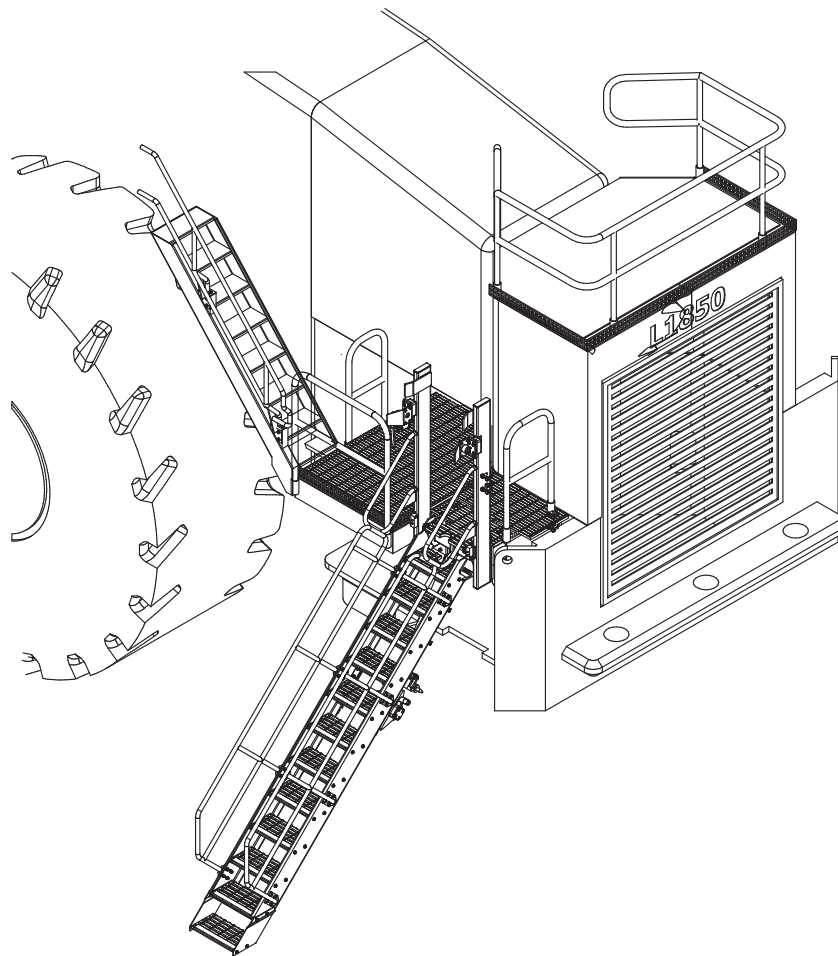


# FOLDING STAIRWAY



## Manual LeTourneau L1850 Wheel Loader



Model No.: PSA-L1850-FS

Serial No.: PSA-L1850-001 - ~

Date Manufactured: Jan 2013



# FOLDING STAIRWAY

## LeTourneau L1850 Wheel Loader



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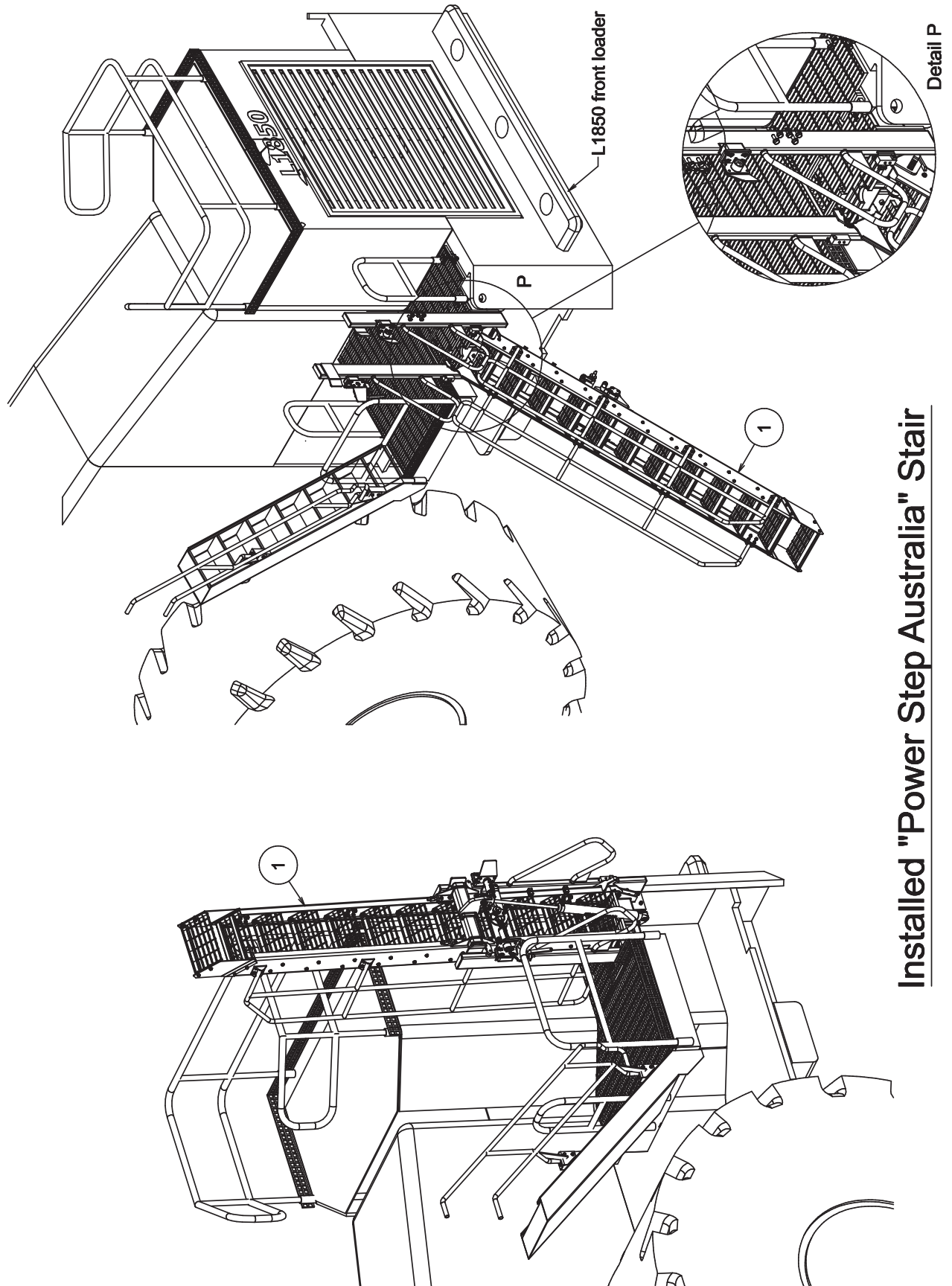


# FOLDING STAIRWAY

## LeTourneau L1850 Wheel Loader



### Section 1 Installation Drawings Access Installed PSA-L1850-INS Sht. 1





# FOLDING STAIRWAY

## LeTourneau L1850 Wheel Loader

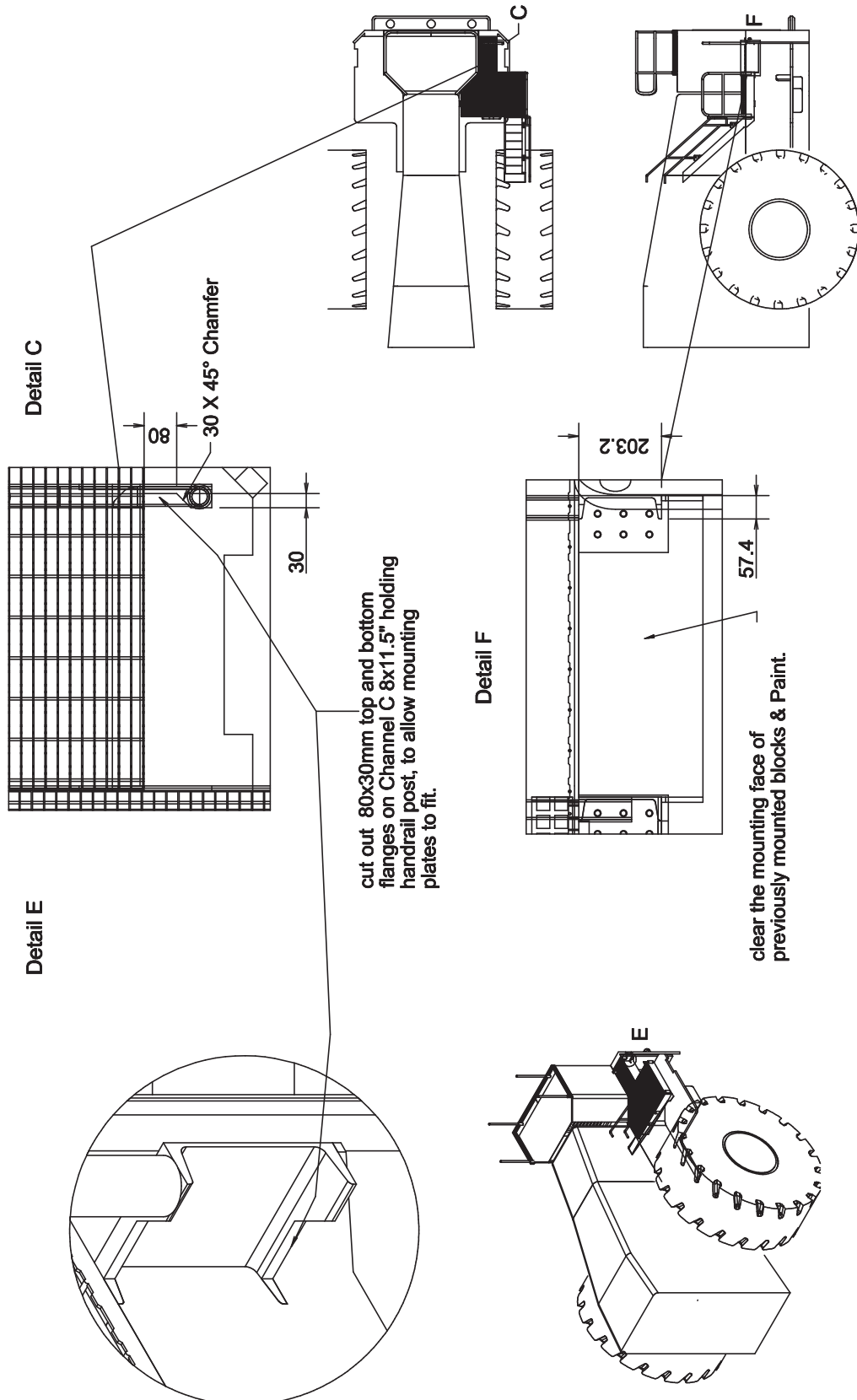


### Section 1 Installation Drawings Preparation Details PSA-L1850-INS Sht.

#### **NOTE**

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

#### preparation pre-install





# FOLDING STAIRWAY

## LeTourneau L1850 Wheel Loader

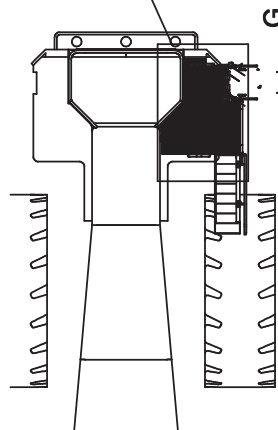


### Section 1 Installation Drawings Preparation Details PSA-L1850-INS Sht. 3

#### preparation pre-install

1. Remove existing ladder and the mounting blocks on the front Channel C 12x25"
2. Remove front and back OEM handrails.
3. unbolt and remove back grid to clear working area.
4. perform the cut out on the Channel C 8x11.5" that holds the back handrail. see Detail "K"

Detail G



G

remove post holder from this position.

New post holder. weld it into position.

OEM post holder

60.3

1030

60.3

15

130

203.2

355 approx.

30

45°

80

Detail K

oem kickplate -

1.- remove and cut out as shown.

2.- Re-welded kickplate flash with Channel C 8x11.5" face

Detail J

15

130

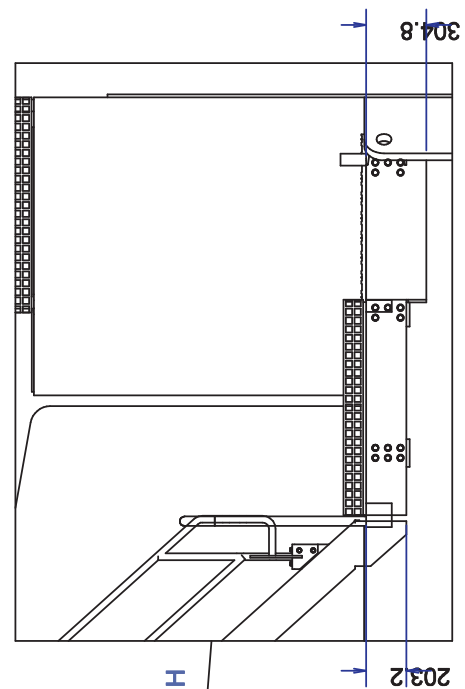
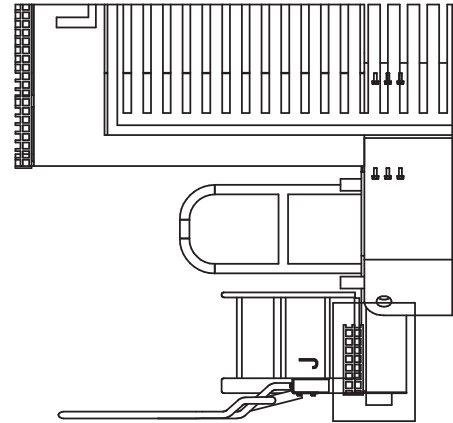
203.2

355 approx.

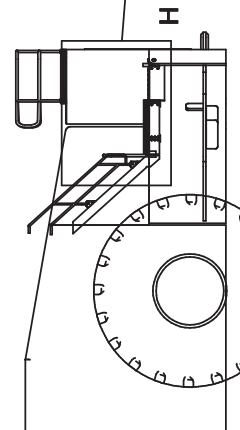
30

45°

80



Detail H



H

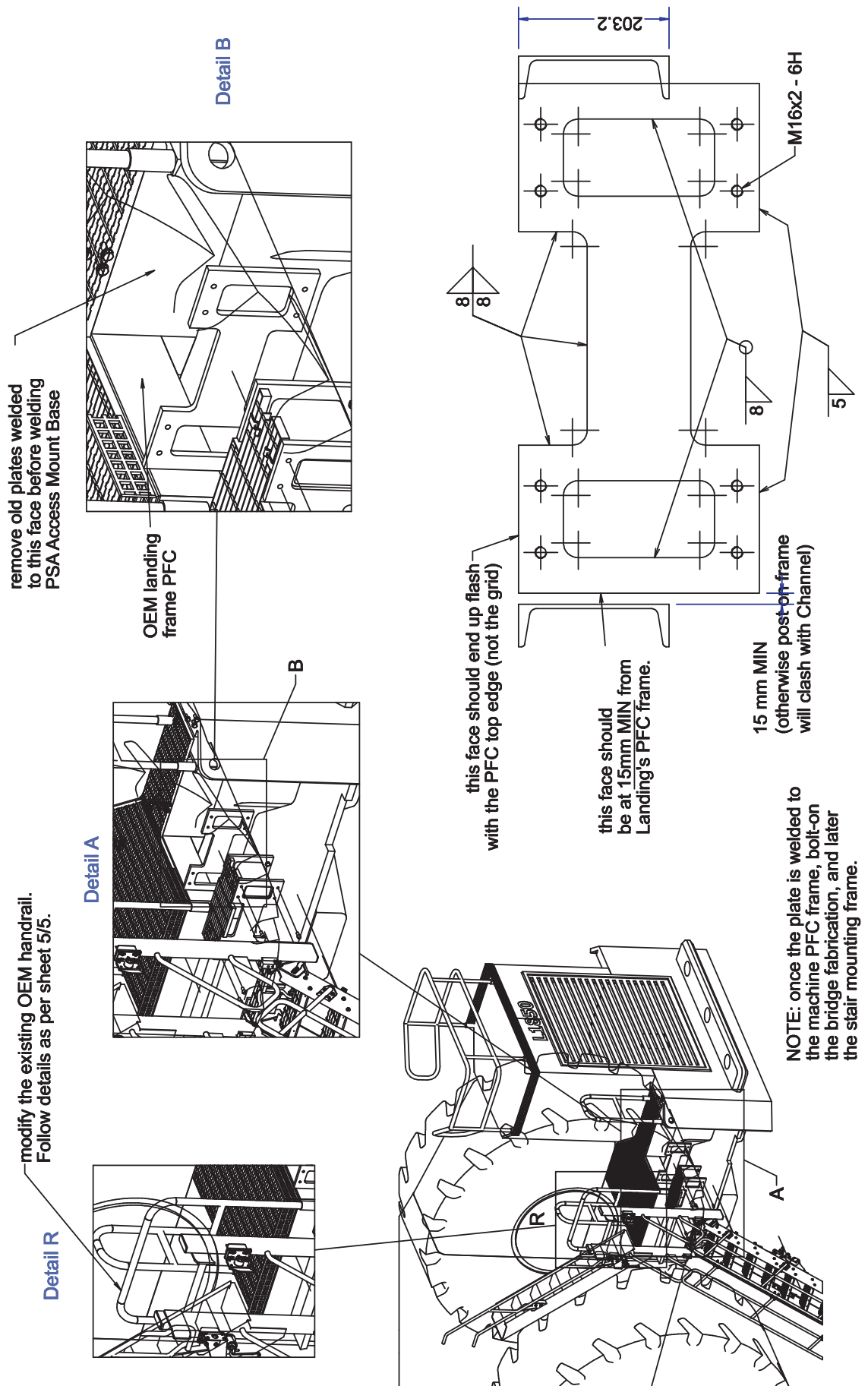


# FOLDING STAIRWAY

## LeTourneau L1850 Wheel Loader



### Section 1 Installation Drawings Weld Mtg. Plates PSA-L1850-INS Sht. 4





# FOLDING STAIRWAY

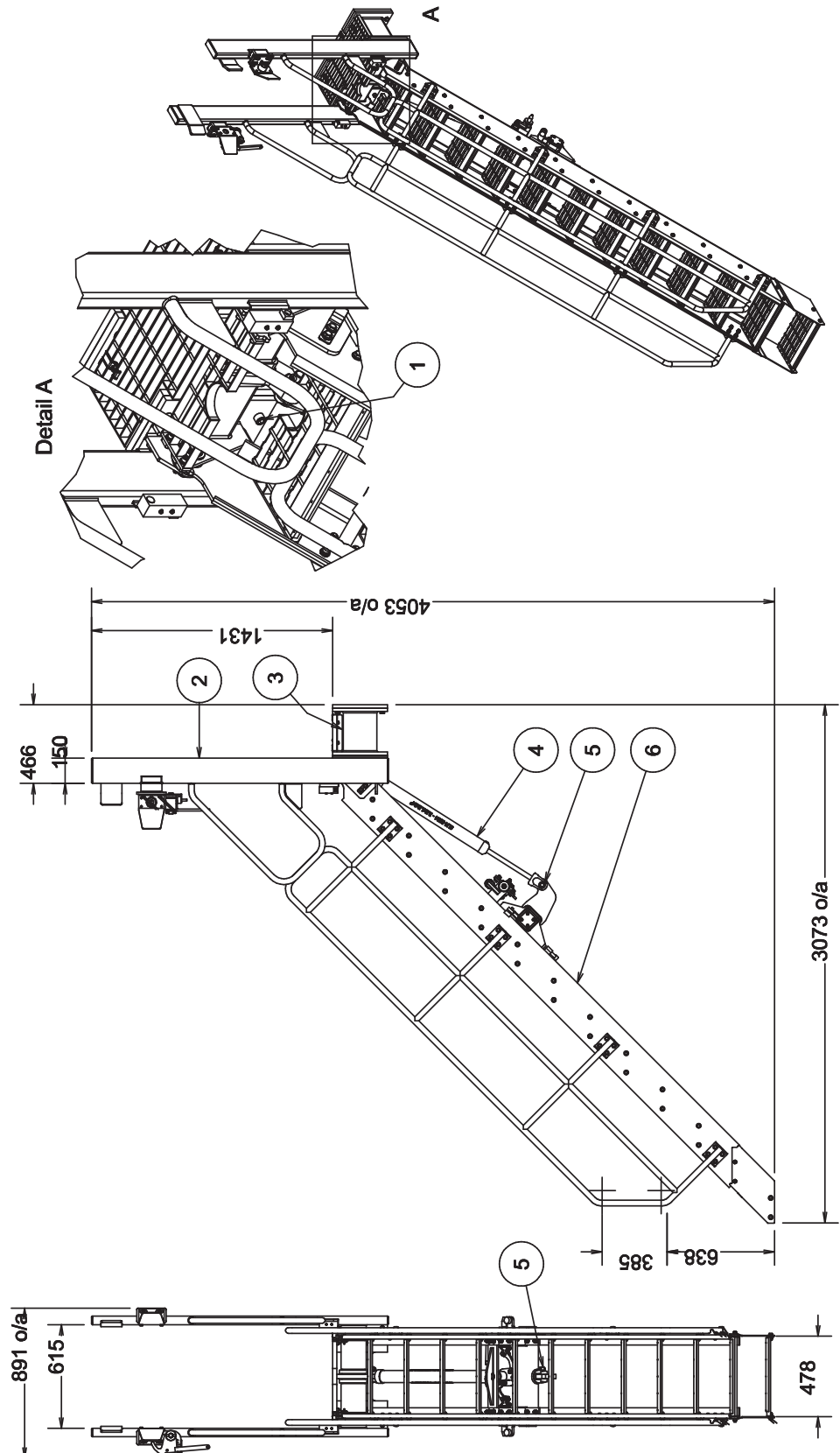
## LeTourneau L1850 Wheel Loader



### Section 1 Installation Drawings

PSA-L1850 Access Sht. 1

ITEM	PART NO	REV	QTY	DESCRIPTION	RAW MATERIAL	MASS
1	AS 1420 - 1973 - M16 x 35		8	ISO metric hexagon socket head cap screws		0.1 kg
2	PSA-FRA-A04	C	1	Stair Access Frame Assembly	Assembly	118.6 kg
3	PSA-FRA-A05	A	1	Bridge Assembly	Assembly	87.1 kg
4	PSA-HYD-A06	-	1	PTE 2.5" x 1.5" Rod x 24" stroke		9.2 kg
5	PSA-PIN-A04	A	2	Std Ram Pin 1" with Grease Nipple	23 856	0.4 kg
6	PSA-STR-A07	C	1	Stair Assembly	Assembly	253.6 kg





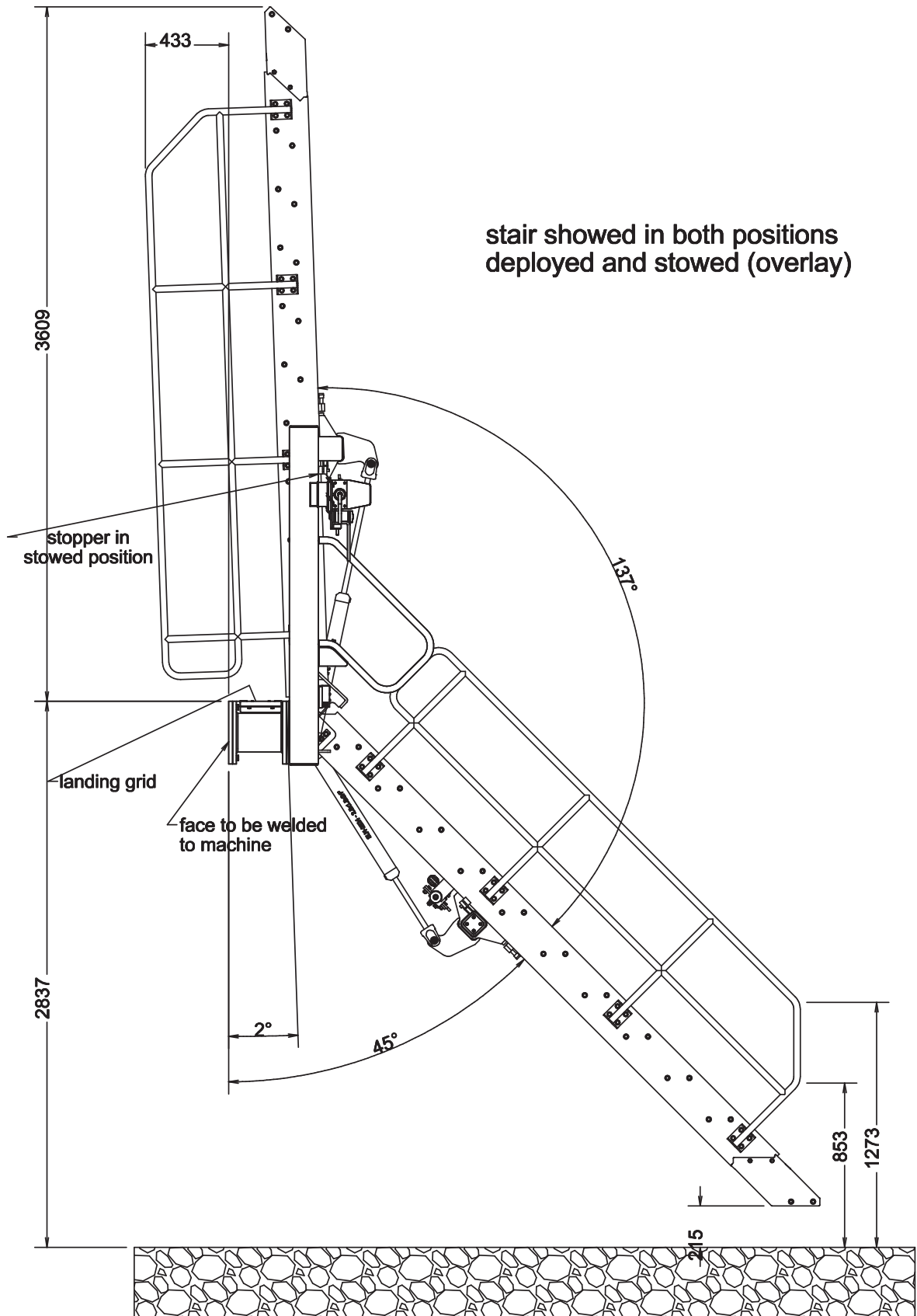
# FOLDING STAIRWAY

## LeTourneau L1850 Wheel Loader



### Section 1 Installation Drawings

PSA-L1850 Access Sht. 2





# FOLDING STAIRWAY

## LeTourneau L1850 Wheel Loader



### 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 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 STAIRWAY**

## **LeTourneau L1850 Wheel Loader**



### **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

## LeTourneau L1850 Wheel Loader



### 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.

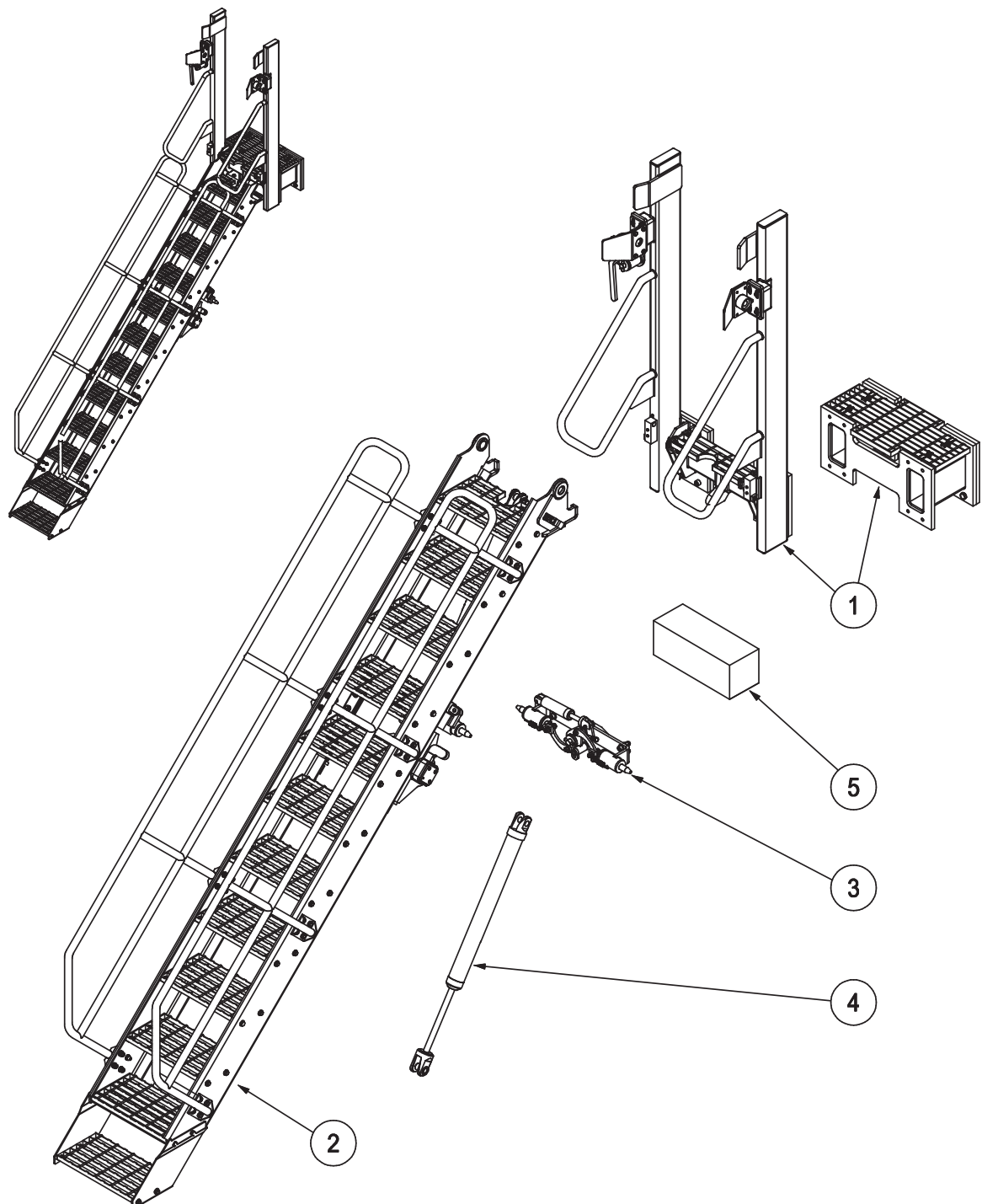


# FOLDING STAIRWAY

## LeTourneau L1850 Wheel Loader



### Section 4 Assembly Complete





# FOLDING STAIRWAY

## LeTourneau L1850 Wheel Loader



### Section 4 Assembly Complete

See Drawing Page 12

ITEM	PART NO.	PART NAME	QTY		
	PSA-L1850-FS	ASSEMBLY COMPLETE	1		
1	PS-FRA-A04	STAIR BASE FRAME & MOUNTING	1		
2	PS-STR-A07	STAIR ASSEMBLY	1		
3	PS-LOC-A07	LATCH ASSEMBLY	1		
4	PS-62998-AH PS- 62997-A	HYDRAULIC CYLINDER (Stair) HYDRAULIC CYLINDER (Latch)	1		
5	PS-80103A-SLD	POWER PACK	1		



# FOLDING STAIRWAY

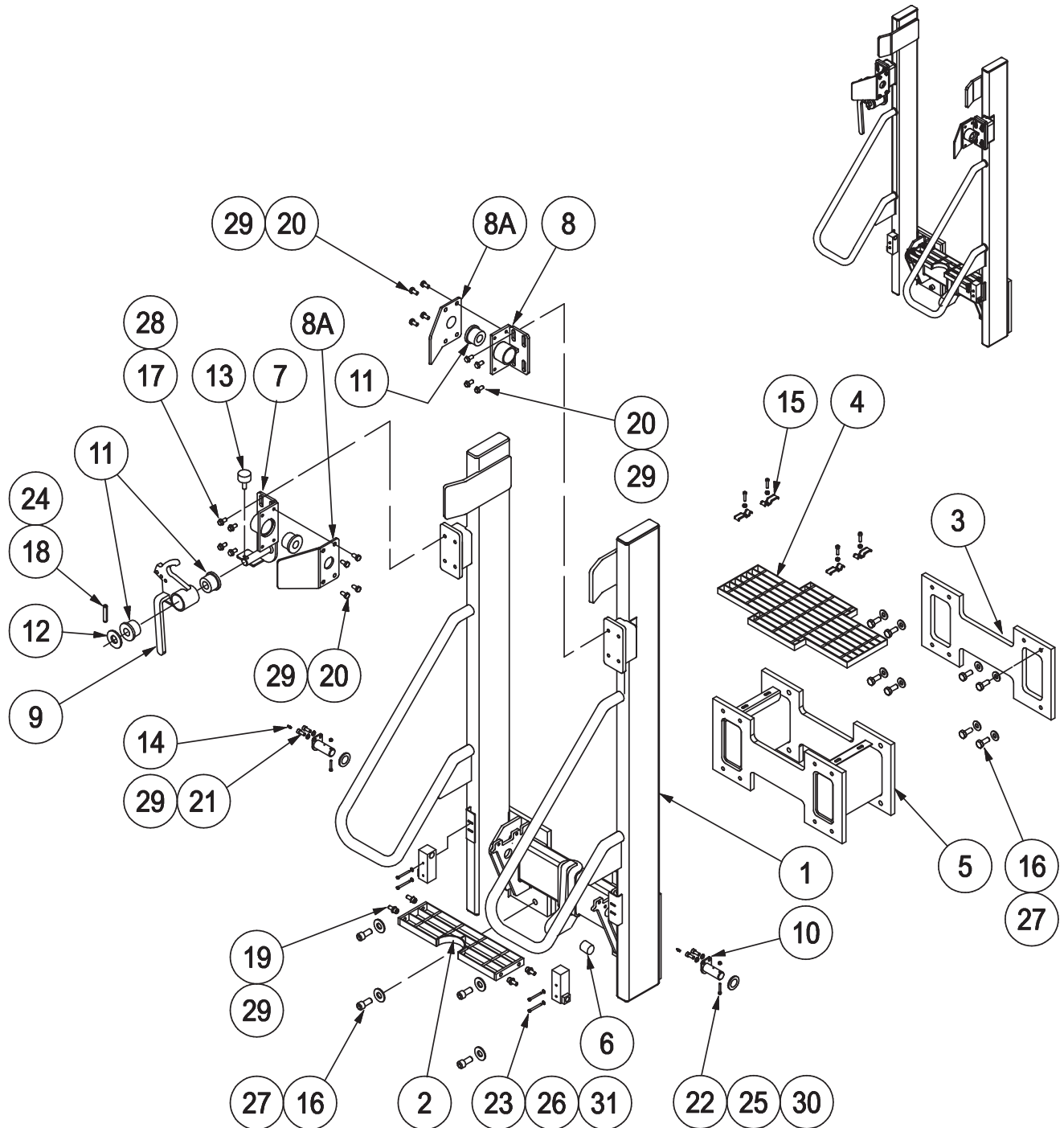
## LeTourneau L1850 Wheel Loader



### Section 4.1 Stair Base Frame and Mounting Assembly

PS-FRA-A04

See Parts List Pg. 15





# FOLDING STAIRWAY

## LeTourneau L1850 Wheel Loader



### Section 4.1 Stair Base Frame and Mounting

PS-FRA-A04

See Drawing Page 14

Item	Part No.	Part Name	Qty		
1	PS-FRA-B07	BASE FRAME	1		
2	PS-STR-B17	LANDING DECK FABRICATION	1		
3	PS-FRA-C43-01	ACCESS MOUNT BASE	1		
4	PS-FLR-C19	BRIDGE MESH FLOOR	1		
5	PS-FRA-B09	BRIDGE BRACE	1		
6	PS-HYD-C12	HARDENED BUSH	1		
7	PS-LOC-B06	STRIKER-LEFT SIDE	1		
8	PS-LOC-B07	STRIKER-RIGHT SIDE	1		
8A	PS-LOC-C46	BUFFER LEADER PLATE	2		
9	PS-LOC-C36	MANUAL RELEASE LEVER	1		
10	PS-P30-009	PIVOT PIN	2		
11	PS-LOC-C35	LATCH BUSH	4		
12	PS-LOC-C29	WASHER	1		
13	PS-40002	LATCH LEVER BUFFER Mackay	1		
14	PS-61006	GREASE NIPPLE M6	2		
15	PS-YNC-01	WEB FORCE CLIP	4		
16	CPS-M16X40ZP	BOLT-M16 x 40	16		
17	CPS-M12X30ZP	BOLT-M12 x 30	8		
18	CPS-M10X60ZP	BOLT-M10 x 60 CAP SCREW	1		
19	CPS-M10X25ZP	BOLT-M10 x 25	4		
20	CPS-M10X20ZP	BOLT-M10 x 20	8		
21	CPS-M10X16ZP	BOLT-M10 x 16	4		
22	CPS-M6X50ZP	BOLT-M6 x 50	2		
23	CPS-M5X50ZP	BOLT-M5 x 50	4		
24	PS-M10NN	NUT-NYLOC-M10	1		
25	PS-M6NZP	NUT-M6	2		
26	PS-M5NN	NUT-NYLOC-M5	4		
27	CPS-M16WH	WASHER-HARDENED-M16	16		
28	CPS-M12WH	WASHER-HARDENED-M12	8		
29	CPS-M10WH	WASHER-HARDENED-M10	16		
30	CPS-M6WH	WASHER-HARDENED-M6	4		
31	CPS-M5WH	WASHER-HARDENED-M5	8		