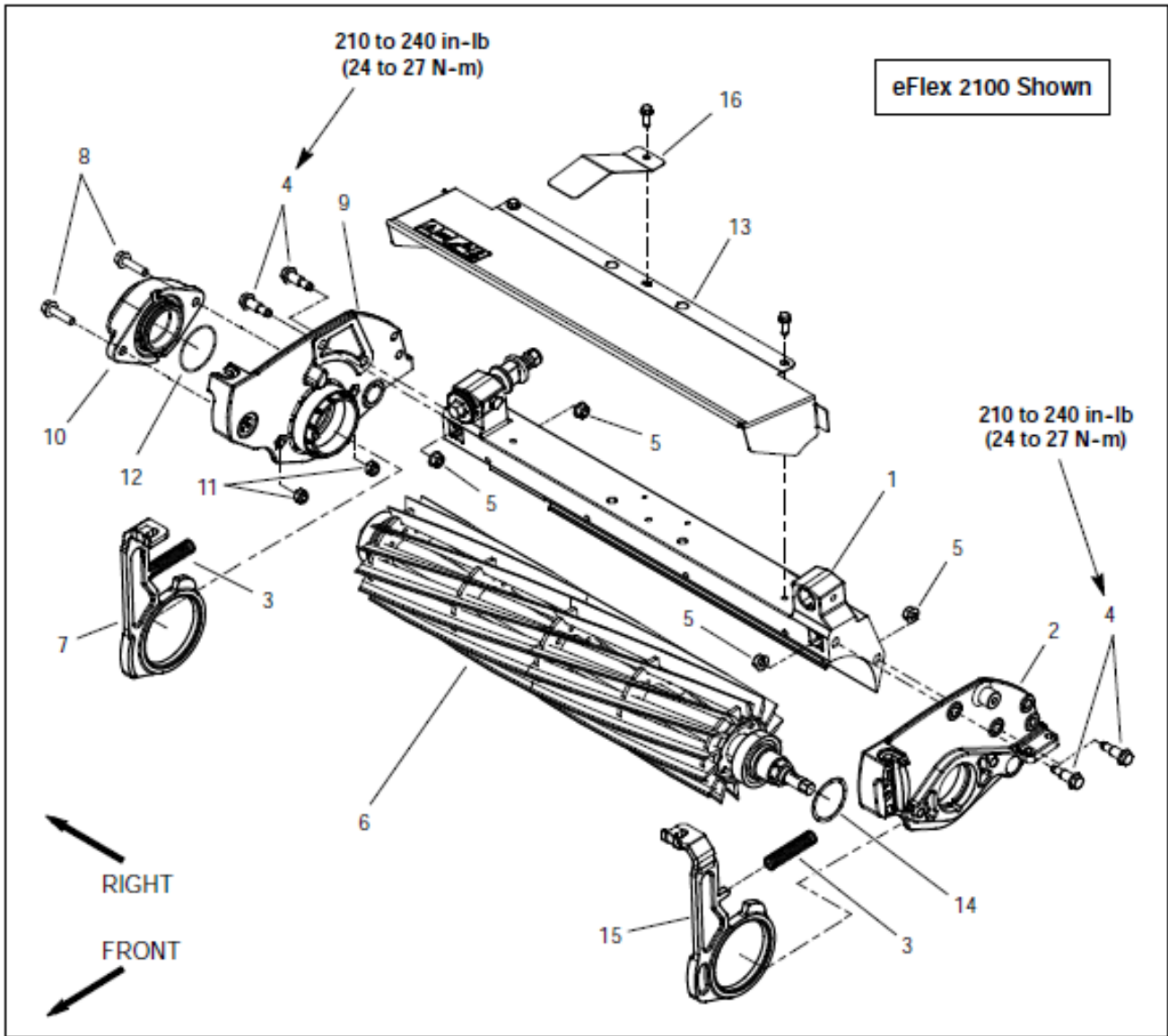


Figure 34

- |   |   |   |
|---|---|---|
| <ul style="list-style-type: none"> <li>1. Crossmember</li> <li>2. LH side plate</li> <li>3. Compression spring (2 used)</li> <li>4. Shoulder bolt (2 used per side plate)</li> <li>5. Flange nut (2 used per side plate)</li> <li>6. Cutting reel assembly</li> </ul> | <ul style="list-style-type: none"> <li>7. RH pitch arm</li> <li>8. Flange head screw (2 used)</li> <li>9. RH side plate</li> <li>10. Weight</li> <li>11. Hex nut</li> </ul> | <ul style="list-style-type: none"> <li>12. O-ring</li> <li>13. Grass shield</li> <li>14. Flat wire spring</li> <li>15. LH pitch arm</li> <li>16. Sensor target plate</li> </ul> |
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