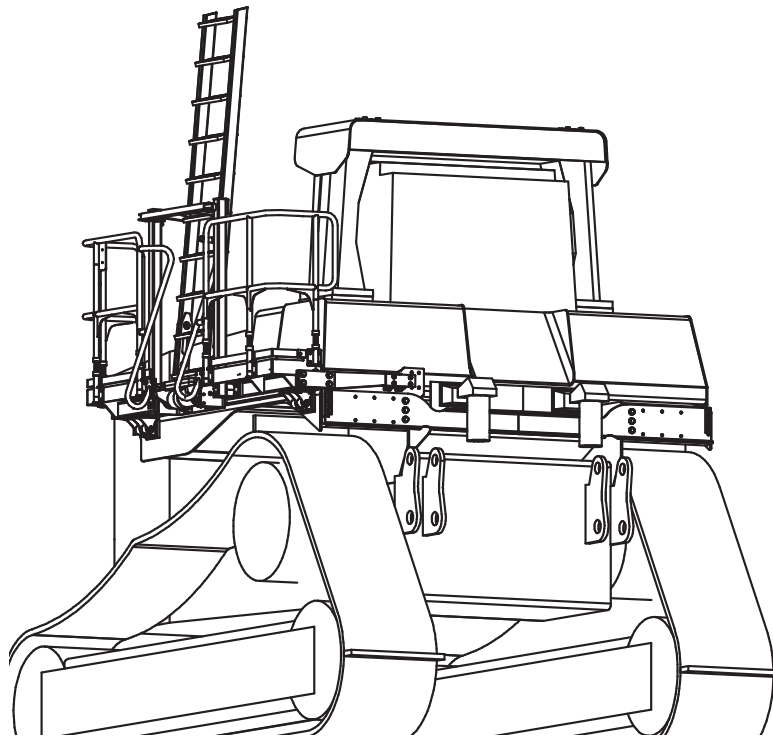


FOLDING LADDER

Manual for Cat D10T Dozer
Left Side Walkway only
Aluminium Ladder



Model No.: PSA-D10T-LHS
Serial No.: D10T-ALU-LHS-001- ~
Date Manufactured:

FOLDING LADDER

Caterpillar D10T Dozer - Aluminium Ladder



CONTENTS

Page 3	Section 1 <u>Installation and Mounting instructions</u> Installation Drawings
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 Assemblies
15	4-1 Landing Assembly LHS Parts Lists
18	4-2 Ladder Assembly Parts List
19	4-3 Power Pack Parts List Hydraulic Diagram - Actuator
24	4-4 Electrical Controls Parts List
26	4-5 Electrical System Wiring Diagram Material Kit Warning Page

FOLDING LADDER

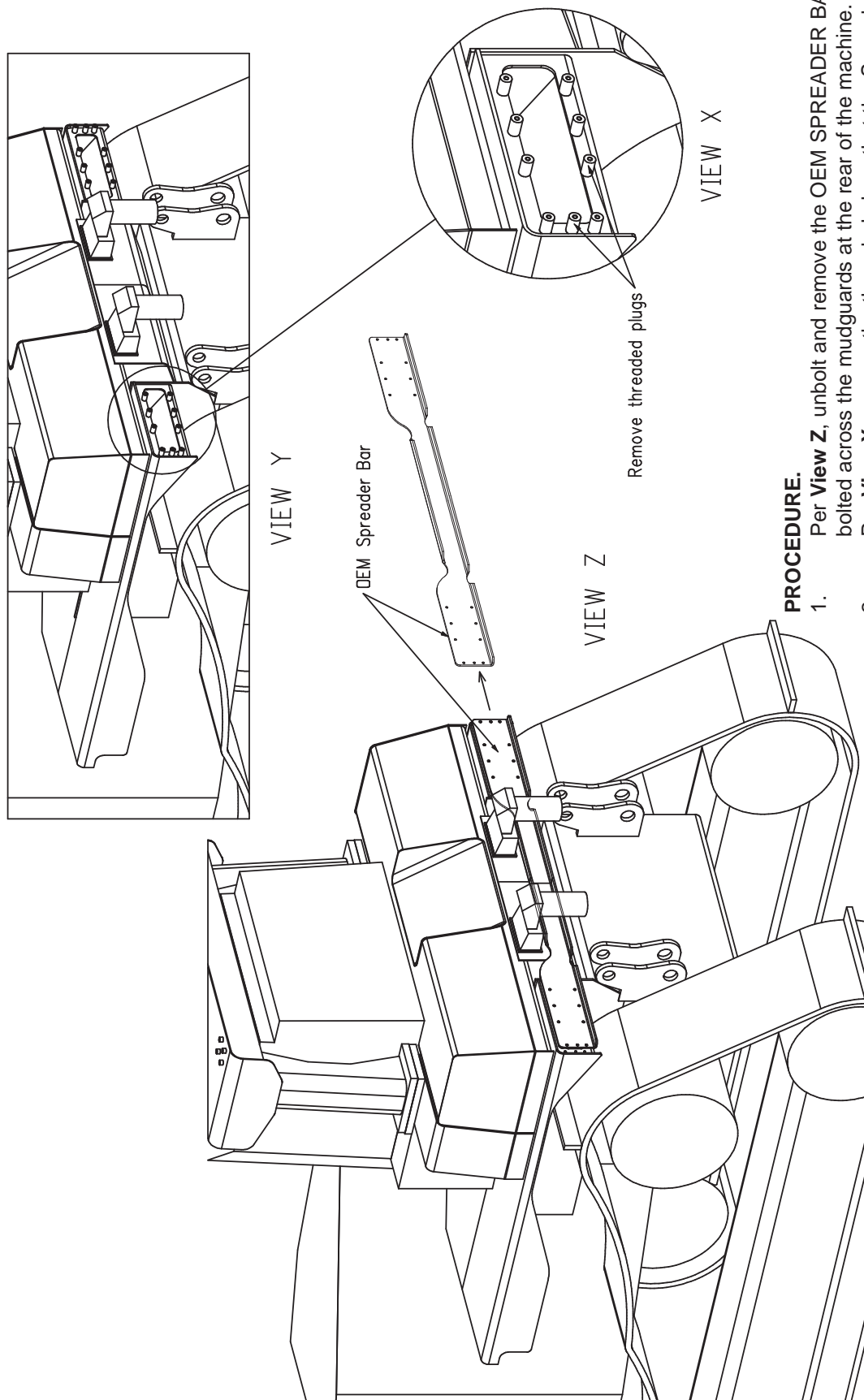
Caterpillar D10T Dozer- Aluminium Ladder



Section 1 Installation and Mounting Instructions

PS-25 252

Removal of OEM Spreader



PROCEDURE.

1. Per View Z, unbolt and remove the OEM SPREADER BAR bolted across the mudguards at the rear of the machine.
2. Per View X, remove the threaded plugs that the Spreader Bar is bolted to the Left Side mudguard only

USE SAFE WORKING AND LIFTING PRACTICES AT ALL TIMES.

FOLDING LADDER

Caterpillar D10T Dozer- Aluminium Ladder



Section 1 Installation and Mounting Instructions Bolting Pads

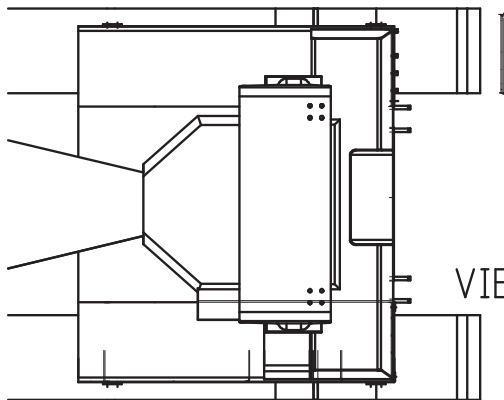
PS-25 253 Sht. 1

PROCEDURE

See Drawings 25 253 See Page 3 & 4

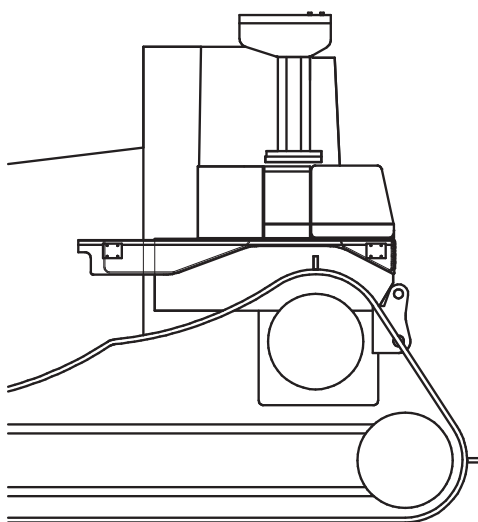
1. Fit the rear bolting pads against the internal reinforcement at the back end of the OEM mudguards. Weld them to the internal reinforcing and the mudguard inner and top/outer plates, as shown in all views on this drawing.
Note that all bevels on the bolting plates are to provide clearance over existing welds, not as weld preparations for this installation.
2. Measuring from the rear bolting plates, fit the side bolting plates on the sides of both mudguards using the measurements in **View V-1** and or the template as shown in **Views U-1**

All welds are to be Cat SP to AS1554 unless specifically directed otherwise.
Use safe lifting, welding and working procedures at all times.

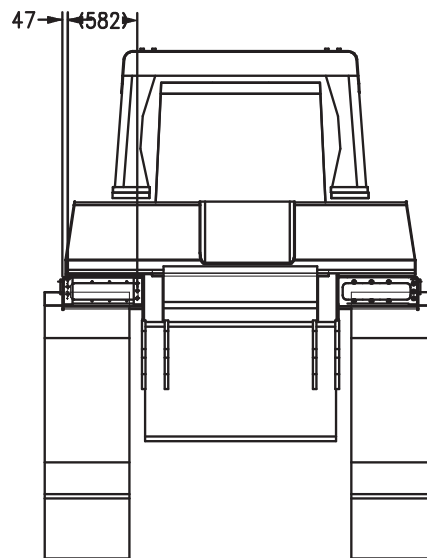


NOTE

Follow all on-site/Mine lifting and safety procedures when installing Power Step Ladder System to Dozer.



VIEW W-2



VIEW W-3

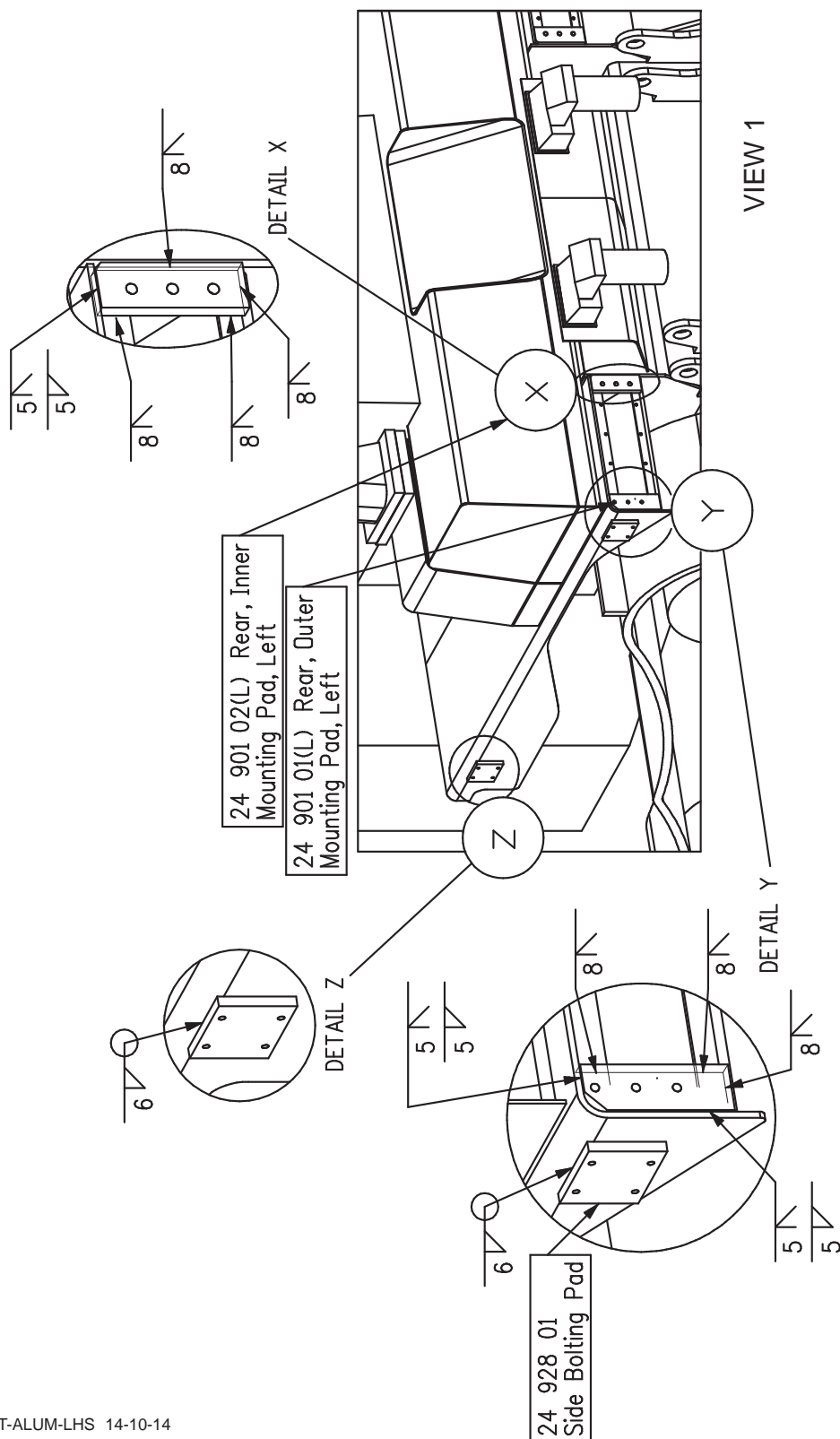
FOLDING LADDER

Caterpillar D10T Dozer- Aluminium Ladder



Section 1 Installation and Mounting Instructions Bolting Pads

PS-25 253 Sht. 2



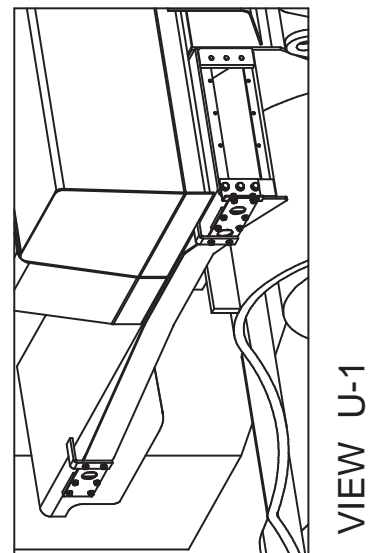
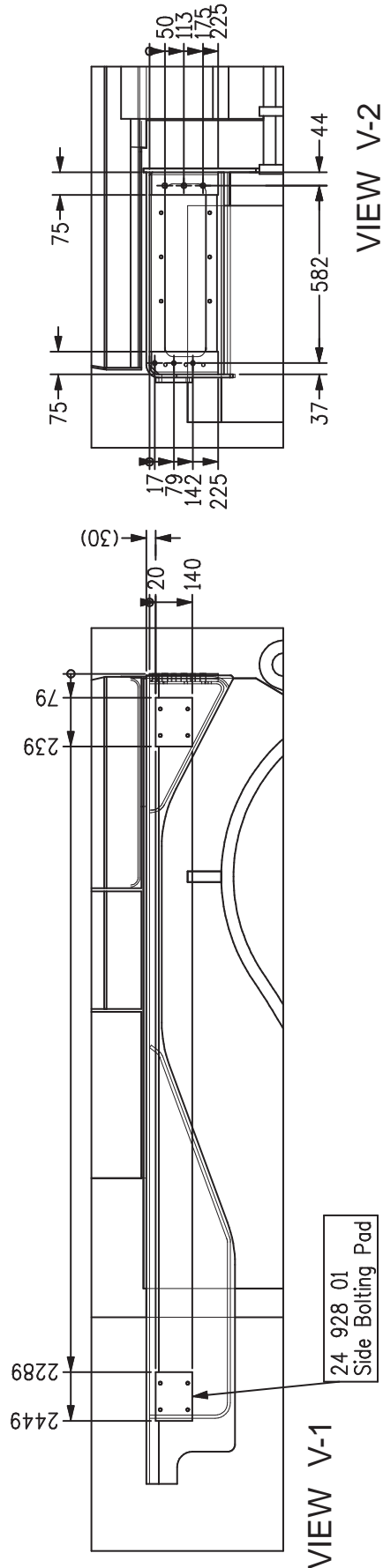
FOLDING LADDER

Caterpillar D10T Dozer- Aluminium Ladder



Section 1 Installation and Mounting Instructions Bolting Pads

PS-24 253 Sht. 3



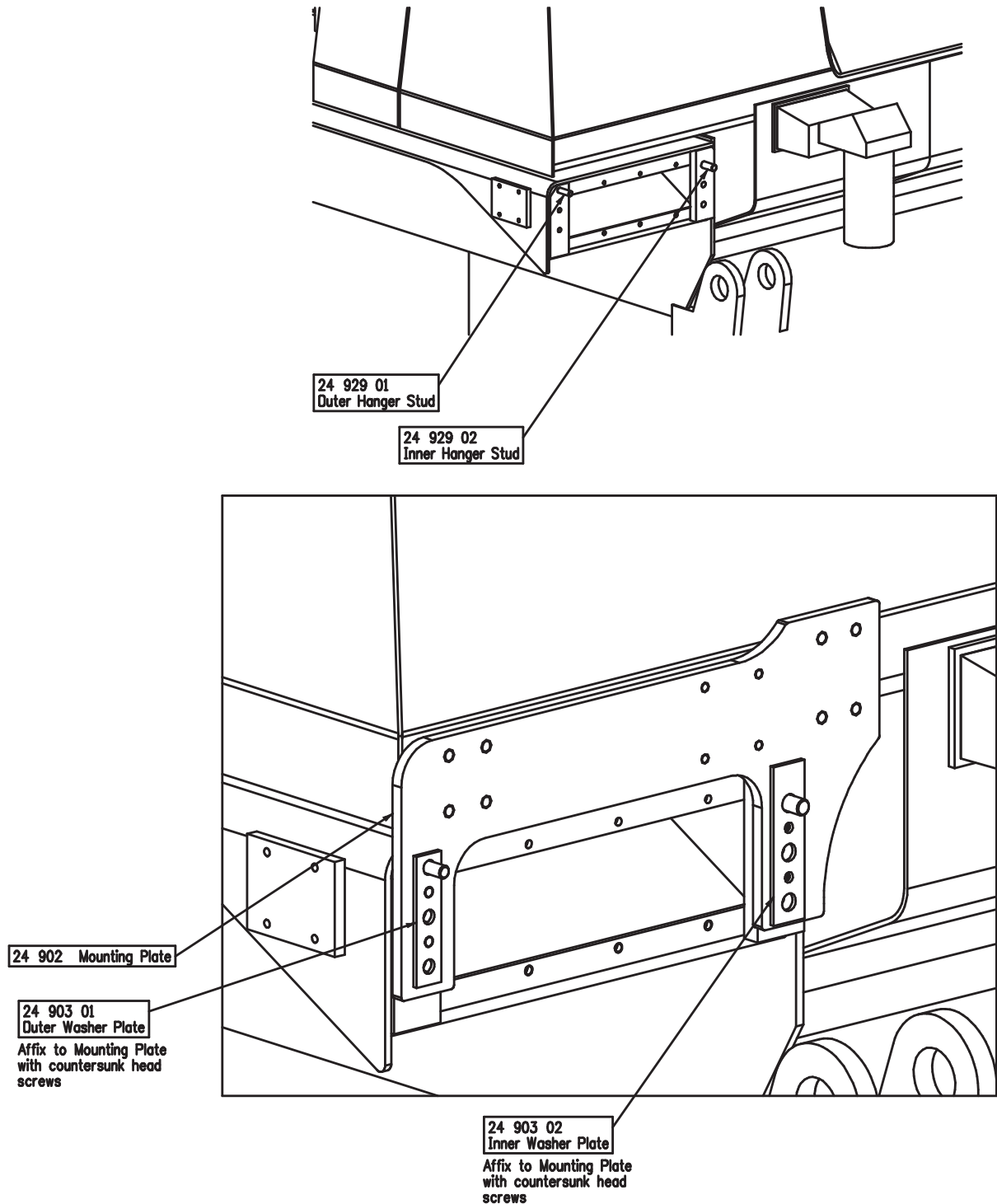
FOLDING LADDER

Caterpillar D10T Dozer- Aluminium Ladder



Section 1 Installation Instruction Drawings PS25 254

Mounting Plate



NOTES

On the back of the left mudguard -
fit the Mounting Plate/s and Washer Plates as shown,
hanging on the Hanger Studs - do not bolt on at this stage.

FOLDING LADDER

Caterpillar D10T Dozer- Aluminium Ladder



Section 1 Installation and Mounting Instructions PS-25 255

Side Platform Supports

NOTE

Follow all on-site/Mine lifting and safety procedures when installing Power Step Ladder System to Dozer.

PROCEDURE

See Drawings Page 8

1. Drill holes to suit in the OEM Rear Spreader to pick up the tapped holes in the mounting pads welded at the back of the mudguard. Fit the OEM Rear Spreader to the tractor per View X.
2. Fit the Outer Washer Plate to the outer end of the OEM spreader, using bolts fitted through the new holes in the OEM spreader (per i. above).
3. Fit Bush Isolators to the pads on the sides of the mudguard
4. Fit Bush Isolators to the boltholes at the top of the Mounting Plate per View Z. Fit the Torque Arm Isolator. Bracket to the isolators attached to the mounting plate. Per View Y.

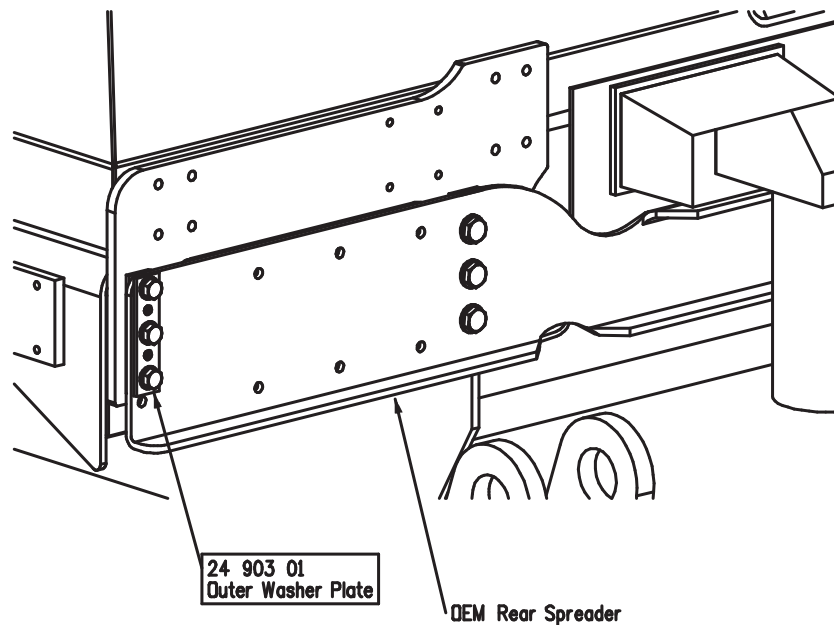
FOLDING LADDER

Caterpillar D10T Dozer- Aluminium Ladder

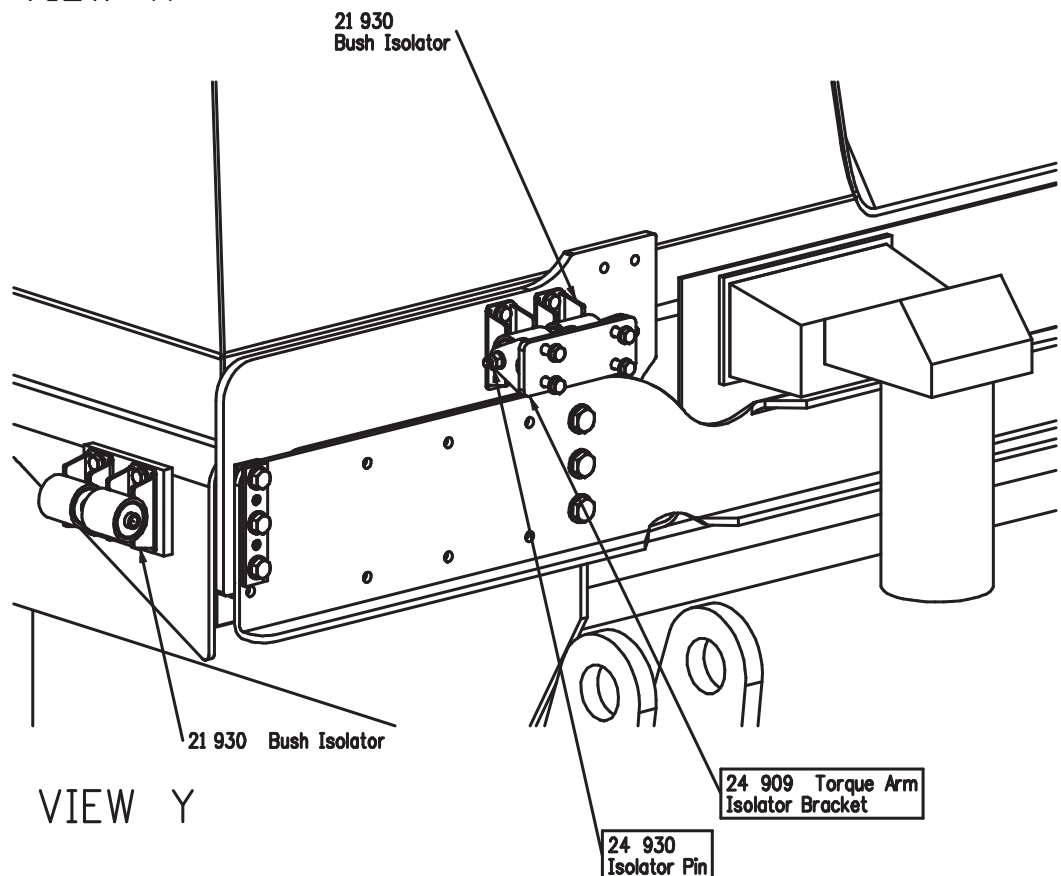


Section 1 Installation and Mounting Instructions PS-25 255

Platform Supports - Rear



VIEW X



VIEW Y

FOLDING LADDER

Caterpillar D10T Dozer- Aluminium Ladder



Section 1 Installation Instruction Drawings 25 256 Sht 1

Side Platform

NOTE

Follow all on-site/Mine lifting and safety procedures when installing Power Step Ladder System to Dozer.

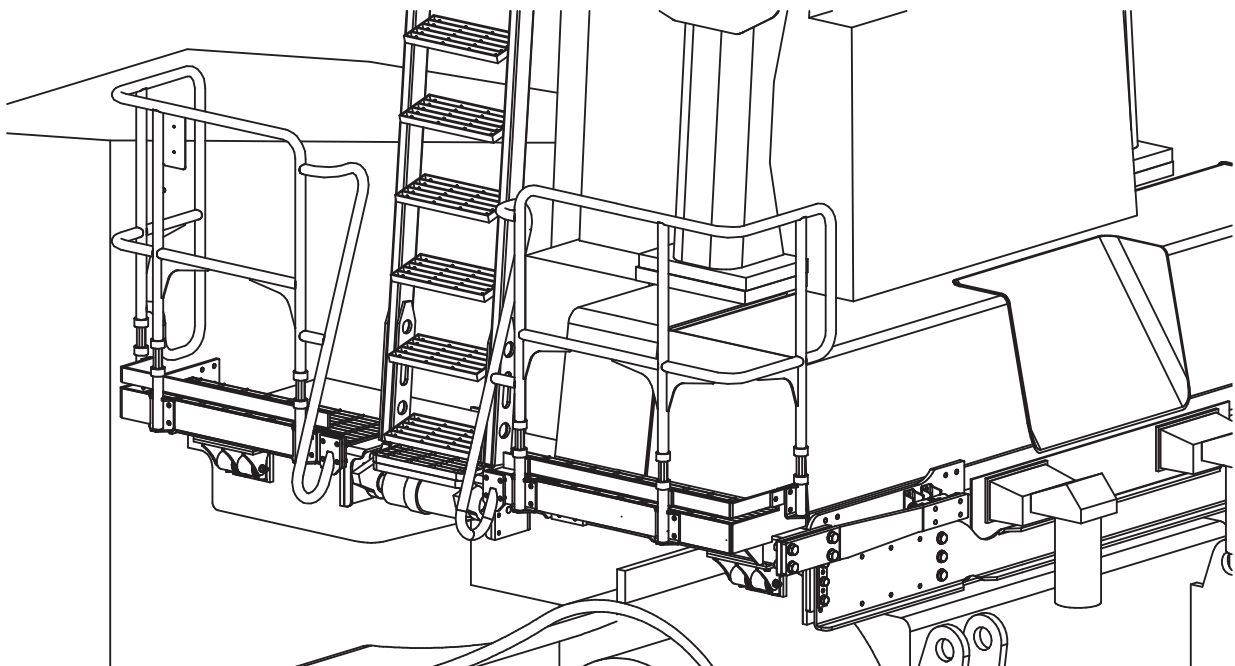
PROCEDURE

See Dwg. 24 934 Page 10 & 11

- 1) Fit the left side platform to the mudguard of the dozer. Fit Side Finger Brackets under the Beam of the platform per **View X**. Fit Isolators to the pads on the sides of the mudguard (front and back). Attach the Finger Brackets to the Isolators with Isolator Pins per **View X**.
- 2) Fit the Torque Arm across the arm flange at the back of the platform and the Torque Arm Isolator Bracket, per **View Y**.

USE SAFE LIFTING AND WORKING PROCEDURES AT ALL TIMES

Note that the platform will be supported by the mountings under it (i, above), it will not be restrained against rotation until the Torque Arm is attached at both ends per (2).



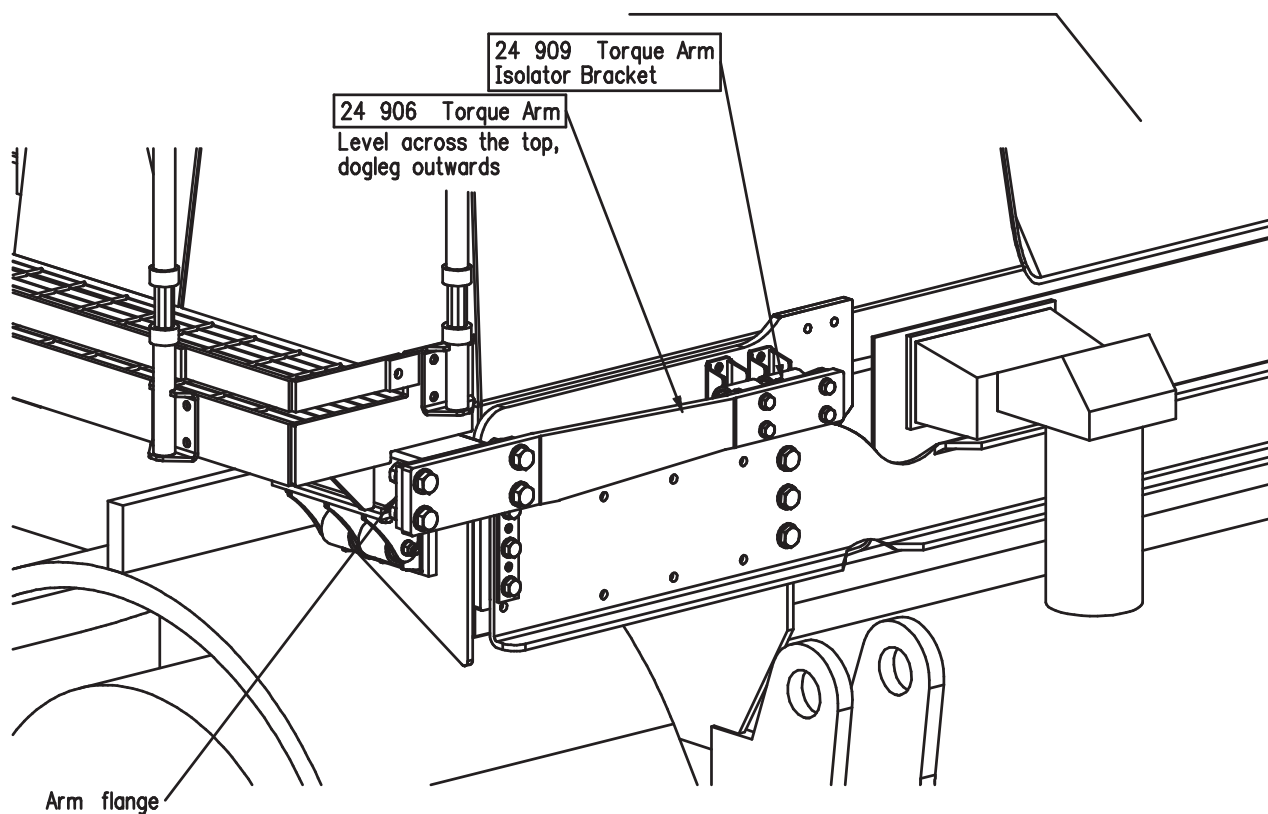
FOLDING LADDER

Caterpillar D10T Dozer- Aluminium Ladder

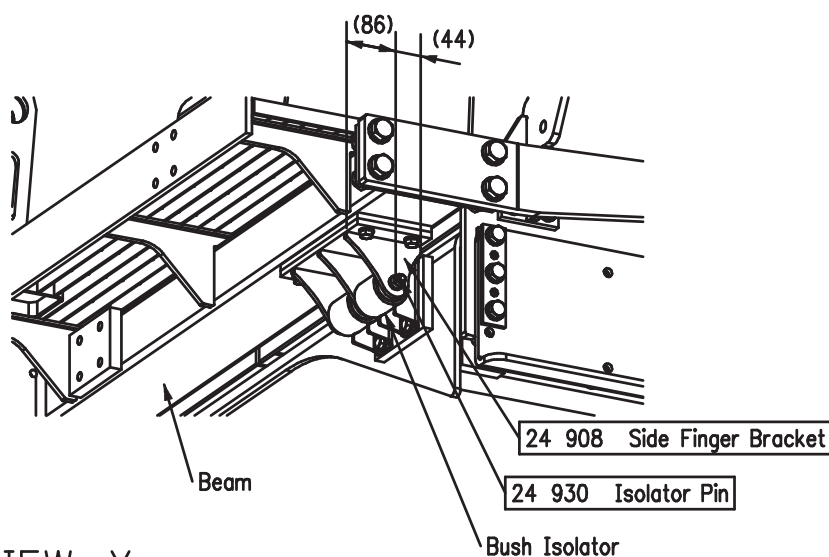


Section 1 Installation Instruction Drawings - 25 256 Sht 2

See Procedure Page 10



VIEW Z



VIEW X

FOLDING LADDER

Caterpillar D10T Dozer- Aluminium Ladder



Section 2 Recommended Maintenance Procedure

Daily

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

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

Notify the appropriate supervisor for any observed damage or malfunction.

500 Hours

Grease the nipples on the Actuator.

Check main mounting bolts for torque.

Check hydraulic oil level in power pack and top up as necessary.

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.

Repeat daily check as above

NOTE.

**THE RELIEF PRESSURE OF THE POWERPACK IS TO BE SET TO 2800PSI.
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 LADDER

Caterpillar D10T Dozer- Aluminium Ladder



Section 3 Operating Procedure

To Lower Ladder (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 Dozer is parked on uneven ground, the bottom of the ladder may touch the ground before the ladder is in the fully lowered position.

Should this occur, descend the ladder with caution.

To Raise Ladder

Ascend the ladder onto the landing of the Dozer.

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].

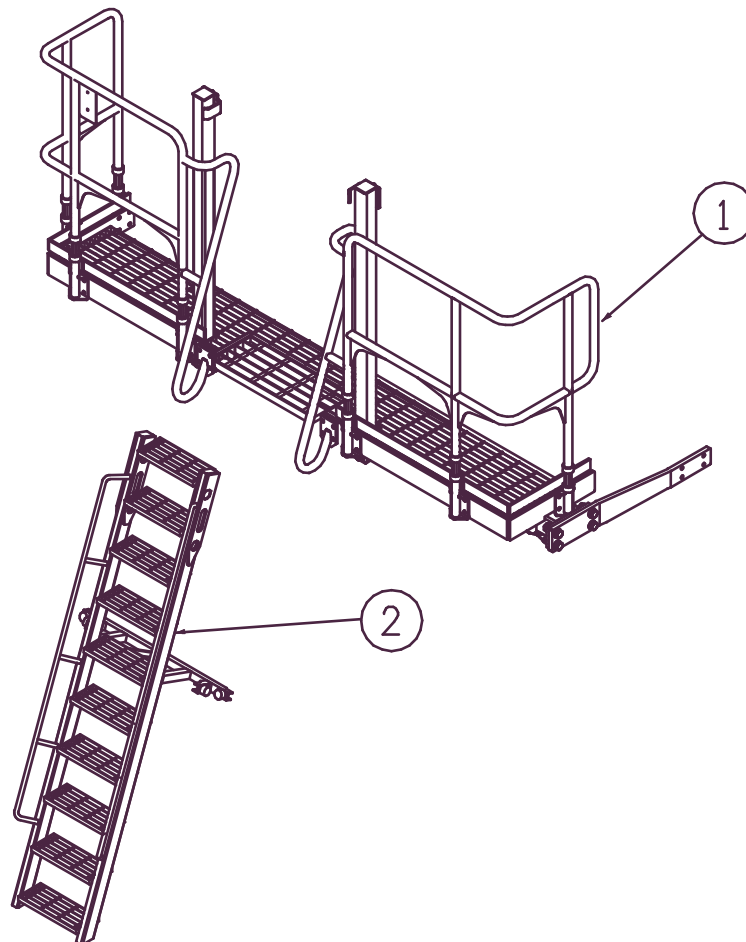
Test by raising and lowering the Power Step a couple of times and adjust again if necessary.

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Caterpillar D10T Dozer



Section 4 Assemblies

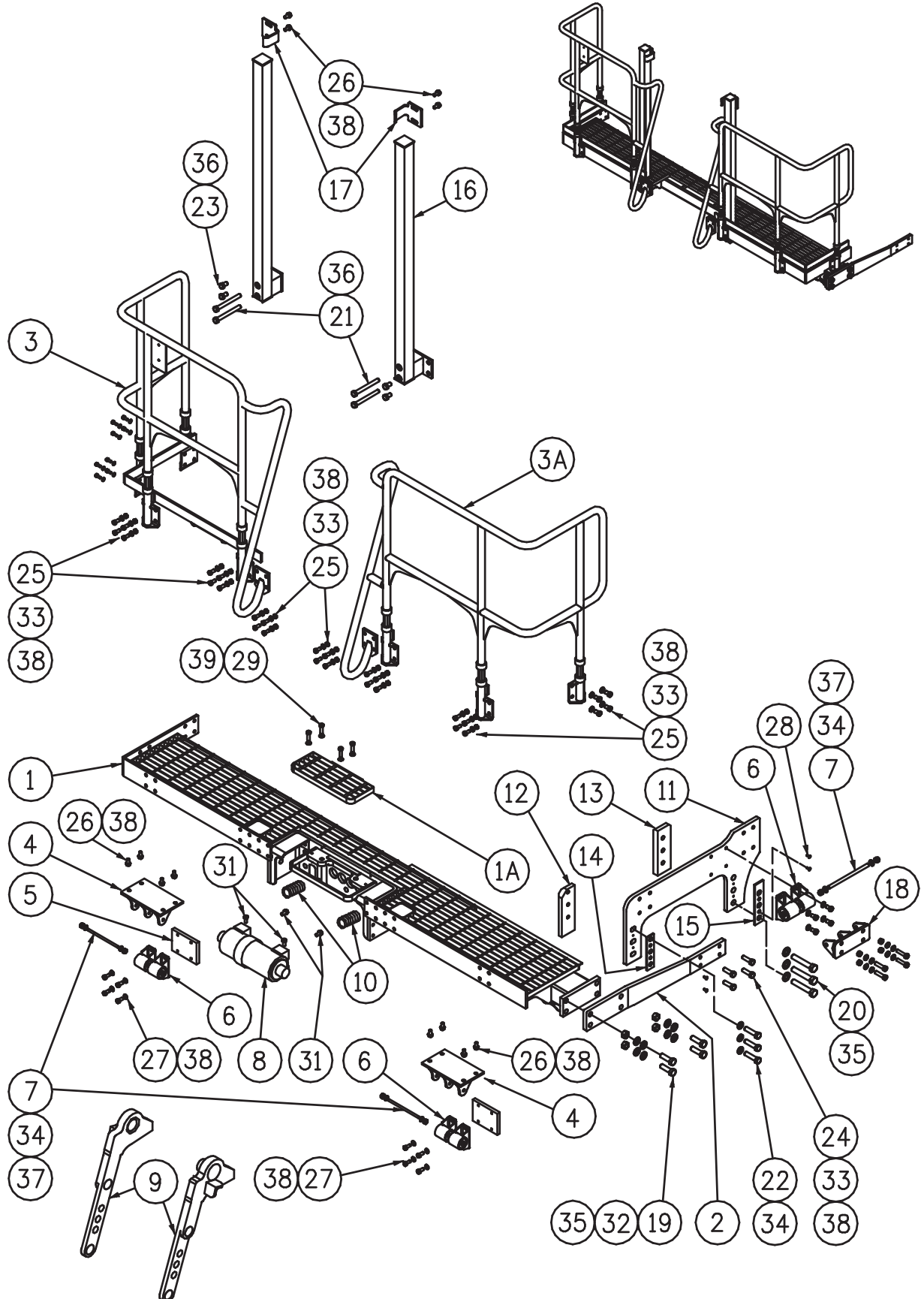


FOLDING LADDER

Caterpillar D10T Dozer- Aluminium Ladder



Section 4-1 Landing Assembly LHS PS-25 250A



FOLDING LADDER

Caterpillar D10T Dozer- Aluminium Ladder



Section 4-1 Landing Assembly LHS PS-25 250A

See Drawing Page 15

(Includes Items 1-4,10,16, 17, 21, 23, 26, 33, 36,& 38)

Item	Part No.	Part Name	Qty		
1	PS-25250	PLATFORM FRAME - LHS	1		
1A	PS-24943	LANDING FILLER-BOLT IN	1		
2	PS-24906 - LHS	TORQUE ARM - LHS	1		
3	PS-25251-A	HANDRAIL - LHS - FRONT	1		
3A	PS-25251-B	HANDRAIL - LHS - REAR	1		
4	PS-24908	SIDE FINGER BRACKETS	2		
5	PS-24928-01	SIDE BOLTING PAD	2		
6	PS-21930-A	ISOLATOR MOUNTING ASSY.	6		
7	PS-24930	ISOLATOR BUSH PIN	3		
8	PS-T30-27-E-FT-220-DA-O-H	ACTUATOR	1		
9	PS-24945	SPIGOT ASSEMBLIES (L & R)	1		
10	PS-DOO93-1	SPRING	2		
11	PS-24902	MOUNTING PAD	1		
12	PS-24901-01	MOUNTING PAD REAR OUTER	1		
13	PS-24901-02	MOUNTING PAD REAR INNER	1		
14	PS-24903-01	WASHER PLATE OUTER	1		
15	PS-24903-02	WASHER PLATE INNER	1		
16	PS-24920	GUIDE POSTS	2		
17	PS-24920-07	GUIDE PLATES	2		
18	PS-24909	ISOLATOR BRACKET	1		
19	PS-M20X80ZP	BOLT-M20 x 80	4		
20	PS-M20X60ZP	BOLT-M20 x 60	4		
21	CPS-M16X150ZP	BOLT-M16 x 150	4		
22	CPS-M16X65ZP	BOLT-M16 x 65	3		
23	CPS-M16X35ZP	BOLT-M16 x 35	4		
24	CPS-M12X50ZP	BOLT-M12 x 50	4		
25	CPS-M12X35ZP	BOLT-M12 x 35	36		
26	CPS-M12X25ZP	BOLT-M12 x 25	12		
27	CPS-M12X20ZP	BOLT-M12 x 20	12		
28	CPS-M6X12ZP	BOLT-M6 x 12	4		
29	CPS-M10X20SC	SOCKET CAP BOLT-M10 x 20SC	4		
30	PS-5/8"X 2 3/4"ZP	BOLT - 5/8"X 2 3/4"UNC	2		

FOLDING LADDER

Caterpillar D10T Dozer- Aluminium Ladder



Section 4-1 Landing Assembly LHS PS-25 250A

See Drawing Page 15

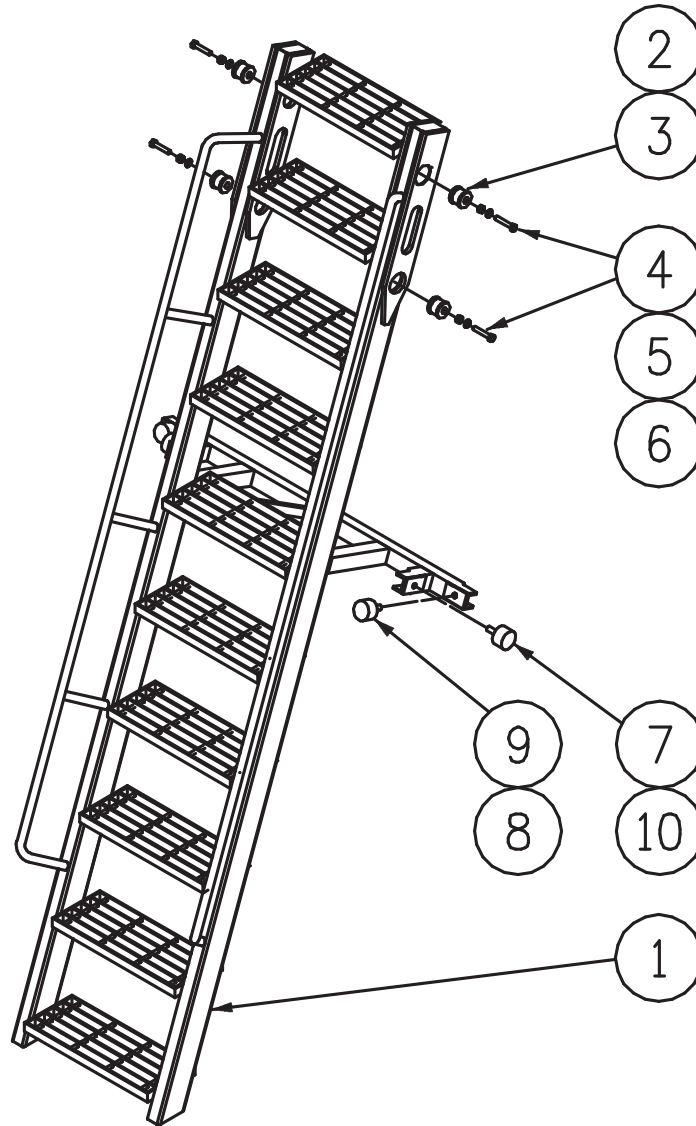
Item	Part No.	Part Name	Qty		
31	PS-5/8"X 1 1/2"SC	SOCKET CAP BOLT-5/8"x 1 1/2"UNC	2		
32	CPS-M20NZP	NUT-M20	4		
33	CPS-M12NZP	NUT-M12	40		
34	CPS-1/2"NN	NUT-NYLOC-1/2" UNC	6		
35	CPS-M20WH	WASHER-HARDENED-M20	11		
36	CPS-M16WH	WASHER-HARDENED-M16	11		
37	CPS-1/2"WH	WASHER-HARDENED-1/2"	6		
38	CPS-M12WH	WASHER-HARDENED-M12	76		
39	CPS-M10WH	WASHER-HARDENED-M10	4		

FOLDING LADDER

Caterpillar D10T Dozer- Aluminium Ladder



Section 4-2 Ladder Assembly PS- 24 942A



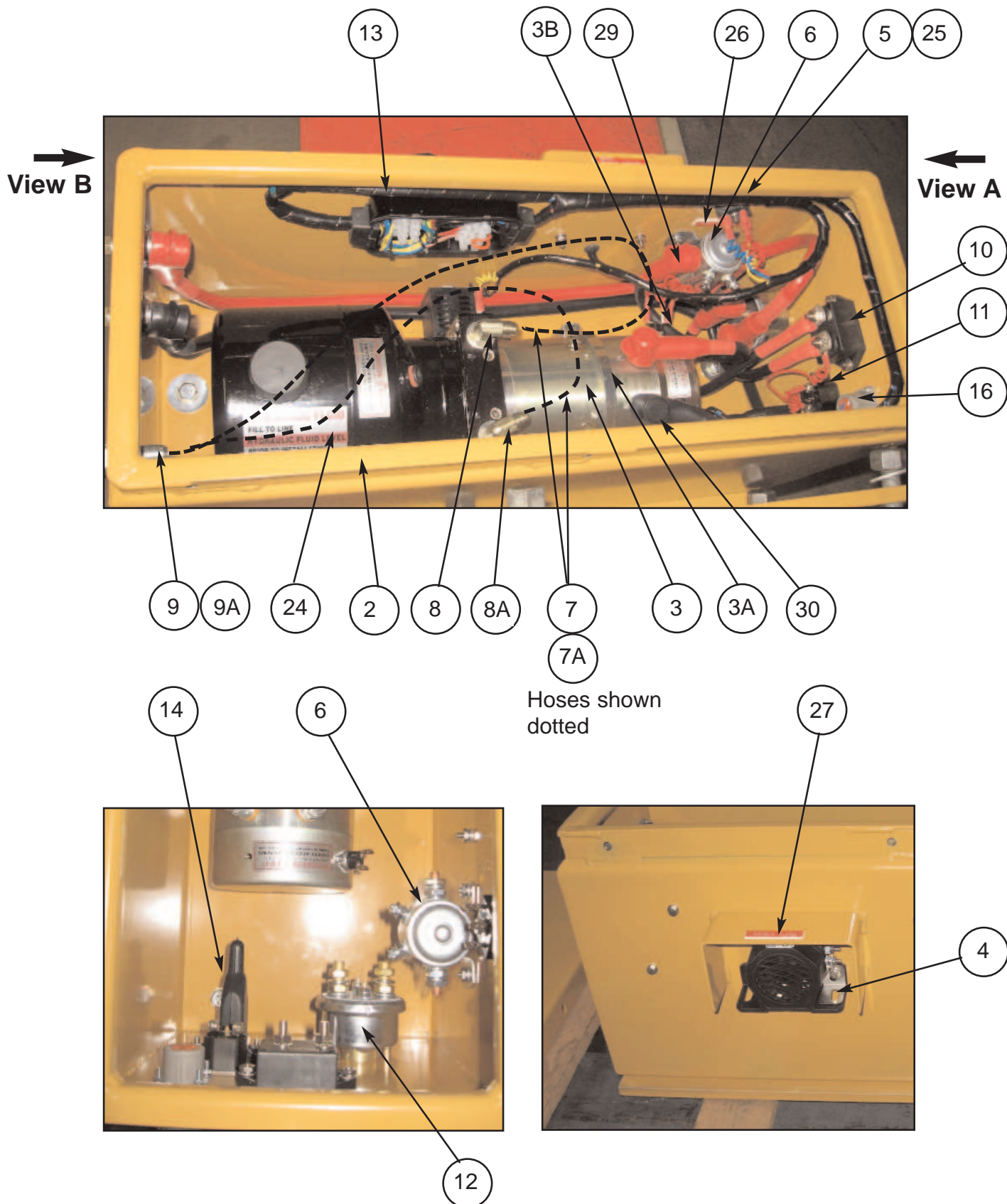
Item	Part No.	Part Name	Qty		
1	PS-24942	LADDER & HANDRAIL FABRICATION	1		
2	PS-24946-01	BUSH KEEPER PLATE	8		
3	PS-2229K	POLY BUSH KIT	4		
4	CPS-M12X100ZP	BOLT M12 x 100	4		
5	CPS-M12NN	NYLOC NUT-M12	4		
6	CPS-M12WH	WASHER-HARDENED-M12	8		
7	PS-40002	BUFFER	2		
8	CPS-M10WH	WASHER M10	2		
9	PS-40003	BUFFER	2		
10	CPS-M8WH	WASHER M8	2		

FOLDING LADDER Caterpillar D10T Dozer



Section 4-3 Power Pack PS-80103A-SLD/21

See Parts List Pg 21/22

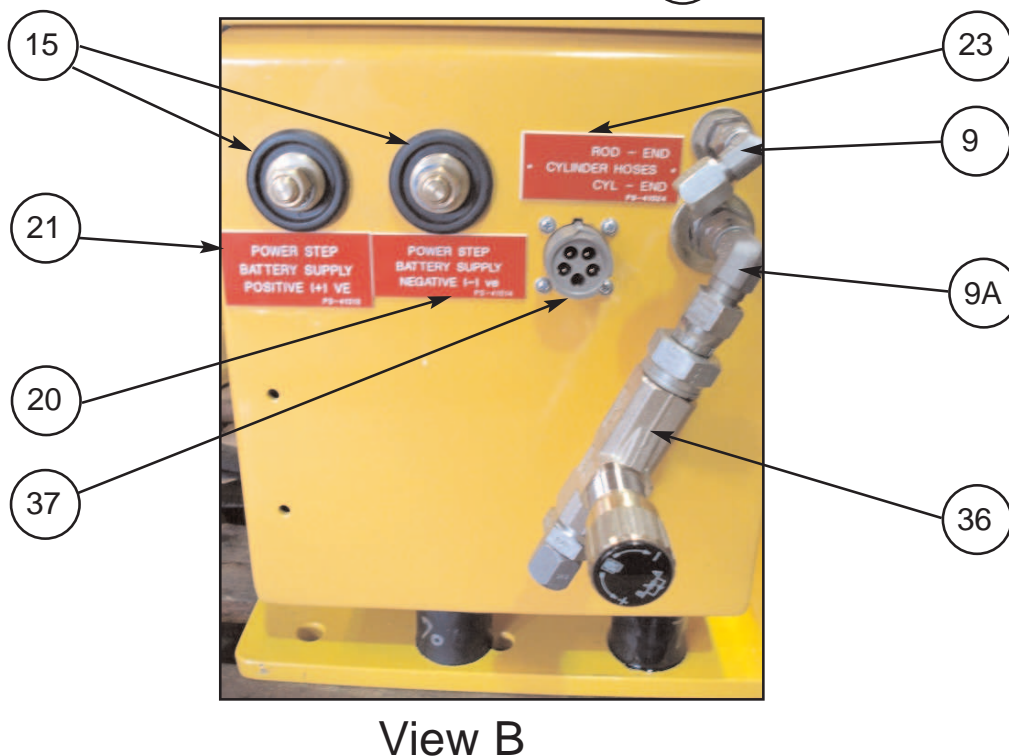
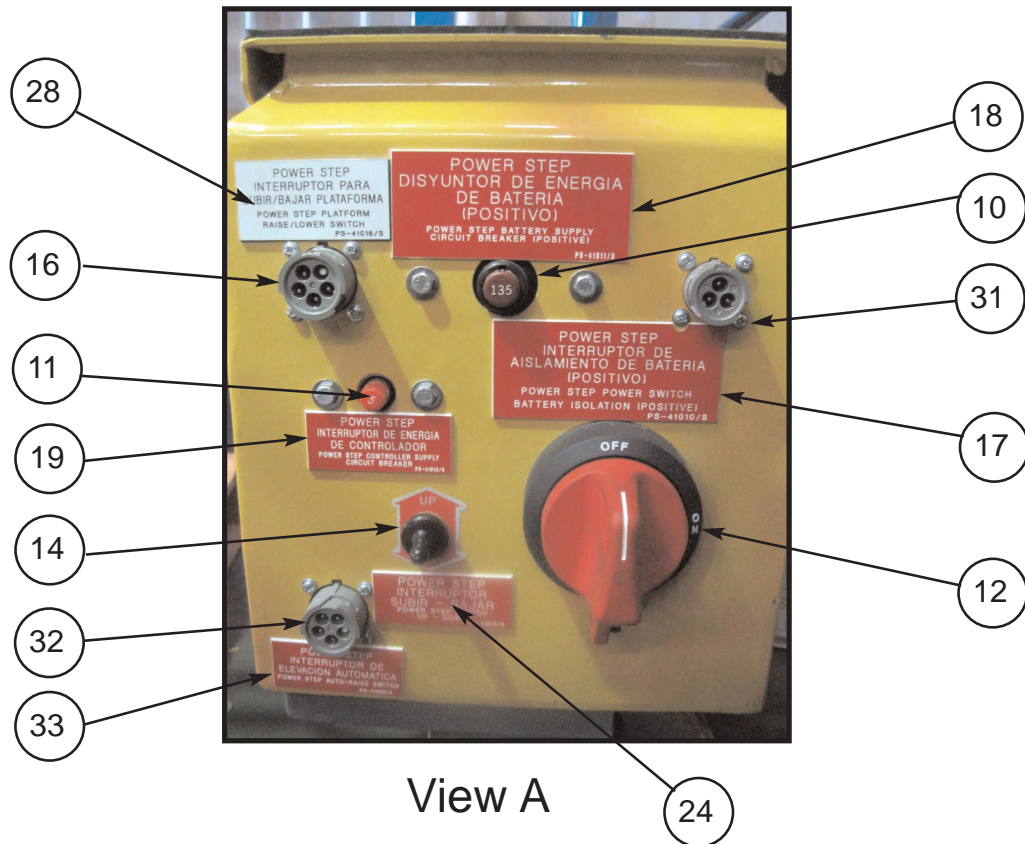


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Caterpillar D10T Dozer

Section 4-3 Power Pack PS-80103A-SLD

See Parts List Pg 21/22



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

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Caterpillar D10T Dozer



Section 4-3 Power Pack (Electrical Controls & Accessories)

See Photos Pgs. 19 & 20

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		
3B	PS-84201-100	HEAT SENSOR	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-61176	HYDRAULIC FITTING 7/16"	1		
9A	PS-61177	HYDRAULIC FITTING 9/16"	1		
10	PS-84213	135A CIRCUIT BREAKER	1		
11	PS-84212	5A CIRCUIT BREAKER	1		
12	PS-84303	ISOLATION SWITCH	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-10A	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	6		

FOLDING LADDER

Caterpillar D10T Dozer



Section 4-3 Power Pack (Electrical Controls & Accessories)

See Photos Pgs. 19 & 20

Item	Part No.	Part Name	Qty		
30	PS-73009	RUBBER BOOT BLACK	3		
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-60051-3.5M	HYDRAULIC HOSE 9/16" x 3.5M	1		Not Shown
35	PS-60050-3.5M	HYDRAULIC HOSE 7/16" x 3.5M	1		Not Shown
36	PS-63202A	VALVE FITTING (FLOW CONTROL VALVE)	1		
37	PS-HD10-5-16P	5 PIN SOCKET	1		

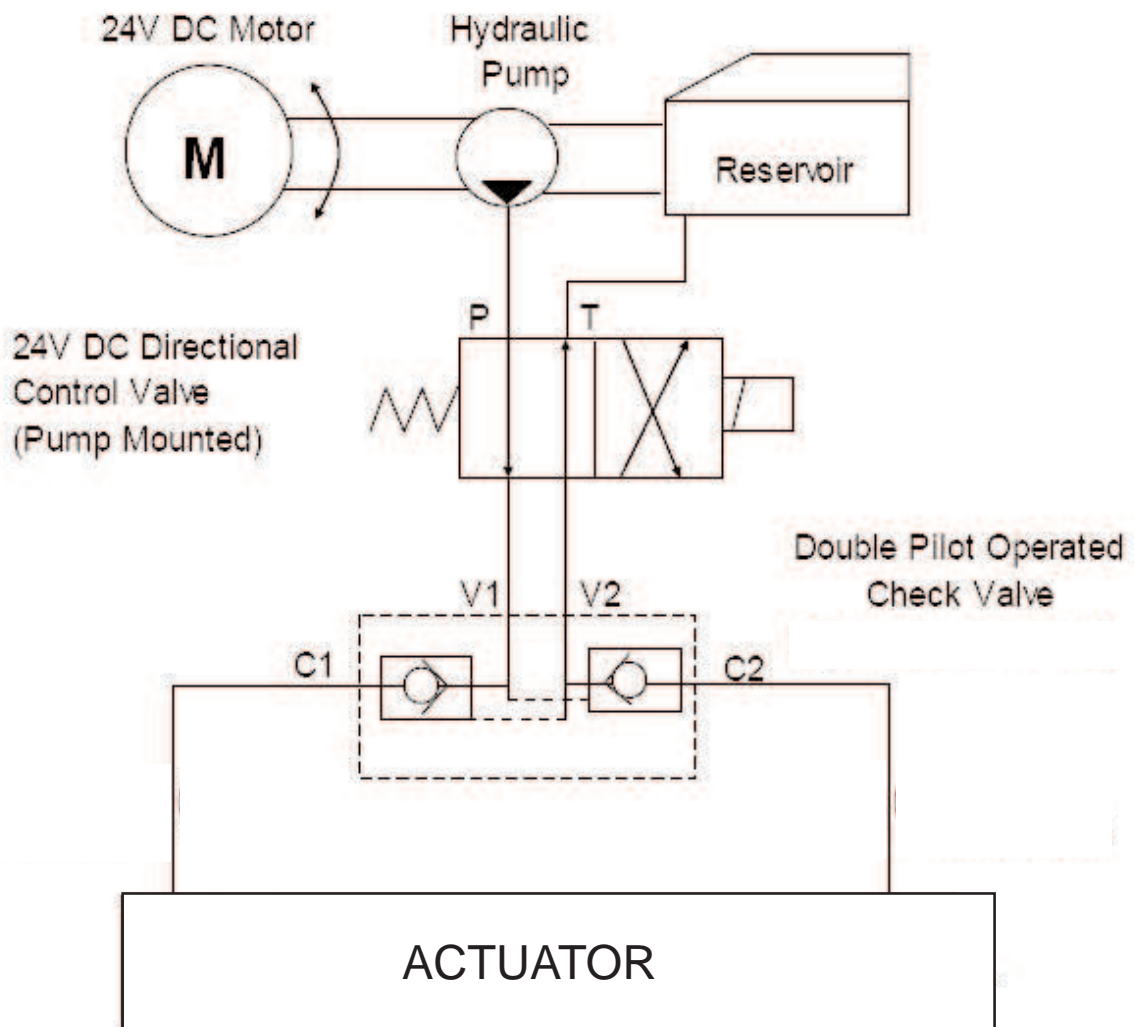
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Caterpillar D10T Dozer- Aluminium Ladder



Section 4-3 Hydraulic Actuator (Valve Diagram)

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



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Caterpillar D10T Dozer- Aluminium Ladder

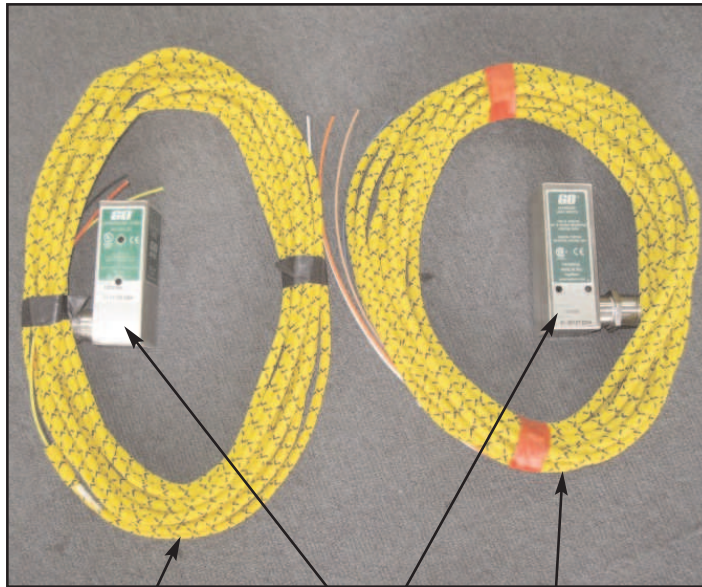


Section 4-4 Electrical Controls

Refer also Wiring drawings Pg 26.27 & 28

Proximity Switch Assembly

Mounted on Fixed Landing



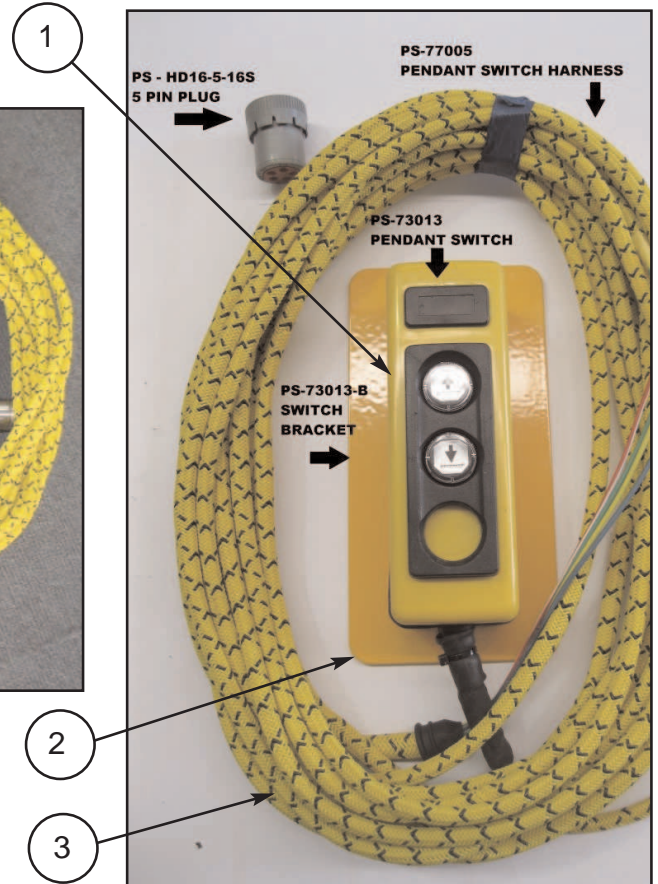
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4

Control Pendant Switch

Mounted on Handrail



Cab Harness & Equipment

Refer Wiring Harness Drawings



7

8

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Caterpillar D10T Dozer- Aluminium Ladder



Section 4-4 Electrical Controls

Refer also Wiring Drawings

See Photos Page 24

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**

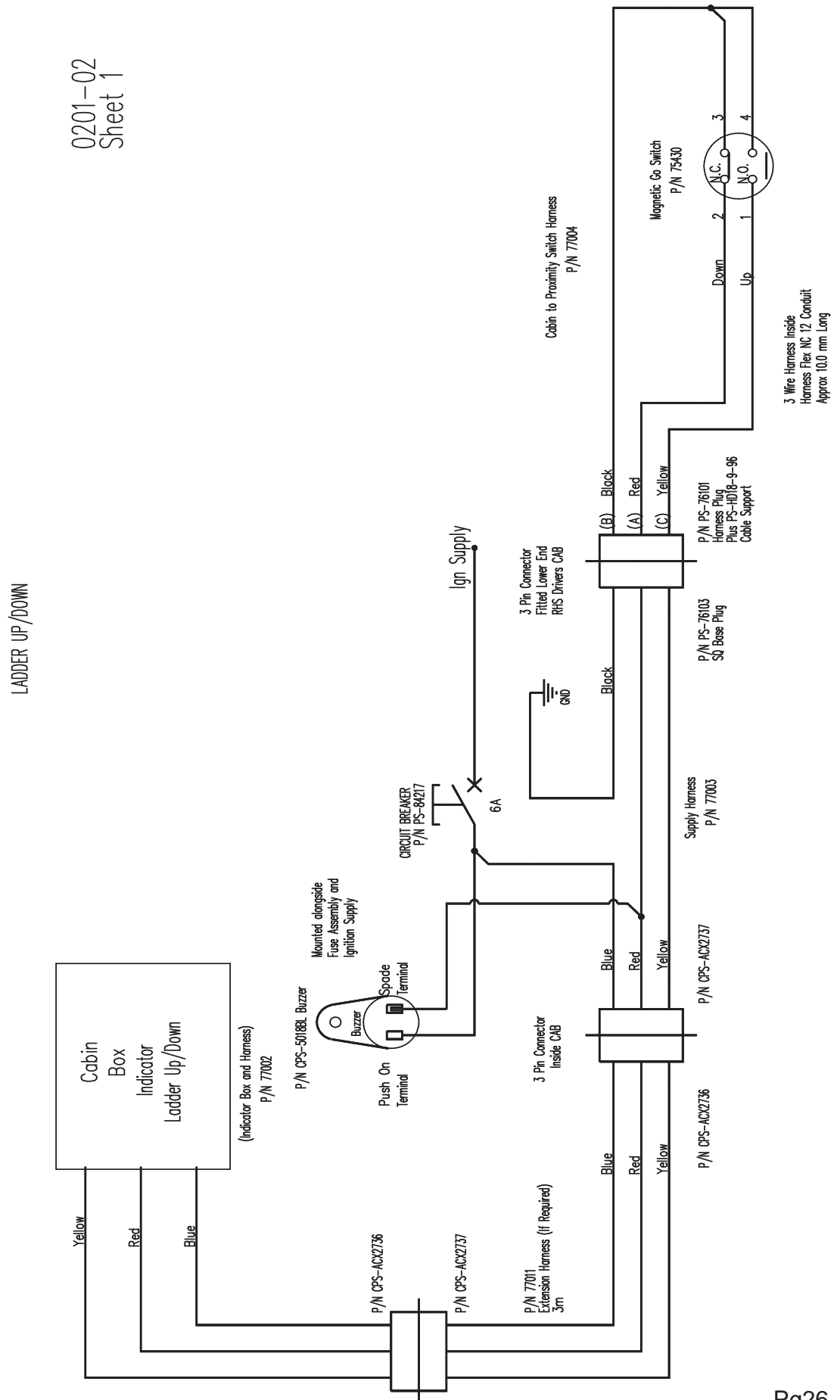
FOLDING LADDER

Caterpillar D10T Dozer- Aluminium Ladder



Section 4.5 Electrical System - Wiring Diagram

Sheet 1



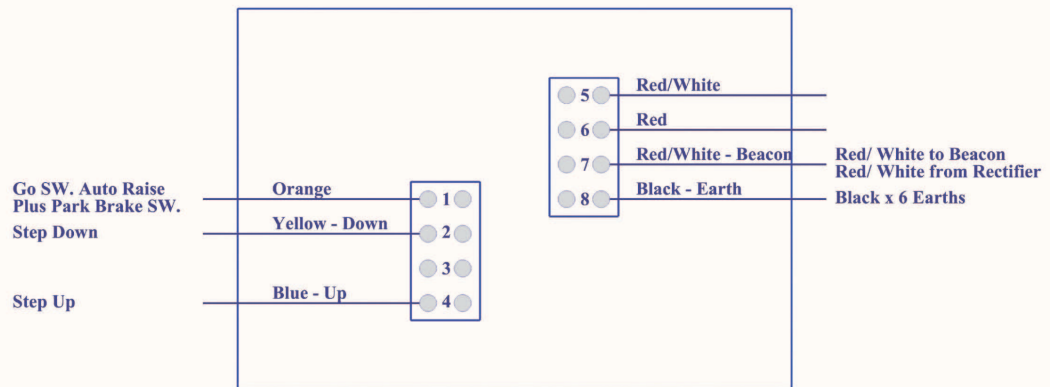
FOLDING LADDER

Caterpillar D10T Dozer- Aluminium Ladder



Section 4.5 Electrical System - Wiring Diagram Sheet 2

WIRING HARNESS



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)

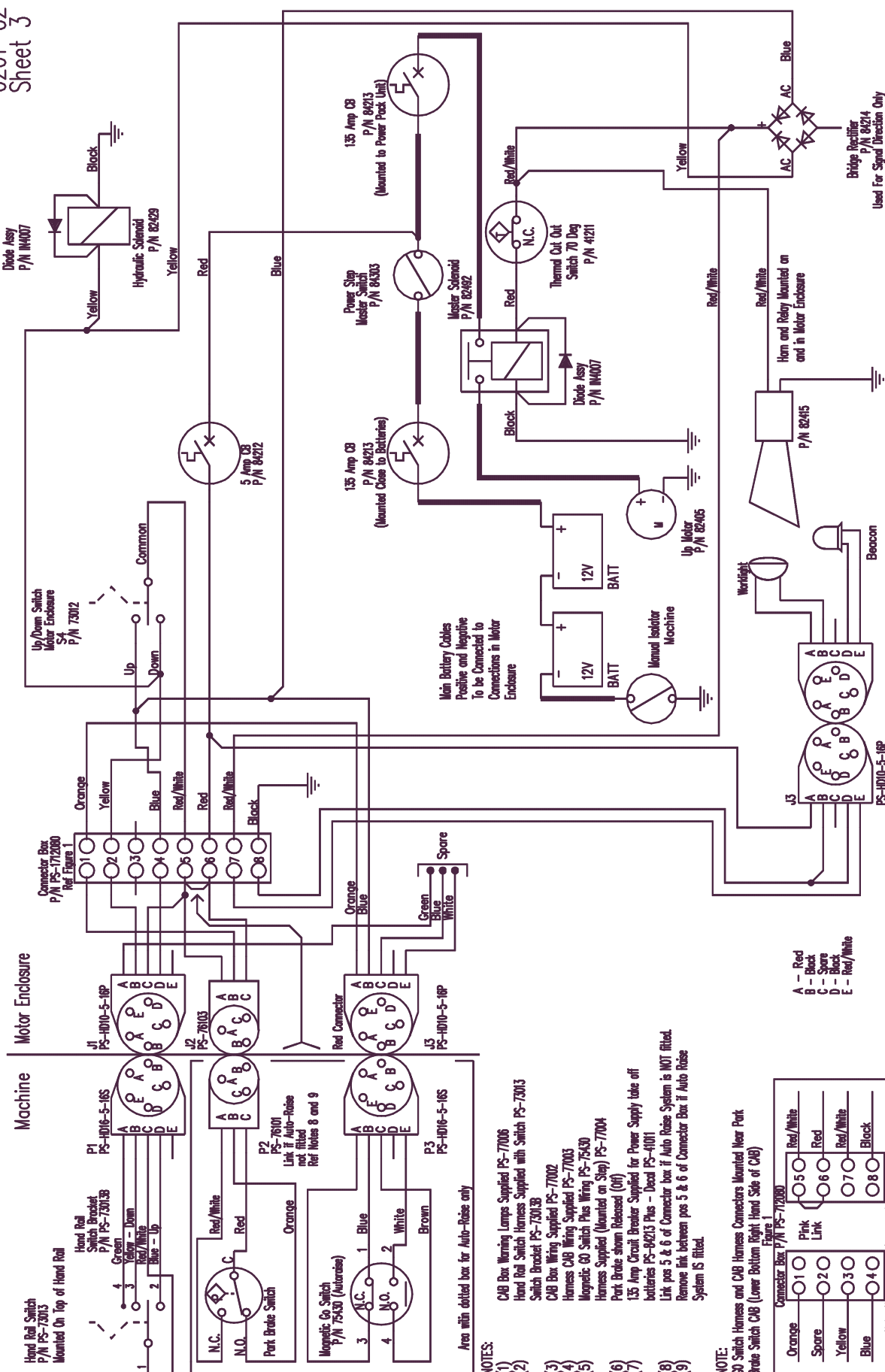
<u>Plug Term</u>	<u>Colour</u>		<u>Terminal ID.</u>	
(B)	Black	-	No. 1 Terminal N.C. Contact	Length 10m (Harness Flex No 12)
(B)	Black	-	No. 2 Terminal N.O. Contact	
(Bridge No. 1 and No. 2 in Go Switch)				
(A)	Red	-	No. 3 Terminal N.C. Contact	
(C)	Yellow	-	No. 4 Terminal N.O. Contact	

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	-		

POWER STEP

0201-02
Sheet 3



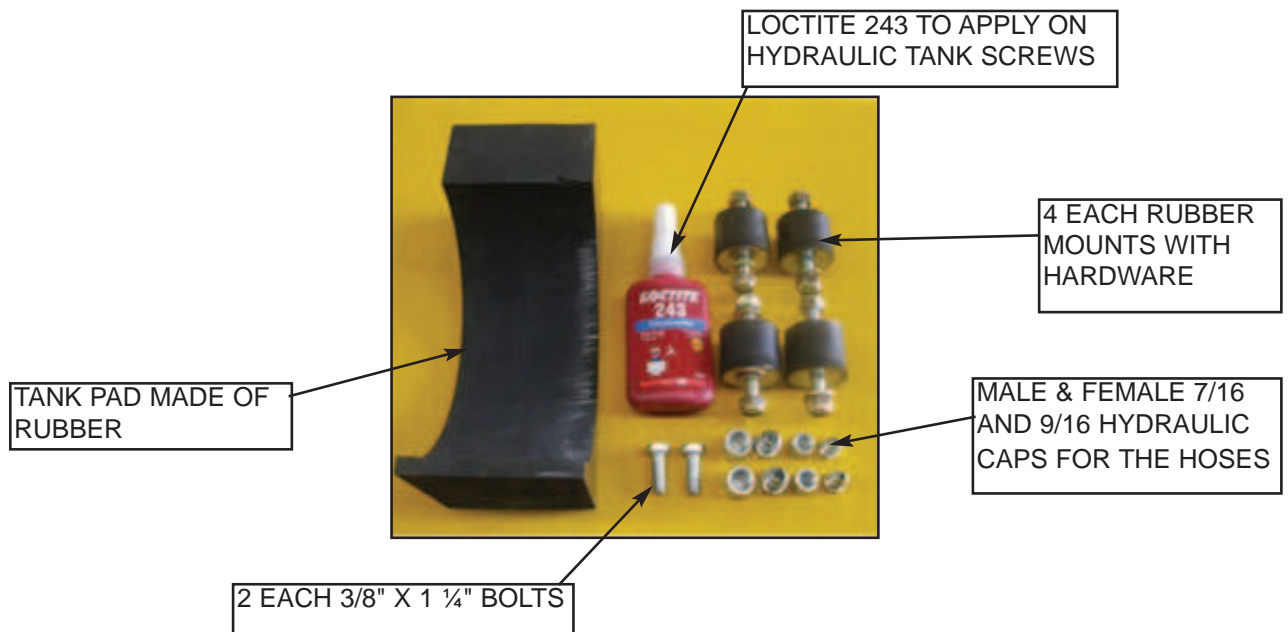
FOLDING LADDER

Caterpillar D10T Dozer- Aluminium Ladder



Material Kit supplied

PS-P/PACK-ISO. KIT



PS-DO-RELIEF VALVE KIT (UP)





WARNING

**DO NOT REPAIR, STRAIGHTEN, REWELD OR ATTEMPT TO FIX THE LADDER
AFTER IT SUSTAINED ANY DAMAGE**

**CONTACT POWER STEP OR ITS LOCAL AREA REPRESENTATIVE TO
REQUEST A REPLACEMENT LADDER**

**IF THE LADDER MATERIAL IS BENT, TWISTED OR CRACKED YOU MUST
REPORT THE INCIDENT TO POWER STEP SO PROPER REMEDIAL ACTION IS
TAKEN TO ADDRESS THE DAMAGE**

**POWER STEP DESIGNED AND FABRICATED THIS PRODUCT UNDER
SPECIFIC STANDARDS AND GUIDELINES; ANY CHANGES OR
MODIFICATIONS WILL JEOPARDISE MATERIAL PROPERTIES AND SAFETY
OF THE PRODUCT**

CONTACT

POWER STEP (AUSTRALIA) PTY LTD

TEL: +61 7 32773977

FAX: +61 7 32773994

EMAIL: sales@powerstep.com.au