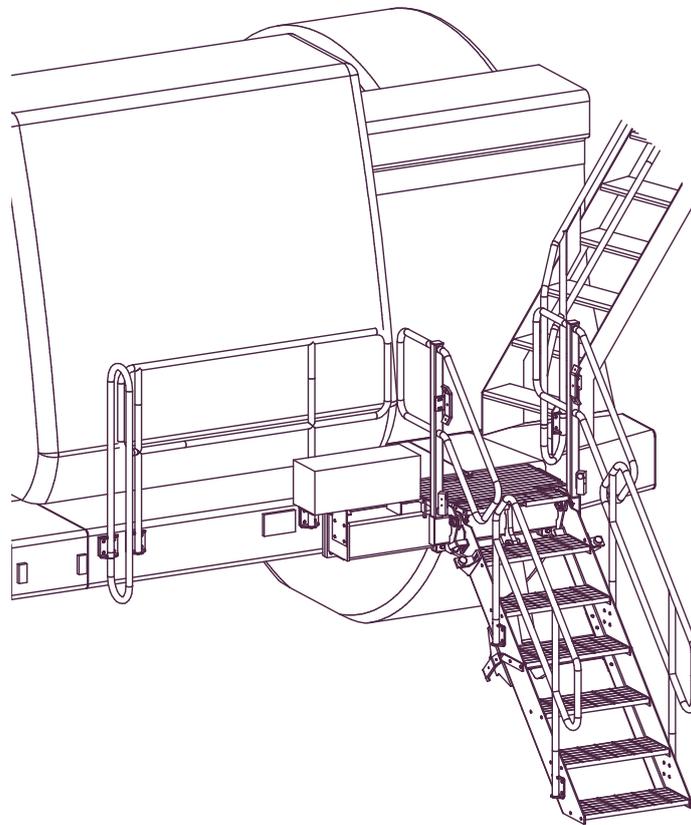


FOLDING STAIRWAY

Manual for Cat 777F Truck



Model No.: PSA-CAT 777F-FS (South African Application)

Serial No.:777F-SA-001 to 777F-SA-003

Date Manufactured: Nov 2009

FOLDING STAIRWAY

Caterpillar 777F Truck



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FOLDING STAIRWAY

Caterpillar 777F Truck

Section 1. Mounting and Installation

See Page 4

NOTE

Follow all on-site/Mine lifting and safety procedures when installing PSFS to Truck.

PROCEDURE

See Pages 4,5 and 6

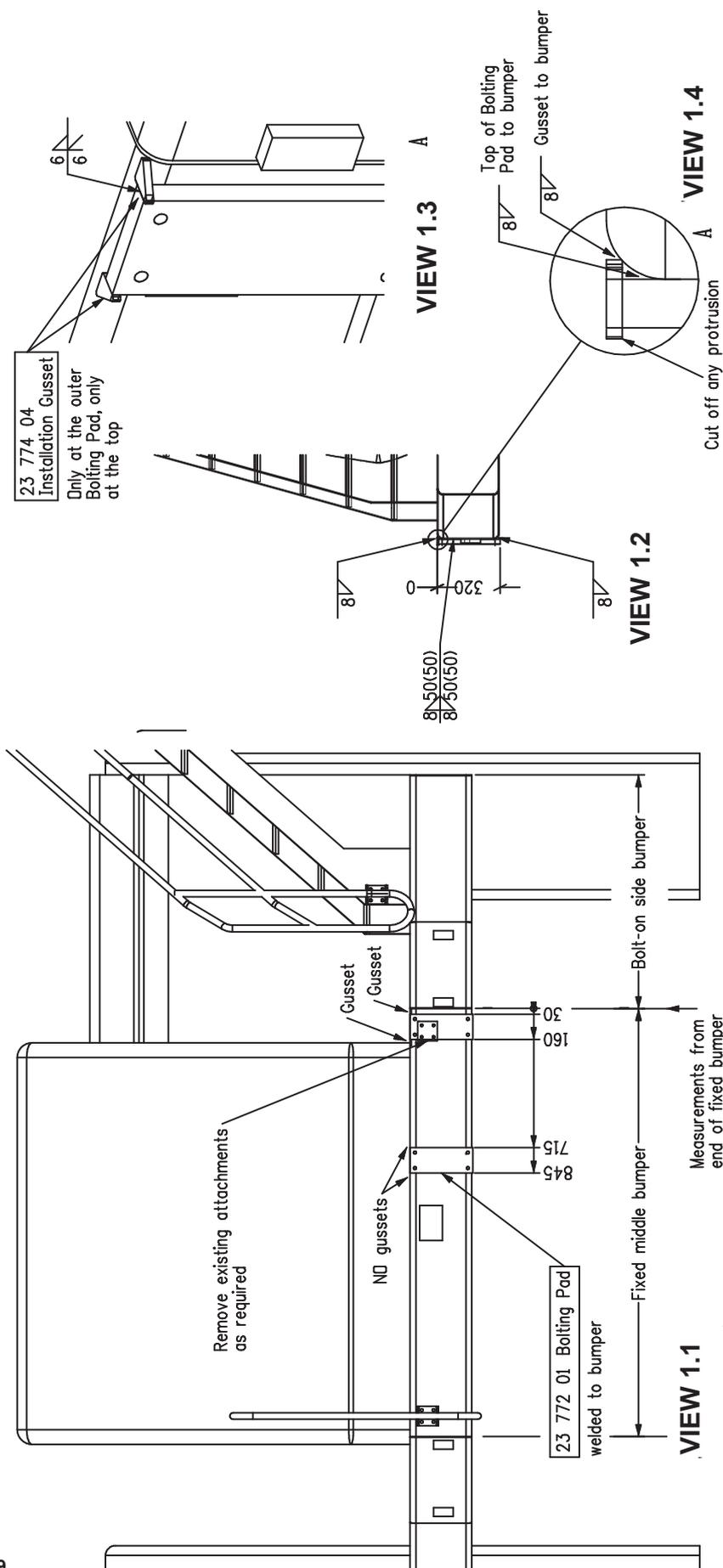
1. Per Views **1.1 & 1.2**, weld Bolting Pads to the front of the truck bumper, after first removing any interfering existing attachments. Per Views **1.3 & 1.4**, fit 23 774 04 Installation Gussets to the top of the outer Bolting Pad.
2. Per Views **2.1 & 2.2**, bolt the Spacer Beam 23 776 to the Bolting Pads.
3. Per Views **3.1 & 3.2**, fit the assembled Stair and Landing to the Spacer Beam.
4. Per View 4.1, weld bolting pads to the front bumper and fit Front Bumper Handrail 23 663. Also weld Switch Mounting Plate 23 664 to the handrail of the original inclined stair, as a mounting for the Power Step stair's control switch.
5. Per Views **3.1, 3.3 & 4.2** adjust the declination of the deployed stair by grinding, or building up with weld and then grinding, the Stop Pads at the top back of each stair stile.
6. Per View **3.2** adjust the position of the Stair Actuator Attachment 23 675 on the back of the stair so that the stair rises to vertical in its' stowed position (full cylinder extension). Adjust Stair Buffer Brackets 23 653 so that the stair is held firm in stowed position.
7. Per View **3.2** adjust the position of Handrail Bumper 23 651 (4 off) so that the handrails are prevented from vibrating when the stair is in its' stowed position and the truck is working.

FOLDING STAIRWAY

Caterpillar 777F Truck



Section 1. Mounting and Installation 23782 Sheet 1

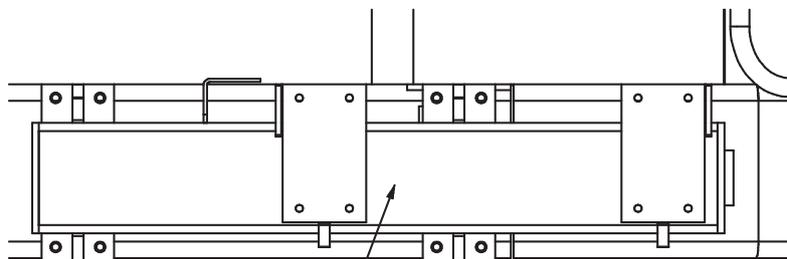


FOLDING STAIRWAY

Caterpillar 777F Truck

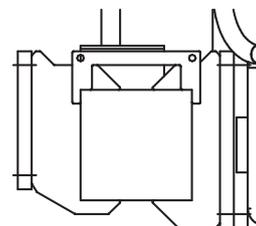


Section 1. Mounting and Installation 23782 Sheet 3

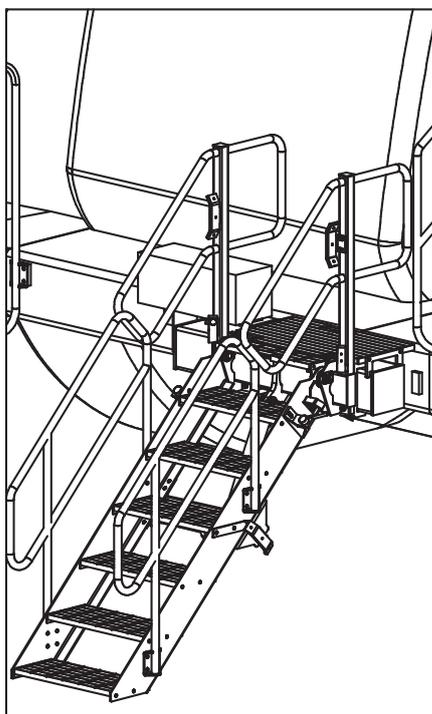


23 776 Spacer Beam

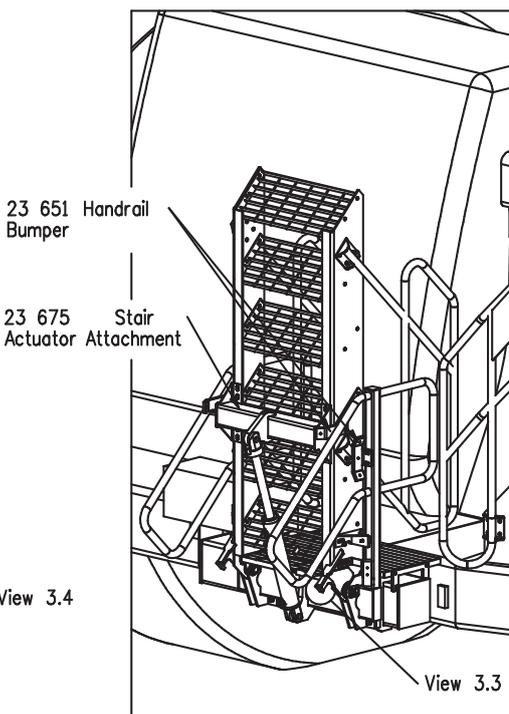
VIEW 2.1



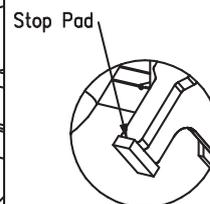
VIEW 2.2



VIEW 3.1

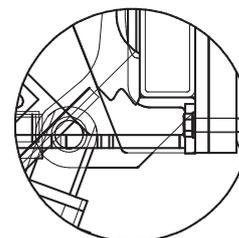


VIEW 3.2



Stop Pad

VIEW 3.3



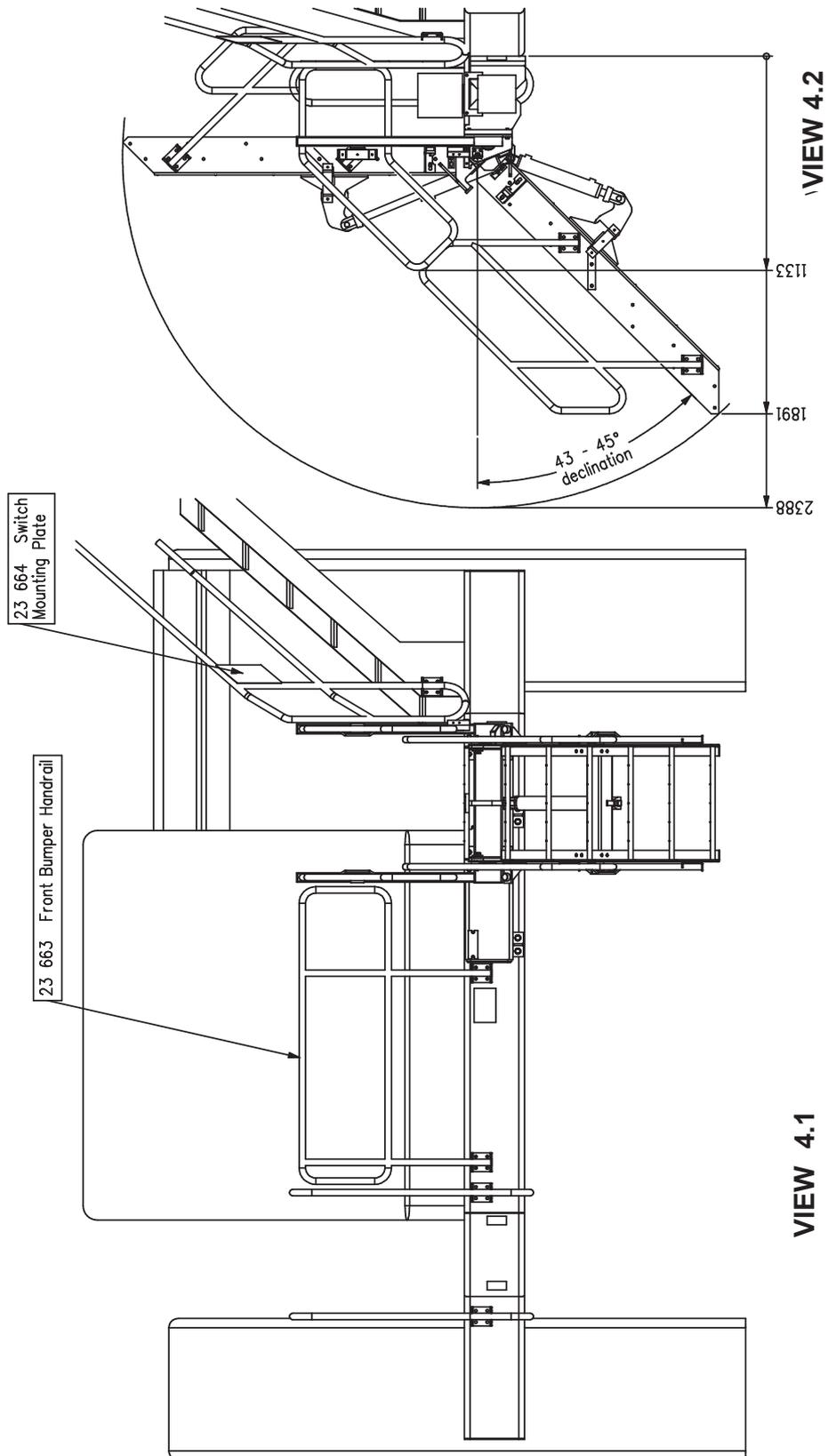
VIEW 3.4

FOLDING STAIRWAY

Caterpillar 777F Truck



Section 1. Mounting and Installation 23782 Sheet 2



FOLDING STAIRWAY

Caterpillar 777F Truck



Section 2. Electrical Installation

Remove centre console panel in cabin -
- to do this remove six (6) screws and gear selection knob.

Position stairway indicator panel on centre console, above hour meter.
- drill two mounting screw holes (6mm or 7/32")
- one electrical cable hole (12mm or 15/32")
- do not re-fix console Panel

Remove four (4) screws holding Caterpillar fuse panel behind operator's seat. Drill one hole to insert Caterpillar fuse holder - fit fuse holder, into fuse indicator panel - tighten. Drill size (12mm or 15/32").

Remove rear access panel from back of cabin and run short conduit through the main cable gland to inside centre console, ensuring conduit goes underneath control box.

Connect blue wire start from conduit above to blue wire of cabin indicator panel harness.

In rear access, connect black wire, with 10mm eye terminal to machine ground, and blue wire to outer terminal of newly inserted fuse holder.

Install short blue wire to screw terminal of Caterpillar circuit breaker, and other end to fuse holder.

Run wiring harness from Power Step Folding Stairway magnetic proximity switch around under radiator, and follow cabling/hose routing up to air line/ electrical outlet on rear Right Hand Side of cabin.

Drill hole in RH Cabin access panel - route wiring harness in through access panel, and through to under centre console - connect wires appropriately as colour coded. Hole saw/drill size (24mm), cable tie harness as appropriate, approximately every 300mm.

WARNING

**LOW OR FAULTY BATTERIES WILL VOID
WARRANTY ON THE POWER PACK AND ALL
ELECTRICAL SWITCHES AND COMPONENTS**

FOLDING STAIRWAY

Caterpillar 777F Truck



Section 3. Operating Procedure

To Lower Stairway (from the machine)

Position machine in a level, safe area, away from the work face, whenever possible.
Apply park brake and lower engine speed to idle.

Check that the area below the Stair Access System is clear of people and obstacles, and lower Stair by operating the two position electrical switch adjacent to the stair, to the down position by pressing the switch down.

Hold the switch in the down position until Stair is fully lowered.

If the truck is parked on uneven ground, the bottom of the stairway may touch the ground before the ladder is in the fully lowered position.

Should this occur, descend the Stair with caution.

To Raise Stairway

Ascend the Stair onto the landing of the truck.

Ensure the area around the Stair is clear of people and standing to the side, clear of the area the handrails and Stair raises into, operate the electrical switch to the raise position (up).

Hold the switch in the up position until the Stair is in the fully raised position.

The Stair is now raised and stored.

FOLDING STAIRWAY

Caterpillar 777F Truck



Section 4. Recommended Maintenance Procedure

Daily

Visually check stairway and structure for damage, loose components, handrails, etc.

Check for hydraulic oil leaks from hydraulic cylinders, plumbing and hoses.

Notify the appropriate supervisor for any observed damage or malfunction.

500 Hours

Grease 2 grease nipples on Stair hinge pins.

Check main mounting bolts for torque.

Check hydraulic oil level in power pack and top up as necessary. (Stairway in raised position).

Top up using same hydraulic oil as used in hydraulics of machine.

Thoroughly check all electrical wiring for damage, replace as necessary.

Repeat daily check as above.

5000 Hours

Change hydraulic oil in tank of hydraulic Power Pack.

It is recommended that the same hydraulic oil be used in the power pack as the hydraulics of the machine.

Grease 2 grease nipples on Stair Hinge Pins.

Check and inspect all main bolts on stairway system.

Retorque if required.

Repeat daily check as above.

FOLDING STAIRWAY

Caterpillar 777F Truck



Section 5. Assembly Complete - Main Assemblies

See Pg 11

Item	Part No.	Part Name	Qty		
1	PSA-777F-FS	ASSEMBLY COMPLETE	1		
2	PS-23646A	LANDING ASSEMBLY (INC.HANDRAILS) REFER TO 5.2 FOR DETAILS	1		
3	PS-23662A	STAIR ASSEMBLY (INC.HANDRAILS) REFER TO 5.3 FOR DETAILS	1		
4	PS-62999-AH	HYDRAULIC CYLINDER REFER TO 5.4 FOR DETAILS	1		
5	PS-80103A-SLD	POWER PACK REFER TO 5.5 FOR DETAILS	1		

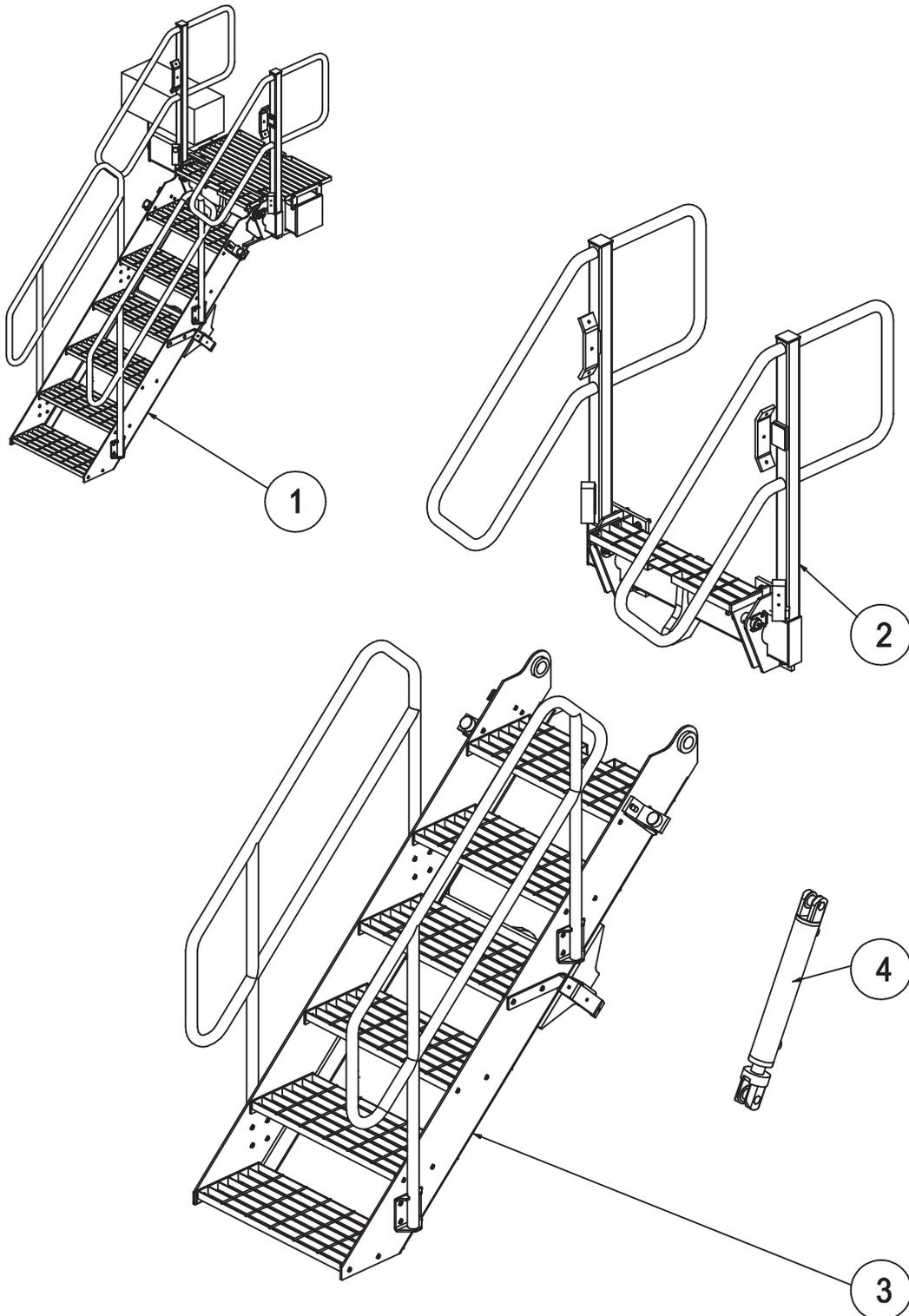
FOLDING STAIRWAY

Caterpillar 777F Truck

Hydraulic Operation



Section 5-1. Assembly Complete PS-23640A

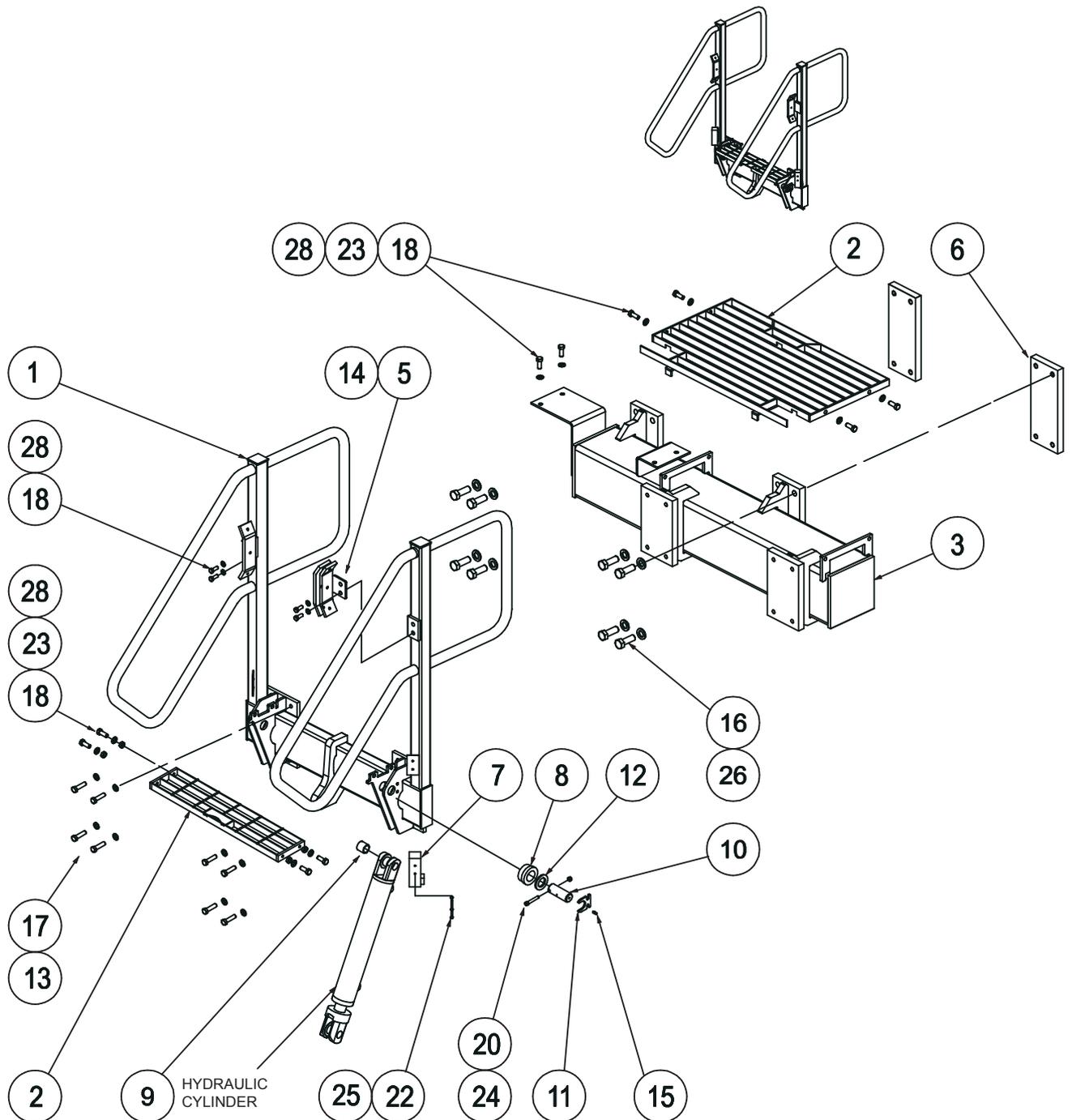


FOLDING STAIRWAY

Caterpillar 777F Truck



Section 5-2. Landing Assembly PS-23646A LANDING ASSY.



FOLDING STAIRWAY

Caterpillar 777F Truck



Section 5-2. Landing Assembly PS-23646A

Parts List

See Drawing Pg 12

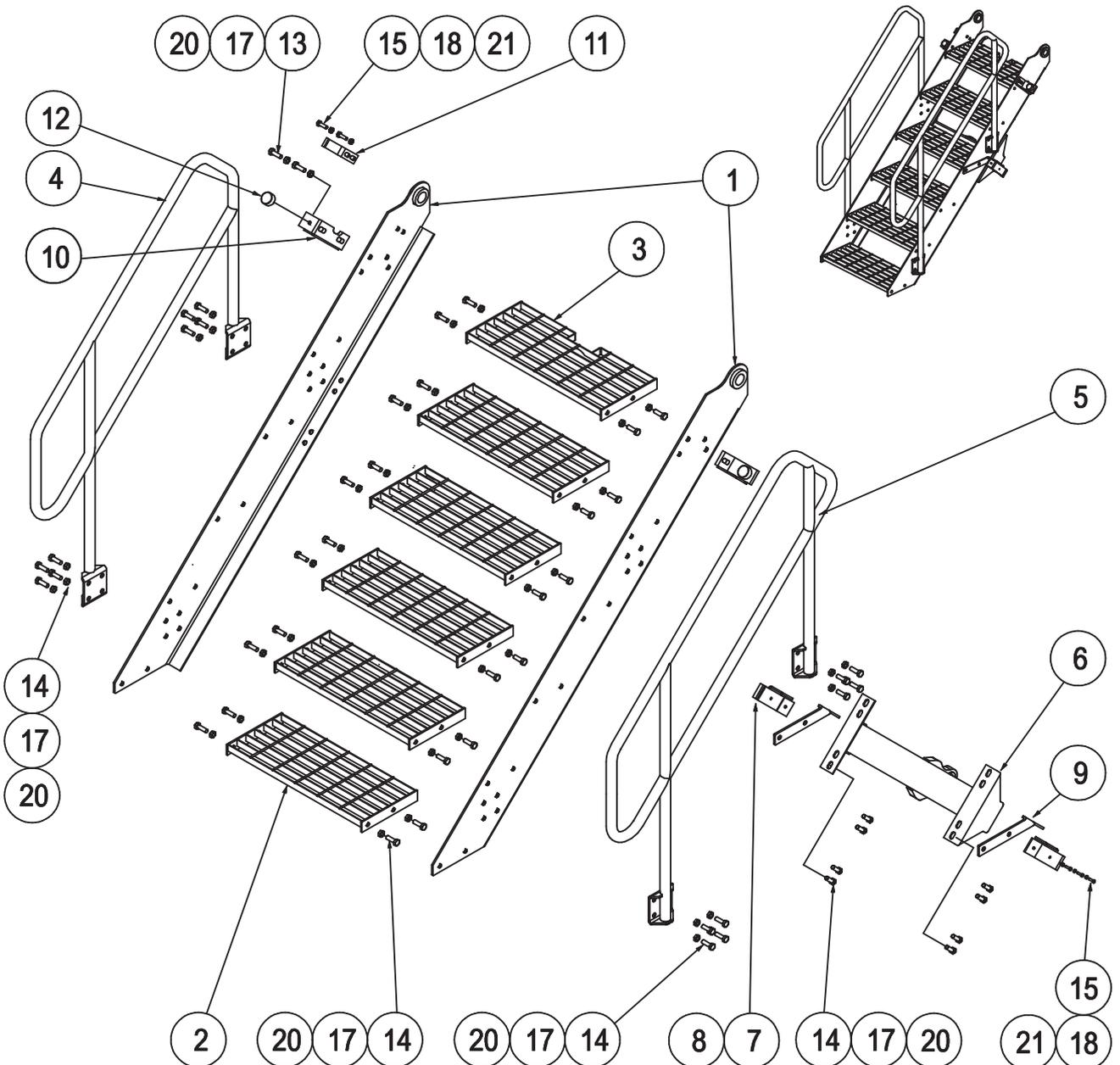
Item	Part No.	Part Name	Qty		
1	PS-23779	LANDING FABRICATION	1		
2	PS-23771	LANDING DECK	1		
3	PS-23776A	SPACER BEAM FABRICATION	1		
3A	PS-23775	POWER UNIT MOUNTINGS	1		
4	PS-23771A	DECK	1		
5	PS-23651B-01	HANDRAIL BUMPERS	2		
6	PS-23772	BOLTING PADS (Set)	1		
7	PS-75430	GO- SWITCH	1		
8	PS-23655-01	BUSH COLLAR	2		
9	PS-23655-02	BUSH-(Nylon)	2		
10	PS-23654-01	STAIR HINGE PIN	2		
11	PS-23645-02	HEAD PLATE	2		
12	PS-23654-03	WASHER-(Dia 55)	2		
13	PS-23679	SPECIAL WASHER	8		
14	PS-23651-02	HANDRAIL BUMPER LINER	2		
15	PS-61006-2	GREASE NIPPLE-M6 Str.	2		
16	CPS-M20X50ZP	BOLT-M20 X 50 Socket head	8		
17	CPS-M16X35ZP	BOLT-M16 x 35 (For infill)	8		
18	CPS-M12X30ZP	BOLT-M12 x 30	6		
19	CPS-M10X30ZP	BOLT-M10 x 30	8		
20	CPS-M8X16ZP	BOLT-M8 x 16	4		
21	CPS-M6X50ZP	BOLT- M6 x 50 Socket head	2		
22	CPS-M6X20ZP	BOLT-M6 x 20 Pan Head	6		
23	CPS-M4X45ZP	BOLT - (Go Switch)	2		
24	CPS-M12NZP	NUT-M12	8		
25	CPS-M10NZP	NUT-M10	8		
26	CPS-M6NN	NUT-NYLOC-M6	2		
27	CPS-M4NZP	NUT-M4	2		
28	CPS-M20WH	WASHER - HARDENED - M20	8		
29	CPS-M12WH	WASHER - HARDENED - M12	8		
30	CPS-M10WH	WASHER - HARDENED - M10	16		
31	CPS-M8WH	WASHER - HARDENED - M8	4		

FOLDING STAIRWAY

Caterpillar 777F Truck



Section 5-3. Stair Assembly PS-23662A STAIR



FOLDING STAIRWAY

Caterpillar 777F Truck



Section 5-3. Stair Assembly PS-23662A

Parts List

See Drawing Page 14

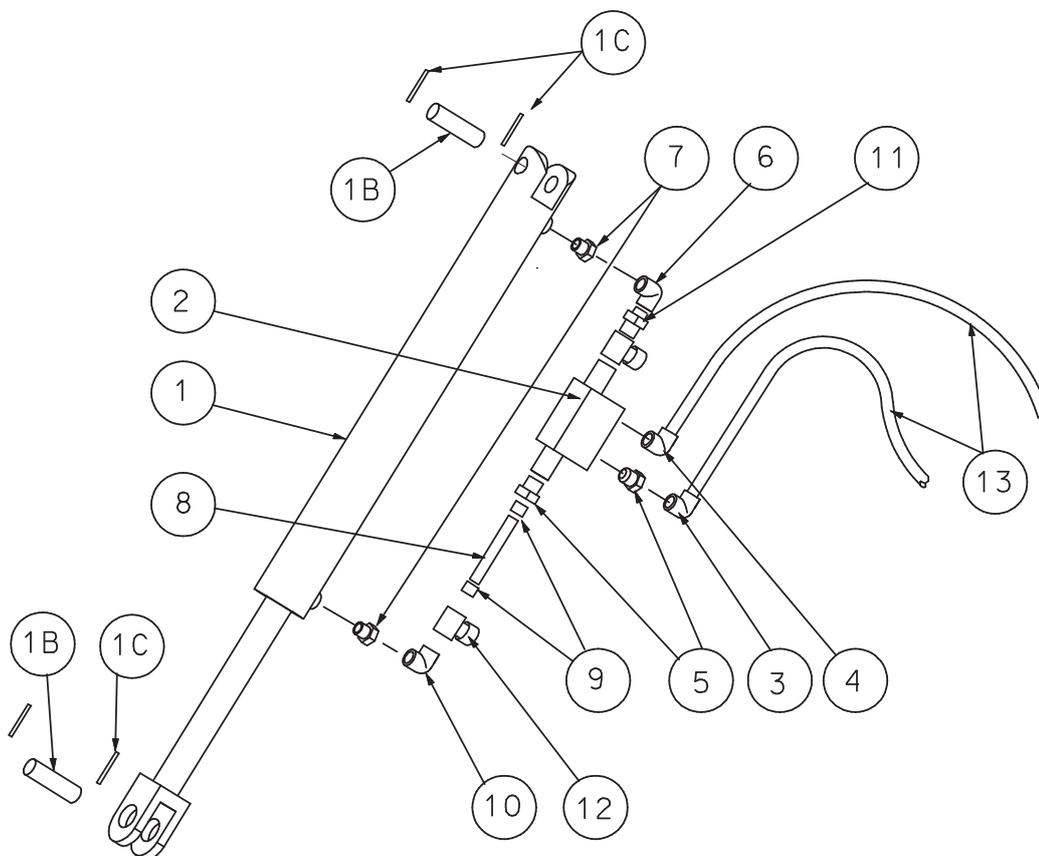
Item	Part No.	Part Name	Qty		
1	PS-23662	STAIR STILES FABRICATION	1		
2	PS-22266A	STAIR TREADS	5		
3	PS-22659	STAIR TREAD (Modified)	1		
4	PS-23777-99	HANDRAIL-FRONT-INNER	1		
5	PS-23777-98	HANDRAIL-REAR-OUTER	1		
6	PS-23675	STAIR ACTUATOR ATTACHMENT	1		
7	PS-23651-01	HANDRAIL BUMPER (Matched Pair)	2		
8	PS-23651-02	HANDRAIL BUMPER LINER	2		
9	PS-23656	HANDRAIL BUMPER MOUNT (Matched pair)	2		
10	PS-23653	STAIR BUFFER BRACKET (Matched Pair)	2		
11	PS-23657A	GO SWITCH TRIGGER	1		
12	PS-40001	BUFFER- Mackay M12402055	2		
13	CPS-M12X40ZP	BOLT-M12 x 40	4		
14	CPS-M12X30ZP	BOLT-M12 x 30	50		
15	CPS-M10X30ZP	BOLT-M10 x 30	4		
16	CPS-M6X20ZP	BOLT-M6 x 20 Pan Head	6		
17	CPS-M12NZP	NUT-M12	54		
18	CPS-M10NZP	NUT-M10	4		
19	CPS-M6NZP	NUT-M6	6		
20	CPS-M12WH	WASHER-HARDENED-M12	108		
21	CPS-M10WH	WASHER-HARDENED-M10	8		

FOLDING STAIRWAY

Caterpillar 777F Truck



Section 5-4. Hydraulic Cylinder Assembly P/No. PS-62999-AH



NOTE: HYDRAULIC CYLINDER ASSEMBLY P/No PS- 62998-AH includes Part No.s 1 to 12

Item	Part No.	Part Name	Qty	
1	PS-62999-A	HYDRAULIC CYL. (with hard plumbing)	1	
	PS-62999-HPK	HARD PLUMBING KIT	1	
1A	PS-62999-A	HYDRAULIC CYLINDER 2 1/2"	1	
1B	PS-62999-P	PIN - CYLINDER	2	
1C	CPS-M4X50ZP	SPLIT PIN-M4-CLEVIS PIN-BOTTOM & TOP	4	
1S	PS-63103	SEAL KIT (Not shown)	1	
2	PS-63201	VALVE - PILOT OPERATED LOCKING	1	
3	PS-61159	FITTING - ELBOW-9/16" JIC	1	
4	PS-61154	FITTING - ELBOW- O RING 1/4BSPPx9/16" JIC	1	
5	PS-61157	FITTING - O RING 1/4BSPPx 9/16" JIC	2	
6	PS-61158-5MM	FITTING - 1 mm RESTRICTION 90 DEG	1	CYL. END
7	PS61163	REDUCER JIC x BSPP	2	
8	PS-61160	TUBE (Cut to suit) 110mm	1	
9	PS-61147	FERRULES	2	
10	PS-61158-1MM	FITTING - 1mm RESTRICTION 90 DEG	1	ROD END
11	PS-61145	FITTING- 9/6" JIC SWIVEL	1	
12	PS-61143	CAP	2	
13	PS-60051-3.5	HOSE- HYDR. (9/6" JIC SWIVEL FITTING)	2	

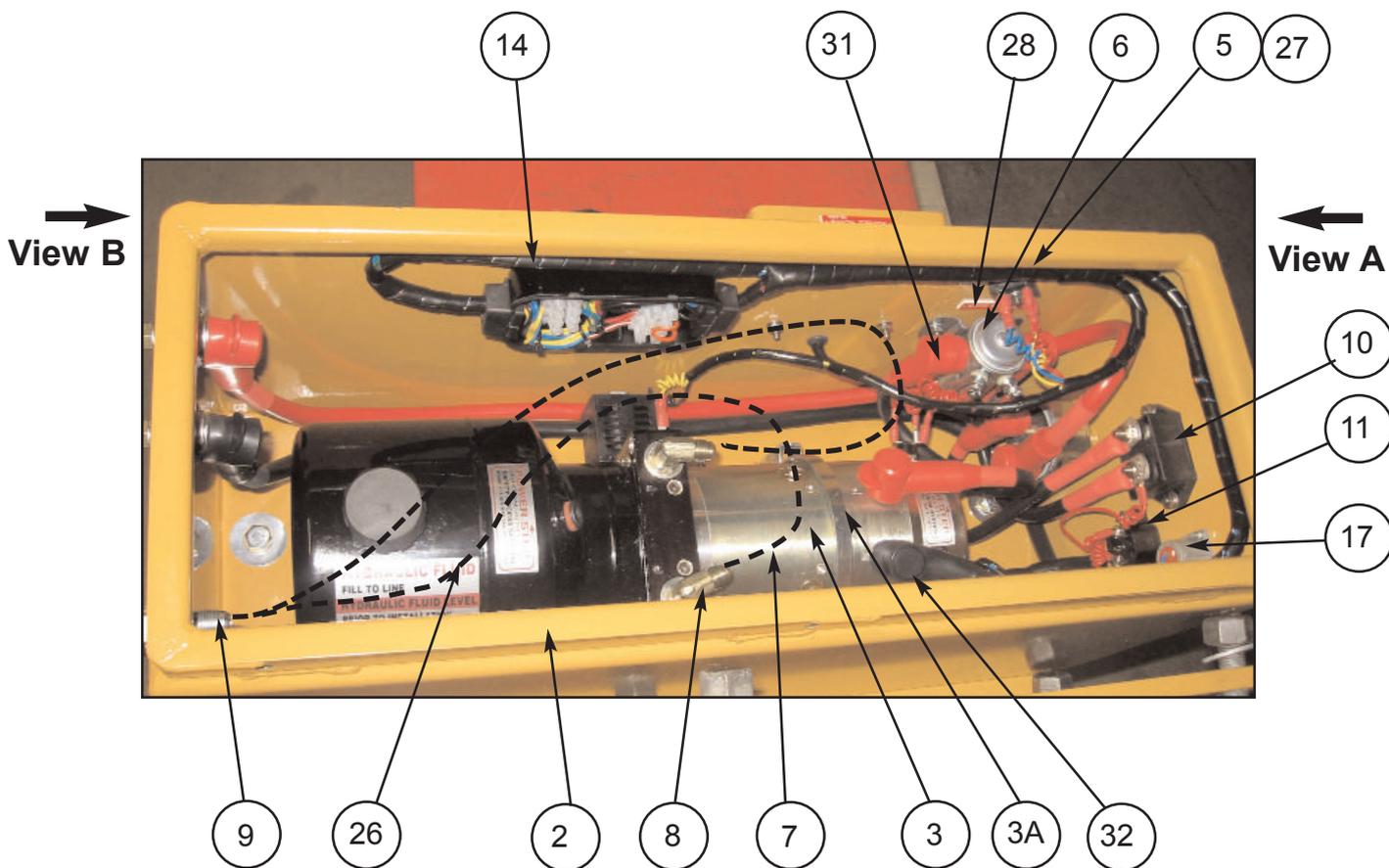
FOLDING STAIRWAY

Caterpillar 777F Truck

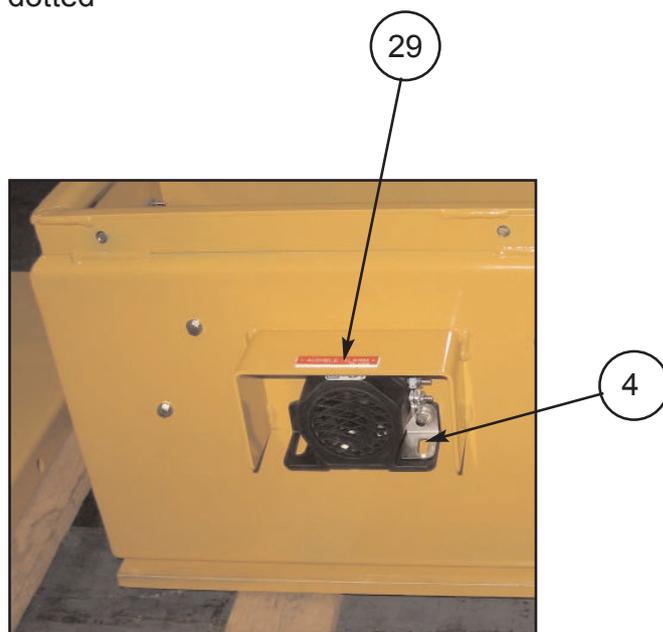
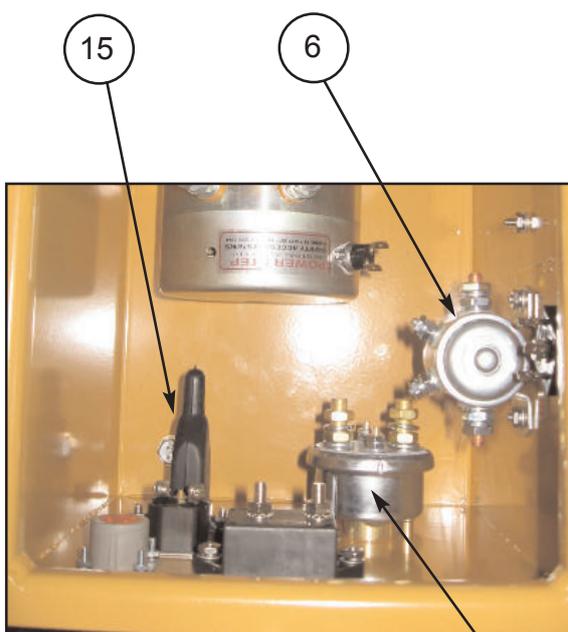


Section 5-5. Power Pack PS-80103A-SLD

See Parts List Pg 19



Hoses shown
dotted



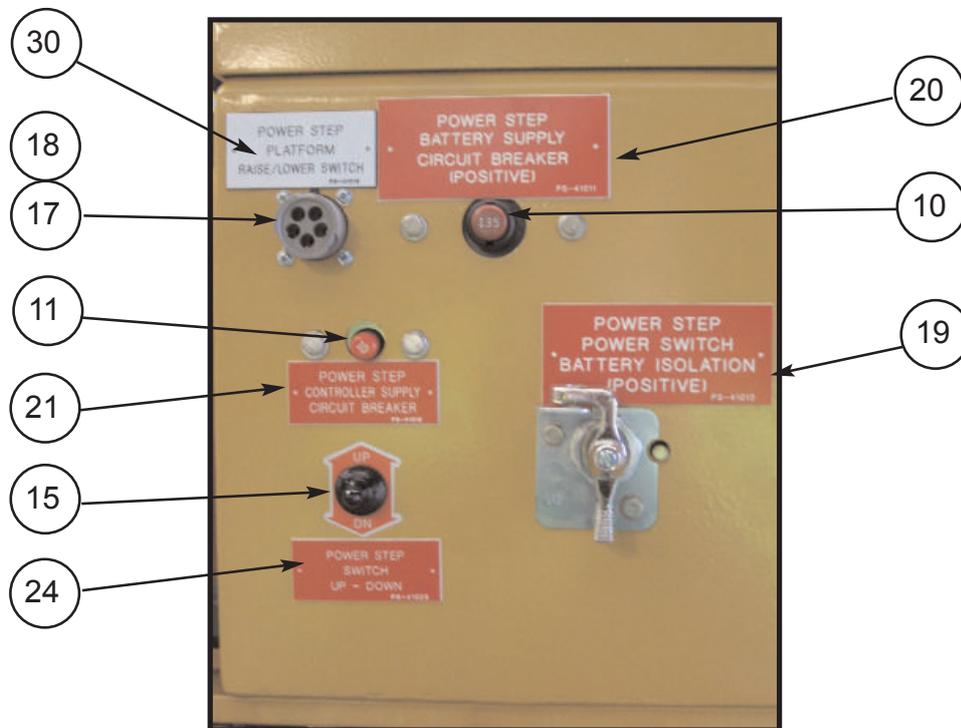
FOLDING STAIRWAY

Caterpillar 777F Truck

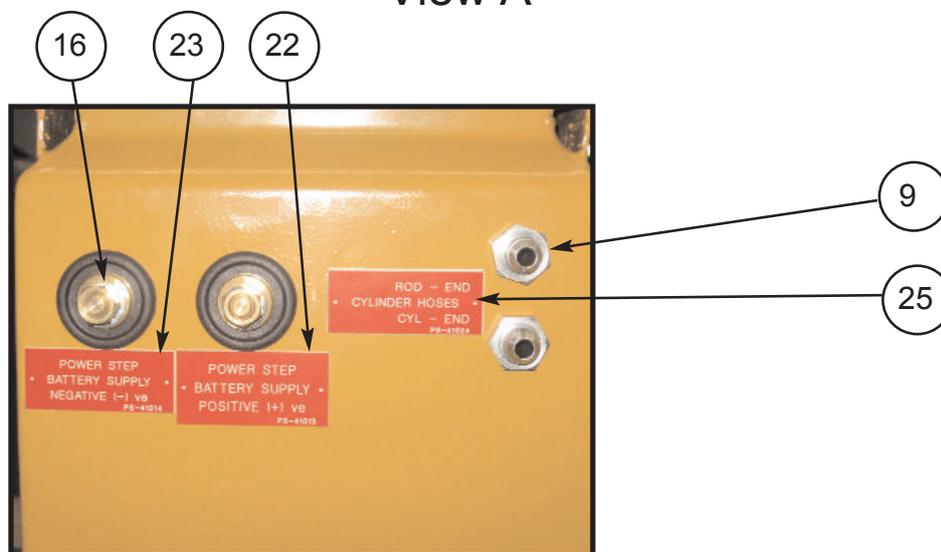


Section 5-5. Power Pack PS-80103A-SLD

See Parts List Pg 21 & 22



View A



View B

FOLDING STAIRWAY

Caterpillar 777F Truck



Section 5-5. Power Pack PS-80103A-SLD

See Photos Page 17 & 18

Item	Part No.	Part Name	Qty		
1	PS-80103A-SLD	POWER PACK ASSEMBLY	1		
2	PS-21107-METAL	MOTOR ENCLOSURE- SEALED ST/ST	1		
3	PS-80103A	POWER PACK	1		
3A	PS-80103-CLAMP	CLAMP ELECTRIC MOTOR	1		
4	PS-82415	AUDIBLE ALARM	1		
5	PS-84214	BRIDGE RECTIFIER	2		
6	PS-82402	SOLENOID 24V START MOTOR	1		
7	PS-60050-900MM	HYDR. HOSES 9/16" JIC STRAIGHT SWIVEL	1		
8	PS-61152	HYDRAULIC FITTING	1		
9	PS-61177	HYDRAULIC FITTING	2		
10	PS-84213	135A CIRCUIT BREAKER	2		
11	PS-84212	10A CIRCUIT BREAKER	2		
12	PS-84303	ISOLATION SWITCH	1		
13	PS-84303-B	ISOLATION SWITCH BRACKET	1		
14	PS-1712080	SEALED WIRING BOX	1		
15	PS-73012	TOGGLE SWITCH KIT	1		
16	PS-82493	BATTERY FEED STUDS	1		
17	PS-HD10-5-16P	5 PIN SOCKET	1		
18	PS-HD10-5-16S	5 PIN PLUG	2		
19	PS-41010	DECAL-Battery Isolation	1		
20	PS-41011	DECAL-Battery Supply C/B-135A	1		
21	PS-41012	DECAL-Controller Supply C/B-10A	1		
22	PS-41013	DECAL-Battery Supply-Positive	1		
23	PS-41014	DECAL-Battery Supply-Negative	1		
24	PS-41023	DECAL-Up/Down	1		
25	PS-41024	DECAL HYDRAULIC-HOSES	1		
26	PS-41041	DECAL OIL TANK	1		
27	PS-41019	DECAL BRIDGE RECTIFIER	1		
28	PS-41017	DECAL SOLENOID	1		
29	PS-41018	DECAL ALARM	1		
30	PS-41016	DECAL RAISE/LOWER SWITCH	1		
31	PS-73010	RUBBER BOOT RED	3		
32	PS-73009	RUBBER BOOT BLACK	1		

FOLDING STAIRWAY

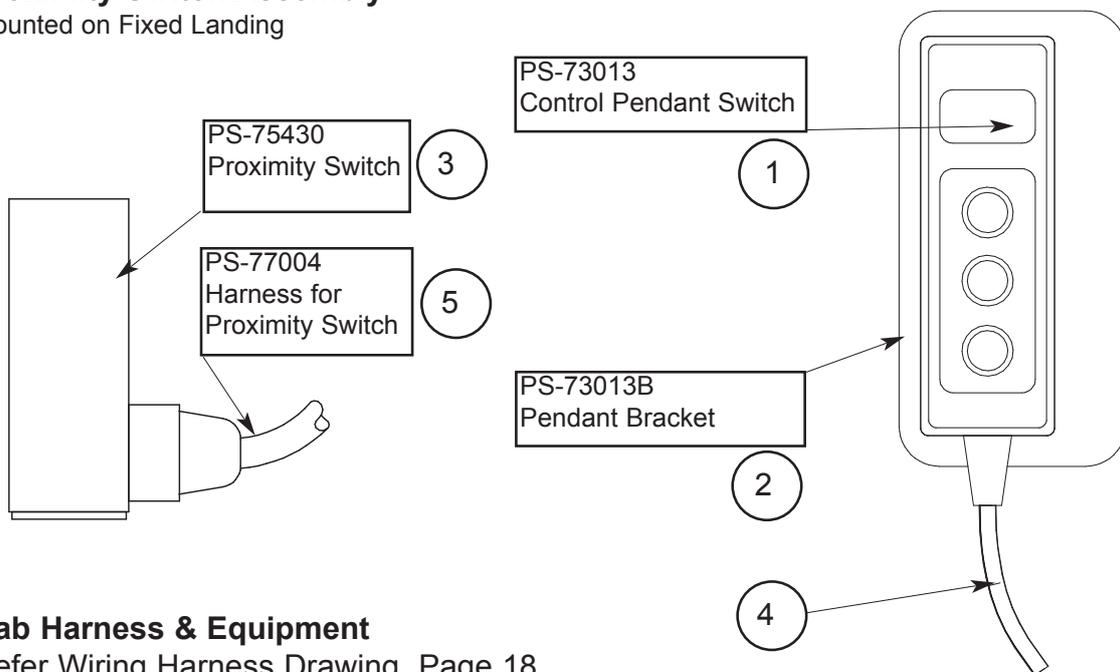
Caterpillar 777F Truck



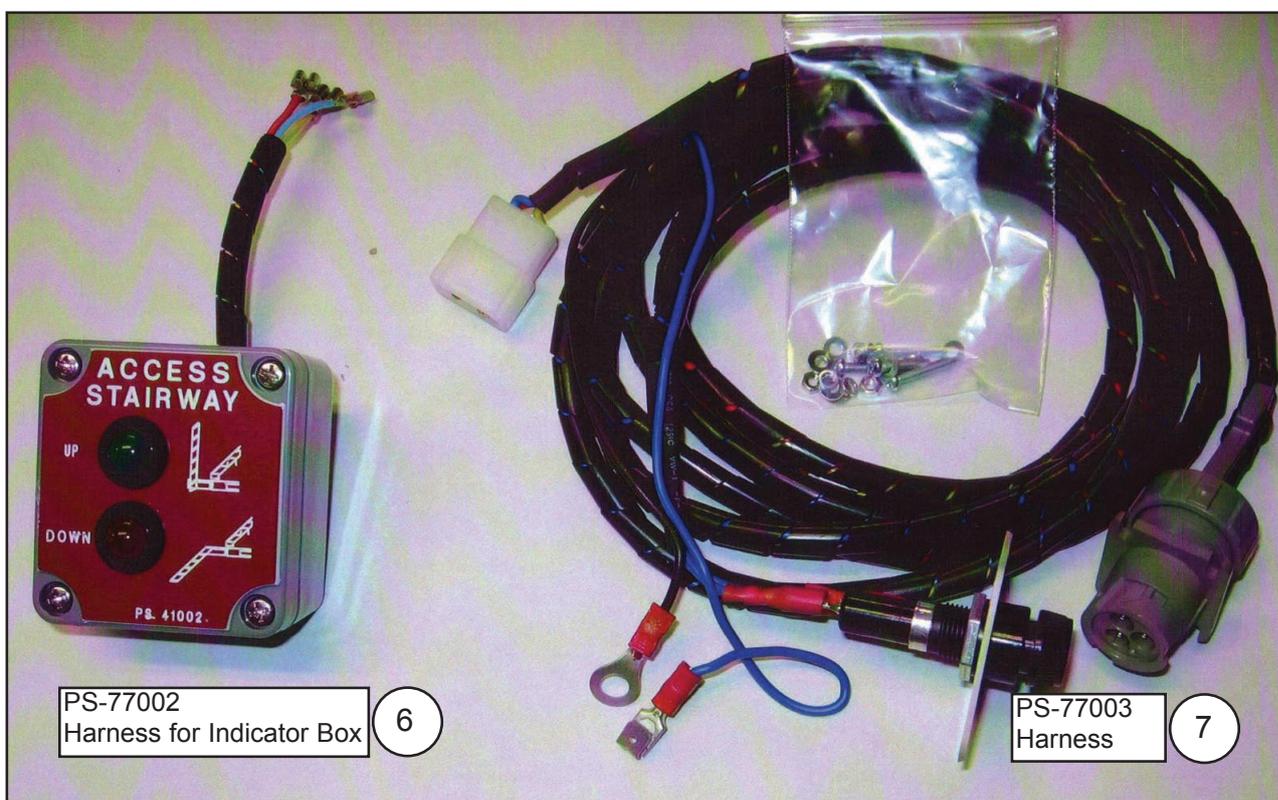
Section 5-6. Electrical Controls

Control Pendant Switch Mounted on Handrail

Proximity Switch Assembly Mounted on Fixed Landing



Cab Harness & Equipment Refer Wiring Harness Drawing Page 18



FOLDING STAIRWAY

Caterpillar 777F Truck



Section 5-6. Electrical - Controls

Item	Part No.	Part Name	Qty		
1	PS-73013	CONTROL PENDANT SWITCH	1		
2	PS-73013-B	CONTROL PENDANT BRACKET	1		
3	PS-75430	PROXIMITYSWITCH	1		
4	PS-77005	HAND RAIL SWITCH HARNESS	1		
5	PS-77004	PROXIMITY MAGNETIC SWITCH HARNESS	1		
6	PS-77002	CABIN BOX LED LIGHT INDICATOR	1		
7	PS-77003	WIRING HARNESS	1		
8	PS-60051-3.5	HOSE SET 3.5M	2		Not shown

WARNING

LOW OR FAULTY BATTERIES WILL VOID WARRANTY ON THE POWER PACK AND ALL ELECTRICAL SWITCHES AND COMPONENTS

FOLDING STAIRWAY

Caterpillar 777F Truck



Section 5-6. Electrical - Wiring Harness

WIRING HARNESS CAT 777F

P/N 77000

Complete CAB Harness

P/N 77001

Including:

P/N PS-77001

P/N 77002

P/N 77003

