

Installation Instructions

5543000 & 5543006 Tarp Arm Kit with Manual Ground Control

Section 1 - Installing the Head & Crank Assemblies

1. Determine the Mounting Location for the Head Assembly

A. Mount the Head Assembly on top of the cab and as far forward as possible to minimize interference with the bucket when loading

B. When choosing the location, it will be helpful to visualize a line from the approximate pivot location to the Axle to see if the arms are clear.

C. If vertical stacks are in the way of the ideal location you can choose to shorten or realign the stacks or mount the Head Assembly behind them.

2. Install the DS and PS Brackets

A. Use the included 1/2" Bolts and Locknuts.

3. Mount the Bearings

A. Attach a Bearing to the outside of each Mounting Bracket using (2) 3/8 x 1-1/2" HHCS and Nylon Insert Locking nuts

4. Fit the Roller Axle

A. Axle will need to be long enough to have 1" gap from the inside of each Mounting Plate

B. Cut the Axle to this length

5. Mount the Stub Shaft and Roller Axle

A. Drill a clearance hole (for 5/16" bolt) 1 inch from the passenger side end of the Axle

B. Mount the Stub Shaft to the Axle using 5/16"-18 x 2-3/4" HHCS (Hex Head Cap Screw) and Nylon Locking Nut.

NOTE: The long end of the Stub Shaft should be outside the end of the Axle

C. Insert the Stub Shaft end of the Roller Axle Assembly into the PS Bearing.

D. Insert the Sprocket Shaft through the DS bearing and into the DS of the Roller Axle (it will remain loose during fitup)

6. Mount the Crank Assembly

A. Determine the location on the side of the truck bed where you will mount the Crank Assembly and clamp in place

B. Hang the Chain on the Sprocket Shaft

C. Feed the Chain through the Crank Assembly's housing to ensure that it will be long enough once the Crank Assembly is mounted. **NOTE: When positioning the Chain, make certain that it is not angled side to side (DS to PS) relative to the Crank Assembly and Sprocket Shaft. The Sprocket Shaft should be moved in or out to achieve this.**



D. Permanently mount the Crank Assembly. Due to many different truck designs, hardware is NOT provided for this step.

NOTE: When choosing the bolt locations, consider their location in the Crank Assembly's slots to provide adjustment needed for mounting and tightening the chain.

7. Mount the Sprocket Shaft to the Roller Axle

A. With the Chain straight as described in step 6, measure the position of the Sprocket Shaft relative to the end of the Roller Axle.

B. Determine where the best location to bolt the Sprocket Shaft to the Roller axle will be then measure and mark this location on both parts.

C. Drill a clearance hole (for 5/16" bolt) in the marked locations on the Roller Axle and Sprocket Shaft

D. Reinstall the Sprocket Shaft through the DS Bearing and Mounting Plate then into the Roller Axle until the holes line up.

E. Fasten together using (1) 5/16"-18 x 2-3/4" HHCS and a Nylon Locking Nut.

8. Install Chain

A. Wrap the Chain around the Sprocket Shaft and then around the sprocket in the Crank Assembly to determine necessary length of the chain

B. Remove Chain, cut it to size (if necessary) and install the master link to complete the loop

C. Reinstall Chain and Slide the Crank Assembly to take up any slack

D. Ensure all mounting fasteners are fully tightened

9. Install the Wind Deflector (5543000 only)

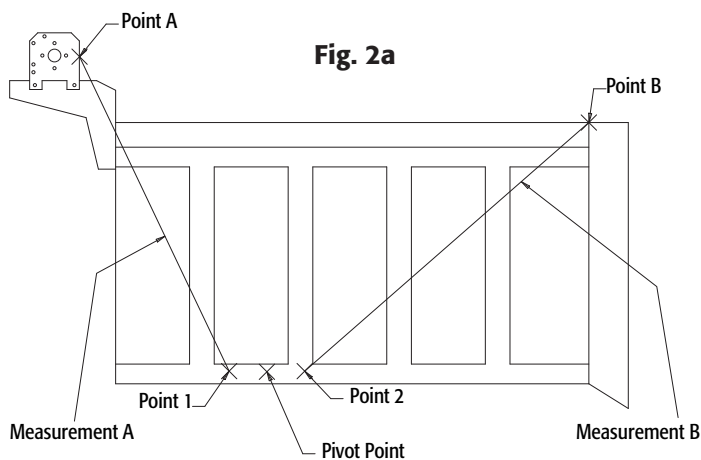
A. Measure the distance between the DS and PS Mounting Brackets

B. Cut the Wind Deflector to this length and attach it using the (8) 1/4 x 1-1/2 Thread Cutting Bolts

Section 2 – Installing the Tarp Bow

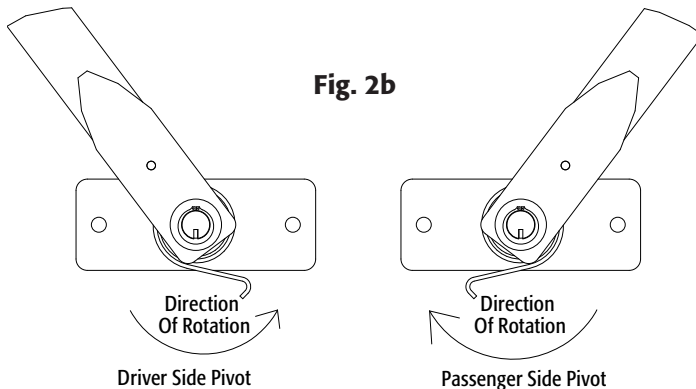
1. Determine the Pivot Point (Fig. 2a)

- Measure from Point A to the point on the side rail that is approximately where the pivot point will be. Mark this point (Point 1) and record it as Measurement A.
- From Point B (where you want the tarp to end), use Measurement A to mark this point (Point 2) on the rail.
- Mark your pivot point at $\frac{1}{2}$ the distance between Point 1 and Point 2.
- To mark the pivot point on the other side, measure from the back of the box to the first pivot point and transfer this measurement to the other side.



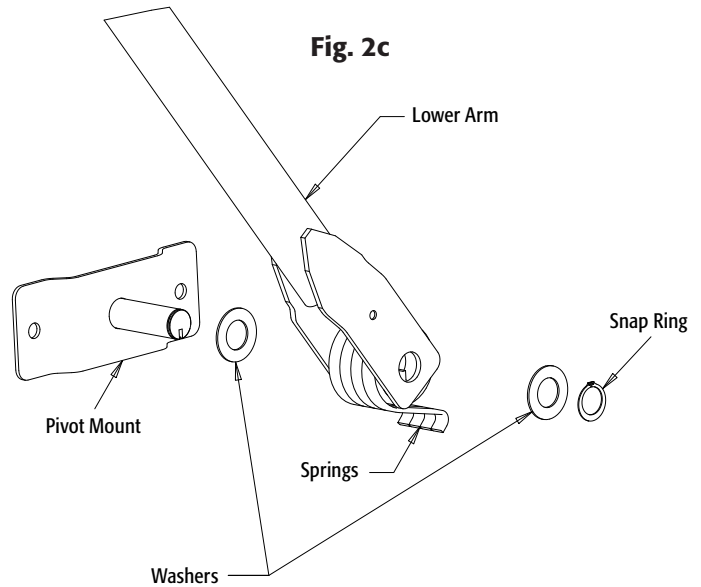
2. Mounting Pivot Assemblies

- Drill one $\frac{3}{4}$ " hole 4-1/4" on each side of both pivot points. This will give you two holes 8-1/2" apart for mounting the Pivot Assemblies.
 - Using the included 5/8"-11 x 1-1/2" Bolts, Washers, and Locknuts bolt the Pivot Assemblies to the box.
- NOTE: Pivots are directional and must be mounted to their correct sides. Grooves point toward ground. (See Fig. 2b).**



3. Mounting the Lower Pivot Assemblies

- Install the Components as shown in Fig. 2c.



4. Verify Fit of System

- Rotate Lower Pivot Assemblies so they do not engage the springs and can move freely (This will simplify verification since you will not be working against the spring forces)
 - Insert the Corner Connectors into the Upper Arms. Fasten by drilling a hole through the Upper Arm and Corner Connector and bolting together using the supplied 5/16"-18 x 1-3/4" HHCS and Nylon Locking Nuts.
 - Insert one Upper Arm into a Lower Arm
 - Adjust the Upper Arm length until the Corner Connector rests on the desired landing point at the back of the box. If the Upper Arm is too long, cut it to fit. Be sure to maintain at least 24" inside the Lower Arm
 - Cut the other Upper Arm to the same length and insert it on the other side so both Upper Arms are inserted the same amount
 - Cut the Rear Arm to the desired length and fit between Corner Connectors to create a Bow Assembly
 - Swing the Bow Assembly toward the Head Assembly. It should rest in the center of the Head Assembly. Adjust as needed.
 - Swing the Bow Assembly back toward the rear of the truck and verify that the rear resting point is in a desired location and does not interfere with the tailgate operation.
- NOTE: If position is not as desired the Pivot Point may need moved and the verification of fit repeated.**
- Drill necessary holes to fasten the Corner Connectors and the Rear Arm. Do NOT bolt together at this time.

Section 3 – Installing the Tarp (sold separately)

1. Preparing the System for the Tarp

- Mark the Position of the Upper Arms so they can easily be returned to the same place without re-measuring.
- Remove the Upper Arms and Rear Arm

2. Preloading the Springs

- A. Rotate the pivots so the hooks on the springs clip over the pin inside the assembly. (Fig. 2b)
- B. Preload the Springs by rotating the Lower Arms (one at a time) toward the back of the box and until you can reinstall the Upper Arms
- C. Install one Arm Guide on each Upper Arm
- D. Insert the Upper Arms to the positioning mark and tighten the bolts to secure them in the Lower Arms.

NOTE: Make sure the springs have hooked over the pin in the Lower Arm Assembly

3. Attaching the Tarp

- A. Line up the grommets on the front edge of the tarp with the threaded slot of the Axle
- B. Attach the tarp to the Axle using the included 5/16"-18 x 5/8" Button Head Bolts (found in hardware bag)
- C. Slide Rear Arm through the pocket in the Tarp
- D. Slide (2) Arm Guides on each end of the Rear Arm
- E. Reattach the Rear Arm to the Corner Connectors using included 5/16" Bolts
- F. Center the Tarp, slide the inner set of Arm Guides against Tarp, tighten Arm Guides to lock Tarp in position
- G. Position the remaining Arm Guides as desired and tighten set screws
- H. Double check that all fasteners are secured and fully tightened and thread lockers are used where needed.
- I. Apply antiseize to all metal to metal connections

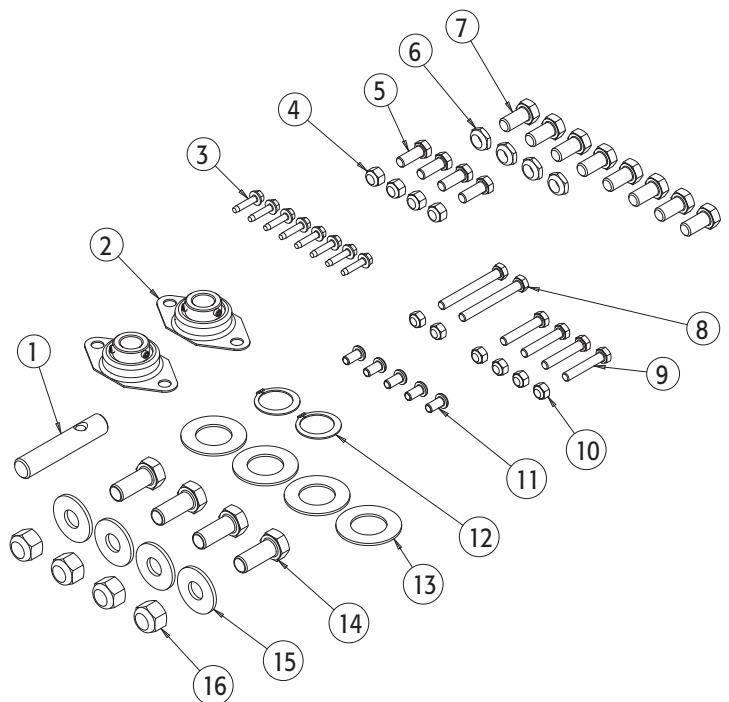
Section 4 – General Information

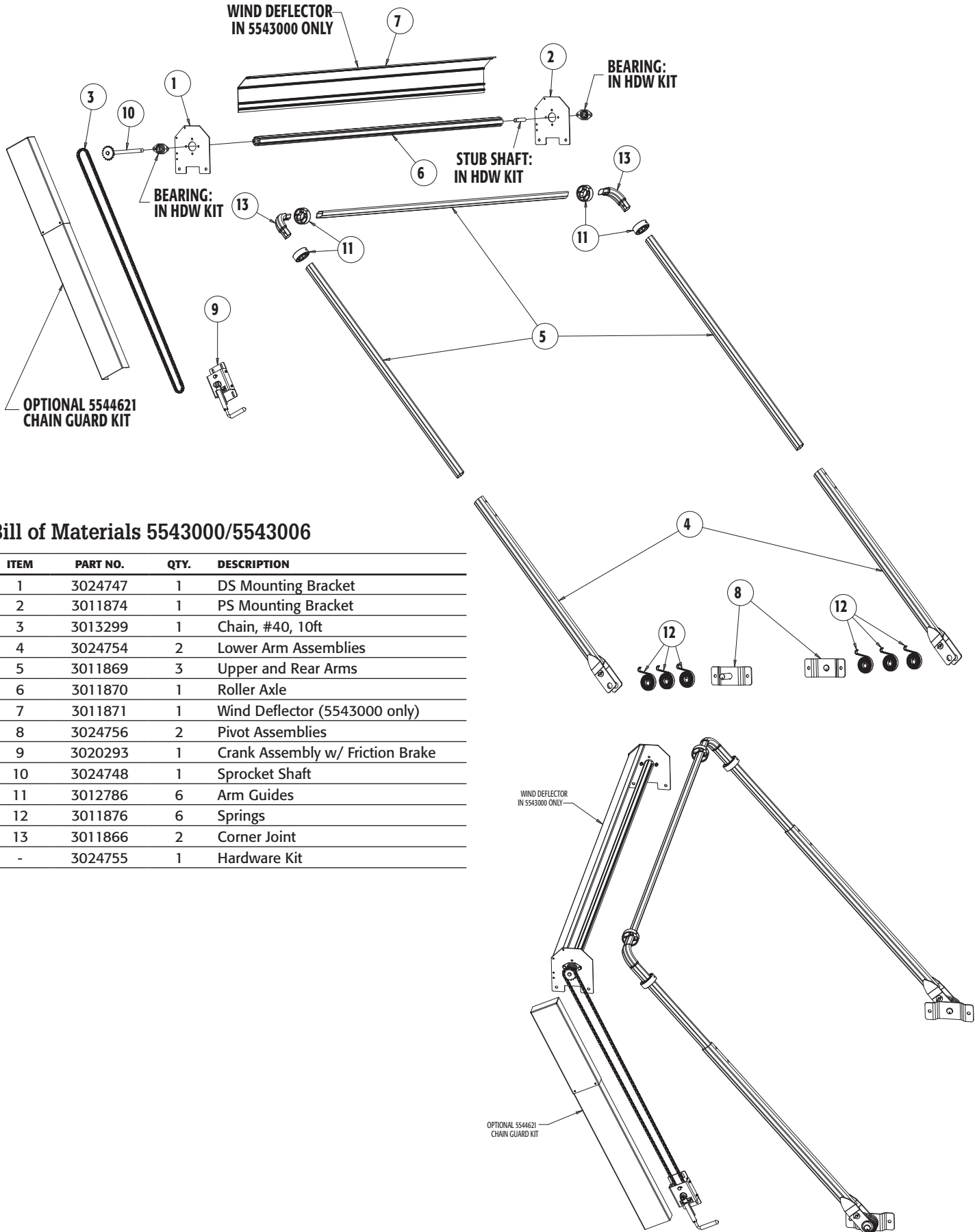
1. Operation of the Tarp System

- A. The Tarp System should only be fully opened or fully closed when the truck is moving. Leaving the Tarp System partially open or closed while the truck is moving may cause damage if the wind catches the tarp or if the Bow Assembly hits trees, power lines, overpasses, bridges, etc.
- B. Before operating the Tarp System, be sure that there are no obstructions in the Head Assembly such as debris or ice as this may cause damage to the tarp.
- C. Inspect the Tarp System regularly (daily inspection is recommended) for any issues. Replace any damaged component before operating the Tarp System

Bill of Materials Hardware Kit - 3024755

ITEM	PART NO.	QTY.	DESCRIPTION
1	3012785	1	Idler Shaft
2	3012784	2	Bearing, 3/4" ID Flanged
3	3014109	8	1/4"-20 x 1", Thread Cutting Screw
4	-	4	3/8"-16, Nylon Locking Nut
5	-	4	3/8"-16 x 1", HHCS
6	-	4	1/2"-20, Nylon Locking Nut
7	-	8	1/2"-20 x 1, HHCS
8	-	2	5/16"-18 x 2-3/4", HHCS
9	-	4	5/16"-18 x 1-3/4", HHCS
10	-	6	5/16"-18, Nylon Locking Nut
11	-	5	5/16"-18 x 5/8", Button Head Socket Screw
12	3001432	2	Snap Ring
13	13030351	4	Spring Pivot Washer
14	-	4	5/8"-11 x 1-1/2", HHCS
15	-	4	5/8" ID Flat Washer
16	-	4	5/8"-11, Nylon Locking Nut





Bill of Materials 5543000/5543006

ITEM	PART NO.	QTY.	DESCRIPTION
1	3024747	1	DS Mounting Bracket
2	3011874	1	PS Mounting Bracket
3	3013299	1	Chain, #40, 10ft
4	3024754	2	Lower Arm Assemblies
5	3011869	3	Upper and Rear Arms
6	3011870	1	Roller Axle
7	3011871	1	Wind Deflector (5543000 only)
8	3024756	2	Pivot Assemblies
9	3020293	1	Crank Assembly w/ Friction Brake
10	3024748	1	Sprocket Shaft
11	3012786	6	Arm Guides
12	3011876	6	Springs
13	3011866	2	Corner Joint
-	3024755	1	Hardware Kit