



Pivot Service Kit

Model 08751 Tooth Rake for Sand Pro® Traction Unit

Model No. 121-9064

Installation Instructions

Loose Parts

Use the chart below to verify that all parts have been shipped.

Description	Qty.	Use
No parts required	–	Remove the existing bracket.
Thrust washers	2	
Clevis pin	1	
Pivot tube	1	
Hitch assembly	1	Assemble the pivot bracket.
Jam nut (1/2 inch)	2	
Carriage bolt (1/2 inch)	2	
Cotter pin	1	
Screw (1/2 inch)	1	
Flange nut (1/2 inch)	1	
Locknut (1/2 inch)	1	Install the pivot bracket to the machine.
Screw (3/8 inch)	1	
Flange nut (3/8 inch)	1	
Rake stop plates	2	
Screw (1/2 inch)	1	
Clevis pin	1	
Cotter pin	1	Install the pivot bracket to the attachment.
Flat washers	2	
Pivot bracket assembly	1	
Locknut (1/2 inch)	1	
No parts required	–	Adjust the tine engagement.

Note: Determine the left and right sides of the machine from the normal operating position.



Removing the Existing Bracket Assembling the Pivot Bracket

1. Remove and discard the cotter and clevis pins securing the existing bracket and lower end of the latch mechanism (Figure 1).

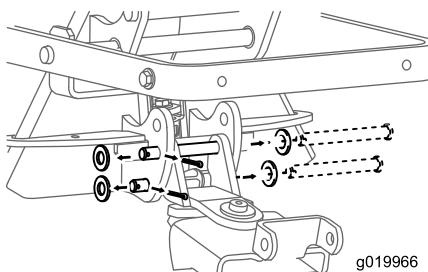


Figure 1

2. Remove and discard the fasteners securing the bracket to the attachment (Figure 2). Discard the bracket.

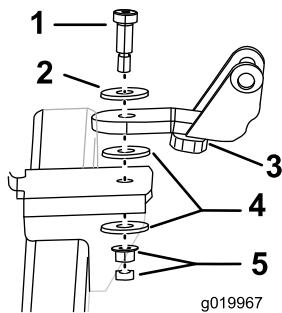


Figure 2

1. Securing bolt	4. Washers
2. Washer	5. Nuts
3. Existing bracket	

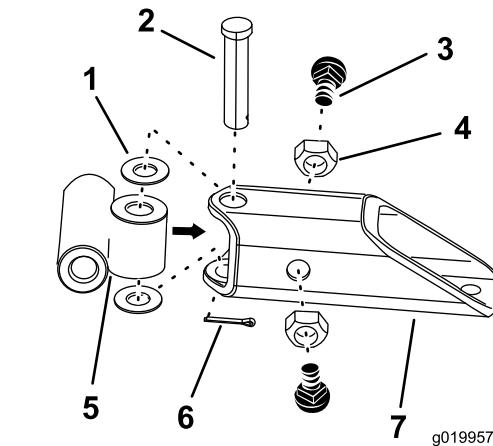


Figure 3

1. Thrust washer	5. Hitch assembly
2. Clevis pin	6. Cotter pin
3. Carriage bolt (1/2 inch)	7. Pivot tube
4. Jam nut (1/2 inch)	

1. Place the 2 thrust washers on each opening of the hitch assembly and set it inside the pivot tube (Figure 4, Box 1).

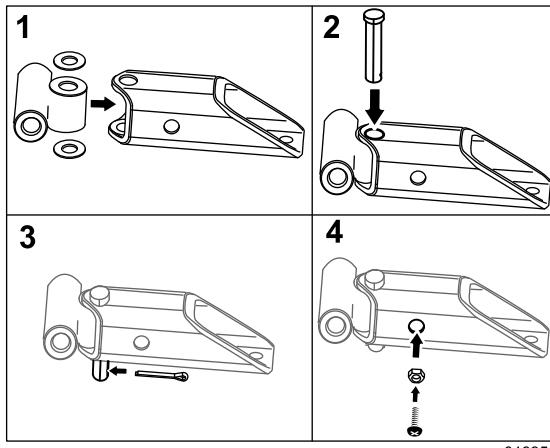


Figure 4

2. Slide the clevis pin through the top of the pivot tube, the first washer, the hitch assembly, the second washer, and the bottom of the pivot tube (Figure 4, Box 2).
3. Secure with the cotter pin (Figure 4, Box 3).
4. Place each carriage bolt (1/2 inch) in a jam nut (1/2 inch) (Figure 4, Box 4).
5. Thread each carriage bolt into the side of the pivot tube (Figure 4, Box 4).

Installing the Pivot Bracket to the Machine

1. Install the pivot bracket assembly to the frame with a screw (1/2 inch) and secure with a flange nut (1/2 inch) (Figure 5).

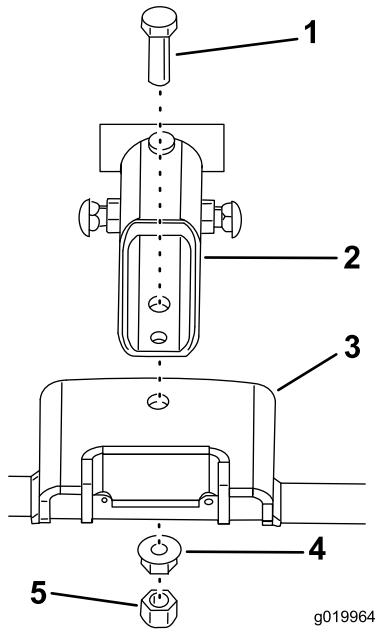


Figure 5

1. Screw (1/2 inch)	4. Flange Nut (1/2 inch)
2. Pivot bracket assembly	5. Locknut (1/2 inch)
3. Machine	

2. Torque the flange nut to 112–117 Nm (83-87 ft-lb).
3. Secure with the locknut (1/2 inch) and torque 98–104 Nm (73-77 ft-lb).
4. Drill though the second hole on the pivot bracket assembly into the machine plate (Figure 6).

Important: Ensure that the pivot bracket assembly is 90 degrees from the machine hitch. If the bracket is not set 90 degrees from the hitch, the rakes will tow at an angle.

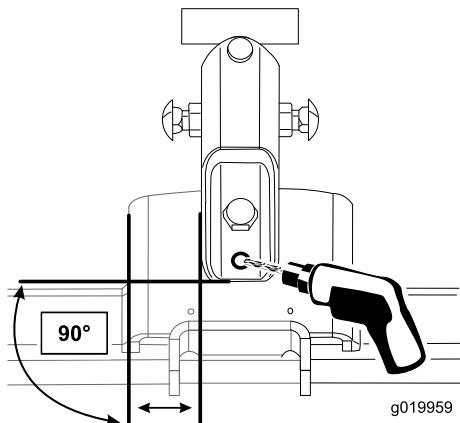


Figure 6

5. Install a screw (3/8 inch) into the newly drilled hole and secure the bracket assembly with a flange nut (3/8 inch) (Figure 7).

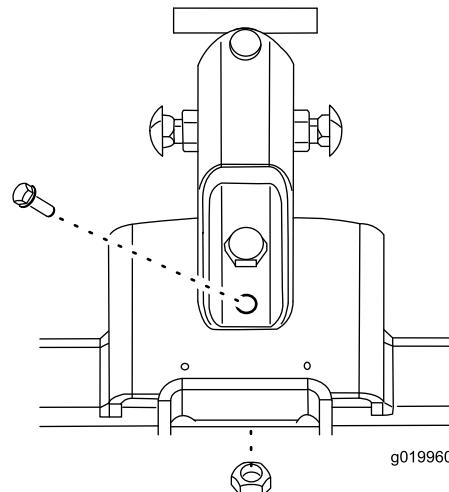


Figure 7

6. Torque the nut to 21–27 Nm (16-20 ft-lb).

Installing the Pivot Bracket to the Attachment

1. Install the clevis pin and a washer in the lowest hole on one of the rake stop plates, through the right hand stop plate, and through the latch mechanism (Figure 8).

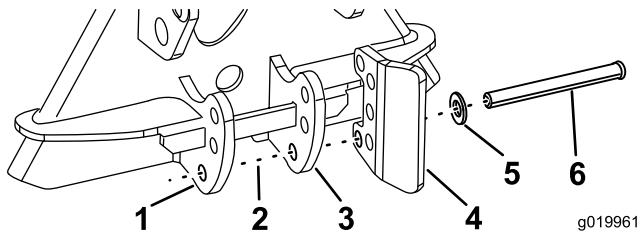


Figure 8

1. Left hand stop plate	4. Rake stop plate
2. Latch mechanism	5. Washer
3. Right hand stop plate	6. Clevis pin

2. Slide the pin through the left hand stop plate and through the lowest hole on the other rake stop plate (Figure 8 and Figure 9).
3. Slide a washer onto the clevis pin and secure it with the cotter pin, bending the ends of the cotter pin to secure it (Figure 9).

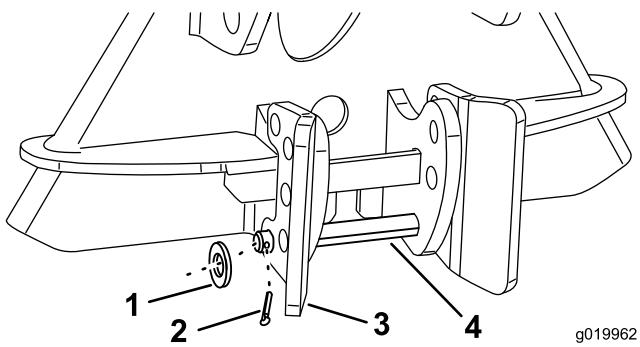


Figure 9

1. Washer	3. Right hand rake stop plate
2. Cotter pin	4. Clevis pin

4. Install the screw (1/2 inch) into the hole that provides the tine engagement desired. Refer to Adjusting the Tine Engagement (page 04).

Note: The pivot bracket assembly needs to be removed and reinstalled to obtain specific levels of tine engagement.

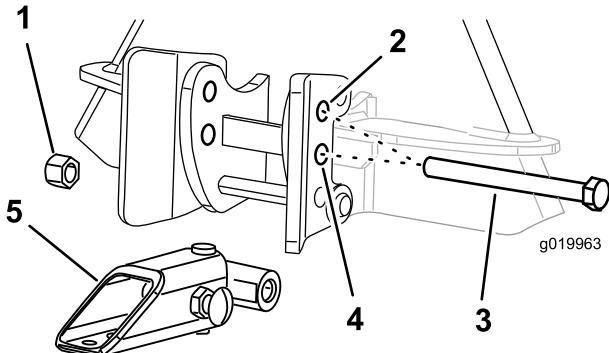


Figure 10

1. Locknut (1/2inch)	4. Top hole
2. Pivot bracket assembly	5. Screw (1/2 inch)
3. Bottom hole	

5. Place the pivot bracket assembly in between the stop plates and slide the screw (1/2 inch) through the hitch assembly.
6. Slide the screw through the same hole of the stop plate and rake stop plate on the other side and secure with the locknut (1/2 inch).

Adjusting the Tine Engagement

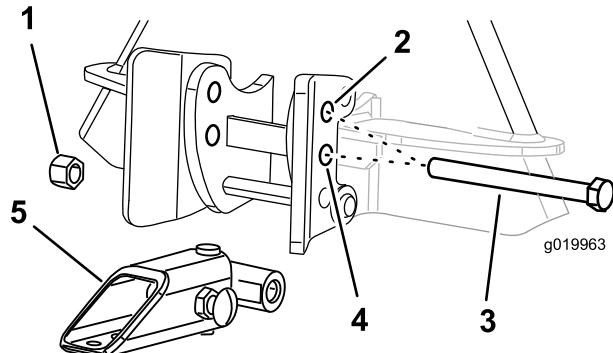


Figure 11

1. Locknut (1/2 inch)	4. Bottom hole
2. Top hole	5. Pivot bracket assembly (shown flat side down)
3. Screw (1/2 inch)	

Level of Tine Engagement	Location to install the Screw (1/2 inch)	How to install the Pivot Assembly
Least	Top hole	Flat side up (See Note)
Less	Bottom hole	Flat side up (See Note)
More	Top hole	Flat side down
Most	Bottom hole	Flat side down

Note: The pivot bracket assembly needs to be removed and reinstalled to obtain this level of tine engagement.