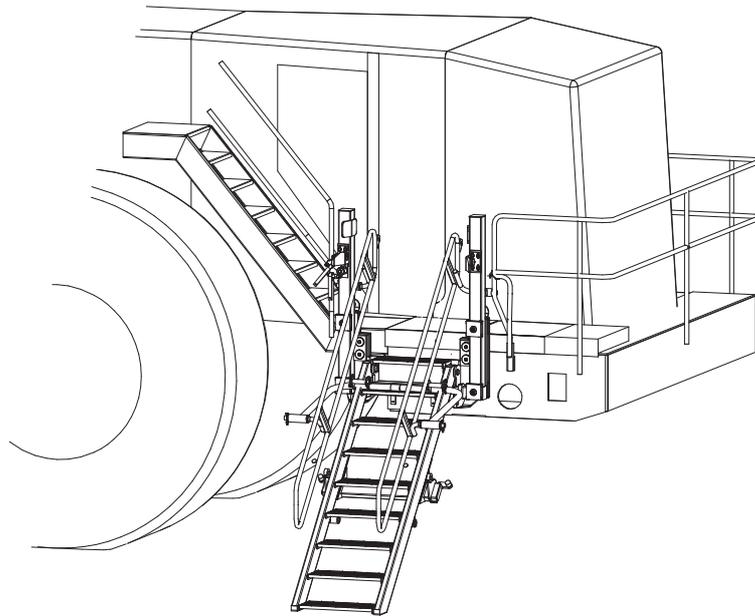


FOLDING STAIRWAY



Manual for Caterpillar 854K



Model No.: PSA-CAT854K-FS

Serial No.: PSA-854K-001 ~

Date Manufactured: Jan 2012

FOLDING STAIRWAY

Caterpillar 854K Wheel Dozer



CONTENTS

Page 3	Section 1 <u>Installation and Mounting Instructions</u> Installation Drawings: Bolting Pads Reinforcing
12	Section 2 <u>Recommended Maintenance procedure</u>
13	Section 3 <u>Operating Procedure</u>
	Section 4 <u>Drawings and Repair Parts lists</u>
14	4 Assembly Complete Parts List
16	4-1 Base Frame and Mounting Assembly Parts List
18	4-2 Stair Assembly Parts List
20	4-3 Latch Assembly Parts List
22	4-4 Hydraulic Cylinders Parts List Hydraulic Layout
25	4-5 Power Pack Parts List
28	4-6 Electrical Controls Wiring Diagrams

FOLDING STAIRWAY

Caterpillar 854K Wheel Dozer



Section 1 Installation Drawings Bolting Pads PS-24308

NOTE

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

PROCEDURE.

See Drawing 24308 Page 4.

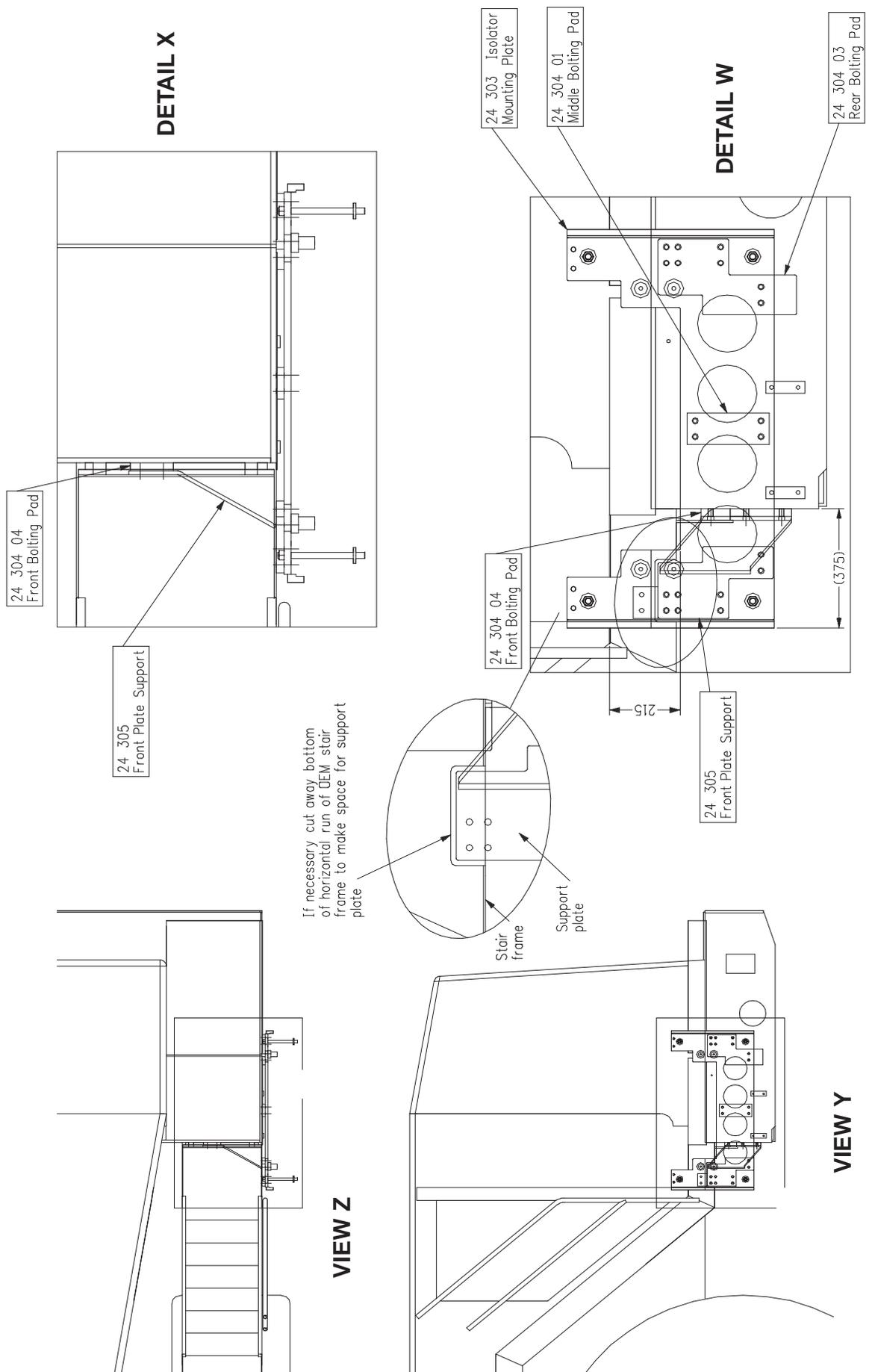
1. Fit the various Bolting Pads and Supports to the back of the Isolator Mounting Plate as shown in **Detail W**.
2. Place the bolting pads and supports against the rear bumper/fuel tank enclosure of the machine per **Detail W**. (First remove handrails and or other attachments to the bumper that would interfere with placement of the pieces. Tack weld all the bolting pads to the bumper with substantial tack welds. Notch out the underside of the horizontal run of the OEM stair frame if necessary to accommodate the front plate support, that is, if the stair frame protrudes past the alignment of the bumper.
3. Try the stair assembly on the isolator plate as shown in **Detail W**. Fit per drawing 24 313 except that the rubber isolator elements need not be fitted at this time - stair fitment not shown in this drawing. If the stair assembly as fitted would interfere with the hoses and fittings used for fuelling of the machine, it will be necessary to move the whole stair assembly forward.
4. Fully weld the three bolting pads to the bumper with 6mm continuous fillet welds. Before welding, ensure that the fuel tank, which is inside the bumper, will not be excessively and dangerously heated by the welding. Take steps to eliminate any danger if necessary. Note that welding and cutting will be required under the bumper as well - to drgs 24 311 & 312 - and this should be taken into account now as well.

FOLDING STAIRWAY

Caterpillar 854K Wheel Dozer



Section 1 Installation Drawings Bolting Pads PS-24308

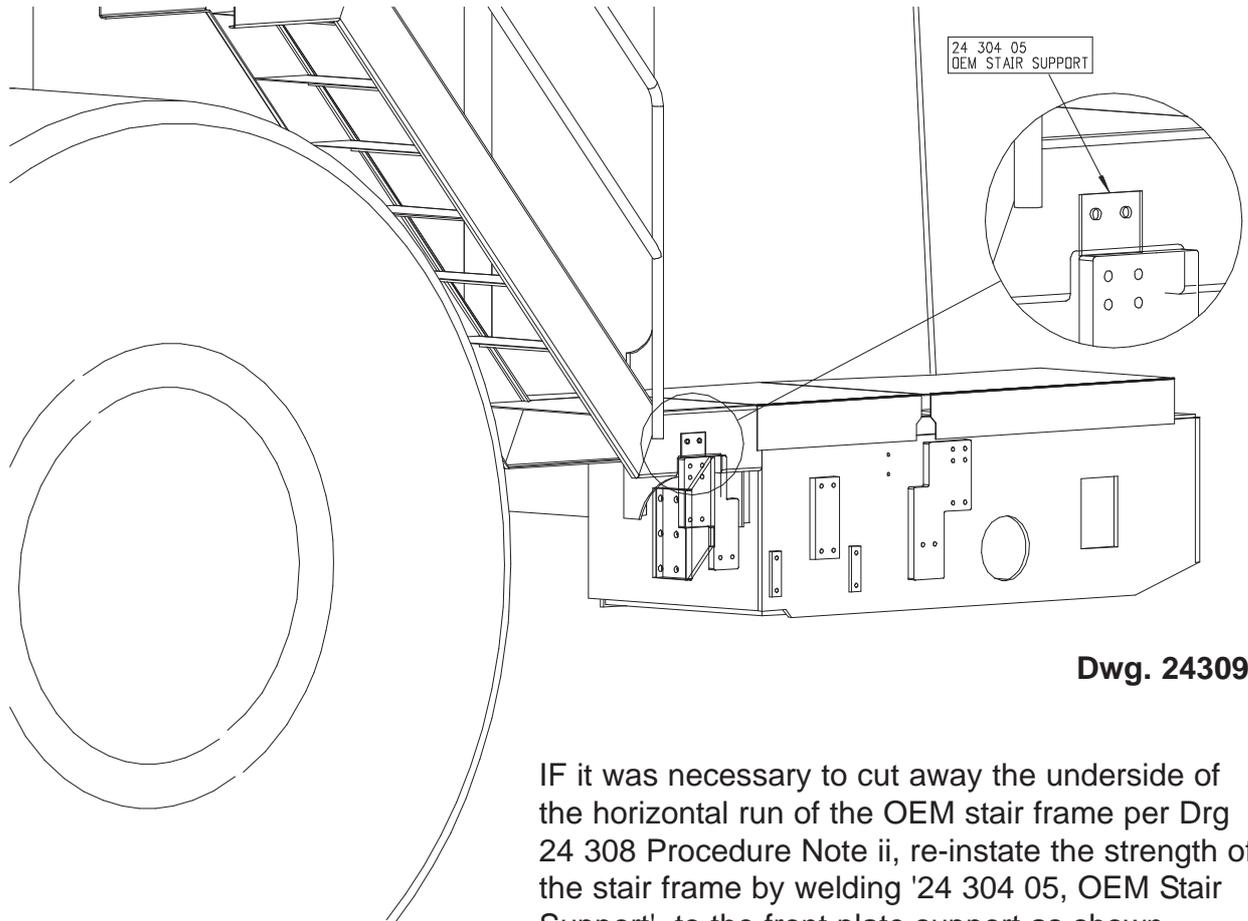


FOLDING STAIRWAY

Caterpillar 854K Wheel Dozer



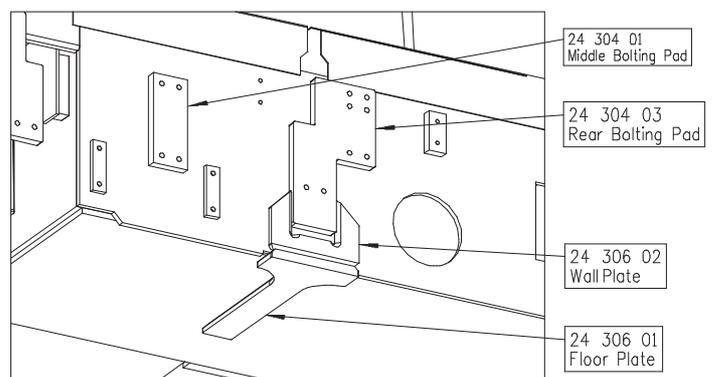
Section 1 Installation Drawings Reinforcing OEM Stair PS-24309/10



Dwg. 24309

IF it was necessary to cut away the underside of the horizontal run of the OEM stair frame per Drg 24 308 Procedure Note ii, re-instate the strength of the stair frame by welding '24 304 05, OEM Stair Support' to the front plate support as shown above, drill matching bolt holes in the stair frame and bolt the two together. If the stair frame was not cut away, this step can be omitted.

The bumper box wall must be reinforced to accommodate the loads applied by the installation and use of the stair set, per the above image. Details are given in subsequent drawings.



Dwg. 24310

FOLDING STAIRWAY

Caterpillar 854K Wheel Dozer



Section 1 Installation Drawings Bumper Reinforcements PS-24311/2

NOTE

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

PROCEDURE.

See Drawing **24311** Page 7

1. Cut away the bottom of the wall of the OEM bumper/tank enclosure over a length of 275mm centred on the bottom of the rear bolting pad. Cut up to the alignment of the floor of the bumper/tank enclosure. Per **Views Z-1** and **Y** and **Detail X**. Note that the internal corners at the ends of the cut must be radiused to approx R6 per **Detail W** - this can be done while cutting or by rectification with weld later.
2. Cut a groove centred on the abutment of the wall and floor up to a depth of 10mm along the length of the cut (from 'i' above), using gas-oxygen gouge or electric air-arc. The width of the groove is not important as long as it can be filled with weld per 'iii' below. See **View Y & Detail X**.
3. Fill the groove cut at the junction of the wall and floor (from '2' above) with weld to a level averaging 2mm above the floor plate - that is, leaving 2mm NOT FILLED with weld. Grind back any protrusions to the alignment of the underside of the floor. **USE SAFE WORKING PRACTICES AT ALL TIMES**, including, if necessary, making the fuel tank safe from the effects of heat caused by the cutting, welding and grinding. Refer also to drawing 24 308.

PROCEDURE.

See Drawing **24312** Page 8

1. Attach Floor Plate 24 306 01 under the bumper floor per **Views Z & Y** and **Detail V**, protruding 25-27 outside the bumper wall alignment. At this stage it can tack-welded in place except that the 12mm fillet weld shown in **Detail V** must be finished before moving on to '2'.
2. Fit and weld Wall Plate 24 306 02 per **Views X & W** and **Detail U**.
3. Ensure that the re-entrant corners of the at the ends of the cut out at the bottom of the bumper wall are round and smooth, per **Detail T**. Fill & grind if necessary.

USE SAFE WORKING PRACTICES AT ALL TIMES.

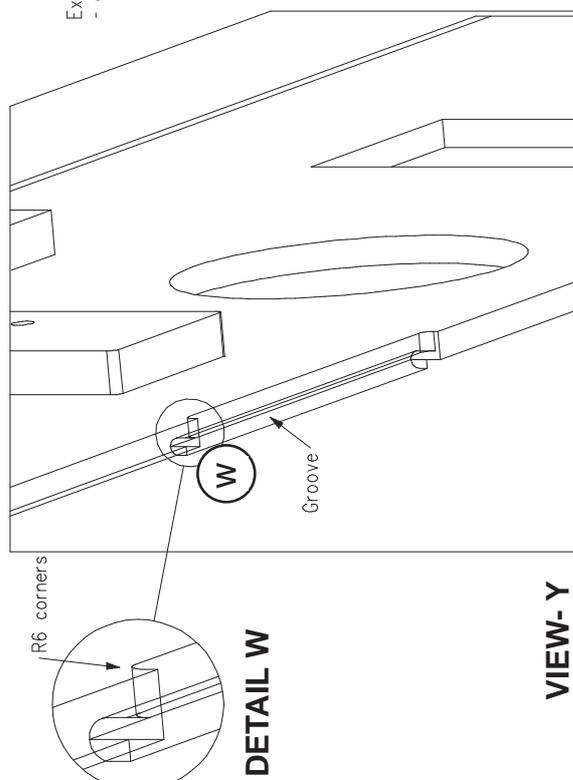
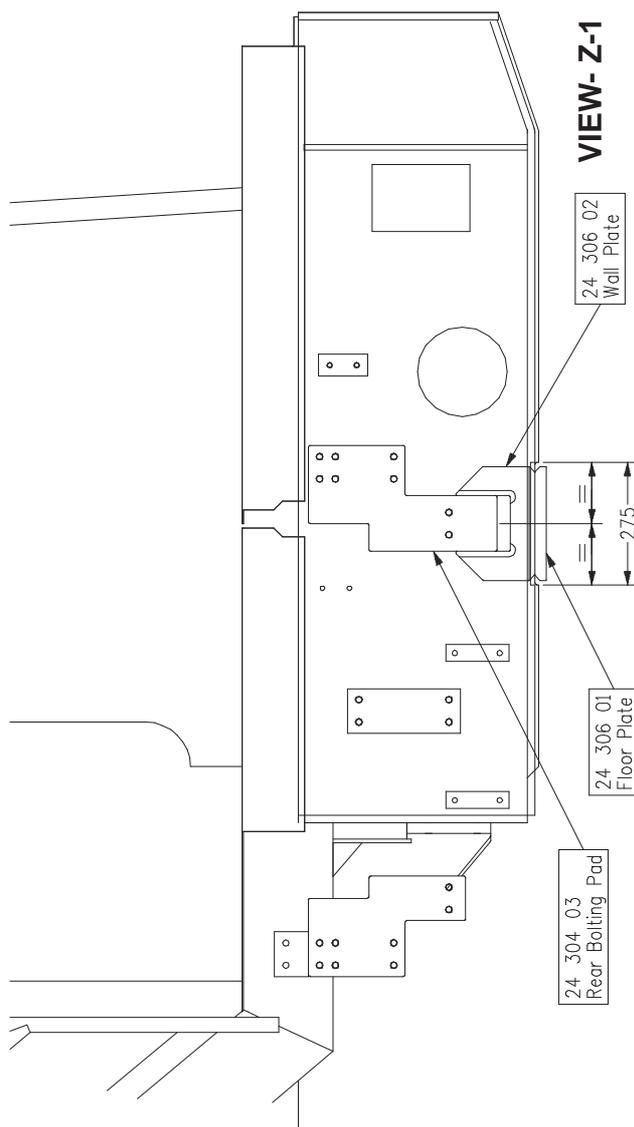
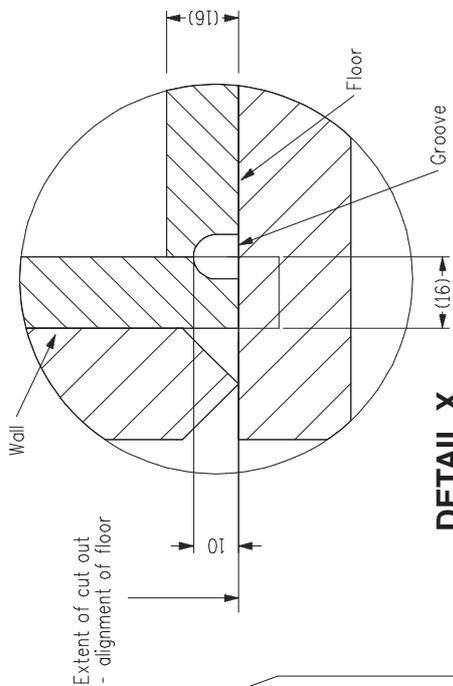
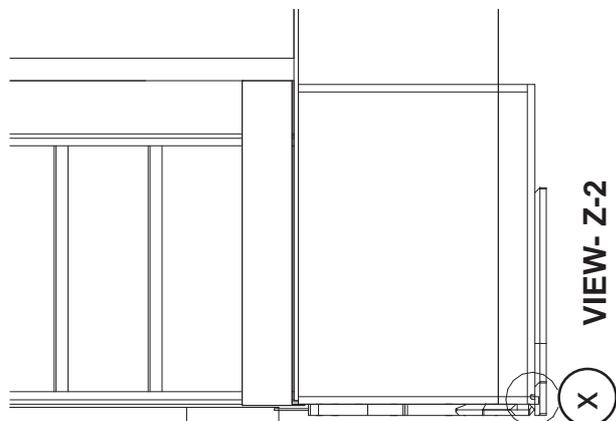
Take note of the warning in Drg 24 308 about welding near the fuel tank and take precautions as required.

FOLDING STAIRWAY

Caterpillar 854K Wheel Dozer



Section 1 Installation Drawings Bumper Reinforcements PS-24311

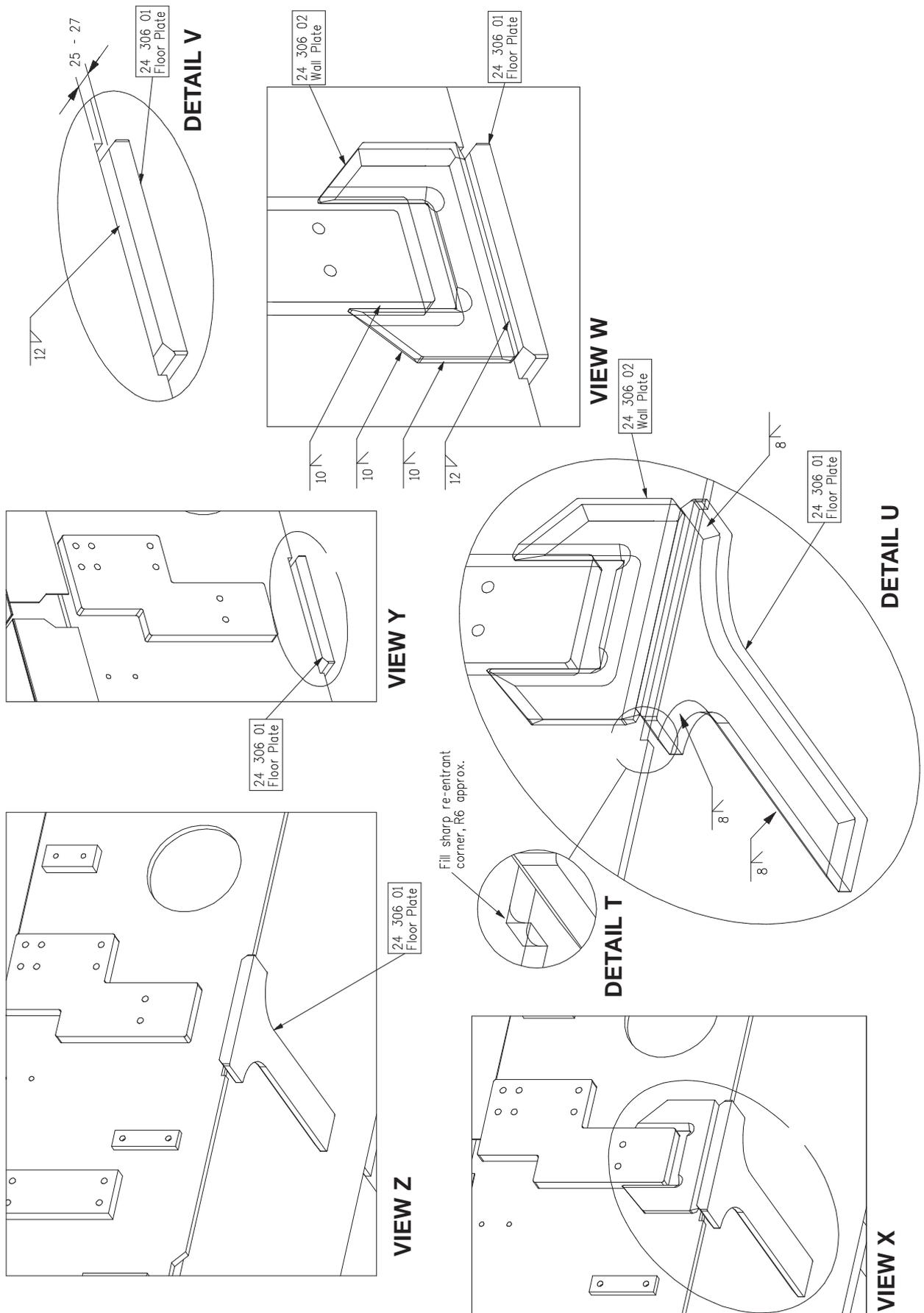


FOLDING STAIRWAY

Caterpillar 854K Wheel Dozer



Section 1 Installation Drawings Bumper Reinforcements PS-24312



FOLDING STAIRWAY

Caterpillar 854K Wheel Dozer



Section 1 Installation Drawings Stair Set PS-24313
See Drawing Page 10

NOTE

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

PROCEDURE.

1. With the Isolator Mounting Plate **24 303** bolted to the various bolting pads, assemble the stair set, generally per Drg **23 859** (but with only one hydraulic actuator).
2. Re-fit handrails to the loader, if necessary using post base components per **Detail W**. Attach the Bolting Block to the wall of the bumper in a location to suit with a 6mm continuous fillet weld. Cut and bend the Post to suit. Observe previously mentioned precautions when cutting, grinding or welding in the vicinity of the fuel tank.
3. Fit the hydraulic power unit to the loader in a suitable location and connect and fasten the hydraulic hoses. Complete the wiring.
4. Fit a manual latch release lanyard to suit.

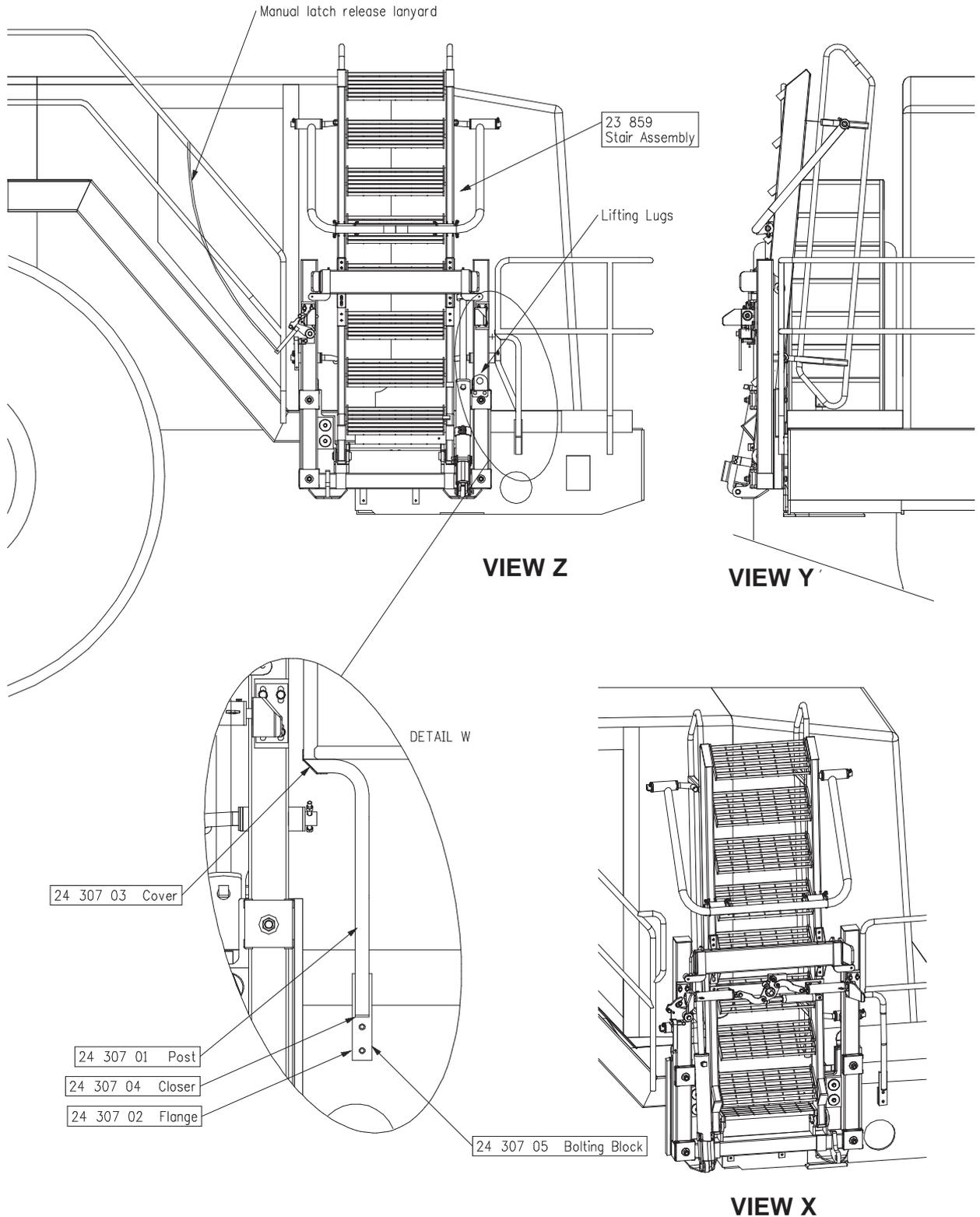
FOLDING STAIRWAY

Caterpillar 854K Wheel Dozer



Section 1 Installation Drawings

Stair Set PS24313



FOLDING STAIRWAY

Caterpillar 854K Wheel Dozer



Section 1 Installation and Mounting Instructions (cont.)

WARNING

Raising the POWER STEP platform by external means can create a vacuum in the hydraulic cylinder and create the opportunity to allow air into the hydraulic system, defeating the inherent safety features of the POWER STEP.

This must be avoided, to maintain safe operation of the POWER STEP.

In instances where the use of external means to raise the platform must be used, please follow the following instructions:

Loosen hard plumbed hydraulic lines on cylinder side of lock valve on cylinder.

Raise platform by available means.

Note: Make necessary arrangements to collect displaced oil, and be aware that air enters the piston side of the cylinder as platform is raised.

Lock in raised position.

Re-tighten hydraulic fittings.

SECURE THE PLATFORM IN THE RAISED POSITION, MECHANICALLY, CHAIN & TAGOUT THE POWER STEP

To recommission the POWER STEP:

Loosen hydraulic fittings on cylinder side of lock valve.

Note: Collect displaced oil.

Lower platform to lowest position, using alternate safety approved means, fully retracting cylinder. Ensure all personnel are clear of step radius.

Operate electrical control switch to purge air from the hydraulic line systems, lock valve and cylinder.

Tighten the hydraulic fittings either side of lock valves to restriction fittings.

Cycle step unloaded several times to purge all air from hydraulic system.

The Power Step will not operate correctly if there is any air in the hydraulic circuit (due to the incorrect operation of the lock valve).

NOTE.

THE RELIEF PRESSURE OF THE POWERPACK IS TO BE SET TO 1500PSI.

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

Caterpillar 854K 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 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 (5.0 litres)

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

Check and inspect all main bolts on stairway system.
Retorque if required.

Repeat daily check as above

FOLDING STAIRWAY

Caterpillar 854K 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 Ladder Access System is clear of people and obstacles, and lower ladder by operating the two position electrical switch adjacent to the ladder, to the down position by pressing the switch down.

Hold the switch in the down position until ladder 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 ladder with caution.

To Raise Stairway

Ascend the ladder onto the landing of the Loader.

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

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

The ladder 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.

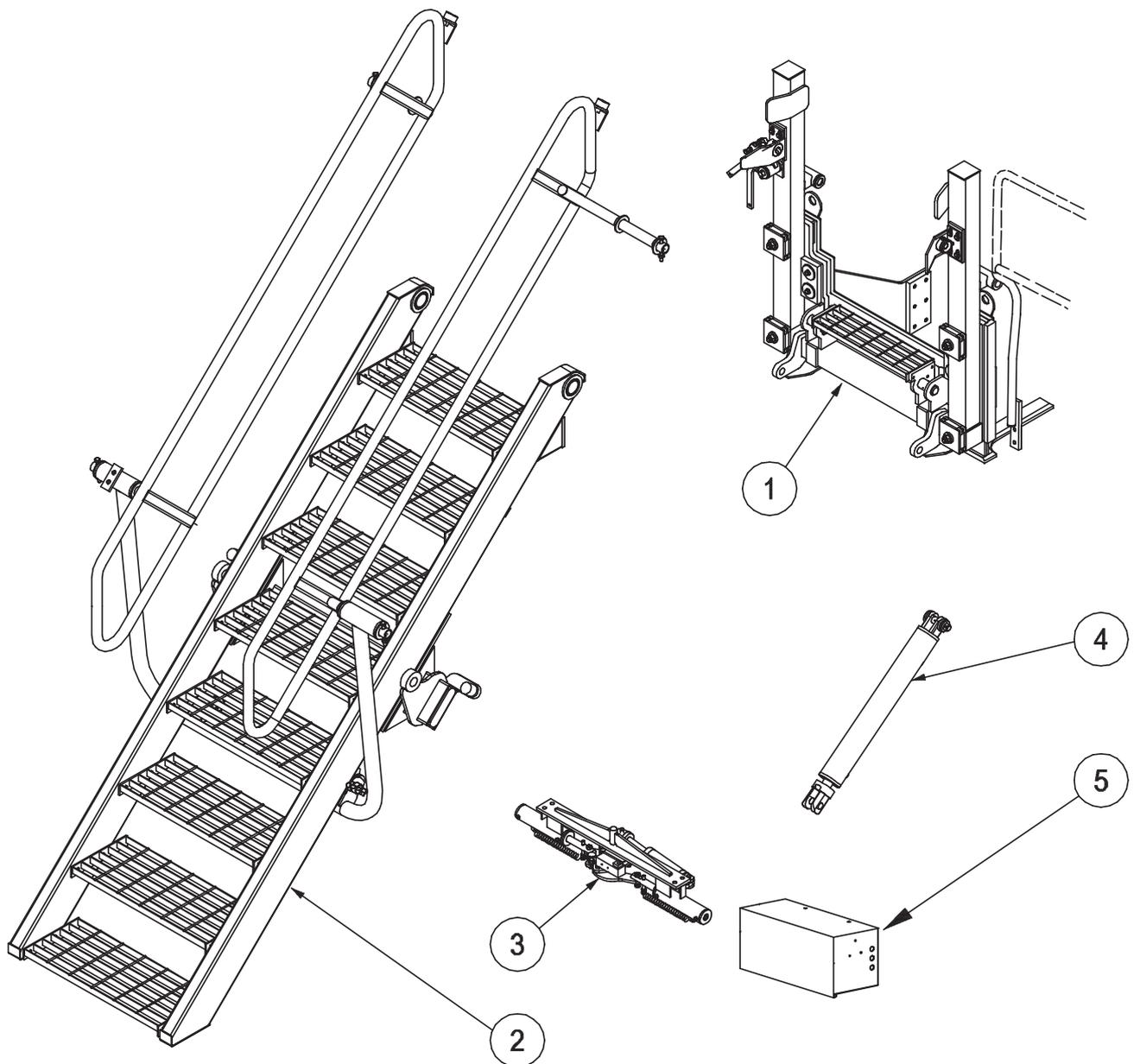
[DO NOT EXCEED 10mm DISTANCE BETWEEN THE SWITCH AND STRIKER PLATE].
Test by raising and lowering the Power Step a couple of times and adjust again if necessary.

FOLDING STAIRWAY

Caterpillar 854K Wheel Dozer



Section 4 Assembly Complete



FOLDING STAIRWAY

Caterpillar 854K Wheel Dozer



Section 4 Assembly Complete

See Drawing Page 14

ITEM	PART NO.	PART NAME	QTY		
	PSA-CAT854K-FS	ASSEMBLY COMPLETE	1		
1	PS-23838A	STAIR BASE FRAME & MOUNTING	1		
2	PS-23852A	STAIR ASSEMBLY	1		
3	PS-23847A	LATCH ASSEMBLY	1		
4	PS-62996-A	HYDRAULIC CYLINDERS (Stair)	1		
5	PS-80103A-SLD	POWER PACK	1		

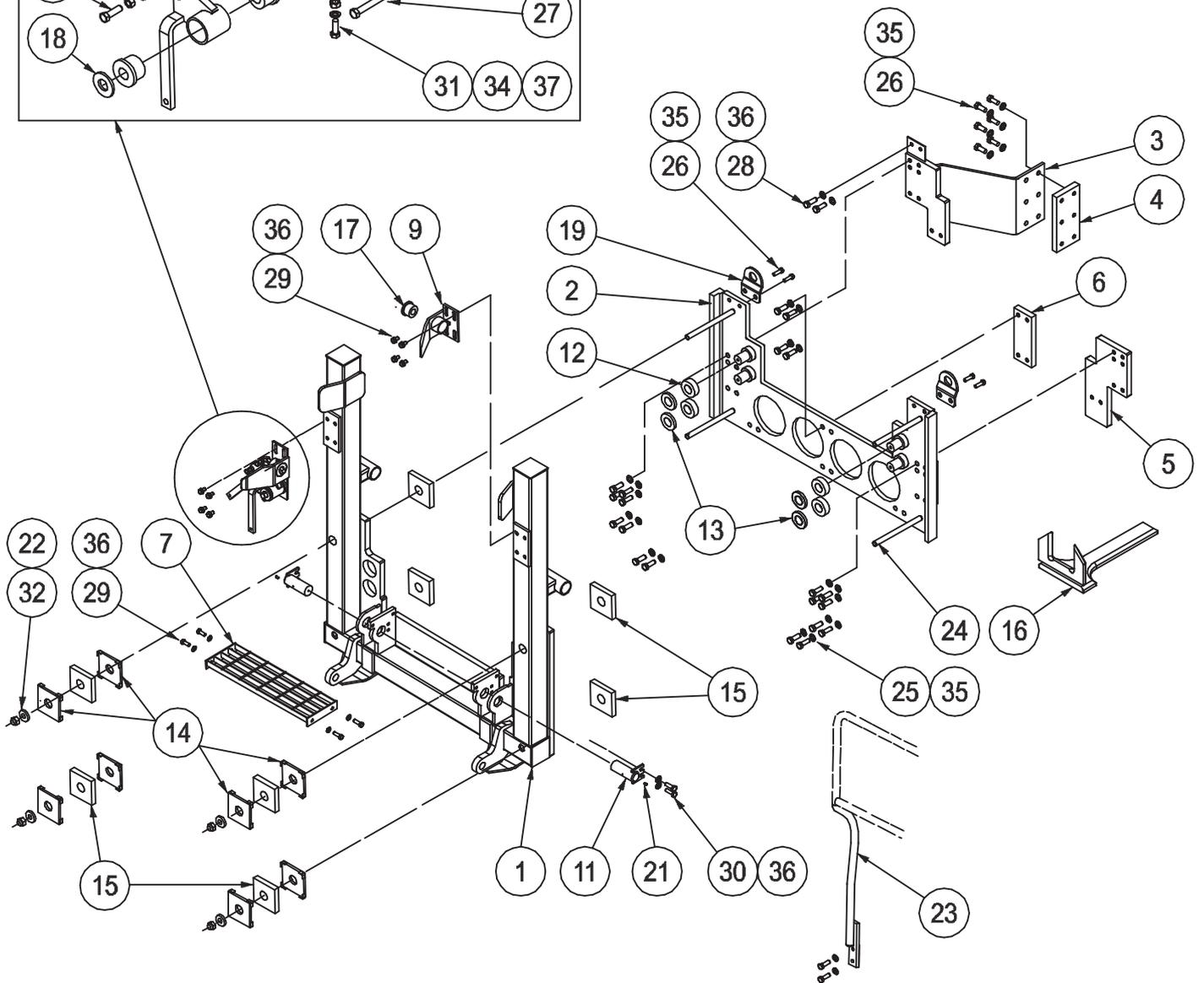
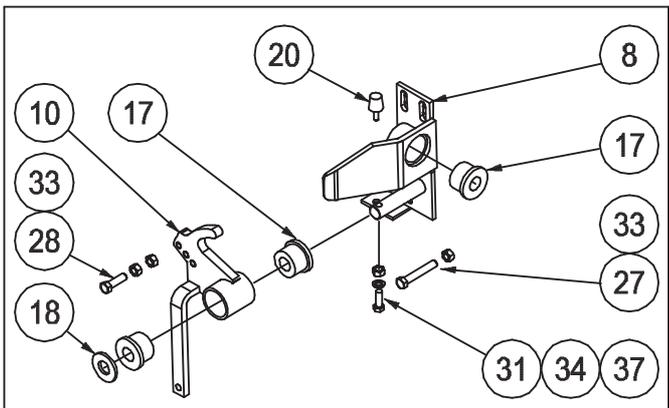
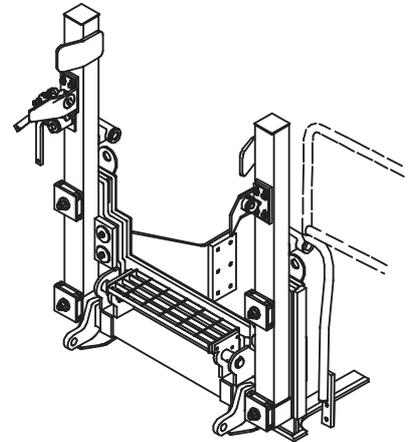
FOLDING STAIRWAY

Caterpillar 854K Wheel Dozer



Section 4.1 Stair Base Frame and Mounting Assembly PS-23838A

See Parts List Pg. 17



FOLDING STAIRWAY

Caterpillar 854K Wheel Dozer



Section 4.1 Stair Base Frame and Mounting

PS-23838A

See Drawing Page 16

PS-23838-A (Excl.Items 2, 3, 4, 5, 6, 7,19, 23, 24, 25, 26, 32, 35, 36)

Item	Part No.	Part Name	Qty		
1	PS-23838	BASE FRAME	1		
2	PS-24303	ISOLATOR MOUNTING PLATE	1		
3	PS-24305	FRONT PLATE SUPPORT	1		
4	PS-24304-04	FRONT BOLTING PAD	1		
5	PS-24304-03	REAR BOLTING PAD	1		
6	PS-24304-01	MIDDLE BOLTING PAD	1		
7	PS-23839	TOP STAIR TREAD	1		
8	PS-23841-98	STRIKER-LEFT SIDE	1		
9	PS-23841-99	STRIKER-RIGHT SIDE	1		
10	PS-23854A	MANUAL RELEASE LEVER	1		
11	PS-23828	HINGE PIN	2		
12	PS-23836-02	SHEAR ISOLATOR ELEMENT	4		
13	PS-23834-01	SHEAR ISOLATOR CAP	4		
14	PS-23833-99	ISOLATOR COVER PLATE	8		
15	PS-23836-01	FACE ISOLATOR ELEMENT	8		
16	PS-24306-02	BUMPER WALL REINFORCEMENT	1		
17	PS-23846-02	LATCH BUSH	8		
18	PS-23846-03	RELEASE LEVER SPACER	1		
19	PS-23860	LIFT LUG	2		
20	PS-1066553	LATCH LEVER BUFFER Mackay 12252555 M6	1		
21	PS-61006-2	GREASE NIPPLE M6	2		
22	PS-23834-03	FACE ISOLATOR WASHER	4		
23	PS-24307A	HANDRAIL PIECE	1		
24	PS-M20X250	THREADED ROD-M20 x 250	4		
25	CPS-M16X45ZP	BOLT-M16 x 45	20		
26	CPS-M16X35ZP	BOLT-M16 x 35	10		
27	CPS-M12X75ZP	BOLT-M12 x 75	1		
28	CPS-M12X35ZP	BOLT-M12 x 35	2		
29	CPS-M12X25ZP	BOLT-M12 x 25	8		
30	CPS-M12X20ZP	BOLT-M12 x 20	8		
31	CPS-M8X35ZP	BOLT-M8 x 35	1		
32	CPS-M20NZP	NUT-M20	6		
33	PS-M12NZP	NUT-M12	4		
34	PS-M8NZP	NUT-M8	1		
35	CPS-M16WH	WASHER-HARDENED-M16	28		
36	CPS-M12WH	WASHER-HARDENED-M12	16		
37	CPS-M8WH	WASHER-HARDENED-M8	2		

FOLDING STAIRWAY

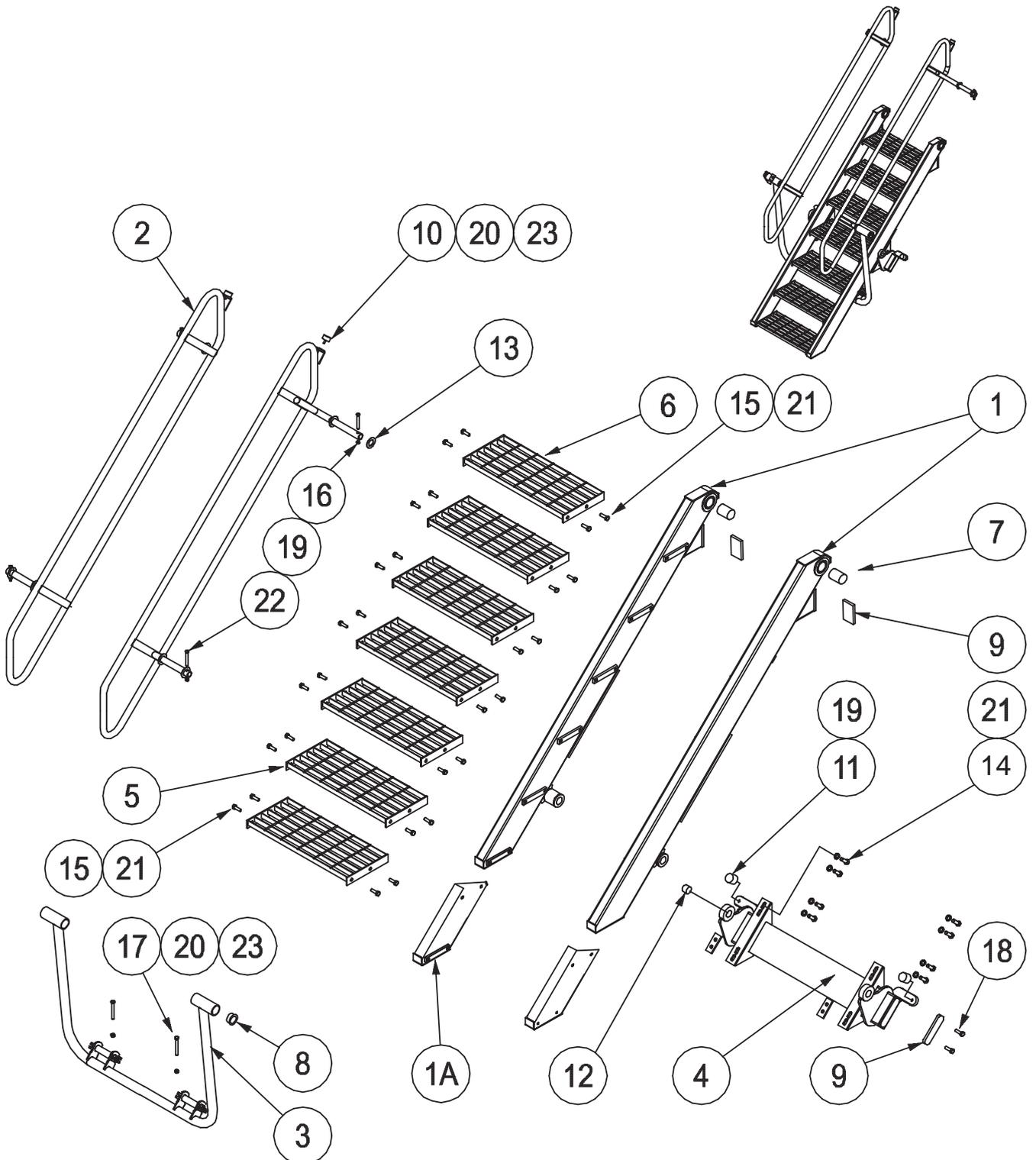
Caterpillar 854K Wheel Dozer



Section 4-2 Stair Assembly

PS- 23-852A

See Parts List Page 19



FOLDING STAIRWAY

Caterpillar 854K Wheel Dozer



Section 5-2 Stair Assembly

PS- 23852A

See Drawing Page 18

Item	Part No.	Part Name	Qty		
1	PS-23852A	STAIR STILE (6 Tread)	2		
1A	PS-23868	STAIR EXTENSION-(Single Tread)	1set		
2	PS-23853A	STAIR HANDRAILS	2		
3	PS-23863	HANDRAIL LINK POST	1		
4	PS-23849	STAIR ACTUATOR BEAM	1		
5	PS-22266	STAIR TREAD	7		
6	PS-23839	STAIR TREAD -TOP	1		
7	PS-23857	HINGE BUSH	2		
8	PS-23858A	HANDRAIL BUSH	4		
9	PS-23848-07	BUMPER PAD (Rubber)	2		
10	PS-40002	BUFFER-RUBBER-MACKAY M12402055 M8	2		
11	PS-40003	BUFFER-RUBBER-MACKAY M12503555 M10	2		
12	PS-23849-01	BUSH-(Stair Actuator Beam)	2		
13	PS-23853-05	WASHER	4		
14	CPS-M12X30ZP	BOLT-M12 x 30	4		
15	CPS-M12X20ZP	BOLT-M12 x 20	24		
16	CPS-M10X85ZP	BOLT-M10 x 85	4		
17	CPS-M8X75ZP	BOLT-M8 x 75	4		
18	CPS-M6X15ZP	BOLT-M6 x 15	4		
19	CPS-M10NN	NUT-NYLOC-M10	4		
20	CPS-M8NN	NUT-NYLOC-M8	4		
21	CPS-M12WH	WASHER-HARDENED-M12	28		
22	CPS-M10WH	WASHER-HARDENED-M10	10		
23	CPS-M8WH	WASHER-HARDENED-M8	10		

FOLDING STAIRWAY

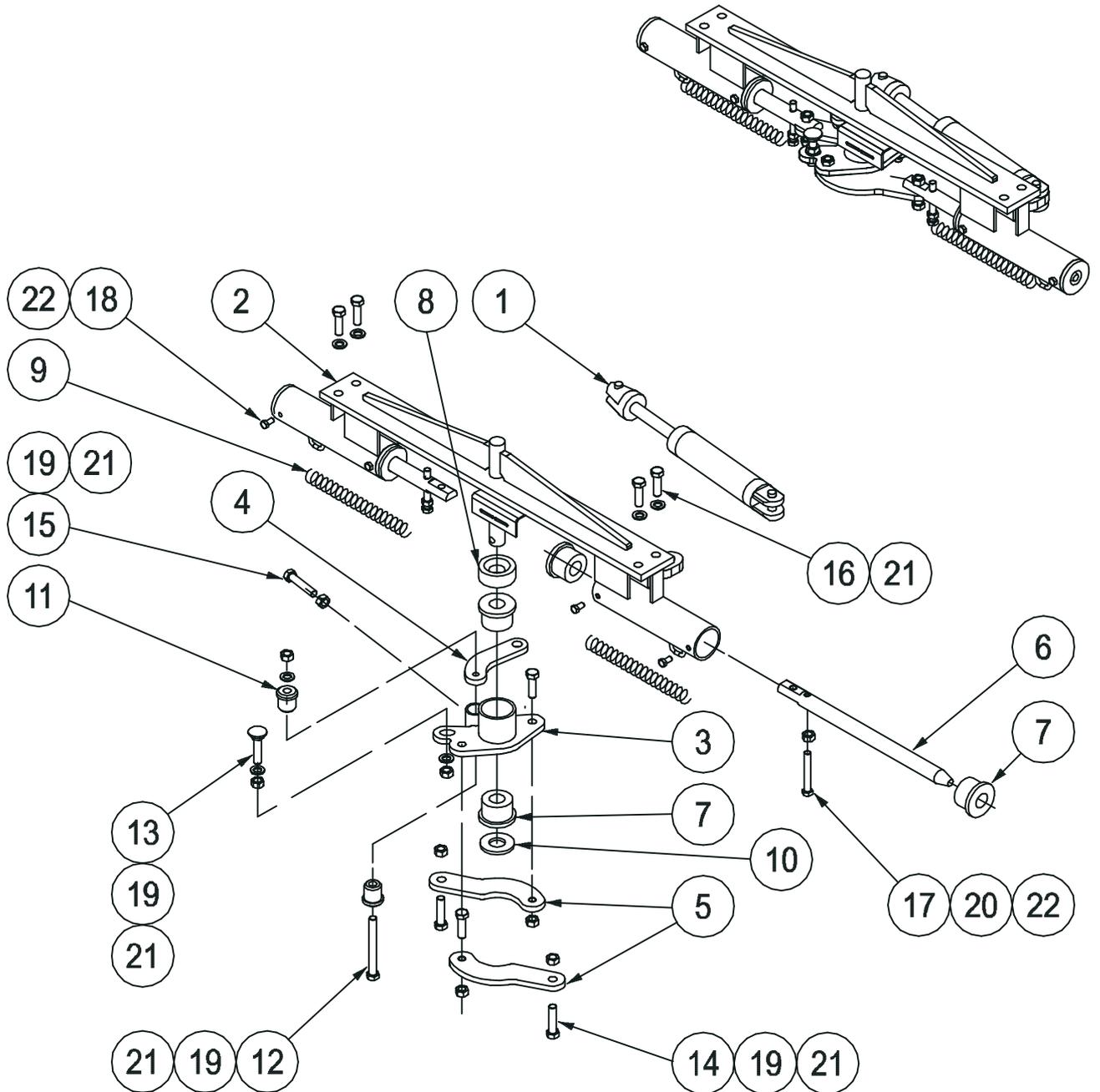
Caterpillar 854K Wheel Dozer



Section 4-3 Latch Assembly

PS-23847A

See Parts List Pg.21



FOLDING STAIRWAY

Caterpillar 854K Wheel Dozer



Section 4-3 Latch Assembly

PS-23847A

See Drawing Page 20

Item	Part No.	Part Name	Qty		
1	PS-62997	CYLINDER	1		
2	PS-23842	LATCH BASE	1		
3	PS-23845-99	LATCH WRIST	1		
4	PS-23845-98	ACTUATOR ARM	1		
5	PS-23844-01	BOLT LINK	2		
6	PS-23843	LATCH BOLT	2		
7	PS-23846-02	LATCH BUSH	6		
8	PS-23846-01	WRIST SPACER	2		
9	PS-39008-SPRING	SPRING	2		
10	PS-23844-02	WASHER	4		
11	PS-S245	LATCH BUSH-(WRIST PLATE) S245	2		
12	PS-M12X110ZP	BOLT-M12 x 110	1		
13	CPS-M12X55ZP	BOLT-M12 x 55 (Striker)	1		
14	CPS-M12X40ZP	BOLT-M12 x 40	4		
15	CPS-M12X35ZP	BOLT-M12 x 35	1		
16	CPS-M12X25ZP	BOLT-M12 x 25	4		
17	CPS-M10X75ZP	BOLT-M10 x 75	2		
18	CPS-M10X15ZP	BOLT-M10 x 15	4		
19	CPS-M12NZP	NUT-M12	1		
20	CPS-M10NZP	NUT-M10	6		
21	CPS-M12WH	WASHER-HARDENED-M12	12		
22	CPS-M10WH	WASHER-HARDENED-M10	6		

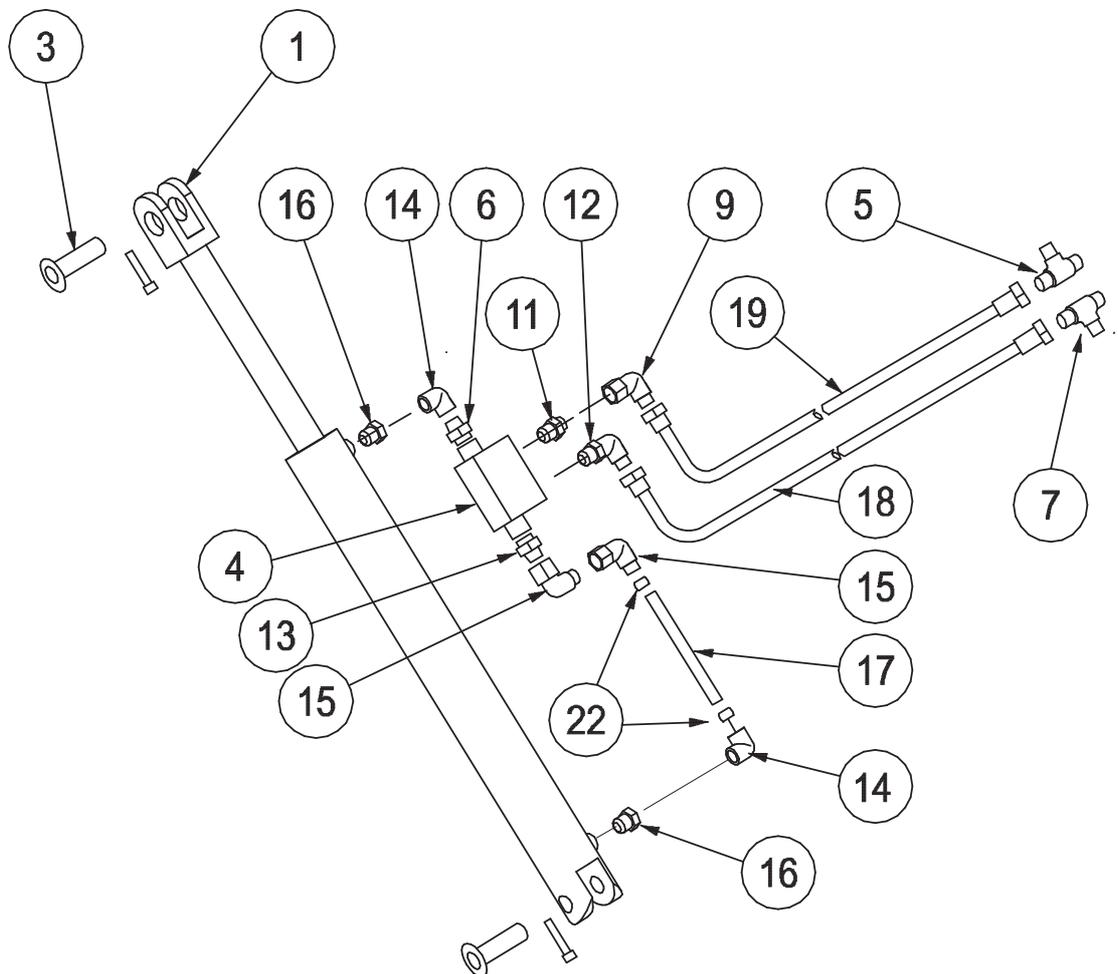
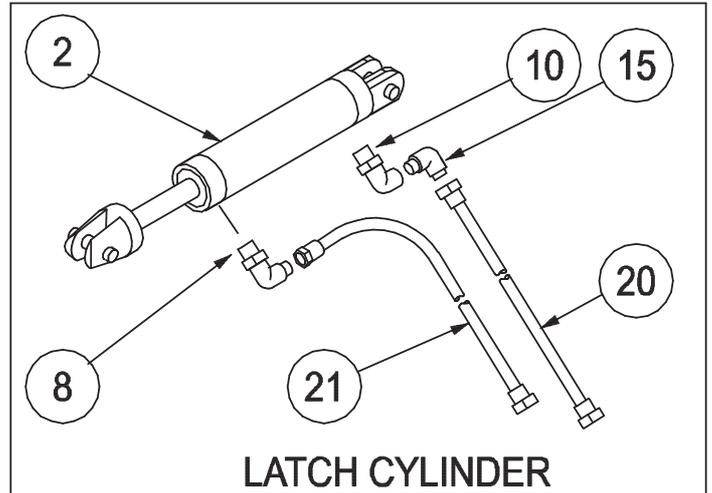
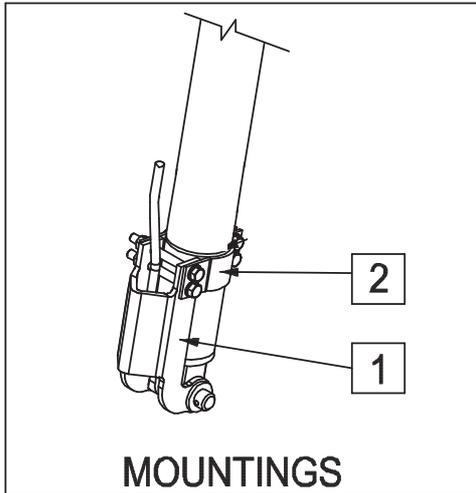
FOLDING STAIRWAY

Caterpillar 854K Wheel Dozer



Section 4-4 Hydraulic Cylinder & Plumbing

Cyl. P/No. PS- 62996-AH
Latch Cyl. PS- 62997-A



FOLDING STAIRWAY

Caterpillar 854K Wheel Dozer



Section 4-4 Hydraulic Cylinders & Plumbing

See Drawing 22

STAIR & LATCH CYLINDERS

PS-62996-HPK-FS Hard Plumbing Kit (Items 4, 6, 9, 11 - 15, 17 & 22)

Item	Part No.	Part Name	Qty		
1	PS-62996-A	HYDRAULIC CYLINDER ASSEMBLY	1		
-	PS-63103	SEAL KIT-STAIR (NOT SHOWN)	1		
2	PS-62997	HYDRAULIC CYLINDER - LATCH	1		
-	PS-62997-SK	SEAL KIT-LATCH (NOT SHOWN)	1		
3	PS-23856	CYLINDER PINS	2		
4	PS-63201	VALVE - PILOT OPERATED LOCKING	1		
5	PS-61140	FITTING-T -7/16"	1		
6	PS-61145	FITTING - 9/16" JIC SWIVEL	1		
7	PS-61149	FITTING - T 9/16"	1		
8	PS-61150	FITTING - ELBOW 7/16"	1		
9	PS-61151	FITTING - ELBOW 7/16"	1		
10	PS-61152	FITTING - ELBOW 9/16"	1		
11	PS-61153	FITTING - 1/4" BSPPx7/16" STRAIGHT	1		
12	PS-61154	FITTING - ELBOW- O RING 1/4BSPPx7/16" JIC	1		
13	PS-61157	FITTING - STRAIGHT 1/4"BSPPx9/16" JIC	1		
14	PS-61158-5mm	FITTING - 5mm RESTRICTION 90 DEG	2		
15	PS-61159	FITTING- ELBOW 9/16"	3		
16	PS-61163	REDUCER JIC x BSPP	2		
17	PS-61160	TUBE-900/1200	1		
18	PS-60051-1.2M 9/16	HOSE-HYDR. (9/16" JIC ST. SWIVEL 1.2M)	1		
19	PS-60050-1.2M 7/16	HOSE-HYDR. (7/16" JIC ST. SWIVEL 1.2M)	1		
20	PS-60051-1.65M 9/16	HOSE-HYDR. (9/16" JIC ST. SWIVEL 1.65M)	1		
21	PS-60050-1.8M 7/16	HOSE-HYDR. (7/16" JIC ST. SWIVEL 1.8M)	1		
22	PS-60031-FT	FERRULES	2		

MOUNTINGS

Item	Part No.	Part Name	Qty		
1	PS-23855-98	PORT SHIELD PLATE	1		
2	PS-23855-02-5	PORT SHIELD CLAMP	2		

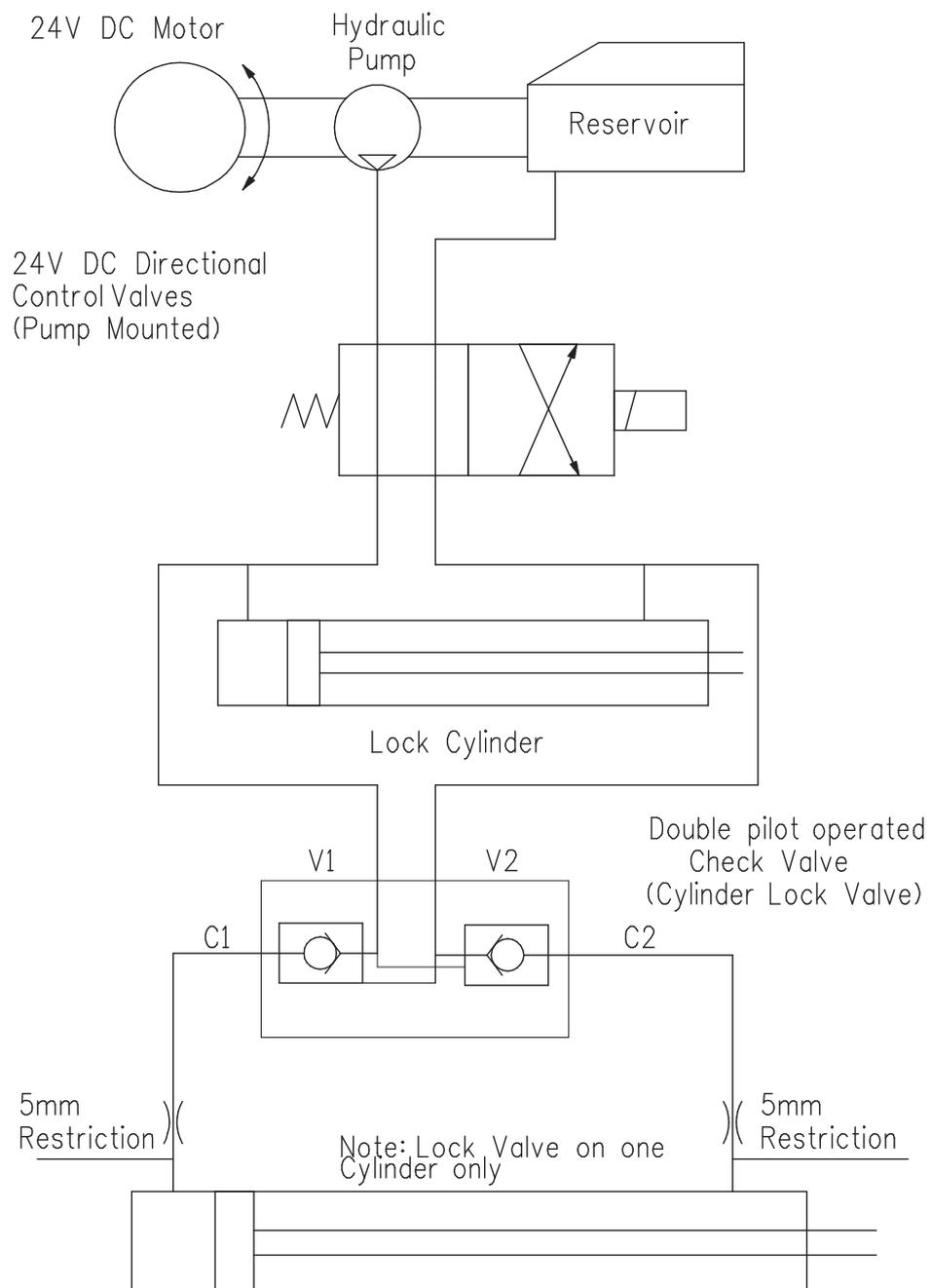
FOLDING STAIRWAY

Caterpillar 854K Wheel Dozer



Section 4-4 Hydraulics (Valve Diagram)

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



FOLDING STAIRWAY

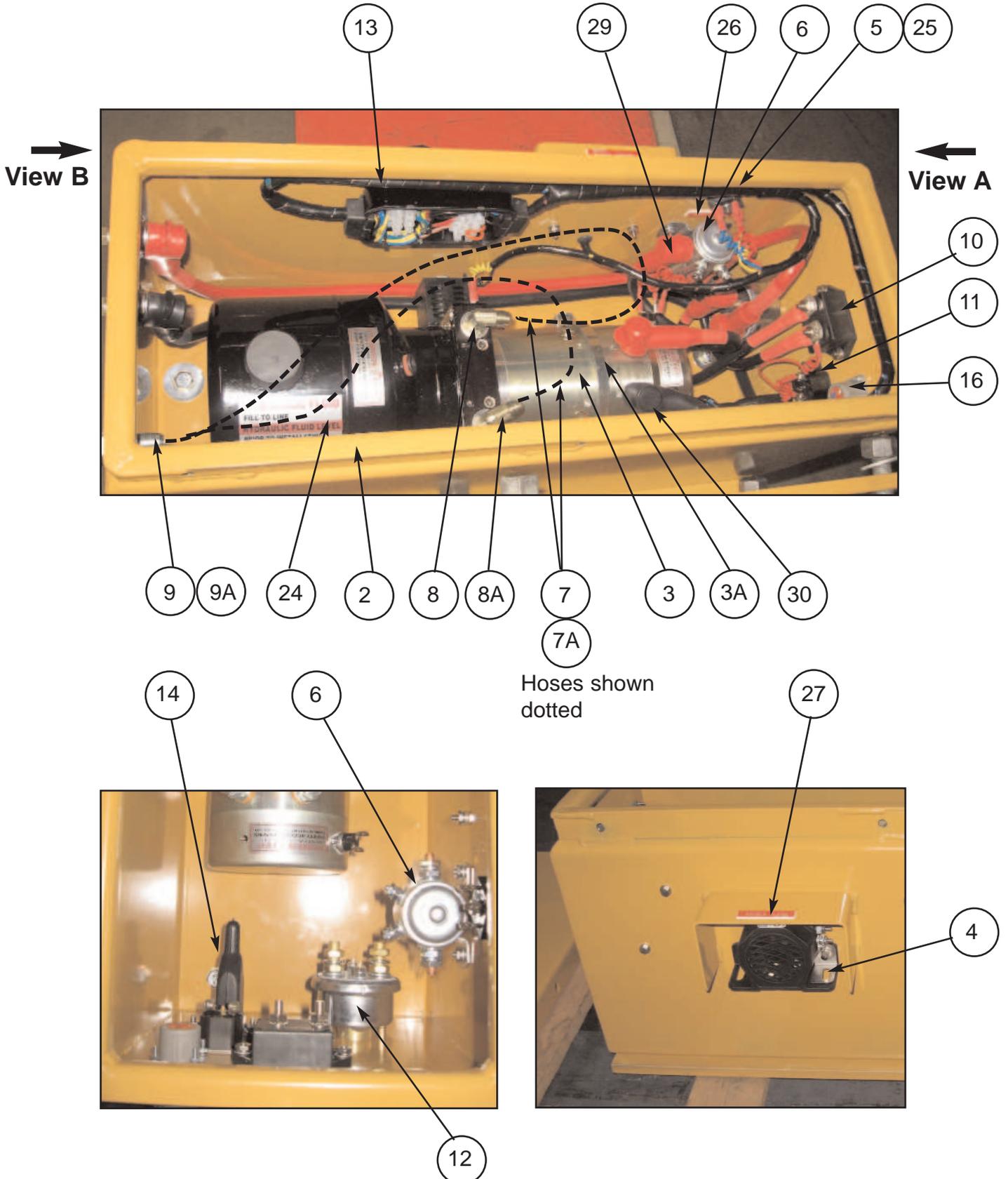
Caterpillar 854K Wheel Dozer



Section 4-5 Power Pack

PS- 80103A-SLD

See Parts List Pg 27



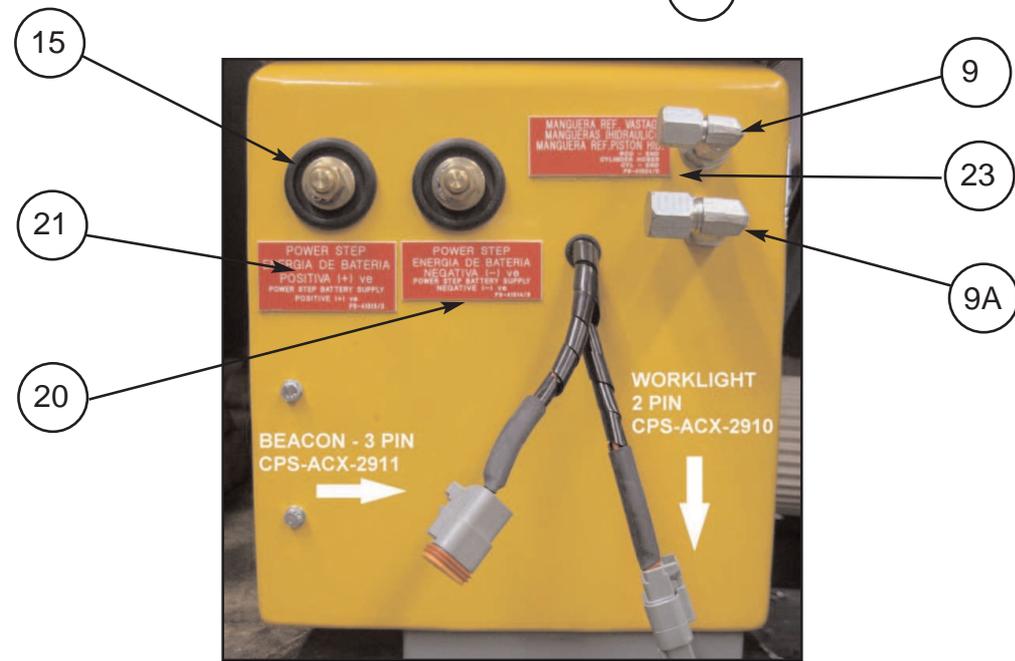
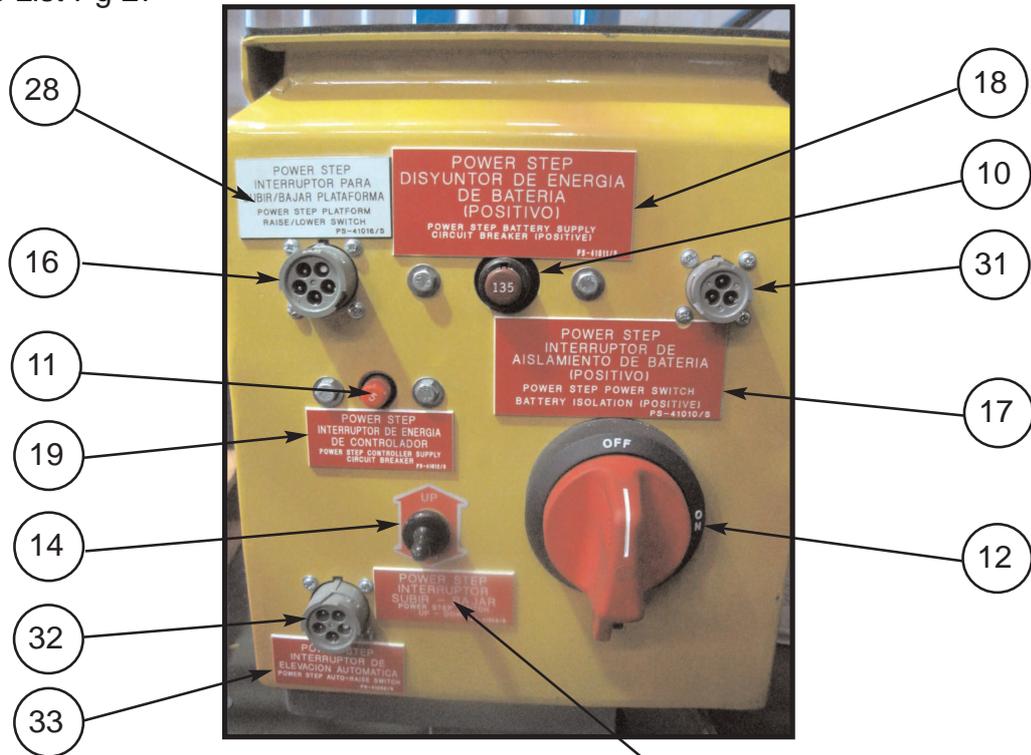
FOLDING STAIRWAY

Caterpillar 854K Wheel Dozer

Section 4-5 Power Pack PS-80103A-SLD



See Parts List Pg 27



NOTE.
THE RELIEF PRESSURE OF THE POWERPACK IS TO BE SET TO 1500PSI.
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

Caterpillar 854K Wheel Dozer



Section 4-5 Power Pack

PS-80103A-SLD

See Photos Pg 25 & 26

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	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		

FOLDING STAIRWAY

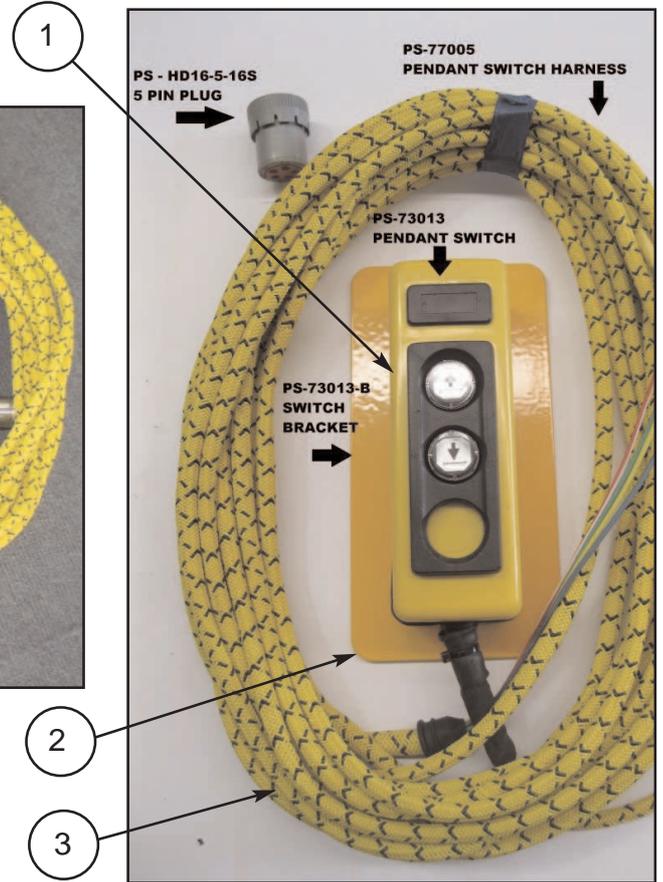
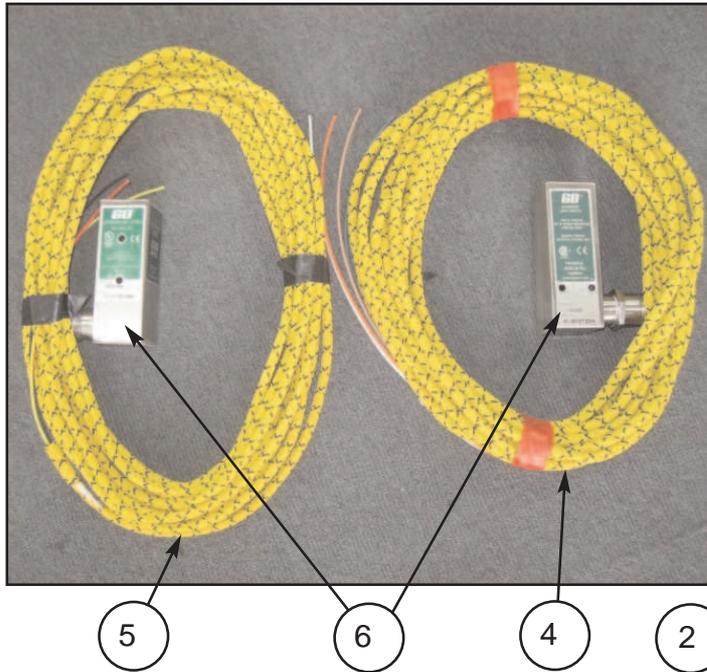
Caterpillar 854K Wheel Dozer



Section 4-6 Electrical Controls

Control Pendant Switch Mounted on Handrail

Proximity Switch Assembly Mounted on Fixed Landing



Cab Harness & Equipment Refer Wiring Harness Drawings



FOLDING STAIRWAY

Caterpillar 854K Wheel Dozer



Section 4-6 Electrical Controls

See Page 28

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		
5	PS-77004	CABIN TO SWITCH HARNESS	1		
6	PS-75430	PROXIMITY SWITCH	2		
7	PS-77002	CABIN BOX LED LIGHT INDICATOR	1		
8	PS-77003	WIRING HARNESS IN CABIN	1		

WARNING

LOW VOLTAGE BATTERIES WILL HARM THE FUNCTION OF THE POWER PACK AND THE CONTROL SWITCHES.

DAMAGE RESULTING DUE TO LOW VOLTAGE BATTERIES WILL VOID WARRANTY ON ALL ELECTRICAL COMPONENTS.

FOLDING STAIRWAY

Caterpillar 854K Wheel Dozer

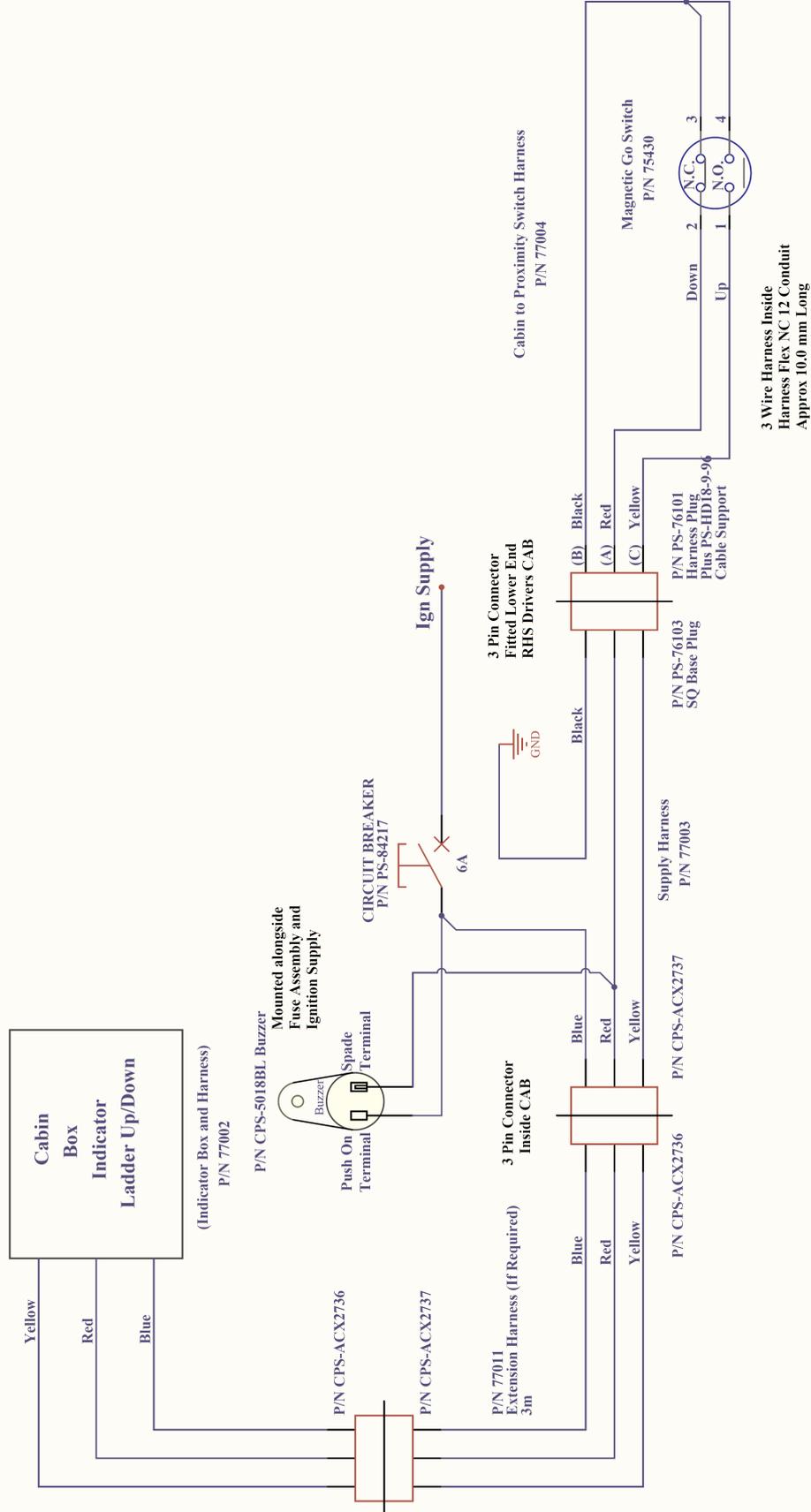


Section 4-6 Electrical Controls Wiring Diagrams Page 1

WIRING HARNESS

0201-02
Sheet 1

LADDER UP/DOWN



FOLDING STAIRWAY

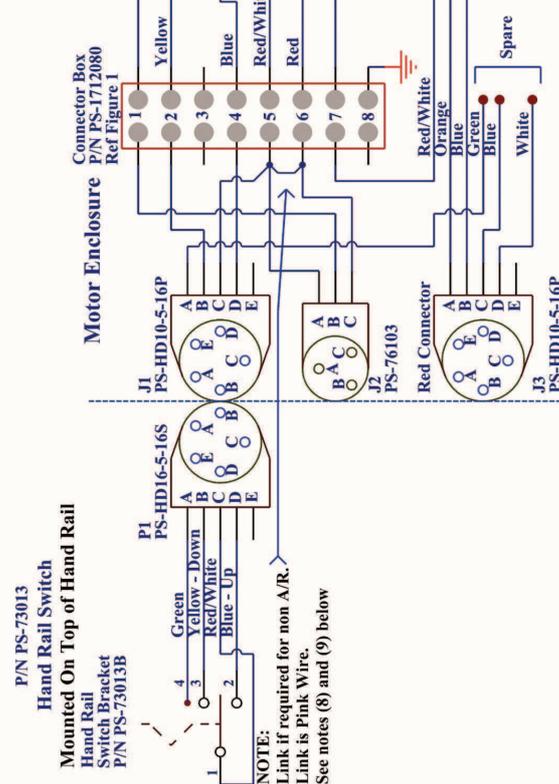
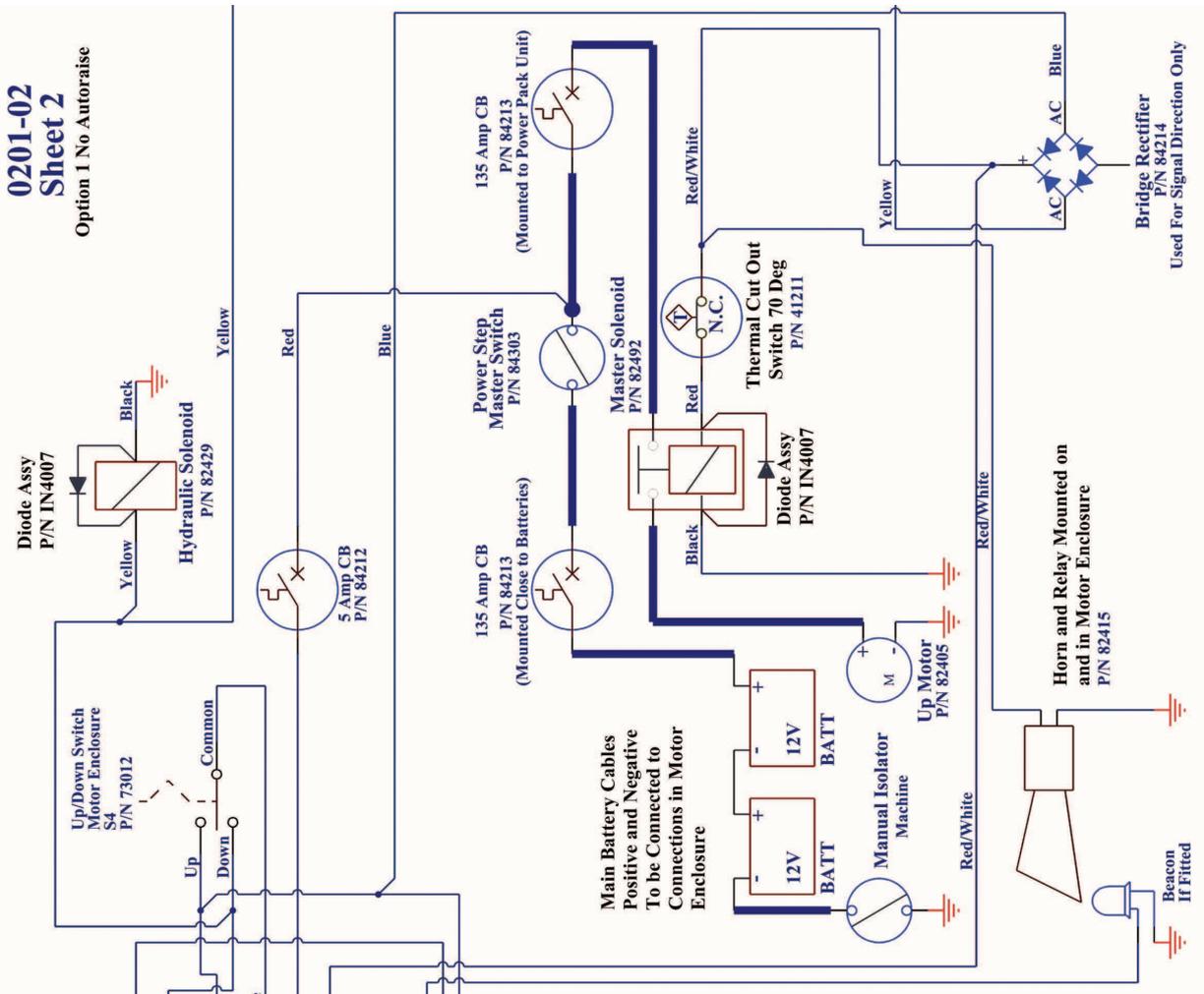
Caterpillar 854K Wheel Dozer



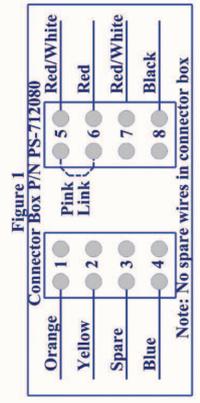
Section 4-6 Electrical Controls Wiring Diagrams Page 2 Non-Auto Raise

0201-02
Sheet 2

Option 1 No Autoraise



- NOTES:**
- (1) CAB Box Warning Lamps Supplied PS-77006
 - (2) Hand Rail Switch Harness Supplied with Switch PS-73013B
 - (3) CAB Box Wiring Supplied PS-77002
 - (4) Harness CAB Wiring Supplied PS-77003
 - (5) Magnetic GO Switch Plus Wiring PS-75430
 - (6) Harness Supplied (Mounted on Step) PS-77004
 - (7) Park Brake shown Released (Off)
 - (8) 135 Amp Circuit Breaker Supplied for Power Supply take off batteries PS-84213 Plus - Decal PS-41011
 - (9) Link pos 5 & 6 of Connector box if Auto Raise System is NOT fitted. Remove link between pos 5 & 6 of Connector Box if Auto Raise System IS fitted.



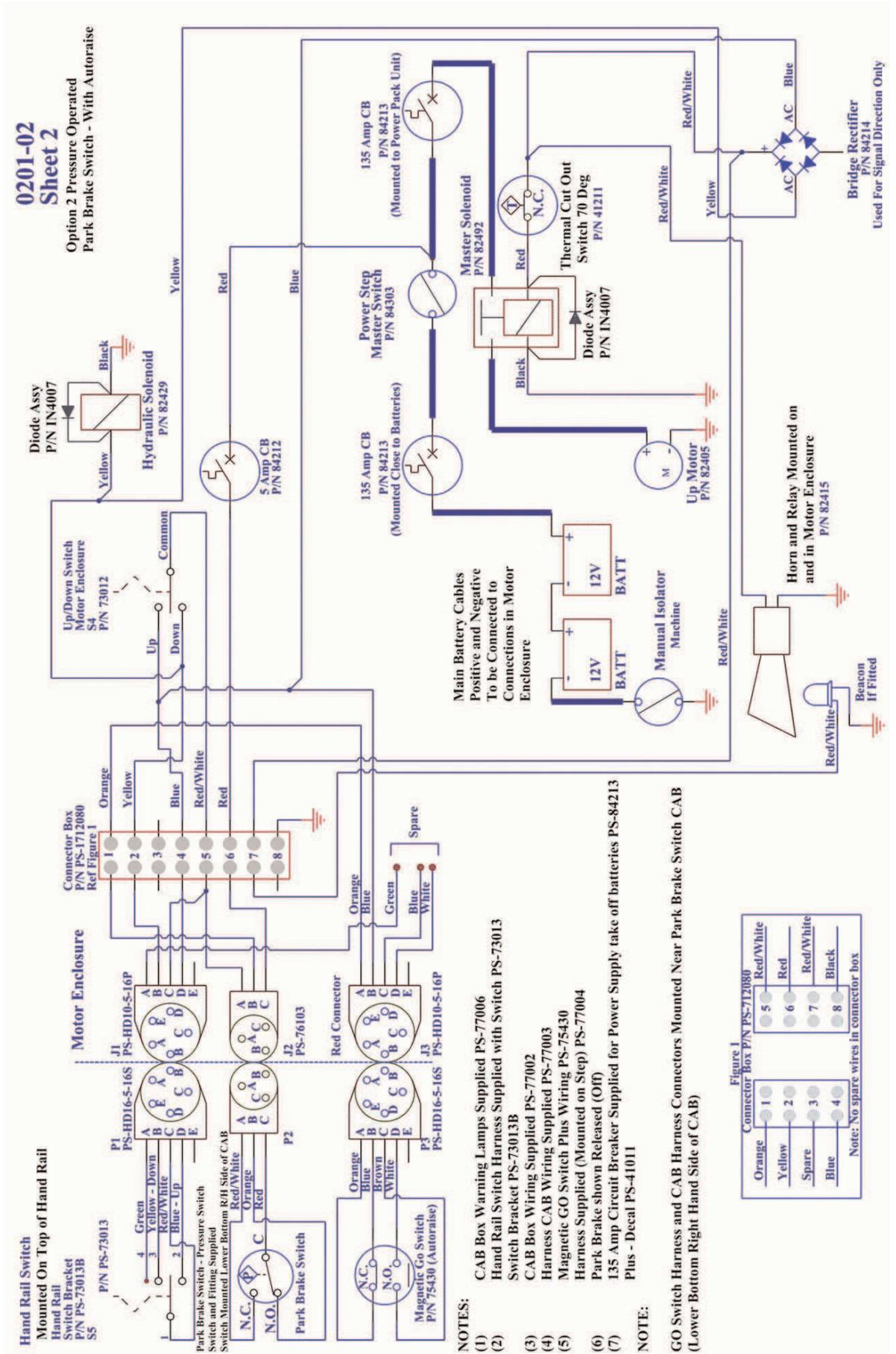
FOLDING STAIRWAY

Caterpillar 854K Wheel Dozer



Section 4-6 Electrical Controls Wiring Diagrams Page 3

Auto Raise



FOLDING STAIRWAY

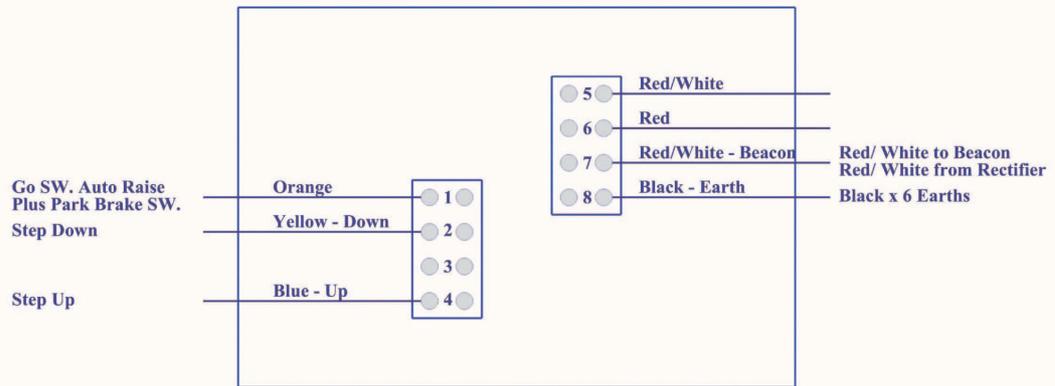
Caterpillar 854K Wheel Dozer



Section 4-6 Electrical Controls Wiring Diagrams Page 4

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)	Orrange	-	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	
(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

Caterpillar 854K Wheel Dozer



Section 4-6 Electrical Controls Wiring Diagrams Page 5

WIRING HARNESS 2

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

