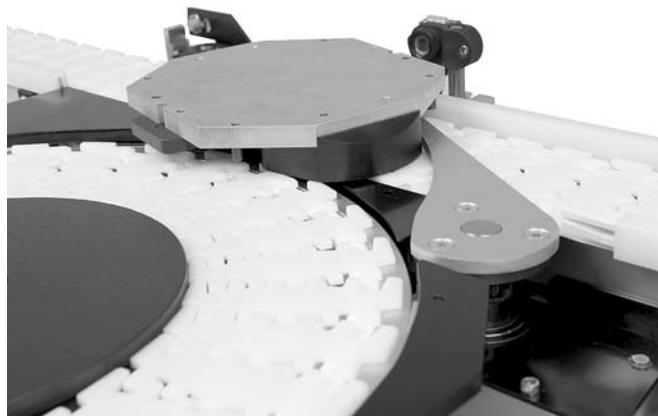




SmartFlex Pallet System Accessories

Installation, Maintenance & Parts Manual



Divert and Merge



Lift and Locate Station / Pallet Stop



Pallet

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IMPORTANT

Some illustrations may show guards removed. DO NOT operate equipment without guards.

Upon receipt of shipment:

- Compare shipment with packing slip. Contact factory regarding discrepancies.
- Inspect packages for shipping damage. Contact carrier regarding damage.
- Accessories may be shipped loose. See accessory instructions for installation.

Dorner's Limited Warranty applies.

Dorner has convenient, pre-configured kits of Key Service Parts for all conveyor products. These time saving kits are easy to order, designed for fast installation, and guarantee you will have what you need when you need it. Key Parts and Kits are marked in the Service Parts section of this manual with the Performance Parts Kits logo .

Dorner reserves the right to make changes at any time without notice or obligation.

Warnings – General Safety

⚠ WARNING

The safety alert symbol, black triangle with white exclamation, is used to alert you to potential personal injury hazards.

⚠ DANGER



Climbing, sitting, walking or riding on conveyor will cause severe injury. **KEEP OFF CONVEYORS.**

⚠ DANGER



DO NOT OPERATE CONVEYORS IN AN EXPLOSIVE ENVIRONMENT.

⚠ WARNING



Exposed moving parts can cause severe injury. **LOCK OUT POWER** before removing guards or performing maintenance.

⚠ WARNING



Gearmotors may be HOT.
DO NOT TOUCH Gearmotors.

⚠ WARNING



Dorner cannot control the physical installation and application of conveyors. Taking protective measures is the responsibility of the user.

When conveyors are used in conjunction with other equipment or as part of a multiple conveyor system, **CHECK FOR POTENTIAL PINCH POINTS** and other mechanical hazards before system start-up.

⚠ WARNING



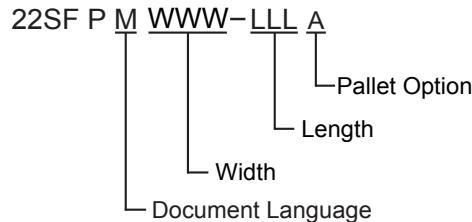
Loosening stand height or angle adjustment screws may cause conveyor sections to drop down, causing severe injury.

SUPPORT CONVEYOR SECTIONS PRIOR TO LOOSENING STAND HEIGHT OR ANGLE ADJUSTMENT SCREWS.

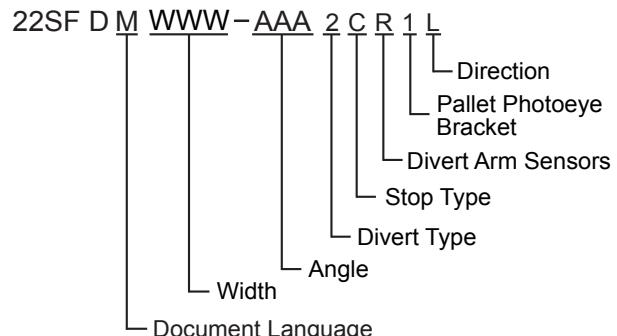
Specifications

Accessories:

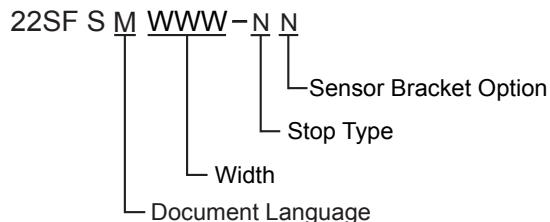
Pallets



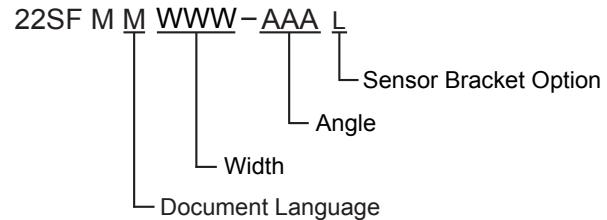
Divert and Merge



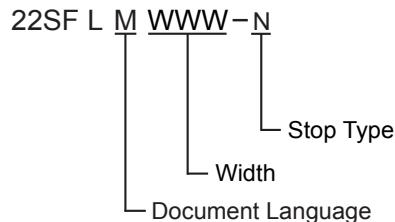
Pallet Stops



Fixed Merge



Lift and Locate Station



Installation

Required Tools

- 3/32" hex wrench
- 3 mm hex wrench
- 4 mm hex wrench
- 5 mm hex wrench
- 6 mm hex wrench
- 7 mm wrench
- 10 mm wrench
- 13 mm wrench
- Belt Removal Tool #203480

Pallets

1. Place pallet (**Figure 1, item 1**) on conveyor belt (**Figure 1, item 2**).

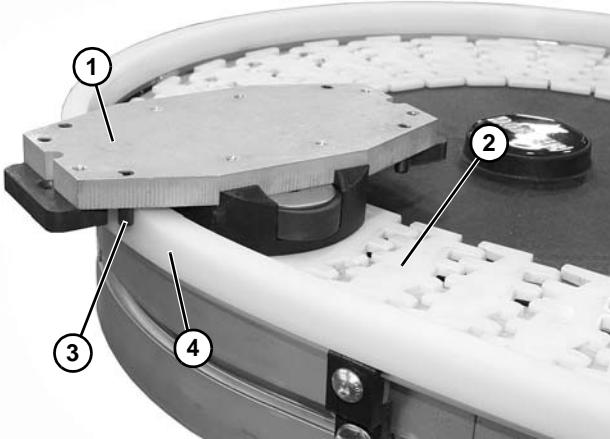


Figure 1

2. Make sure that the guide pins (**Figure 1, item 3**) are on the outside of the wear strip (**Figure 1, item 4**).

Pallet Stops

The following procedure is for the Cushioned Stop Module. The procedure for the Fixed Stop Module is similar.

1. Install pallet stop (**Figure 2, item 1**) to the conveyor.

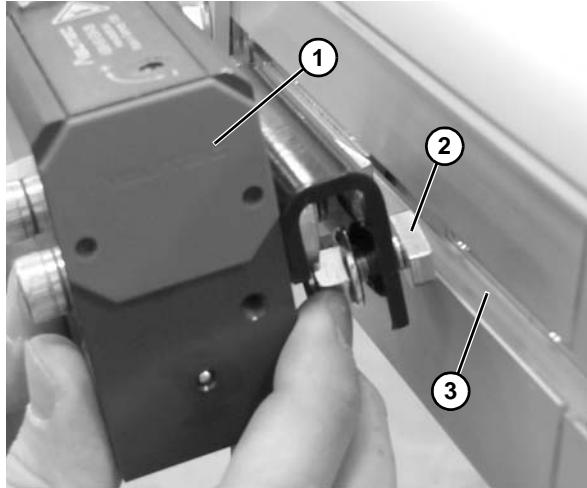


Figure 2

2. Make sure that the studs (**Figure 2, item 2**) are inside the channel (**Figure 2, item 3**) of the conveyor.

NOTE

*Make sure that the studs (**Figure 2, item 2**) rotate inside the channel and engage with the conveyor.*

3. Tighten hex nuts (**Figure 3, item 1**) with wrench.

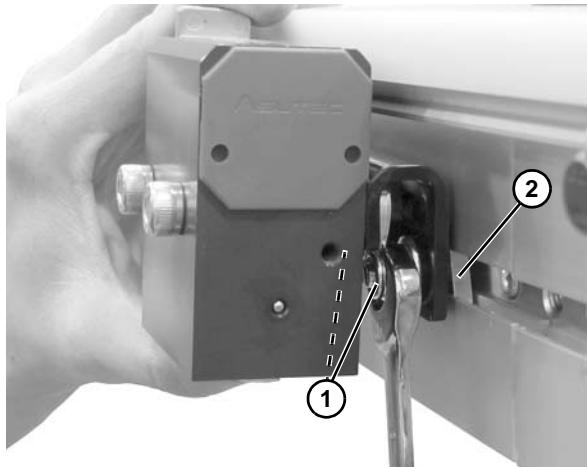


Figure 3

Pneumatic and Control Logic Suggestions

Recommended Pneumatics

Dorner recommends using a 3 port, 2 way solenoid valve (**Figure 4**) to operate Pallet Stops.

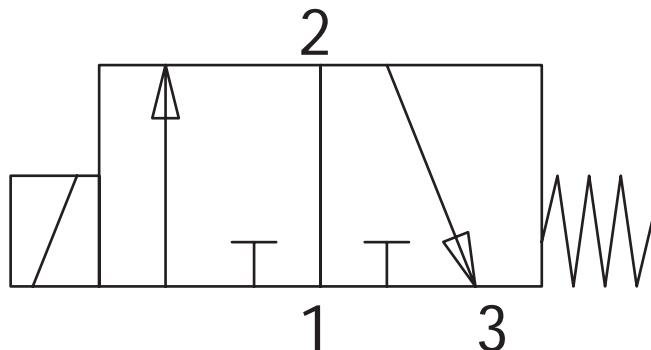


Figure 4

Attaching and Operations of Pneumatics

1. Connect the solenoid to the stop. Dorner fittings (**Figure 5, item 1**) accept 1/4" outside diameter tubing standard (**Figure 5, item 2**).

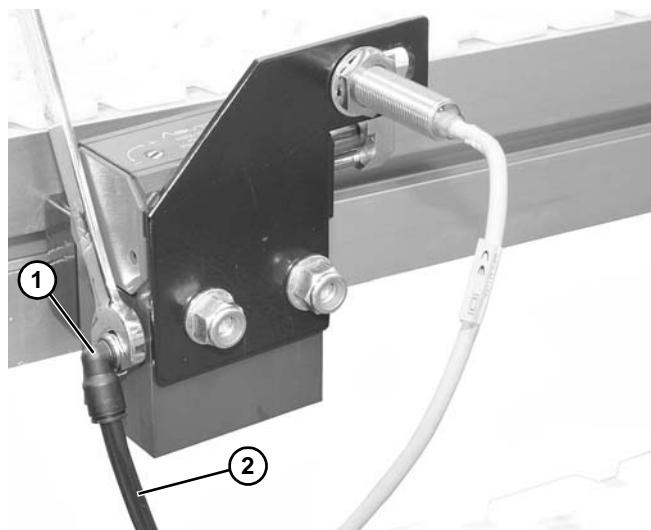


Figure 5

2. Stops release the pallet when air is supplied to the stop.

Sensor Installation and Basic Logic

2 Options:

- Side Sensor (**Figure 6**)
- Bottom Up Sensor (**Figure 7**)

Optional sensor bracket (**Figure 6, item 1**) and (**Figure 7, item 1**) can be used to mount a 12 mm barrel proximity sensor (**Figure 6, item 2**) and (**Figure 7, item 2**).

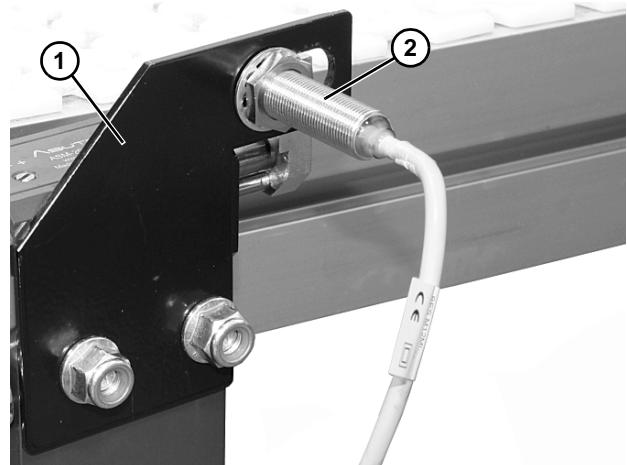


Figure 6

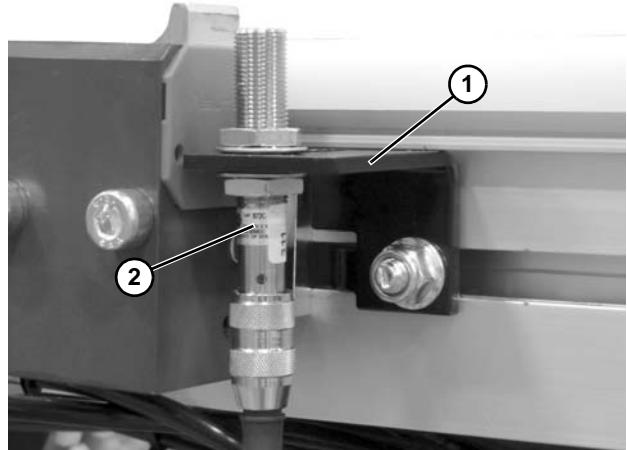


Figure 7

- Proximity sensor detects off the pallet stop block.
- Use proximity sensor to detect pallet located at the stop.
- The stop can reset when the proximity sensor signal clears.

Installation

Lift and Locate Station

1. Raise lift and locate station (**Figure 8, item 1**), on an angle as shown, into position from under the conveyor.

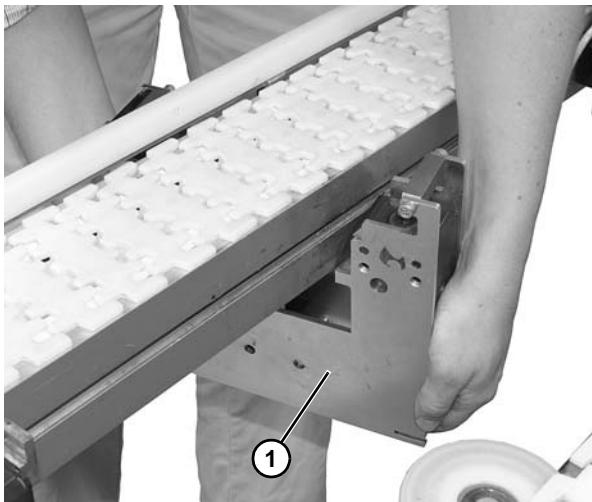


Figure 8

2. Rotate lift and locate station so that the tabs (**Figure 9, item 1**) on both sides can be inserted into the channel (**Figure 9, item 2**) of the conveyor.

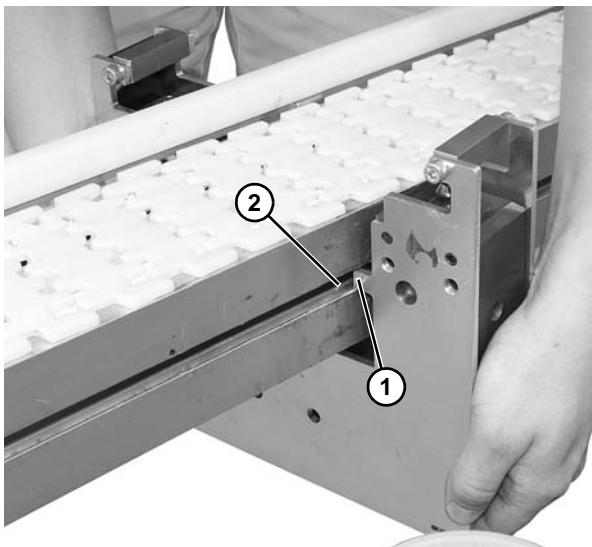


Figure 9

NOTE

Make sure that the stud rotates inside the channel and engages with the conveyor.

3. Loosely install angle bracket (**Figure 10, item 1**) to conveyor with M8 x 20 mm stud and hex nut (**Figure 10, item 2**).

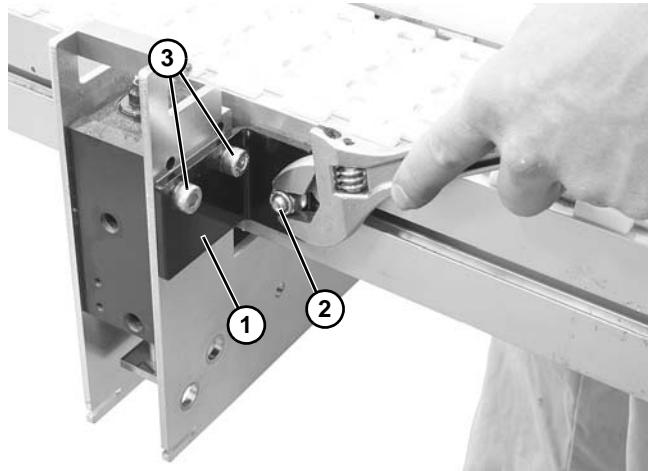


Figure 10

4. Loosely secure the angle bracket (**Figure 10, item 1**) to the lift and locate station with two socket head screws (**Figure 10, item 3**).
5. Repeat on opposite side of conveyor.
6. Tighten socket head screws and hex nuts.
7. Place pallet (**Figure 11, item 1**) on lift and locate (**Figure 11, item 2**).

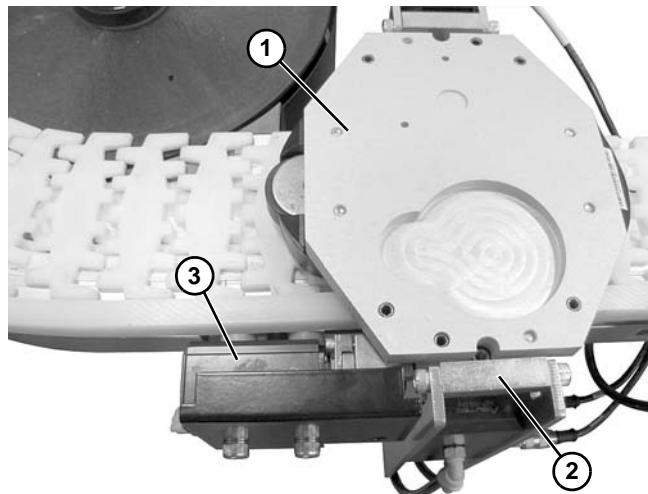


Figure 11

8. Install pallet stop (**Figure 11, item 3**). Position against pallet.

Installation

9. Install lead in guide clip (**Figure 12, item 1**) 4" before angle bracket (**Figure 12, item 2**). Lead in guide clip has a washer (**Figure 12, item 3**) between the frame and clip.

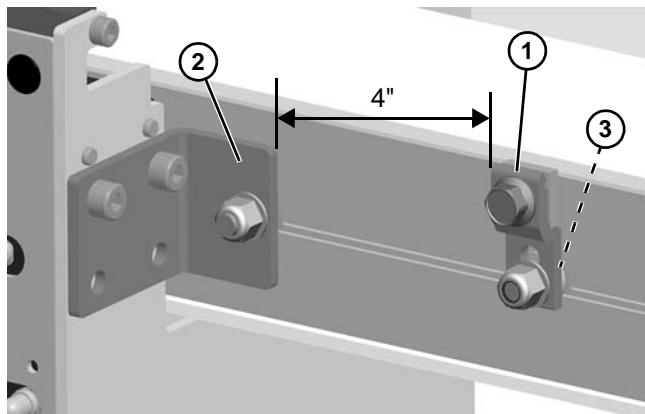


Figure 12

Attaching and Operations of Pneumatics

1. Connect the 3 port, 2 way solenoid valve to the stop. Dorner fittings (**Figure 15, item 1**) accept 1/4" outside diameter tubing standard.



Figure 15

Pneumatic and Control Logic Suggestions

Recommended Pneumatics

Dorner recommends using a 3 port, 2 way solenoid valve (**Figure 13**) to operate Lift and Locate Stop.

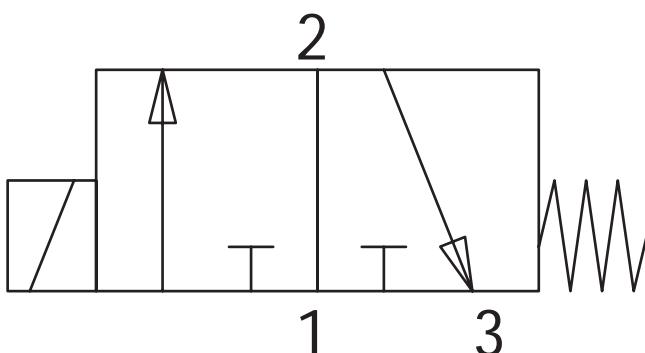


Figure 13

Dorner recommends using a 5 port, 2 way solenoid valve (**Figure 14**) to operate Lift and Locate Pallet Unit.

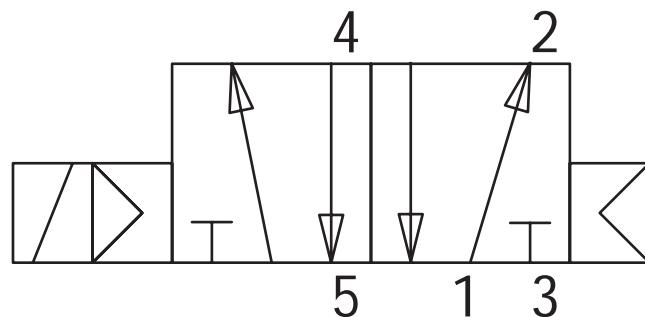


Figure 14

2. Stops release when air is supplied to the stop.
3. Connect Port 4 (**Figure 14**) of the 5 port, 2 way solenoid to the lowest port (**Figure 16, item 1**) on the lift. Dorner fittings accept 1/4" outside diameter tubing standard.
4. Connect Port 2 (**Figure 14**) of the 5 port, 2 way solenoid to the upper port (**Figure 16, item 2**) on the lift. Dorner fittings accept 1/4" outside diameter tubing standard.

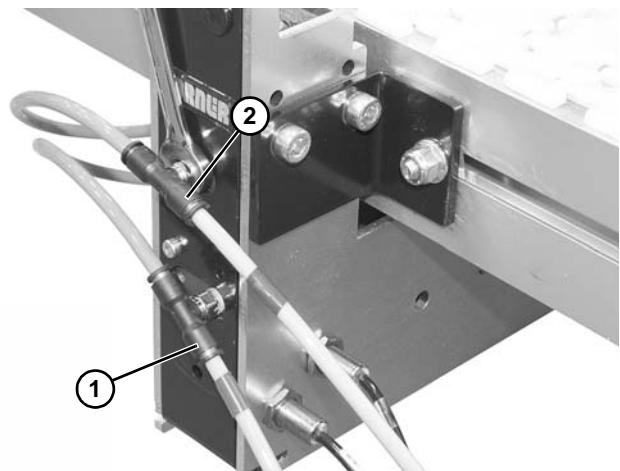


Figure 16

- The lift raises when air is supplied to the lower port of the lift and the upper port is allowed to exhaust.
- The lift lowers when air is supplied to the upper port of the lift and the lower port is allowed to exhaust.

Installation

Sensor Installation and Basic Logic

1. Mount pallet sensing 12 mm barrel proximity sensor (**Figure 17, item 1**).

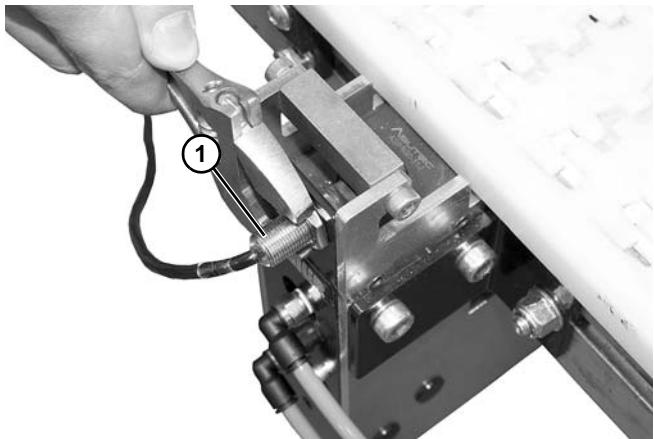


Figure 17

- Proximity sensor detects off the pallet stop block.
 - Use proximity sensor to detect pallet located at the stop.
 - The stop can reset when the proximity sensor signal clears.
2. 12 mm barrel proximity sensors can be mounted to the side of the lift that will detect if the lift is in the up or down position:
 - a. Remove screw (**Figure 18, item 1**) from lift side cover.



Figure 18

- b. Remove side cover (**Figure 19, item 1**).

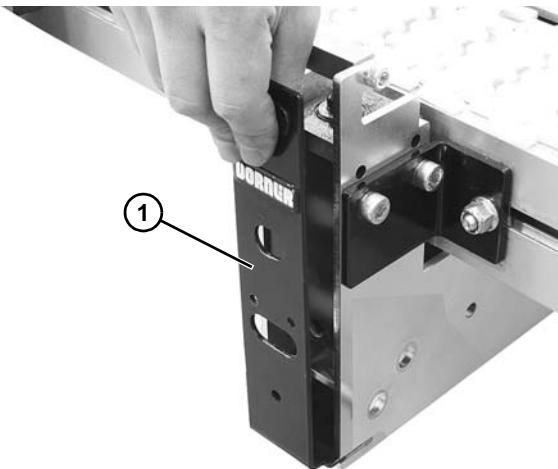


Figure 19

- c. Remove plastic cover and mount sensors (**Figure 20, item 1**) to lift frame. Install side cover with screw.

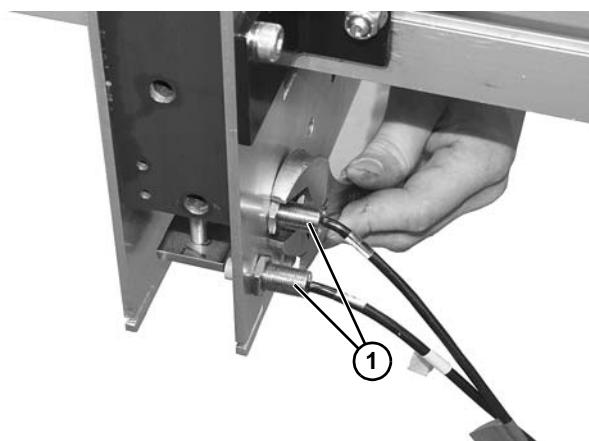


Figure 20

Divert and Merge

90° Divert-Merge shown. All other configurations are similar. See layout drawings starting on page 14.

NOTE

Make sure that the stud(s) rotate inside the channel and engage with the conveyor.

1. Install conveyor tie plate (**Figure 21, item 1**) to straight conveyor section (**Figure 21, item 2**) with two M8 x 35 mm studs (**Figure 21, item 3**), washers (**Figure 21, item 4**), and hex nuts (**Figure 21, item 5**).

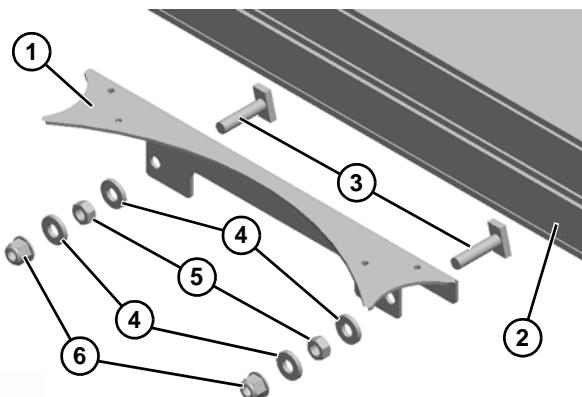


Figure 21

2. Thread on hex nuts (**Figure 21, item 6**) a couple turns at this time.
3. Install tie bar (**Figure 22, item 1**) to curved conveyor section (**Figure 22, item 2**) with two M8 x 20 mm studs (**Figure 22, item 3**) and hex nuts (**Figure 22, item 4**).

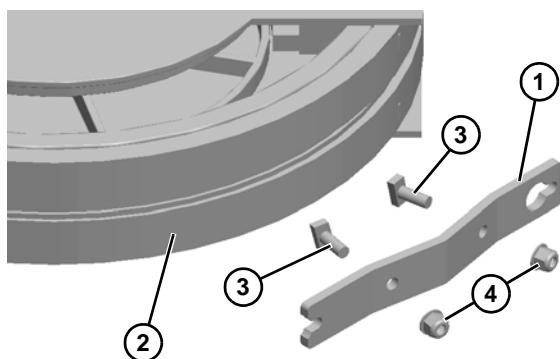


Figure 22

4. Connect conveyor sections together. Make sure that the tie bar (**Figure 23, item 1**) is positioned between washers (**Figure 23, item 2**) and hex nuts (**Figure 23, item 3**) on both sides.

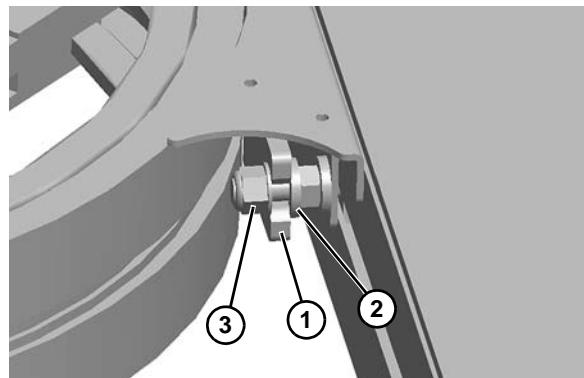


Figure 23

5. Tighten hex nuts (**Figure 23, item 3**).
6. To aid in the installation of the diverter assembly, loosen socket head screw (**Figure 24, item 1**) on flange collar (**Figure 24, item 2**). Remove diverter arm (**Figure 24, item 3**).

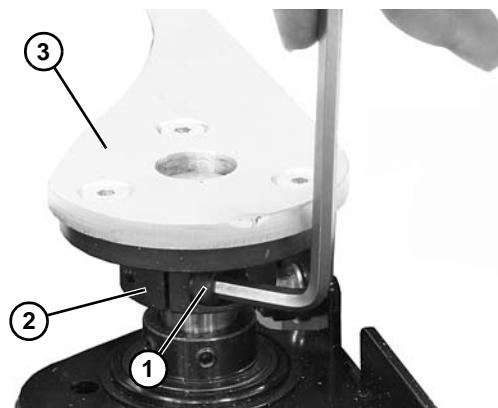


Figure 24

7. Install diverter assembly (**Figure 25, item 1**) to conveyor (**Figure 25, item 2**) with two M8 x 20 mm studs and hex nuts (**Figure 25, item 3**).

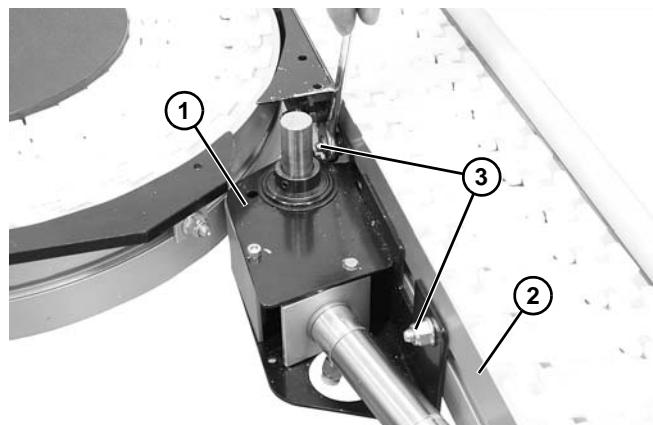


Figure 25

Installation

8. Tighten hex nuts with wrench.
9. Install diverter arm (**Figure 24, item 3**).
10. Install two angle supports (**Figure 26, item 1**) to conveyor with two M8 x 20 mm studs and hex nuts (**Figure 26, item 2**). Do not tighten hex nuts at this time.

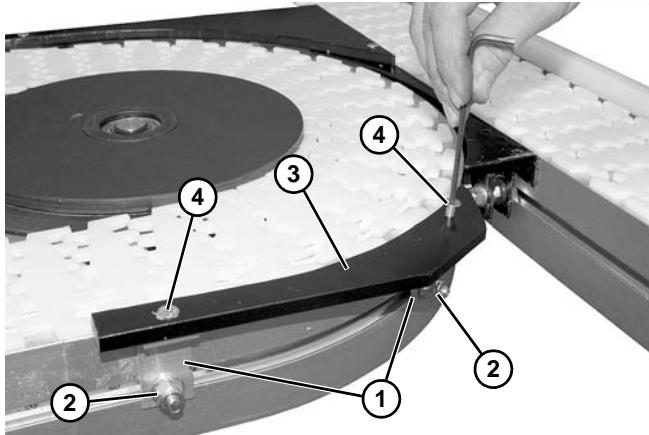


Figure 26

11. Install exit wedge guide (**Figure 26, item 3**) to angle supports with two flat head screws (**Figure 26, item 4**).
12. Tighten hex nuts with wrench.
13. Install one angle support (**Figure 27, item 1**) to conveyor with one M8 x 20 mm stud and hex nut. Do not tighten hex nut at this time.

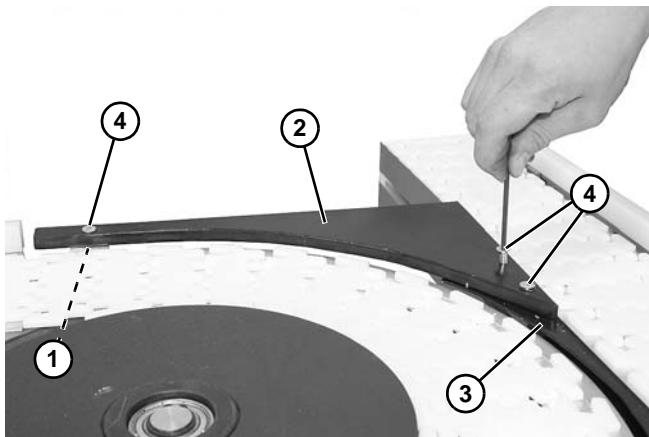


Figure 27

14. Install entrance wedge guide (**Figure 27, item 2**) to angle support and conveyor tie plate (**Figure 27, item 3**) with three flat head screws (**Figure 27, item 4**).
15. Tighten hex nut with wrench.

Guiding

For exact locations refer to layout drawings starting on page 14.

1. Attach wear strip (**Figure 28, item 1**) to guiding (**Figure 28, item 2**).

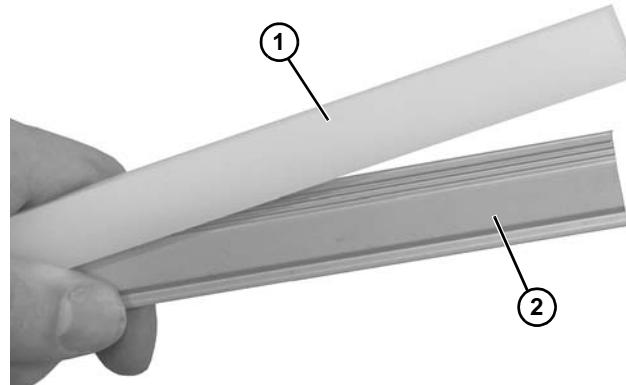


Figure 28

2. Attach clip (**Figure 29, item 1**) to guiding (**Figure 29, item 2**).

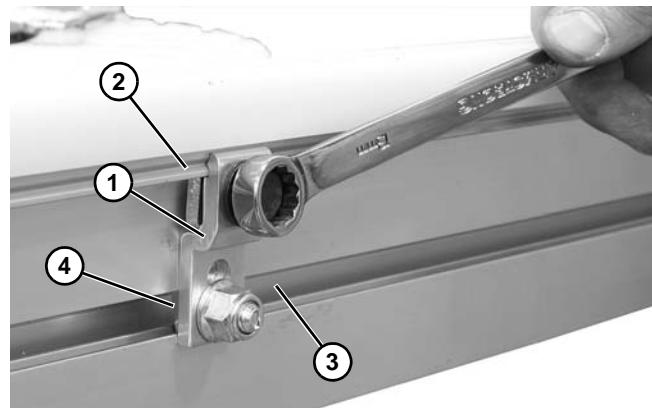


Figure 29

NOTE

Make sure that the studs (**Figure 29, item 4**) rotate inside the channel and engage with the conveyor.

3. Attach clip (**Figure 29, item 1**) to conveyor (**Figure 29, item 3**).

NOTE

Guiding can be assembled in a high position (**Figure 30, item 1**) or a low position (**Figure 30, item 2**).

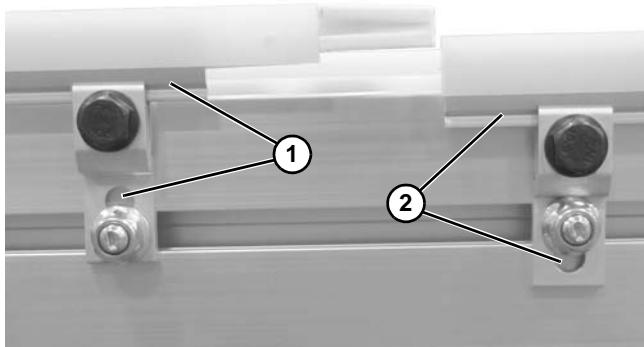


Figure 30

NOTE

Be certain that slot (**Figure 31, item 1**) is close to vertical when finished tightening nut.

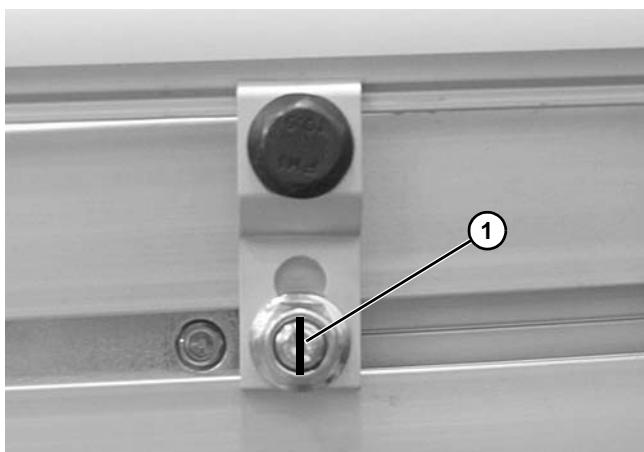
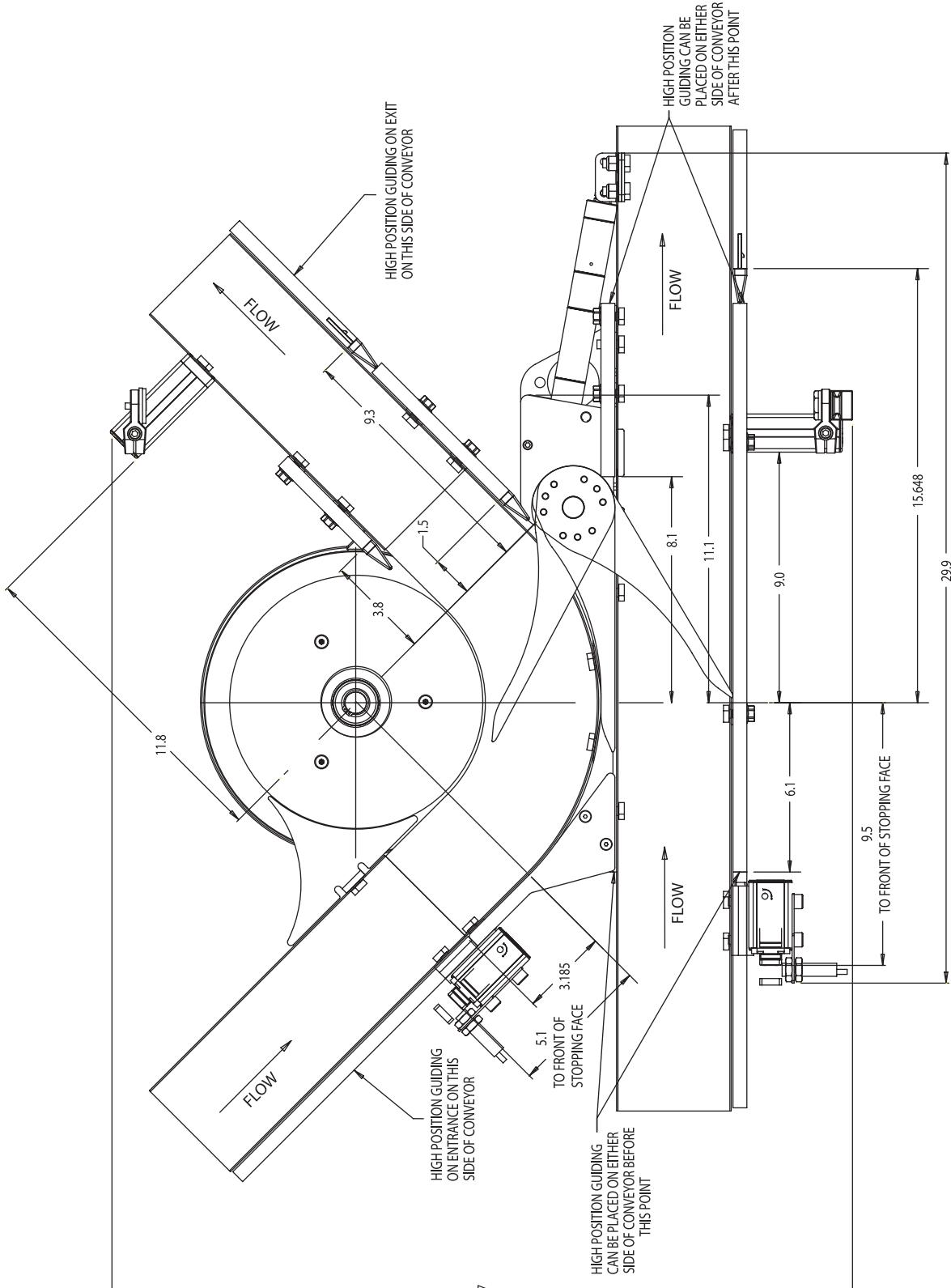


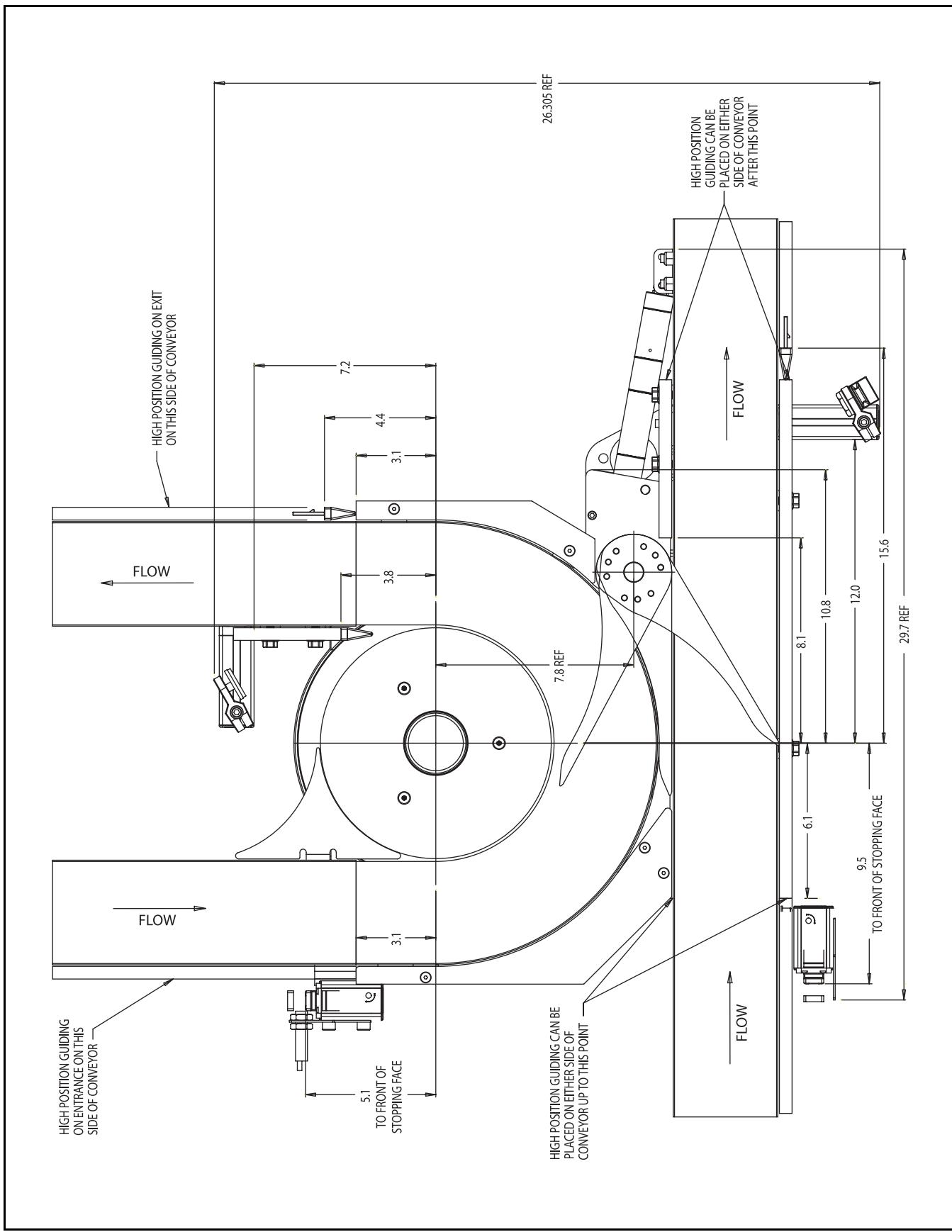
Figure 31

Installation

45° Divert-Merge Layout

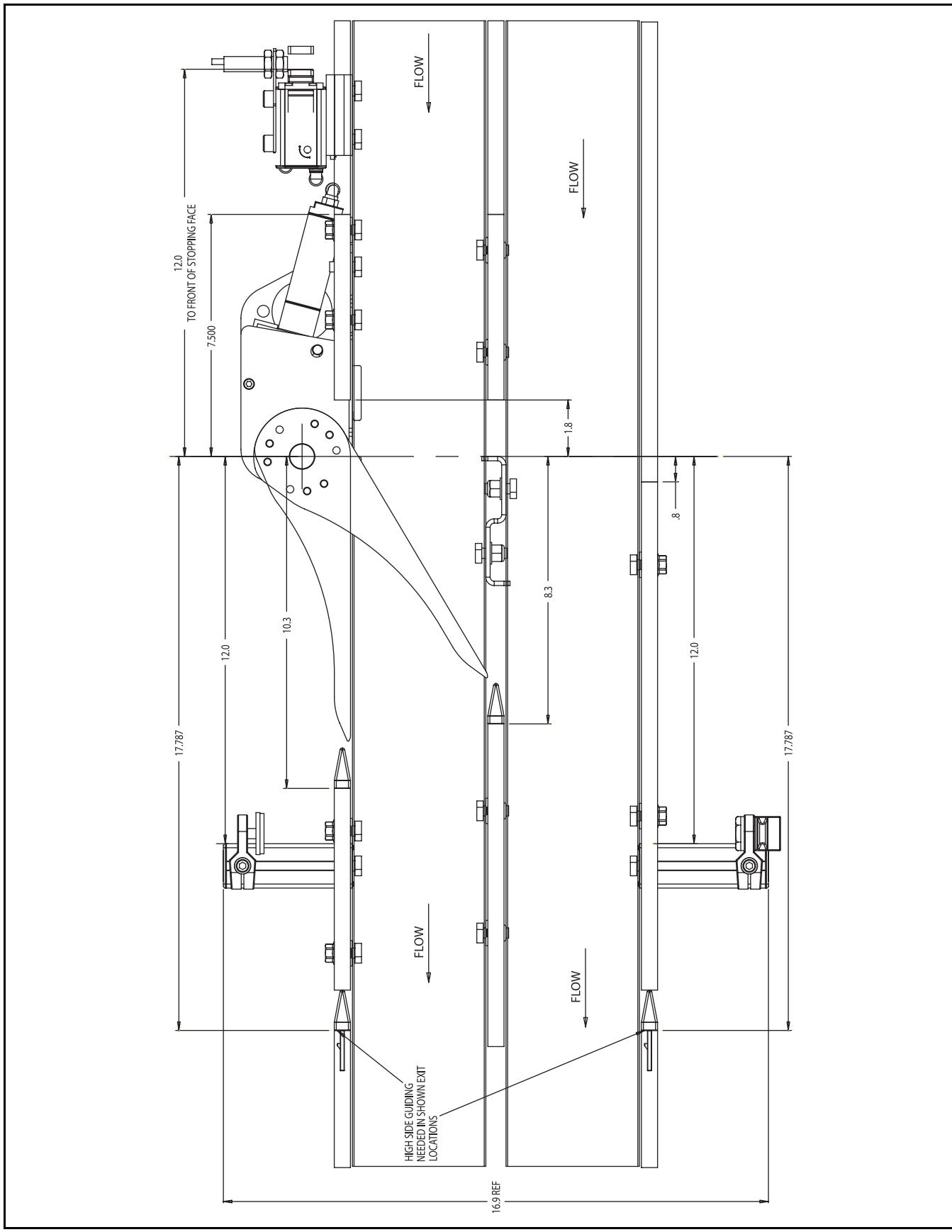


90° Divert-Merge Layout

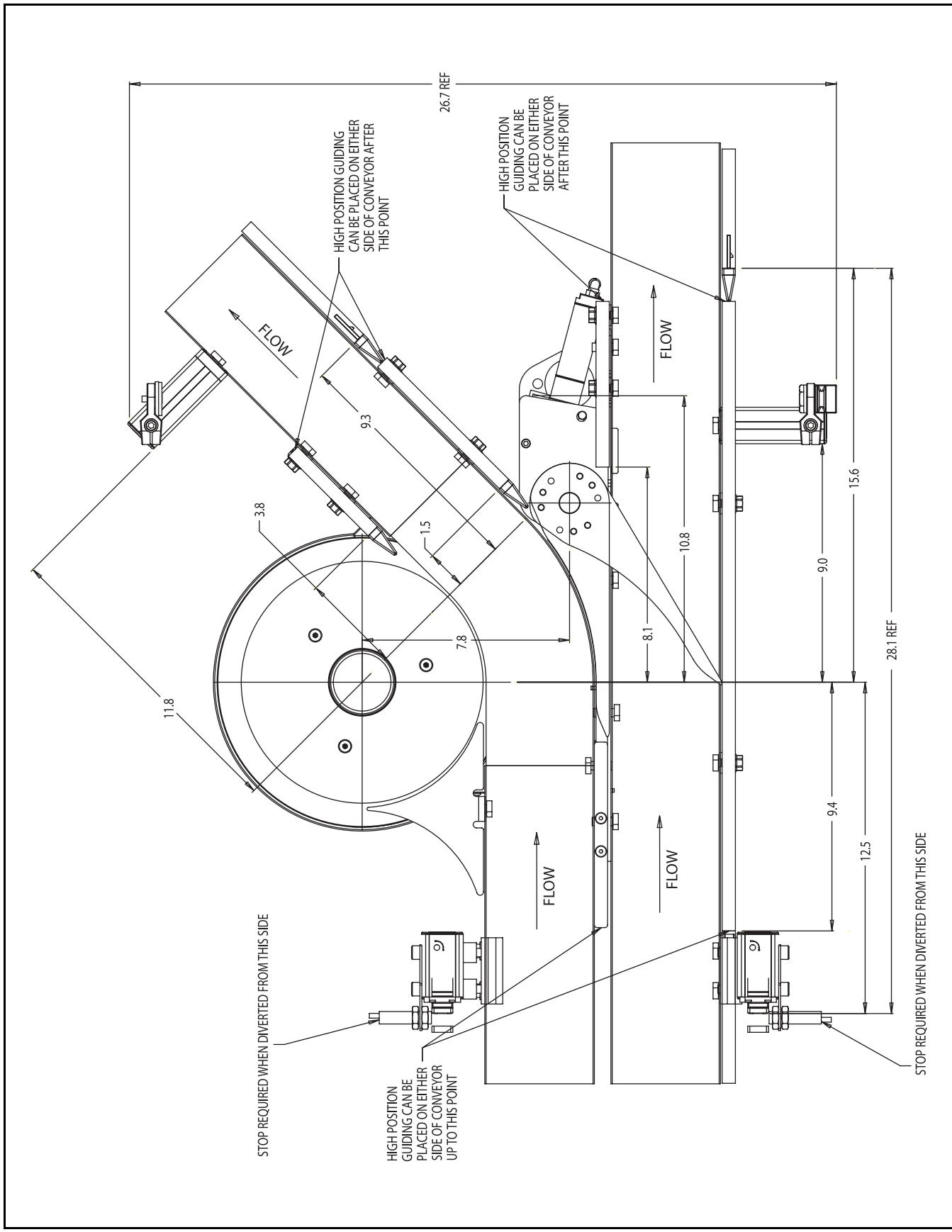


Installation

Parallel Divert-Merge Layout

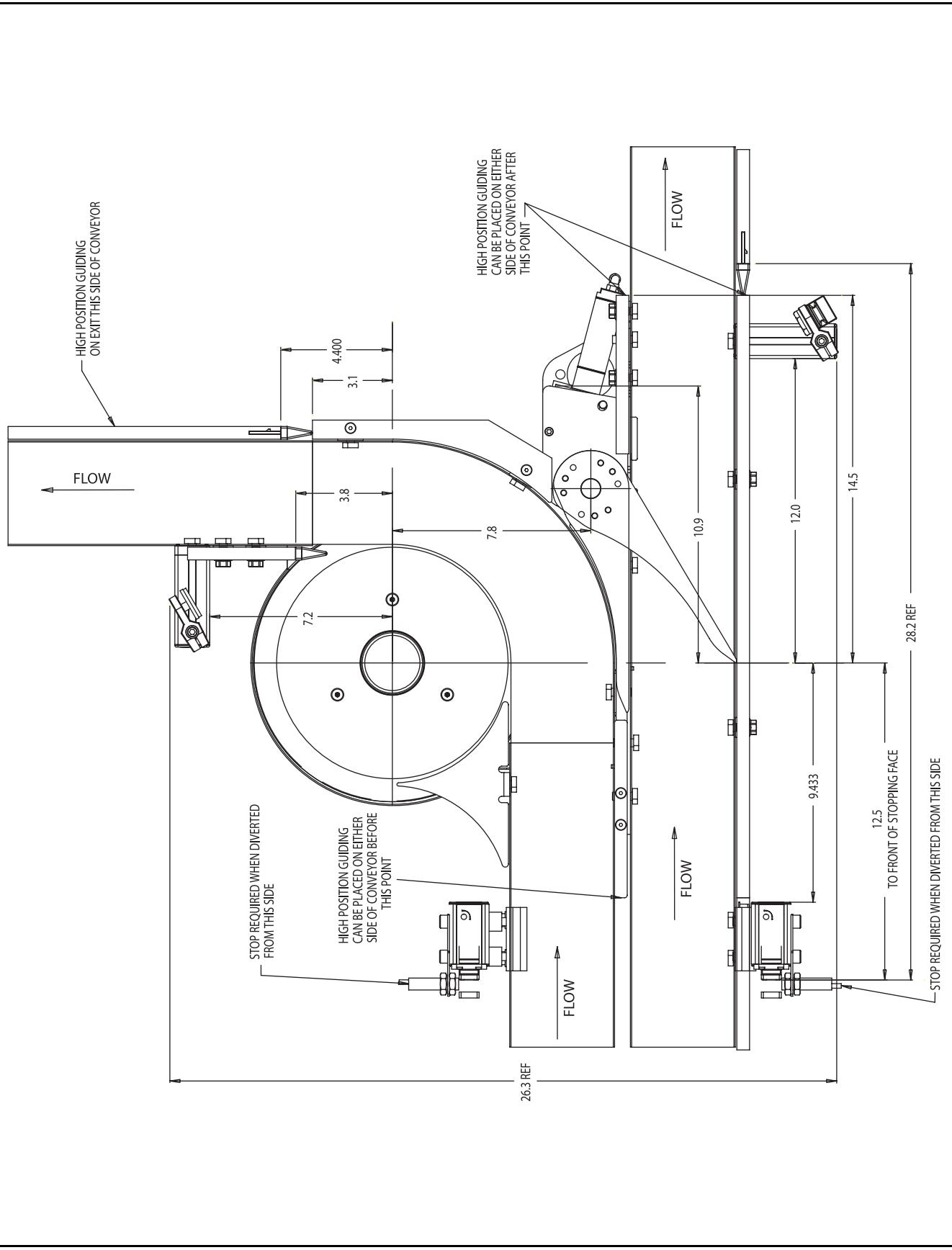


45° Parallel Divert-Merge Layout



Installation

90° Parallel Divert-Merge Layout



Pneumatic and Control Logic Suggestions

Diverts Only

Recommended Pneumatics

Dorner recommends using a 5 port, 2 way solenoid valve (**Figure 32**) to divert.

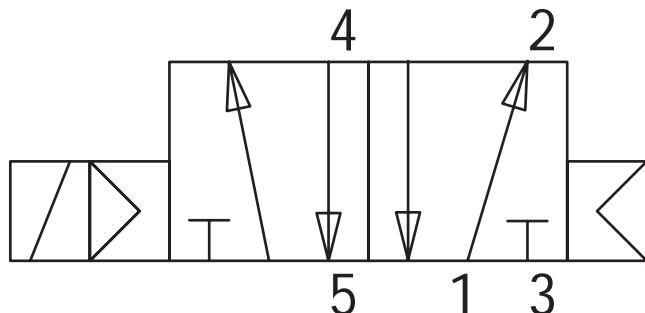


Figure 32

Attaching and Operations of Pneumatics

1. Connect Port 4 (**Figure 32**) of the 3 port, 2 way solenoid to the cylinders back port (**Figure 33, item 1**). Dorner fittings accept 1/4" outside diameter tubing standard.
2. Connect Port 2 (**Figure 32**) of the 3 port, 2 way solenoid to the cylinders front port (**Figure 33, item 2**). Dorner fittings accept 1/4" outside diameter tubing standard.

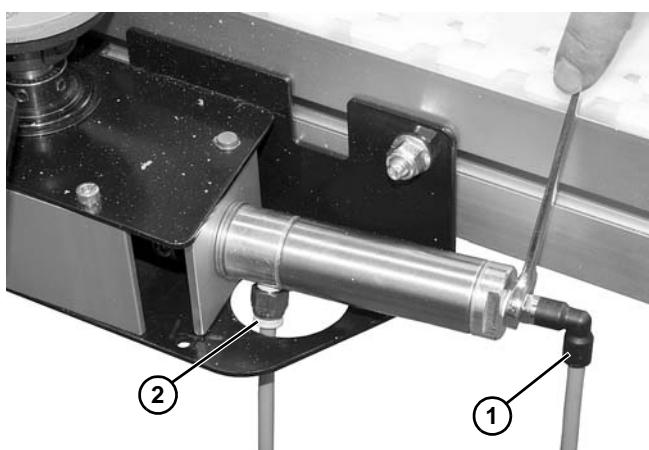


Figure 33

- The divert arm will swing into the conveyor when air is supplied to the back port of the cylinder and the front port is allowed to exhaust.
- The divert arm will swing away from the conveyor when air is supplied to the front port of the cylinder and the back port is allowed to exhaust.

3. Adjust limits:

- a. Move divert to maximum displacement angle (**Figure 34, item 1**).

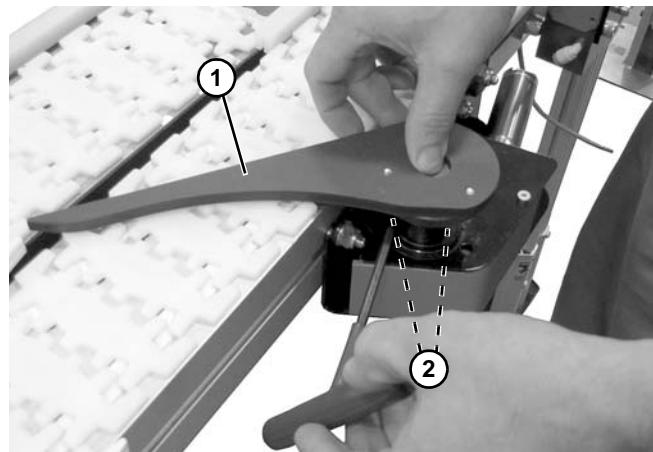


Figure 34

- b. Loosen two fasteners (**Figure 34, item 2**).
- c. Reposition divert to the desired end location and tighten fasteners.
- d. Remove guard (**Figure 35, item 1**).

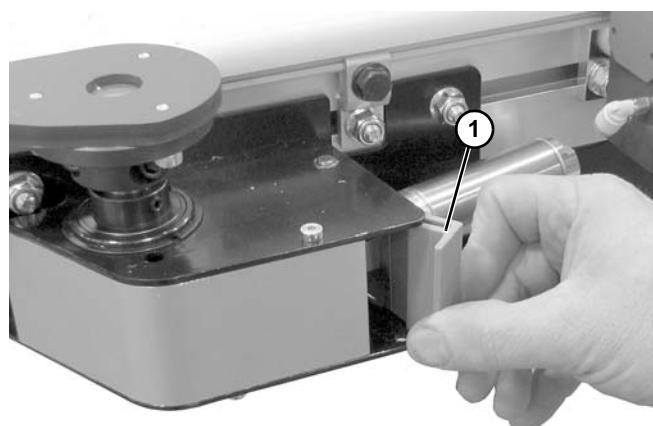


Figure 35

Installation

- e. Loosen stop collar (**Figure 36, item 1**) or cylinder.

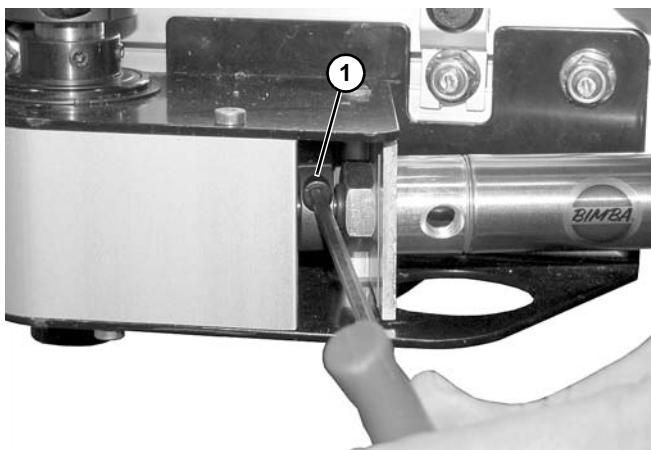


Figure 36

- f. Move divert (**Figure 37, item 1**) to desired minimum position and tighten fasteners.

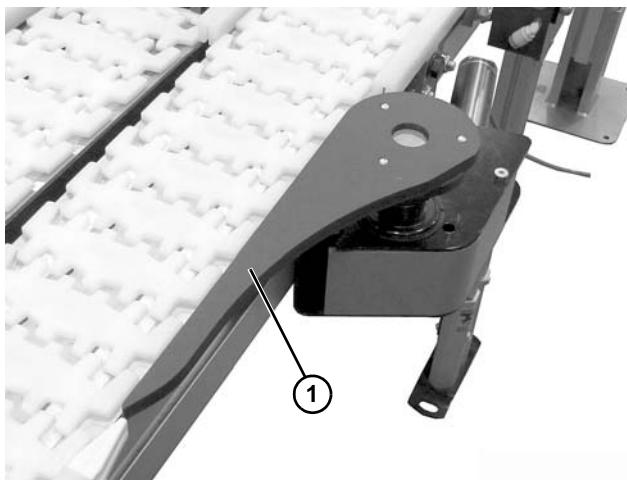


Figure 37

- g. Verify divert movement by energizing cylinder.

Sensor Installation and Basic Logic

Reed sensors (**Figure 38, item 1**) can be mounted on the cylinder. A divert module with magnet installed must be requested.

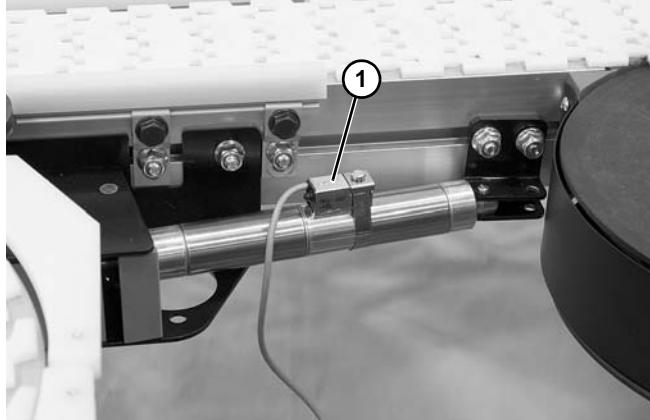


Figure 38

A photo eye kit (**Figure 39, item 1**) can be mounted in a manner that will sense pallets in the divert zone.

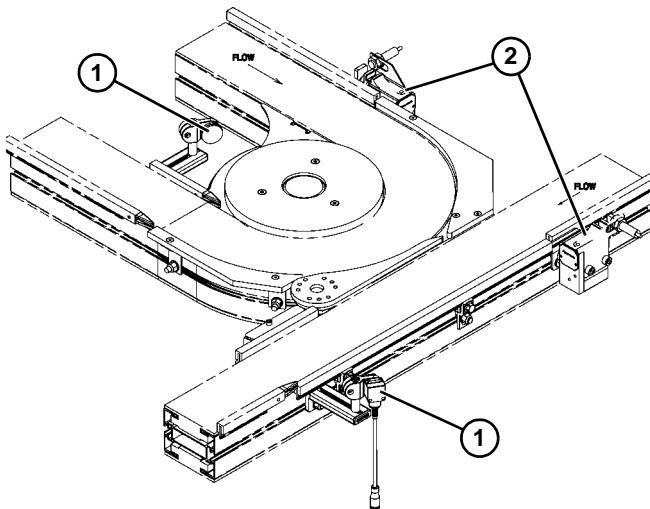


Figure 39

- Once pallet has cleared the photo eye, the traffic control stops (**Figure 39, item 2**) can allow a new pallet into the zone.

Installation

Diverts and Merge

Recommended Pneumatics

Dorner recommends using a 5 port, 3 way, exhaust center (**Figure 40**) and 3 port, 2 way solenoid valve (**Figure 41**) to operate divert and merge.

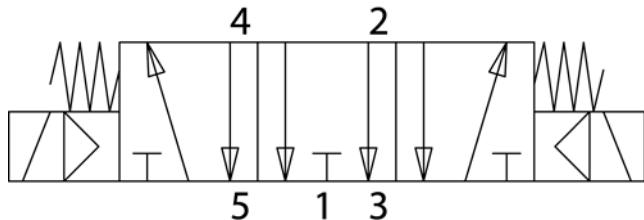


Figure 40

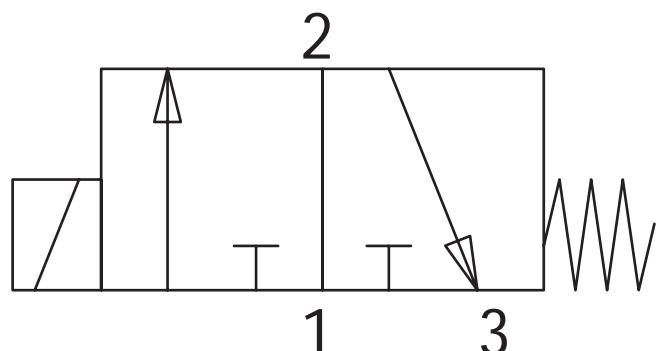


Figure 41

Attaching and Operations of Pneumatics

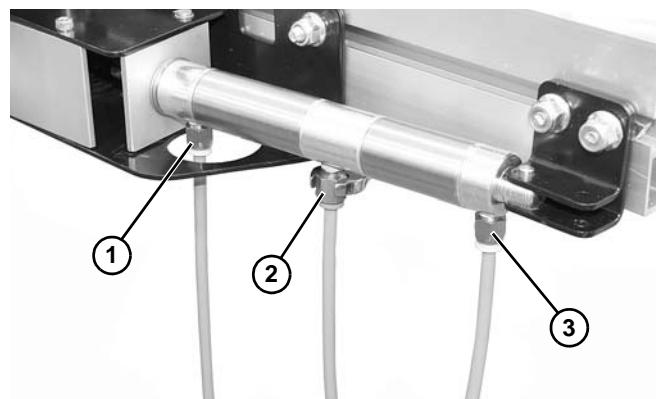


Figure 42

1. Connect Port 4 (**Figure 40**) of the 5 port, 3 way solenoid to the cylinder front port (**Figure 42**, item 1). Dorner fittings accept 1/4" Outside Diameter tubing.
2. Connect Port 2 (**Figure 40**) of the 5 port, 3 way solenoid to the cylinders middle port (**Figure 42**, item 2). Dorner fittings accept 1/4" Outside Diameter tubing.

3. Connect the 3 port, 2 way solenoid (**Figure 41**) to the cylinders back port (**Figure 42**, item 3). Dorner fittings accept 1/4" Outside Diameter tubing.

- The divert arm will be fully extended into the conveyor when both the middle port and the back port is pressurized and the front port is allowed to exhaust.
- The divert arm will be at its middle position when both the back port and the front port are pressurized and the middle port is allowed to exhaust.
- The divert arm will be fully retracted away from the attached conveyor frame when the front port is pressurized and the middle and back ports allowed to exhaust.

Sensor Installation and Basic Logic

Reed sensors (**Figure 43**, item 1) can be mounted on the cylinder. A divert module with magnet installed must be requested.

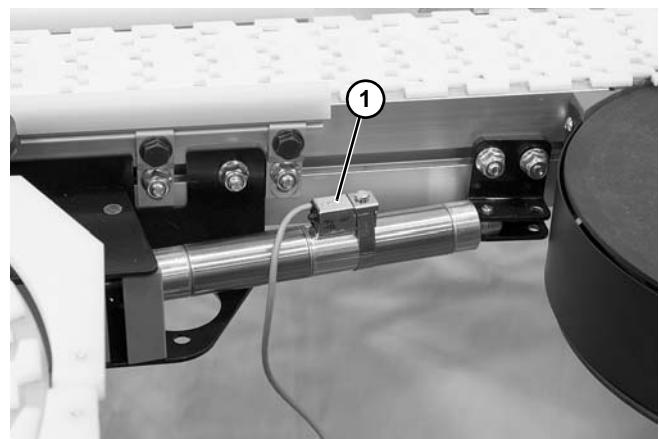


Figure 43

A photo eye kit (**Figure 44**, item 1) can be mounted in a manner that will sense pallets in the divert and merge zone.

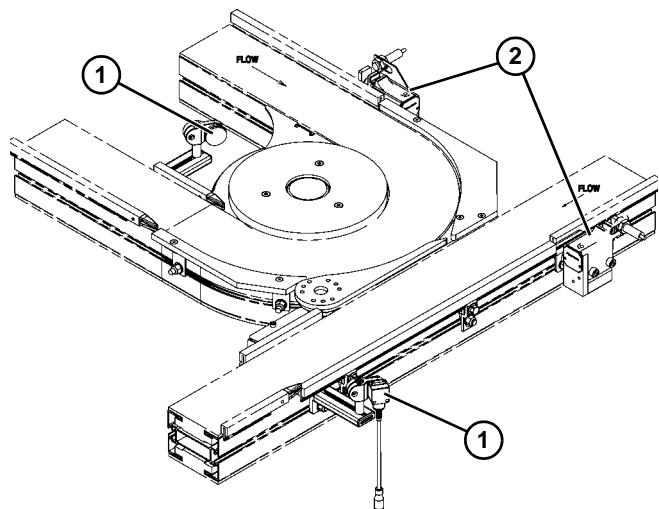


Figure 44

- Once pallet has cleared the photo eye, the traffic control stops (**Figure 44**, item 2) can allow a new pallet into the zone.

Installation

Fixed Merge

Merge

NOTE

Make sure that the stud(s) rotate inside the channel and engage with the conveyor.

1. Install conveyor tie plate (**Figure 45, item 1**) to straight conveyor section (**Figure 45, item 2**) with two M8 x 35 mm studs (**Figure 45, item 3**), washers (**Figure 45, item 4**), and hex nuts (**Figure 45, item 5**).

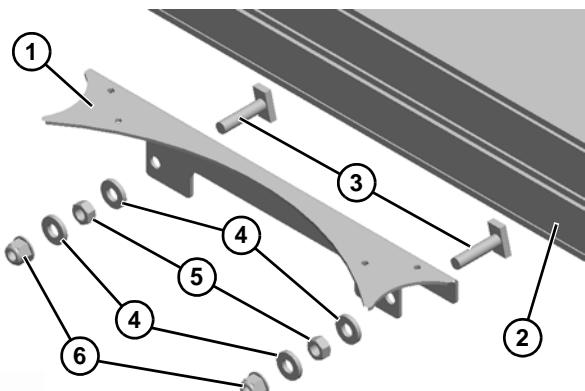


Figure 45

2. Thread on hex nuts (**Figure 45, item 6**) a couple turns at this time.
3. Install tie bar (**Figure 46, item 1**) to curved conveyor section (**Figure 46, item 2**) with two M8 x 20 mm studs (**Figure 46, item 3**) and hex nuts (**Figure 46, item 4**).

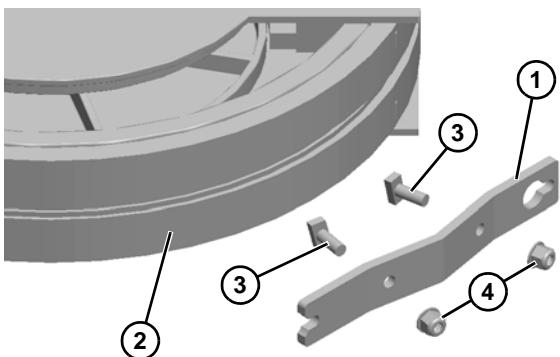


Figure 46

4. Connect conveyor sections together. Make sure that the tie bar (**Figure 47, item 1**) is positioned between washers (**Figure 47, item 2**) and hex nuts (**Figure 47, item 3**) on both sides.

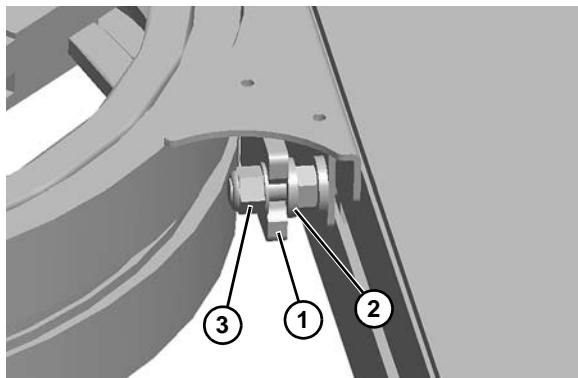


Figure 47

5. Tighten hex nuts (**Figure 47, item 3**).
6. Install 45 degree corner guide (**Figure 48, item 1**) to conveyor tie plate (**Figure 48, item 2**) with two flat head screws (**Figure 48, item 3**).

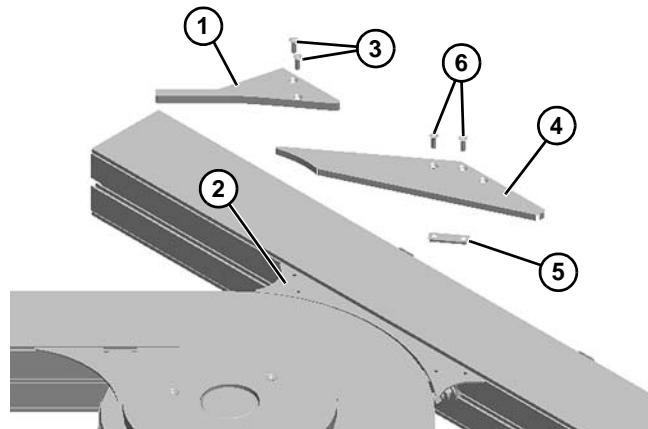


Figure 48

7. Install corner guide (**Figure 48, item 4**) to conveyor tie plate (**Figure 48, item 2**) with spacer (**Figure 48, item 5**) and two flat head screws (**Figure 48, item 6**).

Parallel Merge

NOTE

Make sure that the stud(s) rotate inside the channel and engage with the conveyor.

1. Install conveyor tie plate (**Figure 49, item 1**) to conveyor section (**Figure 49, item 2**) with two M8 x 20 mm studs (**Figure 49, item 3**) and hex nuts (**Figure 49, item 4**).

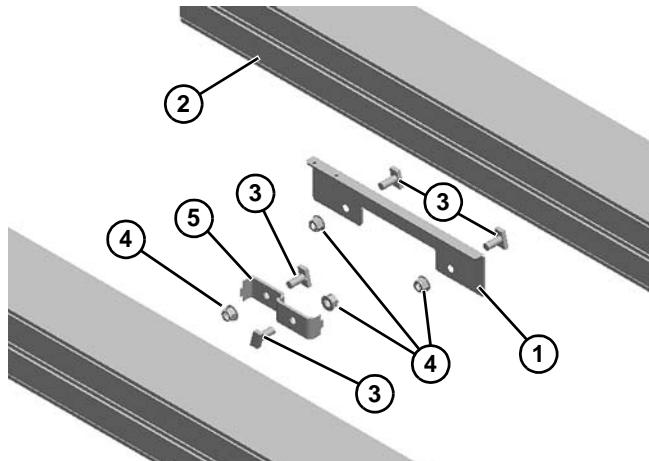


Figure 49

2. Install frame connecting clip (**Figure 49, item 5**) to conveyor sections with two M8 x 20 mm studs (**Figure 49, item 3**) and hex nuts (**Figure 49, item 4**).
3. Tighten hex nuts (**Figure 49, item 4**).
4. Install corner guide (**Figure 50, item 1**) to conveyor tie plate (**Figure 50, item 2**) with spacer (**Figure 50, item 3**) and two flat head screws (**Figure 50, item 4**).

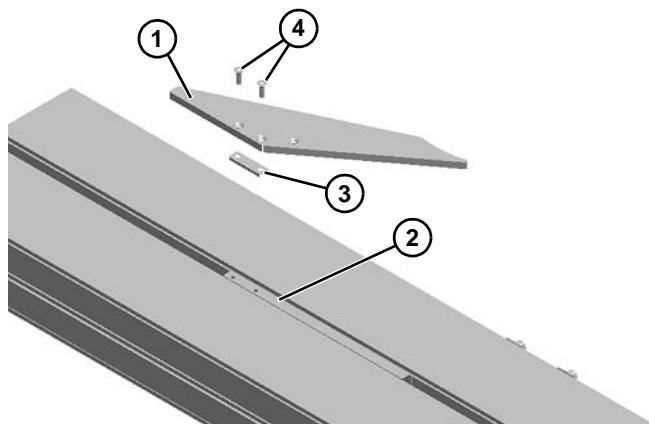


Figure 50

Guiding

For exact locations refer to layout drawings starting on page 25.

1. Attach wear strip (**Figure 28, item 1**) to guiding (**Figure 28, item 2**).

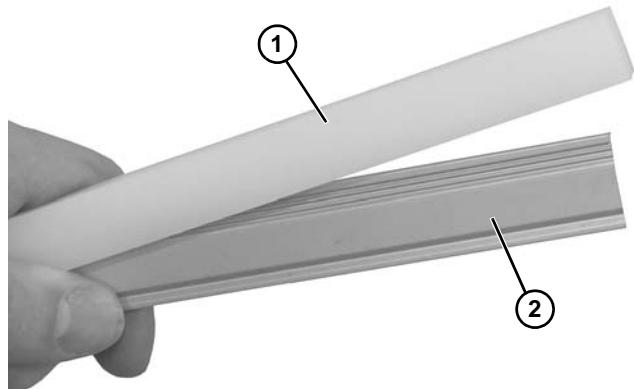


Figure 51

2. Attach clip (**Figure 29, item 1**) to guiding (**Figure 29, item 2**).

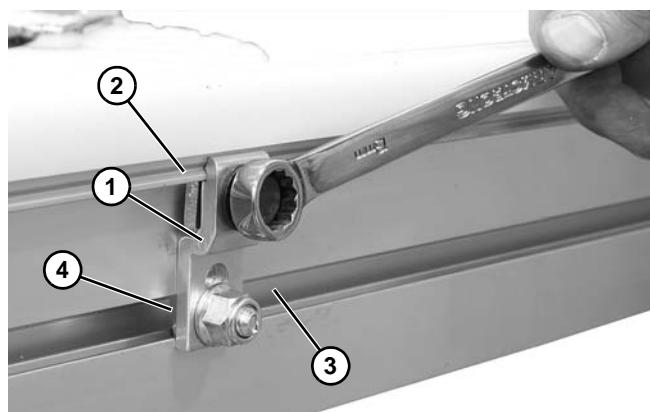


Figure 52

NOTE

*Make sure that the studs (**Figure 29, item 4**) rotate inside the channel and engage with the conveyor.*

3. Attach clip (**Figure 29, item 1**) to conveyor (**Figure 29, item 3**).

Installation

NOTE

Guiding can be assembled in a high position (Figure 30, item 1) or a low position (Figure 30, item 2).

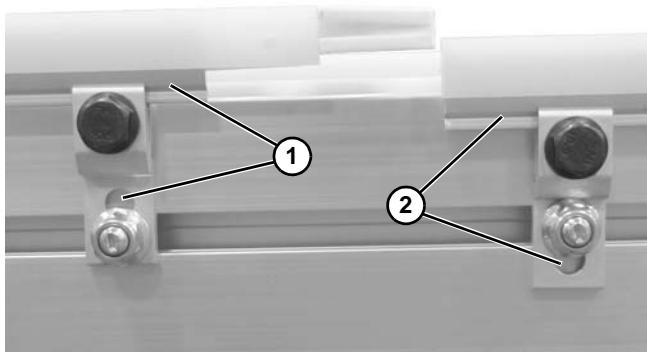


Figure 53

NOTE

Be certain that slot (Figure 31, item 1) is close to vertical when finished tightening nut..

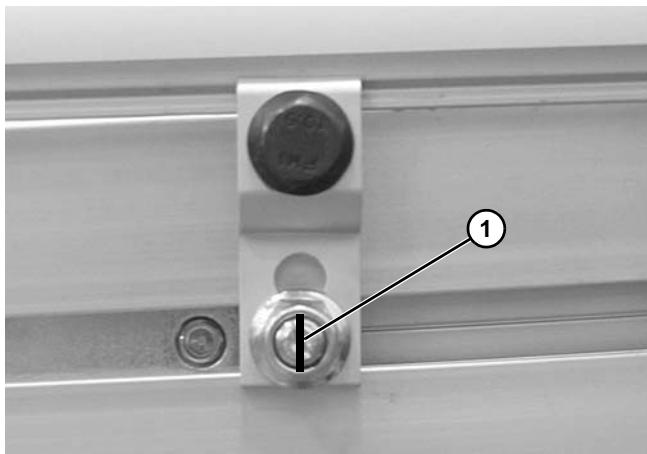
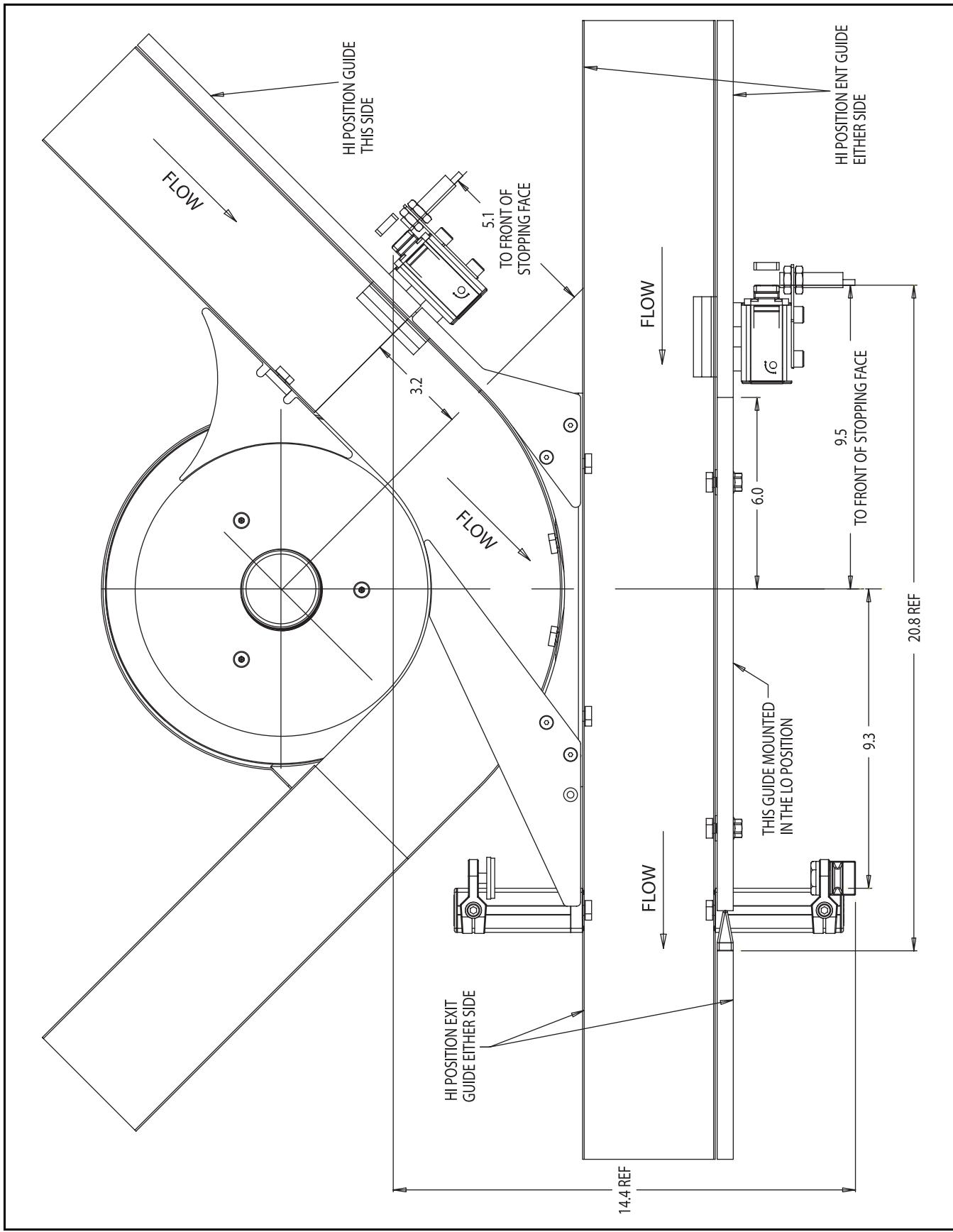


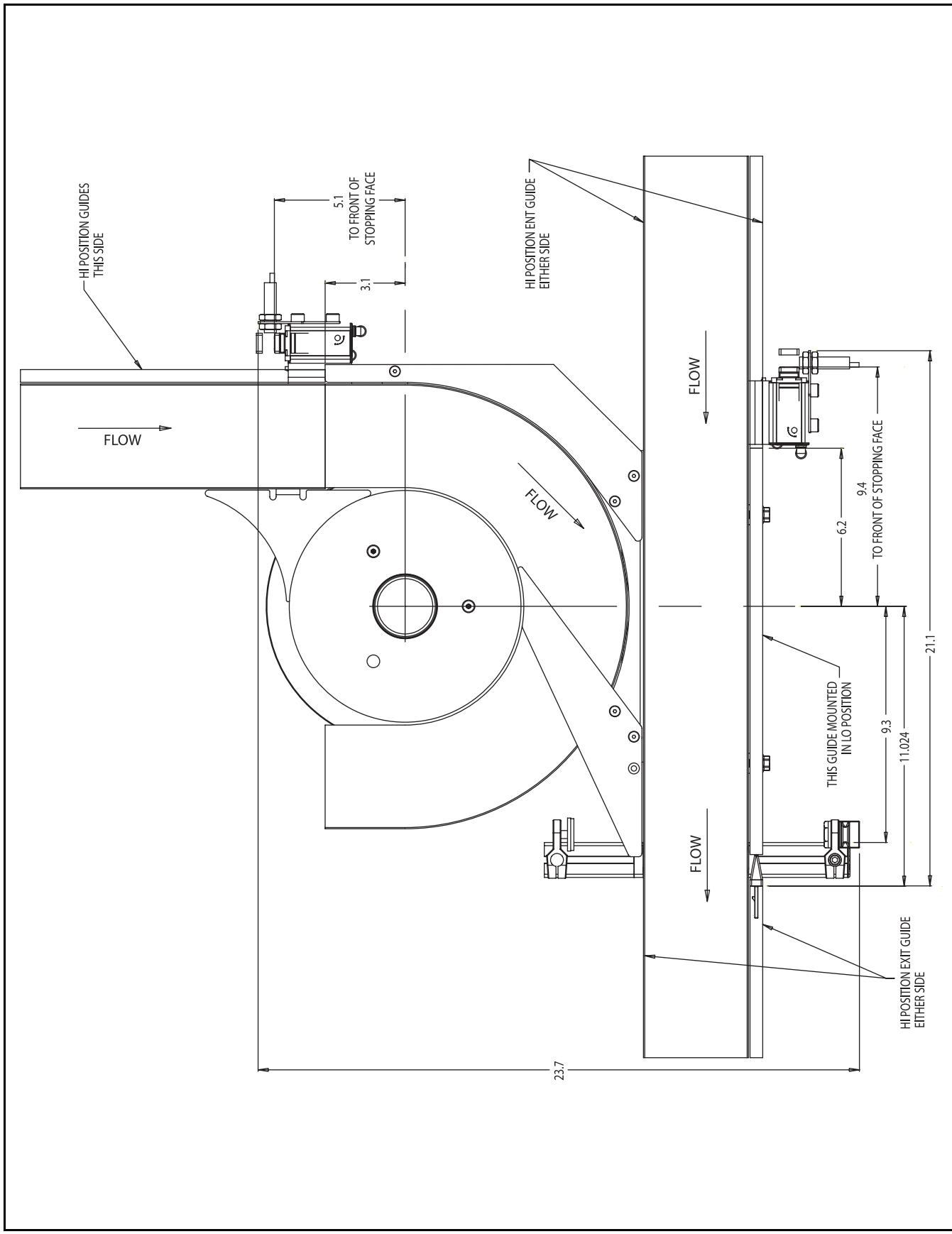
Figure 54

45° Merge Layout

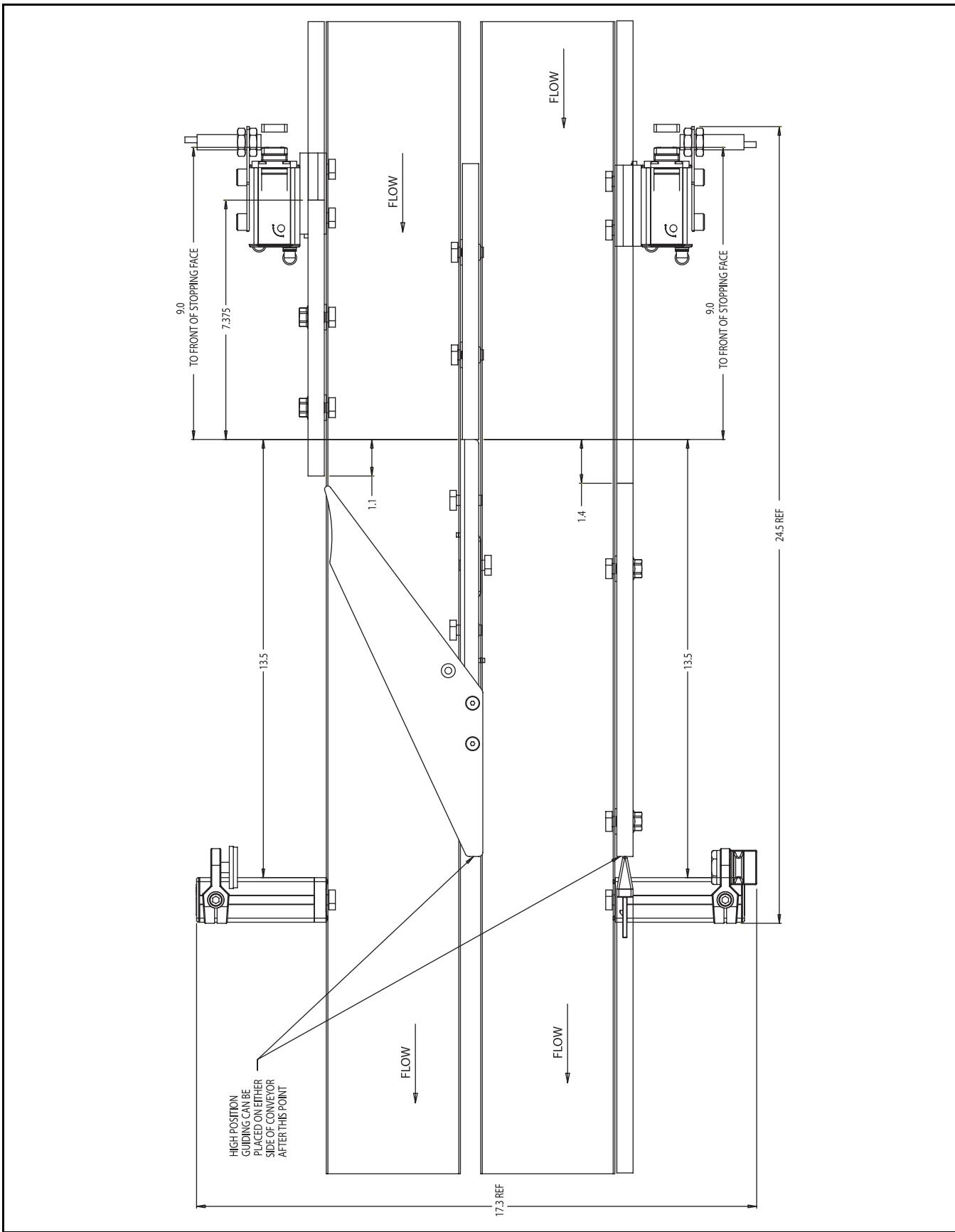


Installation

90° Merge Layout

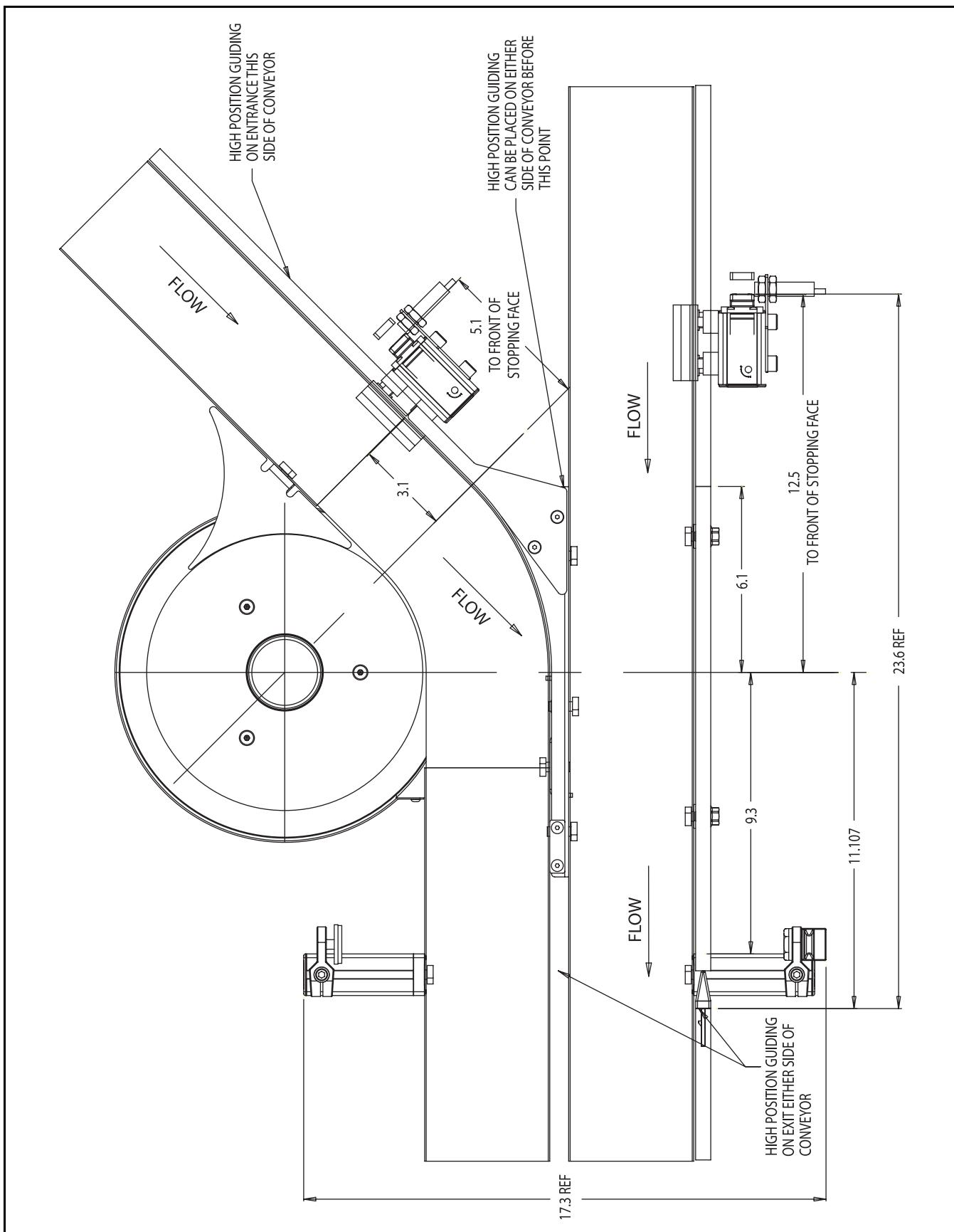


Parallel Merge Layout

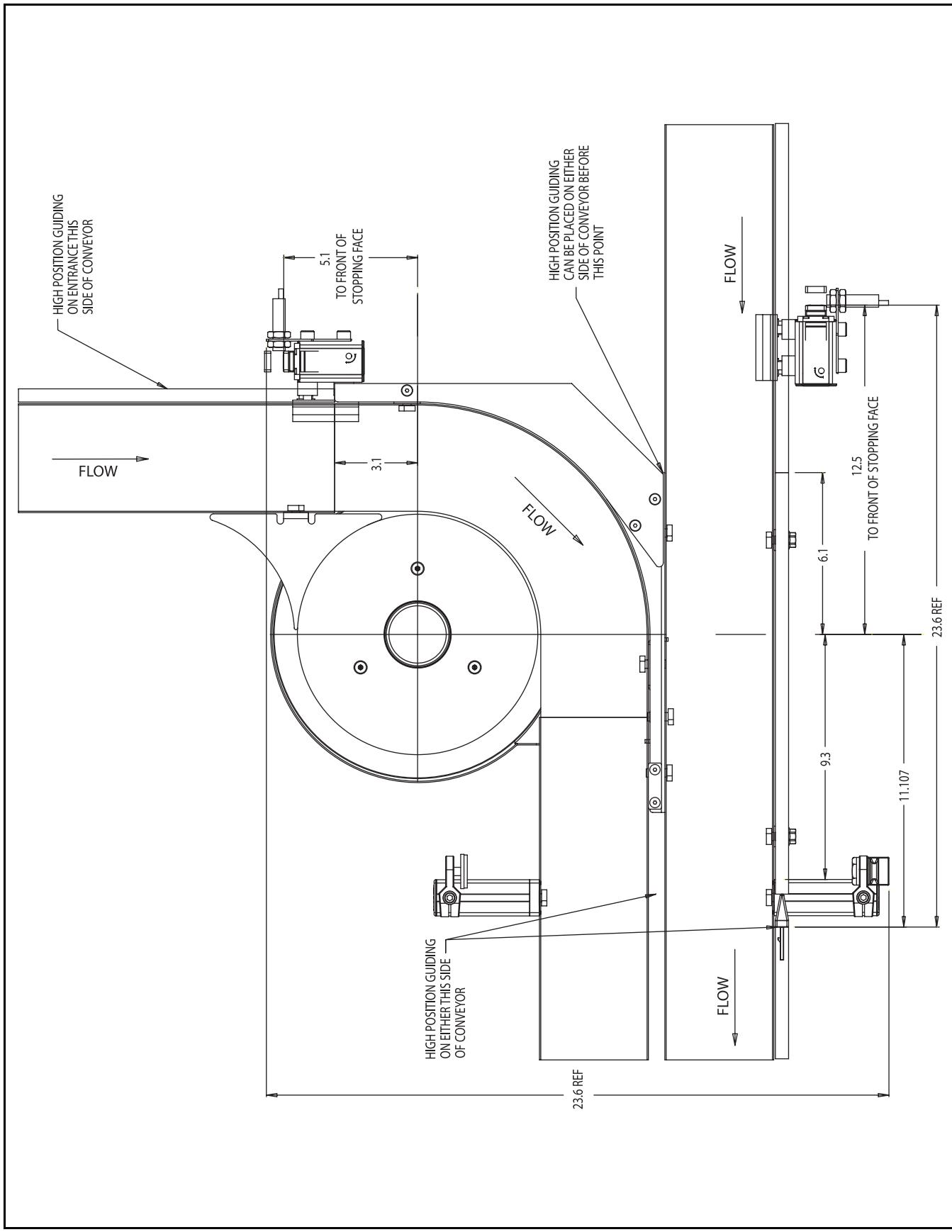


Installation

45° Parallel Merge Layout



90° Parallel Merge Layout



Preventive Maintenance and Adjustment

Required Tools

- 3/32" hex wrench
- 3 mm hex wrench
- 4 mm hex wrench
- 5 mm hex wrench
- 6 mm hex wrench
- 7 mm wrench
- 10 mm wrench
- 13 mm wrench
- Belt Removal Tool #203480

Checklist

- Keep service parts on hand. Refer to the "Service Parts" section starting on page 35 for recommendations.
- Replace any worn or damaged parts.

Pallets

1. Remove pallet from conveyor.
2. Remove four socket head screws (**Figure 55, item 1**) and remove pucks (**Figure 55, item 2**).

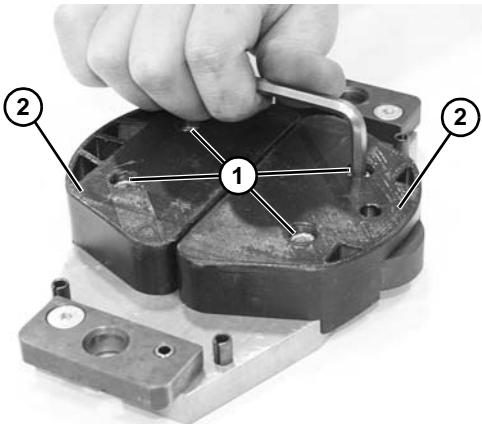


Figure 55

3. Turn over bumper pallet puck (**Figure 56, item 1**) and remove bumper (**Figure 56, item 2**) and washer (**Figure 56, item 3**).

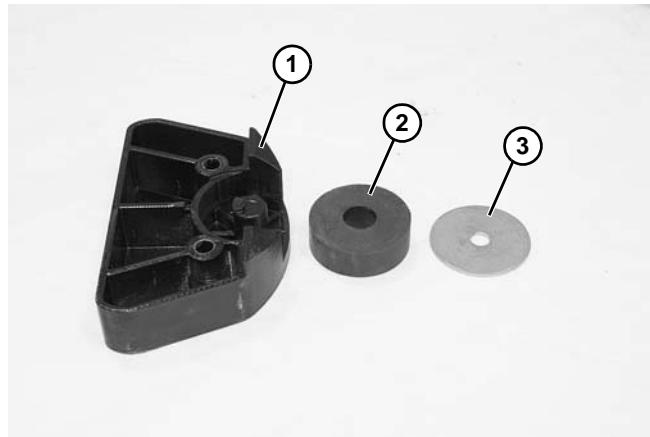


Figure 56

4. Replace worn or damaged parts.

Pallet Stops

Removal

For removal of Pallet Stops, reverse the installation procedure. Refer to "Pallet Stops" starting on page 6.

Lift and Locate Station

1. Remove fittings (**Figure 57, item 1**) on both sides of the lift and locate station.

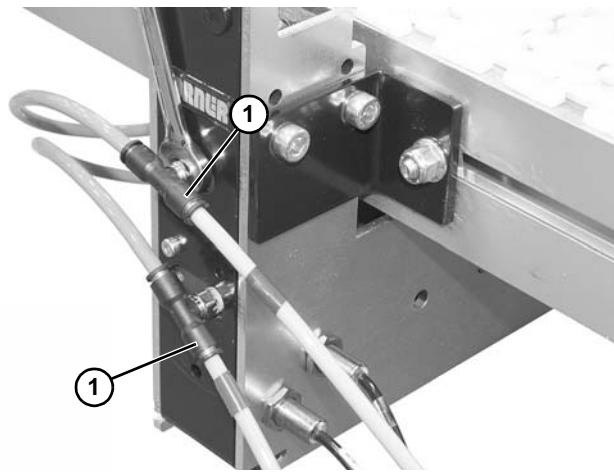


Figure 57

Preventive Maintenance and Adjustment

2. Remove pallet proximity sensor (**Figure 58, item 1**).

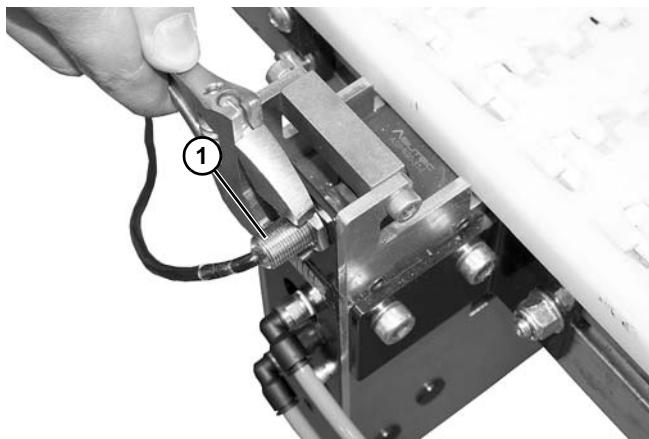


Figure 58

3. Remove screw (**Figure 59, item 1**) from lift side cover.



Figure 59

4. Remove side cover (**Figure 60, item 1**).

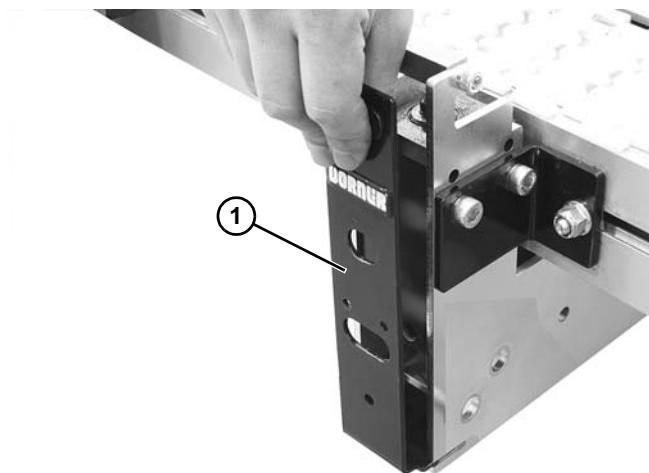


Figure 60

5. Remove proximity sensors (**Figure 61, item 1**) from lift side of unit.

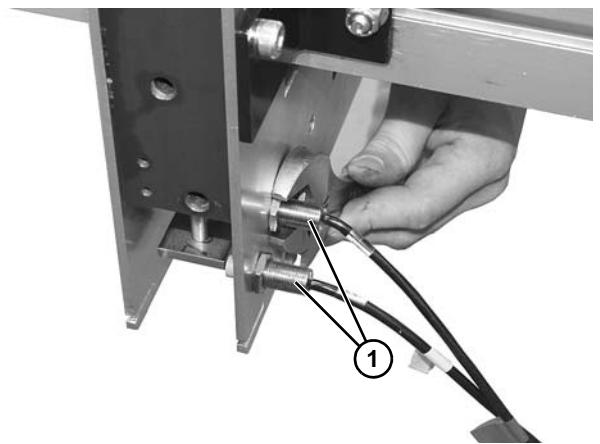


Figure 61

6. Remove two socket head screws (**Figure 62, item 1**) securing the angle bracket (**Figure 62, item 2**) to the lift and locate station.

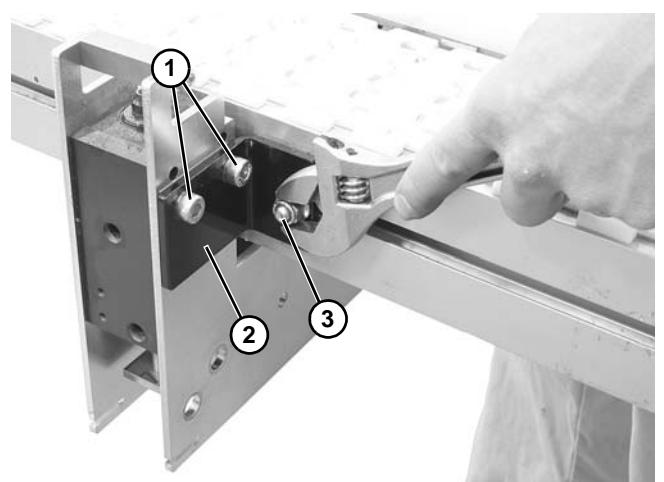


Figure 62

7. Loosen hex nut (**Figure 62, item 3**) securing angle bracket to conveyor and slide out of the way.
8. Repeat on opposite side of conveyor.

Preventive Maintenance and Adjustment

9. Rotate lift and locate station so that the tabs (**Figure 63, item 1**) on both sides disengage from the channel (**Figure 63, item 2**) of the conveyor.

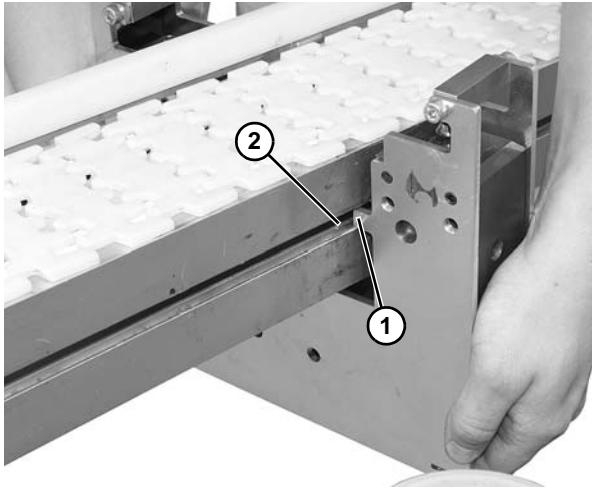


Figure 63

12. Pry side plate (**Figure 66, item 1**) from groove pins (**Figure 66, item 2**) using a flat blade screw driver (**Figure 66, item 3**) on both sides of lift and locate station.

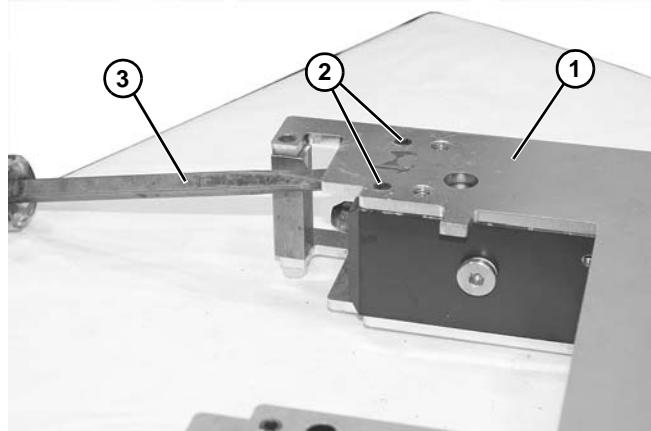


Figure 66

10. Lower lift and locate station (**Figure 64, item 1**), on an angle as shown, and remove from under the conveyor.

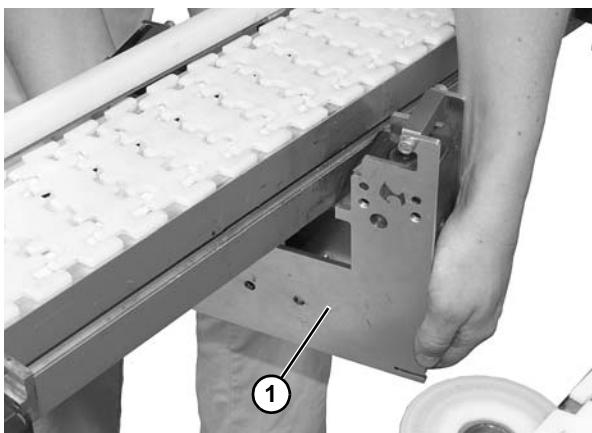


Figure 64

11. Remove two socket head screws (**Figure 65, item 1**) with allen wrench (**Figure 65, item 2**).

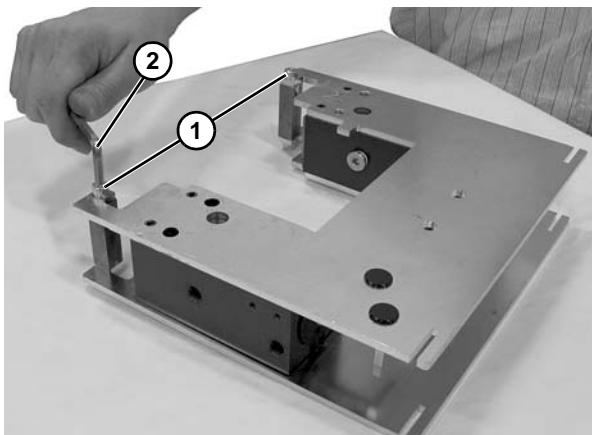


Figure 65

13. Remove lift unit(s) (**Figure 67, item 1**) from groove pins.

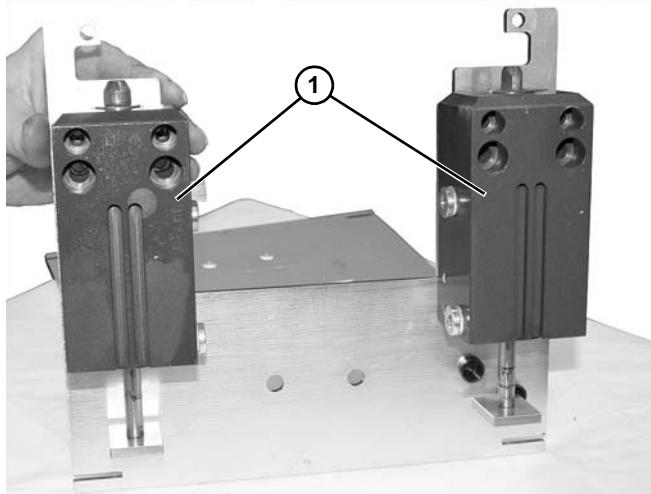


Figure 67

14. Replace worn or damaged parts.

Preventive Maintenance and Adjustment

Divert and Merge

Replace Cylinder Assembly

1. Disconnect 1/4" tubing from cylinder fittings.
2. Using an allen wrench, remove two socket head screws (**Figure 68, item 1**) securing bottom guard (**Figure 68, item 2**) to the top and bottom plates.

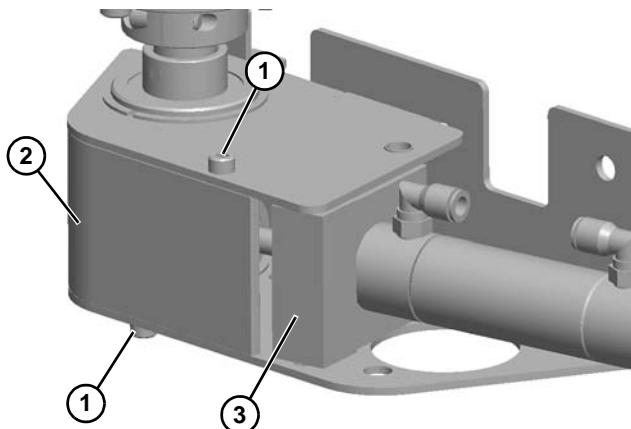


Figure 68

3. Remove cover (**Figure 68, item 3**) from cylinder assembly.
4. Feed allen wrench through access hole (**Figure 69, item 1**) in bottom plate and remove socket head screw (**Figure 69, item 2**) securing eye bolt (**Figure 68, item 3**) to the arm block (**Figure 69, item 4**).

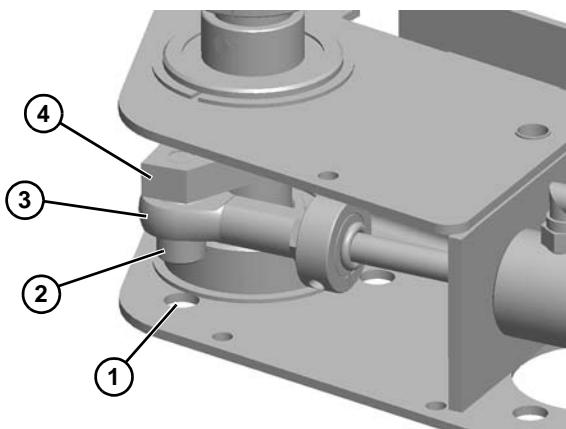


Figure 69

5. Using a wrench, loosen jam nut (**Figure 70, item 1**). Remove eye bolt (**Figure 70, item 2**) and jam nut from threaded rod.

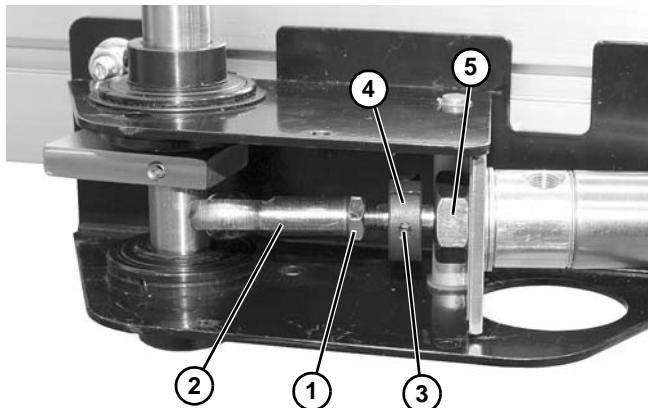


Figure 70

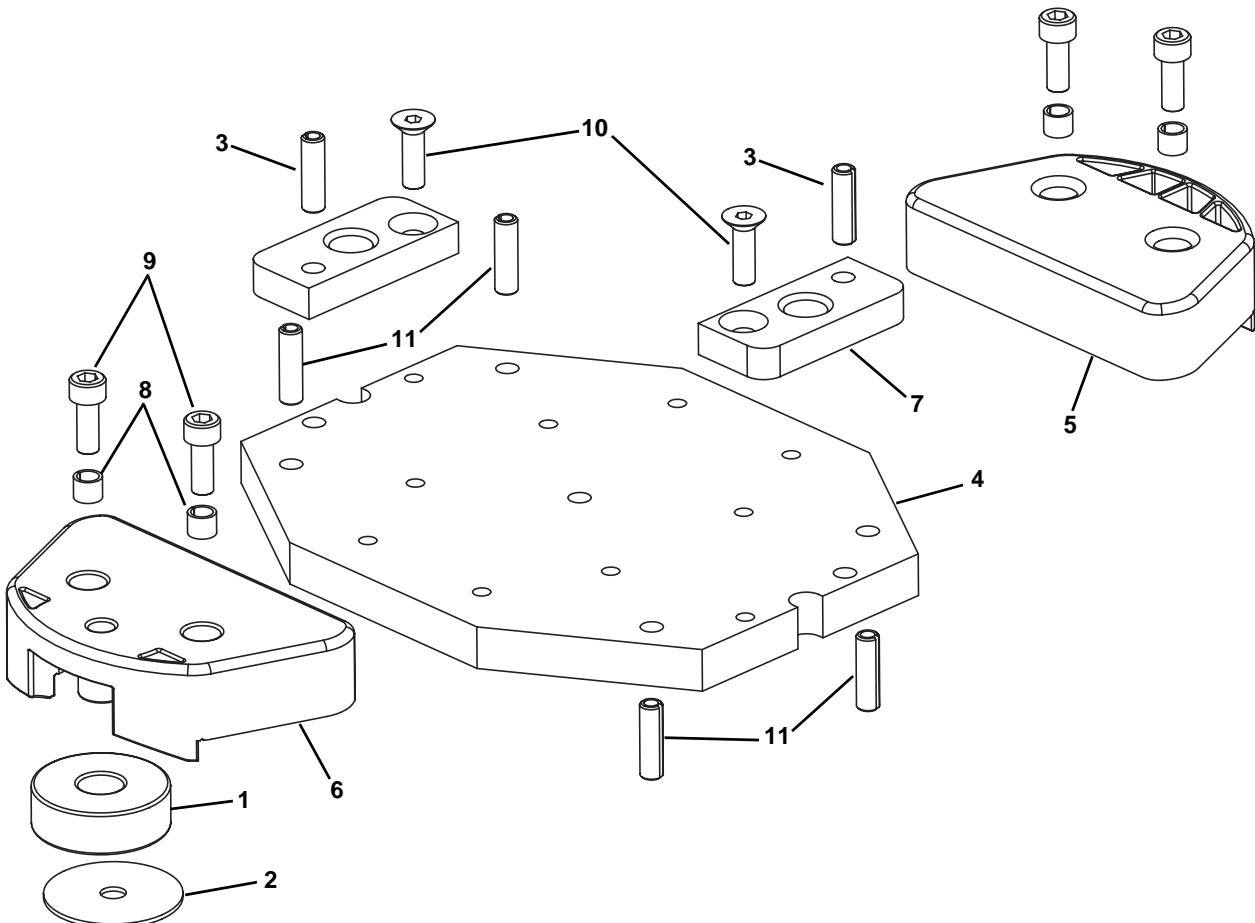
6. Loosen stop screw (**Figure 70, item 3**) and remove collar (**Figure 70, item 4**) from rod. Using 7/8" open end wrench on back end of cylinder, unscrew cylinder from mounting nut (**Figure 70, item 5**).
7. Remove and replace cylinder.
8. Installation is the reverse of removal.

Notes

NOTE

For replacement parts other than those shown in this section, contact an authorized Dorner Service Center or the factory. Key Service Parts and Kits are identified by the Performance Parts Kits logo . Dorner recommends keeping these parts on hand.

Pallets

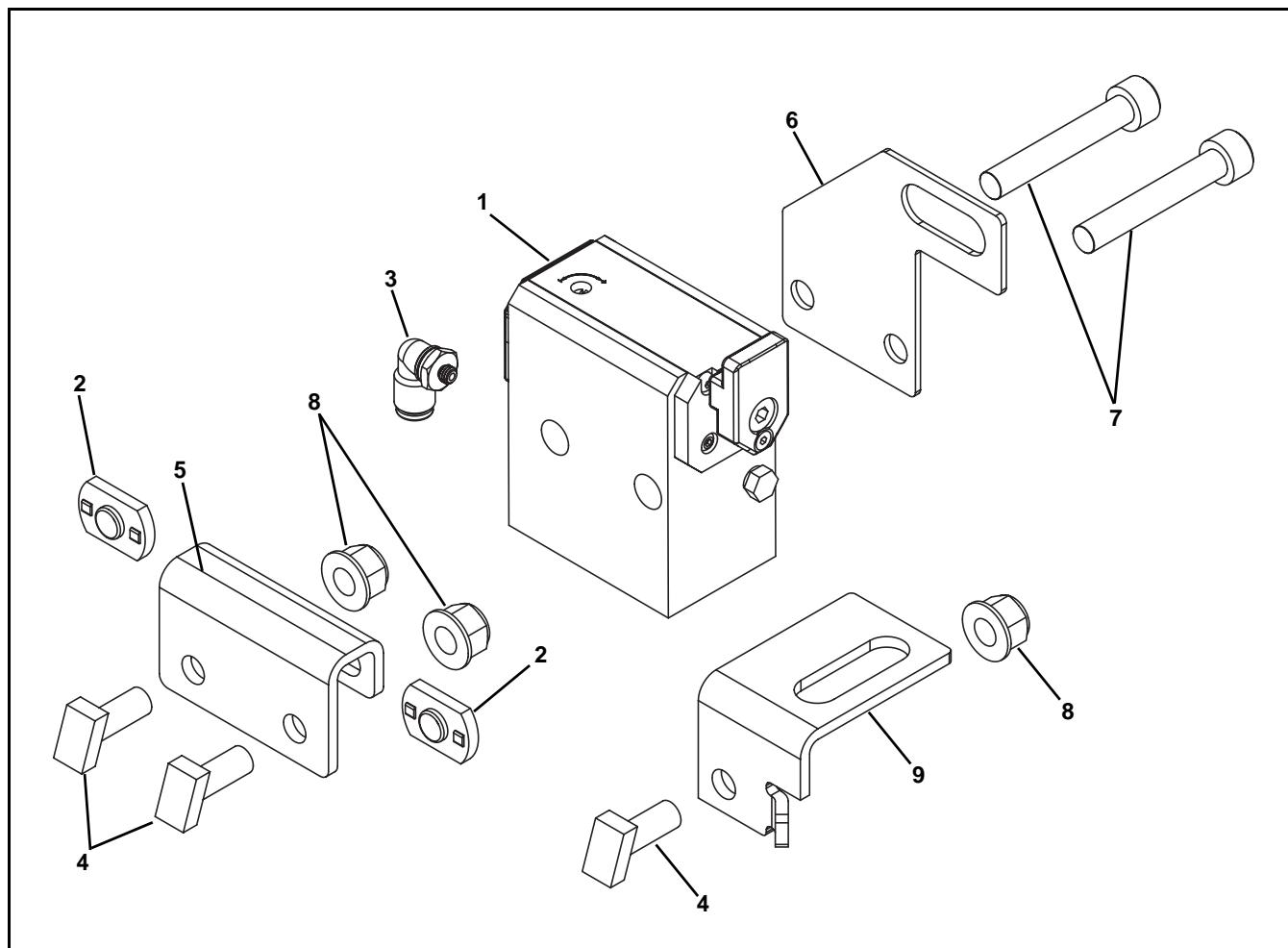


Item	Part Number	Description
1	807-2554	Bumper
2	807-692	Washer
3	913-509	Pin
4	205152-LLL	Pallet
5	203895	Basic Pallet Puck
6	203896	Bumper Pallet Puck
7	205148	Stop Block
8	450226SSP	Sleeve
9	920616M	Socket Head Screw, M6-1.00 x 16 mm
10	930620M	Flat Head Screw, M6-1.00 x 20 mm
11	913-015	Pin, Groove, .25" x .875" Length

LLL = Pallet Length 100, 150, 200

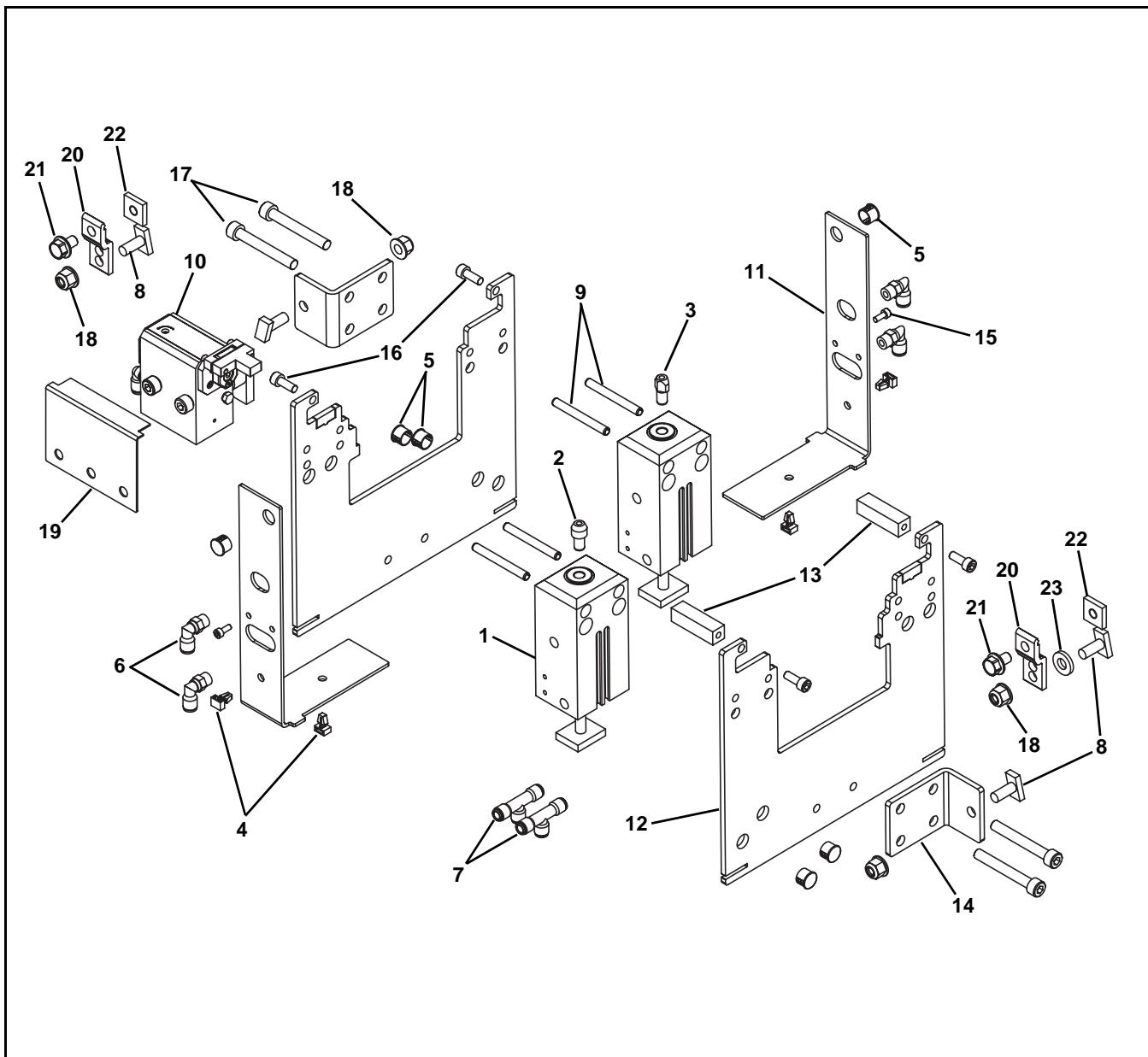
Service Parts

Pallet Stops



Item	Part Number	Description
1	804-724	Fixed Stop Module
	807-725	Cushioned Stop Module
2	807-1075	Nut, Weld, M8-1.25
3	810-529	Elbow Fitting
4	834-007	Stud, M8 x 20 mm
5	205154	Bracket
6	205155	Side Mount Sensor Bracket
7	920850M	Socket Head Screw, M8-1.25 x 50 mm
8	990812M	Hex Nut
9	205157	Bottom Mount Sensor Bracket

Lift and Locate Station

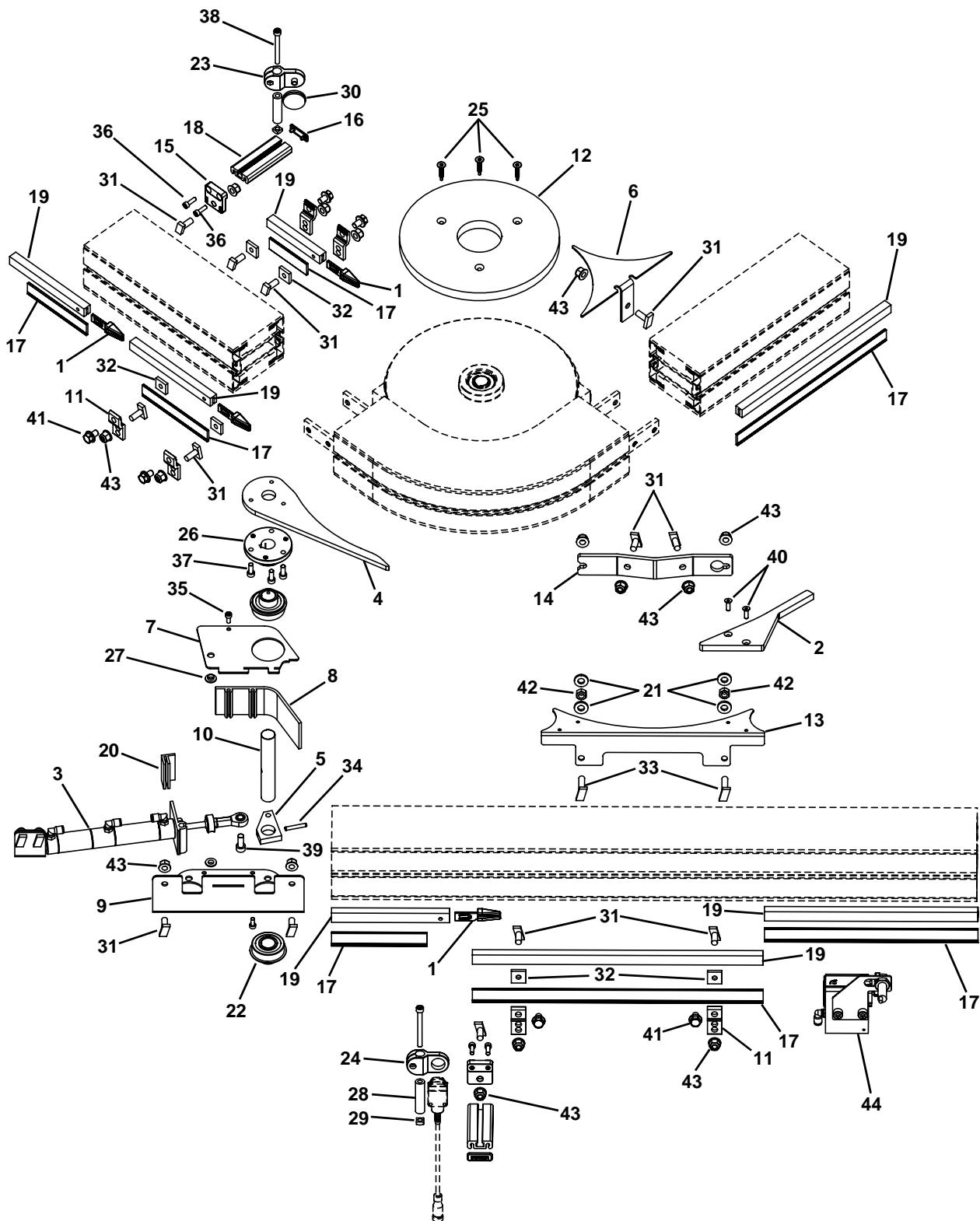


Item	Part Number	Description
1	804-726	Lift Unit
2	804-727	Locator Pin, Round
3	804-728	Locator Pin, Diamond
4	807-2593	Cable Clip
5	807-684	Plug
6	810-222	Male Elbow
7	810-251	Tee Union
8	834-007	Stud, M8 x 20 mm
9	913-436	Groove Pin
10	204440	Fixed Pallet Stop
	204442	Cushion Pallet Stop
11	205120	Guard
12	205149	Side Plate

Item	Part Number	Description
13	205150	Stop Block
14	205151	Angle Plate
15	920410M	Socket Head Screw, M4-.70 x 10 mm
16	920616M	Socket Head Screw, M6-1.00 x 16 mm
17	920860M	Socket Head Screw, M8-1.25 x 60 mm
18	990812M	Hex Nut
19	205167	Guard Bracket
20	205129	Clip
21	960882M	Flange Head Cap Screw, M8-1.25 x 12 mm
22	834-014	Slide In Nut, M8
23	605280P	Washer

Service Parts

45° Divert-Merge



SmartFlex Pallet System Accessories

Service Parts

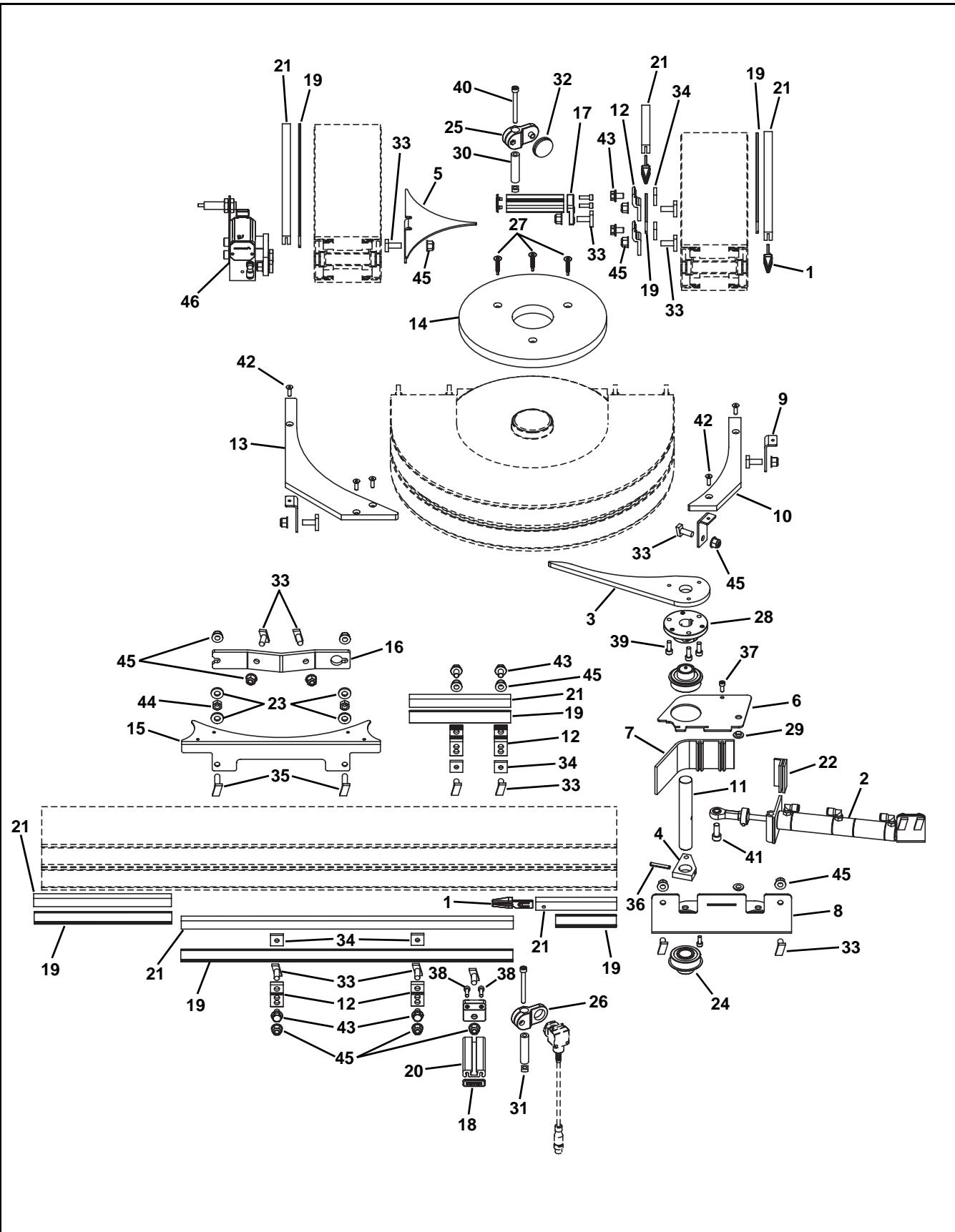
Item	Part Number	Description
1	203894	Lead In Guide Wedge
2	204298	Wedge Guide
3	204391	Cylinder Assembly
4	204775	Divertor Arm
5	204776	Arm Block
6	204788	Corner Guide
7	205117	Top Plate
8	205118	Bottom Guard
9	205119	Bottom Angle Plate
10	205127	Shaft
11	205129	Clip
12	205131	Wheel Guide
13	205158	Conveyor Tie Plate
14	205159	Tie Bar
15	210848	Mounting Block
16	210849	Cap
17	205925-LLLL	0.5" High Side Guide
18	210846-00353	Extrusion 3.53" long
19	350899-LLLL	Clip On Wear Strip
20	532226-00200	Bar 2.00" long
21	605280P	Washer
22	802-232	Bearing
23	807-1390	Reflector Mount Clamp
24	807-1391	Photo Eye Mount Clamp
25	807-2556	Flat Head Screw, #10-16 x 1.25"
26	807-2562	Flange Collar
27	807-2563	Spacer
28	807-2565	Post Spacer
29	807-920	Square Nut, M6-1.0
30	809-289	Reflector
31	834-007	Stud, M8 x 20 mm
32	834-014	Slide In Nut, M8
33	834-018	Stud, M8 x 35 mm
34	913-142	Roll Pin
35	920512M	Socket Head Screw, M5-.80 x 12 mm
36	920516M	Socket Head Screw, M5-.80 x 16 mm
37	920616M	Socket Head Screw, M6-1.00 x 16 mm
38	920660M	Socket Head Screw, M6-1.00 x 60 mm
39	920820M	Socket Head Screw, M8-1.25 x 20 mm
40	930516M	Flat Head Screw, M5-.80 x 16 mm
41	960882M	Flange Head Cap Screw, M8-1.25 x 12 mm
42	990801M	Hex Nut
43	990812M	Hex Nut
44	204447	Fixed Pallet Stop
	204448	Cushion Pallet Stop

LLLL = Length is inches width 2 decimal places.

Length Example: Length = 6.25" LLLL = 00625

Service Parts

90° Divert-Merge



Service Parts

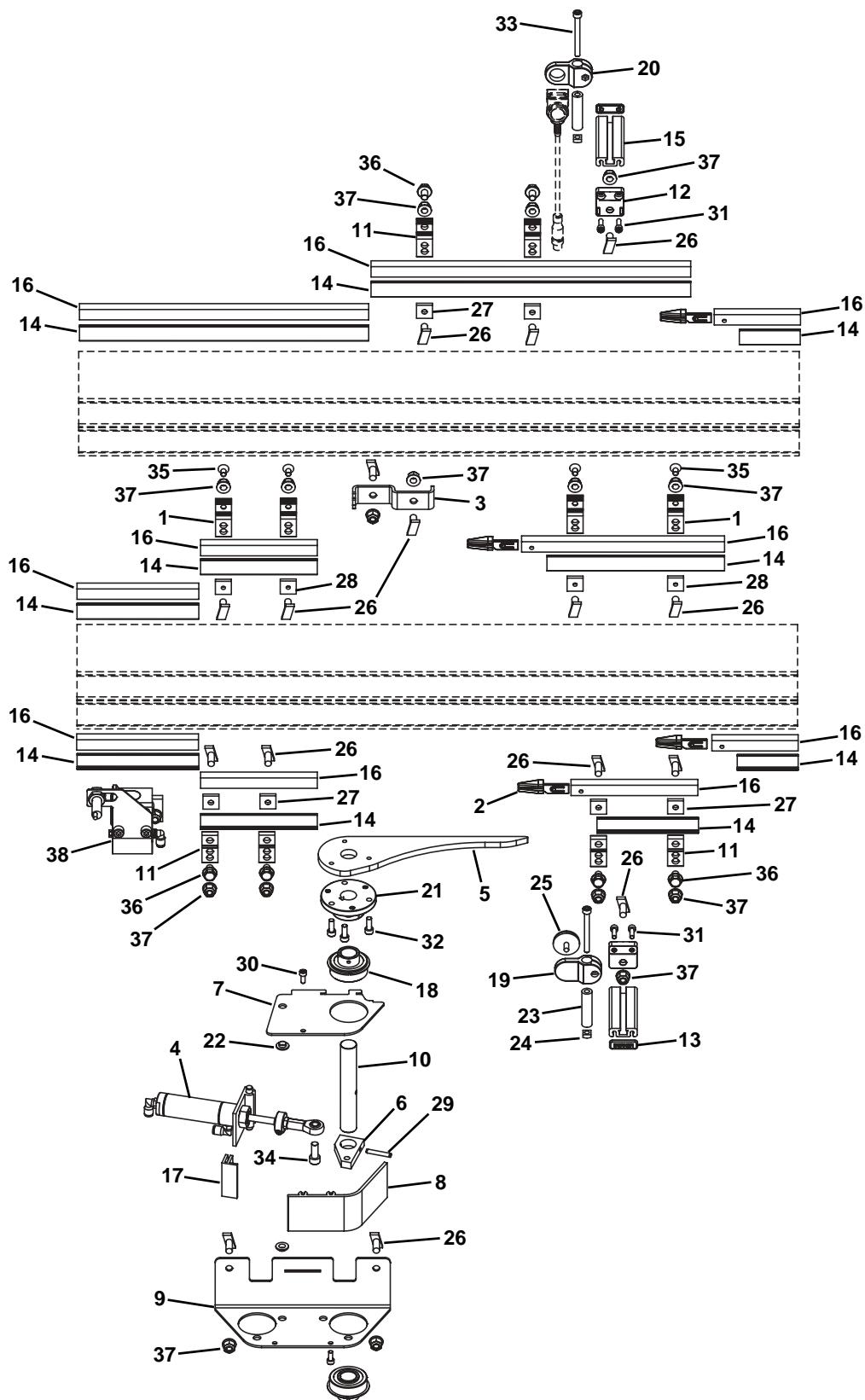
Item	Part Number	Description
1	203894	Lead In Guide Wedge
2	204391	Cylinder Assembly
3	204775	Divertor Arm
4	204776	Arm Block
5	204788	Corner Guide
6	205117	Top Plate
7	205118	Bottom Guard
8	205119	Bottom Angle Plate
9	205123	Angle Support
10	205124	Wedge Guide - Exit
11	205127	Shaft
12	205129	Clip
13	205130	Wedge Guide - Entrance
14	205131	Wheel Guide
15	205158	Conveyor Tie Plate
16	205159	Tie Bar
17	210848	Mounting Block
18	210849	Cap
19	205925- <u>LLLL</u>	0.5" High Side Guide
20	210846-00353	Extrusion 3.53" long
21	350899- <u>LLLL</u>	Clip On Wear Strip
22	532226-00200	Bar 2.00" long
23	605280P	Washer
24	802-232	Bearing
25	807-1390	Reflector Mount Clamp
26	807-1391	Photo Eye Mount Clamp
27	807-2556	Flat Head Screw, #10-16 x 1.25"
28	807-2562	Flange Collar
29	807-2563	Spacer
30	807-2565	Post Spacer
31	807-920	Square Nut, M6-1.0
32	809-289	Reflector
33	834-007	Stud, M8 x 20 mm
34	834-014	Slide In Nut, M8
35	834-018	Stud, M8 x 35 mm
36	913-142	Roll Pin
37	920512M	Socket Head Screw, M5-.80 x 12 mm
38	920516M	Socket Head Screw, M5-.80 x 16 mm
39	920616M	Socket Head Screw, M6-1.00 x 16 mm
40	920660M	Socket Head Screw, M6-1.00 x 60 mm
41	920820M	Socket Head Screw, M8-1.25 x 20 mm
42	930516M	Flat Head Screw, M5-.80 x 16 mm
43	960882M	Flange Head Cap Screw, M8-1.25 x 12 mm
44	990801M	Hex Nut
45	990812M	Hex Nut
46	204447	Fixed Pallet Stop
	204448	Cushion Pallet Stop

LLLL = Length is inches width 2 decimal places.

Length Example: Length = 6.25" LLLL = 00625

Service Parts

Parallel Divert-Merge



Service Parts

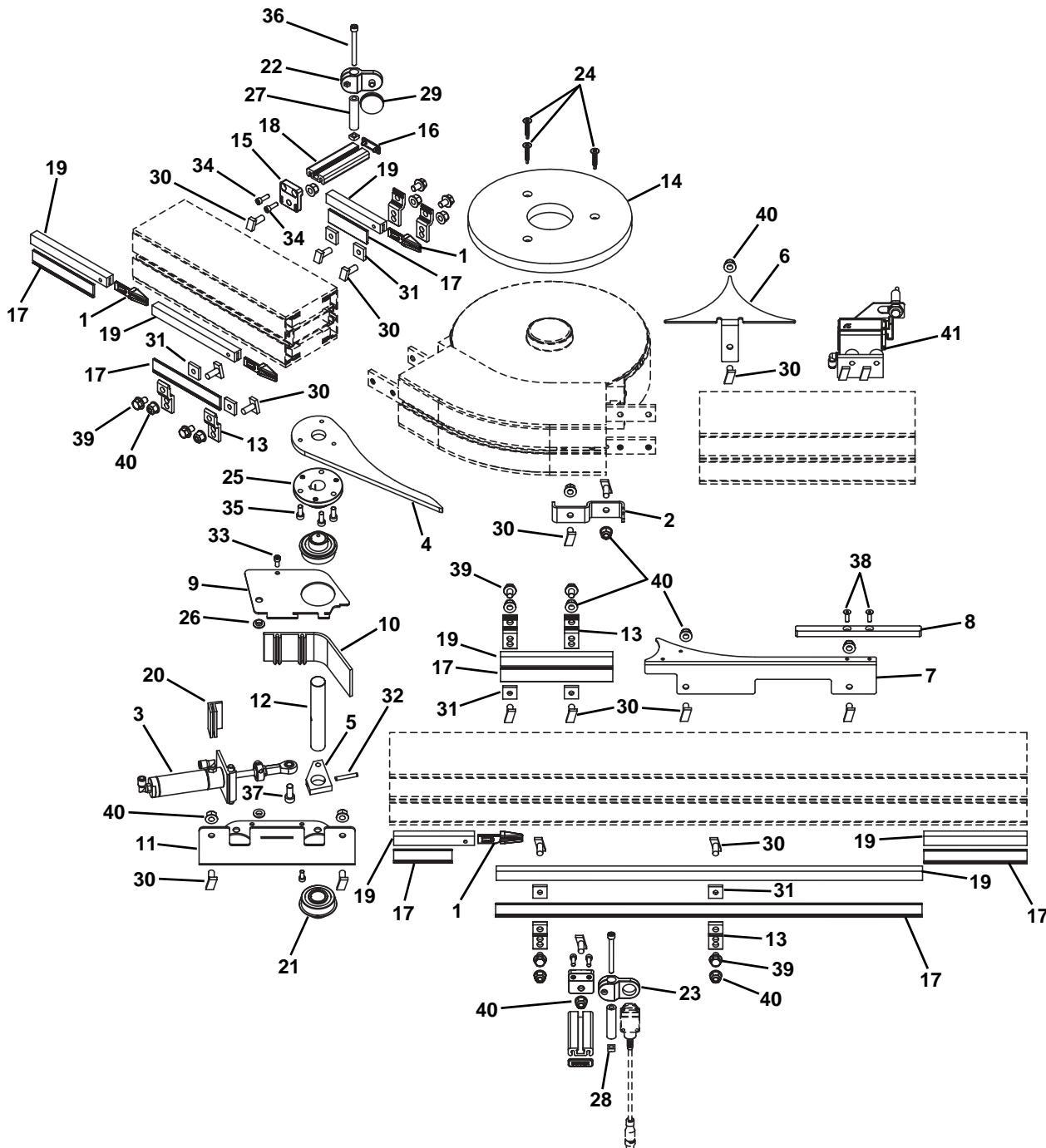
Item	Part Number	Description
1	203877	Clip
2	203894	Lead In Guide Wedge
3	204289	Frame Connecting Clip
4	204385	Cylinder Assembly - 2 Position
5	204775	Diverter Arm
6	204776	Arm Block
7	205117	Top Plate
8	205118	Bottom Guard
9	205119	Bottom Angle Plate
10	205127	Shaft
11	205129	Clip
12	210848	Mounting Block
13	210849	Cap
14	205925- <u>LLLL</u>	0.5" High Side Guide
15	210846-00353	Extrusion 3.53" long
16	350899- <u>LLLL</u>	Clip On Wear Strip
17	532226-00200	Bar 2.00" long
18	802-232	Bearing
19	807-1390	Reflector Mount Clamp
20	807-1391	Photo Eye Mount Clamp
21	807-2562	Flange Collar
22	807-2563	Spacer
23	807-2565	Post Spacer
24	807-920	Square Nut, M6-1.0
25	809-289	Reflector
26	834-007	Stud, M8 x 20 mm
27	834-014	Slide In Nut, M8
28	834-019	Slide In Nut, M6
29	913-142	Roll Pin
30	920512M	Socket Head Screw, M5-.80 x 12 mm
31	920516M	Socket Head Screw, M5-.80 x 16 mm
32	920616M	Socket Head Screw, M6-1.00 x 16 mm
33	920660M	Socket Head Screw, M6-1.00 x 60 mm
34	920820M	Socket Head Screw, M8-1.25 x 20 mm
35	930612M	Flat Head Screw, M6-1.00 x 12 mm
36	960882M	Flange Head Cap Screw, M8-1.25 x 12 mm
37	990812M	Hex Nut
38	204447	Fixed Pallet Stop
	204448	Cushion Pallet Stop

LLLL = Length is inches width 2 decimal places.

Length Example: Length = 6.25" LLLL = 00625

Service Parts

45° Parallel Divert-Merge



Service Parts

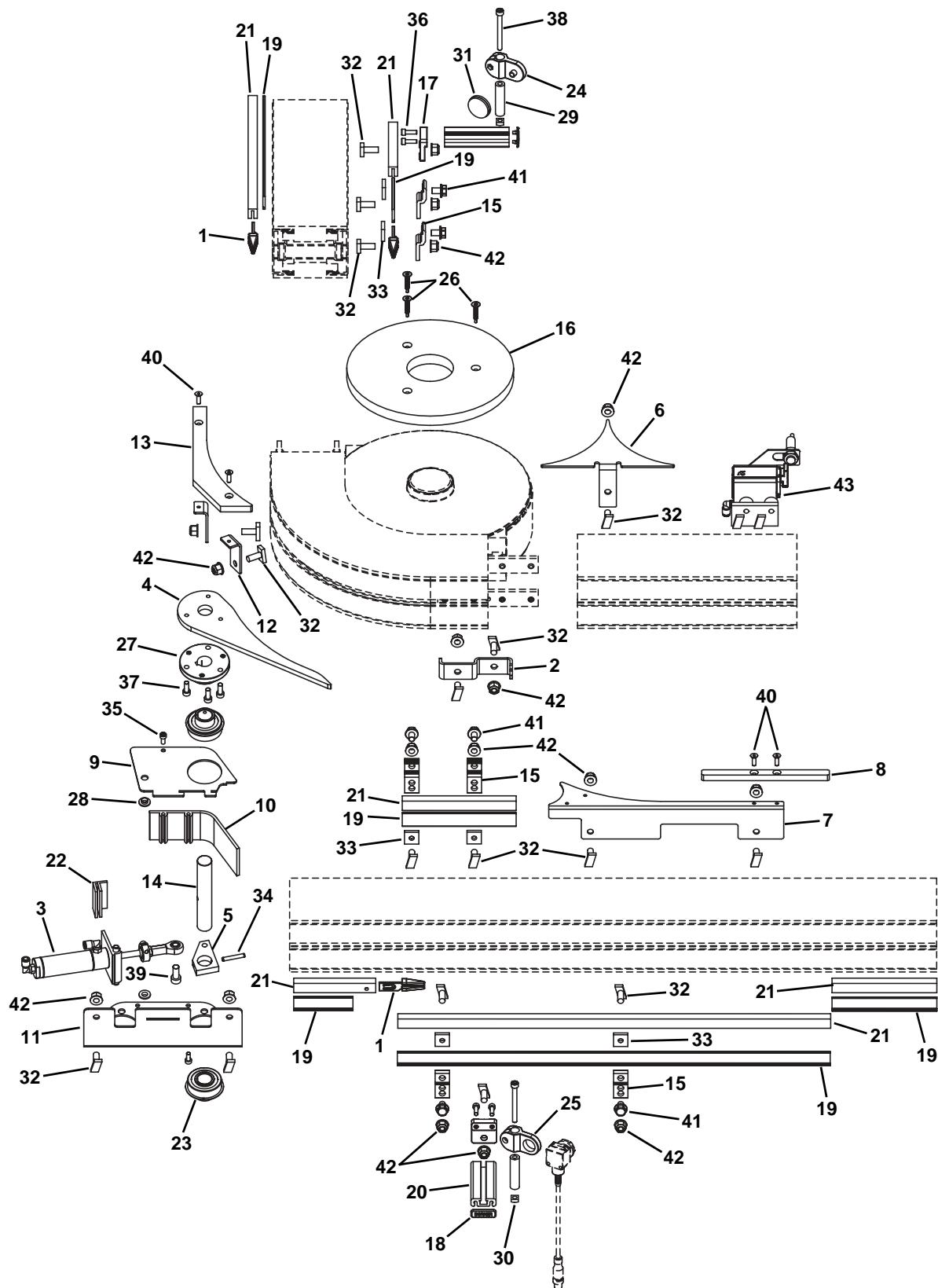
Item	Part Number	Description
1	203894	Lead In Guide Wedge
2	204289	Frame Connecting Clip
3	204385	Cylinder Assembly
4	204775	Divertor Arm
5	204776	Arm Block
6	204788	Corner Guide
7	204797	Tie Bar
8	204835	Divert Guide
9	205117	Top Plate
10	205118	Bottom Guard
11	205119	Bottom Angle Plate
12	205127	Shaft
13	205129	Clip
14	205131	Wheel Guide
15	210848	Mounting Block
16	210849	Cap
17	205925-LLLL	0.5" High Side Guide
18	210846-00353	Extrusion 3.53" long
19	350899-LLLL	Clip On Wear Strip
20	532226-00200	Bar 2.00" long
21	802-232	Bearing
22	807-1390	Reflector Mount Clamp
23	807-1391	Photo Eye Mount Clamp
24	807-2556	Flat Head Screw, #10-16 x 1.25"
25	807-2562	Flange Collar
26	807-2563	Spacer
27	807-2565	Post Spacer
28	807-920	Square Nut, M6-1.0
29	809-289	Reflector
30	834-007	Stud, M8 x 20 mm
31	834-014	Slide In Nut, M8
32	913-142	Roll Pin
33	920512M	Socket Head Screw, M5-.80 x 12 mm
34	920516M	Socket Head Screw, M5-.80 x 16 mm
35	920616M	Socket Head Screw, M6-1.00 x 16 mm
36	920660M	Socket Head Screw, M6-1.00 x 60 mm
37	920820M	Socket Head Screw, M8-1.25 x 20 mm
38	930516M	Flat Head Screw, M5-.80 x 16 mm
39	960882M	Flange Head Cap Screw, M8-1.25 x 12 mm
40	990812M	Hex Nut
41	204447	Fixed Pallet Stop
	204448	Cushion Pallet Stop

LLLL = Length is inches width 2 decimal places.

Length Example: Length = 6.25" LLLL = 00625

Service Parts

90° Parallel Divert-Merge



Service Parts

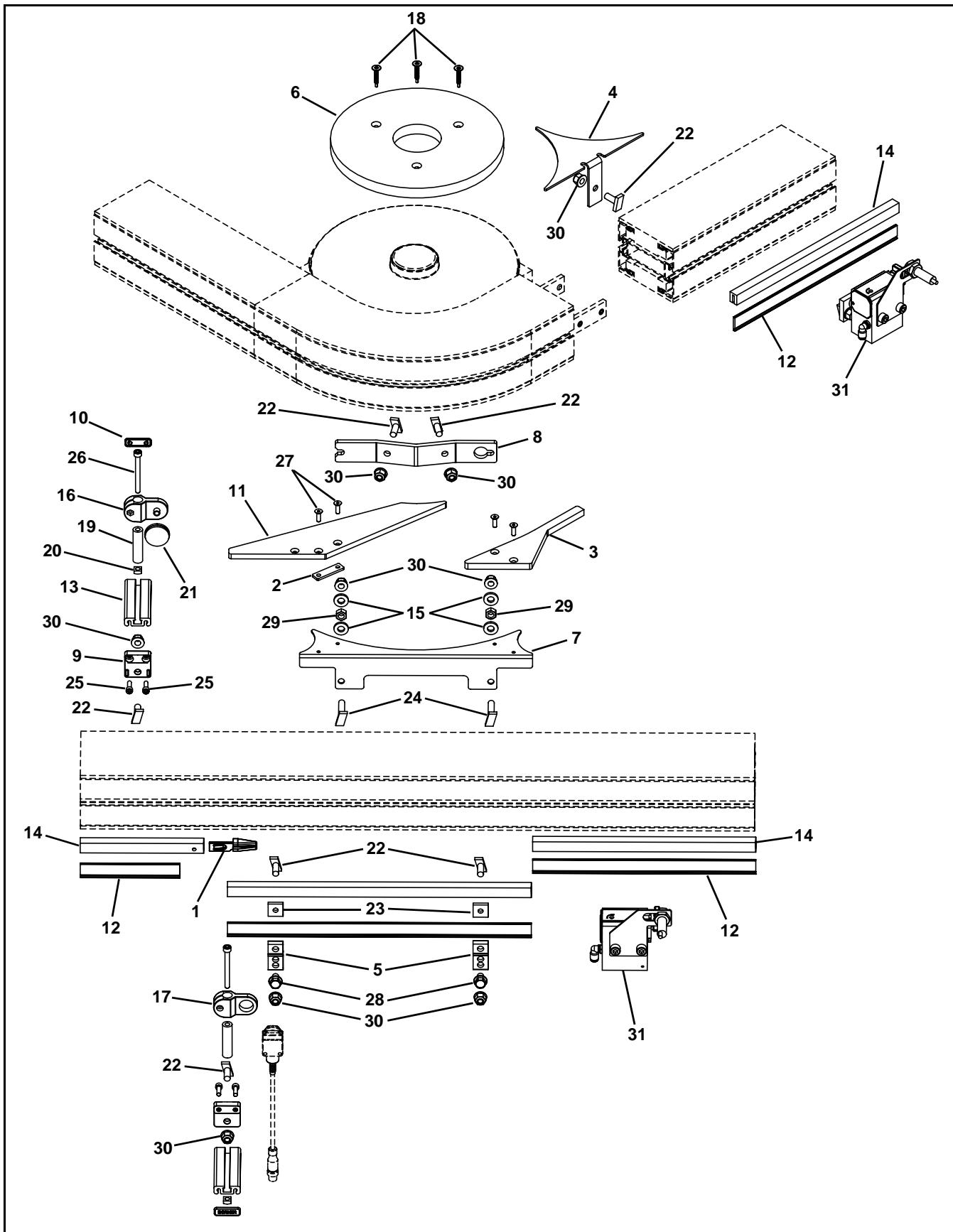
Item	Part Number	Description
1	203894	Lead In Guide Wedge
2	204289	Frame Connecting Clip
3	204385	Cylinder Assembly
4	204775	Divertor Arm
5	204776	Arm Block
6	204788	Corner Guide
7	204797	Tie Bar
8	204835	Divert Guard
9	205117	Top Plate
10	205118	Bottom Guard
11	205119	Bottom Angle Plate
12	205123	Angle Support
13	205124	Wedge Guide - Exit
14	205127	Shaft
15	205129	Clip
16	205131	Wheel Guide
17	210848	Mounting Block
18	210849	Cap
19	205925-LLLL	0.5" High Side Guide
20	210846-00353	Extrusion 3.53" long
21	350899-LLLL	Clip On Wear Strip
22	532226-00200	Bar 2.00" long
23	802-232	Bearing
24	807-1390	Reflector Mount Clamp
25	807-1391	Photo Eye Mount Clamp
26	807-2556	Flat Head Screw, #10-16 x 1.25"
27	807-2562	Flange Collar
28	807-2563	Spacer
29	807-2565	Post Spacer
30	807-920	Square Nut, M6-1.0
31	809-289	Reflector
32	834-007	Stud, M8 x 20 mm
33	834-014	Slide In Nut, M8
34	913-142	Roll Pin
35	920512M	Socket Head Screw, M5-.80 x 12 mm
36	920516M	Socket Head Screw, M5-.80 x 16 mm
37	920616M	Socket Head Screw, M6-1.00 x 16 mm
38	920660M	Socket Head Screw, M6-1.00 x 60 mm
39	920820M	Socket Head Screw, M8-1.25 x 20 mm
40	930516M	Flat Head Screw, M5-.80 x 16 mm
41	960882M	Flange Head Cap Screw, M8-1.25 x 12 mm
42	990812M	Hex Nut
43	204447	Fixed Pallet Stop
	204448	Cushion Pallet Stop

LLLL = Length is inches width 2 decimal places.

Length Example: Length = 6.25" LLLL = 00625

Service Parts

45° Merge



SmartFlex Pallet System Accessories

Service Parts

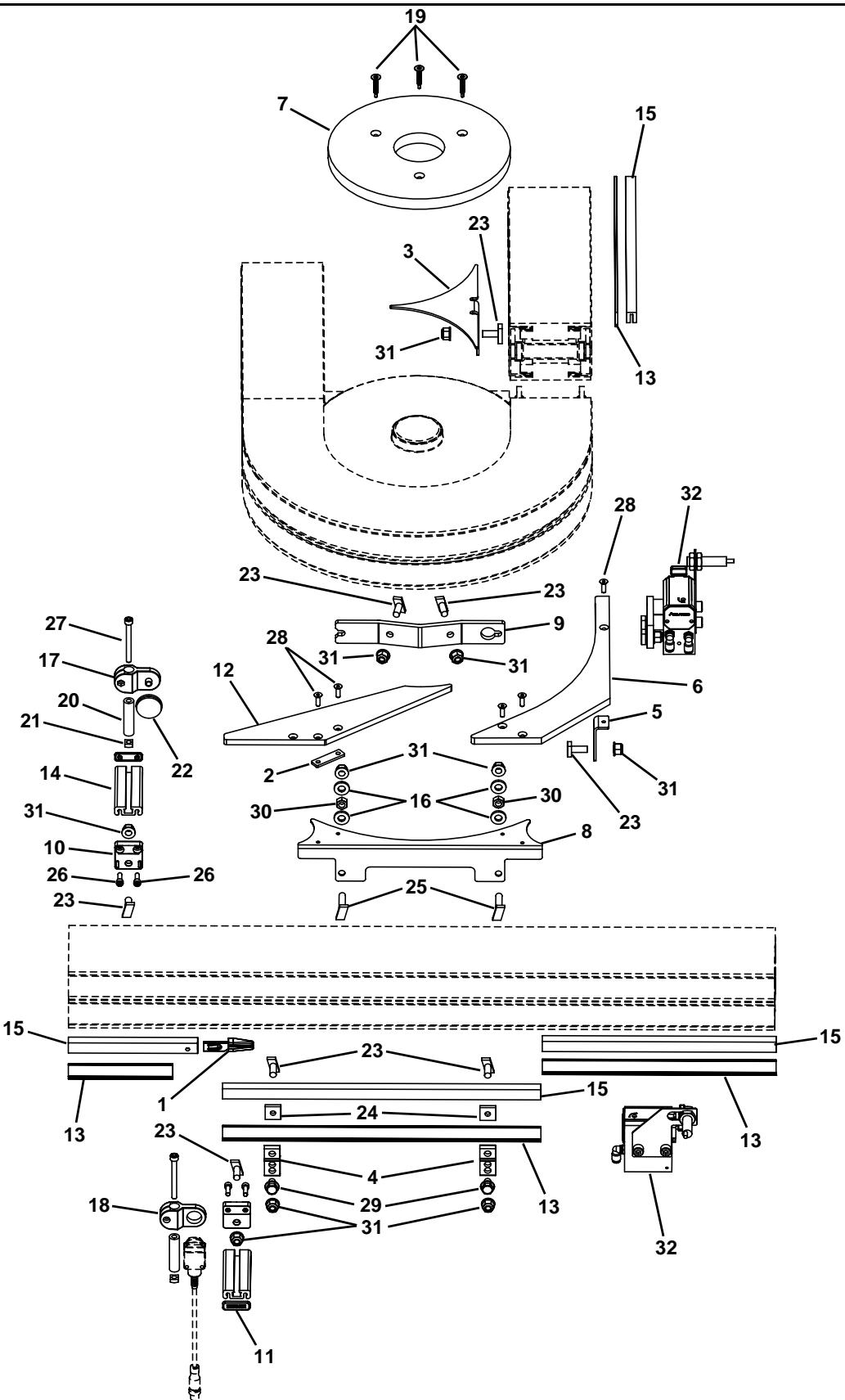
Item	Part Number	Description
1	203894	Lead In Guide Wedge
2	204295	Spacer
3	204298	45° Corner Guide
4	204788	Corner Guide
5	205129	Clip
6	205131	Wheel Guide
7	205158	Conveyor Tie Plate
8	205159	Tie Bar
9	210848	Mounting Block
10	210849	Cap
11	204833	Corner Guide
12	205925- <u>LLLL</u>	0.5" High Side Guide
13	210846-00353	Extrusion 3.53" long
14	350899- <u>LLLL</u>	Clip On Wear Strip
15	605280P	Washer
16	807-1390	Reflector Mount Clamp
17	807-1391	Photo Eye Mount Clamp
18	807-2556	Flat Head Screw, #10-16 x 1.25"
19	807-2565	Post Spacer
20	807-920	Square Nut, M6-1.0
21	809-289	Reflector
22	834-007	Stud, M8 x 20 mm
23	834-014	Slide In Nut, M8
24	834-018	Stud, M8 x 35 mm
25	920516M	Socket Head Screw, M5-.80 x 16 mm
26	920660M	Socket Head Screw, M6-1.00 x 60 mm
27	930516M	Flat Head Screw, M5-.80 x 16 mm
28	960882M	Flange Head Cap Screw, M8-1.25 x 12 mm
29	990801M	Hex Nut
30	990812M	Hex Nut
31	204447	Fixed Pallet Stop
	204448	Cushion Pallet Stop

LLLL = Length is inches width 2 decimal places.

Length Example: Length = 6.25" LLLL = 00625

Service Parts

90° Merge



SmartFlex Pallet System Accessories

Service Parts

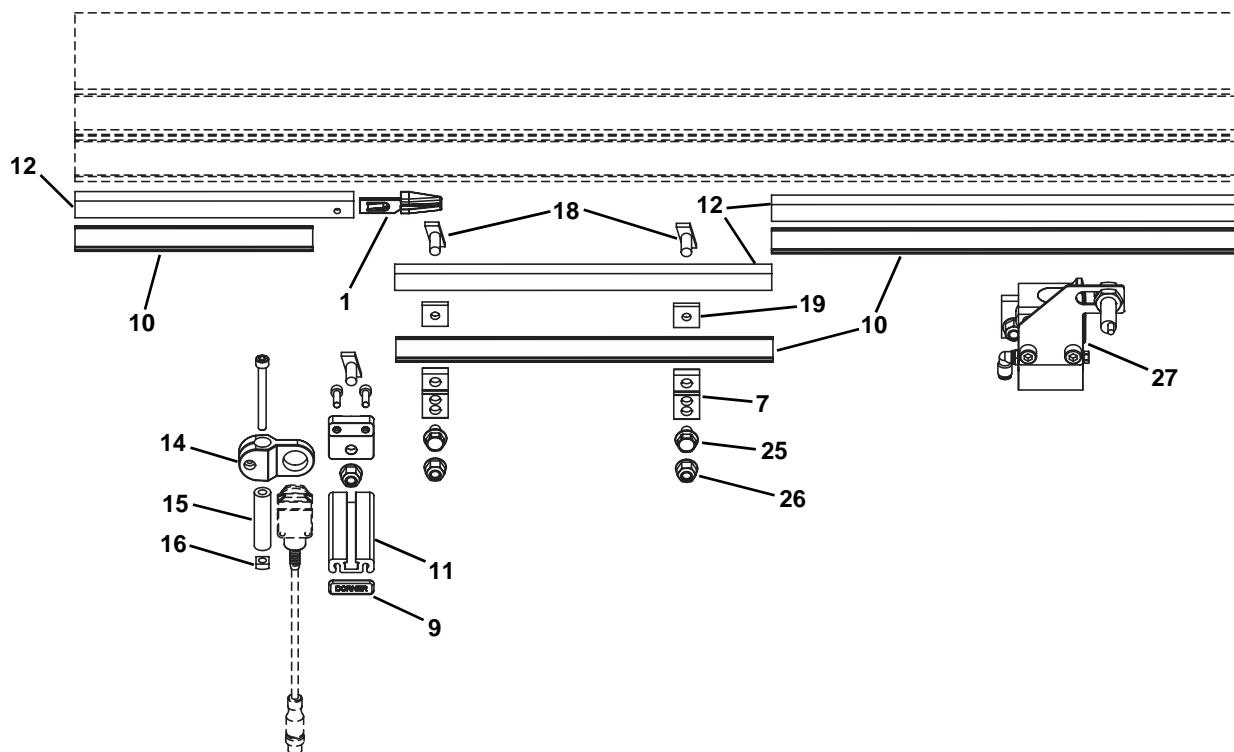
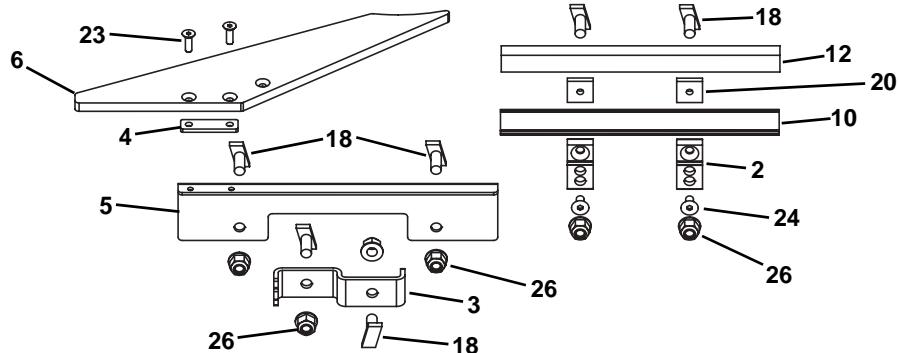
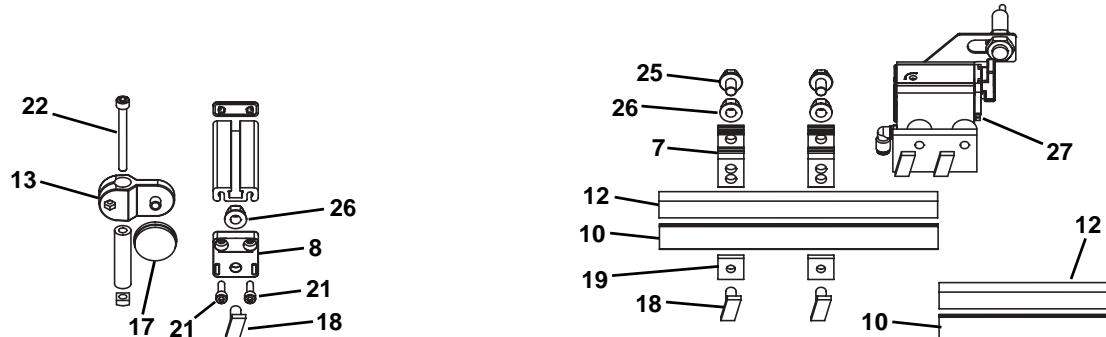
Item	Part Number	Description
1	203894	Lead In Guide Wedge
2	204295	Spacer
3	204788	Corner Guide
4	205129	Clip
5	205123	Angle Support
6	205130	Wedge Guide - Entrance
7	205131	Wheel Guide
8	205158	Conveyor Tie Plate
9	205159	Tie Bar
10	210848	Mounting Block
11	210849	Cap
12	204833	Corner Guide
13	205925- <u>LLLL</u>	0.5" High Side Guide
14	210846-00353	Extrusion 3.53" long
15	350899- <u>LLLL</u>	Clip On Wear Strip
16	605280P	Washer
17	807-1390	Reflector Mount Clamp
18	807-1391	Photo Eye Mount Clamp
19	807-2556	Flat Head Screw, #10-16 x 1.25"
20	807-2565	Post Spacer
21	807-920	Square Nut, M6-1.0
22	809-289	Reflector
23	834-007	Stud, M8 x 20 mm
24	834-014	Slide In Nut, M8
25	834-018	Stud, M8 x 35 mm
26	920516M	Socket Head Screw, M5-.80 x 16 mm
27	920660M	Socket Head Screw, M6-1.00 x 60 mm
28	930516M	Flat Head Screw, M5-.80 x 16 mm
29	960882M	Flange Head Cap Screw, M8-1.25 x 12 mm
30	990801M	Hex Nut
31	990812M	Hex Nut
32	204447	Fixed Pallet Stop
	204448	Cushion Pallet Stop

LLLL = Length is inches width 2 decimal places.

Length Example: Length = 6.25" LLLL = 00625

Service Parts

Parallel-Merge

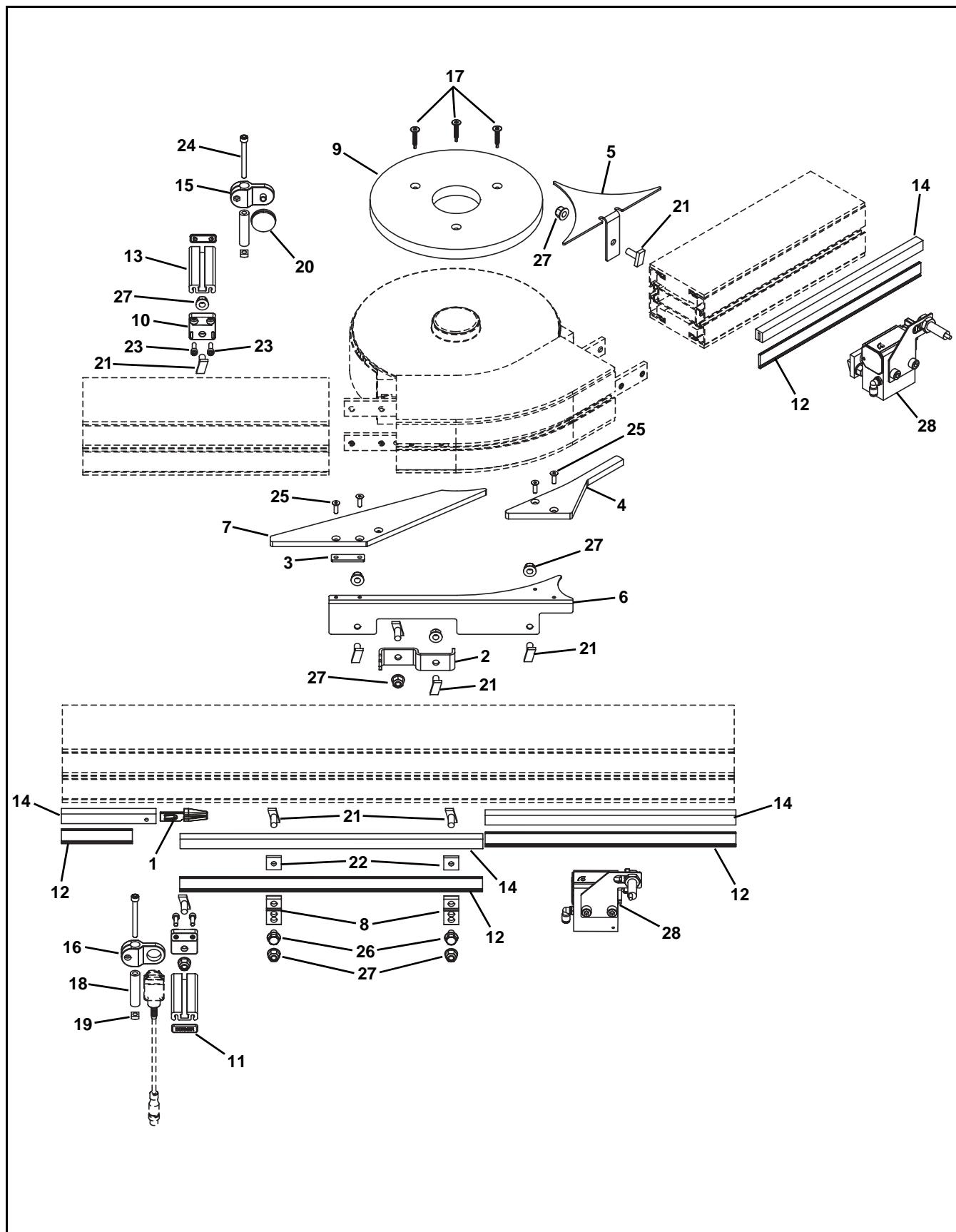


Service Parts

Item	Part Number	Description
1	203894	Lead In Guide Wedge
2	203877	Clip
3	204289	Frame Connecting Clip
4	204295	Spacer
5	204426	Tie Plate
6	204833	Corner Guide
7	205129	Clip
8	210848	Mounting Block
9	210849	Cap
10	205925- <u>LLLL</u>	0.5" High Side Guide
11	210846-00353	Extrusion 3.53" long
12	350899- <u>LLLL</u>	Clip On Wear Strip
13	807-1390	Reflector Mount Clamp
14	807-1391	Photo Eye Mount Clamp
15	807-2565	Post Spacer
16	807-920	Square Nut, M6-1.0
17	809-289	Reflector
18	834-007	Stud, M8 x 20 mm
19	834-014	Slide In Nut, M8
20	834-019	Slide In Nut, M6
21	920516M	Socket Head Screw, M5-.80 x 16 mm
22	920660M	Socket Head Screw, M6-1.00 x 60 mm
23	930516M	Flat Head Screw, M5-.80 x 16 mm
24	930612M	Flat Head Screw, M6-1.00 x 12 mm
25	960882M	Flange Head Cap Screw, M8-1.25 x 12 mm
26	990812M	Hex Nut
27	204447	Fixed Pallet Stop
	204448	Cushion Pallet Stop
<u>LLLL</u> = Length is inches width 2 decimal places.		
Length Example: Length = 6.25" <u>LLLL</u> = 00625		

Service Parts

45° Parallel-Merge



Service Parts

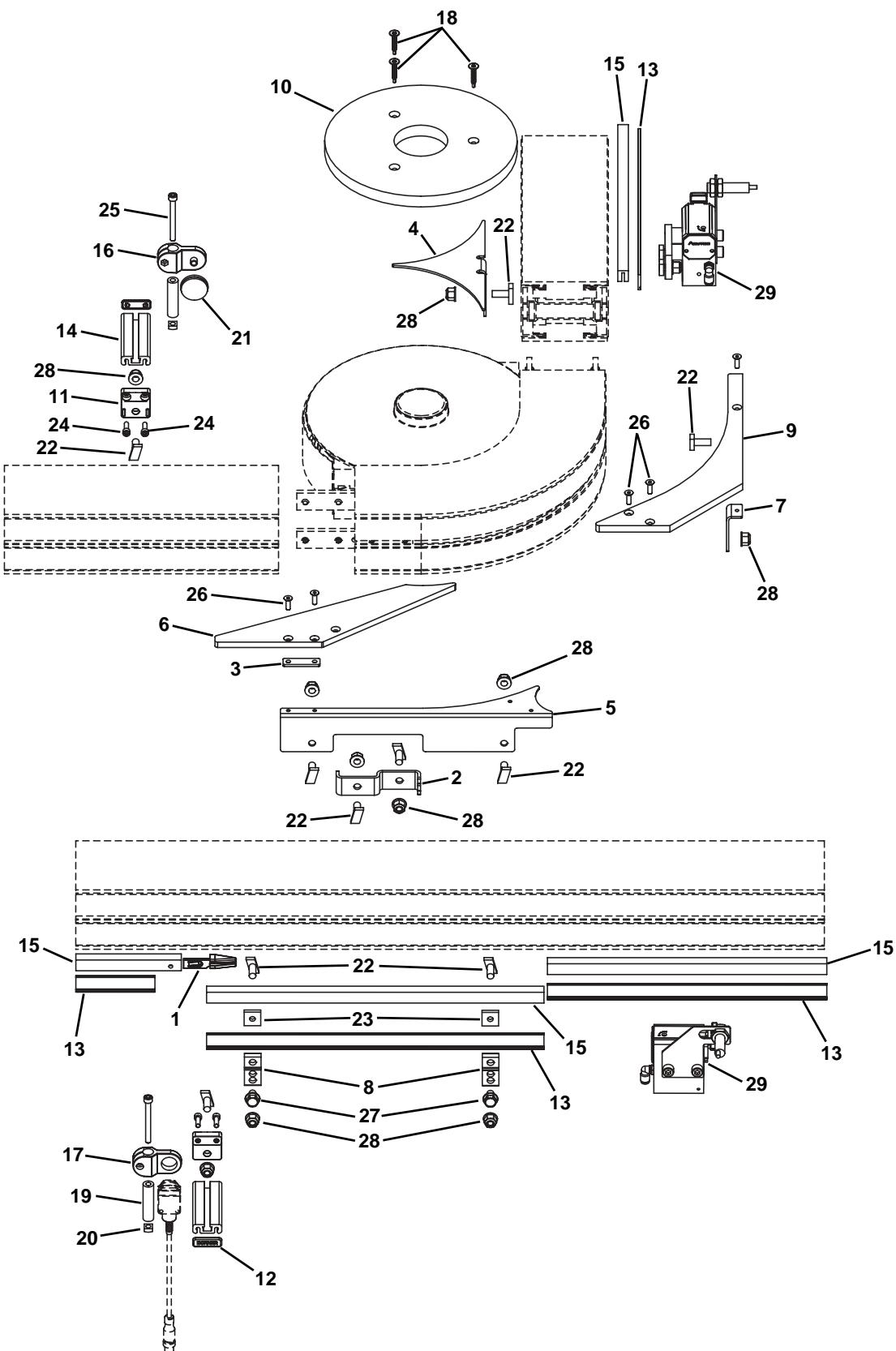
Item	Part Number	Description
1	203894	Lead In Guide Wedge
2	204289	Frame Connecting Clip
3	204295	Spacer
4	204298	45° Corner Guide
5	204788	Corner Guide
6	204797	Tie Plate
7	204833	Corner Guide
8	205129	Clip
9	205131	Wheel Guide
10	210848	Mounting Block
11	210849	Cap
12	205925- <u>LLLL</u>	0.5" High Side Guide
13	210846-00353	Extrusion 3.53" long
14	350899- <u>LLLL</u>	Clip On Wear Strip
15	807-1390	Reflector Mount Clamp
16	807-1391	Photo Eye Mount Clamp
17	807-2556	Flat Head Screw, #10-16 x 1.25"
18	807-2565	Post Spacer
19	807-920	Square Nut, M6-1.0
20	809-289	Reflector
21	834-007	Stud, M8 x 20 mm
22	834-014	Slide In Nut, M8
23	920516M	Socket Head Screw, M5-.80 x 16 mm
24	920660M	Socket Head Screw, M6-1.00 x 60 mm
25	930516M	Flat Head Screw, M5-.80 x 16 mm
26	960882M	Flange Head Cap Screw, M8-1.25 x 12 mm
27	990812M	Hex Nut
28	204447	Fixed Pallet Stop
	204448	Cushion Pallet Stop

LLLL = Length is inches width 2 decimal places.

Length Example: Length = 6.25" LLLL = 00625

Service Parts

90° Parallel-Merge



SmartFlex Pallet System Accessories

Service Parts

Item	Part Number	Description
1	203894	Lead In Guide Wedge
2	204289	Frame Connecting Clip
3	204295	Spacer
4	204788	Corner Guide
5	204797	Tie Plate
6	204833	Corner Guide
7	205123	Angle Support
8	205129	Clip
9	205130	Wedge Guide - Entrance
10	205131	Wheel Guide
11	210848	Mounting Block
12	210849	Cap
13	205925- <u>LLLL</u>	0.5" High Side Guide
14	210846-00353	Extrusion 3.53" long
15	350899- <u>LLLL</u>	Clip On Wear Strip
16	807-1390	Reflector Mount Clamp
17	807-1391	Photo Eye Mount Clamp
18	807-2556	Flat Head Screw, #10-16 x 1.25"
19	807-2565	Post Spacer
20	807-920	Square Nut, M6-1.0
21	809-289	Reflector
22	834-007	Stud, M8 x 20 mm
23	834-014	Slide In Nut, M8
24	920516M	Socket Head Screw, M5-.80 x 16 mm
25	920660M	Socket Head Screw, M6-1.00 x 60 mm
26	930516M	Flat Head Screw, M5-.80 x 16 mm
27	960882M	Flange Head Cap Screw, M8-1.25 x 12 mm
28	990812M	Hex Nut
29	204447	Fixed Pallet Stop
	204448	Cushion Pallet Stop

LLLL = Length is inches width 2 decimal places.

Length Example: Length = 6.25" LLLL = 00625

Return Policy

Returns must have prior written factory authorization or they will not be accepted. Items that are returned to Dorner without authorization will not be credited nor returned to the original sender. When calling for authorization, please have the following information ready for the Dorner factory representative or your local distributor:

1. Name and address of customer.
2. Dorner part number(s) of item(s) being returned.
3. Reason for return.
4. Customer's original order number used when ordering the item(s).
5. Dorner or distributor invoice number (if available, part serial number).

A representative will discuss action to be taken on the returned items and provide a Returned Goods Authorization (RMA) number for reference. RMA will automatically close 30 days after being issued. To get credit, items must be new and undamaged. There will be a return charge on all items returned for credit, where Dorner was not at fault. It is the customer's responsibility to prevent damage during return shipping. Damaged or modified items will not be accepted. The customer is responsible for return freight.

Product Line	Product Type								Engineered to order parts
	Conveyors	Gearmotors & Mounting Packages	Support Stands	Accessories	Spare Parts (non-belt)	Spare Belts - Standard Flat Fabric	Spare Belts - Cleated & Specialty Fabric	Spare Belts - Plastic Chain	
1100									
2200									
2200 Modular Belt									
2200 Precision Move									
2300									
2300 Modular Belt									
3200									
3200 LPZ									
3200 Precision Move									
4100									
5200									
5300									
6200									
Controls									
7200 / 7300	50% return fee for all products								
7350									
7360									
7400									
7600									

Returns will not be accepted after 60 days from original invoice date. The return charge covers inspection, cleaning, disassembly, disposal and reissuing of components to inventory. If a replacement is needed prior to evaluation of returned item, a purchase order must be issued. Credit (if any) is issued only after return and evaluation is complete.

Dorner has representatives throughout the world. Contact Dorner for the name of your local representative. Our Customer Service Team will gladly help with your questions on Dorner products.

For a copy of Dorner's Warranty, contact factory, distributor, service center or visit our website at www.dorner.com.

For replacement parts, contact an authorized Dorner Service Center or the factory.



Dorner Mfg. Corp. reserves the right to change or discontinue products without notice. All products and services are covered in accordance with our standard warranty. All rights reserved. © Dorner Mfg. Corp. 2013

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TEL 1-262-367-7600
FAX 1-262-367-5827