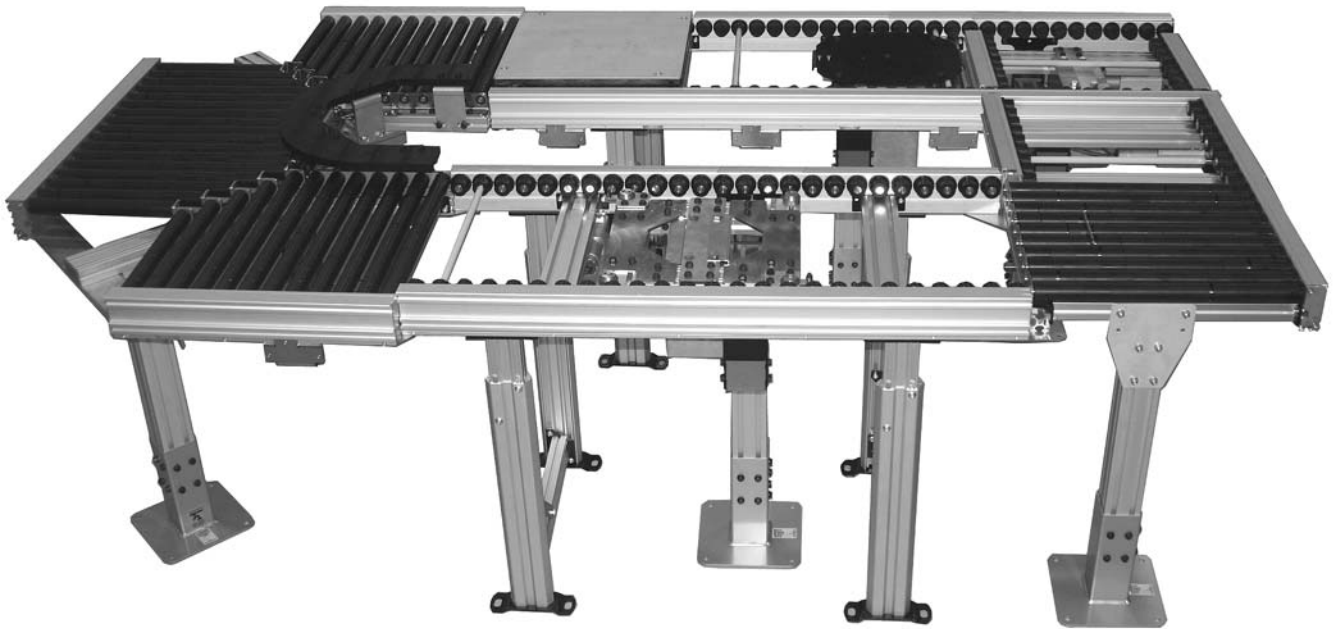




ERT™ 250 Pallet System Stations & Accessories

Installation, Maintenance & Parts Manual



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Record Conveyor Serial Number Here

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IMPORTANT

<i>Some illustrations may show guards removed. DO NOT operate equipment without guards.</i>

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

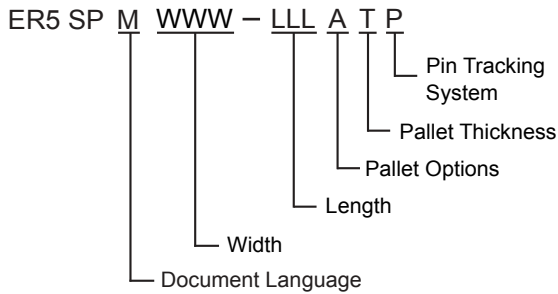


Loosening stand height or angle adjustment screws may cause conveyor sections to drop down, causing severe injury.

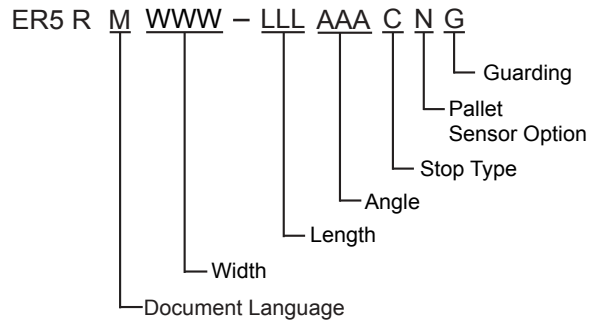
SUPPORT CONVEYOR SECTIONS PRIOR TO LOOSENING STAND HEIGHT OR ANGLE ADJUSTMENT SCREWS.

Accessories:

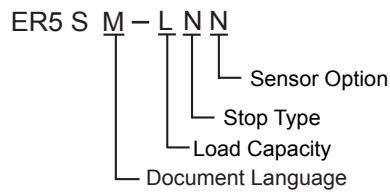
Pallets



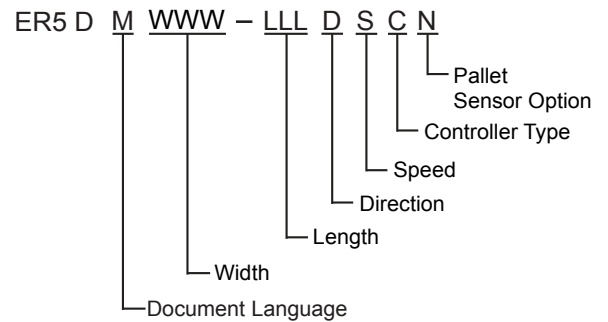
Lift and Rotate Station



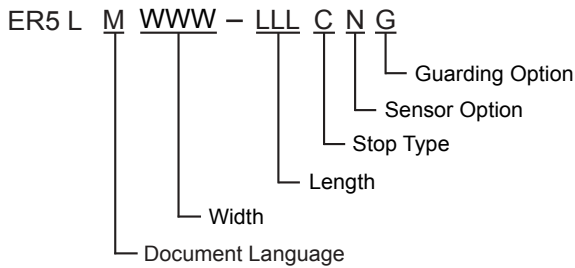
Pallet Stops



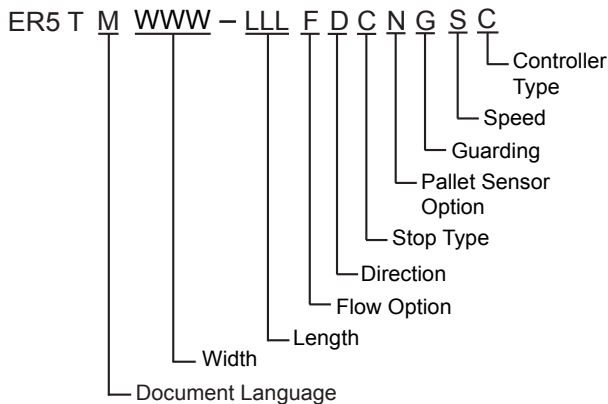
Pallet Pusher



Lift and Locate Station



Lift and Transfer Station



Installation

Required Tools

- .050" hex wrench
- 2 mm hex wrench
- 5 mm hex wrench
- 6 mm hex wrench
- 13 mm wrench
- 17 mm wrench
- 19 mm wrench

Sensor Mounts

Bottom Mount

1. Install spring nut (**Figure 1, item 1**) into T-slot.



Figure 1

2. Attach sensor (**Figure 2, item 1**) to conveyor with bolt (**Figure 2, item 2**).

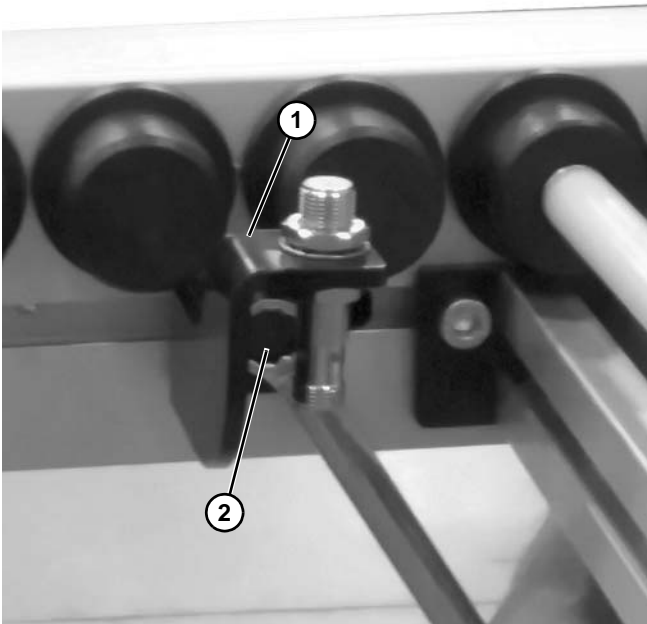


Figure 2

Side Mount

1. Install spring nut (**Figure 3, item 1**) into T-slot.



Figure 3

2. Attach sensor (**Figure 4, item 1**) to conveyor with bolt (**Figure 4, item 2**).

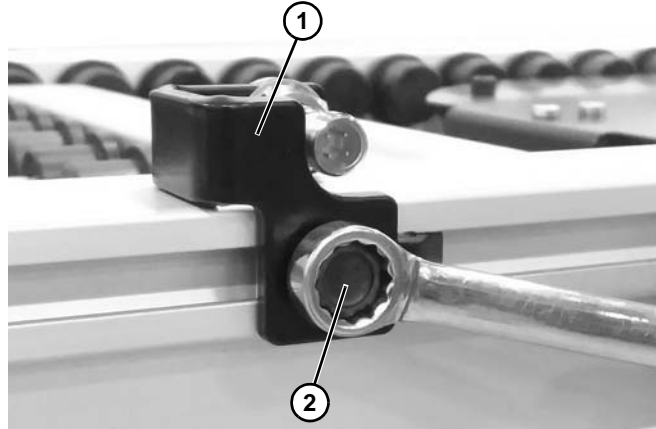


Figure 4

Pallet Stops

Installation

1. Install spring nuts (**Figure 5, item 1**) into T-slot.

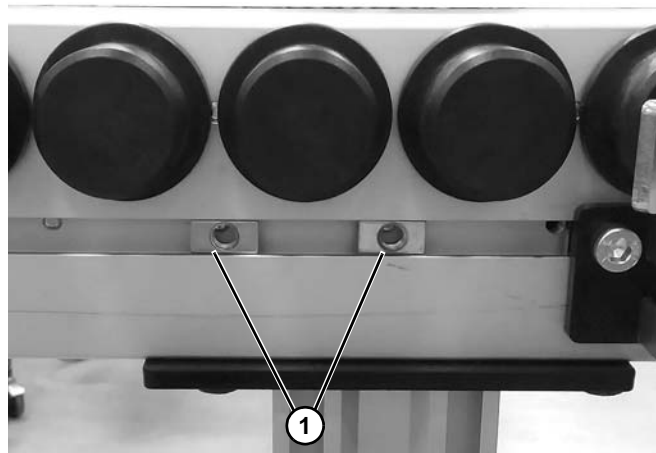


Figure 5

2. Install pallet stop (**Figure 6, item 1**) to conveyor using two screws (**Figure 6, item 2**). Tighten screws.

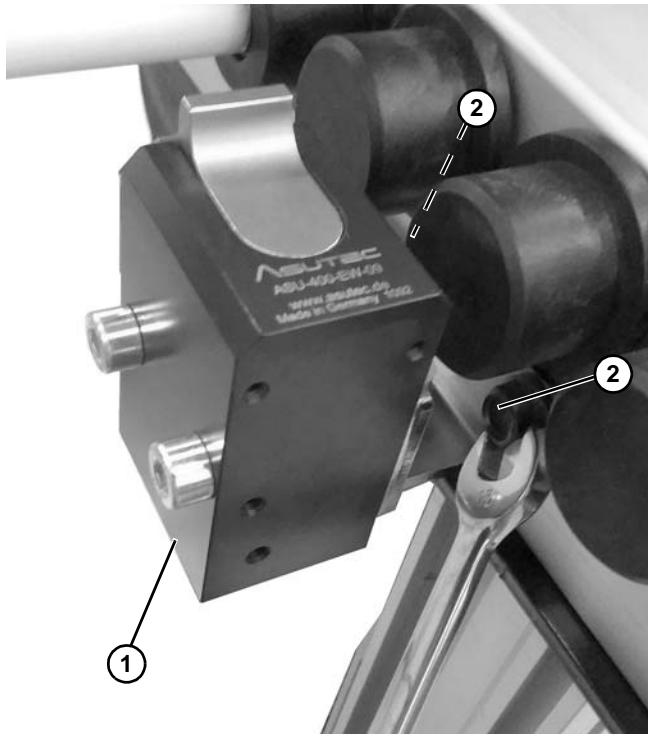


Figure 6

To switch pallet stop from left hand to right hand

1. Remove two fasteners (**Figure 7, item 1**) and remove bracket (**Figure 7, item 2**).

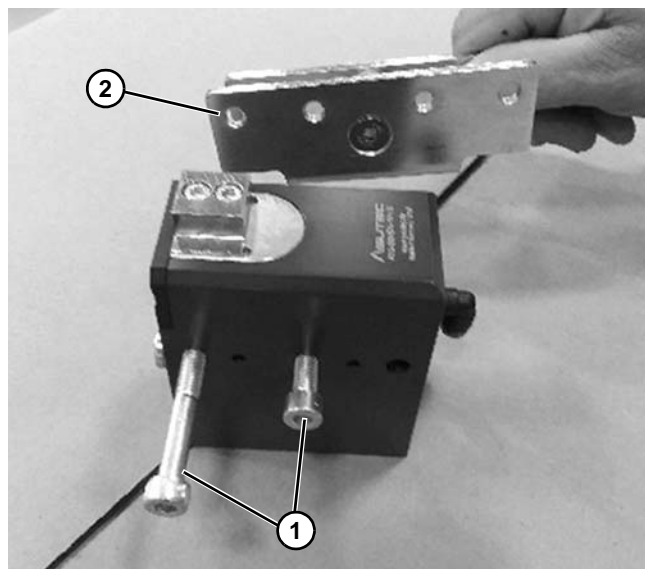


Figure 7

2. Insert the two fasteners (**Figure 8, item 1**) on the opposite side of the pallet stop.

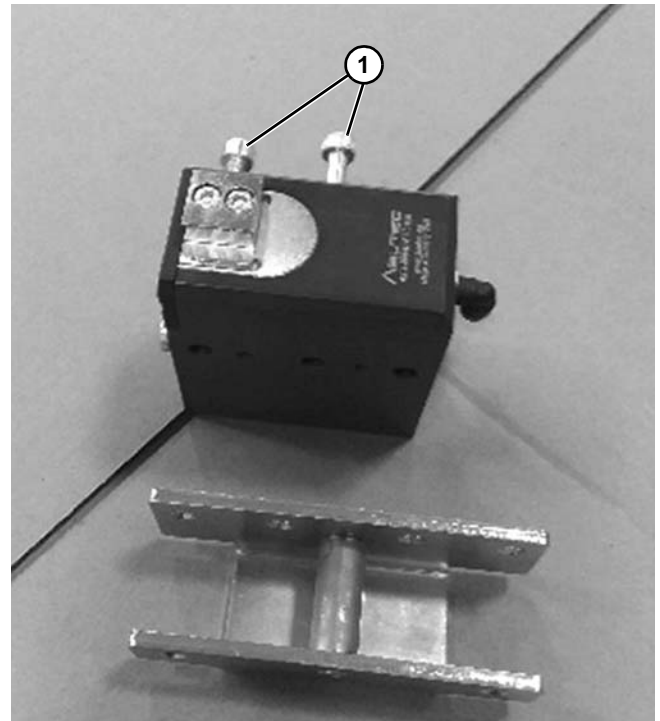


Figure 8

3. Tighten fasteners to secure bracket (**Figure 9, item 1**) back onto pallet stop.

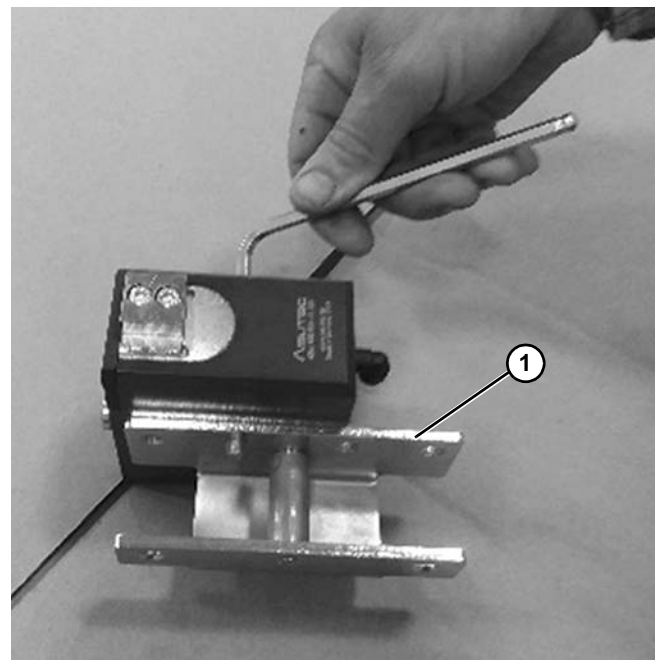


Figure 9

Installation

4. Remove fasteners (Figure 10, item 1) on top of pallet stop.

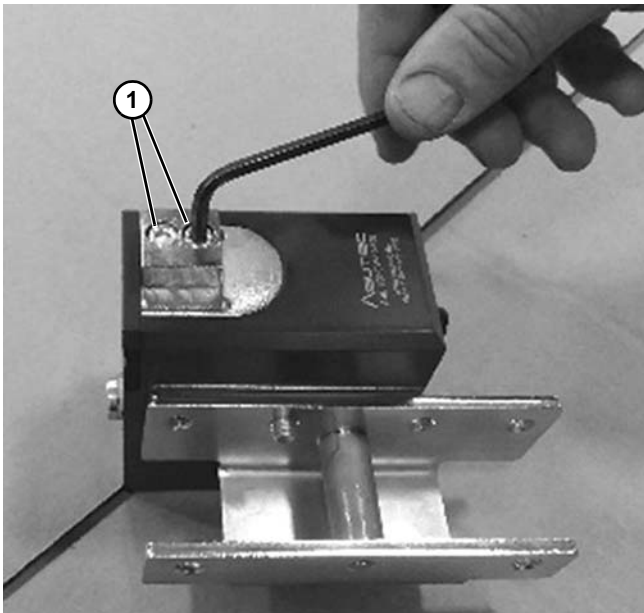


Figure 10

5. Remove stop (Figure 11, item 1) and rotate 180 degrees.

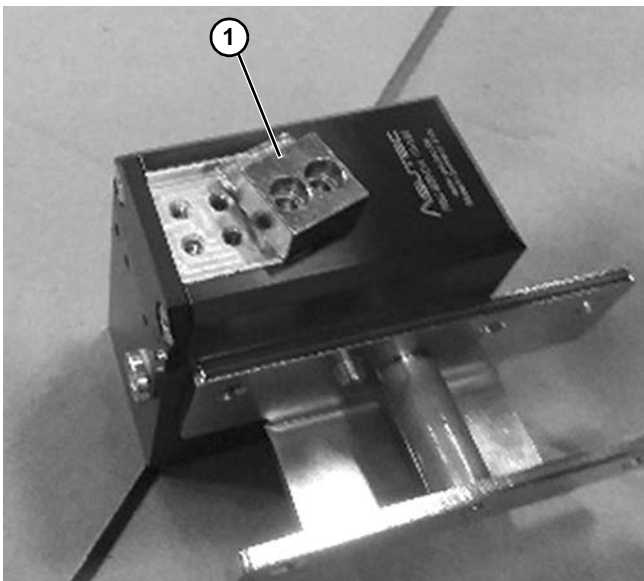


Figure 11

6. Replace fasteners (Figure 12, item 1) and tighten.

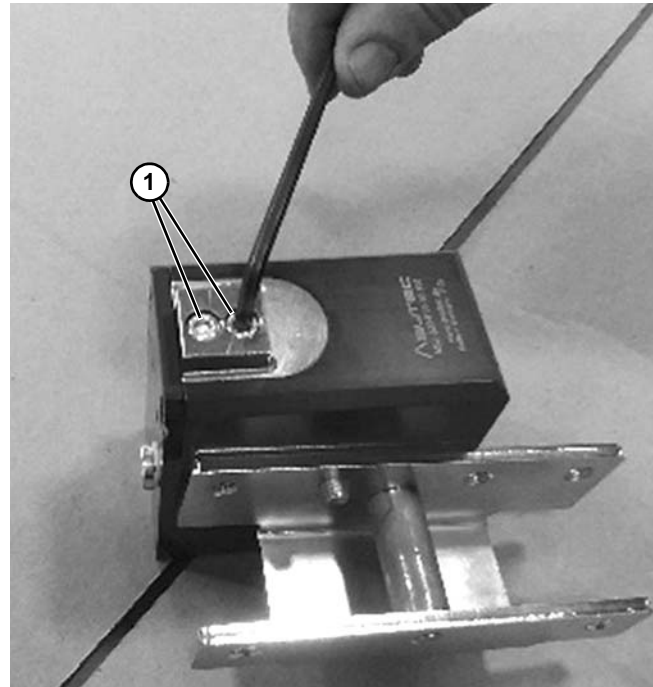


Figure 12

Pneumatic and Control Logic Suggestions

Recommended Pneumatics

Dorner recommends using a 3-port 2-way solenoid valve (Figure 13) to operate Pallet Stops.

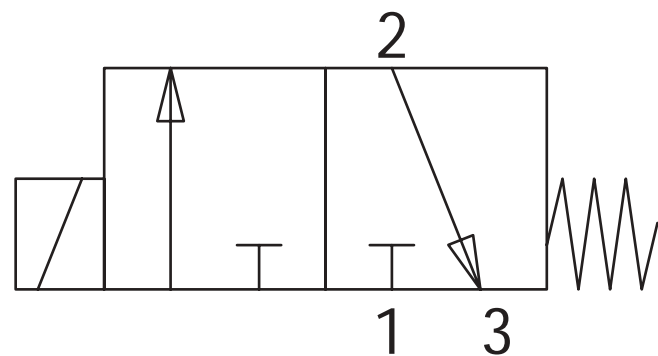


Figure 13

Attaching and Operations of Pneumatics

1. Connect the solenoid to the stop. Dorner fittings (**Figure 14, item 1**) accept 1/4" outside diameter tubing standard (**Figure 14, item 2**).

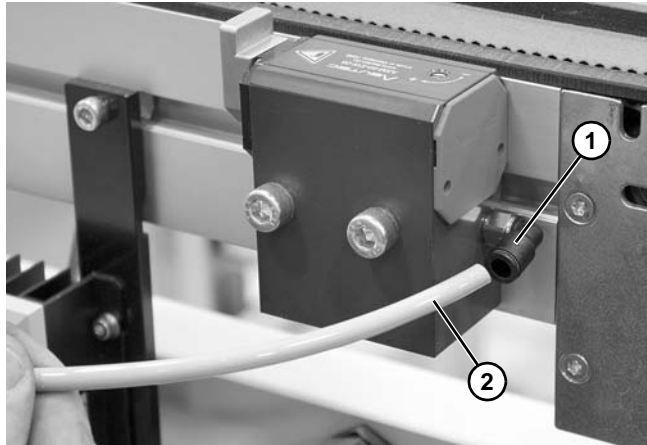


Figure 14

2. Stops release when air is supplied to the stop. The stops only need to be released long enough for the leading pallet skirt to clear the stop.

Sensor Installation and Basic Logic

2 Options:

- Bottom Mount Sensor
- Side Mount Sensor

Optional bottom mount (**Figure 15, item 1**) or side mount (**Figure 15, item 2**) sensor brackets can be used to mount a 12 mm barrel proximity sensor (**Figure 15, item 3**).

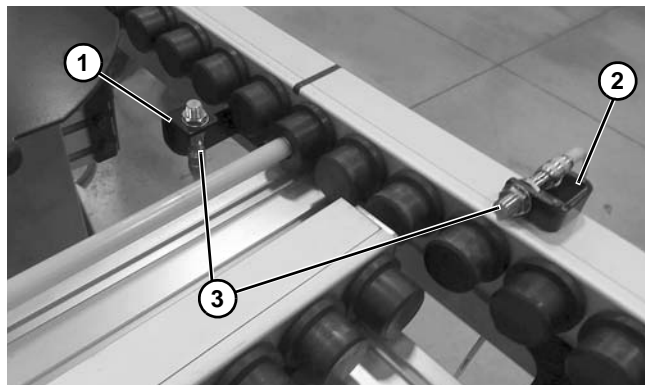


Figure 15

- On an in-frame stop, two bottom (**Figure 16, item 1**) and two side flags (**Figure 16, item 2**) (when bumpers are not installed) can be used for sensing.



Figure 16

- Use proximity sensor to detect pallet located at the stop.
- The stop can reset after a short delay when the proximity sensor signal clears.
- Stop only has to be released long enough to clear pallet skirt that was stopped. Notches (**Figure 16, item 3**) in skirt allow for continued travel either before stop when stop placed on the right conveyor (stop is catching on trailing skirt) or after stop when stop is placed on left conveyor (stop is catching on leading skirt).

Lift and Locate Station

Simplified Installation

1. Install and adjust Lift and Locate module (**Figure 17, item 1**).

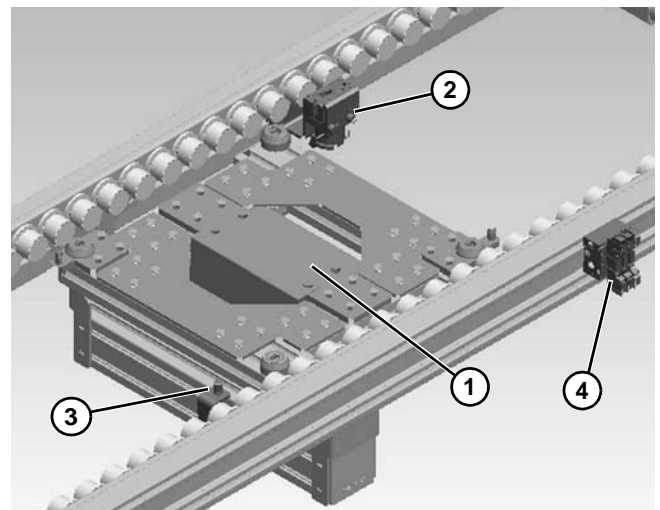


Figure 17

2. Locate and install pallet stop (**Figure 17, item 2**). (Refer to "Pallet Stops" starting on page 6.)
3. Locate and install pallet sensor (**Figure 17, item 3**). (Refer to "Sensor Mounts" starting on page 6.)
4. Install and connect pneumatic solenoids (**Figure 17, item 4**), provided by others.

Installation

Full Installation Steps

1. Install two spring nuts (**Figure 18, item 1**) in inner T-slot on both sides of the conveyor.

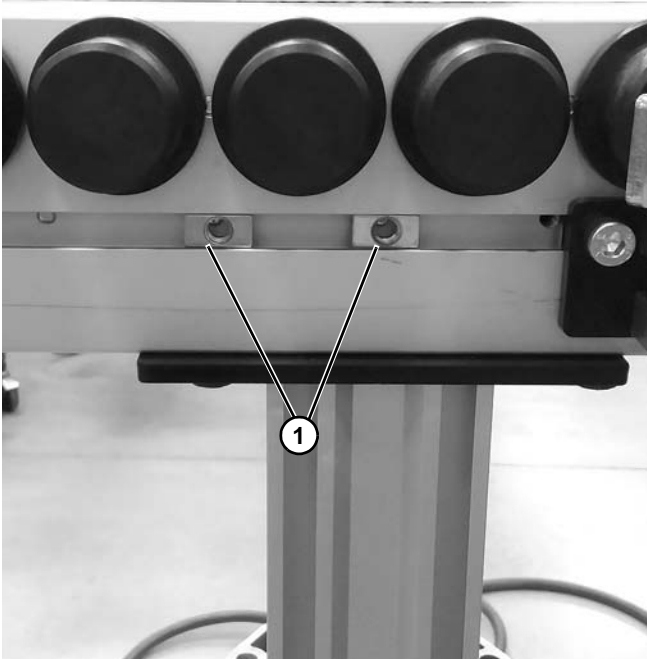


Figure 18

2. Raise lift and locate station (**Figure 19, item 1**) into position from under the conveyor, lining up center pin (**Figure 19, item 2**) in slotted channel of conveyor channel. Repeat on opposite side.

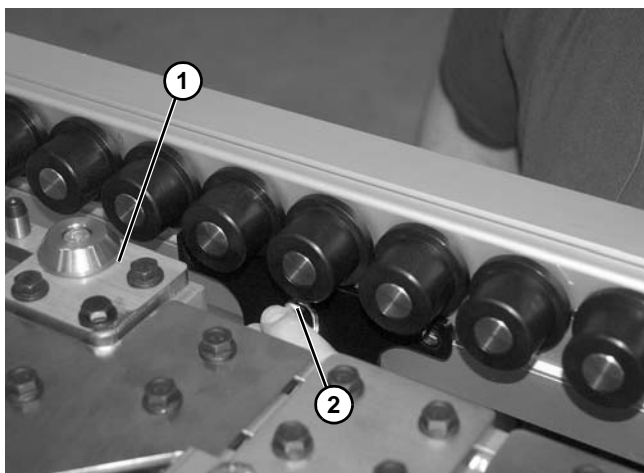


Figure 19

3. Tilt locate station, as needed, and install and tighten bolts (**Figure 20, item 1**) into follower nuts inside channel.

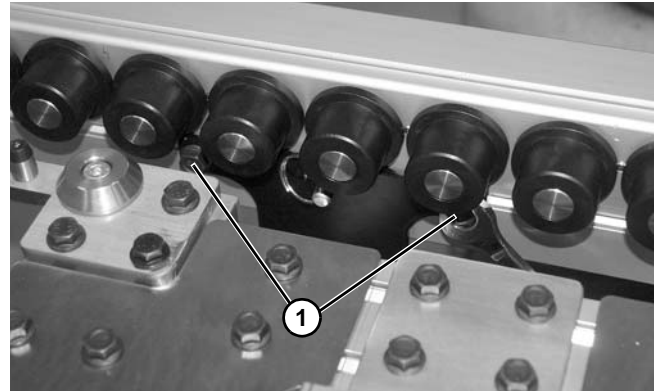


Figure 20

4. Install pallet stop (**Figure 21, item 1**) at leading end. (Refer to “Pallet Stops” starting on page 6.)

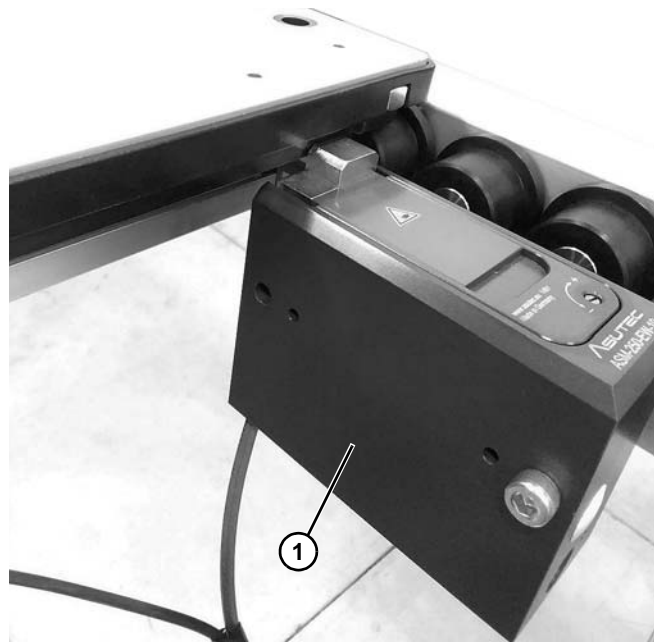


Figure 21

Guard Kit Removal (If Equipped)

1. Loosen and slide out screws (**Figure 22, item 1**) that secure cylinder guard (**Figure 22, item 2**) over cylinder assembly.

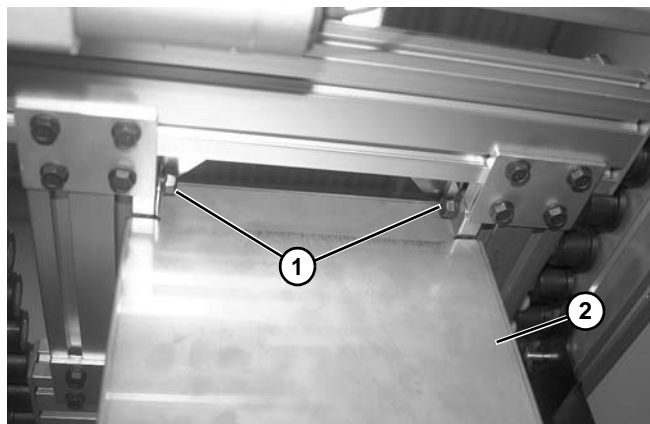


Figure 22

2. Lower cylinder guard (**Figure 23, item 1**) from around cylinder assembly.

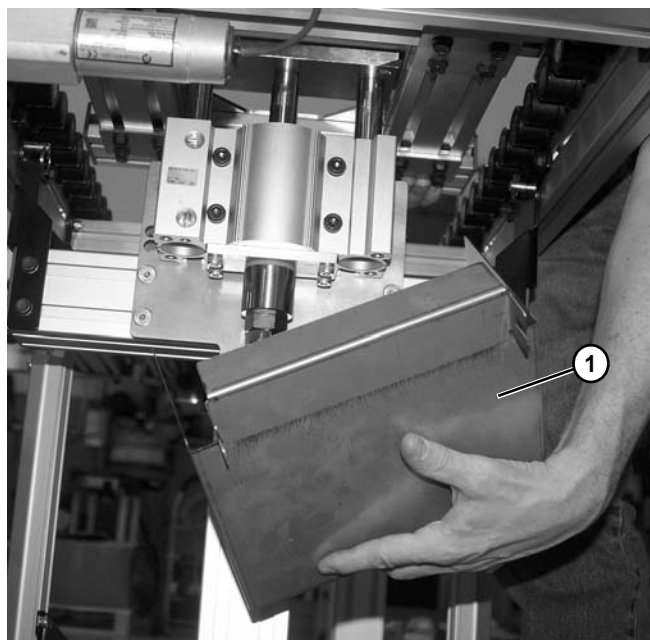


Figure 23

Stroke Sensing Adjustment

1. To adjust cylinder stroke sensors, loosen set screw (**Figure 24, item 1**) and move sensor (**Figure 24, item 2**) up or down in channel (**Figure 24, item 3**). Tighten set screw.

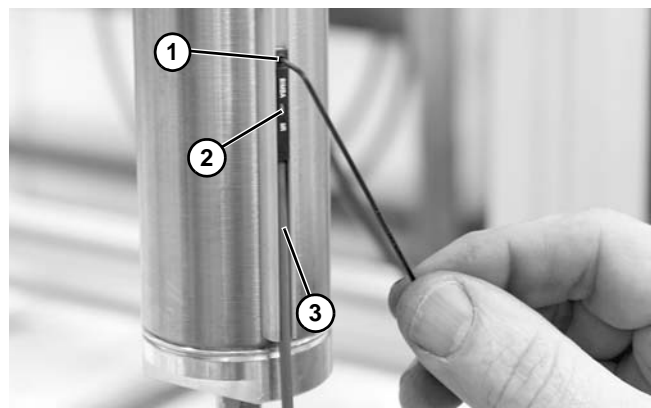


Figure 24

Stroke Adjustment

NOTE

*Adjust stroke to that pallet (**Figure 25, item 1**) raises to desired level.*

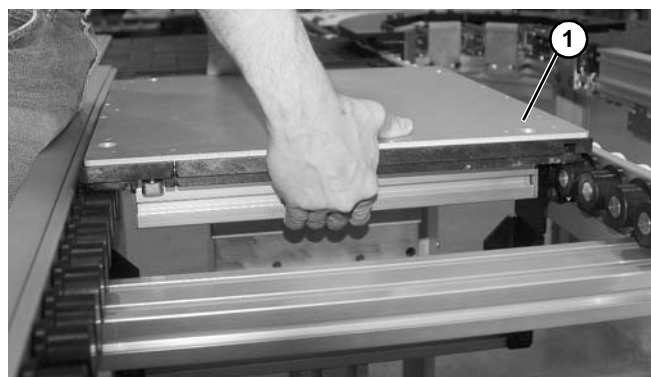


Figure 25

Installation

1. To adjust stroke, loosen jam nut (**Figure 26, item 1**) from large nut (**Figure 26, item 2**) on the bottom of cylinder shaft.

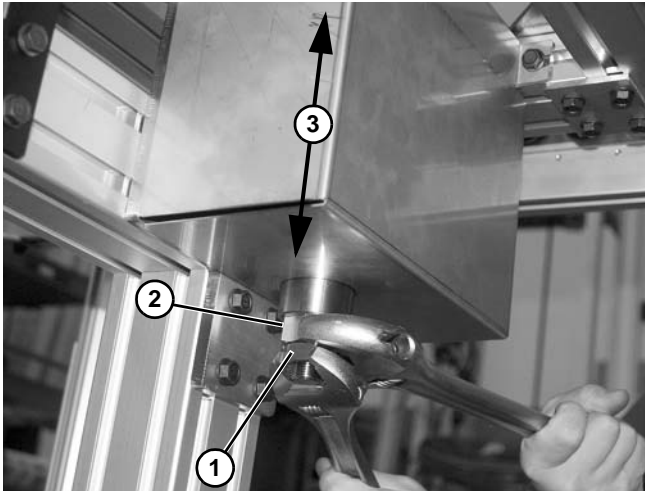


Figure 26

2. Turn large nut (**Figure 26, item 2**) clockwise or counterclockwise to raise or lower (**Figure 26, item 3**) pallet assembly as needed.
3. Tighten jam nut against large nut to secure position.

Pneumatic and Control Logic Suggestions

Recommended Pneumatics

Dorner recommends using a 3-port 2-way solenoid valve (**Figure 27**) to operate the Lift and Locate Stop.

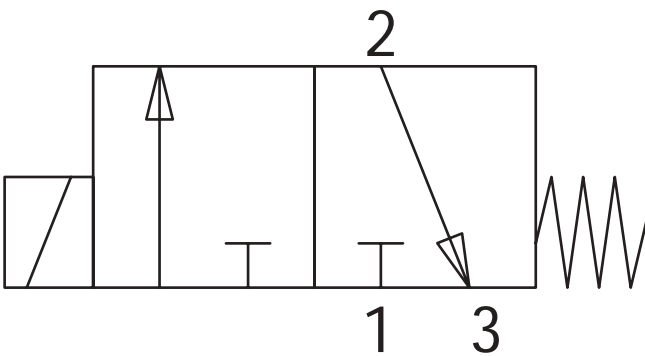


Figure 27

Dorner recommends using a 5-port, 2-way solenoid valve (**Figure 28**) to operate the Lift and Locate Pallet Unit.

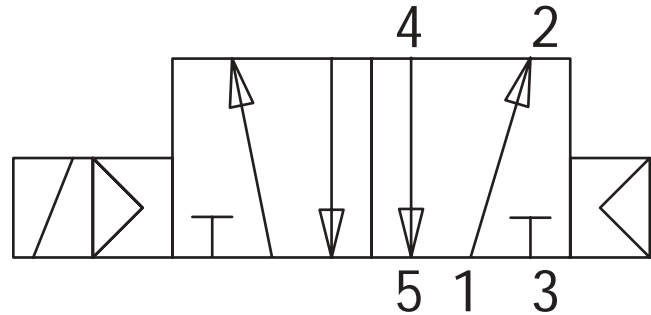


Figure 28

Attaching and Operations of Pneumatics

1. Remove guarding, if equipped.
2. Connect the 3-port, 2-way solenoid valve to the stop. Dorner fittings (**Figure 29, item 1**) accept 1/4" outside diameter tubing standard (**Figure 29, item 2**).

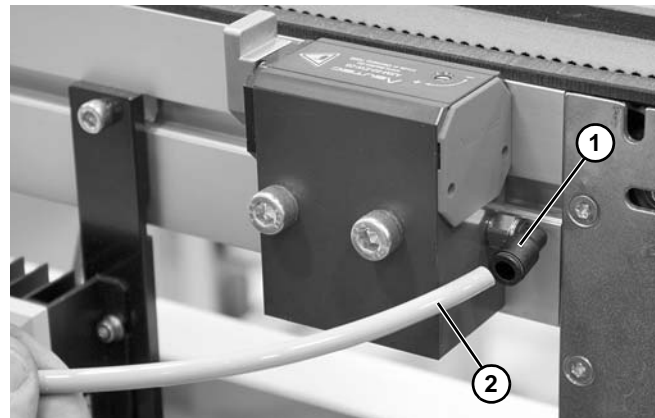


Figure 29

3. Stops release when air is supplied to the stop and only needs to be released long enough for the leading pallet skirt to clear the stop.

- Connect Port 4 (Figure 28) of the 5-port 2-way solenoid through the lower opening (Figure 30, item 1) in plate (Figure 30, item 2) and to the lowest port (Figure 30, item 3) on the lift. Dorner fittings accept 1/4" outside diameter tubing standard.

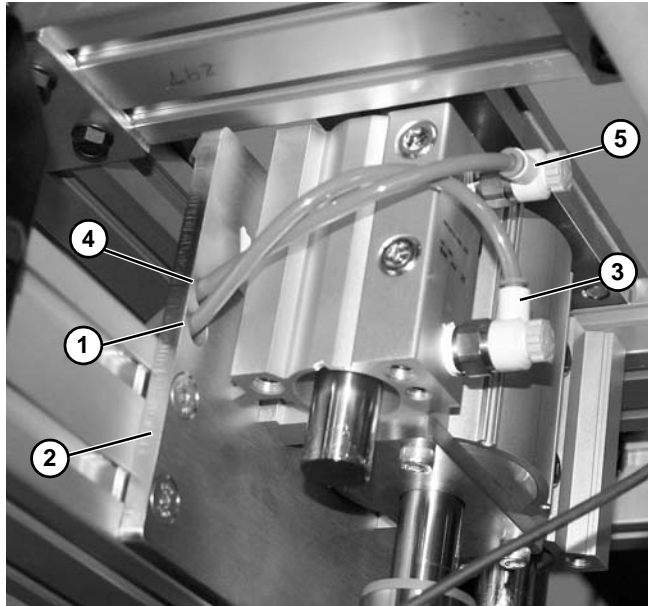


Figure 30

- Connect Port 2 (Figure 28) of the 5-port, 2-way solenoid through the upper opening (Figure 30, item 4) in plate (Figure 30, item 2) to the upper port (Figure 30, item 5) on the lift. Dorner fittings accept 1/4" outside diameter tubing standard.
- The lift raises when air is supplied to the lowest 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.
- Adjust flow controls to achieve desired lift speed.
 - Reinstall guarding, if equipped.

Sensor Installation and Basic Logic

Optional bottom mount (Figure 31, item 1) or side mount (Figure 31, item 2) sensor brackets can be used to mount a 12 mm barrel proximity sensor (Figure 31, item 3).

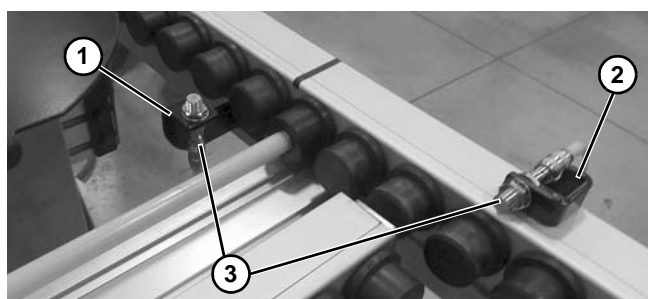


Figure 31

- One bottom (Figure 32, item 1) and two side flags (Figure 32, item 2) can be used for sensing.

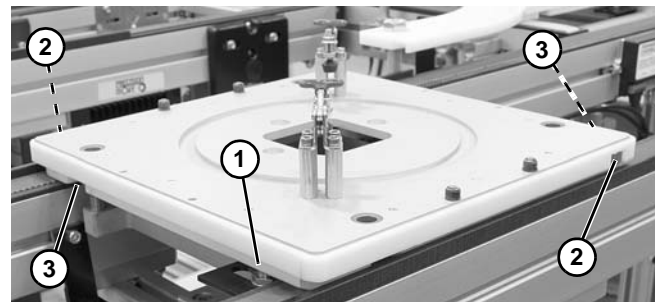


Figure 32

- Use proximity sensor to detect pallet located at the stop.
- The stop can reset after a short delay when the proximity sensor signal clears.
- Stop only has to be released long enough to clear pallet skirt that was stopped. Notches (Figure 32, item 3) in skirt allow stop to be reset before pallet clears stop area.

Lift and Transfer Station

Simplified Installation

- Install and adjust Lift and Transfer module (Figure 33, item 1).

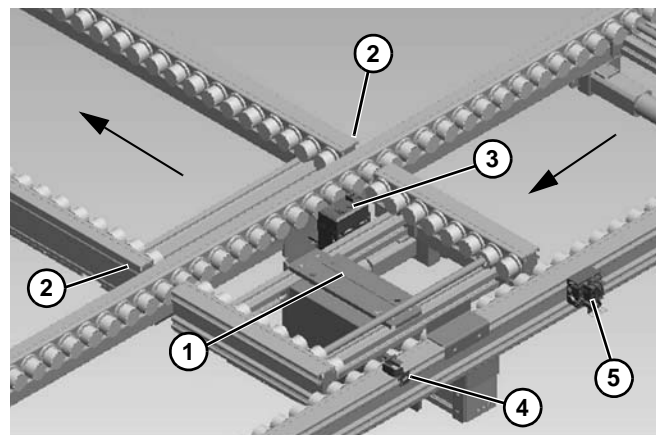


Figure 33

- Connect transfer conveyor with connecting brackets (Figure 33, item 2).
- Locate and install pallet stop (Figure 33, item 3), if required. (Refer to "Pallet Stops" starting on page 6.)
- Locate and install pallet sensor (Figure 33, item 4). (Refer to "Sensor Mounts" starting on page 6.)
- Install and connect pneumatic solenoids (Figure 33, item 5), provided by others.

Installation

Full Installation Steps

1. Install two spring nuts (**Figure 34, item 1**) in inner T-slot on both sides of the conveyor

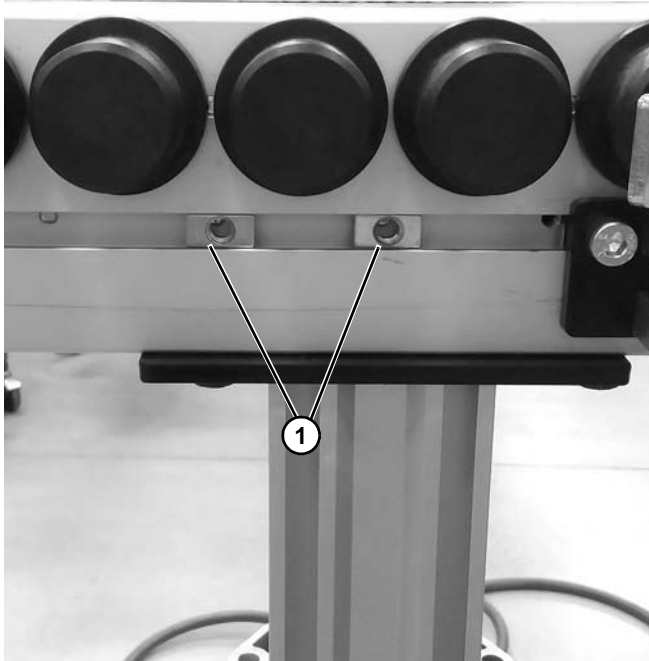


Figure 34

2. Raise lift and transfer station (**Figure 35, item 1**) into position from under the conveyor, lining up center pin (**Figure 35, item 2**) in slotted channel of conveyor channel. Repeat on opposite side.

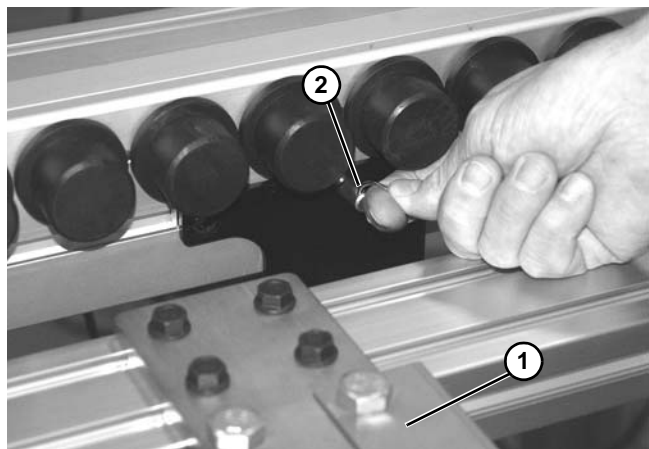


Figure 35

3. Tilt locate station and position, as needed, and install and tighten bolts (**Figure 36, item 1**) into follower nuts inside channel.

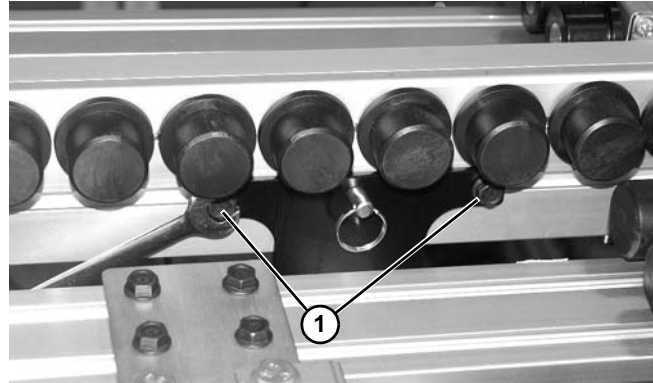


Figure 36

4. Install studs and/or spring nuts into conveyor channels. Install tie bracket (**Figure 37, item 1**) with three bolts (**Figure 37, item 2**).

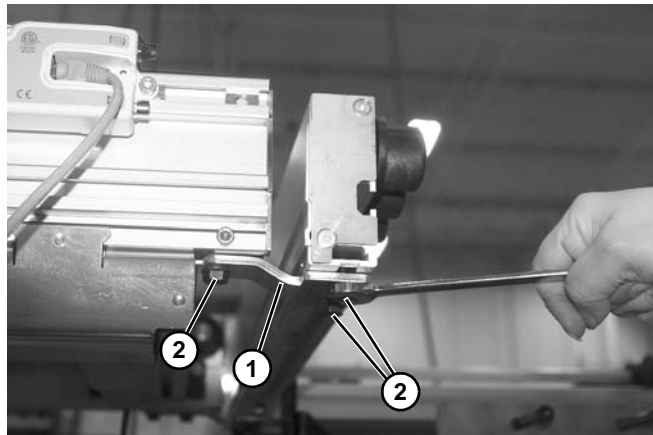


Figure 37

Guard Kit Removal (If Equipped)

1. Remove two screws (**Figure 38, item 1**) and smaller cylinder guard (**Figure 38, item 2**) from around cylinder assembly.

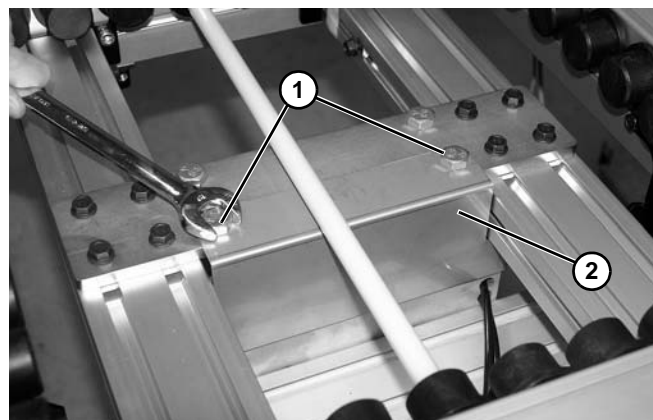


Figure 38

2. Loosen two screws (Figure 39, item 1).

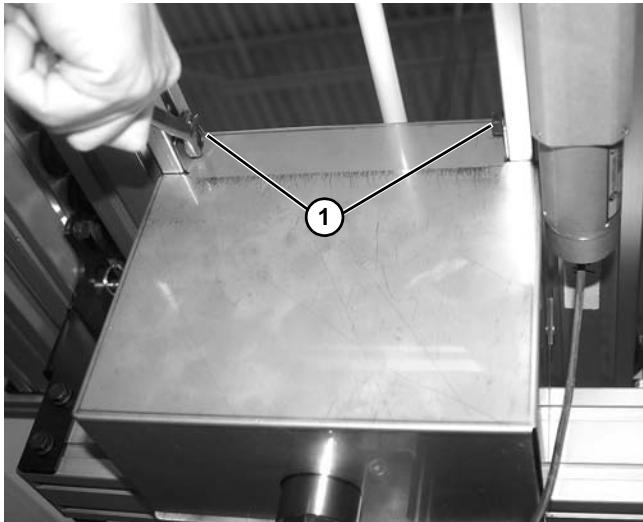


Figure 39

3. Remove slotted tab (Figure 40, item 1) from screw (Figure 40, item 2) on each side. Lower cylinder guard (Figure 41, item 1) from around cylinder assembly.

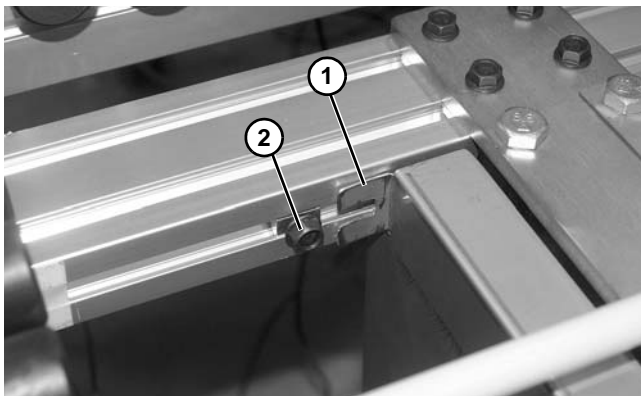


Figure 40

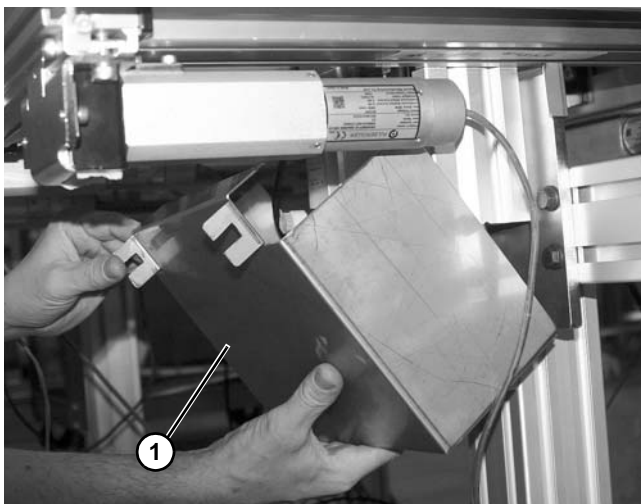


Figure 41

Stroke Adjustment

1. Adjust stroke so that pallet (Figure 42, item 1) mates correctly with sending/receiving conveyor (Figure 42, item 2).

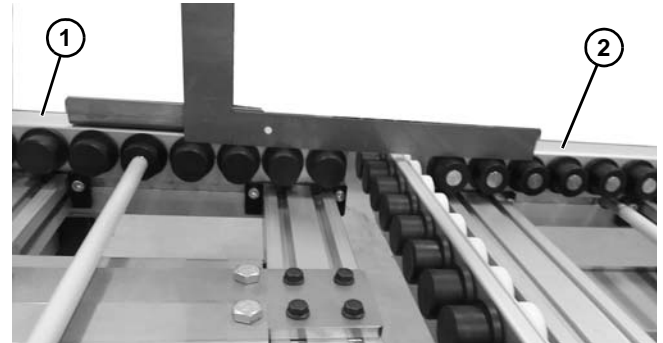


Figure 42

2. To adjust stroke, loosen jam nut (Figure 43, item 1) from large nut (Figure 43, item 2) on the bottom of cylinder shaft.

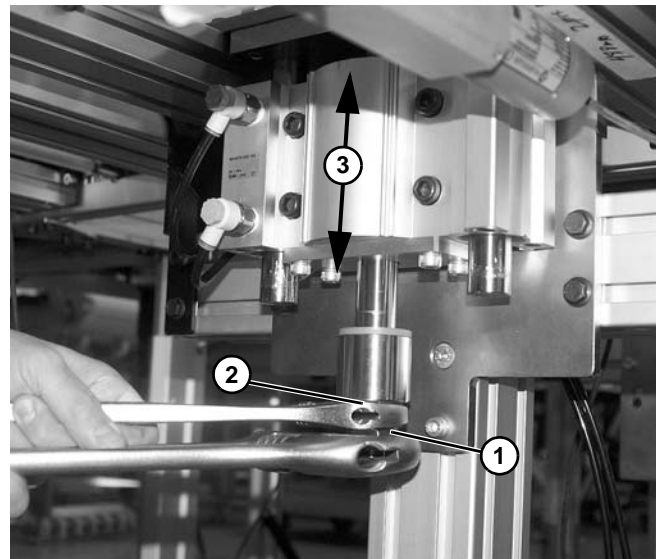


Figure 43

3. Turn large nut (Figure 43, item 2) clockwise or counterclockwise to raise or lower (Figure 43, item 3) pallet assembly as needed.
4. Tighten jam nut against large nut to secure position.

Installation

Pneumatic and Control Logic Suggestions

Recommended Pneumatics

Dorner recommends using a 3 port, 2 way solenoid valve (Figure 44) to operate the Lift and Transfer Stop.

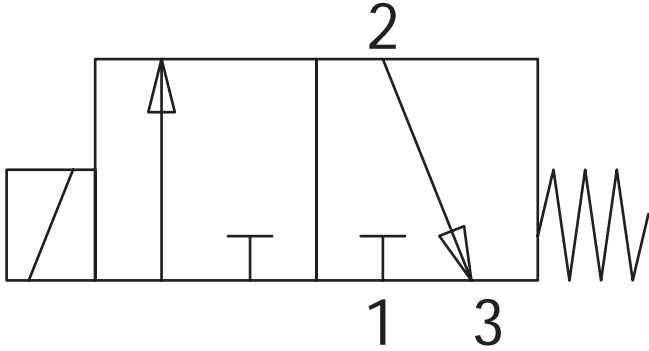


Figure 44

Dorner recommends using a 5-port 2-way solenoid valve (Figure 45) to operate the Lift and Transfer Pallet Unit.

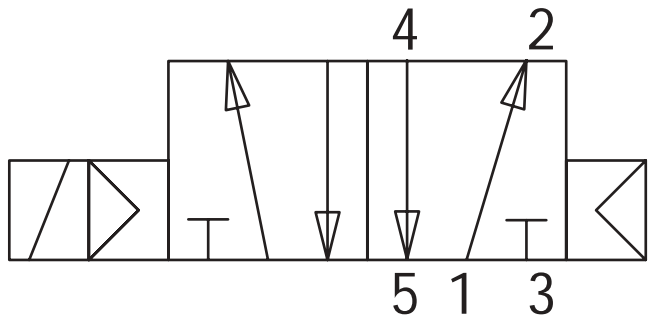


Figure 45

Attaching and Operations of Pneumatics

1. Remove guarding, if equipped.
2. Connect the 3-port 2-way solenoid valve to the stop. Dorner fittings (Figure 46, item 1) accept 1/4" outside diameter tubing standard (Figure 46, item 2).

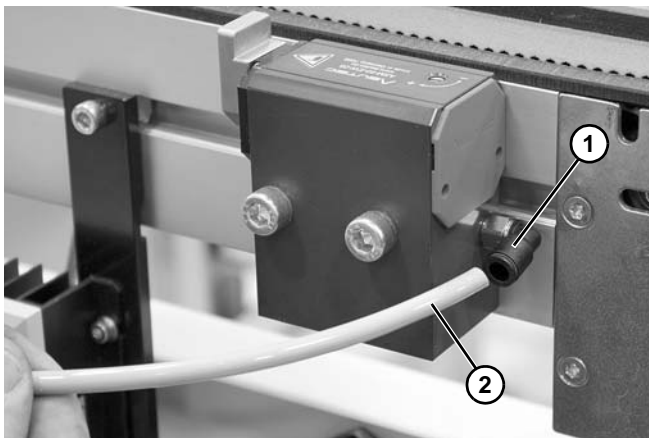


Figure 46

3. Stops release when air is supplied to the stop and only needs to be released long enough for the leading pallet skirt to clear the stop.
4. Connect Port 4 (Figure 45) of the 5-port 2-way solenoid through the lower opening (Figure 47, item 1) in plate (Figure 47, item 2) and to the lowest port (Figure 47, item 3) on the lift. Dorner fittings accept 1/4" outside diameter tubing standard.

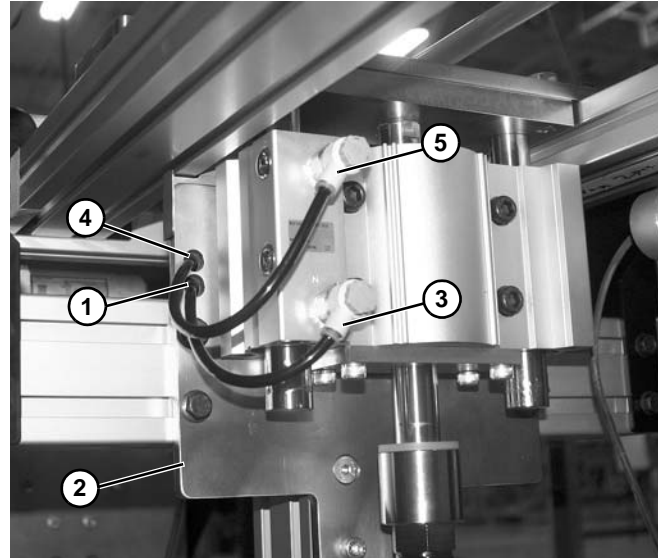


Figure 47

5. Connect Port 2 (Figure 45) of the 5 port, 2 way solenoid through the upper opening (Figure 47, item 4) in plate (Figure 47, item 2) to the upper port (Figure 47, item 5) on the lift. Dorner fittings accept 1/4" outside diameter tubing standard.
- The lift raises when air is supplied to the lowest 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.
6. Adjust flow controls to achieve desired lift speed.
 7. Reinstall guarding, if equipped.

Lift and Rotate Station

Simplified Installation

1. Install and adjust Lift and Rotate module (**Figure 48, item 1**).

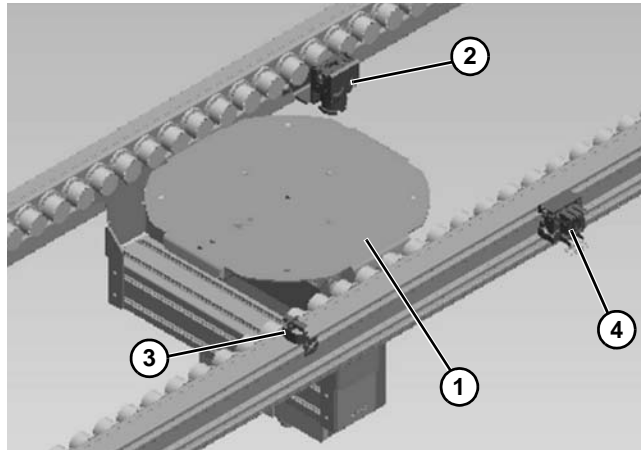


Figure 48

2. Locate and install pallet stop (**Figure 48, item 2**). (Refer to “Pallet Stops” starting on page 6.)
3. Locate and install pallet sensor (**Figure 48, item 3**). (Refer to “Sensor Mounts” starting on page 6.)
4. Install and connect pneumatic solenoids (**Figure 48, item 4**), provided by others.

Full Installation Steps

1. Install two spring nuts (**Figure 49, item 1**) in inner T-slot on both sides of the conveyor.

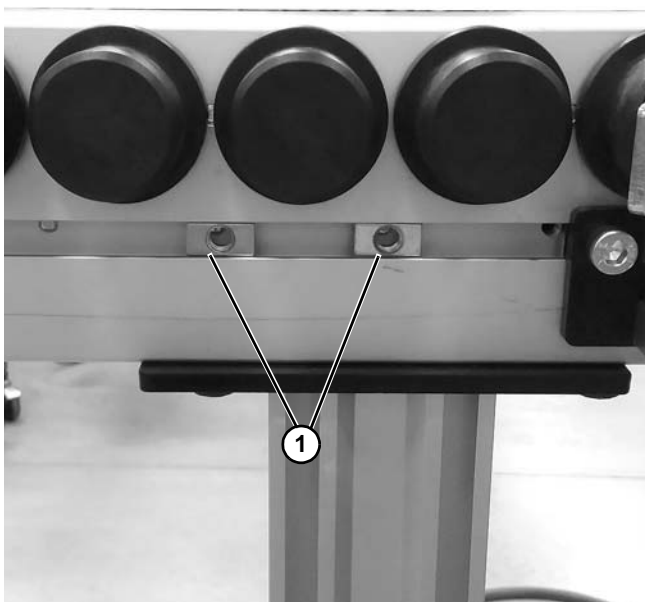


Figure 49

2. Raise lift and rotate station (**Figure 50, item 1**) into position from under the conveyor, lining up center pin (**Figure 50, item 2**) in slotted channel of conveyor channel. Repeat on opposite side.

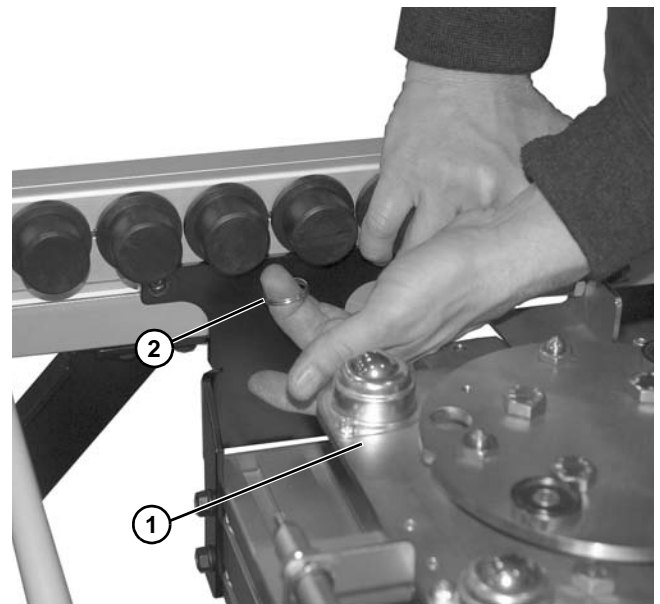


Figure 50

3. Tilt rotate station, as needed, and install and tighten bolts (**Figure 51, item 1**) into follower nuts inside channel.

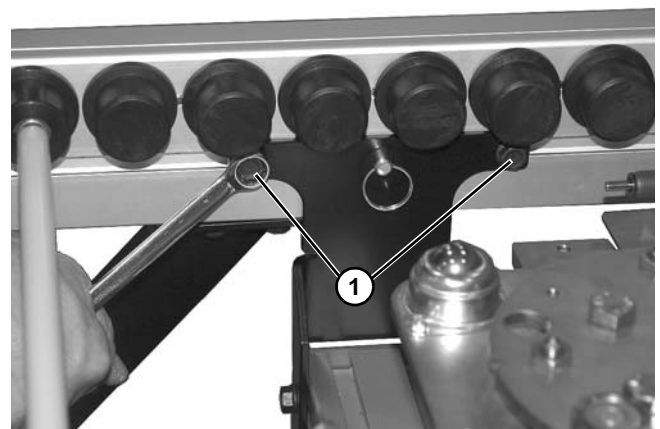


Figure 51

Installation

- Place lift and rotate plate (**Figure 52, item 1**) on lift and rotate assembly (**Figure 52, item 2**). Verify that arrow (**Figure 53, item 1**) on plate lines up with indented V (**Figure 52, item 3**) on rotation plate.

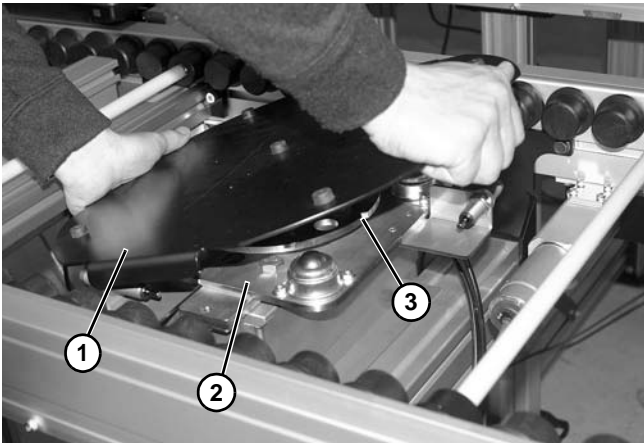


Figure 52

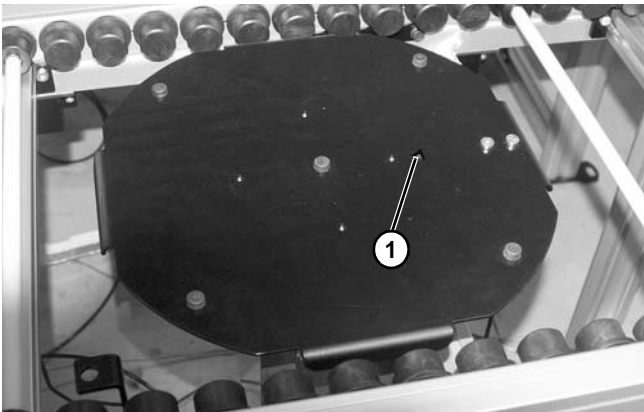


Figure 53

- Place pallet (**Figure 54, item 1**) on lift and rotate plate (**Figure 54, item 2**). Raise top plate to underside of pallet.

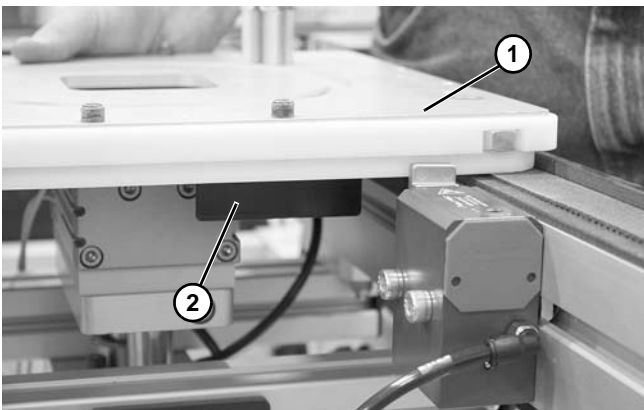


Figure 54

- Install pallet stop (**Figure 55, item 1**). (Refer to “Pallet Stops” starting on page 6.)

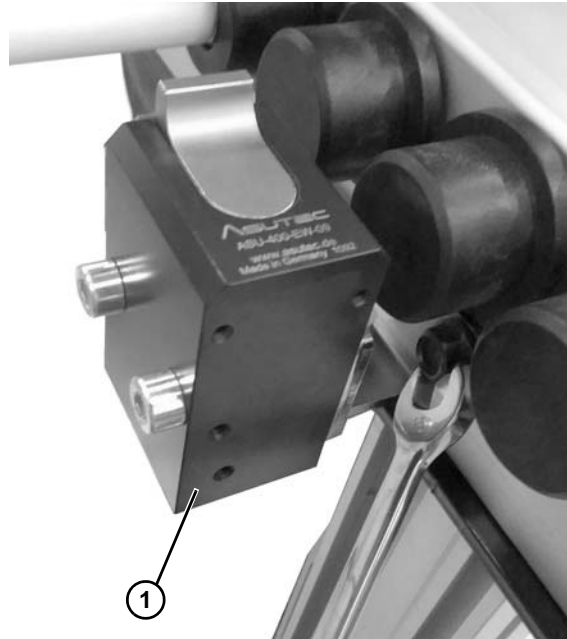


Figure 55

Rotation Adjustment

- Loosen nuts (**Figure 56, item 1**) with an open-end wrench.

NOTE

Top plate removed for clarity. Adjust with plate in place.

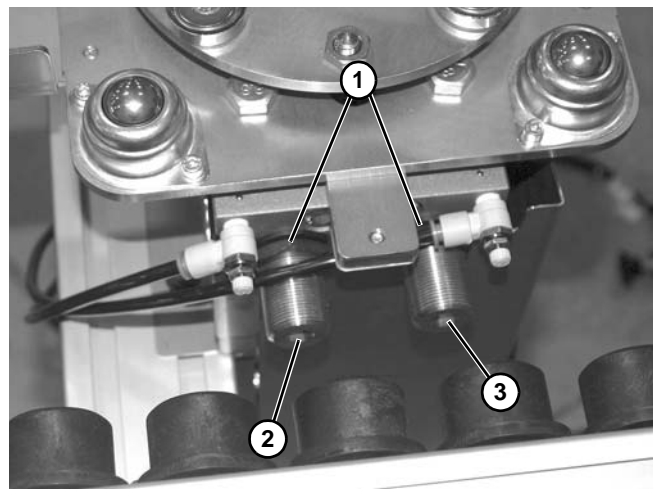


Figure 56

- Adjust stroke by rotating screw (**Figure 56, item 2**) left or right with an open-end wrench. Adjust movement by rotating screw (**Figure 56, item 3**) left or right with an open-end wrench. Tighten nuts.

3. Turn nuts (**Figure 57, item 1**) to position dampener (**Figure 57, item 2**). Secure position by tightening both nuts. Final rotation should be set by hard stop, not dampener end of stroke.

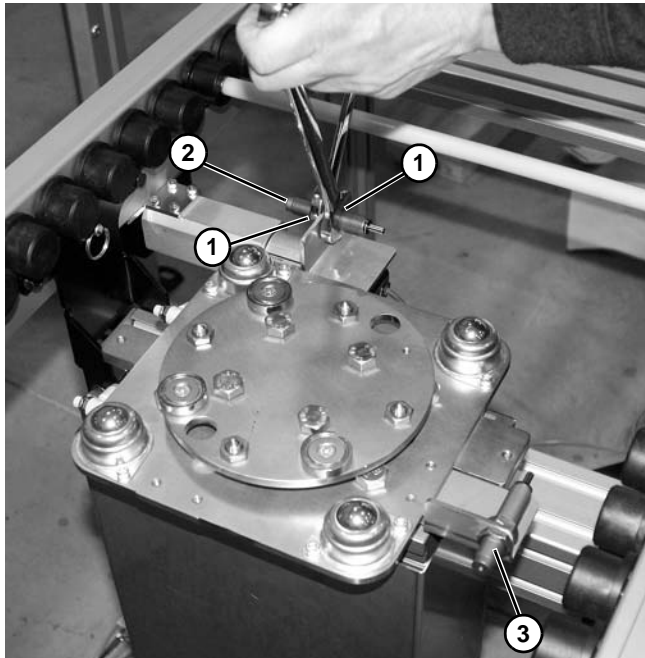


Figure 57

4. Repeat procedure on second dampener (**Figure 57, item 3**).

Guard Kit Removal (If Equipped)

1. Remove four screws (**Figure 58, item 1**) that secure cylinder guard (**Figure 58, item 2**).

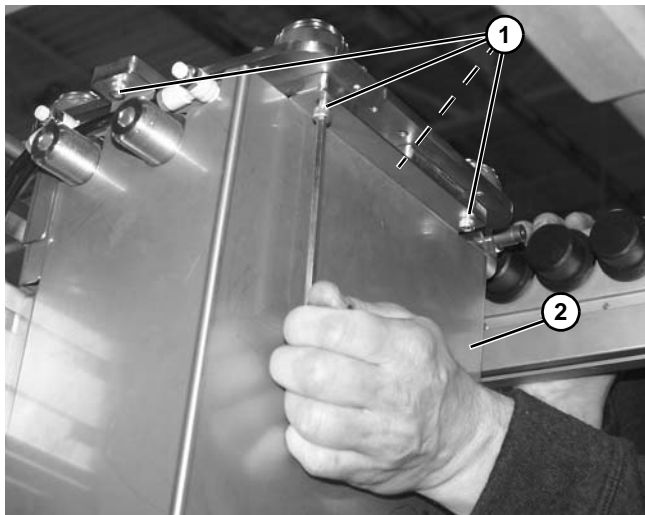


Figure 58

2. Lower cylinder guard (**Figure 59, item 1**) from around cylinder assembly.

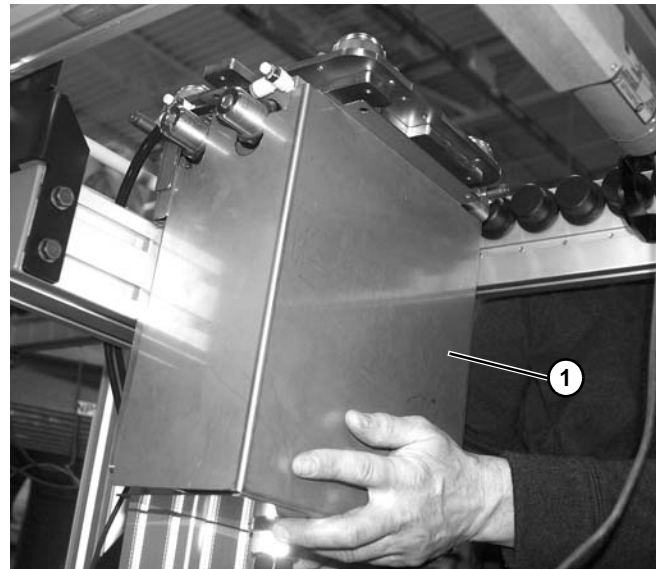


Figure 59

Stroke Adjustment

1. Adjust stroke so that pallet (**Figure 60, item 1**) clears rollers (**Figure 60, item 2**) and remaining conveyor components.

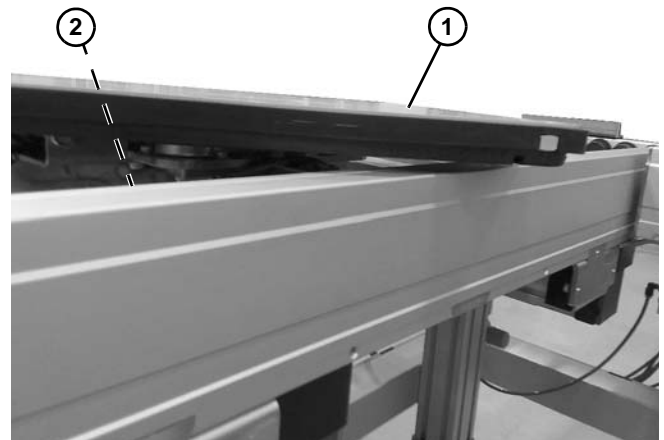


Figure 60

Installation

- To adjust stroke, loosen jam nut (**Figure 61, item 1**) from large nut (**Figure 61, item 2**) on the bottom of cylinder shaft.

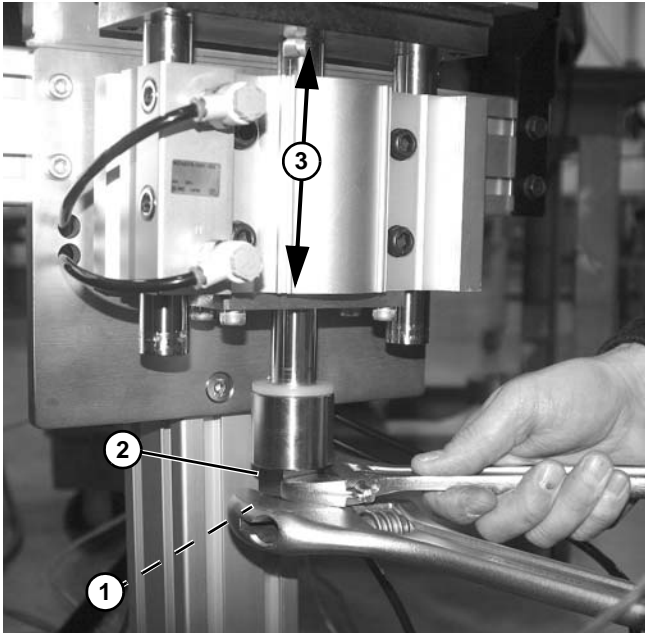


Figure 61

- Turn large nut (**Figure 61, item 2**) clockwise or counterclockwise to raise or lower (**Figure 61, item 3**) pallet assembly as needed.
- Tighten jam nut against large nut to secure position.

Pneumatic and Control Logic Suggestions

Recommended Pneumatics

Dorner recommends using a 3 port, 2 way solenoid valve (**Figure 62**) to operate the Lift and Rotate Stop.

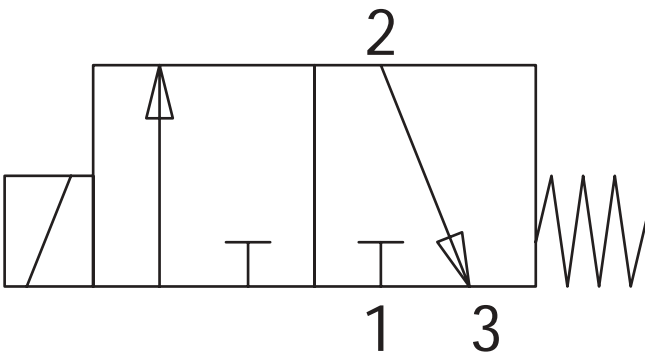


Figure 62

Dorner recommends using a 5 port, 2 way solenoid valve (**Figure 63**) to operate the cylinder.

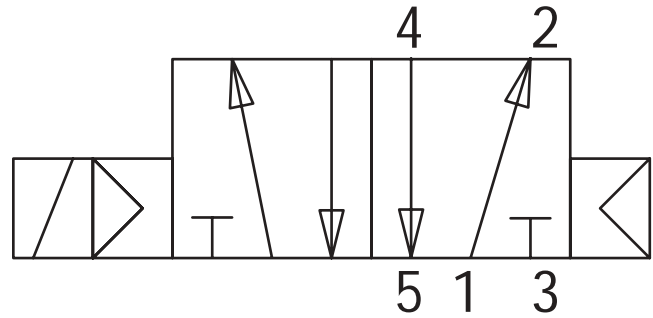


Figure 63

Dorner recommends using a 5-port 2-way solenoid valve (**Figure 64**) to operate the Rotating Actuator.

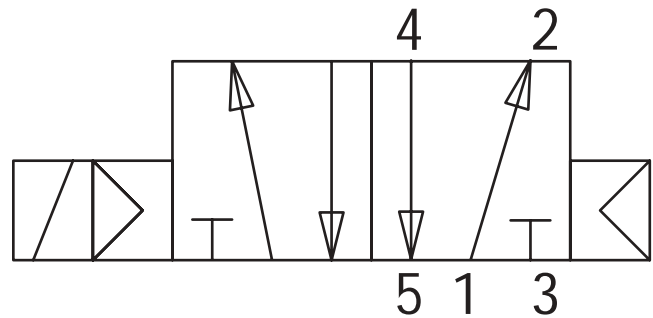


Figure 64

Attaching and Operations of Pneumatics

Stop:

- Connect the 3-port 2-way solenoid valve to the stop. Dorner fittings (**Figure 65, item 1**) accept 1/4" outside diameter tubing standard (**Figure 65, item 2**).

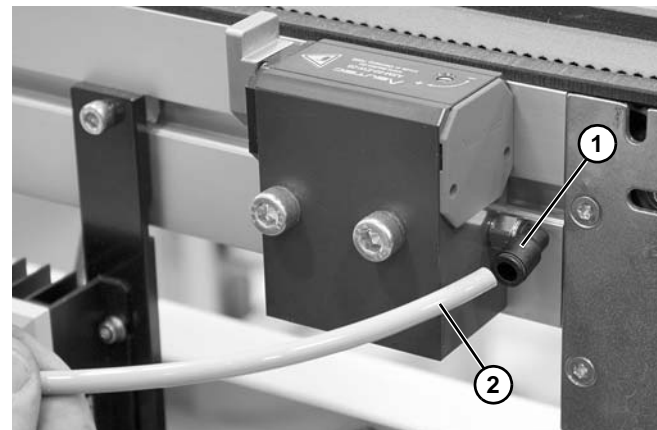


Figure 65

- Stops release when air is supplied to the stop and only needs to be released long enough for the leading pallet skirt to clear the stop.

Lift:

1. Connect Port 4 (**Figure 63**) of the 5-port 2-way solenoid through the lower opening (**Figure 66, item 1**) in plate (**Figure 66, item 2**) and to the lowest port (**Figure 66, item 3**) on the lift. Dorner fittings accept 1/4" outside diameter tubing standard.

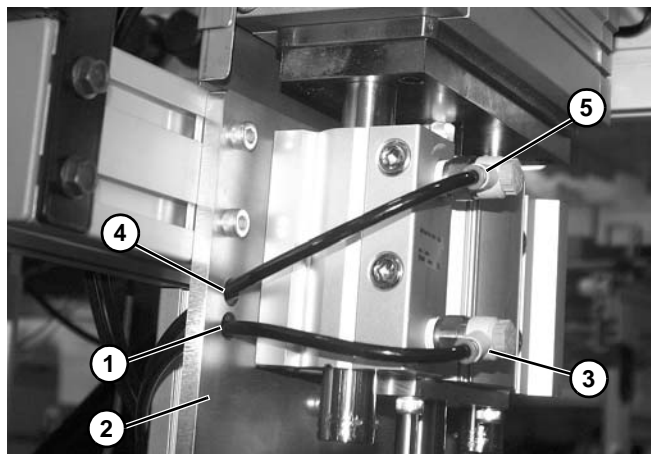


Figure 66

2. Connect Port 2 (**Figure 63**) of the 5-port 2-way solenoid through the upper opening (**Figure 66, item 4**) in plate (**Figure 66, item 2**) and to the upper port (**Figure 66, item 5**) on the lift. Dorner fittings accept 1/4" outside diameter tubing standard.
 - The lift raises when air is supplied to the lowest 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.

Rotate:

1. Connect Port 4 (**Figure 64**) of the 5-port 2-way solenoid to the left port (**Figure 67, item 1**) of the rotator. Dorner fittings accept 1/4" outside diameter tubing standard.

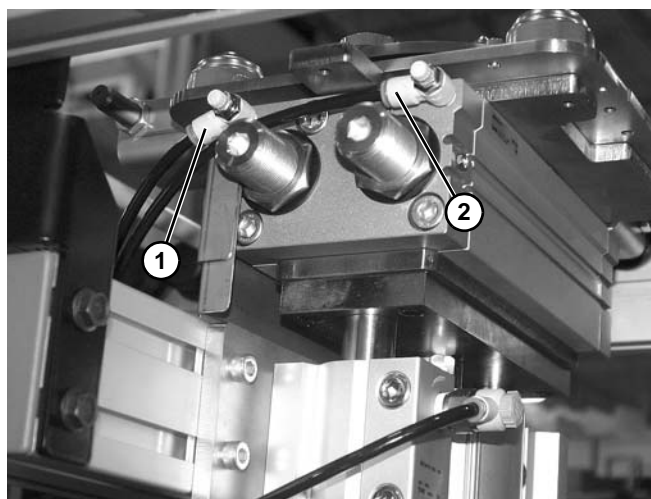


Figure 67

2. Connect Port 2 (**Figure 64**) of the 5-port 2-way solenoid to the right port (**Figure 67, item 2**) of the rotator. Dorner fittings accept 1/4" outside diameter tubing standard.

- Rotate unit rotates clockwise when air is supplied to the left port and the right port is allowed to exhaust.
- Rotate unit rotates counterclockwise when air is supplied to the right port and the left port is allowed to exhaust.

Sensor Installation and Basic Logic

Optional bottom mount (**Figure 68, item 1**) sensor brackets can be used to mount a 12 mm barrel proximity sensor (**Figure 68, item 2**).

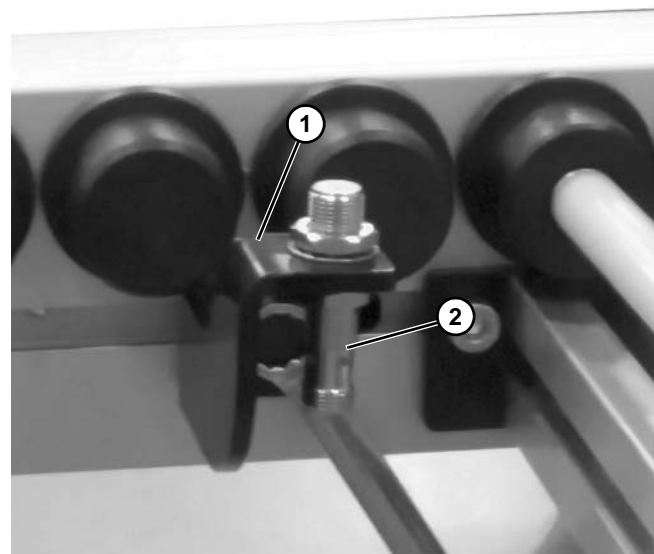


Figure 68

- Two bottom flags (**Figure 69, item 1**) can be used for sensing.

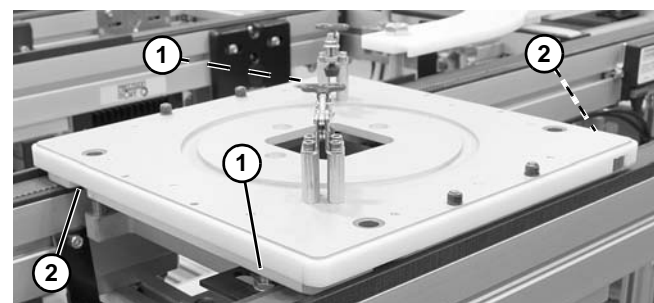


Figure 69

- Use proximity sensor to detect pallet located at the stop.
- The stop can reset after a short delay when the proximity sensor signal clears.
- Stop only has to be released long enough to clear pallet skirt that was stopped. Notches (**Figure 69, item 2**) in skirt allow stop to be reset before pallet clears stop area.
- Reinstall guarding, if equipped.

Installation

Pallet Pusher

Simplified Installation

1. Install and adjust Pusher module (**Figure 70, item 1**).

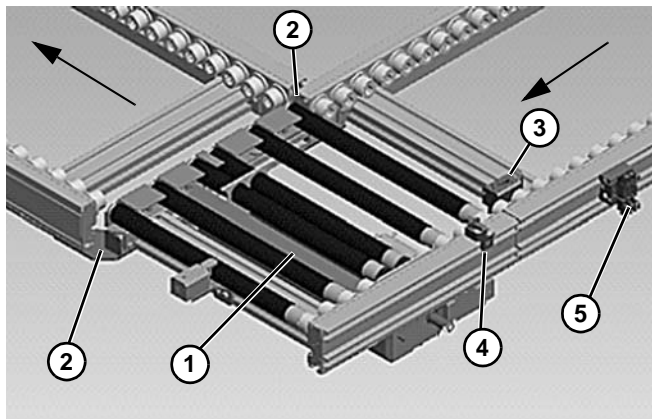


Figure 70

2. Connect transfer conveyor with connecting brackets (**Figure 70, item 2**).
3. Locate and install pallet stop (**Figure 70, item 3**). (Refer to “Pallet Stops” starting on page 6.)
4. Locate and install pallet sensor (**Figure 70, item 4**). (Refer to “Sensor Mounts” starting on page 6.)
5. Install and connect pneumatic solenoids (**Figure 70, item 5**), provided by others.

Full Installation Steps

1. For installing conveyor to pallet pusher (**Figure 71, item 1**), install studs and/or spring nuts into conveyor channels. Install tie bracket (**Figure 71, item 2**) with four bolts (**Figure 71, item 3**).

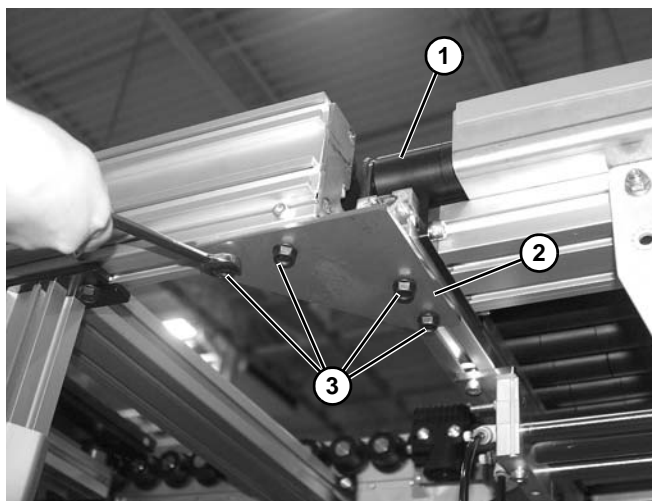


Figure 71

2. Connect Port 4 (**Figure 63**) of the 5–port 2–way solenoid through the outer port (**Figure 72, item 1**) on the pallet pusher. Dorner fittings accept 1/4" outside diameter tubing standard.

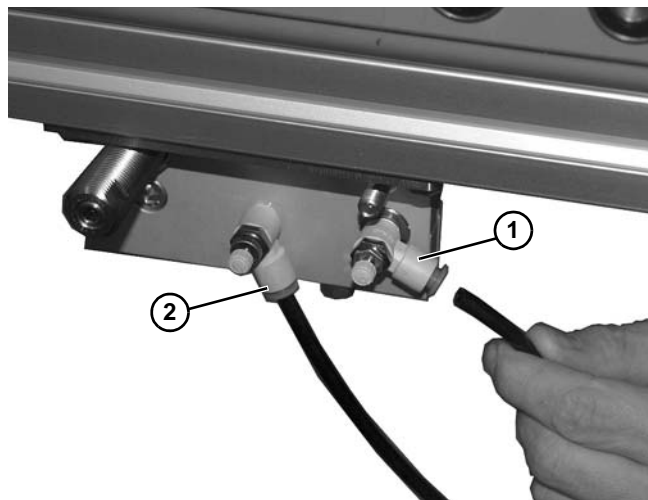


Figure 72

3. Connect Port 2 (**Figure 63**) of the 5–port 2–way solenoid through the center port (**Figure 72, item 2**) on the lift. Dorner fittings accept 1/4" outside diameter tubing standard.
- The lift raises when air is supplied to the lowest 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.

Stands

1. Attach stand (**Figure 73, item 1**) to module (**Figure 73, item 2**) using two connecting strips and four screws (**Figure 73, item 3**).

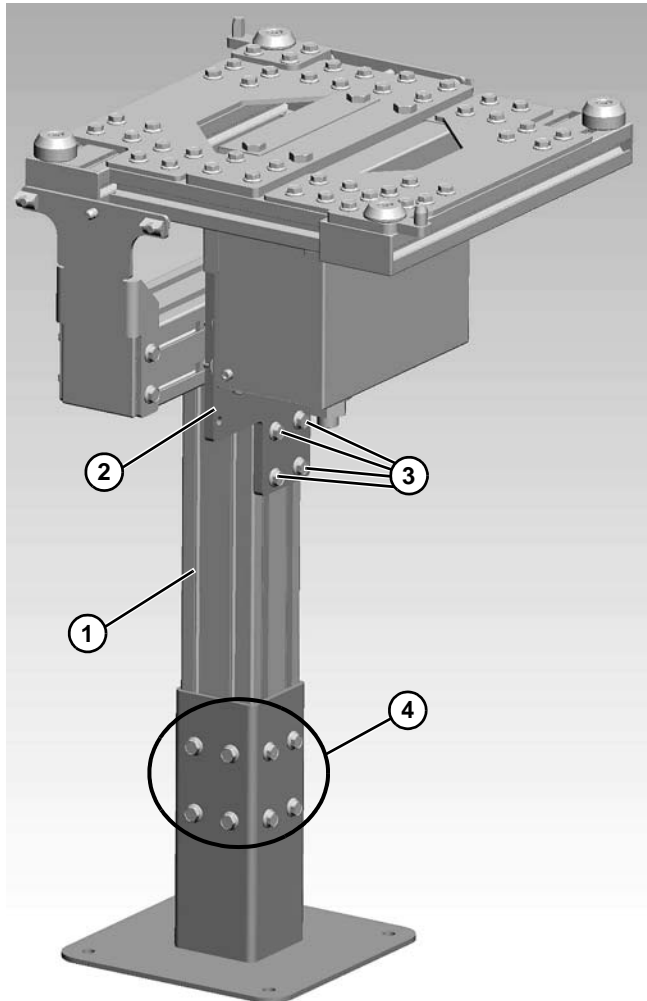


Figure 73

2. Adjust height of stands by loosening screws (**Figure 73, item 4**). Adjust height and retighten fasteners.

Preventive Maintenance and Adjustment

Required Tools

- .050" hex wrench
- 2 mm hex wrench
- 5 mm hex wrench
- 6 mm hex wrench
- 10 mm wrench
- 13 mm wrench
- 17 mm wrench
- 19 mm wrench
- 13 mm socket
- Flat blade screw driver

Checklist

- Keep service parts on hand. Refer to the "Service Parts" section starting on page 34 for recommendations.
- Replace any worn or damaged parts.

Pallets

1. Remove pallet from conveyor.
2. Remove corner skirt from top plate (**Figure 74, item 1**). Make sure not to lose sleeve (**Figure 74, item 2**) at the point where two corner skirts meet.

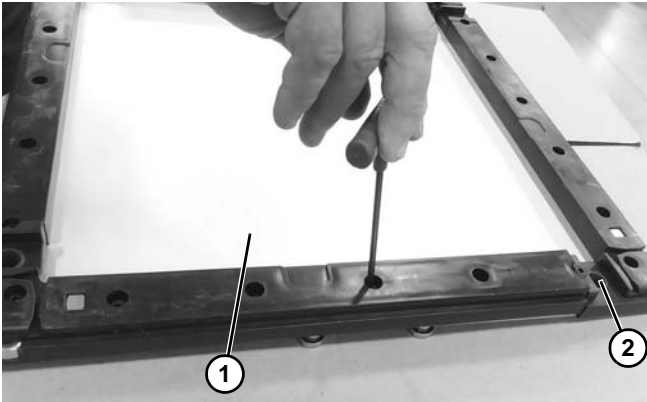


Figure 74

3. Remove retaining ring (**Figure 75 and Figure 76 Item 1**) and bearing (**Figure 75 and Figure 76 Item 2**).

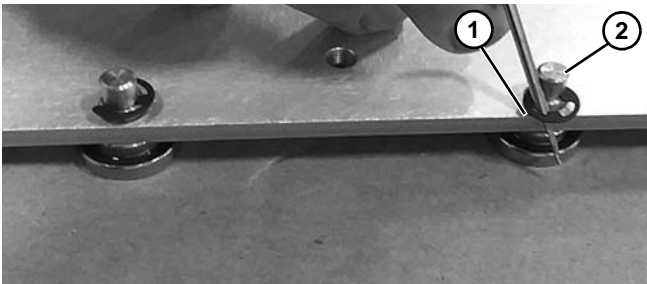


Figure 75

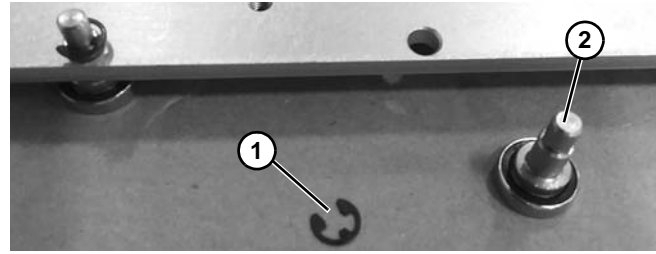


Figure 76

4. Replace worn or damaged parts.
5. Installation is the reverse of removal.

Pallet Stops

1. Remove two screws (**Figure 77, item 1**), air line, and pallet stop (**Figure 77, item 2**) from conveyor.

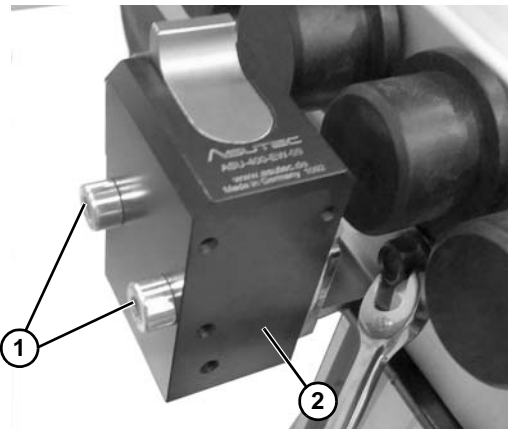


Figure 77

2. Installation is the reverse of removal.

Lift and Locate, Lift and Transfer, Lift and Rotate Stations

Stroke Adjustment

1. Adjust stroke so that pallet (**Figure 78, item 1**) mates correctly with rollers (**Figure 78, item 2**) and remaining conveyor components.

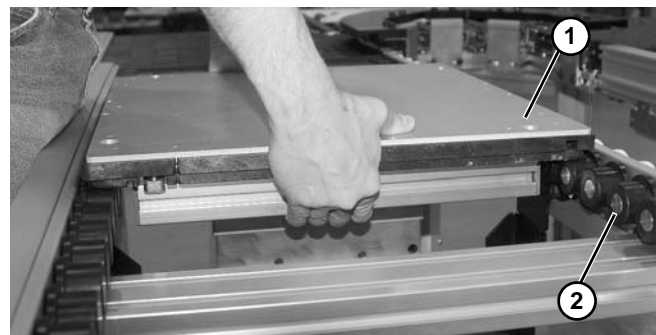


Figure 78

Preventive Maintenance and Adjustment

2. To adjust stroke, loosen jam nut (**Figure 79, item 1**) from large nut (**Figure 79, item 2**) on the bottom of cylinder shaft.

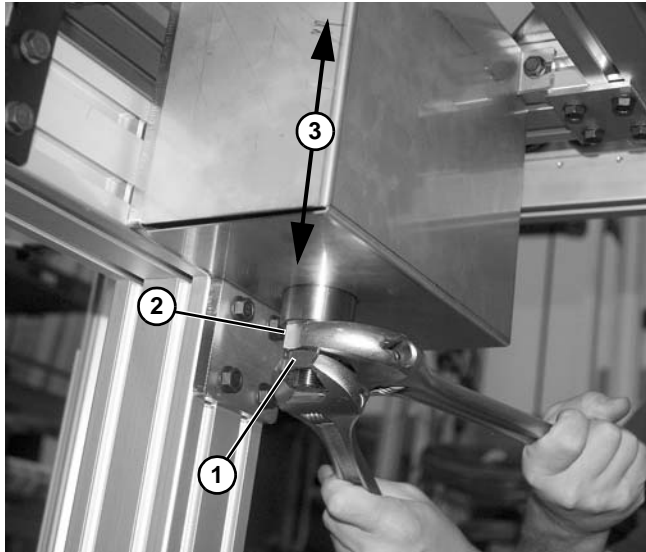


Figure 79

3. Turn large nut (**Figure 79, item 2**) clockwise or counterclockwise to raise or lower (**Figure 79, item 3**) pallet assembly as needed.
4. Tighten jam nut against large nut to secure position.

Lift and Locate Station

Cylinder Replacement

1. Remove optional guarding by loosening two screws (**Figure 80, item 1**) securing cylinder guard (**Figure 80, item 2**) over cylinder assembly.

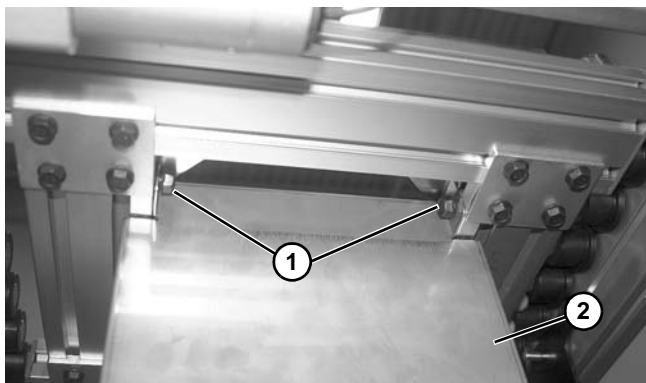


Figure 80

2. Lower cylinder guard (**Figure 81, item 1**) from over cylinder assembly.

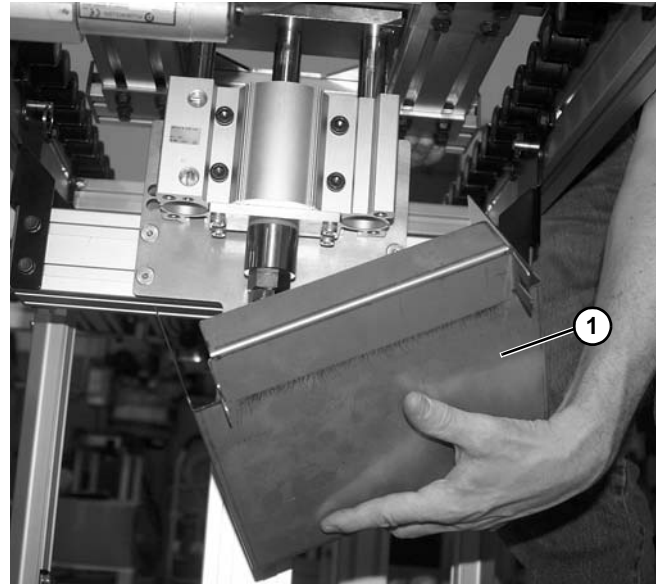


Figure 81

3. Remove two screws (**Figure 82, item 1**) holding lift station platform (**Figure 82, item 2**) onto lift cylinder assembly.

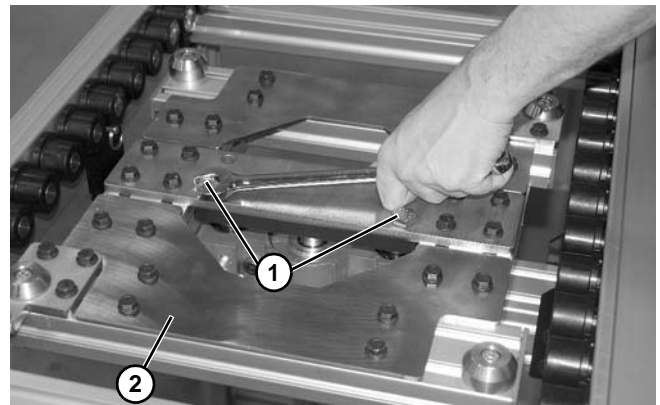


Figure 82

4. Remove lift station platform (**Figure 83, item 1**) from lift cylinder.

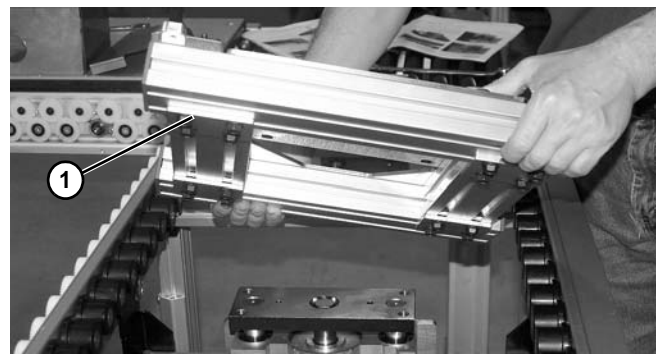


Figure 83

Preventive Maintenance and Adjustment

NOTE

Be sure to mark lower and upper hoses and their locations to aid in reinstalling.

5. Disconnect upper (**Figure 84, item 1**) and lower (**Figure 84, item 2**) hoses from fittings on lift cylinder (**Figure 84, item 3**).

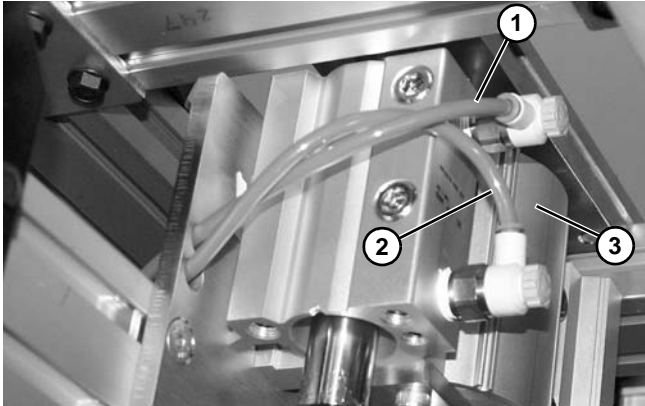


Figure 84

6. Remove four screws (**Figure 85, item 1**) securing cylinder to conveyor frame.

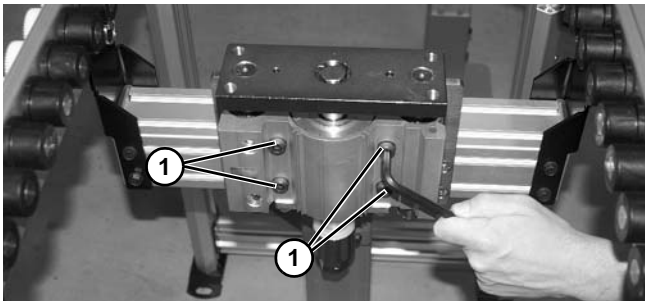


Figure 85

7. Remove cylinder (**Figure 86, item 1**) from conveyor frame.

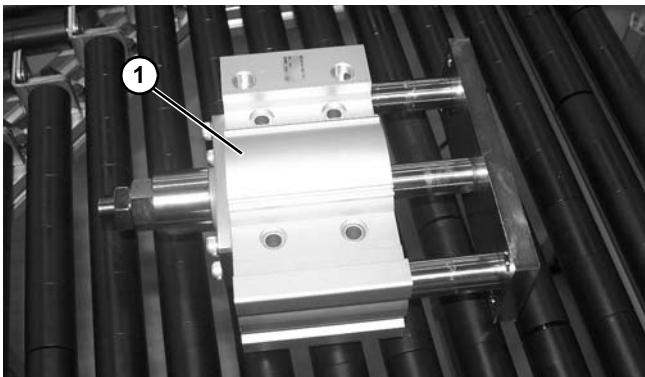


Figure 86

8. Replace worn or damaged parts.
9. Installation is the reverse of removal.

Lift and Transfer Station

Cylinder Replacement

1. Remove optional guarding by loosening two screws (**Figure 87, item 1**).

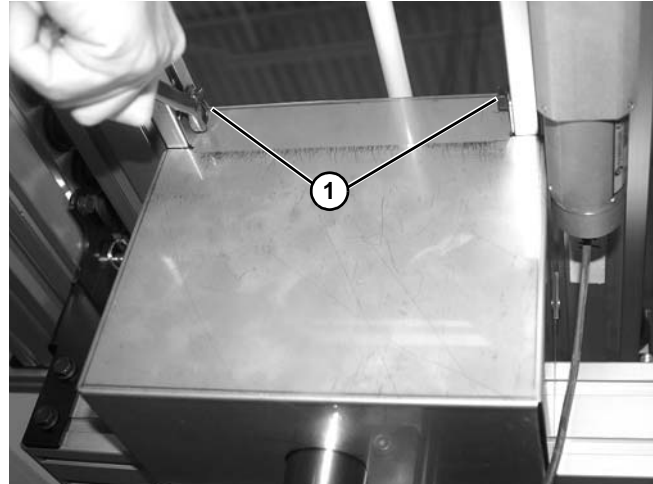


Figure 87

2. Remove cylinder guard (**Figure 88, item 1**) by sliding slotted tabs (**Figure 89, item 1**) of guard off of bolts (**Figure 89, item 2**) on each side.

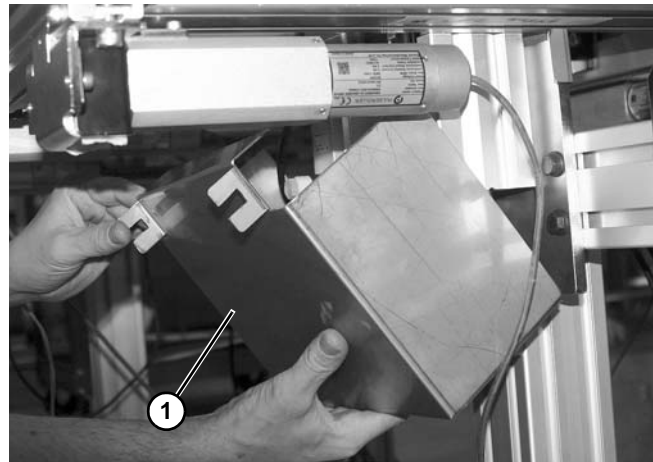


Figure 88

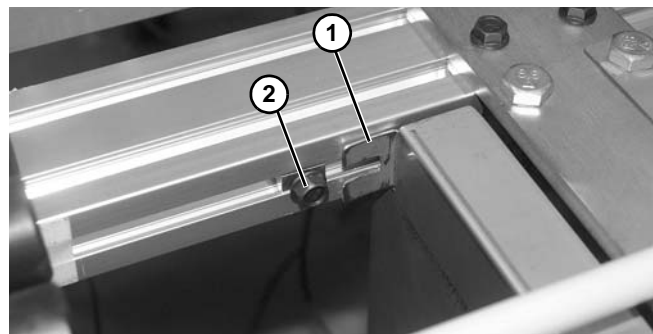


Figure 89

Preventive Maintenance and Adjustment

3. Remove two bolts (**Figure 90, item 1**) and smaller cylinder guard (**Figure 90, item 2**).

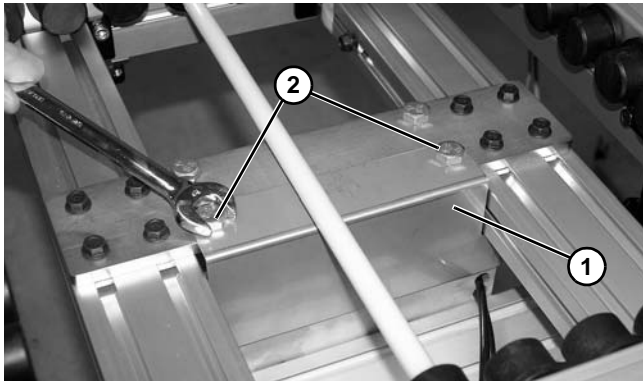


Figure 90

NOTE

Be sure to mark lower and upper hoses and there locations to aid in reinstalling.

4. Disconnect upper (**Figure 91, item 1**) and lower (**Figure 91, item 2**) hoses from fittings on lift cylinder (**Figure 91, item 3**).

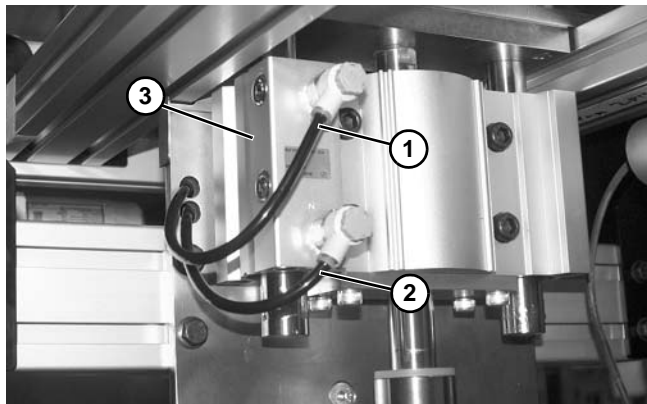


Figure 91

5. Remove two bolts (**Figure 92, item 1**) securing lift and transfer section onto cylinder (**Figure 92, item 2**).

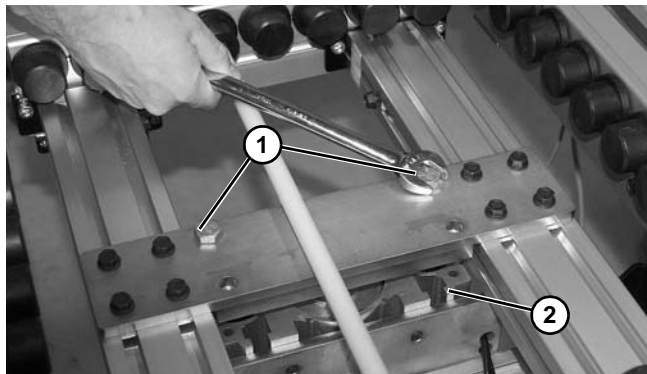


Figure 92

6. Disconnect motor (**Figure 93, item 1**) from power source.

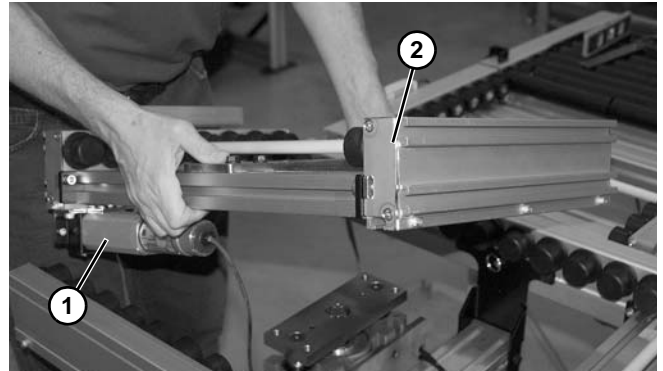


Figure 93

7. Remove lift and transfer section (**Figure 93, item 2**) from conveyor.
8. Remove four socket head screws (**Figure 94, item 1**) securing cylinder to conveyor frame.

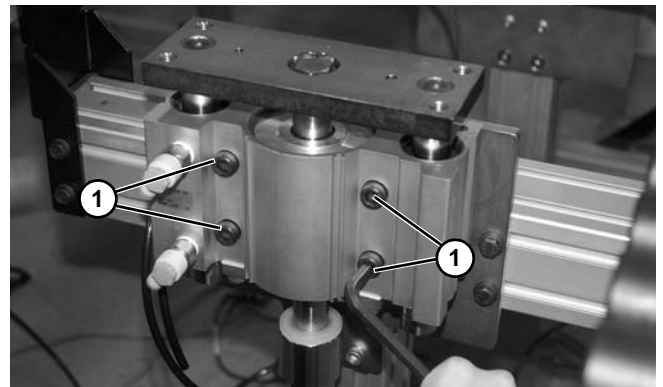


Figure 94

9. Remove cylinder (**Figure 95, item 1**) from conveyor frame.

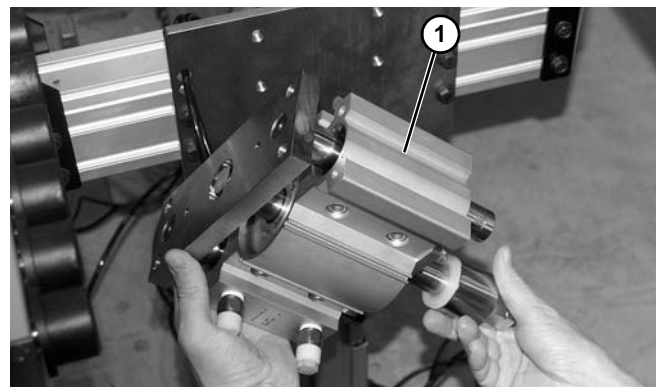


Figure 95

10. Replace worn or damaged parts.
11. Installation is the reverse of removal.

Preventive Maintenance and Adjustment

Lift and Rotate Station

Cylinder Replacement

1. Remove rotate plate (**Figure 96, item 1**) on lift and rotate assembly (**Figure 96, item 2**). Make a note for installation that arrow (**Figure 97, item 1**) on plate lines up with indented V (**Figure 96, item 3**) on rotation plate.

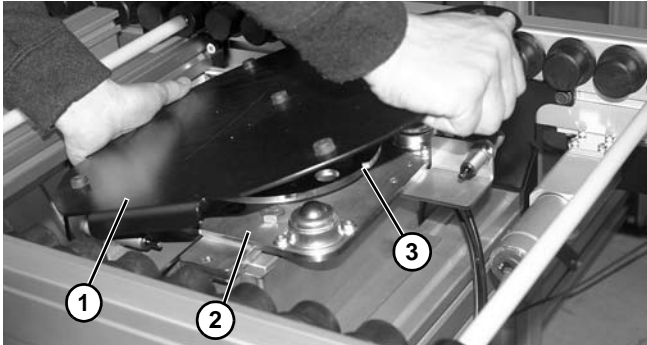


Figure 96

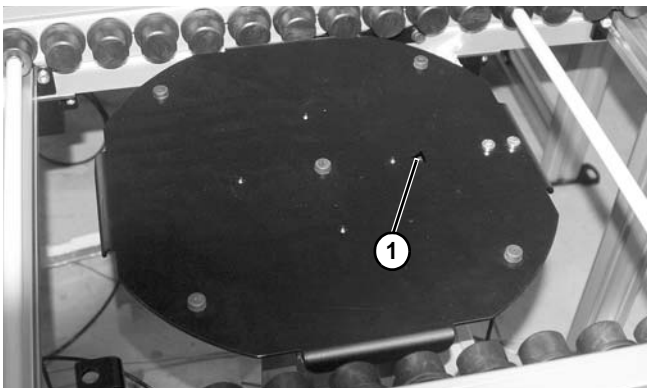


Figure 97

2. Remove optional guarding by removing three screws (**Figure 98, item 1**) on each side securing cylinder guard (**Figure 98, item 2**).

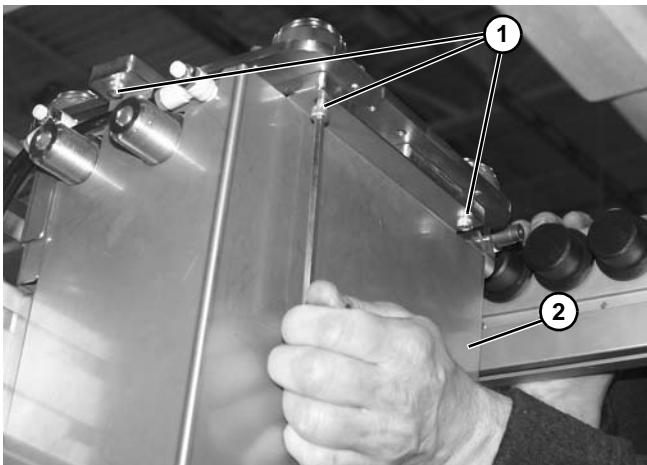


Figure 98

3. Remove cylinder guard (**Figure 99, item 1**) from around cylinder assembly.

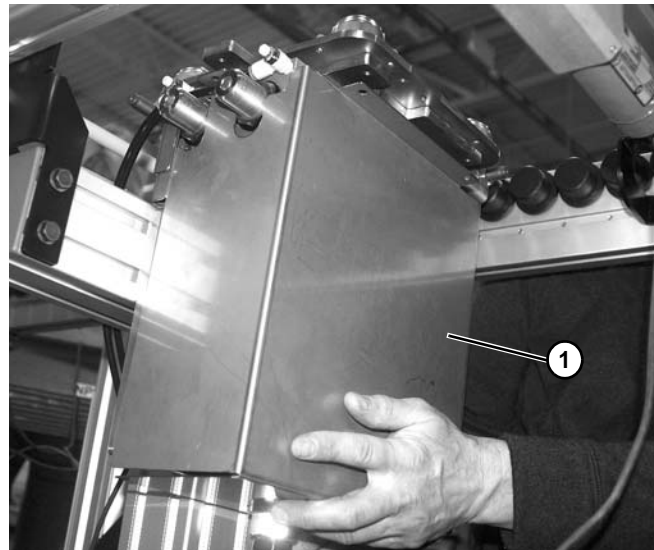


Figure 99

NOTE

Be sure to mark all of the hoses and there locations to aid in reinstalling.

4. Disconnect both hoses (**Figure 100, item 1**) from fittings on rotate cylinder (**Figure 100, item 2**).

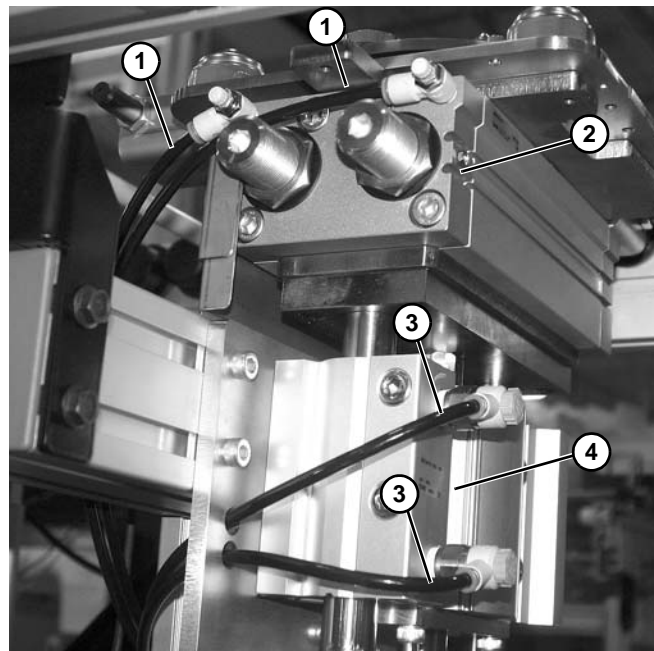


Figure 100

5. Disconnect upper and lower hoses (**Figure 100, item 3**) from fittings on lift cylinder (**Figure 100, item 4**).

Preventive Maintenance and Adjustment

NOTE

If replacing cylinder only remove 2 bolts thru access holes in (Figure 101, item 1), and skip to step 13.

6. Remove four bolts (Figure 101, item 2) from rotation plate (Figure 101, item 3).

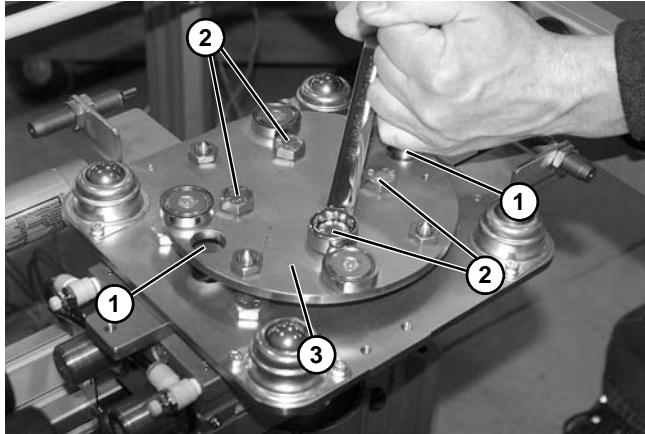


Figure 101

NOTE

Be sure to mark location of mark (Figure 102, item 2) before removing rotation plate. This mark will be an aid during installation.

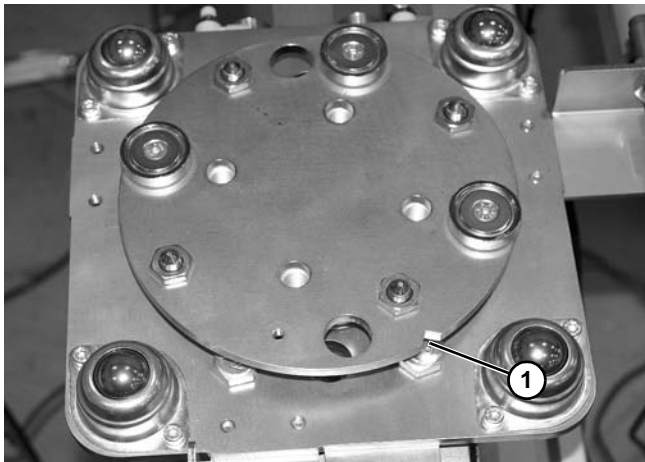


Figure 102

7. Remove rotation plate (Figure 103, item 1).

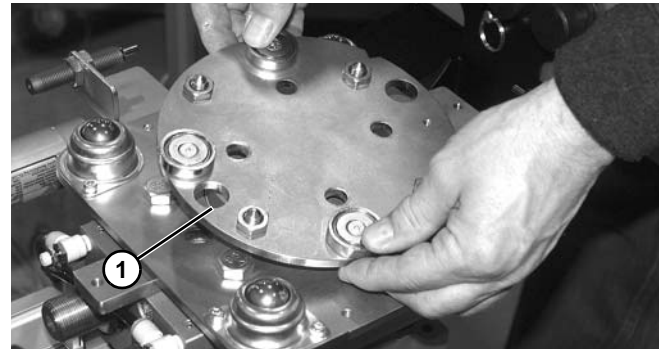


Figure 103

8. Remove four bolts (Figure 104, item 1).

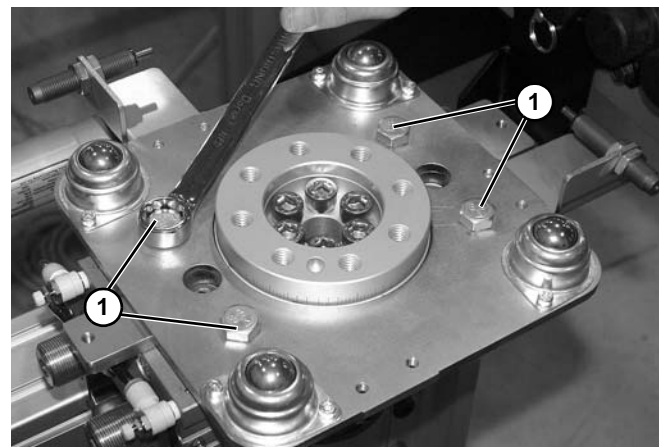


Figure 104

NOTE

Be sure to make note of the stop sensors (Figure 105, item 1) on the plate in relation to the conveyor. This will be an aid when reinstalling.

9. Remove plate (Figure 105, item 2).

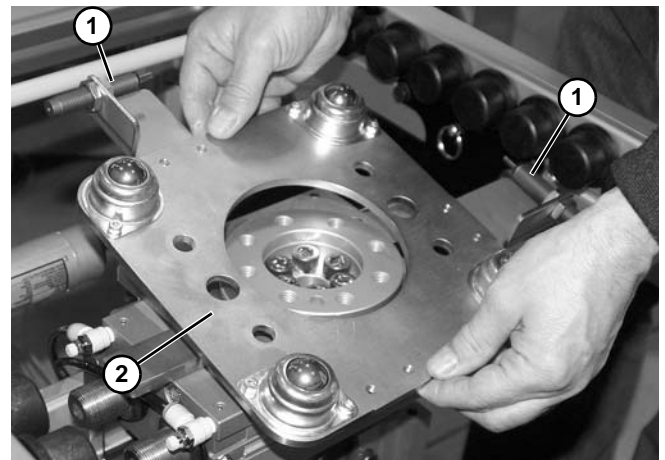


Figure 105

Preventive Maintenance and Adjustment

10. Remove rotation plate (**Figure 106, item 1**), making note of the orientation of the plate before removing.

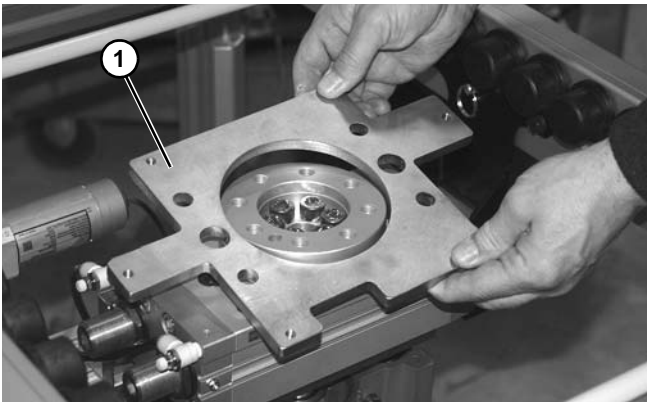


Figure 106

11. Remove two socket head screws (**Figure 107, item 1**) from the top of rotate cylinder.

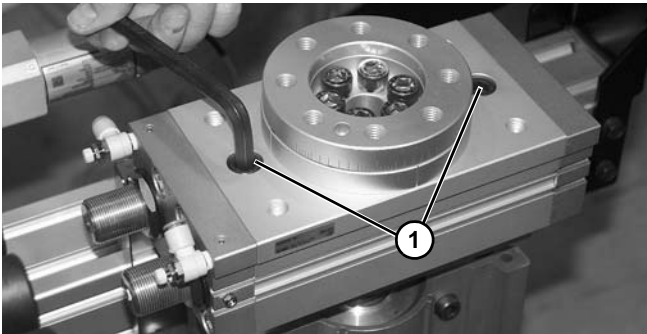


Figure 107

12. Remove rotate cylinder (**Figure 108, item 1**).

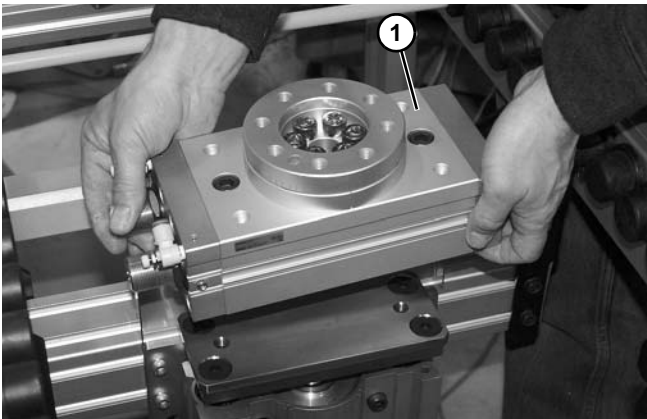


Figure 108

13. Remove four screws (**Figure 109, item 1**) securing lift cylinder.

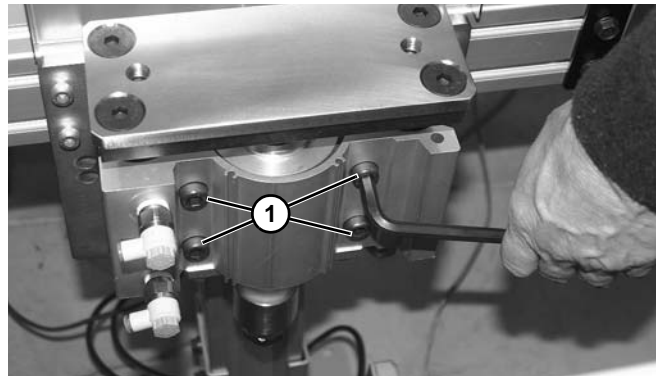


Figure 109

14. Remove lift cylinder (**Figure 110, item 1**).

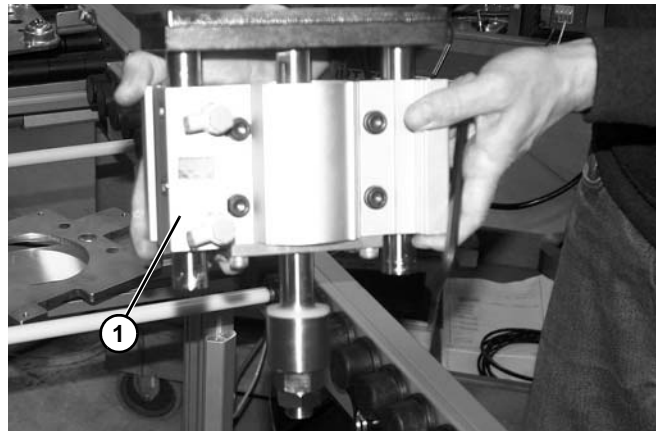


Figure 110

15. Replace worn or damaged parts.
16. Installation is the reverse of removal.

Pallet Pusher Cylinder Replacement

1. Remove screw (**Figure 111, item 1**) on both sides and remove cover (**Figure 111, item 2**).

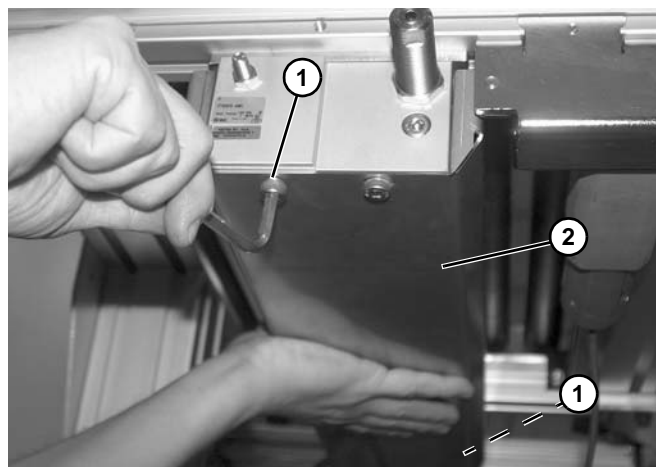


Figure 111

Preventive Maintenance and Adjustment

NOTE

Be sure to mark both hoses and there locations to aid in reinstalling.

2. Disconnect both hoses (Figure 112, item 1) from fittings on pallet pusher assembly (Figure 112, item 2).

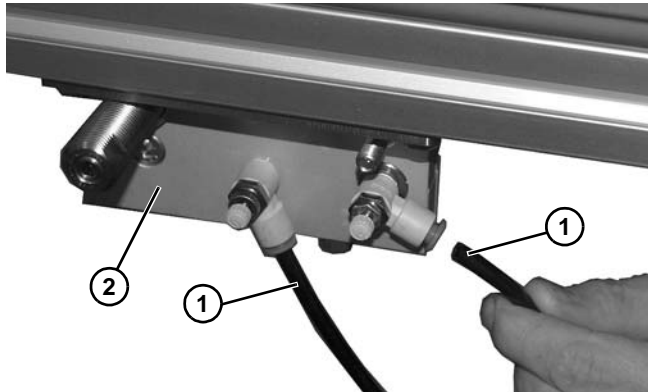


Figure 112

3. Remove side cover from conveyor.
4. Remove socket head screw (Figure 113, item 1) on each side, and remove pallet pusher (Figure 113, item 2).

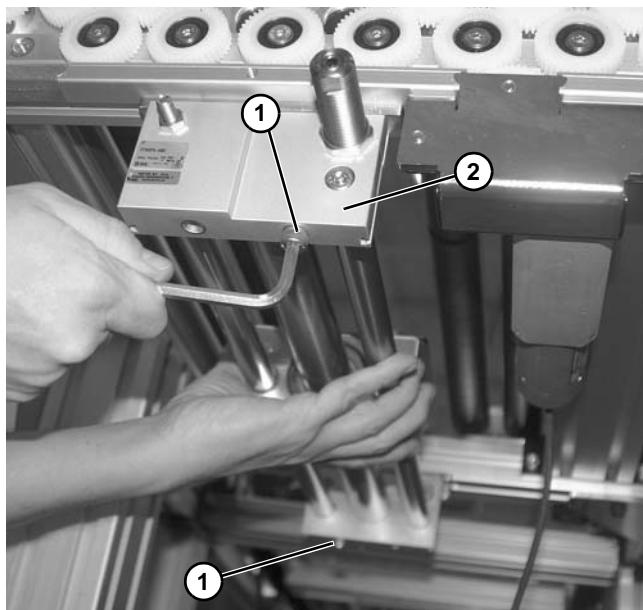


Figure 113

5. Replace worn or damaged parts.
6. Installation is the reverse of removal.

Pallet Pusher Roller, Sprocket, and Gear Replacement

1. Remove screws (Figure 114, item 1) holding side cover (Figure 114, item 2) onto conveyor frame.

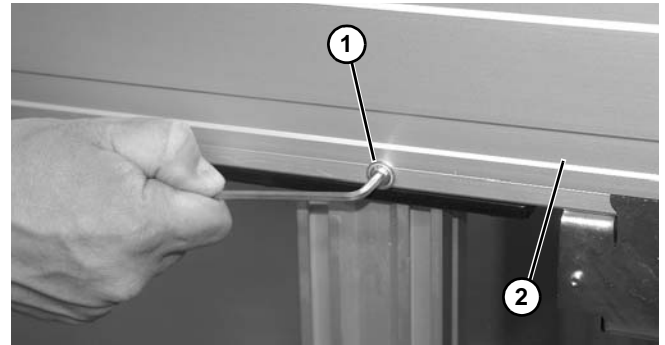


Figure 114

2. Rotate and remove side cover (Figure 115, item 1) from conveyor frame

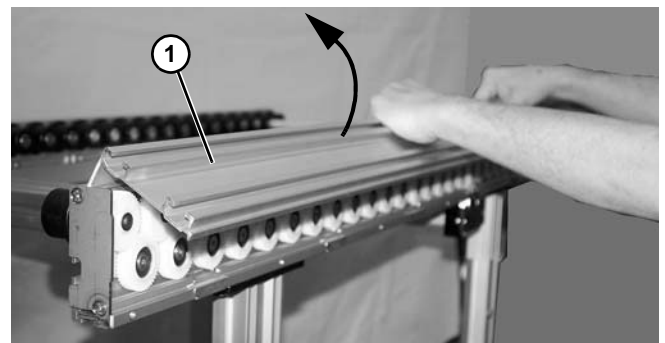


Figure 115

3. Install sprocket removal tool, part number 400289 (Figure 116, item 1) between gears.

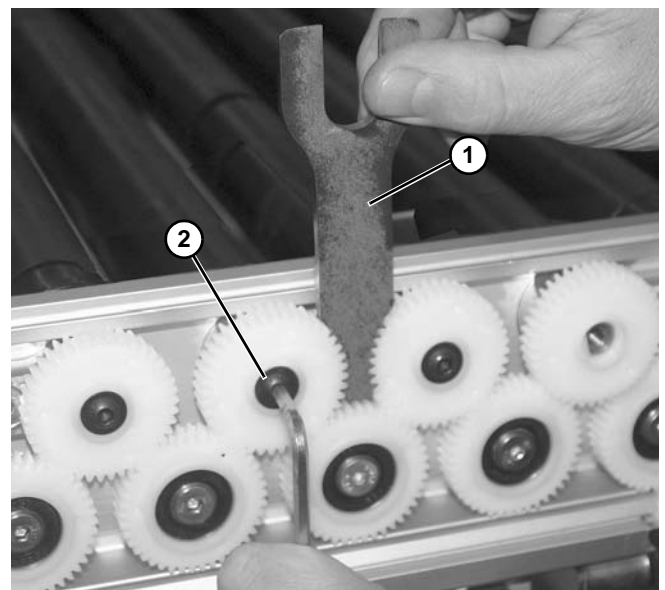


Figure 116

Preventive Maintenance and Adjustment

4. Remove screw (Figure 116, item 2) holding gear onto roller shaft.
5. Install opposite end of sprocket removal tool (Figure 117, item 1) to pry gear (Figure 117, item 2) from roller shaft.

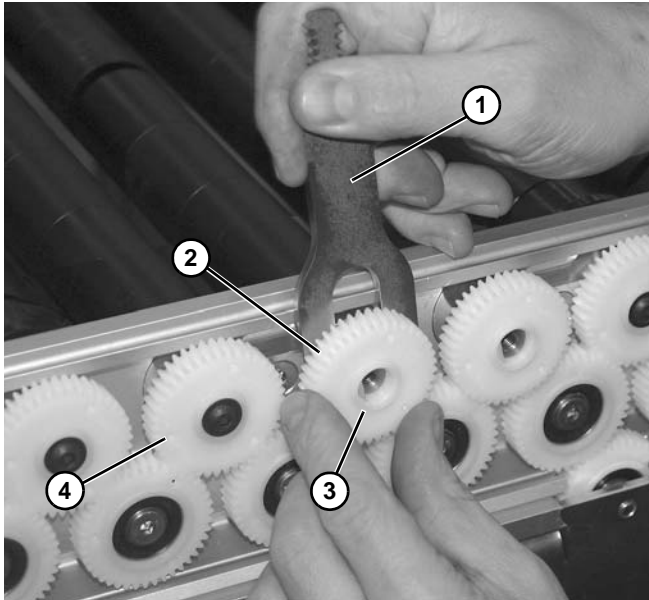


Figure 117

6. Remove the gear (Figure 117, item 2) from the roller shaft. Make note of the raised flange (Figure 117, item 3) on the gear. This raised flange should be installed toward the outside.
7. Repeat for second gear (Figure 117, item 4).
8. Remove screw (Figure 118, item 1) from center of bearing assembly (Figure 118, item 2).

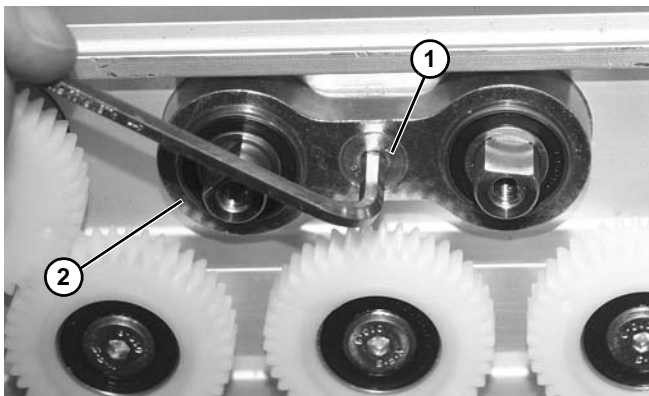


Figure 118

9. Remove bearing assembly (Figure 119, item 1) from the conveyor frame.

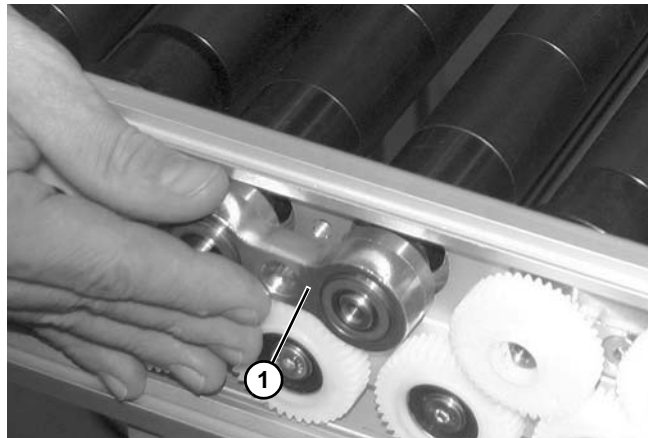


Figure 119

10. On the opposite end, loosen screws (Figure 120, item 1) securing bracket (Figure 120, item 2) onto conveyor frame.

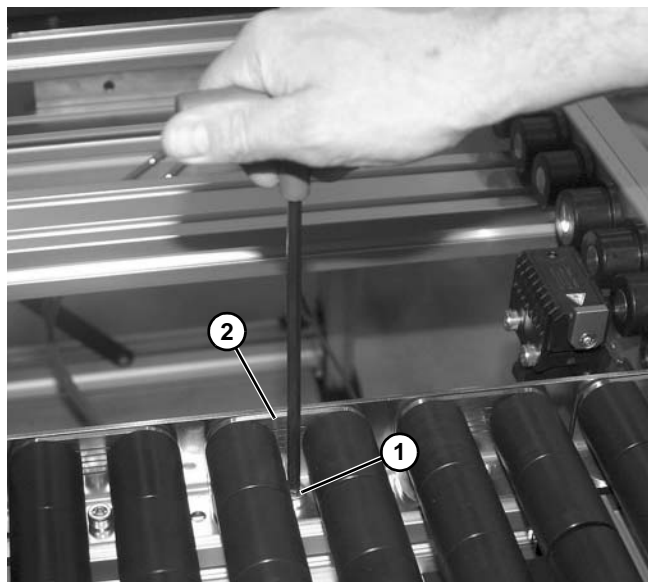


Figure 120

Preventive Maintenance and Adjustment

11. Pull rod end (**Figure 121, item 1**) slightly out, and remove rollers (**Figure 121, item 2**) from rod.

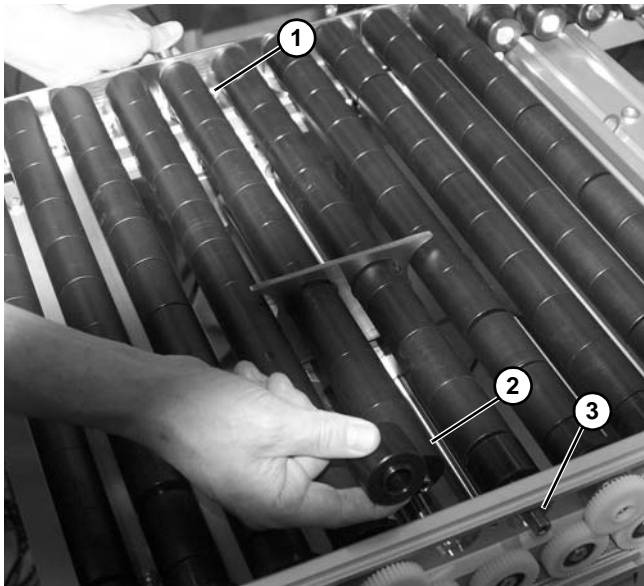


Figure 121

12. Repeat for rollers on second rod (**Figure 121, item 3**).
13. Continue removing all rollers (**Figure 122, item 1**) and rod (**Figure 122, item 2**) from bracket (**Figure 122, item 3**).

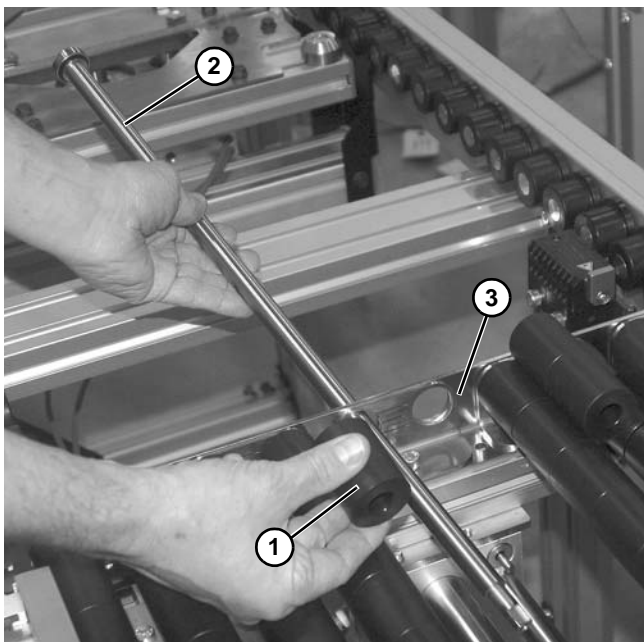


Figure 122

14. For center rollers: Remove lockwasher (**Figure 123, item 1**) and washer (**Figure 123, item 2**) from end of roller shaft (**Figure 123, item 3**).

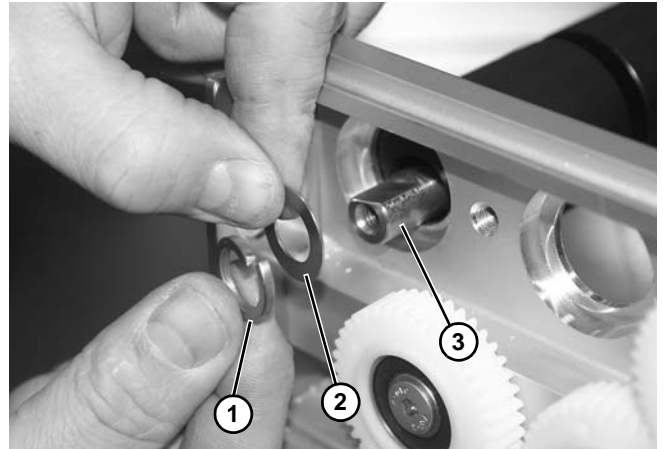



Figure 123

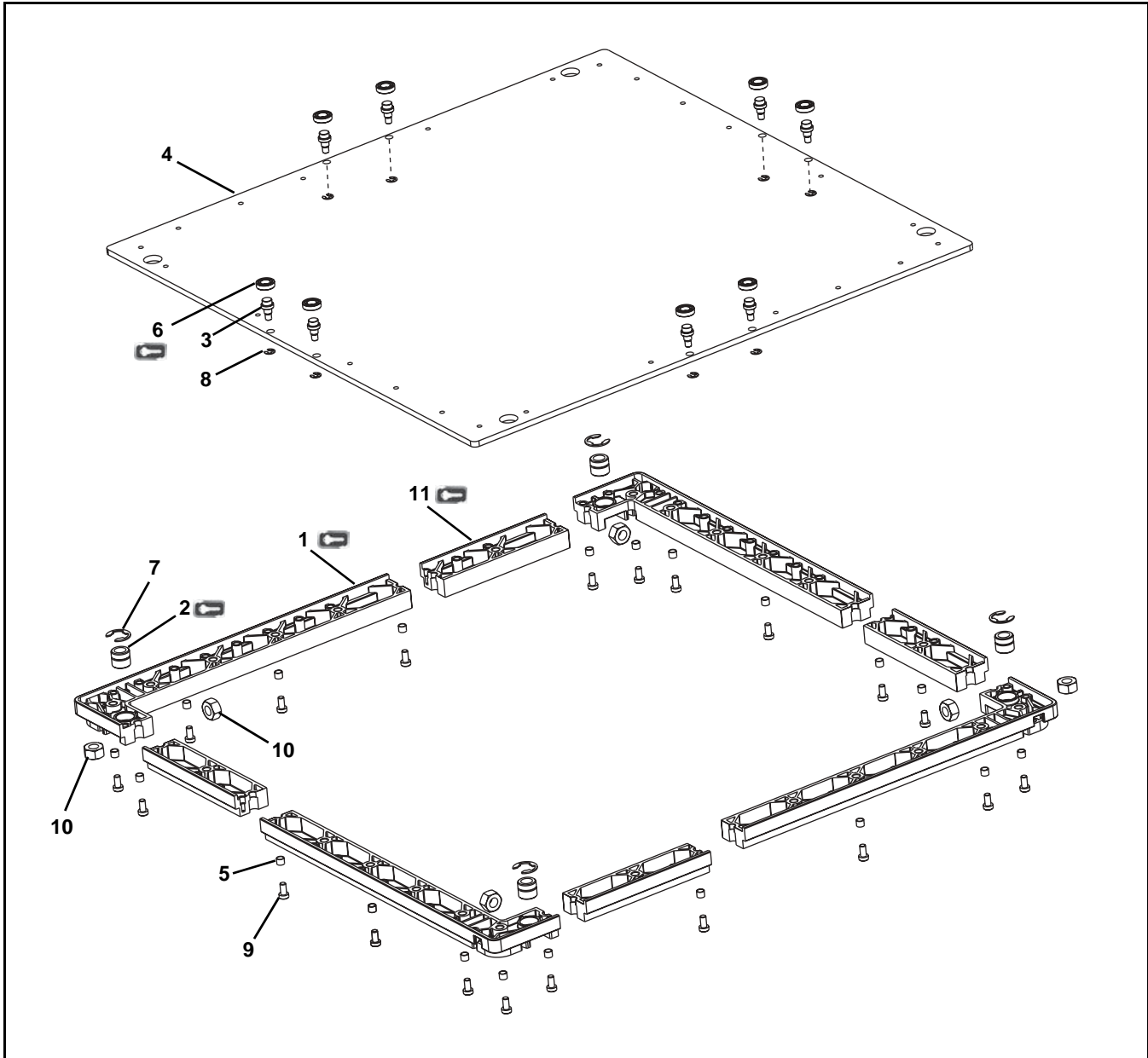
15. Installation is the reverse of removal.

Service Parts

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.

Pallet

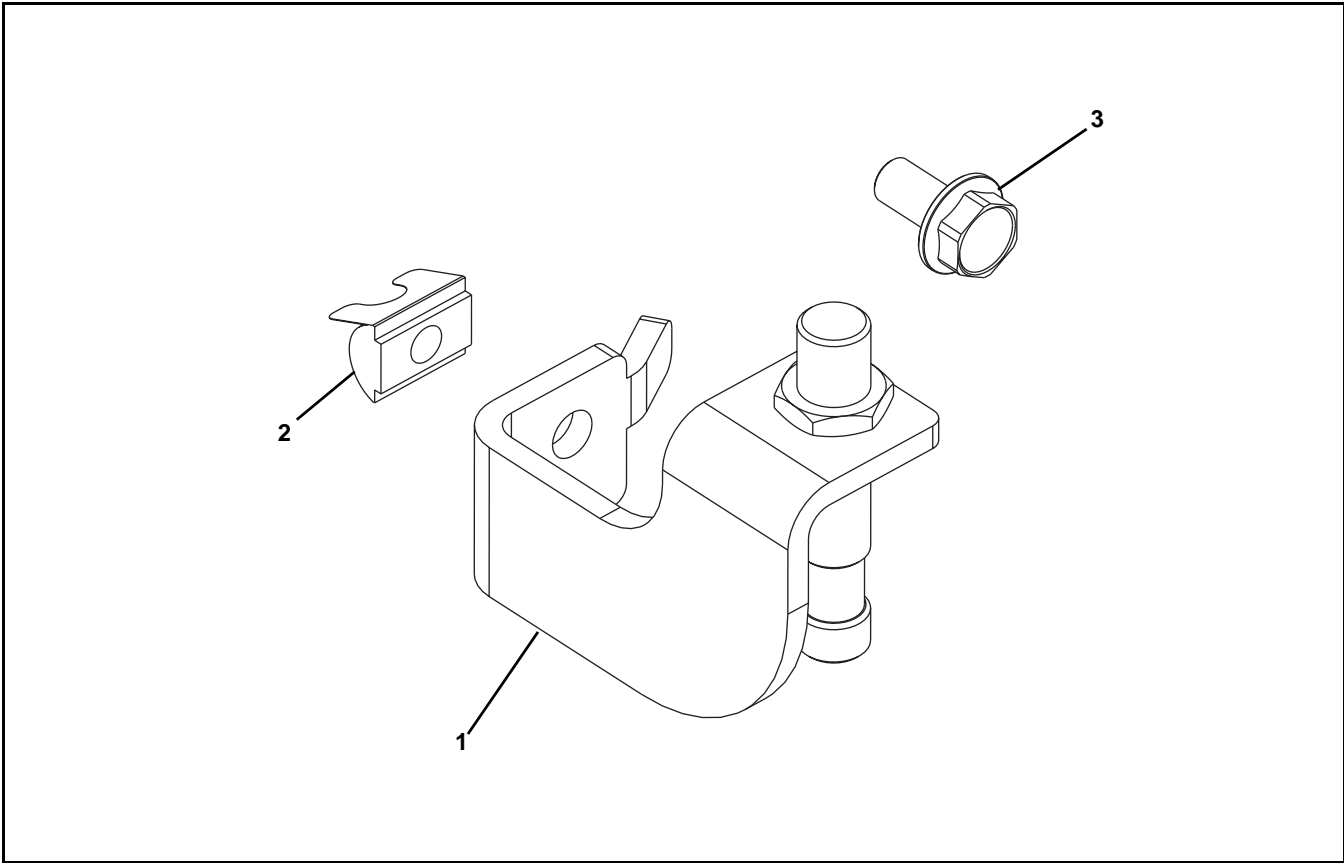


Service Parts

Item	Part Number	Description
1 0	204288- <u>WWW</u>	Corner Skirt
2 0	204548	Bushing
3	400117-4	Guide Pin, for 1/4" Thick Top Plate
	400117-6	Guide Pin, for 3/8" Thick Top Plate
	400117-8	Guide Pin, for 1/2" Thick Top Plate
4	400873- <u>WWW</u> x <u>LLL</u>	1/4" Thick Top Plate
	400874- <u>WWW</u> x <u>LLL</u>	3/8" Thick Top Plate
	400875- <u>WWW</u> x <u>LLL</u>	1/2" Thick Top Plate
5	450226SSP	Sleeve
6 0	802-397	Bearing
7	915-225	Retaining Ring
8	915-342	Retaining Ring
9	950614M	Low Head Cap Screw, M6-1.00 x 14 mm
10	991201M	Hex Nut
11 0	400068-160	Skirt Extension, for 640 width Pallets
	400068-320	Skirt Extension, for 800 width Pallets
<u>WWW</u> = Pallet width reference: 320, 400, 480, 640, 800		
<u>LLL</u> = Pallet length reference: 320, 400, 480, 640, 800		

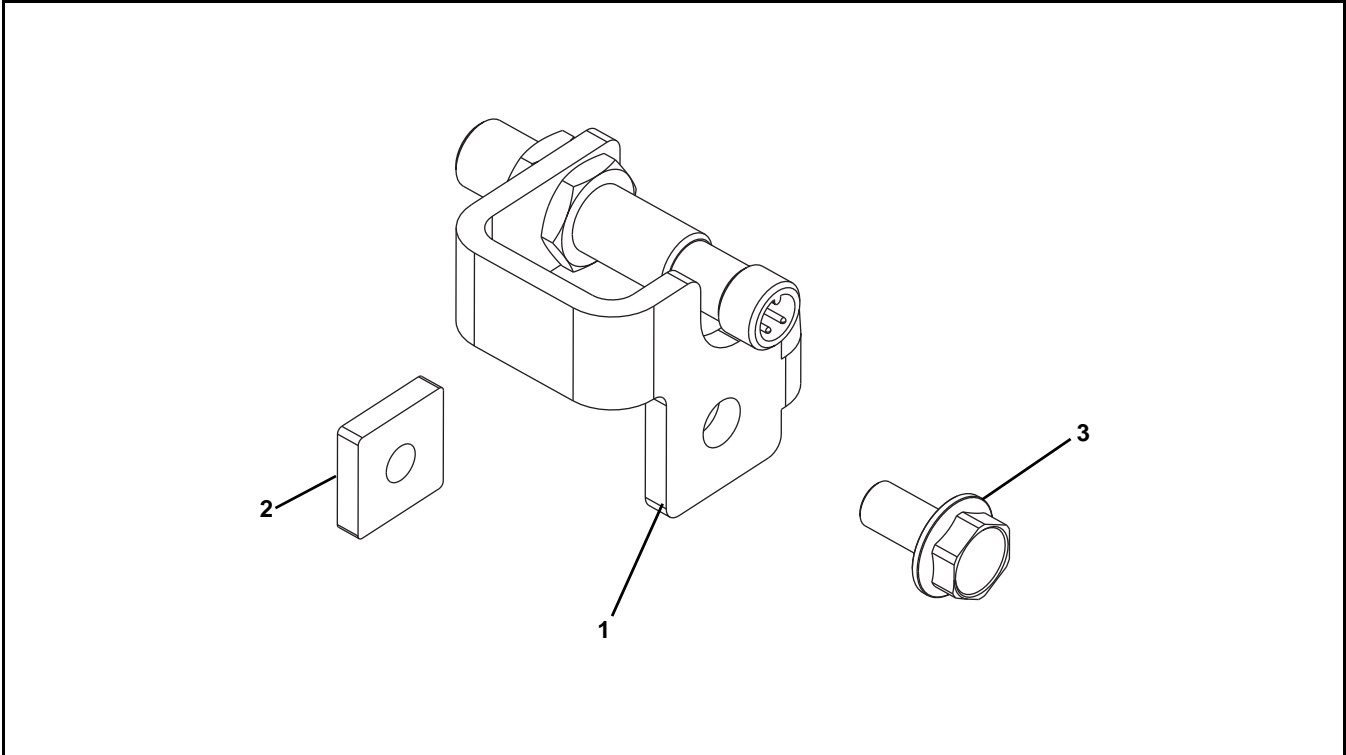
Service Parts

Bottom Sensor



Item	Part Number	Description
1	400266	Bottom Bracket
2	FASL-M8	Spring Tee Nut
3	960883M	Flanged Hex Head Cap Screw, M8 x 16 mm

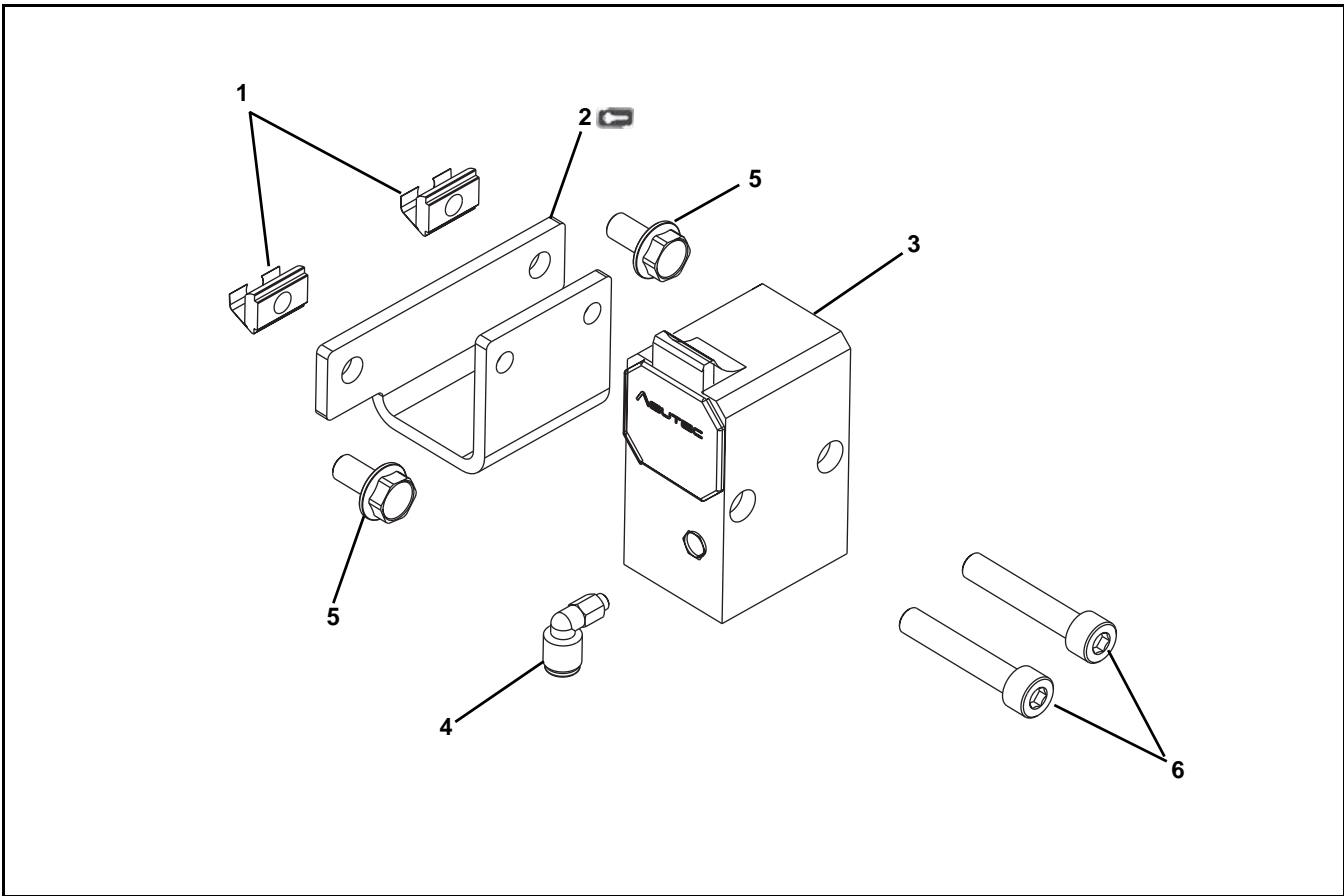
Side Sensor



Item	Part Number	Description
1	400267	Side Bracket
2	FASL-M8	Spring Tee Nut
3	960883M	Flanged Hex Head Cap Screw, M8 x 16 mm

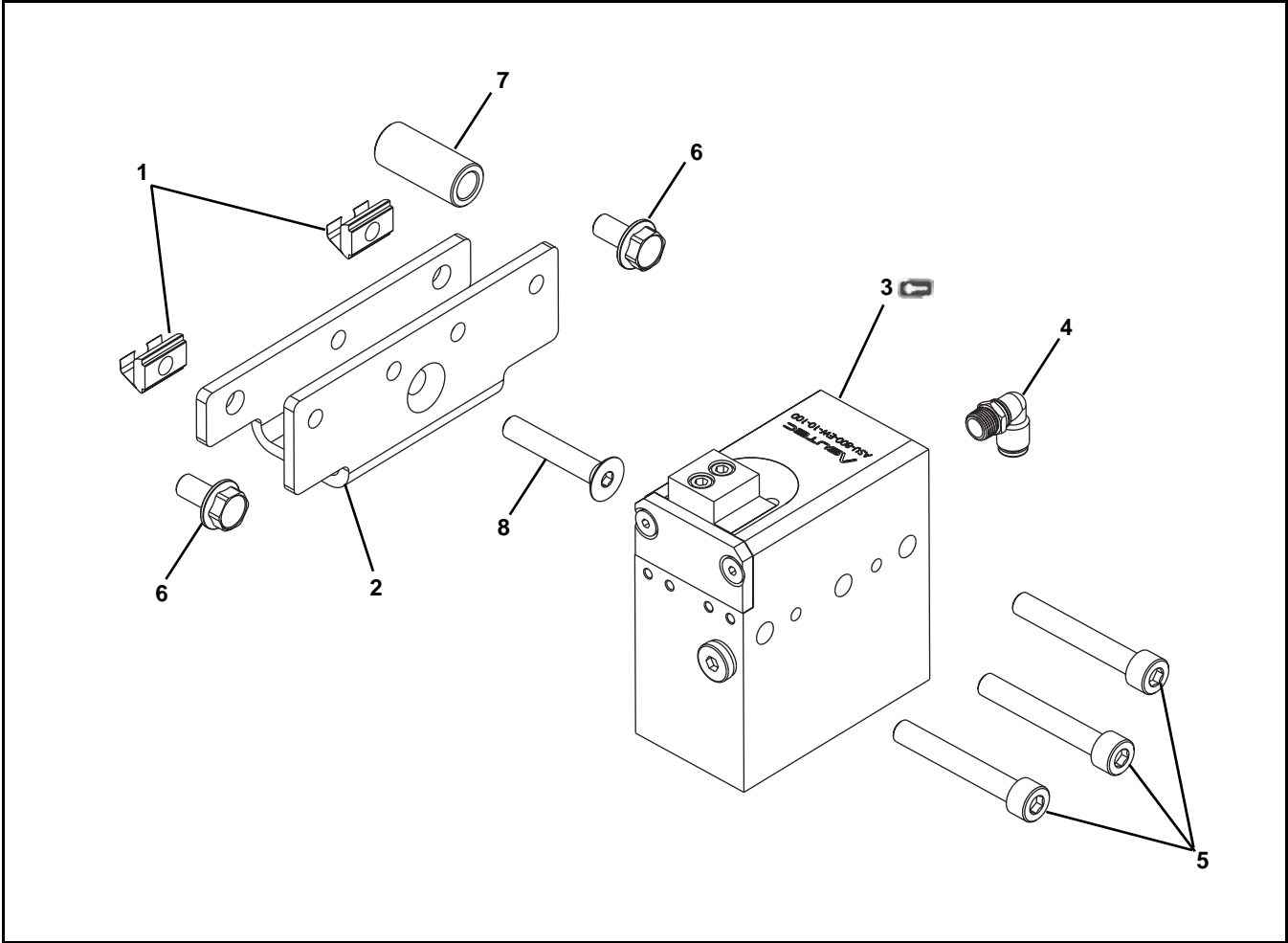
Service Parts

Standard Load Pallet Stop



Item	Part Number	Description
1	FASL-M8	Spring Tee Nut, M8-1.25 x 20 mm
2	400259	Mounting Bracket
3	804-724	Fixed Pallet Stop
	804-1092	Cushioned Pallet Stop
4	810-529	Elbow Fitting
5	960883M	Flanged Hex Head Cap Screw, M8 x 16 mm
6	920845M	Socket Head Screw, M8-1.25 x 45 mm

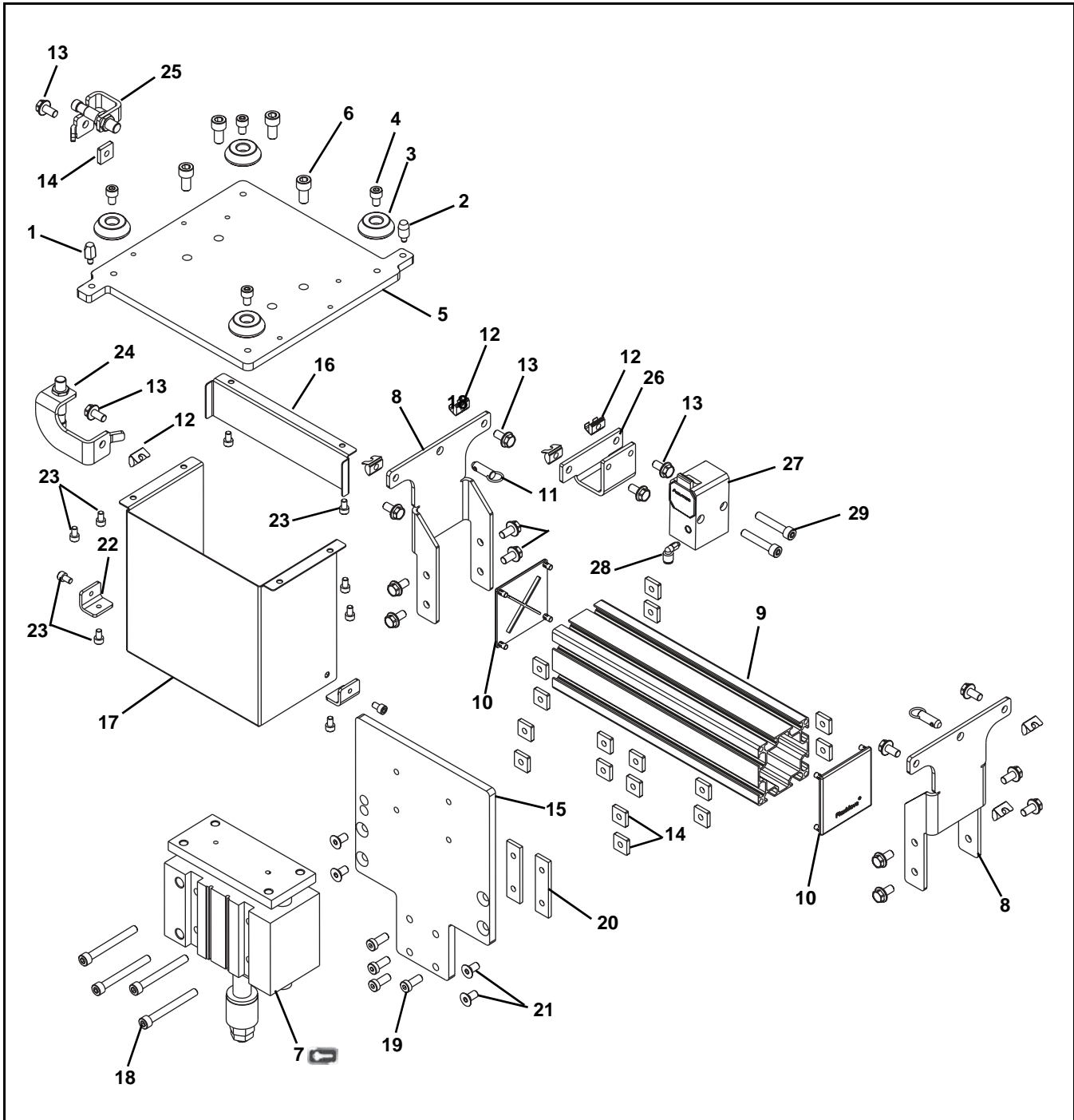
Heavy Load Pallet Stop



Item	Part Number	Description
1	FASL-M8	Spring Tee Nut, M8-1.25 x 20 mm
2	400255	Mounting Bracket
3	804-1091	Fixed Pallet Stop
	804-1093	Cushioned Pallet Stop
4	810-220	Elbow Fitting
5	920855M	Socket Head Screw, M8-1.25 x 55 mm for Fixed Stop
6	960883M	Flanged Hex Head Cap Screw, M8 x 16 mm
7	400257	Spacer Tube
8	930845M	Flat Screw, M8-1.25 x 45 mm

Service Parts

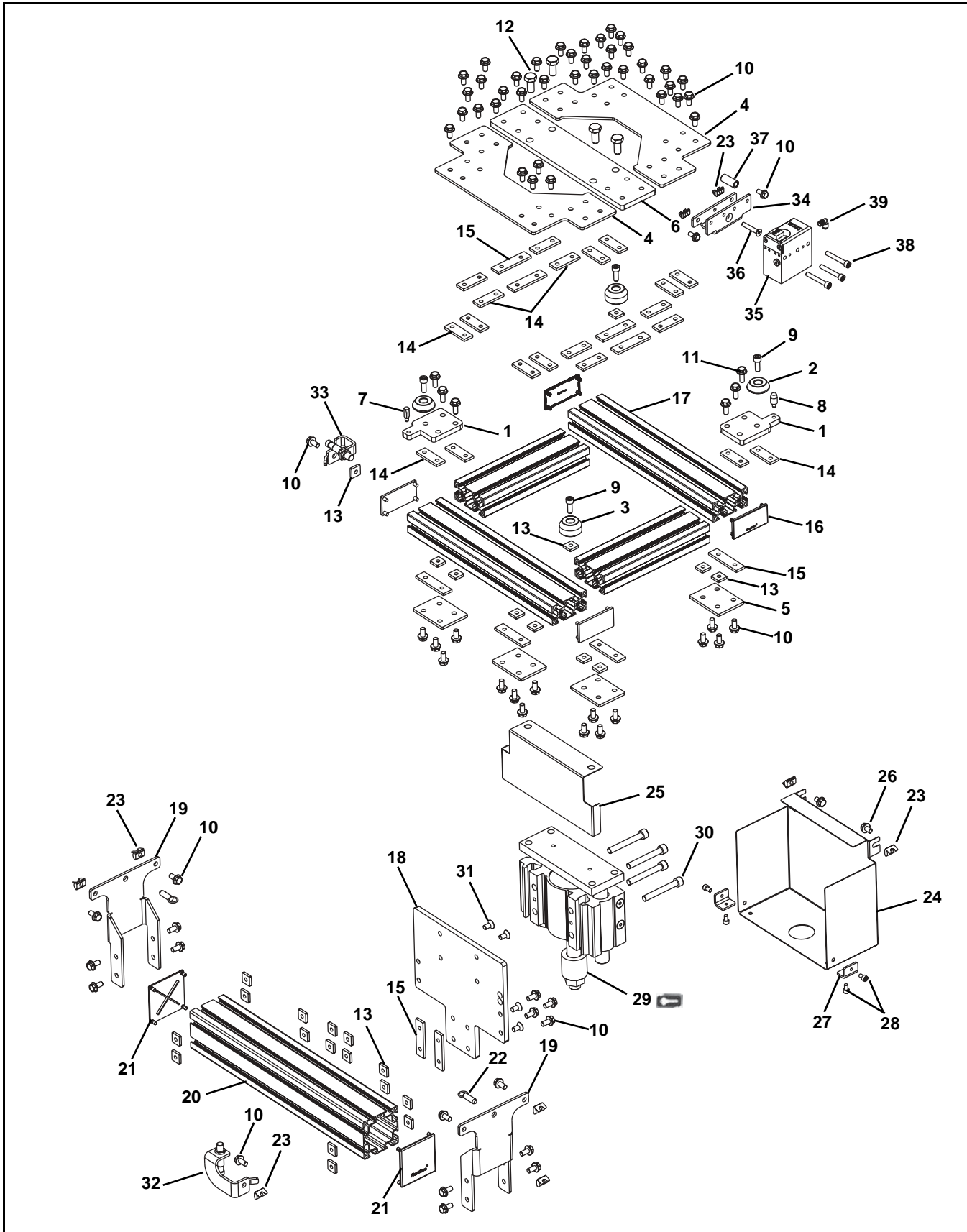
Lift and Locate for Pallets 400 x 480 or Smaller



Item	Part Number	Description
1	807-4084	Diamond Locating Pin
2	807-4085	Round Locating Pin
3	400140	Locating Button Support
4	920812M	Socket Head Screw, M8-1.25 x 12 mm
5	400158- <u>WWW</u> - <u>LLL</u>	Top Plate
6	921020M	Socket Head Screw, M10-1.50 x 20 mm
7	804-1104	Cylinder
8	400136	Support Tube Bracket
9	FBSB-80X80- <u>LLLLL</u> -M	Beam
10	FBEC-80	End Cap
11	807-1169	Quick Release Pin
12	FASL-M8	Spring Tee Nut
13	960883M	Flanged Hex Head Cap Screw, M8 x 16 mm
14	FASN-M8	Square Nut, M8
15	400271	Cylinder Mount Plate
16	400273	Rear Guard
17	400272	Front Guard
18	920880M	Socket Head Screw, M8-1.25 x 80 mm
19	960884M	Flange Head Cap Screw, M8 x 20 mm
20	FBCS-20X76	Connecting Strip
21	930816M	Flat Head Screw, M8-1.25 x 16 mm
22	400270	Angle Guard
23	920610M	Socket Head Screw, M6-1.00 x 10 mm
24	400266	Bottom Sensor Bracket
25	400267	Side Sensor Bracket
26	400259	Pallet Stop Mounting Bracket
27	804-724	Pallet Stop
28	810-529	Elbow Fitting
29	920845M	Socket Head Screw, M8-1.25 x 45 mm
<u>LLLLL</u> = Part Length in mm with one decimal place.		
Length Example: Length = 485 mm LLLLL = 04850		
<u>WWW</u> = Pallet width reference: 320, 400, 480		
<u>LLL</u> = Pallet length reference: 320, 400, 480		

Service Parts

Lift and Locate for Pallets 480 x 480 or Larger

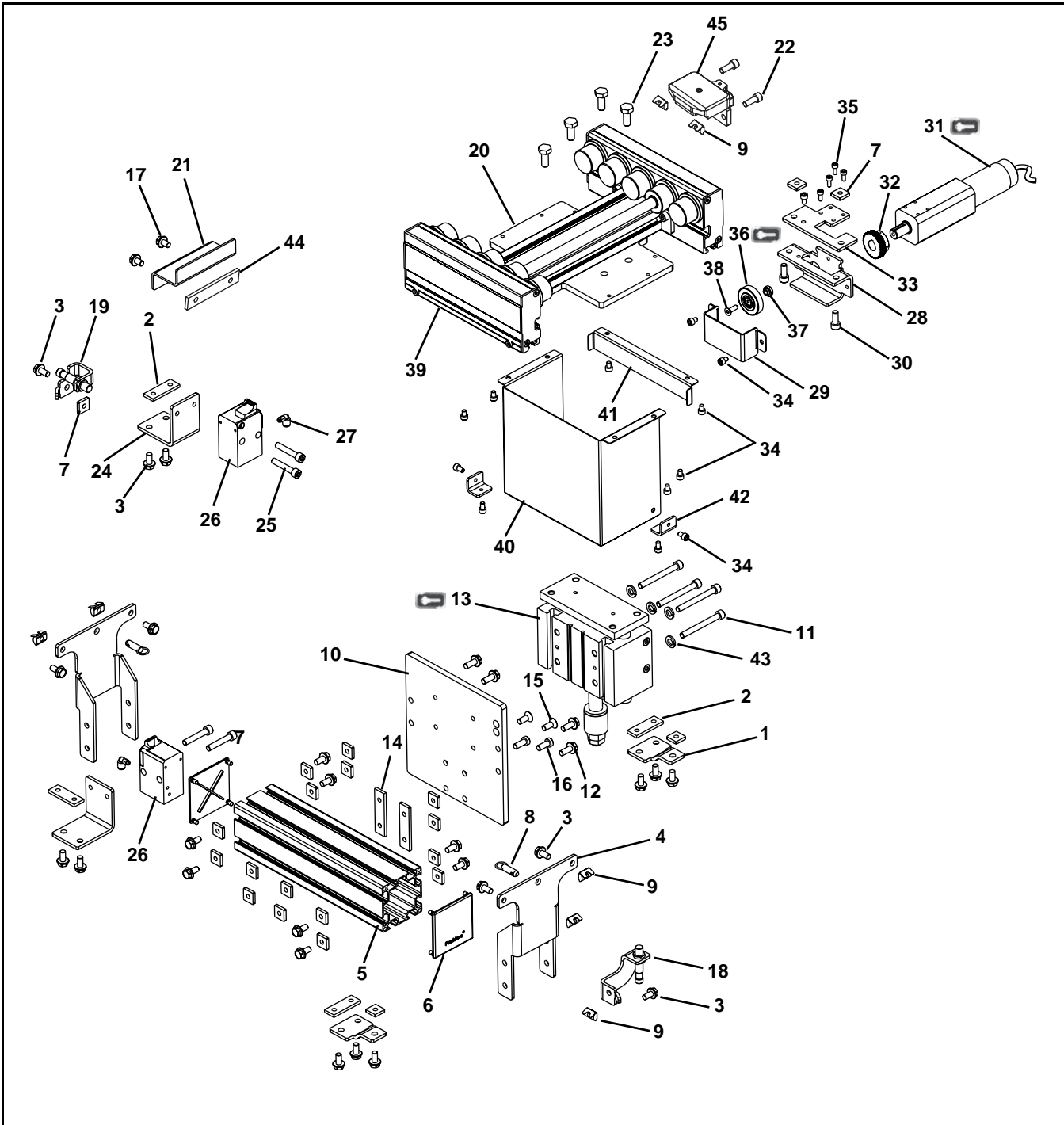


ERT™ 250 Pallet System Stations & Accessories

Item	Part Number	Description
1	400129	Locator Plate
2	400140	Button Support
3	400141	Tall Button Support
4	400142	Top Tie Plate
5	400156	Tube Mounting Plate
6	400166	Cylinder Mounting Plate
7	807-4084	Locating Pin
8	807-4085	Locating Pin
9	920822M	Socket Head Screw, M8-1.25 x 22 mm
10	960883M	Flanged Hex Head Cap Screw, M8 x 16 mm
11	960884M	Flanged Hex Head Cap Screw, M8 x 20 mm
12	961225M	Hex Head Cap Screw, M12-1.50 x 25 mm
13	FASN-M8	Square Nut, M8
14	FBCS-20X55	Connecting Strip (10 pack)
15	FBCS-20X76	Connecting Strip
16	FBEC-40X80	End Cap
17	FBSB-40X80-LLLLL-M	Beam
18	400215	Mounting Plate
19	400136	Support Tube Bracket
20	FBSB-80X80-LLLLL-M	Beam
21	FBEC-80	End Cap
22	807-1169	Quick Release Pin
23	FASL-M8	Spring Tee Nut
24	400212	Slide Guard
25	400216	Rear Guard
26	960882M	Flanged Hex Head Cap Screw, M8 x 12 mm
27	400270	Corner Angle Guard
28	920610M	Socket Head Screw, M6-1.00 x 10 mm
29	804-109	Cylinder
30	921075M	Socket Head Screw, M10-1.50 x 75 mm
31	930816M	Flat Head Screw, M8-1.25 x 16 mm
32	400266	Bottom Sensor Bracket
33	400267	Side Sensor Bracket
34	400255	Pallet Stop Mounting Bracket
35	804-1091	Pallet Stop
36	920855M	Socket Head Screw, M8-1.25 x 55 mm
37	400257	Tube Spacer
38	930845M	Flat Head Screw, M8-1.25 x 45 mm
39	810-220	Elbow Fitting
LLLLL = Part Length in mm with one decimal place.		
Length Example: Length = 485 mm LLLLL = 04850		

Service Parts

Lift and Transfer for Pallets 400 x 480 or Smaller



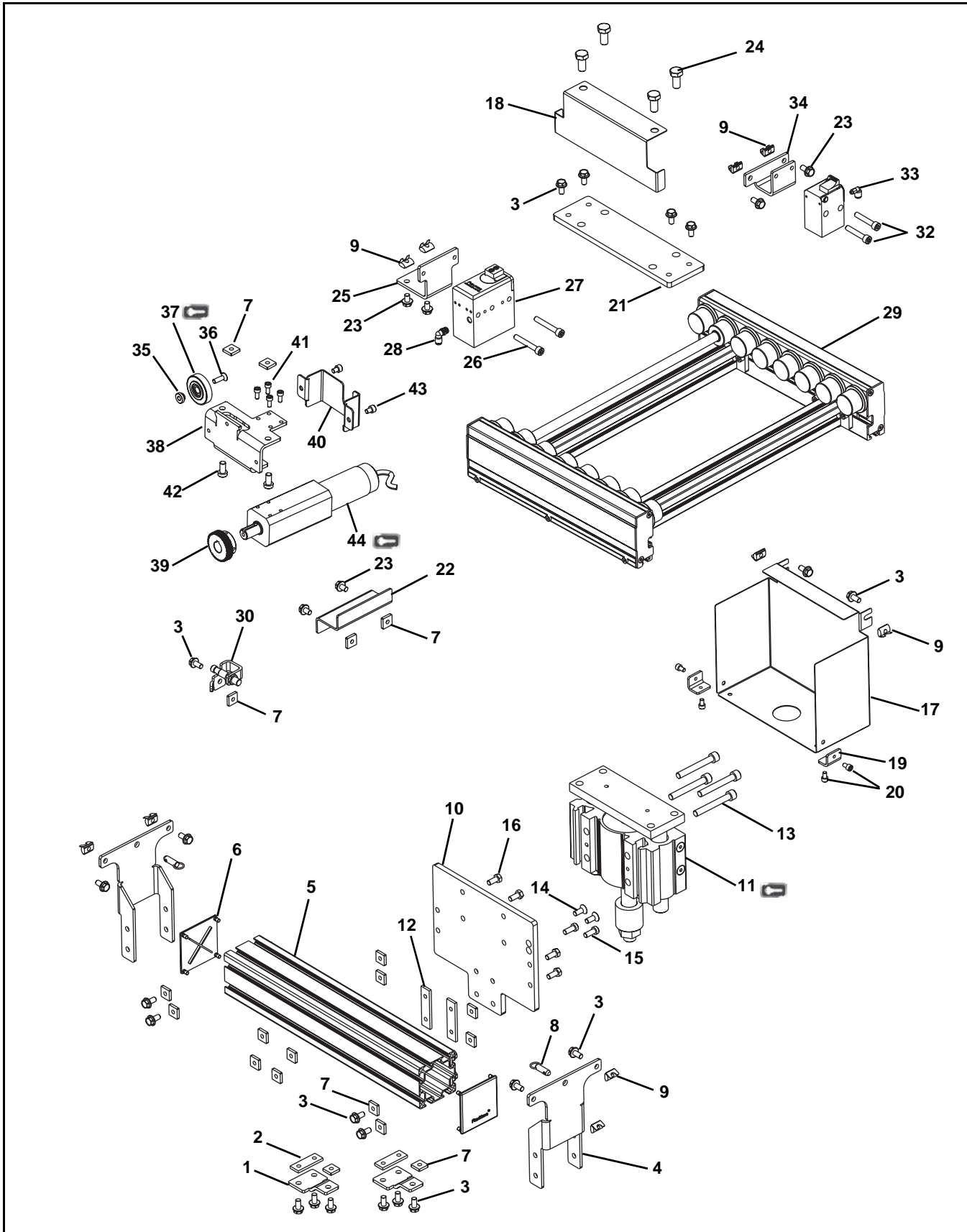
Service Parts

Item	Part Number	Description
1	400171	Connecting Bracket
2	FBCS-20x55	Connecting Strip (10 pack)
3	960883M	Flanged Hex Head Cap Screw, M8 x 16 mm
4	400136	Support Tube Bracket
5	FBSB-80X80-LLLLL-M	Beam
6	FBEC-80	End Cap
7	FASN-M8	Square Nut
8	807-1169	Quick Release Pin
9	FASL-M8	Spring Tee Nut
10	400192	Cylinder Mounting Plate
11	920880M	Socket Head Screw, M8-1.25 x 80 mm
12	960884M	Flanged Hex Head Cap Screw, M8 x 20 mm
13	804-1104	Cylinder
14	FBCS-20x76	Connecting Strips
15	930820MSS	Flat Head Screw, M8-1.25 x 20 mm
16	950820M	Low Head Cap Screw, M8-1.25 x 20 mm
17	960882M	Flanged Hex Head Cap Screw, M8 x 12 mm
18	400266	Bottom Sensor Bracket
19	400267	Side Sensor Bracket
20	400176	Top Plate
21	400173	End Stop Plate
22	920822M	Socket Head Screw, M8-1.25 x 22mm
23	961025MSS	Hex Head Cap Screw, M10-1.50 x 25 mm
24	400393	Pallet Stop Mounting Bracket
25	920845M	Socket Head Screw, M8-1.25 x 45 mm
26	804-724	Fixed Pallet Stop
	804-1092	Cushioned Pallet Stop
27	810-529	Elbow Fitting
28	400086	Motor Mounting Bracket
29	400088	Drive Cover
30	920820M	Socket Head Screw, M8-1.25 x 20 mm

Item	Part Number	Description
31	826-984	Motor, Speed = 10 Mpm, Gear Ratio = 67:1, RPM = 8.7-87
	826-985	Motor, Speed = 15 Mpm, Gear Ratio = 45:1, RPM = 12.9-129
	826-986	Motor, Speed = 20 Mpm, Gear Ratio = 33:1, RPM = 17.6-176
	826-987	Motor, Speed = 25 Mpm, Gear Ratio = 27:1, RPM = 21.5-215
	826-988	Motor, Speed = 37 Mpm, Gear Ratio = 18:1, RPM = 31.7-317
	826-989	Motor, Speed = 46 Mpm, Gear Ratio = 15:1, RPM = 38.7-387
	826-990	Motor, Speed = 62 Mpm, Gear Ratio = 11:1, RPM = 52.9-529
	826-991	Motor, Speed = 76 Mpm, Gear Ratio = 9:1, RPM = 64.5-645
32	400085	Motor Gear
33	400087	Motor Plate
34	920608M	Socket Head Screw, M6-1.00 x 8 mm
35	920512M	Socket Head Screw, M5-.80 x 8 mm
36	400075	Bearing, Idler Gear
37	400076	Spacer
38	930618M	Flat Head Screw, M6-1.00 x 18 mm
39	---	For Conveyor Components See Manual 851-925
40	400103	Front Guard
41	400104	Rear Guard
42	400270	Corner Tie Angle Guard
43	911-120	Washer
44	FBCS-20X90	Connecting Strip
45	809928	Pallet Sensor
<u>LLLLL</u> = Part Length in mm with one decimal place.		
Length Example: Length = 485 mm <u>LLLLL</u> = 04850		

Service Parts

Lift and Transfer for Pallets 480 x 480 or Larger



ERT™ 250 Pallet System Stations & Accessories

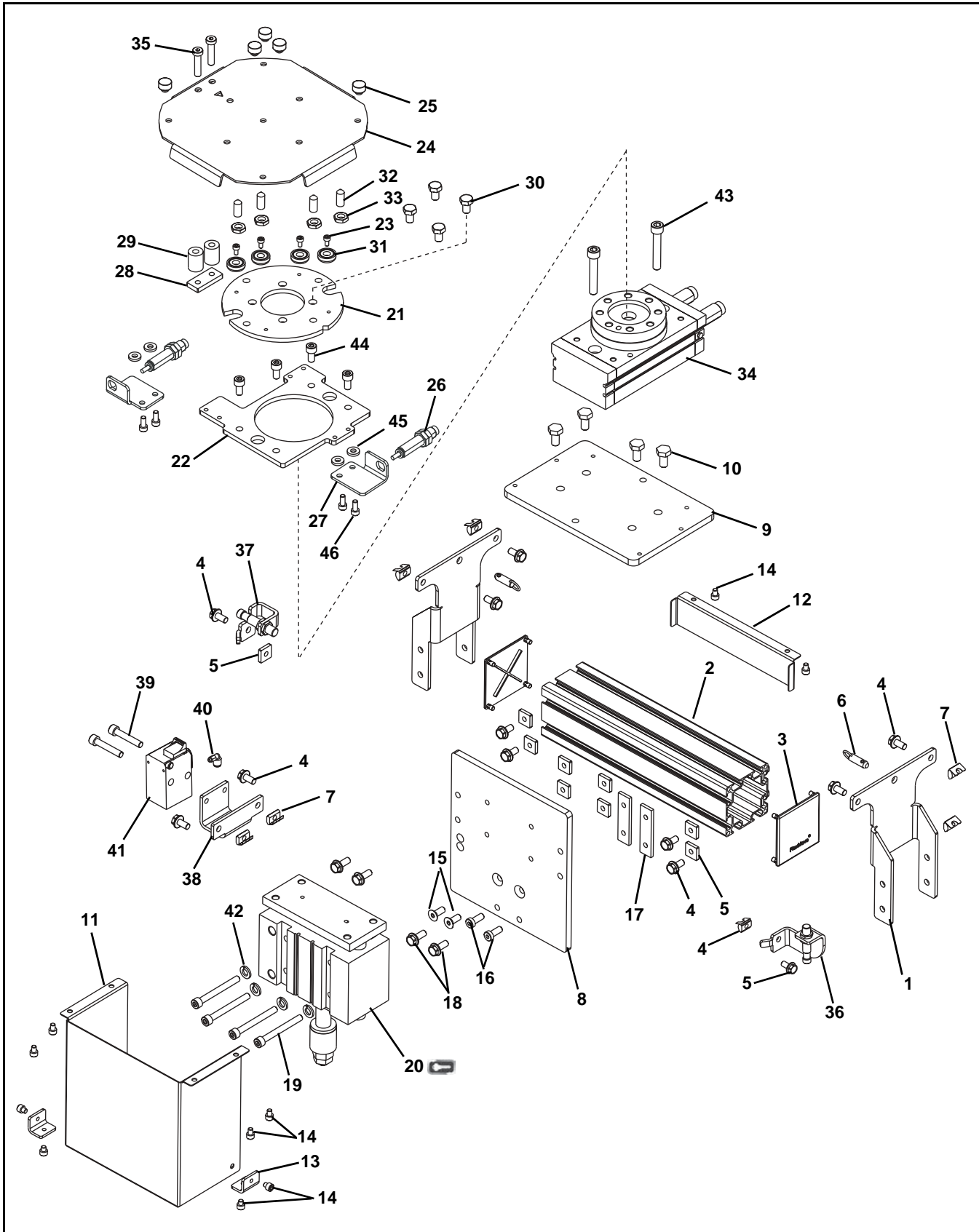
Service Parts

Item	Part Number	Description
1	400171	Connecting Bracket
2	FBCS-20x55	Connecting Strip (10 pack)
3	960883M	Flanged Hex Head Cap Screw, M8 x 16 mm
4	400136	Support Tube Bracket
5	FBSB-80X80-LLLLL-M	Beam
6	FBEC-80	End Cap
7	FASN-M8	Square Nut
8	807-1169	Quick Release Pin
9	FASL-M8	Spring Tee Nut
10	400178	Cylinder Mounting Plate
11	804-109	Cylinder
12	FBCS-20x76	Connecting Strips
13	921075M	Socket Head Screw, M10-1.50 x 75 mm
14	930820MSS	Flat Head Screw, M8-1.25 x 20 mm
15	950820M	Low Head Cap Screw, M8-1.25 x 20 mm
16	960818MSS	Hex Head Cap Screw, M8-1.25 x 18 mm
17	400212	Slide Guard
18	400213	Rear Guard
19	400270	Angle Guard
20	920610M	Socket Head Screw, M6-1.00 x 10 mm
21	400349	Top Plate for 480 x 480 thru 480 x 640 Widths
	400166	Top Plate for 640 x 480 and wider
22	400173	End Stop Plate
23	960882M	Flanged Hex Head Cap Screw, M8 x 12 mm
24	961225MSS	Hex Head Cap Screw, M12-1.50 x 25 mm
25	400338	Heavy Load Pallet Stop Mounting Bracket
26	920855M	Socket Head Screw, M8-1.25 x 20 mm
27	804-1091	Pallet Stop
28	810-220	Elbow Fitting
29	—	For Conveyor Components See Manual 851-925
30	400267	Side Sensor Bracket
31	804-724	Fixed Pallet Stop
	804-1092	Cushioned Pallet Stop
32	9230845M	Socket Head Screw, M8-1.25 x 45 mm
33	810-220	Elbow Fitting
34	400259	Mounting Bracket
35	400076	Bearing Spacer
36	930618M	Flat Head Screw, M6-1.00 x 18 mm
37	400075	Bearing, Idler Gear
38	400078	Motor Mounting Bracket
39	400085	Motor Gear

Item	Part Number	Description
40	400080	Drive Cover
41	920512M	Socket Head Screw, M5-.80 x 12 mm
42	950816M	Low Head Cap Screw, M8-1.25 x 16 mm
43	920608M	Socket Head Screw, M6-1.00 x 8 mm
44	826-984	Motor, Speed = 10 Mpm, Gear Ratio = 67:1, RPM = 8.7-87
	826-985	Motor, Speed = 15 Mpm, Gear Ratio = 45:1, RPM = 12.9-129
	826-986	Motor, Speed = 20 Mpm, Gear Ratio = 33:1, RPM = 17.6-176
	826-987	Motor, Speed = 25 Mpm, Gear Ratio = 27:1, RPM = 21.5-215
	826-988	Motor, Speed = 37 Mpm, Gear Ratio = 18:1, RPM = 31.7-317
	826-989	Motor, Speed = 46 Mpm, Gear Ratio = 15:1, RPM = 38.7-387
	826-990	Motor, Speed = 62 Mpm, Gear Ratio = 11:1, RPM = 52.9-529
	826-991	Motor, Speed = 76 Mpm, Gear Ratio = 9:1, RPM = 64.5-645
LLLLL = Part Length in mm with one decimal place.		
Length Example: Length = 485 mm LLLLL = 04850		

Service Parts

Lift and Rotate for Pallets 400 x 480 or Smaller



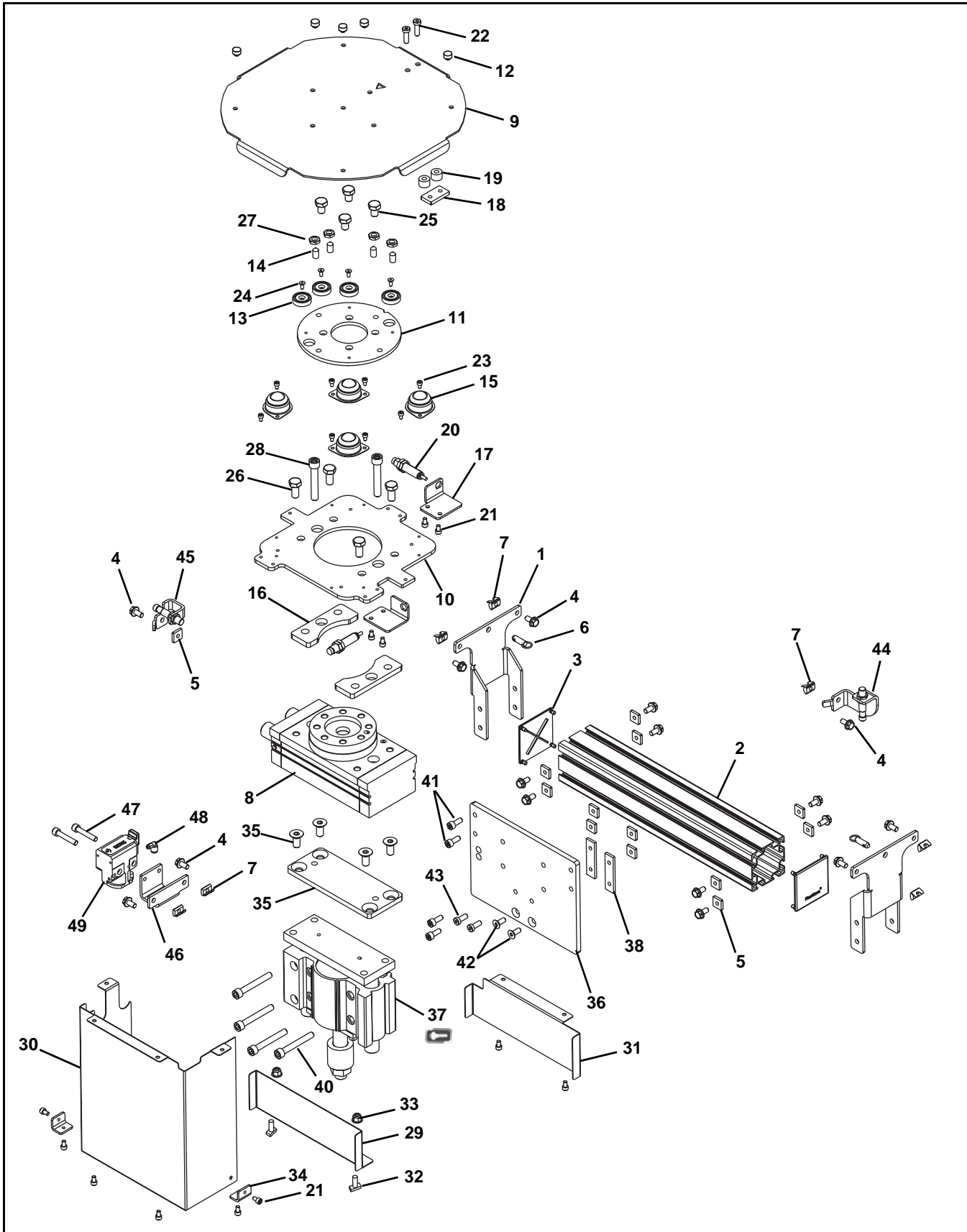
Service Parts

Item	Part Number	Description
1	400136	Support Tube Bracket
2	FBSB-80X80-LLLLL-M	Beam
3	FBEC-80	End Cap
4	960883M	Flanged Hex Head Cap Screw, M8 x 16 mm
5	FASN-M8	Square Nut
6	807-1169	Quick Release Pin
7	FASL-M8	Spring Tee Nut
8	400279	Cylinder Mounting Plate
9	400187	Rotary Plate
10	961020M	Hex Head Cap Screw, M10-1.50 x 20 mm
11	400283	Front Guard
12	400284	Rear Guard
13	400270	Angle Guard
14	920610M	Socket Head Screw, M6-1.00 x 10 mm
15	930820M	Flat Head Screw, M8-1.25 x 20 mm
16	950820M	Low Head Cap Screw, M8-1.25 x 20 mm
17	FBCS-20x76	Connecting Strips
18	960884M	Flanged Hex Head Cap Screw, M8 x 20 mm
19	920880M	Socket Head Screw, M8-1.25 x 80 mm
20	804-1104	Cylinder
21	400138	Round Plate
22	400133- <u>WWW</u>	Top Rotary Plate
23	930512M	Flat Head Screw, M5-.80 x 9.2 mm
24	400134- <u>WWW-LLL</u>	Top Plate
25	807-2641	Bumper
26	804-354	Shock Absorber
27	400143	Absorber Mounting Bracket
28	400281	Pivot Bar
29	807-4195	Spacer
30	961016MSS	Hex Head Cap Screw, M10-1.50 x 16 mm
31	808-042	Magnet
32	807-4086	Set Screw
33	991009MSS	Hex Nut
34	804-1105	Rotary Cylinder
35	950835M	Low Head Cap Screw, M8-1.25 x 35 mm
36	400266	Bottom Sensor Bracket
37	400267	Side Sensor Bracket
38	400259	Pallet Stop Mounting Bracket
39	920845M	Socket Head Screw, M8-1.25 x 45 mm
40	810-529	Elbow Fitting
41	804-724	Fixed Pallet Stop
	804-1092	Cushioned Pallet Stop
42	911-120	Lock Washer

Item	Part Number	Description
43	921060M	Socket Head Screw, M10-1.50 x 60 mm
44	920816M	Socket Head Screw, M8-1.25 x 16 mm
45	605279P	Washer
46	92064M	Socket Head Screw, M6-1.00 x 14 mm
<u>LLLLL</u> = Part Length in mm with one decimal place.		
Length Example: Length = 485 mm LLLLL = 04850		
<u>WWW</u> = Pallet width reference: 320, 400, 480		
<u>LLL</u> = Pallet length reference: 320, 400, 480		

Service Parts

Lift and Rotate for Pallets 480 x 480 or Larger



ERT™ 250 Pallet System Stations & Accessories

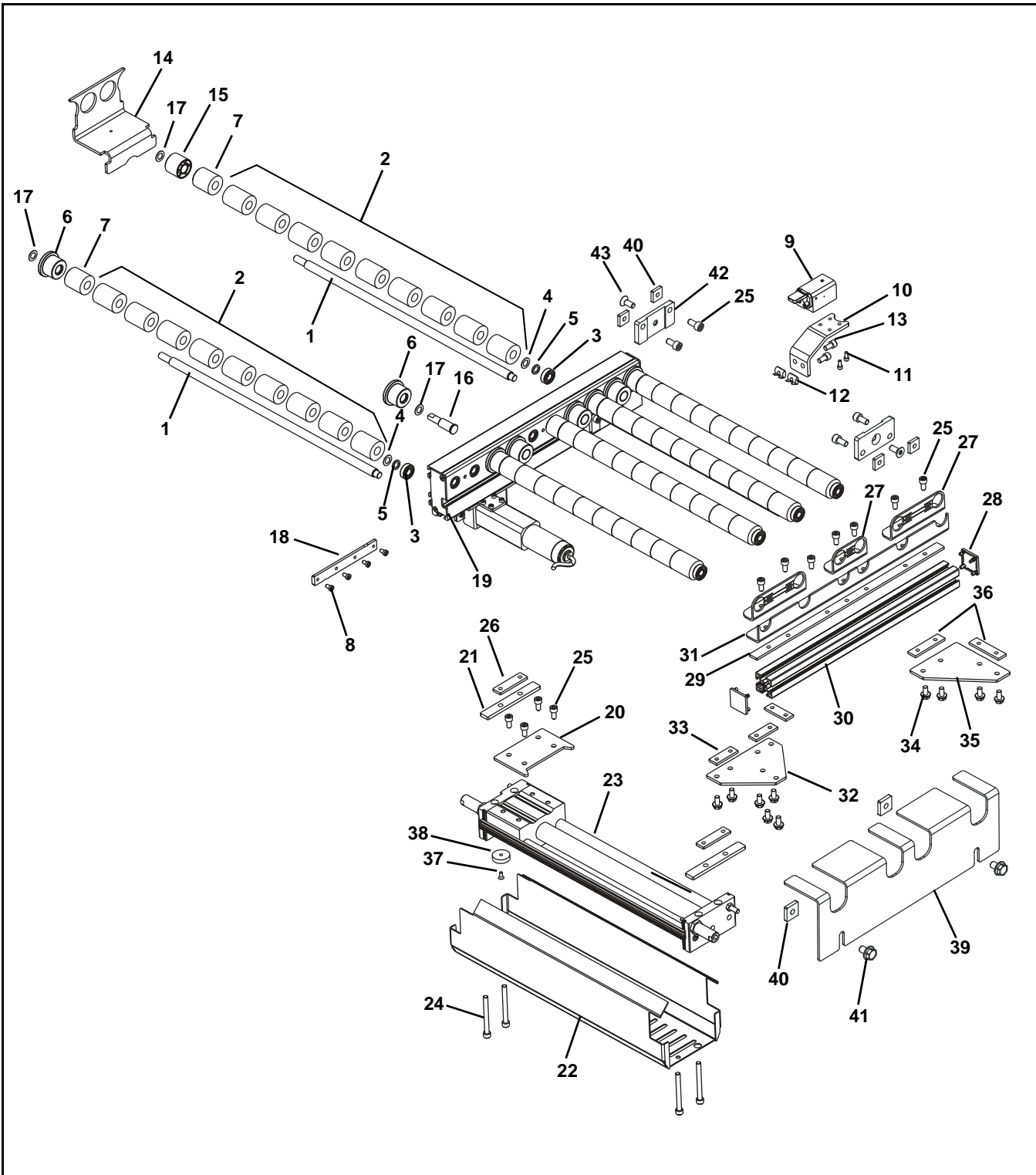
Service Parts

Item	Part Number	Description
1	400136	Support Tube Bracket
2	FBSB-80X80-LLLLL-M	Beam
3	FBEC-80	End Cap
4	960883M	Flanged Hex Head Cap Screw, M8 x 16 mm
5	FASN-M8	Square Nut
6	807-1169	Quick Release Pin
7	FASL-M8	Spring Tee Nut
8	804-183	Rotary Table
9	400175- <u>WWW</u> - <u>LLL</u>	Top Plate
10	400174- <u>WWW</u>	Actuator Plate
11	400172	Magnetic Ring
12	807-2641	Bumper
13	808-042	Magnet
14	807-4086	Set Screw
15	807-4087	Ball Transfer
16	400170	Shim Plate
17	400143	Absorber Mounting Bracket
18	400211	Pivot Bar
19	807-4088	Spacer
20	804-354	Shock Absorber
21	920610M	Socket Head Screw, M6-100 x 10 mm
22	950825M	Low Head Cap Screw, M8-1.25 x 25 mm
23	920508M	Socket Head Screw, M5-.80 x 8 mm
24	930512M	Flat Head Screw, M5-80 x 9.2 mm
25	961216MSS	Hex Head Cap Screw, M12-1.50 x 16 mm
26	961225MSS	Hex Head Cap Screw, M12-1.50 x 25 mm
27	991009MSS	Hex Nut
28	921270M	Socket Head Screw, M12-1.75 x 70 mm
29	400159	Rear Guard
30	400209	Slide Guard
31	400210	Top Guard
32	FATB-20	Twist-In Stud M8-20 mm
33	990812M	Lock Nut
34	400270	Guard Angle
35	400160	Slide Plate
36	400199	Cylinder Mounting Plate
37	804-109	Cylinder
38	FBCS-20x76	Connecting Strips
39	931225M	Flat Head Screw, M12-1.75 x 25 mm
40	921075M	Socket Head Screw, M10-1.50 x 75 mm
41	920884M	Flanged Head Screw, M8 x 20 mm
42	930820M	Flat Head Screw, M8-1.25 x 20 mm
43	950820M	Low Head Cap Screw, M8-1.25 x 20 mm

Item	Part Number	Description
44	400266	Bottom Sensor Bracket
45	400267	Side Sensor Bracket
46	400259	Pallet Stop Mounting Bracket
47	920845M	Socket Head Screw, M8-1.25 x 45 mm
48	810-529	Elbow Fitting
49	804-724	Fixed Pallet Stop
	804-1092	Cushioned Pallet Stop
<u>LLLLL</u> = Part Length in mm with one decimal place.		
Length Example: Length = 485 mm <u>LLLLL</u> = 04850		
<u>WWW</u> = Pallet width reference: 480, 640, 800		
<u>LLL</u> = Pallet length reference: 480, 640, 800		

Service Parts

Pallet Pusher



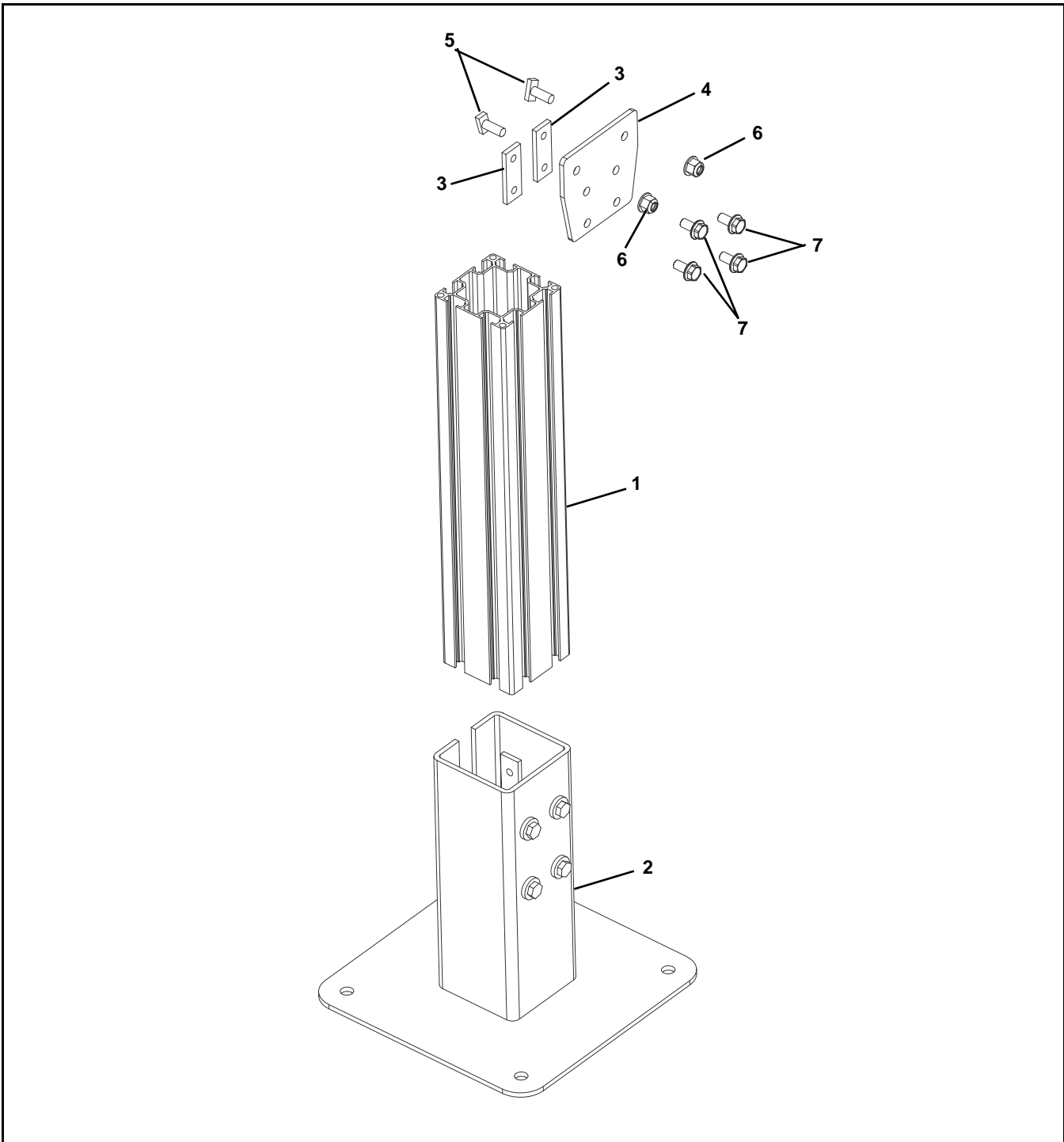
Service Parts

Item	Part Number	Description
1	400237- <u>WWW</u>	Shaft
2	400090	Non-Flanged Roller, 50 mm
3	802-253	Bearing
4	400149	Washer
5	911-720	Lock Washer
6	400060-S	Edge Roller
7	400090- <u>LLLL</u> -M	Filler Roller
8	950610M	Low Head Cap Screw, M6-1000 x 10 mm
9	804-774	Pallet Damper
10	400353	Dampener Bracket
11	920512M	Socket Head Screw, M5-.80 x 12 mm
12	FASL-M8	Spring Tee Nut
13	920816M	Socket Head Screw, M8-1.125x 16 mm
14	400164	Pusher Plate
15	400208	Roller
16	400061-S	Slip Shaft
17	400149	Washer
18	206520	Connecting Bar
19	-----	For Conveyor Components See Manual 851-925
20	400193	Cylinder Top Plate
21	400198	Cylinder Mounting Spacer
22	400233- <u>WWW</u>	Guard Channel
23	804-1118	Slide Cylinder for 320 width Conveyors
	804-1119	Slide Cylinder for 400 width Conveyors
	804-1120	Slide Cylinder for 480 width Conveyors
	804-1121	Slide Cylinder for 640 width Conveyors
	804-1122	Slide Cylinder for 800 width Conveyors
24	920880M	Socket Head Screw, M8-1.25 x 80 mm
25	920816M	Socket Head Screw, M8-1.25 x 16 mm
26	203067	Nut Bar
27	400231	Bearing Mounting Clamp, 2 Place, 85 mm
	400361	Bearing Mounting Clamp, 1 Place, 70 mm
	400362	Bearing Mounting Clamp, 2 Place, 135 mm
28	FBEC-40	End Cap
29	400308- <u>WWW</u>	Nut Bar
30	FBSB-40x40- <u>LLLL</u> -M	Beam
31	400099- <u>WWW</u>	Bearing Mounting
32	400220	Conveyor Tie Plate
33	FBCS-20x55	Connecting Strip
34	960883M	Flanged Hex Head Cap Screw, M8 x 16 mm
35	400223	Conveyor Connecting Plate
36	FBCS-20x76	Connecting Strip

Item	Part Number	Description
37	930512M	Flat Head Screw, M5-.80 x 12 mm
38	808-042	Magnet
39	400399- <u>WWW</u>	Pusher Guard
40	FASN-M8	Square Nut
41	960882M	Flanged Hex Head Cap Screw, M8 x 12 mm
42	400376	Crossmember Plate
43	807-4142	Trilobe Flat Head Screw, M8 x 20 mm
<u>LLLLL</u> = Part Length in mm with one decimal place.		
Length Example: Length = 485 mm <u>LLLLL</u> = 04850		
<u>WWW</u> = Pallet width reference: 320, 400, 480, 640, 800		

Service Parts

Post Support Stand



Item	Part Number	Description
1	FBSB-80X80-LLLLL-M	Beam
2	FBFT-80B	Foot Assembly
3	FBCS-20X55	Connecting Strip
4	400278	Top Plate
5	FATB-20	Twist-In Stud, M8 x 20 mm
6	990812M	Lock Nut, M8

Item	Part Number	Description
7	960883M	Flanged Hex Head Cap Screw, M8 x 16 mm
LLLLL = Part length in mm with one decimal place.		
Length Example: Length = 485 mm LLLLL = 04850		

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 Type										
Product Line	Standard Products								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	All equipment and parts	
1100	30% return fee for all products except: 50% return fee for conveyors with modular belt, cleated belt or specialty belts								non-returnable	case-by-case
2200										
2200 Modular Belt										
2200 Precision Move										
ERT 250										
3200										
3200 LPZ										
3200 Precision Move										
4100										
6200										
Controls										
7200 / 7300	50% return fee for all products									
7350	non-returnable									
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.

Transforming Conveyor Automation

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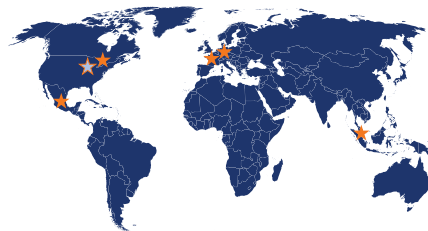
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