



CE Kit

Dingo 320-D Compact Utility Loaders with 220000001 and Higher Serial Numbers

Model No. 22360

Form No. 3328-524

Installation Instructions

Loose Parts

Note: Use the chart below to identify parts for assembly.

Description	Qty.	Use
Brake bracket	2	Installing the parking brake
Brake bar	2	
Brake bar bracket	2	
Flange-head bolt	2	
Parking brake cable	1	
Convoluted cable tube	1	
Locking collar with set screw	2	
Large spring	1	
Bolt, 5/16 x 1 in.	4	
Locknut, 5/16 in.	4	
Parking brake lever assembly	1	
Clevis pin, 3/4 in.	1	
Cotter pin, 3/4 in.	1	
Wheel hub assembly	2	
Cotter pin, 1-1/2 in.	2	
Loader valve lock assembly	1	Installing the loader valve lock
Self-tapping screw, 1/4 x 5/8 in.	2	
Auxiliary hydraulics lever gate	1	Installing the auxiliary hydraulics lever gate
Spacer	2	
Lever mount block	1	
Thick washer	1	
Lock washer, 5/16 in	1	
Flange-head bolt, 8 x 20 mm	1	
Auxiliary hydraulics lever	1	
Carriage bolt, 1/4 x 2 in.	2	
Locknut, 1/4 in.	2	
Torsion spring	1	
Self-tapping screw, 1/4 x 1-3/8 in.	1	
Lock washer, 1/4 in.	1	
Nut, 1/4 in.	1	
Self-tapping screw, 5/16 x 3/4 in.	1	Securing the rear access panel

Description	Qty.	Use
CE information decal, 105-8424	1	Installing the CE decals
European Noise decal, 105-8405	1	
Danger decal, 100-1701	1	
Caution decal, 100-1702	1	
Speed limiter decal, 100-1703	1	
Control panel decal, 100-1706	1	
Pinch decal, 100-8821	4	
No rider decal, 100-8822	2	
Hydraulic oil decal, 93-6686	1	
Radiator cap decal, 93-7840	1	
<i>Operator's Manual</i> <i>Parts Catalog</i>	1	Replace the <i>Operator's Manual</i> and supplement the <i>Parts Catalog</i> .

Preparing the Traction Unit

1. Stop the engine, lower the loader arms, and remove the key.
2. Hoist the traction unit off of the ground and secure it so that you can safely work under it and remove the rear wheels.

Installing the Parking Brake

Removing the Rear Wheel Hubs

1. Remove the rear wheels.
2. Remove the cotter pins and crown nuts securing the rear wheel hubs. Save the crown nuts for future use.
3. Using a hub puller (OTC part number TOR4096), remove the rear wheel hubs (Fig. 1).

Note: You can contact OTC at (507) 455-7346.

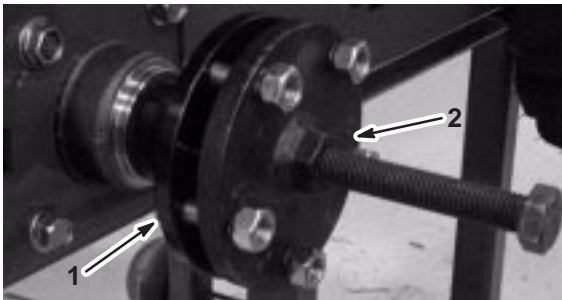


Figure 1

1. Hub
2. Hub puller

4. Save the key from each shaft.

Assembling the Locking Mechanism

1. Fasten the brake bar brackets to the brake bars using 2 flange-head bolts (Fig. 2).

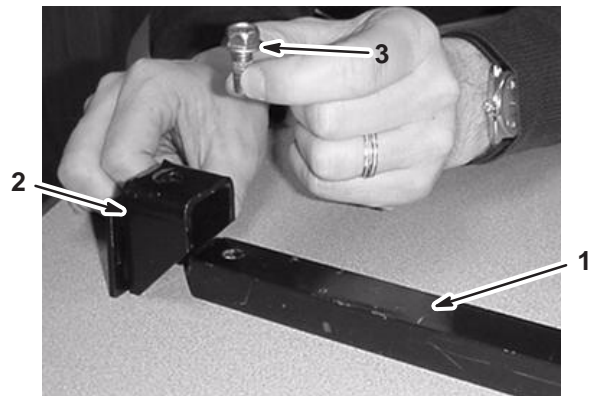


Figure 2

1. Brake bar
2. Brake bar brackets
3. Flange-head bolt

2. Arrange the brake brackets on a table as shown in Figure 3.

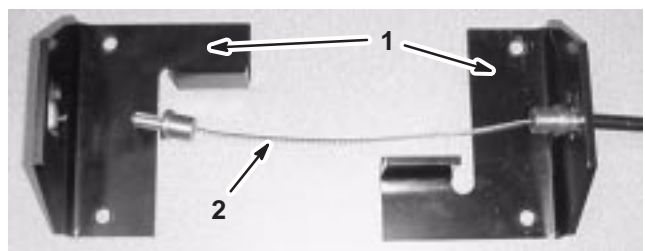


Figure 3

1. Brake brackets
2. Brake cable

3. Insert the cable through the right brake bracket as shown in Figure 3.
4. Slide the bars through the openings in the brake brackets (Fig. 4).

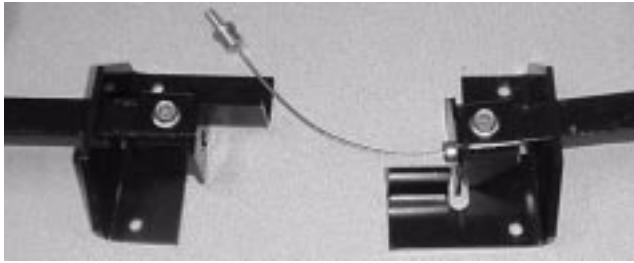


Figure 4

5. Set the cable into the right brake bar bracket, and secure it firmly in place with a locking collar and set screw assembly (Fig. 5). The cable must be securely held in the bracket with no movement at all.

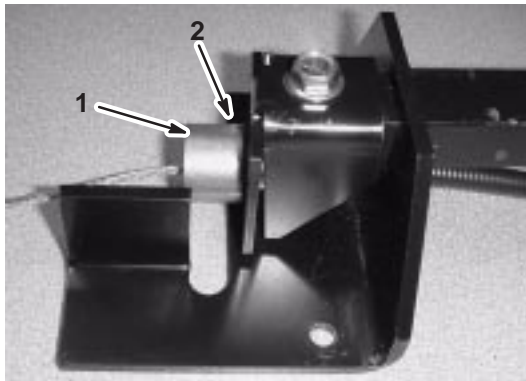


Figure 5

1. Locking collar
2. Set screw

6. Position the large spring over the cable (Fig. 6).

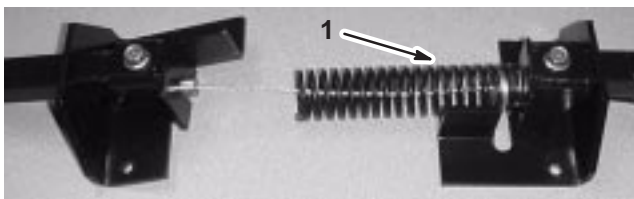


Figure 6

1. Large spring

7. Set the cable into the left brake bar bracket, and secure it firmly in place with a locking collar and set screw assembly (Fig. 7). The cable must be securely held in the bracket with no movement at all.

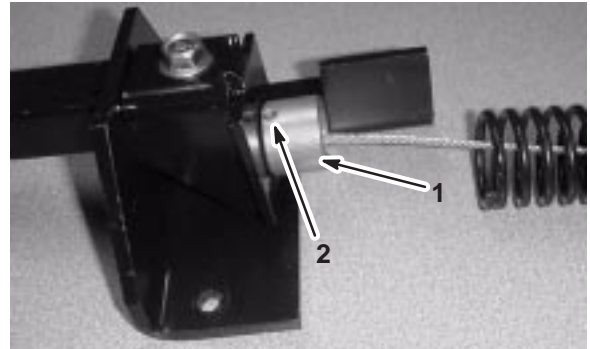


Figure 7

1. Locking collar
2. Set screw

Installing the Locking Mechanism

1. Slide the convoluted tube over the brake cable (Fig. 8).
2. From under the machine, route the end of the cable through the frame in the lower left corner of the frame (Fig. 8). Ensure that the convoluted tube protrudes at least 4 to 6 in. (10 to 15 cm) through the hole.

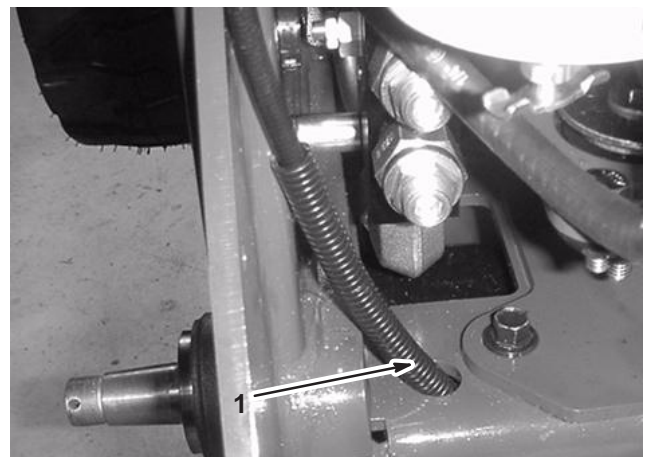


Figure 8

1. Parking brake cable with the convoluted tube.

- Position the brake assembly under the traction unit against the back wall of the frame with the brake bars through the rectangular holes in the sides of the frame (Fig. 9).

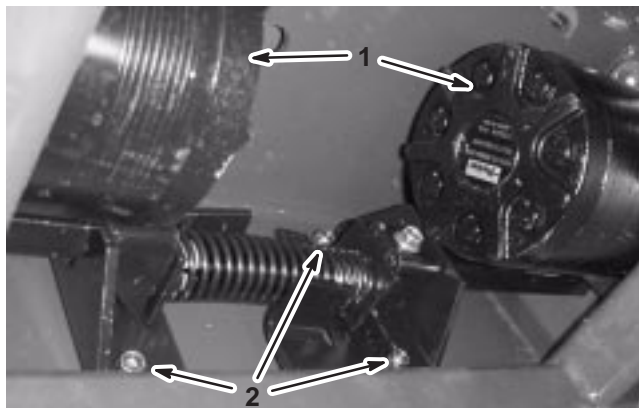


Figure 9

- Rear wheel motors
 - Bolts and locknuts, 5/16 x 1 in. (fourth bolt and locknut not visible)
-
- Secure the brake assembly to the frame with 4 bolts (5/16 x 1 in.) and locknuts (5/16 in.) (Fig. 9). The bolts should be pushed through the frame and brake brackets from the rear of the machine.

Installing the Parking Brake Lever

- Route the cable across the parking brake lever plate (Fig. 10).

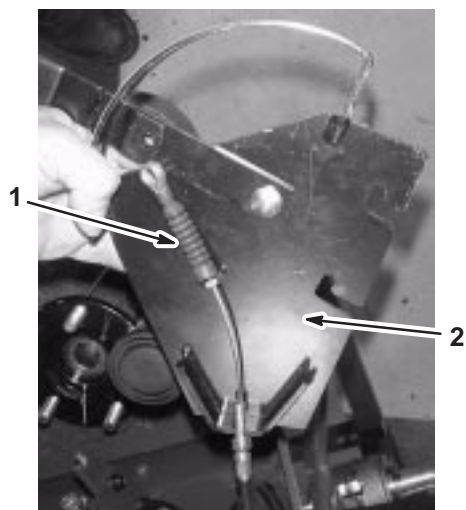


Figure 10

- Parking brake cable
 - Parking brake lever plate
-

- Secure the cable to the lever with a clevis pin and cotter pin (3/4 in.) (Fig. 11).

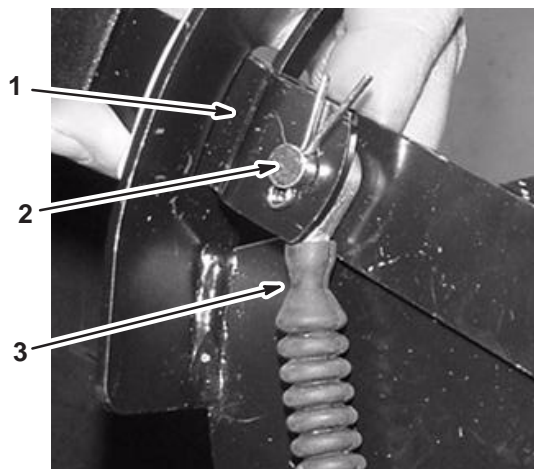


Figure 11

- Parking brake lever
 - Clevis pin and cotter pin
 - Parking brake cable
-

- Lightly tighten the nuts on the adjustment collar around the bracket on the lever plate (Fig. 12).

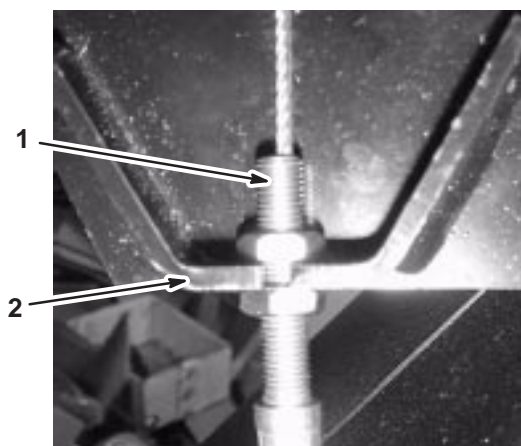


Figure 12

- Cable with adjustment nuts
 - Bracket on the parking brake lever plate
-
- Loosen the nuts securing the air cleaner to the frame (Fig. 13).

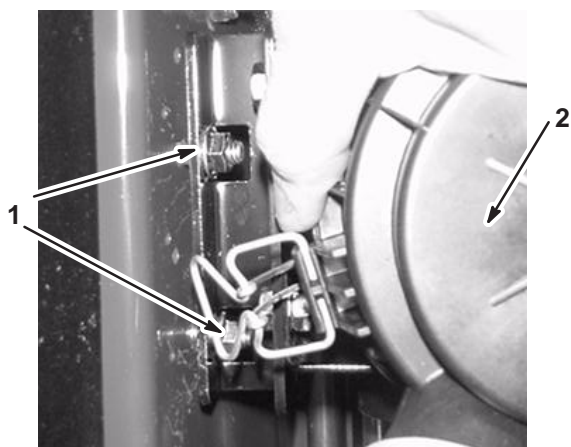


Figure 13

1. Air cleaner bolts and nuts 2. Air cleaner

5. Slide the slots in the lever plate over the air cleaner bolts, between the frame and the air cleaner mounting bracket (Fig. 13).



Figure 14

6. With the slots in the plate positioned all the way over the air cleaner bolts, tighten the air cleaner nuts.

Installing the Rear Wheel Hubs

1. Thoroughly clean the rear drive shafts and the inside of the tapered bore of the wheel hubs with alcohol or degreaser (Fig. 15).

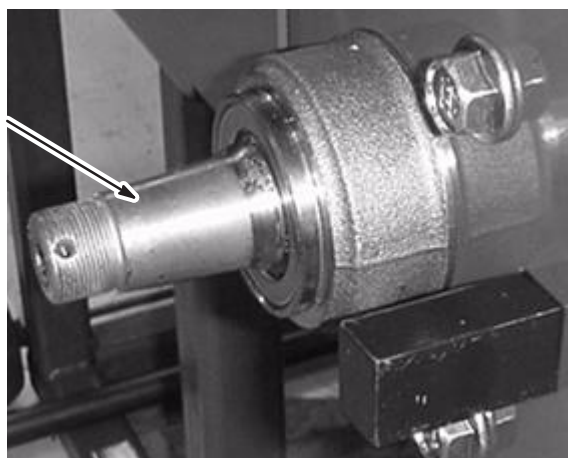


Figure 15

1. Rear drive shaft (left side)

2. Disengage the parking brake lever.
3. Place the keys removed previously into the slots in the drive shafts.
4. Place the new wheel hubs with the lugs pointing out over the drive shafts (Fig. 16).

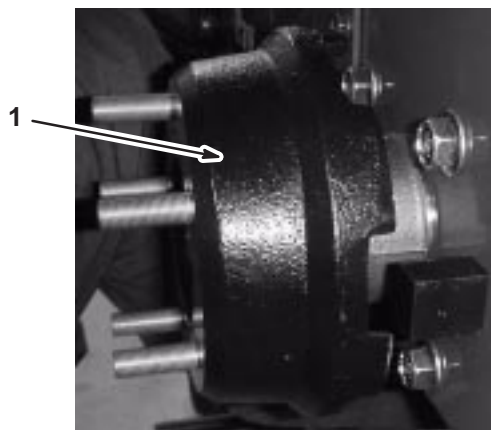


Figure 16

1. Rear wheel hub (left side)

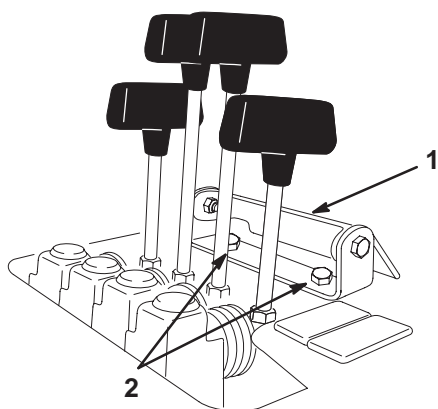
5. Secure the hubs with the crown nuts you removed previously.
6. Torque the crown nuts to 200 to 300 ft-lb. (270 to 400 N·m).
7. Install a new cotter pin (1-1/2 in.) through the end of each drive shaft to secure the crown nuts.
8. Install the rear wheels.
9. Torque the wheel lug nuts to 50 ft-lb. (68 N·m).

Adjusting the Parking Brake

1. Push the parking brake lever all the way up and forward to disengage it.
2. Check the brake bars protruding from either side of the traction unit. The bars should be about 1/8 in. (0.3 cm) from the wheel hub and neither bar should be able to move side to side.
3. Pull the parking brake lever down to engage it. The bars should slide all the way into the notches in the wheel hub.
4. If the brake bars move, are too close to the wheel hub when disengaged, or do not fully engage the slots in the wheel hub when engaged, correct it by adjusting the two jam nuts on the cable (Fig. 12).

Installing the Loader Valve Lock

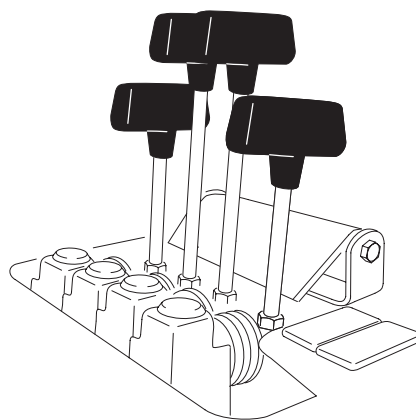
1. Using 2 self-tapping screws (1/4 x 5/8 in.), loosely install the loader valve lock behind the control levers (Fig. 18). The loader valve lock should be able to slide forward and back in the slots.



m-6026

Figure 17

1. Loader valve lock, engaged
 2. Self-tapping screws, 1/4 x 5/8 in.
2. Rotate the loader valve lock rearward as shown in Figure 18.



m-6025

Figure 18

3. Slide the loader valve lock rearward until it contacts the loader arm and attachment tilt levers. Hold it tightly against the levers.
4. Tighten the screws to secure the loader valve lock.
5. Push forward on the loader arm and attachment tilt levers. They should not move forward at all. If they do, loosen the screws and repeat steps 3 through 5.

Note: You will need to move the levers rearward to engage or disengage the valve lock. The lock must touch the levers when it is all the way down and the levers are released.

Installing the Auxiliary Hydraulics Lever Gate

1. Remove and discard decal number 98-4677 (Fig. 19) from the frame near the auxiliary hydraulics lever.

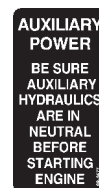


Figure 19

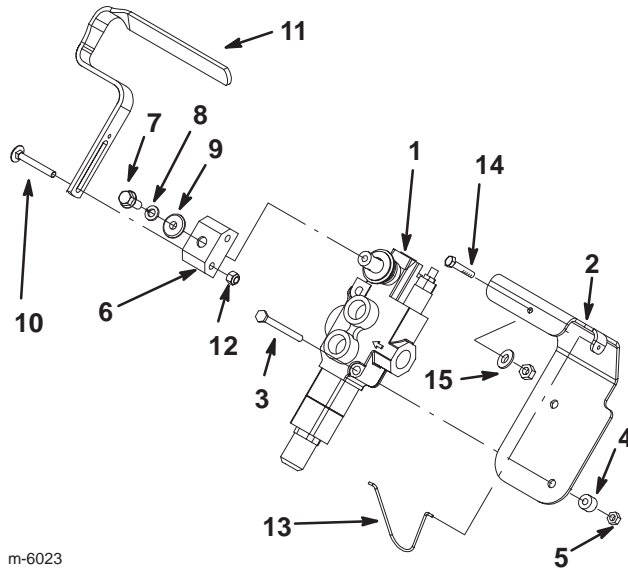


Figure 20

1. Auxiliary hydraulics valve
2. Auxiliary hydraulics valve lever gate
3. Bolt
4. Spacer
5. Locknut
6. Lever mount block
7. Flange-head bolt, 8 x 20 mm
8. Lock washer, 5/16 in.
9. Thick washer
10. Carriage bolt, 1/4 x 2 in.
11. Auxiliary hydraulics lever
12. Locknut, 1/4 in.
13. Lever spring
14. Self-tapping screw, 1/4 x 1-3/8 in.
15. Lock washer and nut, 1/4 in.

3. Remove and discard the auxiliary hydraulics lever from the valve.
4. Apply grease to the inside of the hole in the lever mount block (Fig. 20).
5. Seat and install the lever mount block on the valve and secure it using a thick washer, lock washer (5/16 in.), and flange-head bolt (8 x 20 mm) (Fig. 20).
6. Install the auxiliary hydraulic lever gate under the valve body and secure it to the valve and frame using 2 new spacers and the bolts and locknuts removed previously (Fig. 20).

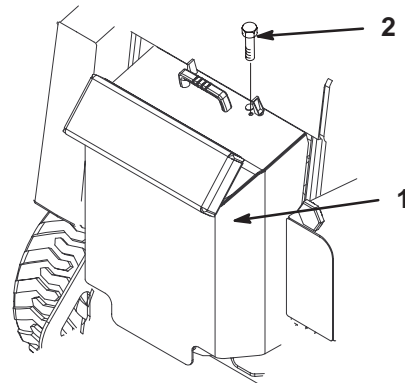
Important Take care while installing the spacers and nuts not to drop them into the traction unit.

7. Thread the new auxiliary hydraulics lever through the opening in the gate and secure it loosely to the side of the mount block with 2 carriage bolts (1/4 x 2 in.) and locknuts (1/4 in.) (Fig. 20). Before tightening the nuts completely, adjust the height of the lever to the level of the handle of the traction unit with the lever all the way forward in the furthest right hand slot of the gate.
8. Tighten the nuts.

9. Install the lever spring between the lever and the gate (Fig. 20).
10. Install the self-tapping screw (1/4 x 1-3/8) into the hole on top of the gate (Fig. 20).
11. Adjust the screw so that when you push the auxiliary hydraulics lever forward in the center slot, it contacts the screw just before it goes into the detent position.
12. Secure the screw with a lock washer (1/4 in.) and nut (1/4 in.) (Fig. 20).
13. Start the engine and set the throttle to the Fast position.
14. Push the lever forward into the center slot and release it. It should travel back to the neutral position on its own.
15. If the lever stays in the detent position, adjust the screw until it returns to the neutral position on its own.
16. Stop the engine and remove the key.

Securing the Rear Access Cover

Using a self-tapping screw (5/16 x 3/4 in.), secure the rear access cover to the frame (Fig. 21).



m-4598

Figure 21





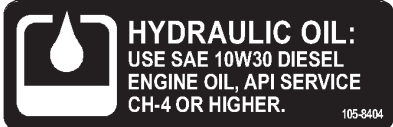

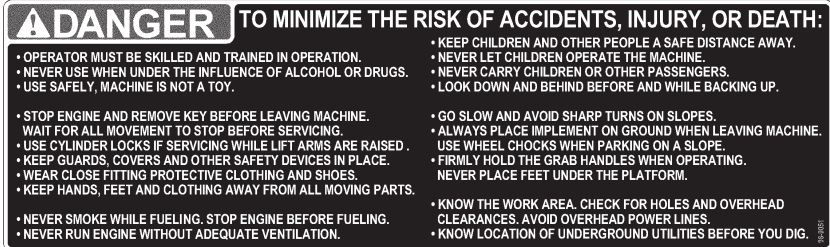
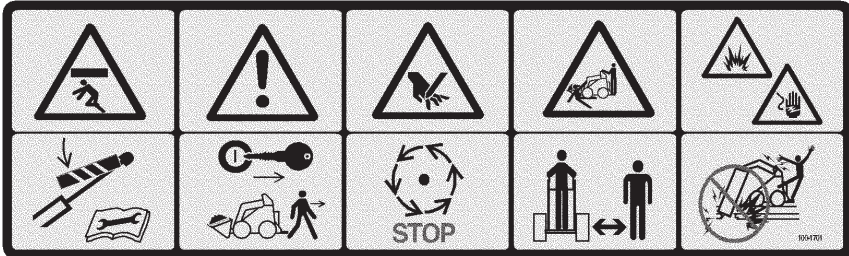
1. Rear access cover
2. Self-tapping screw, 5/16 x 3/4 in.


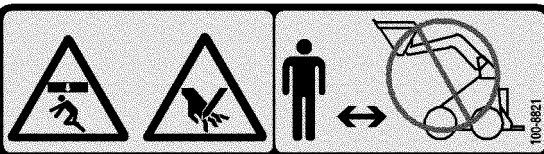
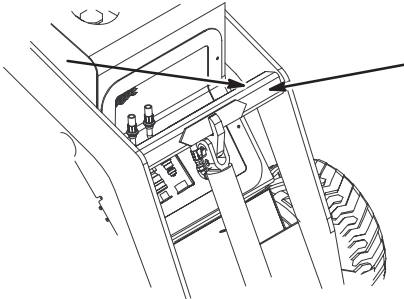
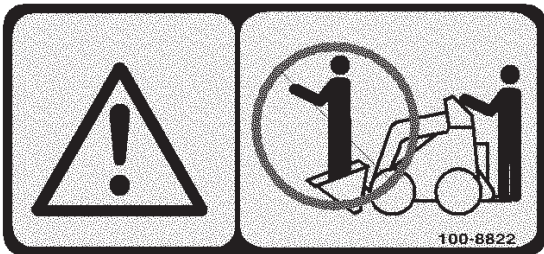
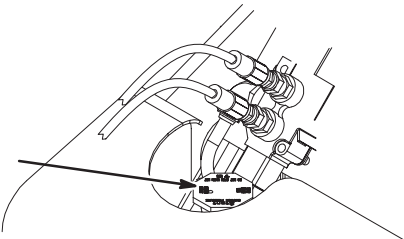
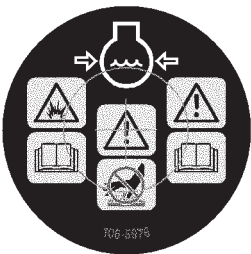
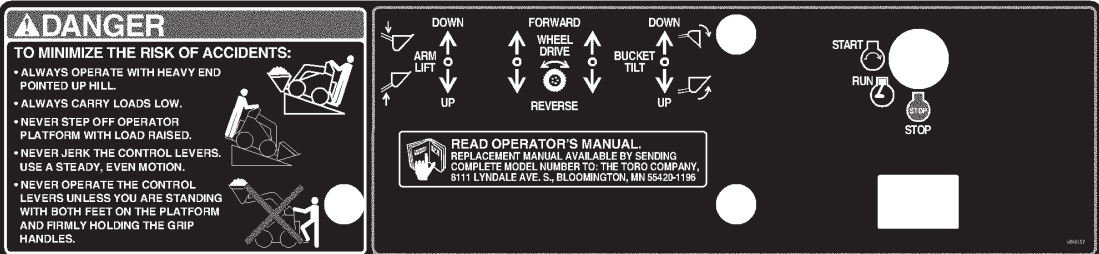
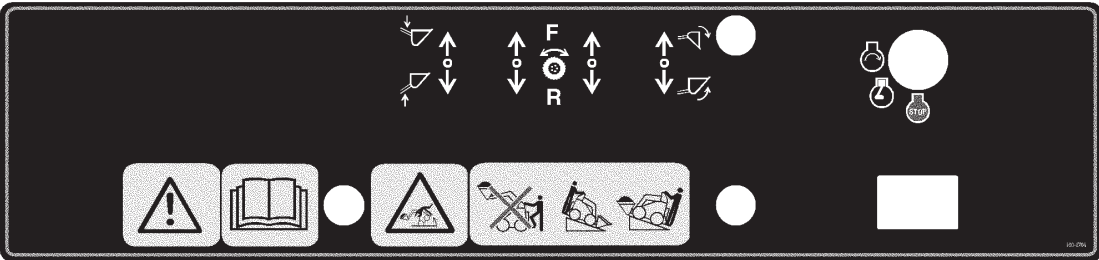
Installing the Decals

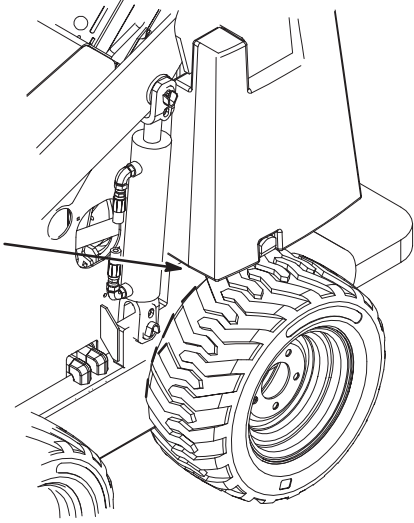
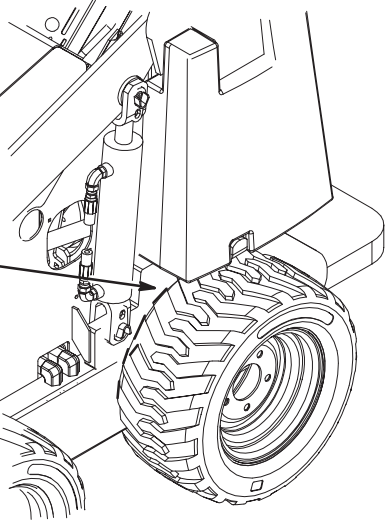

Install the decals in the positions indicated in the following table. Place each decal directly over the US English decal that corresponds to the CE decal you are installing.

Note: Decals 105-8424, 105-8405, and 100-8822 do not have an US English equivalent installed on the traction unit.

1. Thoroughly clean the area where you will install the decal.
2. Dampen the area with water or mildly soapy water.
3. Peel the decal from the backing and install it in place.
4. Squeegee across the surface of the decal, starting at the center of the decal and working toward the edges using overlapping strokes.

Location	US English	CE
On the loader arm crossbar	 <p>98-4682</p>	 <p>100-1702</p>
By the speed limiter	 <p>98-8220</p>	 <p>100-1703</p>
By the hydraulic oil fill tube	 <p>105-8404</p>	 <p>93-6686</p>
On top of the rear access cover.	 <p>98-9051 (US English)</p>	 <p>100-1701 (CE)</p>

Location	US English	CE
4 locations on the loader arms	 <p>100-6141</p>	 <p>100-8821</p>
2 locations on the loader arm crossbar: one facing the operator and one facing forward		 <p>100-8822</p>
On the radiator cap		 <p>106-5976</p>
On the control panel	 <p>99-3157 (US English)</p>	 <p>100-1706 (CE)</p>

Location	US English	CE
<p>On the left side of the frame under the fuel tank</p>		<div data-bbox="915 212 1446 388"> <div> THE TORO COMPANY 8111 Lyndale Avenue South Bloomington, MN 55420-1196 USA </div> <div> Model 22303 with Model 22360 CE Kit </div> <div> 781 kg 15 kW 3750 1/min </div> <div> CE </div> <div> 46 L/min 222 bar </div> <div> 105-8424 </div> </div> <p>105-8424</p>
<p>On the left side of the frame under the fuel tank</p>		<div data-bbox="1040 791 1325 1104"> <div>  LWA </div> <div> 104 dB </div> <div> 105-8405 </div> </div> <p>105-8405</p>

