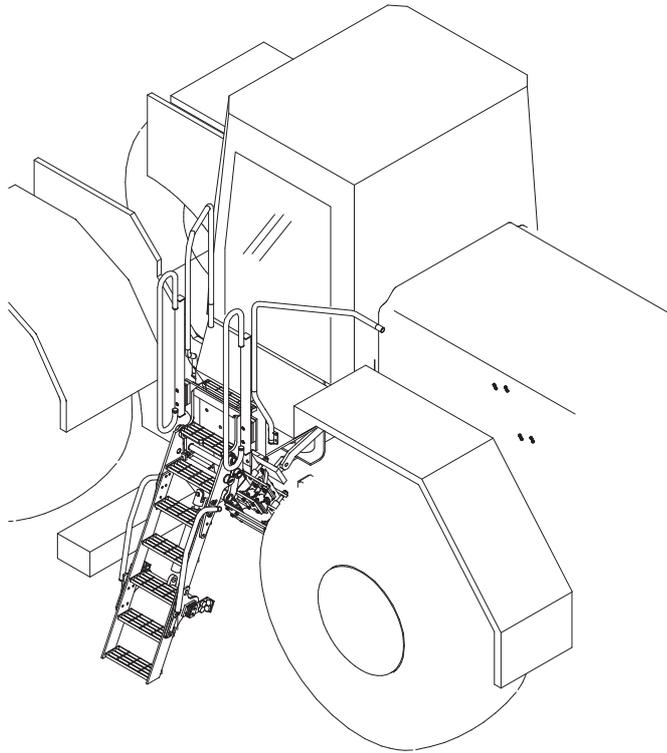




# FOLDING STAIRWAY

## Manual for Cat 824G Wheel Dozer



Model No.: PSA-CAT824G-FL  
Serial No.: 824G - FL- 001 - ~  
Date Manufactured: 2012

# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### CONTENTS

Page 3	Section 1	<u>Mounting and Installation</u> Drawings and Notes
11	Section 2	<u>Recommended Maintenance Procedure</u>
12	Section 3	<u>Operating Procedure</u>
	Section 4	<u>Drawings and Repair Parts lists</u>
13	4	Assembly Complete Parts List
15	4-1	Mounting Column Assembly Parts List
17	4-2	Ladder Assembly Parts List
19	4-3	Hydraulic Cylinder Parts List
22	4-4	Power Pack Parts List
25	4-5	Electrical System Controls Wiring Diagrams

# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### Section 1. Mounting and Installation

Notes for Clamps, Landing modifications and Mounting Column.

#### **NOTE**

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

#### **PROCEDURE.**

**See Drawing PS-23944 Clamps - Page 4**

1. Remove the existing ladder and handrails from the left side cabin landing - no view.
2. Fit clamp components per **View 1** in locations per **View 2** on the inclined 102 x 102 post that supports the left side cabin landing.  
Tighten nuts and bolts but expect to have to loosen and retighten again later.

**See Drawing PS-23945 Landing Modification - Page 5**

1. Cut holes in outer skin of the OEM left side cabin landing fabrication and the plate behind, per **Views 1 and 2**. Drill, oxy-cut or use hole saw to suit.  
Neaten holes if made by a rough method.

**See Drawing PS- 23946 Mounting Column - Page 6**

Fit Mounting Column 23 936 to the clamp plates fitted on the inclined post supporting the landing, using Isolators and Isolator Halves as shown. Using Isolator Packers 23 942 01/02/03 to suit, locate the Mounting Column so it complies with the dimensions given and with a slight incline (inwards at the top) as shown in **View 2**.

# FOLDING STAIRWAY

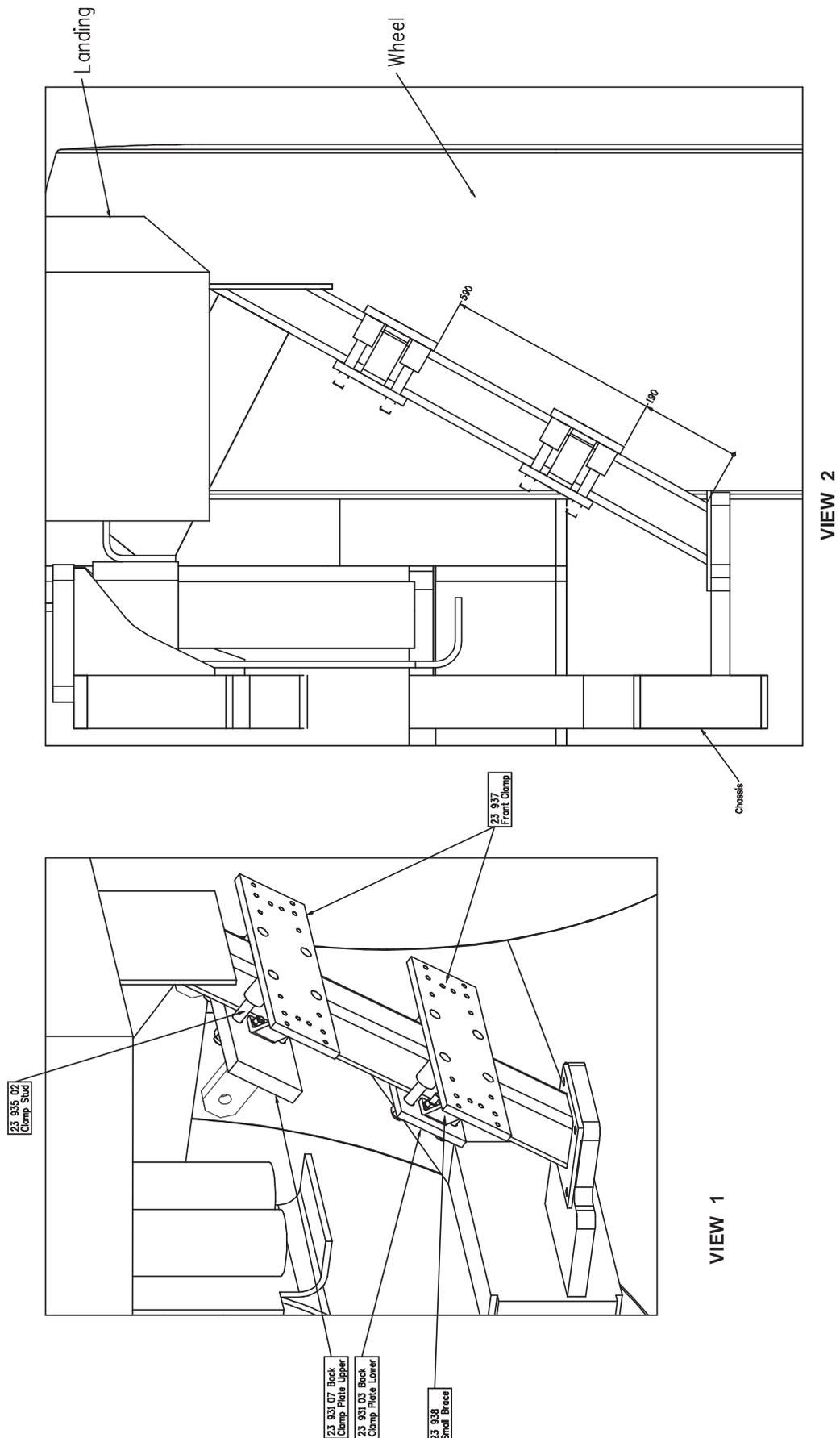
## Cat 824G Wheel Dozer



### Section 1. Mounting and Installation

Clamps PS-23 944

See Procedure Pg. 3



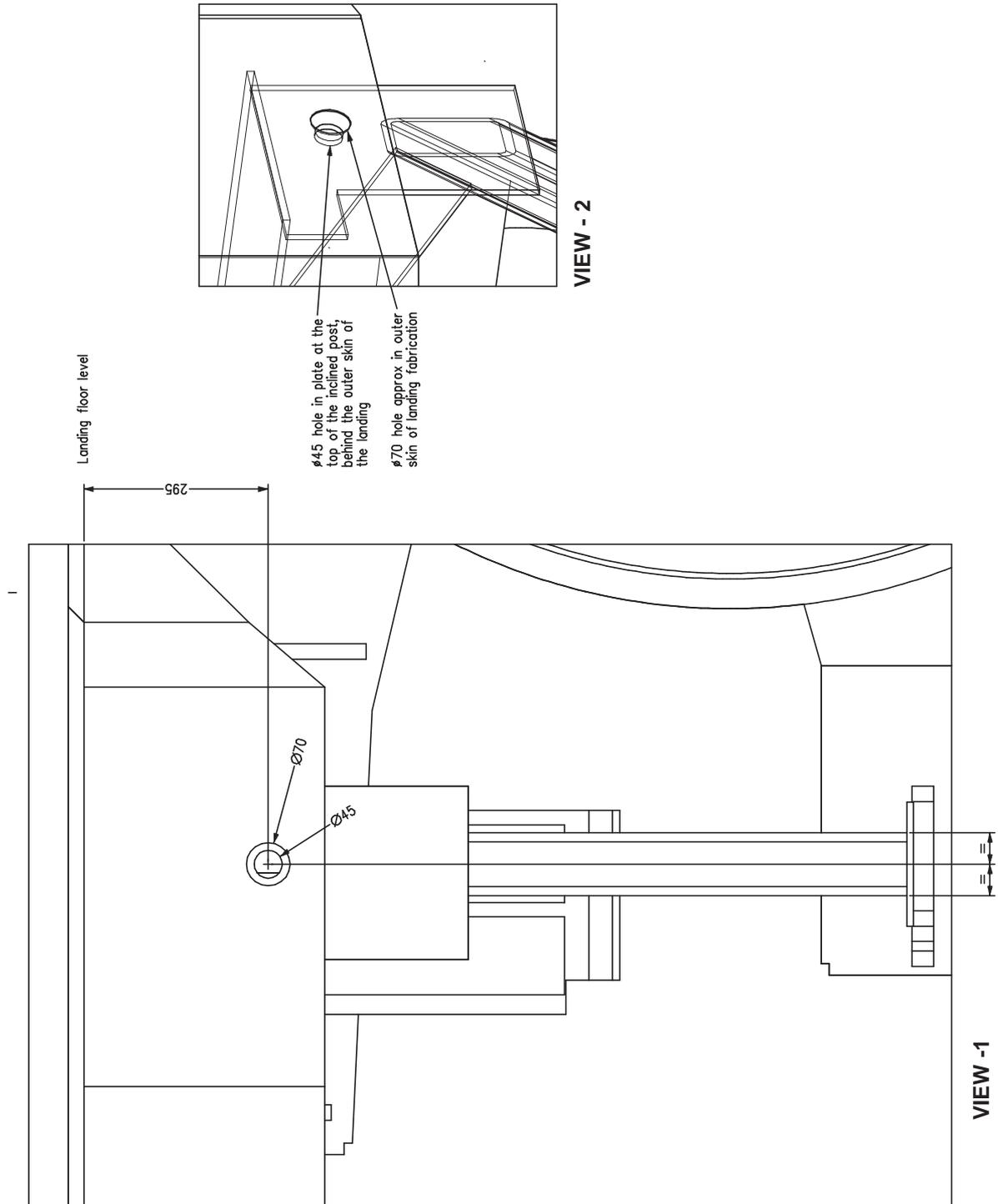
# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### Section 1. Mounting and Installation Landing Modification PS-23945

See Procedure Pg. 3



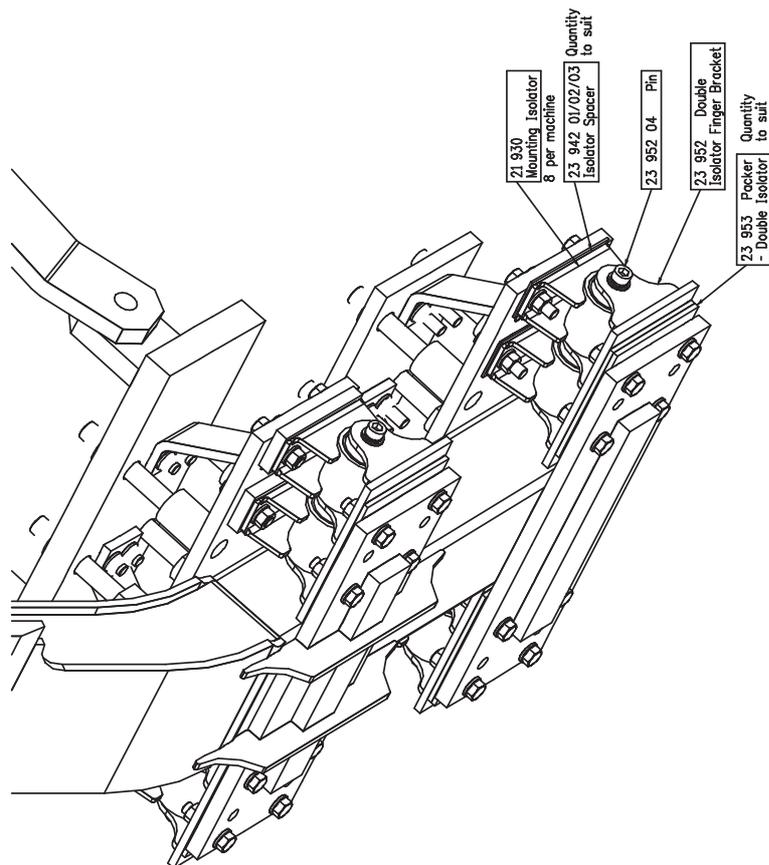
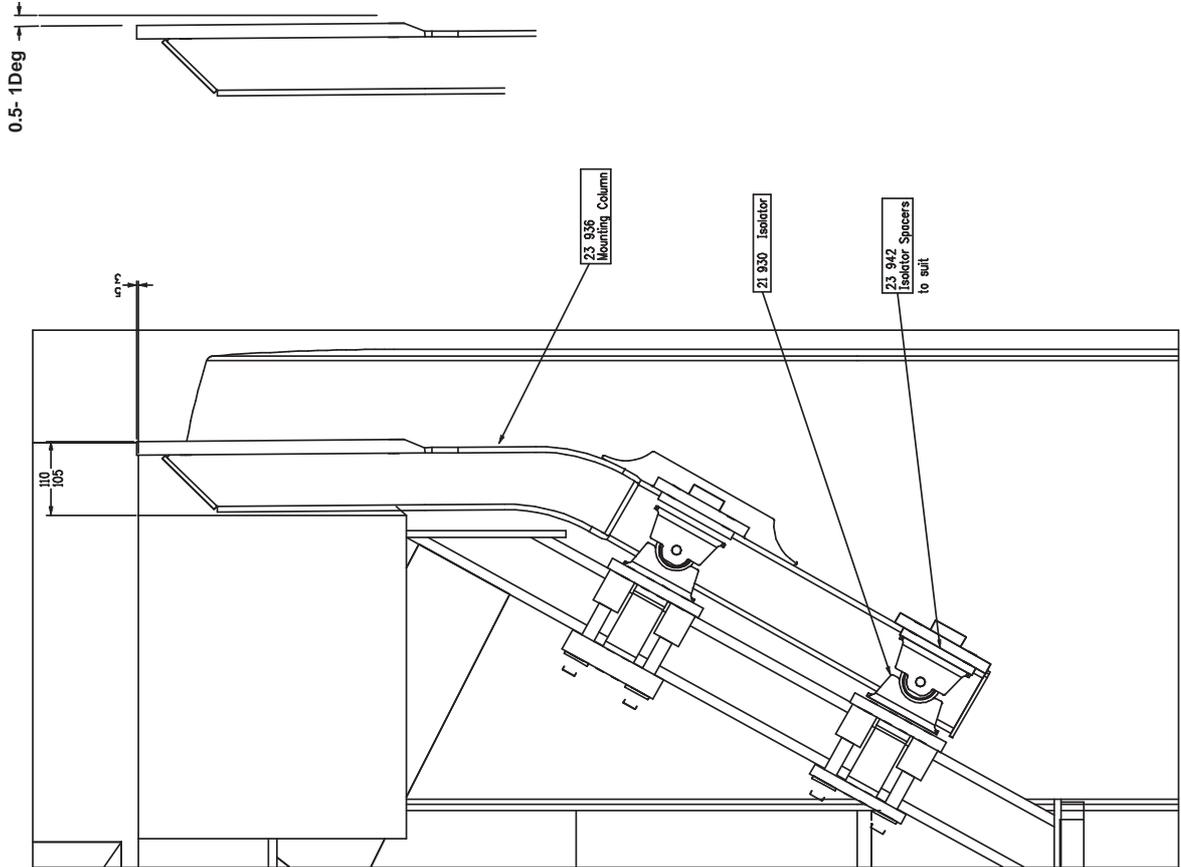
# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### Section 1. Mounting and Installation Mounting Column PS-23946/955

See Procedure Pg. 3



# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### Section 1. Mounting and Installation Ladder Set & Mounting Column

#### **NOTE**

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

#### **PROCEDURE.**

See Drawing PS-23947 Ladder Set - Page 8

1. Fit and attach the ladder set to the mounting plate on the mounting column. Locate ladder set with its' C/L aligned with the C/L of the OEM landing support column(when viewed from beside the loader) and with the top of the ladder set baseplate approx. level with the cabin landing floor, per **Views 2 & 3**. Fit bolts in the positions shown in **View 2** - there are additional holes provided for mounting the ladder set on other machines, and it would be possible to mount it in an incorrect position.
2. Adjust the position of the ladder set so that when the ladder is deployed the top of its' baseplate is level with landing floor and the baseplate is vertical, by sliding the clamps on the incline landing post and by removing or adding spacers under the isolators, per **View 1**. RevA 091012 Update to reflect two off strut cleats and larger clamp plates & isolator plates.
3. Fit the Cushion Element and Cushion Plate per **View 4**. With the ladder in the stowed position, screw the bolt in so that there is about 5 mm play in the position of the rubber cushion between the cushion plate on one side and the inclined strut's head plate on the other. The bolt cannot be tightened or locked in its' final position so a thread locking compound must be applied to the thread before it is engaged.
4. Per **Views 3 & 4**, attach Clamp Stops 23 931 06 to the inclined landing strut immediately beneath the outer clamp plates.
5. Per **Views 3, 4 & 5**, fit Mounting Post Braces 23 940 and Strut Cleats 23 931 05:- Mark holes in the gusset under the front cabin isolator and the front gusset under the rear cabin isolator table, on the back faces of both gussets, to the dimensions in **View 2**.- assemble the mounting post braces and strut cleats and try in position as shown in **Views 4 & 5**, with the cleats against the top back clamp plate in locations to suit.  
- drill holes in the gussets and bolt the braces in place.  
Note that it might be necessary to drill a hole in the second gusset at the back and use a long bit to drill the required hole in the front gusset under the rear isolator table. Weld the cleats to the clamp plate, 10 cfw both sides.  
Dia 22 or 23 holes in isolator table gussets.

See Drawing PS-23948 Handrails - Page 9

1. Fit 23 943 Flooring Extension by bolting it behind the bolting plate of the ladder set.
2. Re-install/rebuild the original landing handrails using 21 934 Handrail Post Bases bolted to the side of the landing fabrication (locations to suit, holes to suit) and replacement post starters per Views 3 and 4 to replace the bottoms of the original access-way post bases.
3. Fit the Power Step Power Unit in a location to suit (eg mudguard over the rear wheel) and complete the hydraulic plumbing and wiring.

Use safe working practices at all times.  
Welding: Cat SP to AS1554, 6 cfw uno.

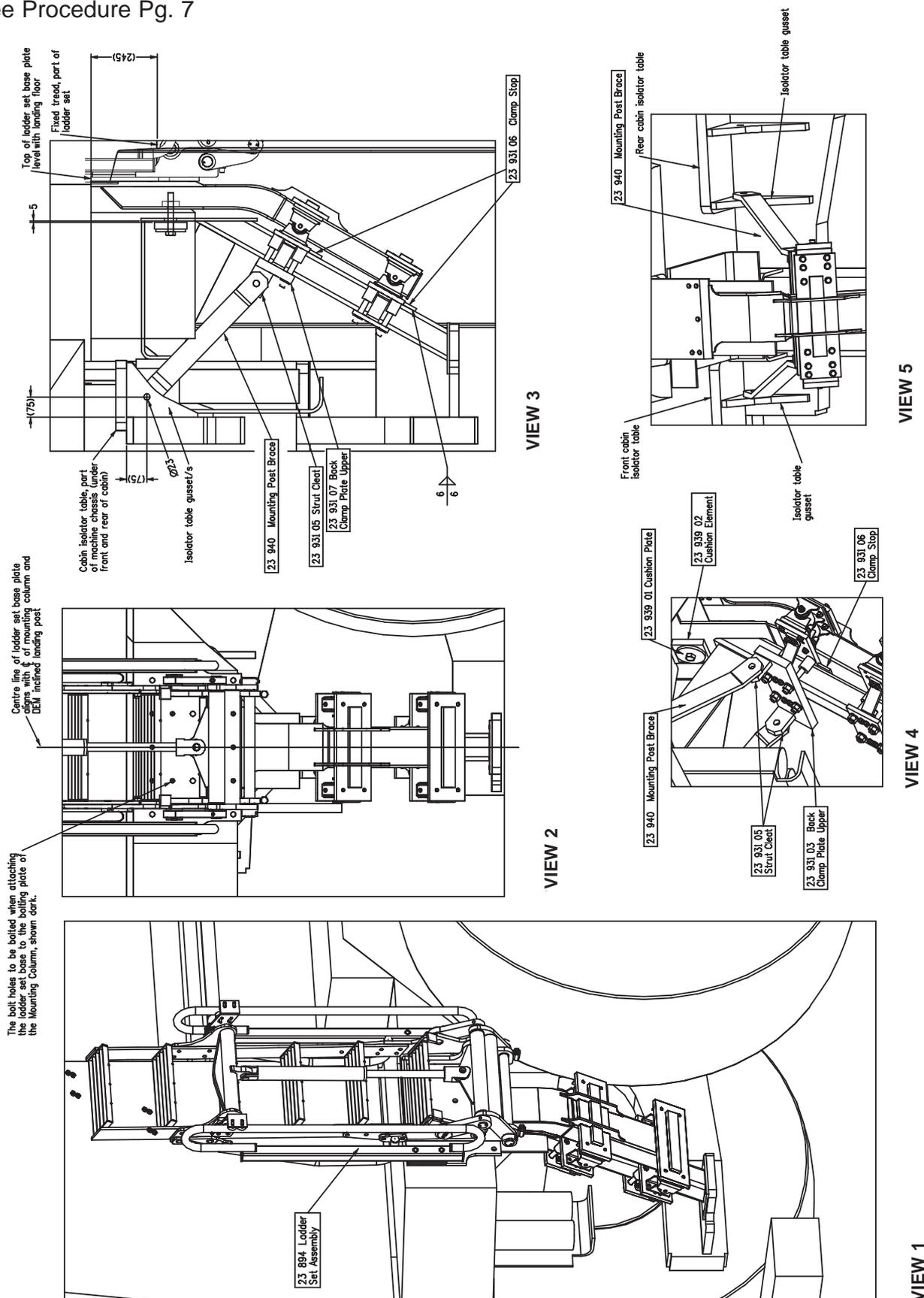
# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### Section 1. Mounting and Installation Ladder Set PS-23947

See Procedure Pg. 7



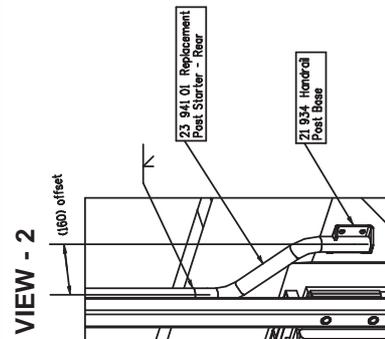
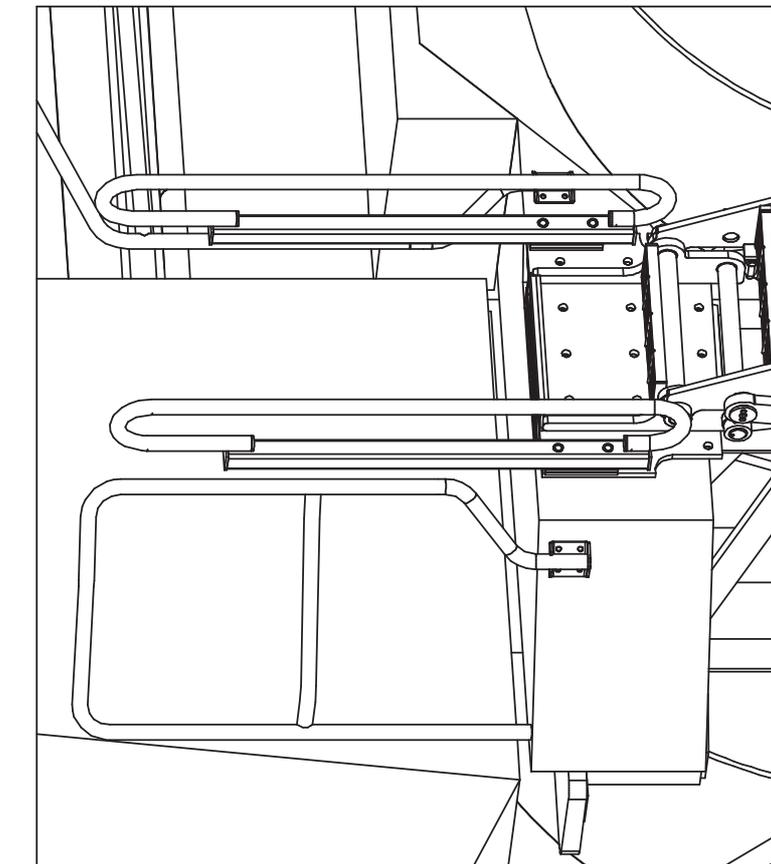
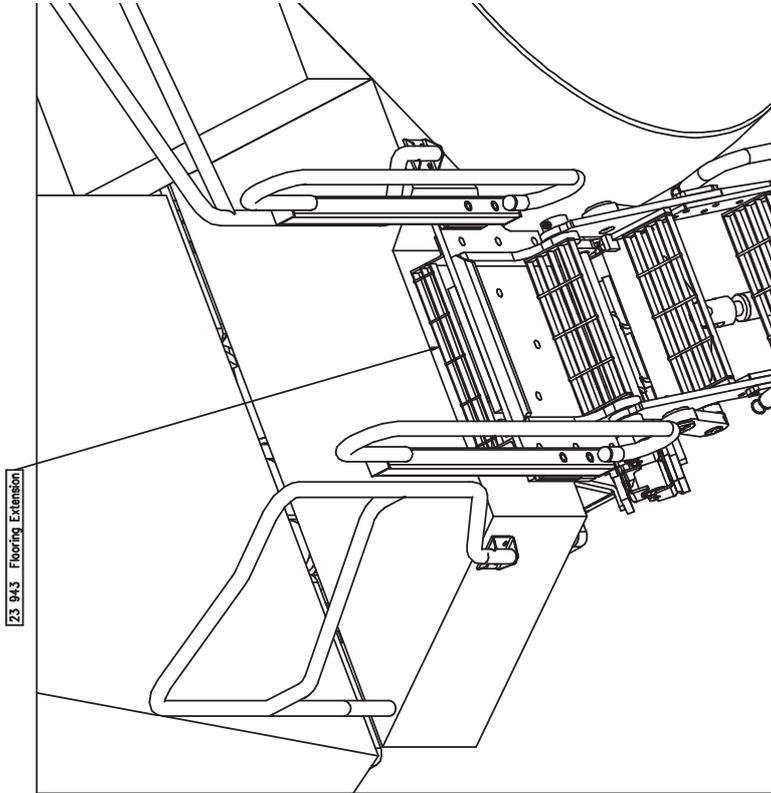
# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### Section 1. Mounting and Installation Handrails PS-23 948

See Procedure Pg. 7

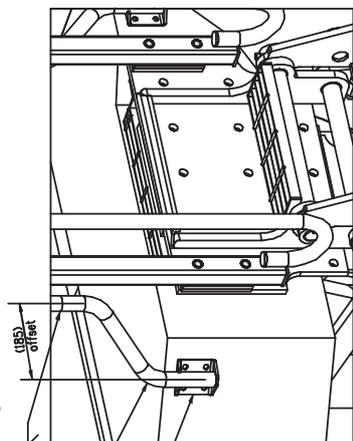


VIEW - 2

(160) offset

23 941 01 Replacement Post Starter - Rear

21 934 Handrail Post Base



VIEW - 3

(185) offset

23 941 02 Replacement Post Starter - Front

21 934 Handrail Post Base

VIEW - 4

# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



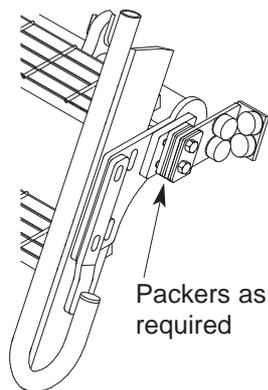
### Section 1. Mounting and Installation - bUMPERS

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

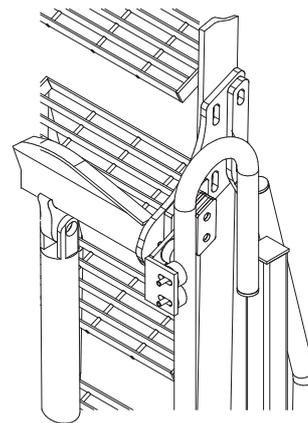
#### Ladder Bumpers

The rubber bumpers fitted to the ladder styles must be adjusted so that when the ladder is stowed it is firm and prevents any movement which can cause wear.

For lateral position use packers.



Ladder lowered



Ladder stowed

# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### Section 2. 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

## Cat 824G Wheel Dozer



### 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 Dozer 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 Dozer.

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.

### OPERATING NOTES

#### **NOTE: FLOW CONTROL VALVE ADJUSTMENT:**

The valve should be positioned to restrict the flow and speed of the Power Step when lowering. Adjust the knob on top of the valve by turning left or right (clockwise) when the step is being lowered, until it is lowering at a safe and reasonable speed.

When it is adjusted, lock the adjusting knob by tightening the grub screw located on the side of the knob.

#### **NOTE: MAGNETIC 'GO' SWITCH ADJUSTMENT:**

The switch target trigger area is located on the opposite side and end from the cable entry point on the switch. Once it is mounted to the switch bracket, adjust the switch in or out from the stair steel trigger point, to be within 3mm - 10mm from touching each other when the stair is in the desired rest position.

[DO NOT EXCEED 10MM DISTANCE BETWEEN THE SWITCH AND STRIKER PLATE].

Test by raising and lowering the Power Step a couple of times and adjust again if necessary.

# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### Section 4. Assembly Complete - Main Assemblies

See Pg 14

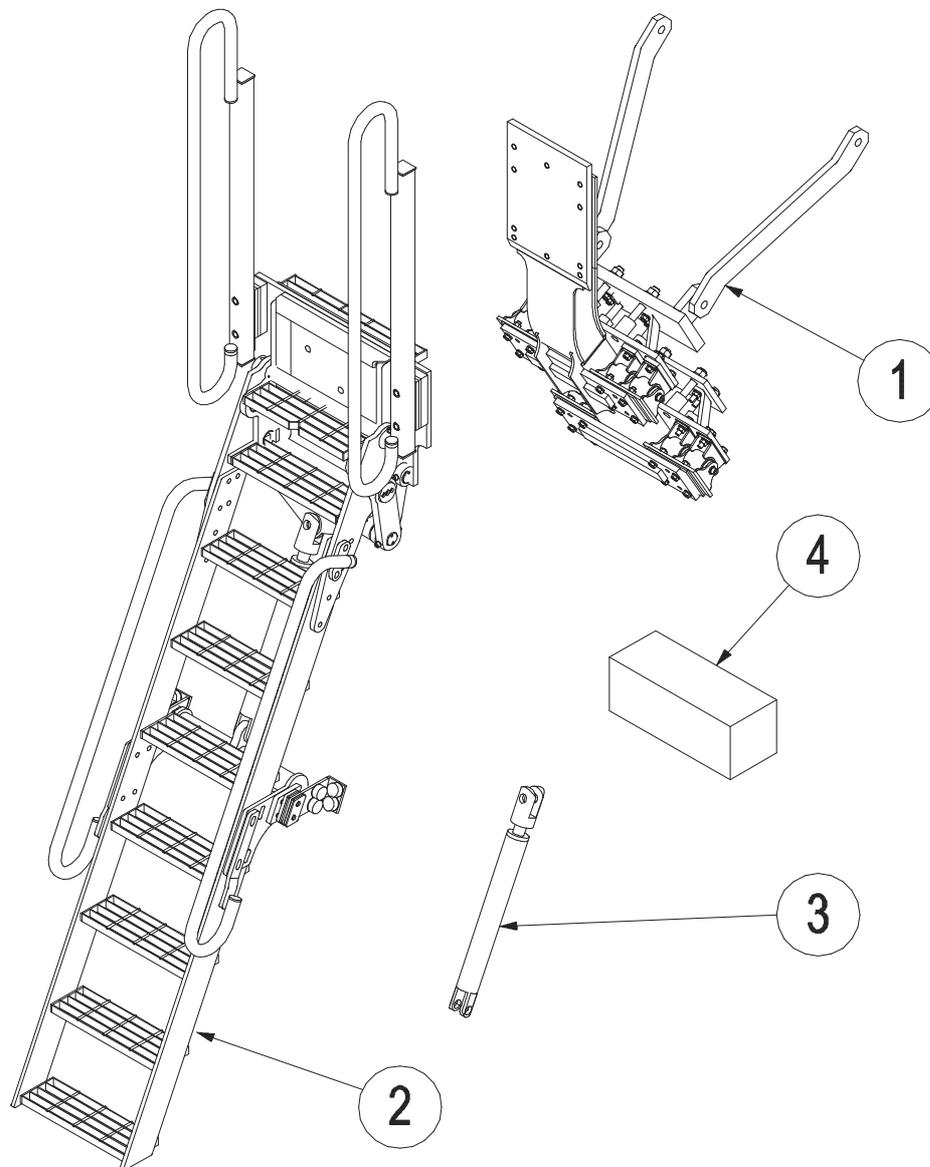
Item	Part No.	Part Name	Qty		
1	PSA-824G-FL	ASSEMBLY COMPLETE			
	PS-23936A	MOUNTING COLUMN ASSEMBLY REFER TO 4.1 FOR DETAILS	1		
	PS-23894A	LADDER SET ASSEMBLY (INC.HANDRAILS) REFER TO 4.2 FOR DETAILS	1		
	PS-62999-AH	HYDRAULIC CYLINDER REFER TO 4.3 FOR DETAILS	1		
4	PS-80103A-SLD	POWER PACK REFER TO 4.4 FOR DETAILS	1		

# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### Section 4. Assembly Complete

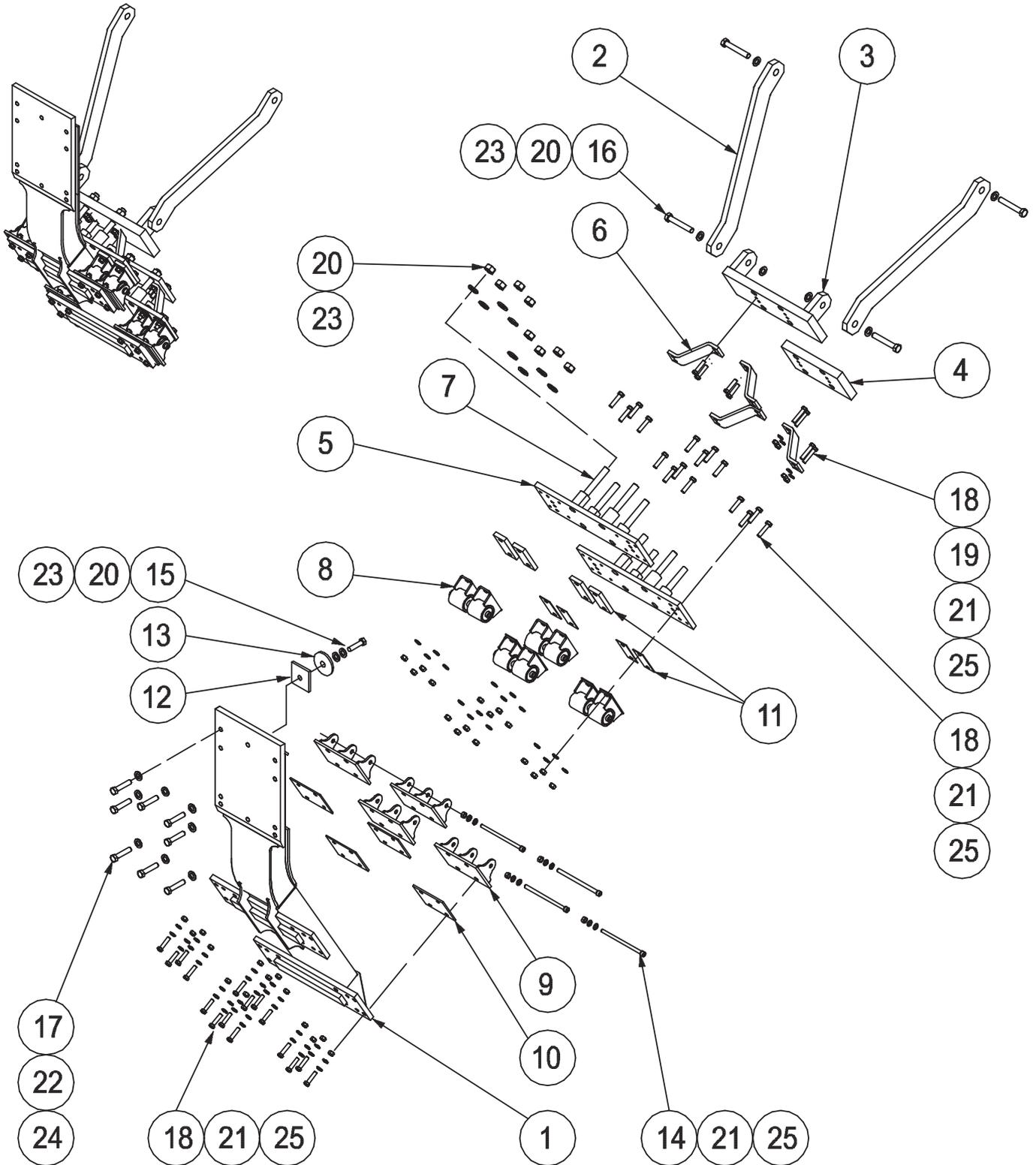


# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### Section 4-1. Mounting Assembly PS-23936A



# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### Section 4-1. Mounting Assembly PS-23936A

#### Parts List

See Drawing Pg 15

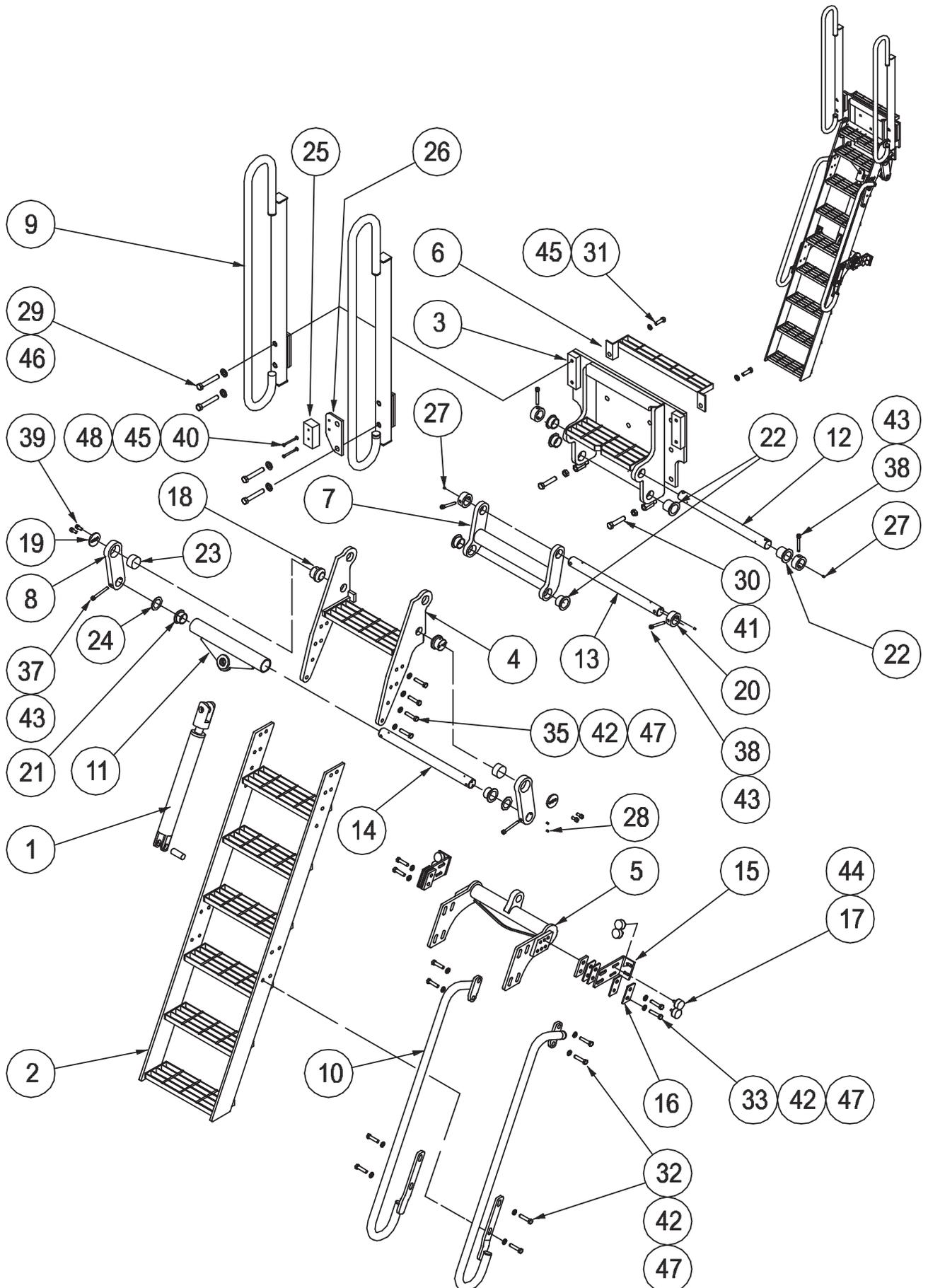
Item	Part No.	Part Name	Qty		
1	PS-23936	MOUNTING COLUMN	1		
2	PS-23940	MOUNTING POST BRACE	2		
3	PS-23931-07	BACK CLAMP PLATE-UPPER	1		
4	PS-23931-03	BACK CLAMP PLATE-LOWER	1		
5	PS-23937	FRONT CLAMP	2		
6	PS-23938	SMALL BRACE	4		
7	PS-23935-02	CLAMP STUD	8		
8	PS-21930A	ISOLATOR ASSEMBLY	8		
9	PS-23952	DOUBLE ISOLATOR FINGER PLATE	4		
10	PS-23953-01	PACKER DOUBLE SPACER	8		
11	PS-23942-01/02/03	SPACERS	28		
12	PS-23939-02	CUSHION ELEMENT	1		
13	PS-23939-01	CUSHION PLATE	1		
14	PS-23952-04	PIN-ISOLATOR	4		
15	CPS-M20X130ZP	BOLT-M20 x 130	1		
16	CPS-M20X100ZP	BOLT-M20 x 100	4		
17	CPS-M16X50ZP	BOLT-M16 x 50	8		
18	CPS-M12X60ZP	BOLT-M12 x 60	40		
19	CPS-M12X40ZP	BOLT-M12 x 40	8		
20	CPS-M20NZP	NUT-M20	5		
21	CPS-M12NZP	NUT-M12	56		
22	CPS-M16NZP	NUT-M16	8		
23	CPS-M20WH	WASHER-HARDENED-M20	18		
24	CPS-M16WH	WASHER-HARDENED-M16	16		
25	CPS-M12WH	WASHER-HARDENED-M12	104		

# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### Section 4-2. Ladder Assembly PS-23894A



# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### Section 4-2. Ladder Assembly PS-23894A

#### Parts List

See Drawing Page 17

Item	Part No.	Part Name	Qty		
1	PS-62999-AH	CYLINDER	1		Ref Pg. 20
2	PS-23889	LADDER FABRICATION	1		
3	PS-23878	BASE FABRICATION	1		
4	PS-23896	LADDER HEAD	1		
5	PS-23879	CYLINDER BEAM	1		
6	PS-23943	FLOORING BRIDGE	1		
7	PS-23886	MECHANISM LINKAGE No. 1	1		
8	PS-23887-02	LINK PLATE	2		
9	PS-23881	HANDRAILS-FIXED	2		
10	PS-23882	HANDRAILS-STAIR	2		
11	PS-23892	LINKAGE CYLINDER BEAM	1		
12	PS-23884-01	SHAFT-LADDER	1		
13	PS-23886-01	SHAFT- MECHANISM LINKAGE No.1	1		
14	PS-23887-01	SHAFT- MECHANISM LINKAGE No.2	1		
15	PS-23891-00	BUFFER BRACKET SET (LH & RH)	2		
16	PS-23891-03	SPACER-BUFFER BRACKET	12		
17	PS-40002	BUFFER- Mackay M12402055	8		
18	PS-23884-02	LINKAGE STUB	2		
19	PS-23896-03	KEEPER PLATE	2		
20	PS-23888	HUB	4		
21	PS-23893-01	BUSH-CYL. LINKAGE BEAM	2		
22	PS-23893-03	BUSH-LADDER HINGE & LINKAGE	6		
23	PS-23893-02	BUSH- LADDER LINKAGE	2		
24	PS-23893-04	LINKAGE SPACER	2		
25	PS-75430	GO SWITCH	2		
26	PS-23875	MOUNTING PLATE-GO SWITCH	2		
27	PS-61006-2	GREASE NIPPLE-Str.	8		
28	PS-61006	GREASE NIPPLE-45 Deg.	2		
29	CPS-M16X100ZP	BOLT-M16 x 100	4		
30	CPS-M16X75ZP	BOLT-M16 x 75	2		
31	CPS-M16X25ZP	BOLT-M16 x 25	2		
32	CPS-M12X60ZP	BOLT-M12 x 60	8		
33	CPS-M12X55ZP	BOLT-M12 x 55	4		

# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### Section 4-2. Ladder Assembly (Cont.) PS-23894A

#### Parts List

See Drawing Page 17

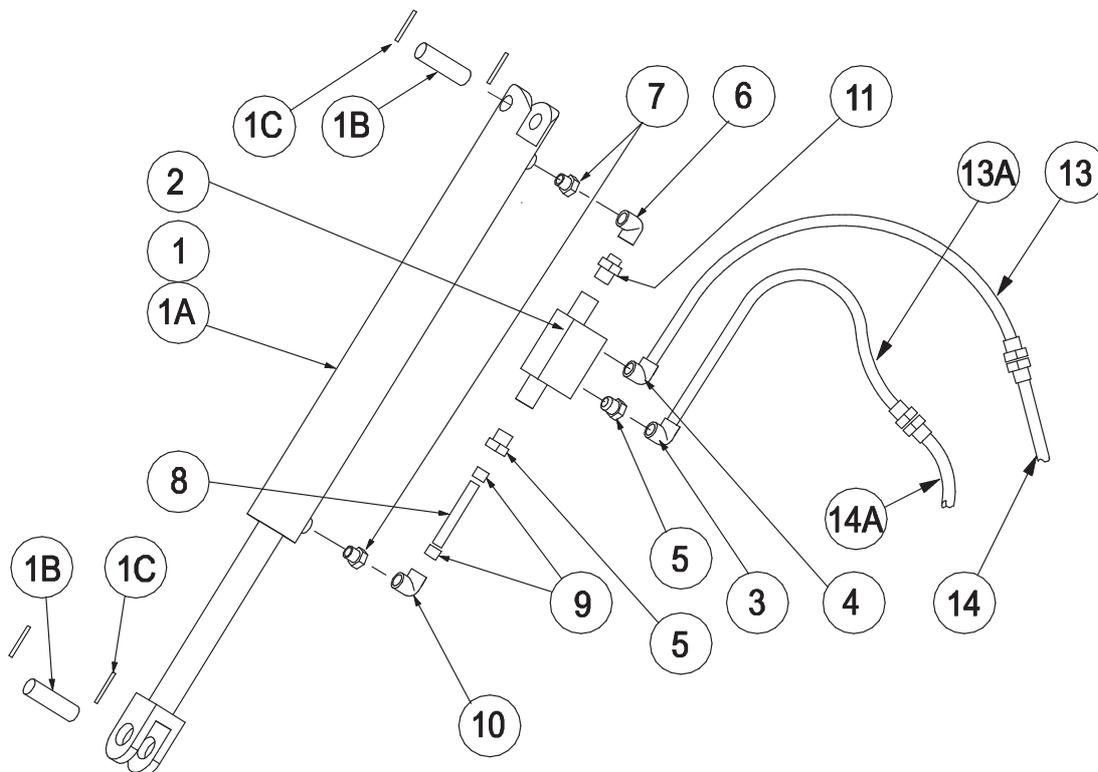
Item	Part No.	Part Name	Qty	
35	CPS-M12X50ZP	BOLT-M12 x 50	8	
36	CPS-M12X35ZP	BOLT-M12 x 35 (H/Rail post bolts)	2	(See pg. 9)
37	CPS-M10X90ZP	BOLT-M10 x 90	2	
38	CPS-M10X80ZP	BOLT-M10 x 80	4	
39	CPS-M10X16ZP	BOLT-M10 x 16	4	
40	CPS-M5X50ZP	BOLT-M5 x 50	4	
41	CPS-M16NZP	NUT-M16	2	
42	CPS-M12NZP	NUT-M12	16	
43	CPS-M10NN	NUT-NYLOC-M10	6	
44	CPS-M8NN	NUT-NYLOC-M8	8	
45	CPS-M5NN	NUT-NYLOC-M5	4	
46	CPS-M16WH	WASHER-HARDENED-M16	6	
47	CPS-M12WH	WASHER-HARDENED-M12	36	
48	CPS-M5WH	WASHER-HARDENED-M5	8	
-		-	-	
49	PS-23941-01	REPLACEMENT POST STARTER-REAR	1	(See Pg. 9)
50	PS-23941-02	REPLACEMENT POST STARTER-FRONT	1	(See Pg. 9)

# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### Section 4-3. 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-AH	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-M8X50ZP	SPLIT PIN-M8-CLEVIS PIN-BOTTOM & TOP	4	
1S	PS-63103	SEAL KIT (Not shown)	1	
2	PS-63201	VALVE - PILOT OPERATED LOCKING	1	
3	PS-61151	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	1	
6	PS-61158-1MM	FITTING - 1 mm RESTRICTION 90 DEG	1	CYL. END
7	PS61163	REDUCER JIC x BSPP	2	
8	PS-61160	TUBE (Cut to suit) 110mm approx.	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-61153	FITTING- 7/6" JIC SWIVEL	1	
13	PS-60050-1.7M	HOSE- HYDR. 9/6" x 1.7M	1	
13A	PS-60051-1.7M	HOSE- HYDR. 7/6" x 1.7M	1	
14	PS-60050-5M	HOSE- HYDR. 9/6" x 5M	1	
14A	PS-60051-5M	HOSE- HYDR. 7/6" x 5M	1	

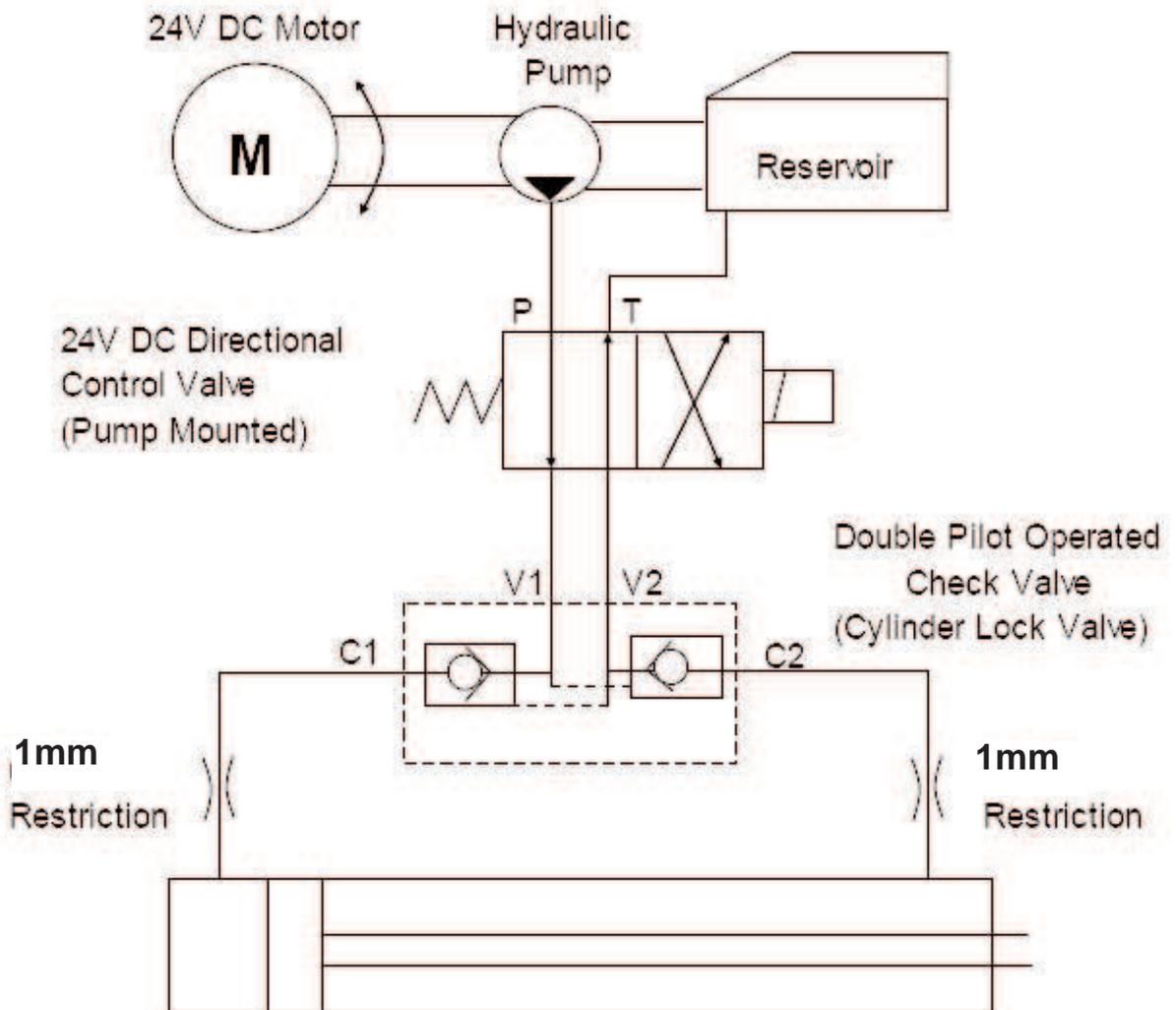
# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### Section 4-3. Hydraulic Diagram P/No. PS-62999-AH

Double Acting Hydraulic System with  
directional Control Valve and Cylinder  
Lock Valve



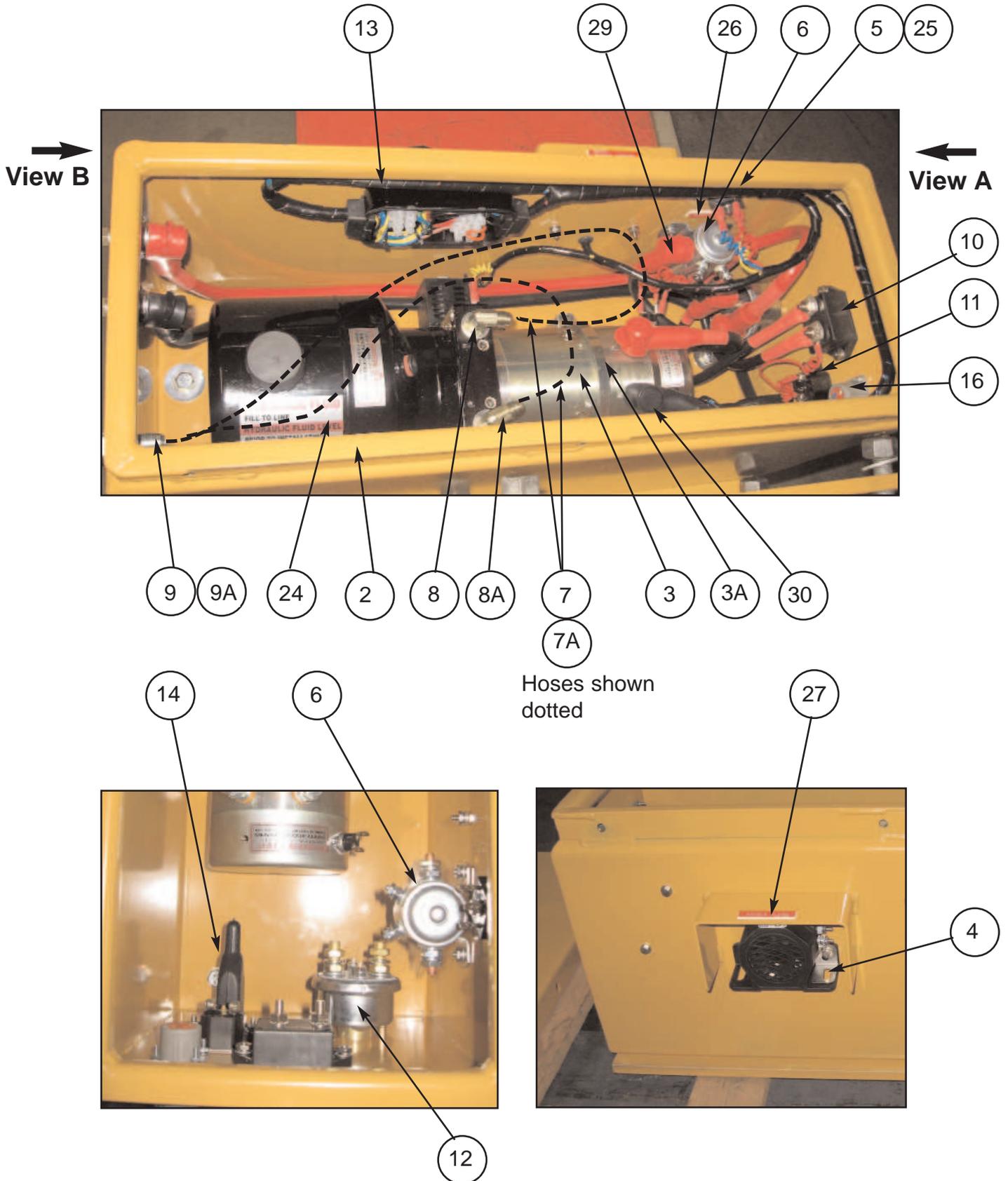
# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### Section 4-4. Power Pack PS-80103A-SLD

See Parts List Pg 24



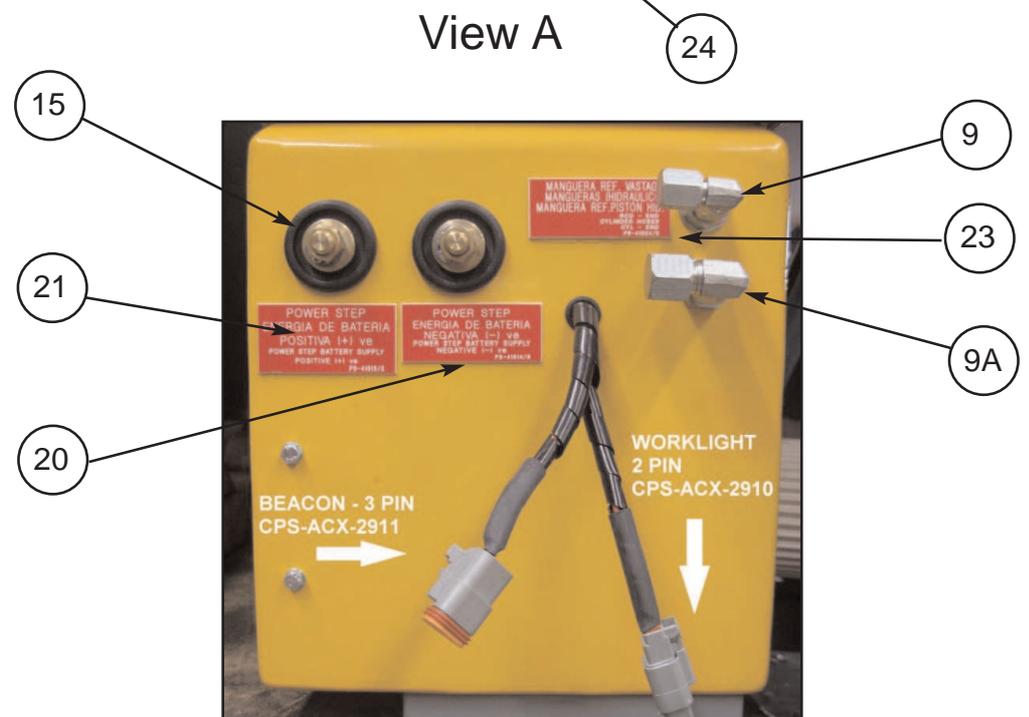
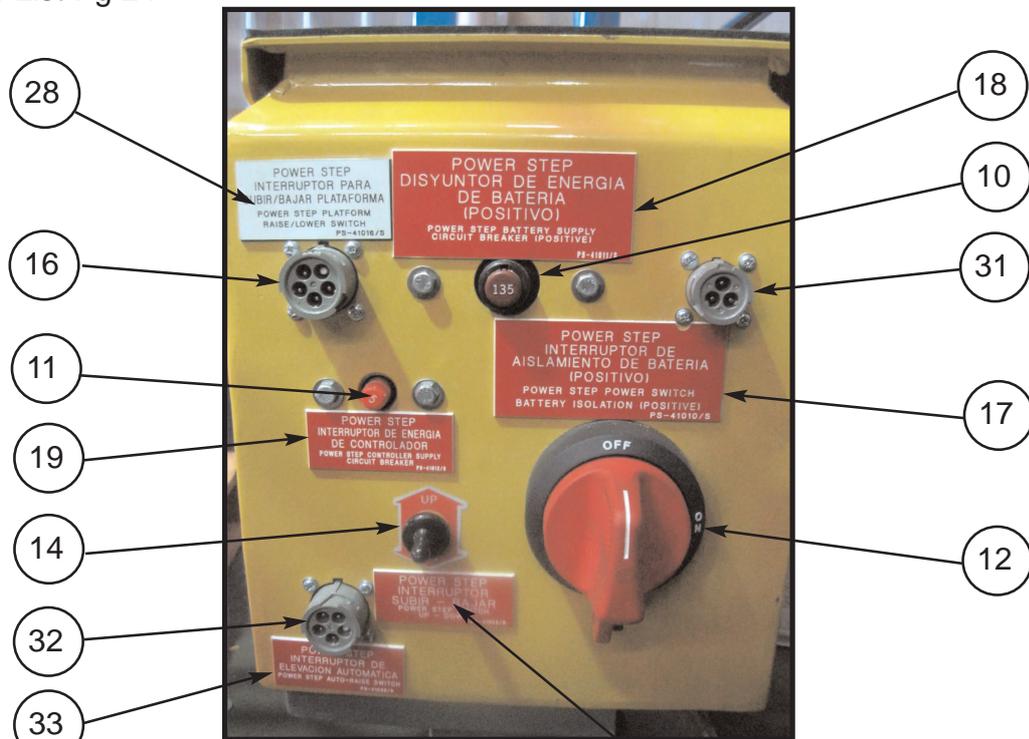
# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### Section 4-4. Power Pack PS-80103A-SLD

See Parts List Pg 24



**NOTE.**  
**THE RELIEF PRESSURE OF THE POWERPACK IS TO BE SET TO 2800SI.**  
**IF THE POWERPACK IS REPLACED, THIS RELIEF PRESSURE WILL NEED TO BE RESET USING INLINE GAUGES.**  
**FAILURE TO DO SO MAY RESULT IN ACCIDENT OR INJURY**

# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### Section 4-4. Power Pack PS-80103A-SLD

See Photos Page 22 & 23

Item	Part No.	Part Name	Qty		
1	PS-80103A-SLD	POWER PACK ASSEMBLY	1		
2	PS-21107-METAL	MOTOR ENCLOSURE- SEALED	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	1		
6	PS-82492	SOLENOID 24V START MOTOR	1		
7	PS-60051-900MM 9/16"	HYDR. HOSES 9/16" JIC STRAIGHT SWIVEL	1		
7A	PS-60050-900MM 7/16"	HYDR. HOSES 7/16" JIC STRAIGHT SWIVEL	1		
8	PS-61152	HYDRAULIC FITTING 9/16"	1		
8A	PS-61150	HYDRAULIC FITTING 7/16"	1		
9	PS-61177	HYDRAULIC FITTING 9/16"	1		
9A	PS-61176	HYDRAULIC FITTING 7/16"	1		
10	PS-84213	135A CIRCUIT BREAKER	1		
11	PS-84212	5A CIRCUIT BREAKER	1		
12	PS-84303	ISOLATION SWITCH- (INCLUDING BRACKET)	1		
13	PS-1712080	SEALED WIRING BOX	1		
14	PS-73012	TOGGLE SWITCH KIT	1		
15	PS-82493	BATTERY FEED STUDS	2		
16	PS-HD10-5-16P	5 PIN SOCKET	1		
17	PS-41010	DECAL-Battery Isolation	1		
18	PS-41011	DECAL-Battery Supply C/B-135A	1		
19	PS-41012	DECAL-Controller Supply C/B-5A	1		
20	PS-41013	DECAL-Battery Supply-Positive	1		
21	PS-41014	DECAL-Battery Supply-Negative	1		
22	PS-41023	DECAL-Up/Down	1		
23	PS-41024	DECAL HYDRAULIC-HOSES	1		
24	PS-41041	DECAL OIL TANK	1		
25	PS-41019	DECAL BRIDGE RECTIFIER	1		
26	PS-41017	DECAL SOLENOID	1		
27	PS-41018	DECAL ALARM	1		
28	PS-41016	DECAL RAISE/LOWER SWITCH	1		
29	PS-73010	RUBBER BOOT RED	4		
30	PS-73009	RUBBER BOOT BLACK	2		
31	PS-HD10-3-16P	3 PIN SOCKET (PARK BREAK)	1		
32	PS-HD10-5-16P	5 PIN SOCKET (AUTO-RAISE)	1		
33	PS-41032	DECAL AUTO-RAISE SOCKET	1		
34	PS-63202A	FLOW CONTROL VALVE	1		Not Shown

# FOLDING STAIRWAY

## Cat 824G Wheel Dozer

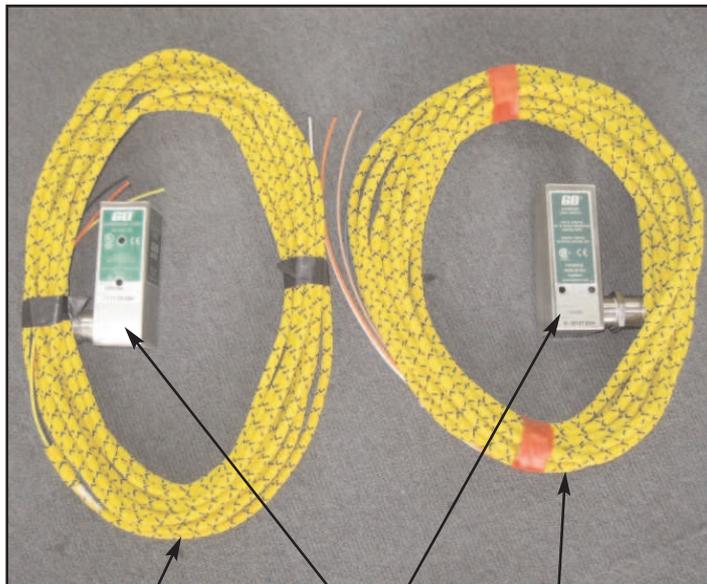


### Section 4-5. Electrical System - Controls

Refer Wiring Harness Drawings

#### Proximity Switch Assembly

Mounted on Fixed Landing



5

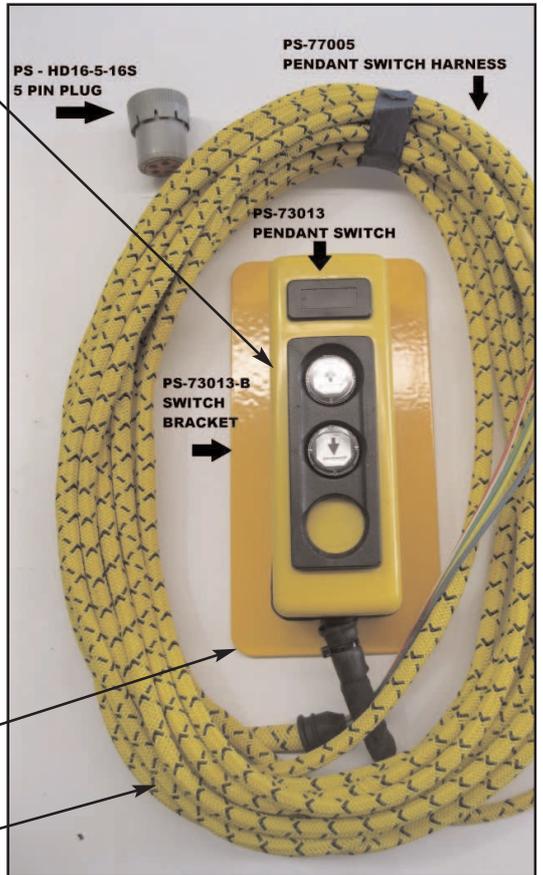
6

4

#### Control Pendant Switch

Mounted on Handrail

1



2

3

#### Cab Harness & Equipment

Refer Wiring Harness Drawings



7

8

# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### Section 4-5. Electrical System - Controls

See Photos Pg. 25

Item	Part No.	Part Name	Qty		
1	PS-73013	CONTROL PENDANT SWITCH	1		
2	PS-73013-B	CONTROL PENDANT BRACKET	1		
3	PS-77005	HAND RAIL SWITCH HARNESS	1		
4	PS-77009AR	AUTO RAISE HARNESS	1		Optional only
5	PS-77004	CABIN TO SWITCH HARNESS	1		
6	PS-75430	PROXIMITY SWITCH	2		1 x Optional
7	PS-77002	CABIN BOX LED LIGHT INDICATOR	1		
8	PS-77003	WIRING HARNESS IN CABIN	1		

### **WARNING**

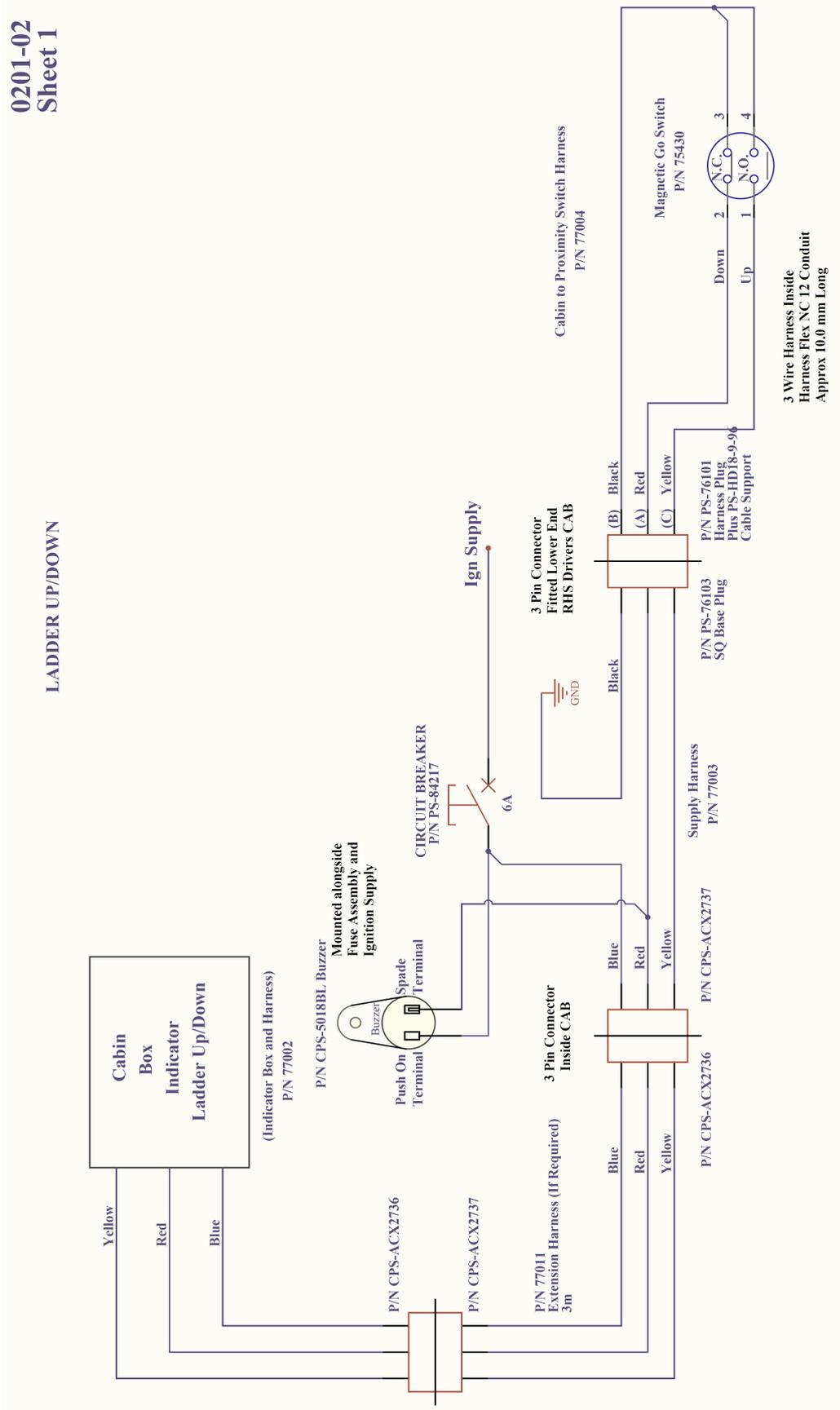
**LOW OR FAULTY BATTERIES WILL VOID  
WARRANTY ON THE POWER PACK AND ALL  
ELECTRICAL SWITCHES AND COMPONENTS**

# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### Section 4-5. Electrical Controls - Wiring 1



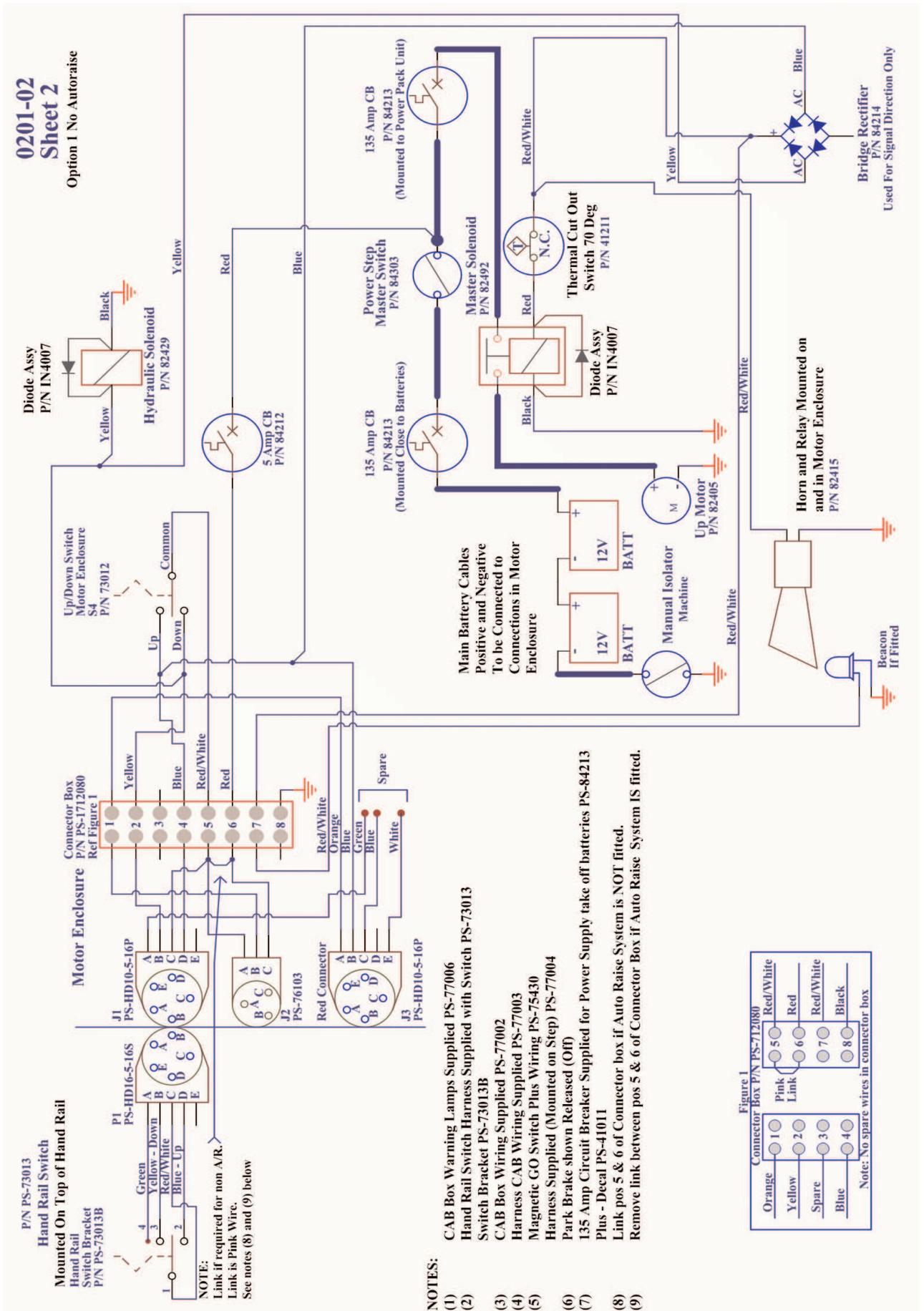
# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### Section 4-5. Electrical Controls - Wiring 2

NON-AUTO-RAISE



**0201-02**  
**Sheet 2**  
Option 1 No Autoraise

Diode Assy  
P/N IN4007

Up/Down Switch  
Motor Enclosure  
S4  
P/N 73012

Connector Box  
P/N PS-712080  
Ref Figure 1

Motor Enclosure  
P/N PS-73013B

Hand Rail Switch  
P/N PS-73013

Hydraulic Solenoid  
P/N 82429

5 Amp CB  
P/N 84212

135 Amp CB  
P/N 84213  
(Mounted Close to Batteries)

135 Amp CB  
P/N 84213  
(Mounted to Power Pack Unit)

Master Solenoid  
P/N 82492

Thermal Cut Out  
Switch 70 Deg  
P/N 41211

Diode Assy  
P/N IN4007

Bridge Rectifier  
P/N 84214  
Used For Signal Direction Only

Up Motor  
P/N 82405

Horn and Relay Mounted on  
and in Motor Enclosure  
P/N 82415

Beacon  
If Fitted

Manual Isolator  
Machine

Main Battery Cables  
Positive and Negative  
To be Connections to  
Enclosure

Red/White

Yellow

Red

Blue

Red/White

Red

Red/White

Red/White

Black

Black

Black

Orange

Blue

Green

Blue

Common

Up

Down

Red/White

Red

Red/White

Red/White

Yellow

Blue

Red/White

Red

Red/White

Red

Red/White

Black

Black

Black

Orange

Blue

Green

Blue

Common

Up

Down

Red/White

Red

Red/White

Red/White

Yellow

Blue

Red/White

Red

Red/White

Red

Red/White

Black

Black

Black

Orange

Blue

Green

Blue

Common

Up

Down

Red/White

Red

Red/White

Red/White

Yellow

Blue

Red/White

Red

Red/White

Red

Red/White

Black

Black

Black

Orange

Blue

Green

Blue

Common

Up

Down

Red/White

Red

Red/White

Red/White

Yellow

Blue

Red/White

Red

Red/White

Red

Red/White

Black

Black

Black

Orange

Blue

Green

Blue

Common

Up

Down

Red/White

Red

Red/White

Red/White

Yellow

Blue

Red/White

Red

Red/White

Red

Red/White

Black

Black

Black

Orange

Blue

Green

Blue

Common

Up

Down

Red/White

Red

Red/White

Red/White

Yellow

Blue

Red/White

Red

Red/White

Red

Red/White

Black

Black

Black

Orange

Blue

Green

Blue

Common

Up

Down

Red/White

Red

Red/White

Red/White

# FOLDING STAIRWAY

## Cat 824G Wheel Dozer

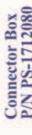
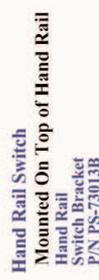
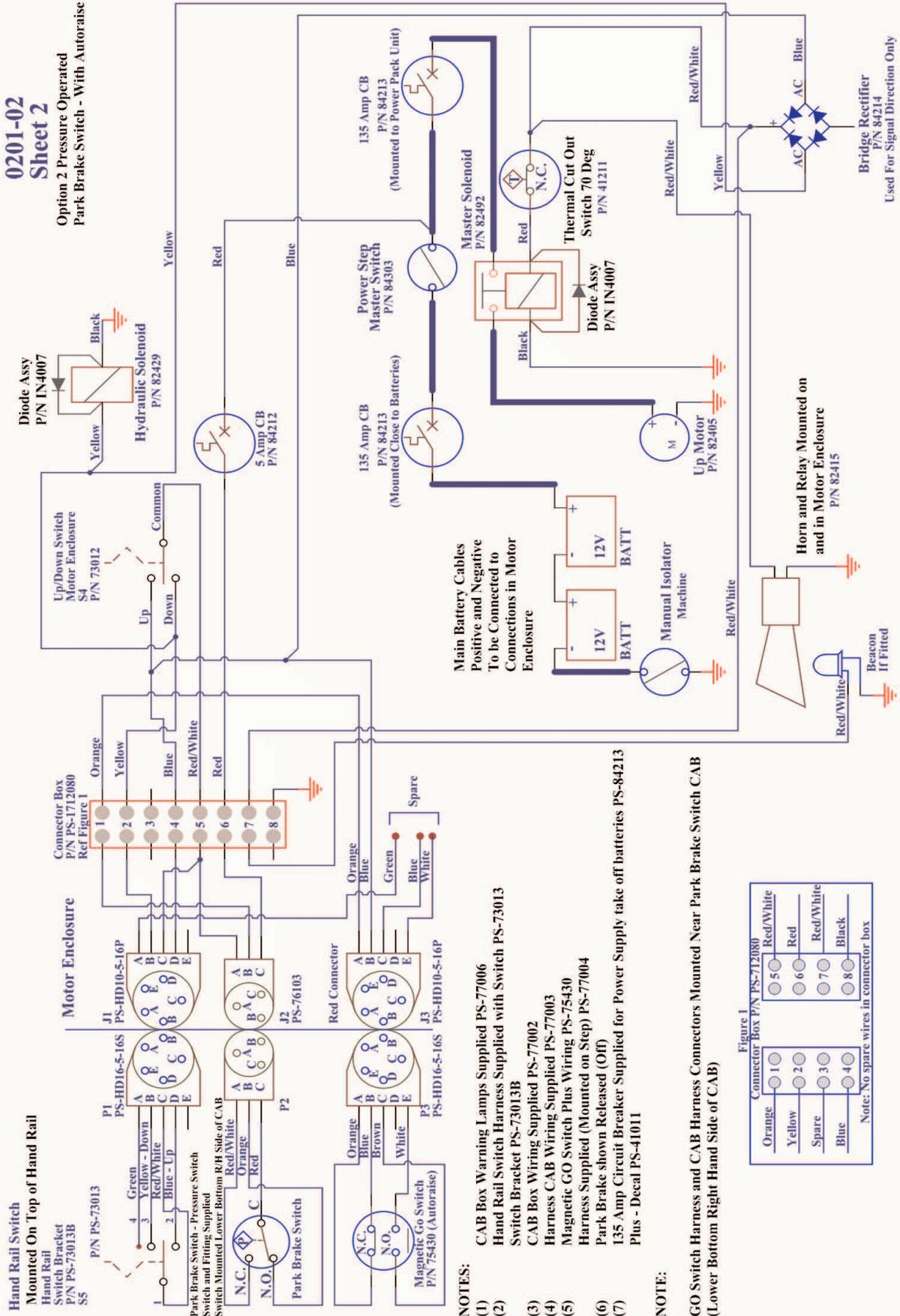


### Section 4-5. Electrical Controls - Wiring 3

**AUTO-RAISE**

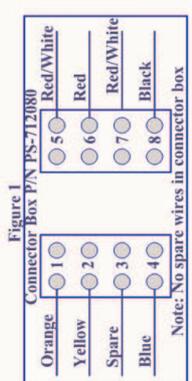
**0201-02**  
**Sheet 2**

Option 2 Pressure Operated  
Park Brake Switch - With Autoraise



- NOTES:**
- (1) CAB Box Warning Lamps Supplied PS-77006
  - (2) Hand Rail Switch Harness Supplied with Switch PS-73013
  - (3) Switch Bracket PS-73013B
  - (4) CAB Box Wiring Supplied PS-77002
  - (5) Harness CAB Wiring Supplied PS-77003
  - (6) Magnetic GO Switch Plus Wiring PS-75430
  - (7) Park Brake shown Released (OFF)
- 135 Amp Circuit Breaker Supplied for Power Supply take off batteries PS-84213 Plus - Decal PS-41011

**NOTE:**  
GO Switch Harness and CAB Harness Connectors Mounted Near Park Brake Switch CAB (Lower Bottom Right Hand Side of CAB)



# FOLDING STAIRWAY

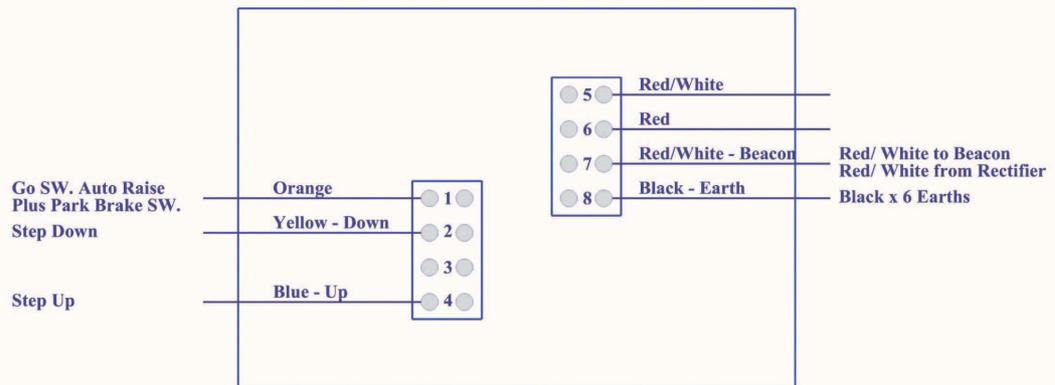
## Cat 824G Wheel Dozer



### Section 4-5. Electrical Controls - Wiring 3

0201-02  
Sheet 5

#### WIRING HARNESS 1



#### Park Brake Harness - P/No 77006-PB

<u>Plug Term</u>	<u>Colour</u>		<u>Terminal ID.</u>	
(C)	Red	-	COM	] Length 10m (Harness Flex No 12)
(A)	Red/White	-	N.C.	
(B)	Orange	-	N.O.	

#### Go Switch Harness (Auto Raise) P/No 77009-AR

<u>Plug Term</u>	<u>Colour</u>		<u>Terminal ID.</u>	
(B)	Blue	-	No. 1 Terminal N.C. Contact	] Length 10m (Harness Flex No 12)
(E)	White (Spare)	-	No. 2 Terminal N.O. Contact	
(A)	Orange	-	No. 3 Terminal N.C. Contact	
(C)	Brown (Spare)	-	No. 4 Terminal N.O. Contact	

#### Go Switch Harness (Cabin to Go Switch) P/No 77004 (Cabin Indicator Ladder Up/Down)

<u>Plug Term</u>	<u>Colour</u>		<u>Terminal ID.</u>	
(B)	Black	-	No. 1 Terminal N.C. Contact	] Length 10m (Harness Flex No 12)
(B)	Black	-	No. 2 Terminal N.O. Contact	
(Bridge No. 1 and No. 2 in Go Switch)				
(A)	Red	-	No. 3 Terminal N.C. Contact	
(C)	Yellow	-	No. 4 Terminal N.O. Contact	

#### Hand Rail Switch Harness (P/No 77010) (Handrail SW to Power Pack Box)

<u>Plug Term</u>	<u>Colour</u>		<u>SW Contacts</u>		<u>Switch Terminal No.</u>	
(C)	Red/White	-	No 1	-	No 5	] Length 10m (Harness Flex No 12)
(D)	Blue	-	No 2	-	No 4	
(B)	Yellow	-	No 3	-	No 2	
(A)	Green	-	No 4	-		

# FOLDING STAIRWAY

## Cat 824G Wheel Dozer



### Section 4-5. Electrical Controls - Wiring 4

## WIRING HARNESS 2

**0201-02**  
**Sheet 6**

#### Go Switch

##### Auto - Raise Connection

N.C.	-	Orange	-	Blue
N.O.	-	Brown	-	White (Spare)

#### Go Switch - Cabin Indicator

##### Up/Down Lights Connection

N.C.	-	Red	-	Black	Linked
N.O.	-	Yellow	-	Black	

#### Hand Control Switch - Mounted on Hand Rails (P/No 73013)

##### Power Step Wiring Harness (10m) and Connections Supplied

#### Contacts

1	-	Red/White	-	Power Supply
2	-	Blue	-	Up Switch
3	-	Yellow	-	Down Switch
4	-	Green	-	Start Sol Motor [FRS Power Pack only (Spare)]

#### Pendant Switch

##### Standard Switch Wiring and Connections

