INSTALLATION INSTRUCTIONS

Publication No. 1030623

The Safety Symbol shown is used throughout this manual to alert you to information about unsafe actions or situations, and will be followed by the word **DANGER, WARNING** or **CAUTION.**

DANGER - indicates immediate hazards that may result in severe injury or death. **WARNING** - indicates unsafe actions or situations that may cause severe injury, death and/or major equipment or property damage.
CAUTION - indicates unsafe actions or situations that may cause injury and/or minor equipment or property damage.

SIDE-PULL KIT, PART NO. 1030590
for use with the
DRIVE-OVER BELT CONVEYOR

Drive-Over Conveyors with Serial No's. prior to 917736 will need to have the mounting holes for the wheel mounts and cross channel drilled, units after that serial number already have predrilled holes.

ASSEMBLY INSTRUCTIONS

On electric drive conveyors, remove the large safety shield from the right side of the conveyor.

CAUTION

- ***Do Not* rely solely on hydraulic or mechanical jacks for support. Use appropriate jack stands or equivalent for supporting the unit.**

1. The wheel mounts will be installed on the lower frame of the conveyor. Raise the conveyor undercarriage using the hydraulic lift (or screw jack) supplied with the conveyor, and place supports under the conveyor while it is in the raised position.
2. Using the dimensions shown in Figure 1, mark and drill four (4) 7/16" dia. holes through the top of the conveyor housing as shown.

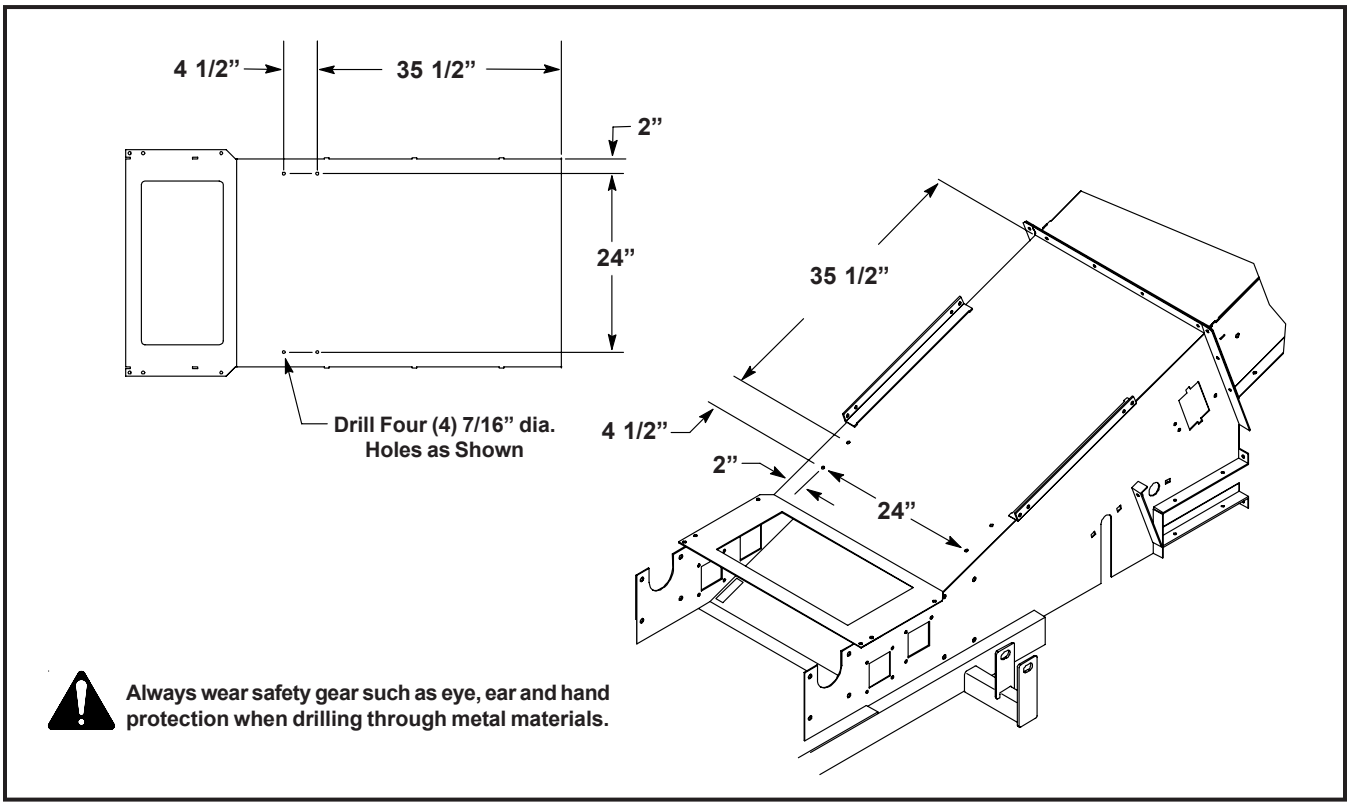


Figure 1

Assembly Instructions (con't.)

3. Install the cross channel weldment to the top of the conveyor housing and secure using four (4) 3/8 x 1" bolts, flat washers, lock washers and non-lock nuts (See Fig's. 2 & 3).

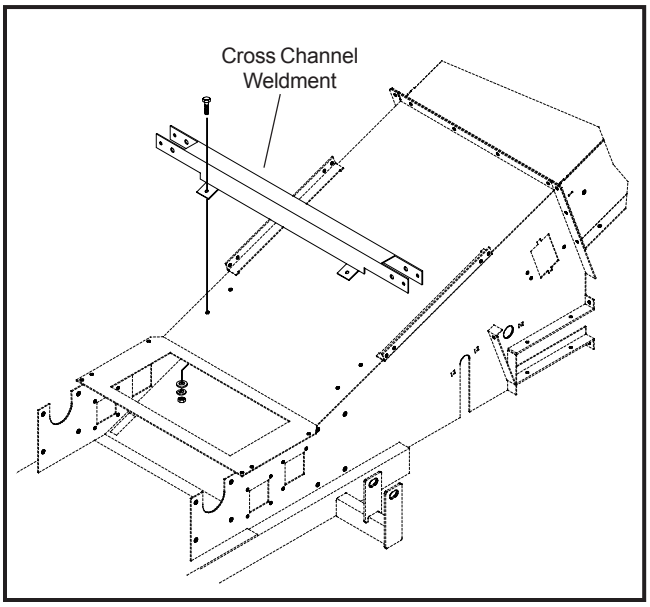


Figure 2

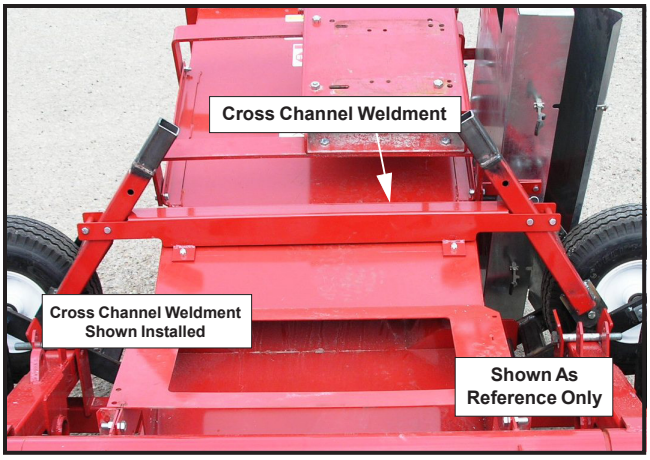


Figure 3

4. Locate the left and right wheel-frame mounts from the kit. Insert the mounts into the conveyor frame as shown in Fig's. 4 & 6.

   Using the mounts as a template, mark the center of each mounting hole. Drill a 9/16" dia. hole at each location (the holes will need to be drilled through both walls of the tubing).

   Note: if not using the mounts as a template, use the dimensions shown in Figure 5 for proper measurements to install the wheel mounts.

   Secure each mount using two (2) 1/2 x 3 1/2" bolts, flatwashers, lock washers and non-lock nuts.

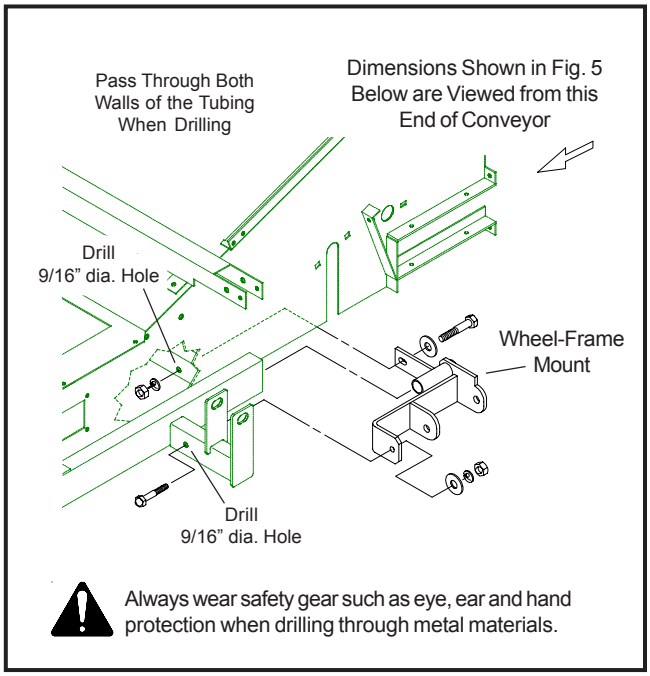


Figure 4

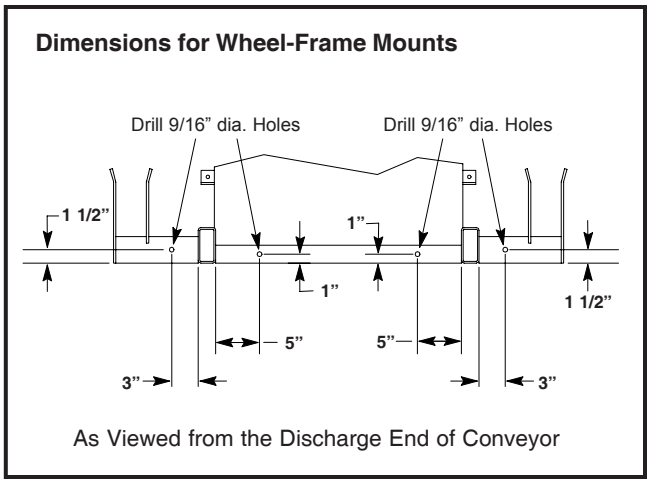


Figure 5

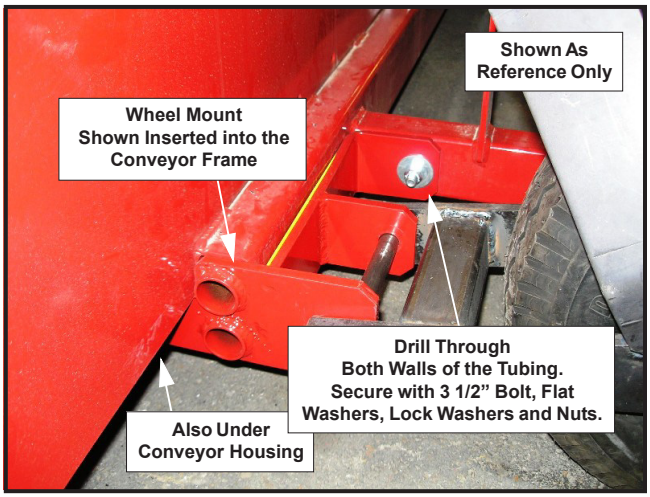


Figure 6

Assembly Instructions (con't.)

5. Install the side-pull tire & wheel assembly to the wheel-frame weldment.

CAUTION

- **The wheel frame and the tire assembly are heavy, to prevent personal injury, use assistance with lifting when necessary.**
- **Use caution around areas that can create pinch points. Severe personal injury can occur to hands or fingers if care is not taken.**

6. Attach the wheel frame weldment to the wheel-frame mount using one (1) pivot rod, two (2) 3/4" flat washers and two (2) 3/16" x 1 3/4" cotter pins (the pivot rod measures 3/4" O.D. x 8 1/2" long).

7. Remove two 1 1/4" O.D. spacers (one 1 3/16" long and one 1 11/16" long) and the axle tube from the box of parts (axle tube is 6 3/8" long).

   Insert the axle tube through the rim. **On the hub side of the rim,** slide the **1 3/16"** long spacer onto the axle tube, on the opposite side of the rim, slide the longer (1 11/16") spacer onto the axle tube.

   Position the tire between the wheel frame.

   Align the axle tube with the mount holes in the wheel frame and insert the axle bolt (keep the square head of the axle bolt positioned on the same side of the wheel frame as the stop key, See Fig. 7). Secure the axle bolt using one (1) 3/4" nylon lock nut.

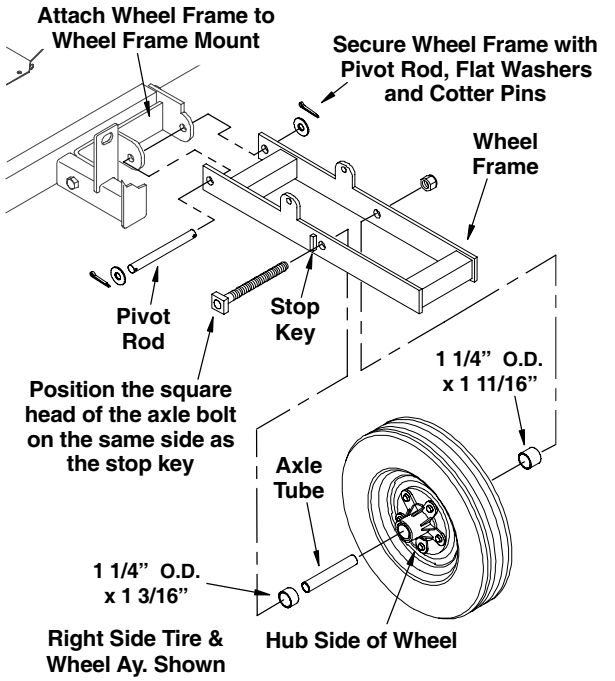


Figure 7

8. Install the brace frame weldments to wheel frame. Position the brace frames as shown in Fig's. 8 & 9 (the lower section of the brace frame will mount to the tabs on the wheel frame, the upper section of the brace frame will fit between the ears of the cross channel previously installed to the top of the conveyor housing).

   Secure the brace frame to the wheel frame using two (2) 1/2 x 1 1/2" bolts, and nylon lock nuts, tighten only enough to still allow the brace frame to pivot freely.

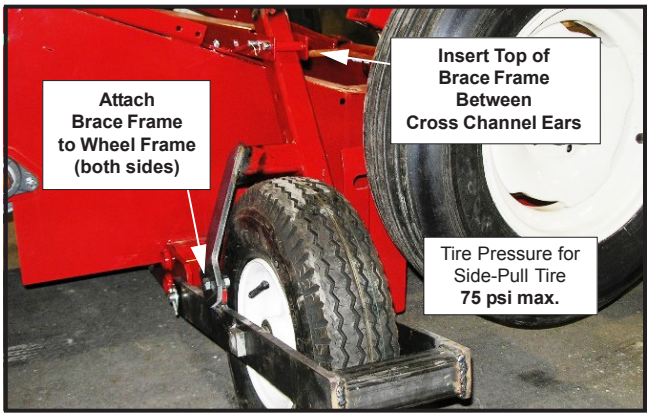


Figure 8

9. Note the two sets of holes on the ends of the cross channel, install a spacer between the outside holes of the cross channel and secure using one 3/8 x 3" bolt and nylon locknut (See Fig. 9).

   Raise the wheel assembly and align the top holes in the brace frame with the holes in the cross channel. Insert one washer-head pin and secure with the hair pin provided (See Fig. 9).

   Note: the wheel assembly will be in the lowered position when using the top hole of brace frame, it may be necessary to raise the conveyor higher to allow the brace frame to be pinned.

   Repeat these procedures on the opposite side of the conveyor.

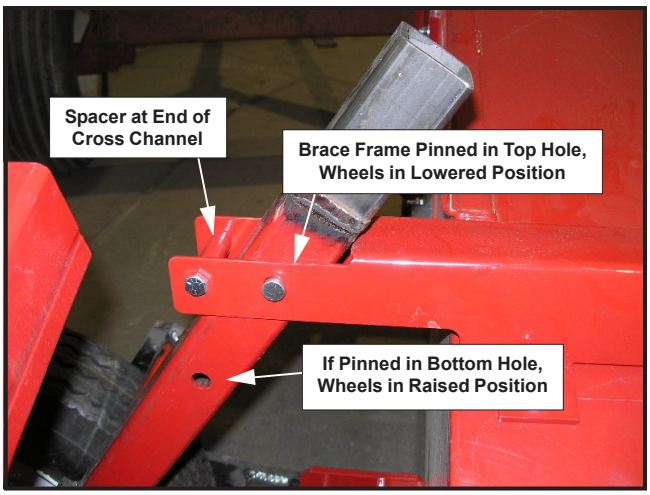


Figure 9

Assembly Instructions (con't.)

10. Install the hitch wheel to the front of the conveyor. Raise the front of the conveyor using the existing hand jack. Place jack stands or equivalent beneath the front of the conveyor for support.

CAUTION

- ***Do Not* rely solely on hydraulic or mechanical jacks for support. Use appropriate jack stands or equivalent for supporting the unit.**

11. Remove the existing hitch and hitch pins from the front of conveyor and install the hitch tube from the Side-Pull Kit. Secure using the hitch pins previously removed with the existing hitch.

12. Insert the axle bushing through the rim of the hitch wheel (See Fig. 10). Slide a spacer onto each side of the bushing and position the wheel assembly between the wheel frame yoke.

    Align the axle bushing with the mounting holes in the yoke and insert the 3/4" x 7" axle bolt. Secure using one 3/4" nylon locknut (the bushing measures 1" O.D. x 5 1/4" long, the axle spacer dimensions are 1 5/8" O.D. x 9/16" long).

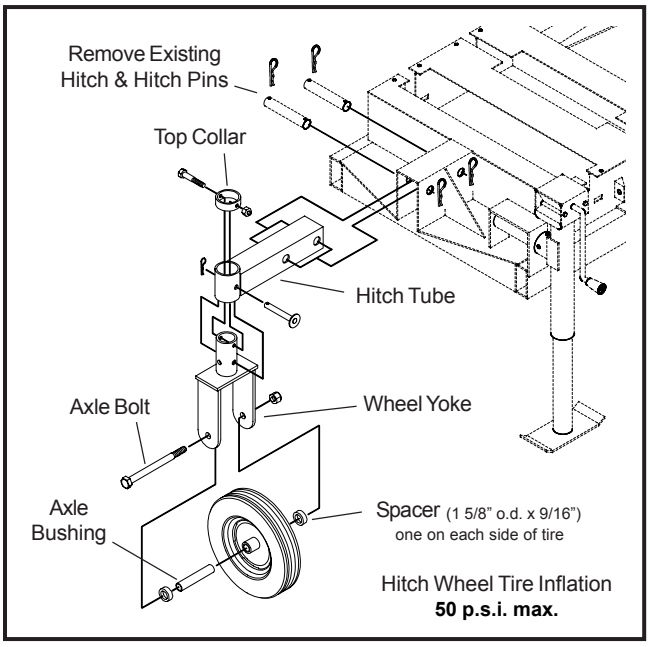


Figure 10

13. Slide the wheel assembly yoke into the end of the hitch tube. The yoke has four lower holes and two upper holes, align one set of the four holes with the holes in the hitch tube and secure using one washer-head hitch pin and hair pin.

14. Set the top collar onto the wheel yoke (See Fig. 10) align the mounting holes and secure using one (1) 3/8 x 3 1/2" bolt and nylon locknut.

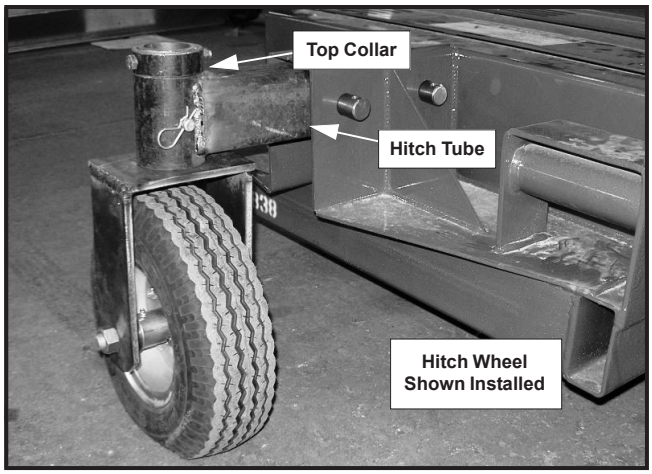


Figure 11

15. Remove the supports from beneath the conveyor, lower the conveyor to the ground and reinstall any shields that may have been removed during the assembly process. Assembly is now complete.

Side-Pull Wheel Shown in the Lowered Position

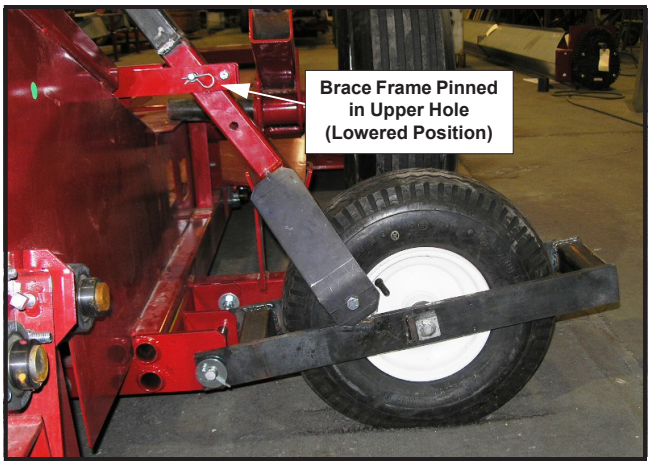


Figure 12

Side-Pull Wheels Shown in the Raised Position

Figure 13

Side-Pull Operation

Lower the Side-Pull Wheels

(to Move Drive-Over Conveyor Sideways)

1. Raise the conveyor undercarriage using the hydraulic lift (or screw jack) supplied with the conveyor. Raise the front of the conveyor using the hand jack until the hitch wheel can be rotated without interference from the ground.

   Remove the pins securing the wheel yoke to the hitch tube and pivot the yoke so the hitch wheel direction of travel is to the left and right of the conveyor.

   Apply upward pressure on the side-pull wheels and remove the pin from the brace frame and cross channel allowing the wheel frame to drop. Align the ***top*** holes in the brace frame with the holes in the cross channel and insert the pin to lock the wheels in the lowered position.

   Once the side-pull wheels on each side of the conveyor have been lowered and the hitch wheel has been properly positioned, lower the undercarriage and hand jack so the conveyor is resting only on the front hitch wheel and side-pull wheels.

   The conveyor can now be moved sideways to the desired location.

Raise the Side-Pull Wheels

(to Transport Drive-Over Conveyor from Site to Site)

2. To transport the conveyor to another site location, use the hand jack and the hydraulic lift (or screw jack) and raise the conveyor high enough to lift the hitch wheel and side-pull wheels off the ground.

   Remove the hitch tube and wheel assembly from the front of the conveyor and replace with the original tow hitch previously removed in Step 11.

3. Remove the pins securing the brace frames to the cross channel and raise each wheel assembly aligning the ***bottom*** holes in the brace frame with the holes in the cross channel. Secure with the pins previously removed.

   The drive-over conveyor can now be transported to a new site location.

Tire Inflation Pressure

Front Hitch Tire: 50 P.S.I. max.

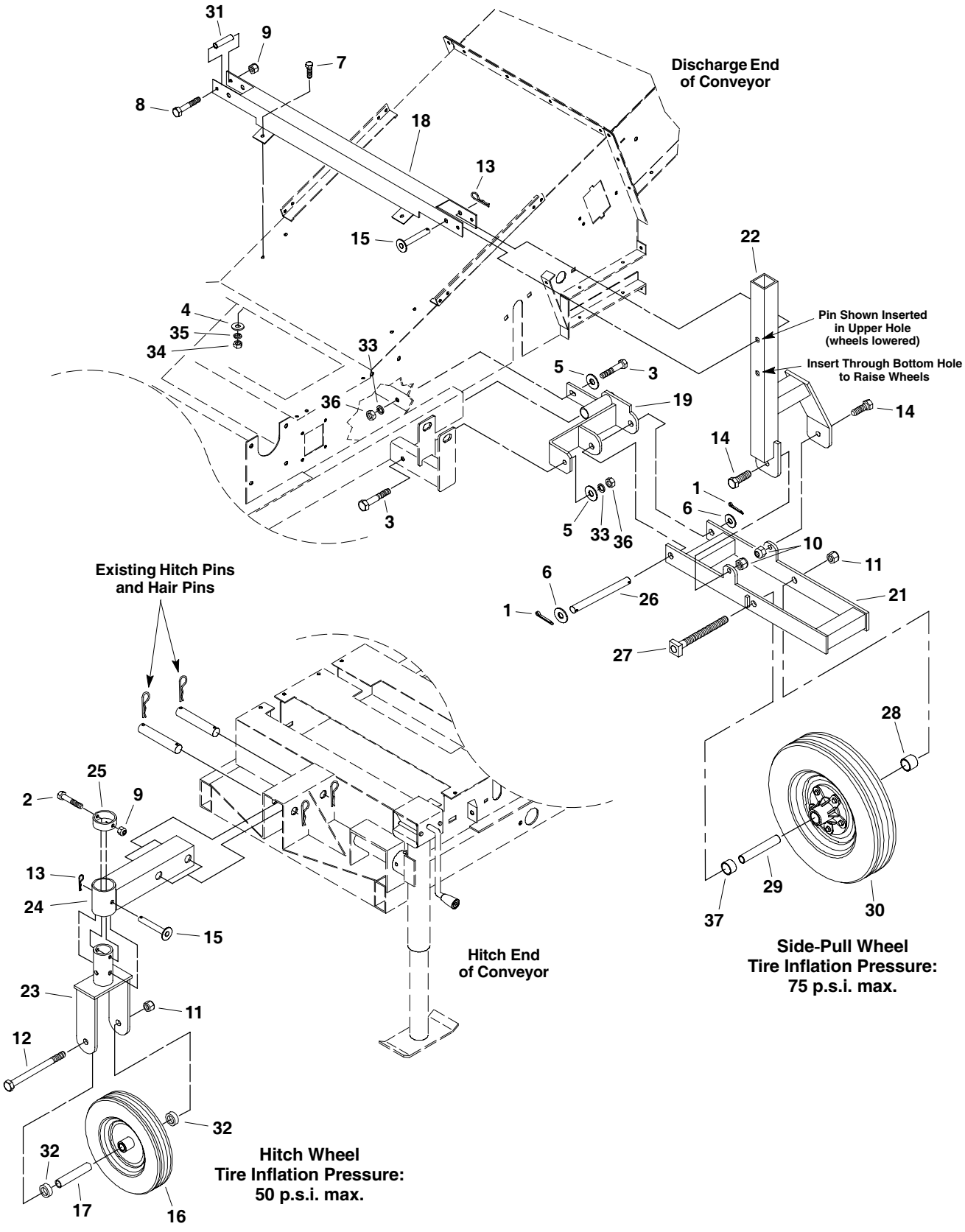
Side-Pull Tires: 75 P.S.I. max.

Bolt Kit for Side-Pull Accessory

Part No.	Description	Qty.	Where Used
4911	Bolt, HHCS, 1/2-13 x 3 1/2" G5 PLT	4	Rear Wheel Frame Mounts
33025	Washer, 1/2" flat PLT	4	to Drive-Over Frame
D1143	Washer, lock 1/2" PLT	4	
D1169	Nut, non-lock, 1/2-13	4	
33060	Bolt, 3/8-16 x 1" G5 PLT	4	Cross Channel Weldment to
33024	Washer, 3/8" flat PLT	4	Top of Drive-Over Bend Section
D1150	Washer, lock, 3/8" PLT	4	
D1149	Nut, non-lock, 3/8 -16, PLT	4	
33068	Bolt, 3/8-16 x 3" HHCS G5 PLT	2	Spacer Tubes to End
33136	Nut, nylon lock, 3/8-16 PLT	2	of Cross Channel
4104	Pin, cotter, 3/16" - 1 3/4"	4	Pivot Pin Ends for Side-Pull Wheel
33027	Washer, 3/4" flat	4	Frames to Wheel Frame Mount
1002227	Bolt, 1/2-13 x 1 1/2" G5 PLT	4	Side-Pull Brace Frames
33138	Nut, nylon lock, 1/2-13	4	to Side-Pull Wheel Frames
1004275	Pin, washer-head 1/2" x 3 1/8"	2	Side-Pull Brace Frames
635164	Pin, hair .094 dia. x 2" long	2	to Cross Channel Weldment
4827	Bolt, HHCS, 3/8-16 x 3 1/2" G5 PLT	1	Hitch Wheel Frame
33136	Nut, nylon lock 3/8-16	1	to Hitch Tube Frame
1004275	Pin, washer-head, 1/2" x 3 1/2"	1	
635164	Pin, hair .094 dia. x 2" long	1	
33214	Bolt, 3/4" x 7" HHCS G5 PLT	1	Hitch Wheel to Hitch Wheel Frame
33140	Nut, nylon lock, 3/4-10 PLT	1	
33140	Nut, nylon lock, 3/4-10 PLT	2	Side-Pull Wheel Axle Bolts

SIDE-PULL KIT, PART NO. 1030590

for use with the Drive-Over Belt Conveyor



SIDE-PULL KIT, PART NO. 1030590

for use with the Drive-Over Belt Conveyor

Ref No.	Part No.	Description	No. Req'd.
	1030590	Kit, Side-Pull	1
1	4104	•Pin, cotter 3/16" x 1 3/4"	4
2	4827	•Bolt, 3/8-16 x 3 1/2" g5 plt	1
3	4911	•Bolt, 1/2-13 x 3 1/2" g5 plt	4
4	33024	•Washer, 3/8" flat, plt	4
5	33025	•Washer, 1/2" flat, plt	4
6	33027	•Washer, 3/4" flat, plt	4
7	33060	•Bolt, 3/8-16 x 1" g5 plt	4
8	33068	•Bolt, 3/8-16 x 3" g5 plt	2
9	33136	•Nut, nylon lock, 3/8"-16	3
10	33138	•Nut, nylon lock, 1/2"-13	4
11	33140	•Nut, nylon lock, 3/4"-10	3
12	33214	•Bolt, 3/4-10 x 7" g5 plt	1
13	635164	•Pin, hair, .094 dia. x 2"	3
14	1002227	•Bolt, 1/2-13 x 1 1/2" g5 plt	4
15	1004275	•Pin, washer–head, 1/2" x 3 1/8"	3
16	1029268	•Tire and Wheel, front hitch 4.10/6 4-ply, 4 1/2" hub	1
17	1030291	•Bushing, hitch wheel axle	1
18	1030297	•Cross channel	1
19	1030553	•Frame, wheel mount (RH)	1
20 *f*	1030554	•Frame, wheel mount (LH)	1
21	1030563	•Frame, side-pull wheel	2
22	1030564	•Brace frame, side-pull	2
23	1030571	•Frame, hitch wheel	1
24	1030575	•Hitch tube	1
25	1030578	•Top collar	1
26	1030579	•Shaft, pivot 3/4" x 8 1/2"	2
27	1030582	•Bolt, axle, side-pull wheel	2
28	1034844	•Spacer, axle (1 11/16" long)	2
29	1030584	•Axle tube, side-pull	2
30	1030587	•Tire and Wheel, 5.70/8 6-ply, bolt-in style hub	2
31	1030588	•Spacer tube, cross channel	2
32	1030589	•Spacer, hitch wheel axle	2
33	D1143	•Washer, lock 1/2" plt	4
34	D1149	•Nut, non-lock 3/8-16 plt	4
35	D1150	•Washer, lock 3/8" plt	4
36	D1169	•Nut, non-lock 1/2-13 plt	4
37	1034845	•Spacer, axle (1 3/16" long)	2

• Indented parts names indicate these parts are included in the previous assembly.

f Not illustrated.

Hutchinson/Mayrath/TerraTrack

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