Operator's Manual

INCLUDES LEAFLET FOR
110/230 VOLTS EMERGENCY
DESCENT CONTROL DEVICE
(SEE SAFETY DEVICES ON P. 20)

P SERIES

HYDRO MOBILE

ELEVATING EFFICIENCY

Call us for information:
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NOTE
All assembly and operation instructions located on motorized units and bridges take precedence over information contained in this manual. Should there be any discrepanies discovered throughout any published documentation issued by Hydro Mobile or its authorized affiliates, the following order of precedence shall prevail:

1. **Written documents issued by the Hydro Mobile Engineering department**
2. **Recall instructions**
3. **Assembly or operation instructions displayed on the motorized unit**
4. **Operator's manual**
5. **Any other document not specifically included in the list above**

Any use of one or several Hydro Mobile motorized units, with or without accessories, in such a configuration or manner as not explicitly described in this manual is not recommended without the prior written permission of Hydro Mobile Inc.

REVISION LIST

Date	Description
Apr 2003 v 1.0	First edition of Operator's manual
Oct 2004 v 2.0	Overall revision 2004
Feb 2005 v 3.0	Addition of bearing bridge; changes to load capacities
Sept 2005 v 3.1	Overall revision; APAVE certification 2005; inclusion of information on 10' (3 m)/min model
Dec 2005 v 3.2	Changes to electric diagram for 10' (3 m)/min model
Jan 2008 v 4.0	Overall 2007-2008 revision; inclusion of additional accessories; addition of load capacity charts for forward/back extension bridges

GENERAL INFORMATION

Model	P2K3J	P Series motorized unit
Motorized unit serial number		
Manufacturing date		

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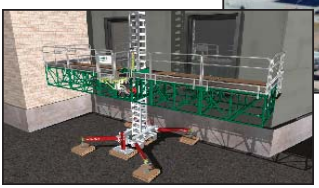


Introduction

Dear owner or user:

Thank you for investing in a Hydro Mobile P Series mast climbing work platform system. The design of this motorized unit reflects over a decade of continued field operation, testing and research work and comes as a solution to our company's deepest concern, your safety and well being on the job.

To ensure that the workplace becomes safer and more efficient using a Hydro Mobile system, always have a competent person and backup competent person assemble, operate, dismantle and move your mast climbing work platform system. These competent persons will be required to read this operator's manual and assimilate the information contained herein. Failure to do so could lead to serious injury and/or equipment damage.

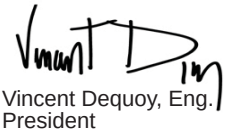
This motorized unit was designed in accordance with the following standards: US ANSI A92.9-1993, ISO 16369 and EN 1495, 98/37/CE "directive machine" and 89/336/CEE "directive CEM". Furthermore, this motorized unit and its operator's manual comply with US ANSI A92.9-1993 standards, Federal Occupational Safety and Health Administration Standards OSHA 29CFR1926 subpart L, as well as applicable State and local regulation; with ISO 16369 as well as local regulation applicable in Canada; and with EN 1495, 98/37/CE "directive machine", 89/336/CEE "directive CEM" or ISO 16369, as well as local regulation applicable in Europe.

To maximize the life expectancy of your equipment and to enjoy years of trouble free operation, we recommend that this Hydro Mobile system be serviced according to maintenance schedules and recommendations provided in this manual. It is also advised to refer to the Honda user's manual included with the motorized unit.

Should you have any questions or concerns, please contact the nearest authorized distributor or Hydro Mobile directly at 888-484-9376 (in the United States), 450 589-8100 (in Canada) or +033.6.30.63.14.56 (in Europe). You can also visit our Web site at www.hydro-mobile.com for additional support and information on our factory safety and performance training seminars.

We wish you years and years of safe, productive construction and renovation work.

Sincerely,



Vincent Dequoy, Eng.
President

NOTE
Items depicted in illustrations throughout this manual may differ from actual products. Items referred to as **wall ties** are the equivalent of the industry standard's **mast ties** and are subject to the same rules and regulations.

Warranty

Hydro Mobile Inc., herein referred to as Hydro Mobile, warrants its new products to be free from defects in material or workmanship for a period of one year after the date of delivery to the first user or a maximum of 18 months after date of delivery to its authorized distributor.

Hydro Mobile's obligation and liability under this warranty are expressly limited to repairing or replacing with re-manufactured or new, at Hydro Mobile's option, any parts which appear to have been defective in material or workmanship. Such parts shall be provided at no cost to the distributor or end user, FCA distributor's yard or job site, at Hydro Mobile's option.

Hydro Mobile shall pay, to the extent established by its applicable service policy in effect at the time of delivery, the cost to install any repaired or replacement part provided under this warranty. The cost of any such work will only be paid by Hydro Mobile if a written authorization has been granted prior to its beginning.

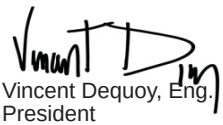
This warranty shall not apply to component parts or accessories of products not manufactured by Hydro Mobile and which carry the warranty of the manufacturer thereof or to normal maintenance (such as engine tune-up) or any part necessary to perform such maintenance. Hydro Mobile offers no other warranty, express or implied, and offers no warranty of merchantability or fitness for any particular purpose.

Hydro Mobile's obligation under such warranty shall not include duty, taxes or any other charge whatsoever, or any liability for direct, indirect, incidental or consequential damage or delay. If requested by Hydro Mobile, transportation charges for products or parts to be returned for warranty claim shall be prepaid by the distributor or end user.

Any use of one or several Hydro Mobile motorized units, with or without accessories, in such a configuration or manner as not explicitly described in this manual is not recommended without the prior written permission of Hydro Mobile Inc.

Any improper use, including operation after discovery of defective or worn parts, shall void this warranty. Improper use also includes operation beyond rated capacity, substitution of parts with parts other than those approved by Hydro Mobile, including anchor systems, or any alteration, modification or repair by others in such manner as in Hydro Mobile's judgment affects the product materially and adversely, shall void this warranty.

Sincerely,



Vincent Dequoy, Eng.
President

Performance and Safety Rules

SAFETY comes first. To ensure user safety, always have a competent person and backup competent person assemble, operate, dismantle and move this mast climbing work platform system. A competent person is defined as one having the:

1- **C**apability of identifying existing and predictable hazards;
2- **A**uthority to take prompt corrective action;
3- **T**raining and knowledge to assemble, operate, dismantle and move this system;
4- **O**perator's manual information on hand at all times;
5- **E**xperience (on the job) to assemble, operate, dismantle and move this system.

Operating instructions

1- Prepare a layout plan showing how the mast climb working platform system [motorized unit(s), bridges, extensions] will be positioned near structures or walls to be erected. On long walls, separate mast climber sections to allow for flexibility. Position motorized units to provide proper anchoring points for masts.
2- Establish the distance between the mast climbing work platform system and the structure or wall, taking into account the length of plank outriggers [5 ft (1,5 m)], as well as curvatures, balconies, columns, trees, telephone wires, electrical lines, etc.
3- Refer to regulations governing distances between the mast climbing work platform system and electrical lines.
4- Make sure the capacity of the bearing surface meets with values included in the *Minimum Bearing Surface Capacities* table herein (fig. 1.21, p. 13). Soil compacting, cribbing or shoring can increase bearing capacity. The **screw jacks on the base outriggers** (swivel type) are designed to level the motorized unit and **should not be used to support the load nor the motorized unit**. Make sure the motorized unit is **resting on the main jacks on the base** (2) and that the support blocks or optional caster wheels are no longer in contact with the ground before using the motorized unit. Contact a licensed engineer for assistance.
5- Never modify the mast climbing work platform system or use substitute factory parts. This could adversely affect worker safety, unit performance and void the warranty. In addition, this could lead to serious injury or death.
6- Unless authorized by Hydro Mobile prior to installation, the motorized unit **must not be used** with a hoist, weather protection, a monorail or any other accessories not specifically included in the P Series Operator's manual. For the use and installation of any accessories other than those included in this operator's manual, contact the distributor or the Hydro Mobile technical support team.
7- Never use the motorized unit in a enclosed space due to carbon monoxide emanations or in a place where explosives are stored. It is also recommended not to smoke on the platform.
8- Characteristics per plank: planks species measuring 2" x 10" or 12" (5 cm x 25 cm or 30 cm) must resist a load of 265 lb (120 kg) at 4' (1,2 m) of an 8' (2,4 m) simple span.
9- IMPORTANT: It is strongly recommended not to use equipment such as Bobcats, jack-hammers, backhoes, etc., on Hydro Mobile platforms.
10- Workers exposed to potential hazards must always wear proper individual protection equipment such as a helmet, safety boots, a fall arrest harness, etc., as prescribed by OSHA or local regulations. In all cases where workers are exposed to fall hazards greater than specified by OSHA or local regulations, the installation of guardrails or face guardrails is **mandatory**.
11- Unless authorized by Hydro Mobile prior to installation, the platform should not be raised higher than 250' (76 m). For any configuration other than those described in this operator's manual, contact the distributor or the Hydro Mobile technical support team.

Performance and Safety Rules (cont'd)

12- Rely on a licensed engineer for help on special jobs and to approve plans if required by local regulation.

13- To ensure work efficiency, safety and performance, it is mandatory to maintain an adequate equipment and parts inventory on the job site. It is also mandatory to make sure that equipment is kept in good condition and that all inspection and maintenance procedures (daily, weekly, monthly and yearly) are carried out effectively and kept on record. While **daily** and **weekly** maintenance operations can be performed by a competent person, it is **mandatory** that any inspection or maintenance operation scheduled to be performed every **month** and every **year** be carried out by an **appropriately trained and competent authorized technician**. It is recommended that **yearly** maintenance operations and inspections be performed in a workshop where non-destructive test techniques can be applied. For more information, refer to maintenance and equipment checklists at the end of this manual.

14- After installation, mark off limit areas of the system using fencing, barriers, warning tape and note emergency phone numbers (fire and police dept.) for quick reference. **Prepare an emergency evacuation plan that is specific to the job site and is in accordance with OSHA and local regulations.**

15- Never load bridges or motorized units beyond their rated capacities. Overloading may cause motorized units to bind and bridges to warp or fall, leading to serious injury or death.

16- Contact the distributor or Hydro Mobile for service, repair or technical advice. Refer to equipment type and serial number when calling.

17- Each person should access the platform by a staircase, through an opening in the building or by the right-hand side of the mast, using the access bridge to reach the platform. The use of the access bridge is **mandatory** to reach the platform by the mast. Refer to p. 47 of the *Accessories* section for more information on the use and installation of the access bridge.

18- The use of appropriate fall protection equipment is **mandatory** when using the mast for climbing or descending or when modifying plank configuration. Failure to use fall protection equipment can expose user to serious injury or death.

19- Only one person at a time may evacuate the platform by climbing down the mast.

20- It is not recommended to evacuate the platform by climbing down the mast at heights beyond 69' (21 m).

21- In the event of an anomaly which could compromise security, immobilize the unit and inform the person in charge.

22- It is strongly recommended not to touch any of the moving parts on the motorized unit when it is in use.

23- It is advised to close all access doors on the motorized unit when they are not in use.

24- All motorized unit operations must be carried out at all times by at least two competent persons. The motorized unit should never be operated by a single person.

25- The motorized unit must not be used or operated during an electrical thunderstorm.

26- Wind speeds must not exceed 28 mi/h (45 km/h) during the erection and dismantlement of a motorized unit setup (including the bridges, the masts, the wall ties and all the other components). The motorized unit setup must not be exposed to wind speeds exceeding 35 mi/h (56 km/h) when in operation. Wind speeds must not exceed 93 mi/h (150 km/h) when the motorized unit setup is out of service.

27- When the motorized unit setup is out of service and above **base** level, it is forbidden to leave loads on the platform other than counterweights used for front and back extension configurations.

Motorized Unit Overview

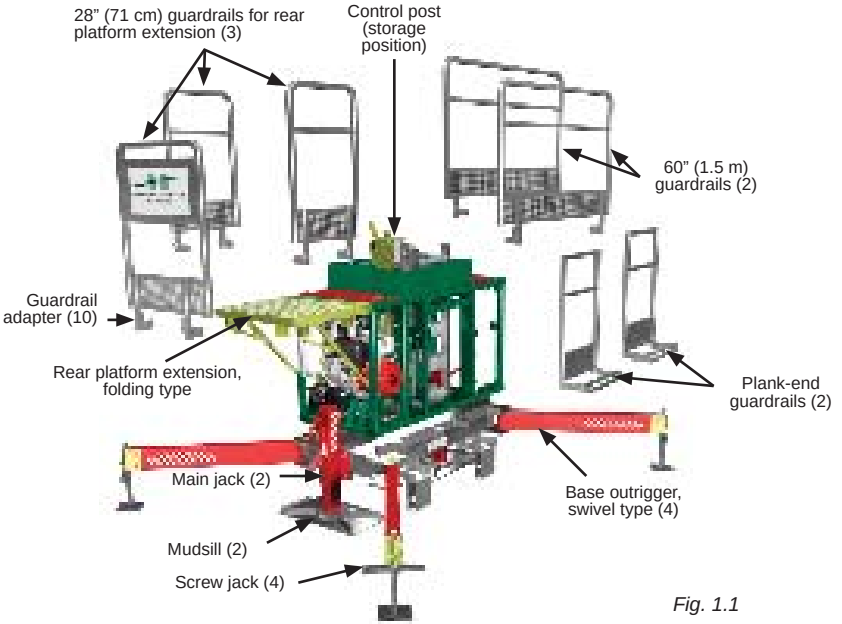
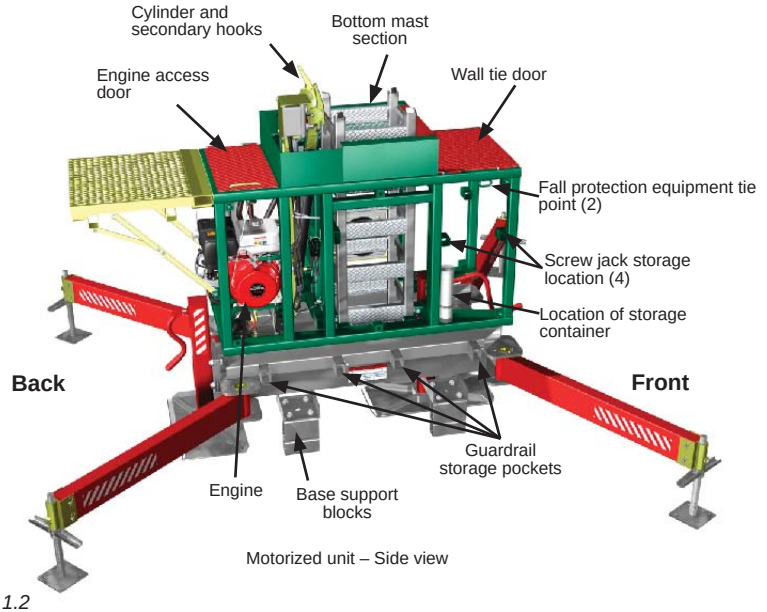


Fig. 1.1



Motorized unit – Side view

Fig. 1.2

Note: Items depicted in illustrations may differ from actual products.

Motorized Unit Overview (cont'd)

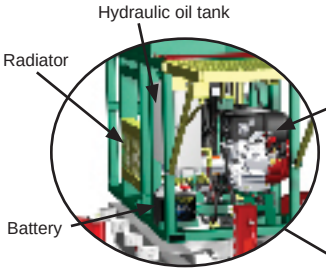


Fig. 1.4

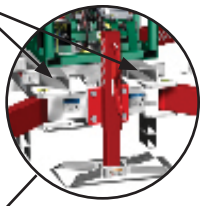


Fig. 1.5

Motorized unit – Back view

Fig. 1.3

Motorized unit – Typical installations

Fig. 1.6

Typical single mast installation

- One P Series motorized unit
- Two (2) 30" (0,76 m) bridges

Fig. 1.7

Typical multiple mast installation

- 2 x P Series motorized units
- 2 x 60" (1,5 m) bridges (**each** cantilever side)
- 2 x 30" (0,76 m) bridges (bearing side)
- 2 x bearing bridge adapters
- 5 x 60" (1,5 m) bridges (bearing side)

List of components included with shipped unit

Quantity	Component
1	P Series motorized unit [1] [10' (3 m)/min or 3' (0,9 m)/min model]
1	Operator's manual
1	15/16" open end wrench
1	level
4	screw jacks
2	60" (1,5 m) guardrails
2	28" (71 cm) guardrails
1	28" (71 cm) guardrail with panel
10	guardrail adapter L brackets
2	plank-end guardrails [2]

[1] Refer to fig. 1.1 on p. 8 for a view of some of the main components included with the motorized unit.
[2] Not included in the weight of the motorized unit on p. 11.

Notes
The P Series motorized unit is shipped without any outriggers.
The list of components included with each motorized unit shipped may change without notice.

Fig. 1.8

Motorized Unit Specifications

General Specifications		
Dimensions of the motorized unit (as shipped)		42” x 76” x 76” (W x L x H) (1,1 m x 1,9 m x 1,9 m) (fully assembled)
Drive system		Hydraulic ratchet drive
Min. / max. platform length	Single mast installation *	7’–5” / 27’–5” (2,3 m / 8,4 m)
	Twin mast installation *	63’–4” / 83’–4” (19,3 m / 25,4 m)
Maximum height		Up to 250’ (76 m) without prior authorization from Hydro Mobile
Tie distance		Up to 20’ (6,1 m) (refer to *Masts and Wall Ties* section for complete information)
Free standing height	Single mast installation *	20’ (6,1 m) with base outriggers extended at a 30° angle
	Twin mast installation *	20’ (6,1 m) with base outriggers extended at a 30° angle
Safety device	Emergency descent	Independent electrical descent control system

* *Refer to fig. 1.6 and fig. 1.7 on p. 9 for a description of components included in typical single and multiple mast installations*

Fig. 1.9

Specific Features			
		10’ (3 m) / min model	**3’ (0,9 m) / min model**
Platform weight (as shipped; weight without plank-end guardrails)	**Total**	2550 lb (1157 kg) (fully assembled)	2500 lb (1134 kg) (fully assembled)
	Base	1130 lb (513 kg)	1130 lb (513 kg)
	MU structure assembly	1190 lb (544 kg)	1140 lb (517 kg)
Maximum load capacity	Single mast installation *	7500 lb at 7’–5” (3402 kg at 2,3 m) 6000 lb at 27’–5” (2722 kg at 8,4 m)	7500 lb at 7’–5” (3402 kg at 2,3 m) 6000 lb at 27’–5” (2722 kg at 8,4 m)
	Twin mast installation *	11 450 lb at 63’–4” (5194 kg at 19,3 m) 9750 lb at 83’–4” (4423 kg at 25,7 m)	11 450 lb at 63’–4” (5194 kg at 19,3 m) 9750 lb at 83’–4” (4423 kg at 25,7 m)
Maximum lifting capacity		8430 lb (3824 kg)	8430 lb (3824 kg)
Vertical travel speed		Up to 10’ (3 m) per minute (Honda 11 HP engine)	Up to 3’ (0,9 m) per minute (Honda 9 HP engine)
Mast section		16” x 16” x 60” (40,6 cm x 40,6 cm x 1,5 m) 235 lb (100 kg) per section	16” x 16” x 60” (40,6 cm x 40,6 cm x 1,5 m) 235 lb (107 kg) per section
Bridges	30” (76 cm)	31” x 62” x 36” (W x L x H) (0,8 m x 1,6 m x 0,9 m)	31” x 62” x 36” (W x L x H) (0,8 m x 1,6 m x 0,9 m)
	60” (1,5 m)	61” x 62” x 36” (W x L x H) (1,5 m x 1,6 m x 0,9 m)	61” x 62” x 36” (W x L x H) (1,5 m x 1,6 m x 0,9 m)
	Bearing bridge adapter	32” x 62” x 36” (W x L x H) (0,8 m x 1,6 m x 0,9 m)	32” x 62” x 36” (W x L x H) (0,8 m x 1,6 m x 0,9 m)
Guardrails (included)		28” (0,7 m) (3) 60” (1,5 m) (2)	28” (0,7 m) (3) 60” (1,5 m) (2)

* *Refer to fig. 1.6 and fig. 1.7 on p. 9 for a description of components included in typical single and multiple mast installations*

Fig. 1.10

Engine Specifications		
	10’ (3 m) / min model	**3’ (0,9 m) / min model**
Model	Honda GX340	Honda GX270
Rated power	11 HP @ 3600 rpm	9 HP @ 3600 rpm
Consumption	230 g/hp·hr	230 g/hp·hr
Spark plug	BPR6ES	BPR6ES
Oil type	SAE 10W30	SAE 10W30
Gasoline tank capacity	1,71 US gal (6,5 l)	1,56 US gal (5,9 l)
Oil capacity	1,16 US qt (1,10 l)	1,16 US qt (1,10 l)
Electrical power supply	12 VDC - 18 ampere-hour	12 VDC - 10 ampere-hour
Battery	12 V - 700 CCA	12 V - 700 CCA
For any other information regarding the use and the maintenance of Honda engines, refer to the Honda User’s manual		

Fig. 1.11

Motorized Unit Specifications (cont'd)

Hydraulic Specifications	
Component	**Specifications**
Single gear pump	1 x 7,38 GPM (27,9 l/min)
Hydraulic cylinder	1 x 3 1/2" x 23 1/2" x 1 1/2" (8,9 cm x 59, 7 cm x 3,8 cm) with 3000 psi counterbalance
Hydraulic tank capacity	6,28 US gal (23,75 l)
Hydraulic oil	Dextron III ATF
Oil filter	Ikron filter model HE K44-20-135-A5-SP010 (HM part number A0410000-0004)

Fig. 1.12

Weight of Components		
Product code	**Description**	**Weight**
30001000-0-00000-2	Base	1130 lb (513 kg)
30000002-K-01000-1	Motorized unit [1] (as shipped [2])	2550 lb (1157 kg)
30000002-0-03000-1	P Series Motorized unit structure assembly [1]	1190 lb (540 kg)
11023310-0-00000-2	Mast assembly	235 lb (107 kg)
30003100-0-00000-1	Access bridge (assembled)	750 lb (340 kg)
20003C04-K-02000-1	30" (76 cm) bridge kit (w/ guardrail)	280 lb (127 kg)
20003D03-K-02000-1	60" (1,5 m) bridge kit (w/ guardrail)	390 lb (177 kg)
20003H00-K-01000-2	30" (76 cm) bridge deck extension kit	96 lb (47 kg)
20003G02-K-01000-2	60" (1,5 m) bridge deck extension kit	124 lb (61 kg)
30003000-0-00000-1	Bearing bridge adapter	210 lb (95 kg)
20008203-K-01000-2	5' 3" (1,6 m) outrigger	20 lb (9 kg)
20002900-K-02000-2	28" (71 cm) guardrail	30 lb (14 kg)
20002701-K-01000-2	60" (1,5 m) guardrail	60 lb (27 kg)
20002501-K-01000-5	60" (1,5 m) door guardrail	90 lb (41 kg)
20002201-K-01000-2	Removable guardrail	48 lb (22 kg)
10002609-1-10000-2	Plank-end guardrail	27 lb (12 kg)
20015001-K-01000-2	Access stairs kit	146 lb (66 kg)

[1] *subtract 50 lb (23 kg) for 3' (0,9 m)/min model*
[2] *weight without plank-end guardrails*

Fig. 1.13

Operation Specifications	
Wind exposure	
	Maximum wind speed allowed
During operation	35 mi/h (56 km/h)
During erecting and dismantling	28 mi/h (45 km/h)
When unit is out of service	93 mi/h (150 km/h)
* Unless authorized by Hydro Mobile prior to installation, the platform should only be used on a mast whose height does not exceed 250' (76 m).	
Noise exposure	
Standard noise level [3] = 83dB(A) [4]	

[3] *measured at 23' (7 m) @ 3600 rpm*
[4] *with super silent, noise level is 76 dB(A)*

Fig. 1.14

Dimensions of the Motorized Unit

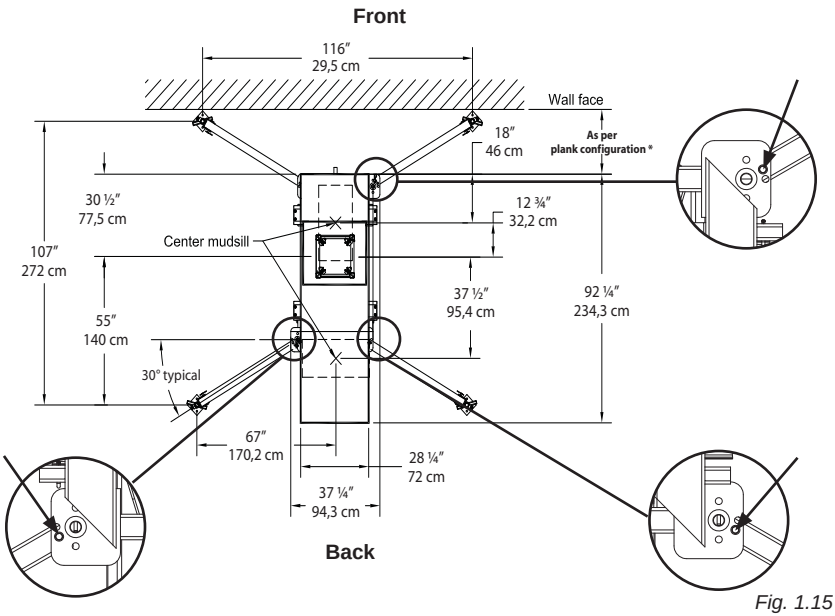


Fig. 1.15

NOTE: The motorized unit can be eased through a 36” (0,9 m) opening in side-to-side movements once the guardrails have all been removed.

Positioning the Motorized Unit

Cribbing

The bearing surface under the motorized unit must be level, clear of debris and have the proper bearing capacity. Cribbing can be used to distribute reaction on the bearing surface. The height of the cribbing must not exceed its width. The plywood and planks used as cribbing should be secured together to prevent slipping, leaving 1/2” (1,3 cm) of space between planks.

Suggested Cribbing				
		3' x 3' x 4 1/2' (0,9 m x 0,9 m x 11,4 cm)	4' x 4' x 6 1/2' (1,2 m x 1,2 m x 16,5 cm)	5' x5' x 8 1/2' (1,5 m x 1,5 m x 21,6 cm)
1	Plywood 1/2” (1,3 cm)	3	4	5
2	2” x 6” x 36” (5 cm x 15 cm x 91 cm)	12		
	2”x 6” x 48” (5 cm x 15 cm x 122 cm)		24	
	2” x 6” x 60” (5 cm x 15 cm x 153 cm)			40

Fig. 1.16

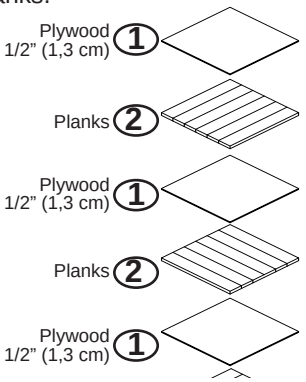


Fig. 1.17

Positioning the Motorized Unit (cont'd)

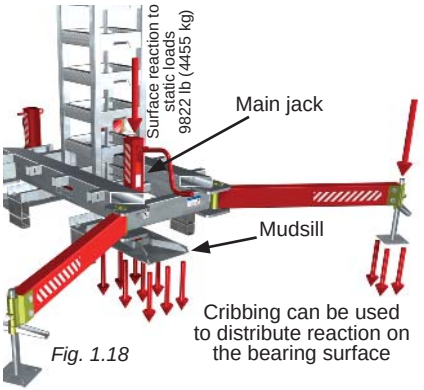


Fig. 1.18

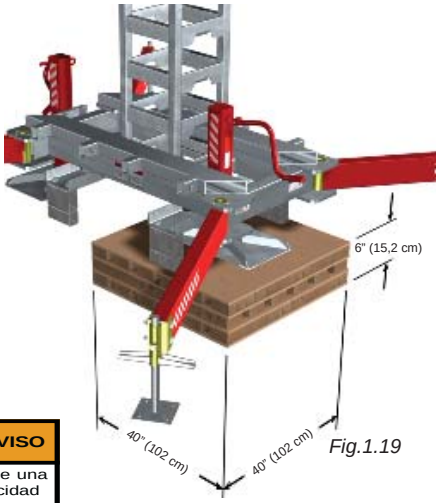


Fig.1.19

WARNING / AVERTISSEMENT / AVISO		
Ensure proper bearing capacity under all jacks.	S'assurer d'une bonne capacité de soutien sous tous les vérins.	Asegurarse de una buena capacidad de apoyo por debajo de todos los gatos

S-V62M2(A0800100-0011)

Fig.1.20

Minimum Bearing Surface Capacities
(for static loads)

	Height		Pressure on each mudsill no cribbing			Pressure on each screw jack no cribbing			Pressure on each screw jack with 18" x 18" x 6" (46 cm x 46 cm x 15 cm) cribbing		
	(ft)	(m)	Reaction (for static load)	(psi)	(kpa)	Reaction (for static load)	(psi)	(kpa)	Reaction (for static load)	(psi)	(kpa)
Freestanding	20	6,1	8764 lb 3975 kg	22,4	154,4	2936 lb 1332 kg	81,6	562,3	2936 lb 1332 kg	9,1	62,5
Installation with wall ties	50	15,2	9822 lb 4455 kg	25,1	173,1						
	75	22,9	10,703 lb 4855 kg	27,3	188,2						
	100	30,5	11,584 lb 5254 kg	29,6	204,1						
	200	61,0	15109 lb 6953 kg	38,5	265,4						
	250	76,2	16,872 lb 7653 kg	43,1	297,2						

Fig. 1.21

Mudsill: 14 x 28" (35,6 x 71 cm)
Contact surface: 392 sq in (,25 m^2)

WARNING

The capacity of the bearing surface must be verified by a professional engineer. The *Minimum Bearing Surface Capacities* table (above, fig. 1.21), illustrates surface reactions to **static loads**. Surface reaction forces can multiply significantly if the platform drops (**dynamic loads**). Should actual soil bearing capacity be inferior to values in the table above or for any configuration requiring the calculation of surface reaction to **dynamic loads**, please seek instructions and recommendations from the Hydro Mobile Engineering department.

Setup and configurations

Standard installation (single mast)

1 - Installation should be carried out under the supervision of a competent person, in accordance with all applicable Federal, State and local regulations.

2 - In reference to the plan/layout drawing, make sure that all the components required are available. Establish the position of the motorized unit, determine if there are obstacles and what are the cribbing and wall tie requirements.

3 - Before installing the motorized unit, determine where the cribbing and the mudsills will rest. The bearing surface under the motorized unit should be level, clear of debris and have the proper bearing capacity (see the *Minimum Bearing Surface Capacities* table, fig. 1.21, p. 13). Should the actual bearing capacity be inferior to the values in the table, please seek instructions and recommendations from Hydro Mobile. It is important to note that the **screw jacks on the base outriggers** (swivel type) are designed to level the motorized unit and **should not be used to support the load nor the motorized unit**.

4- In a standard, recommended three-plank configuration with base outriggers opened at a 30-degree angle, distance from the finished wall should be at least 30" (76,2 cm) or the number of planks x 10" (25 cm), while allowing 6 to 8" (15 to 20 cm) of play. Add an additional 2" (5 cm) if using a toe board. A configuration of **at least three planks** must be used for freestanding installations. Refer to OSHA 1926.453 (b) and other applicable local regulation to determine play or the maximum allowable distance between the motorized unit, including its accessories, and the face of the work. For any other base outrigger configuration, contact the distributor or the Hydro Mobile technical support team.

5- Mark the position of mudsills while taking center-to-center distances into account. Base level differences can be compensated for by adjusting the height of the base jacks, or by building wood cribbing.

6- Unload the motorized unit with a forklift or a crane. When moving the motorized unit with a forklift, the unit must be lifted by the designated areas on the base (see fig. 1.5, p. 9). It is important to consider that a 10' (3 m)/min motorized unit that must be lifted has a total weight of 2550 lb (1157 kg). Make sure that all loads have been removed from the platform and that all workers have stepped down before lifting and transporting the motorized unit. Refer to p.17 for more information on the lift and displacement of a motorized unit.

7- Using a forklift, optional caster wheels (4) * or a crane, position and align the motorized unit with the face of the work or the structure. Using the main jacks, lift the motorized unit until the base blocks or the optional caster wheels no longer touch the bearing surface.

** Caster wheels are optional and must be used on a flat, level surface.*

WARNING
The **screw jacks on the base outriggers** are designed to level the motorized unit and **should not be used to support the load nor the motorized unit**.

Setup and configurations (cont'd)

Standard installation (single mast) (cont'd)

8- Open all base outriggers at a 30-degree angle. Lock them in place by pushing pins through the holes on the base, as shown in fig. 1.15, on p. 12. For any other base outrigger configuration, contact the distributor or the Hydro Mobile technical support team.

9- Using the level provided in the storage container, verify the plumbness of the mast on both its front and side axis. If required, level the motorized unit using the main jacks and the screw jacks on the base.

10- Using bridge installation support brackets or any other lifting device such as a crane or a forklift, install only one bridge on each side of the mast. For more information about bridge installation and the use of the bridge installation support bracket, refer to p. 22 of the *Bridges* section.

11- Using a crane or a forklift, load mast sections on the platform. **Mast sections should be distributed equally on either side of the mast to ensure good balance**. Refer to the *Load Capacities* section on p. 38 for more information about loading the platform.

12- Proceed with the installation of mast sections. Refer to p. 31 of the *Masts and Wall Ties* section for more details on how to install mast sections.

13- Continue installing mast sections until a wall tie is required, making sure throughout the process that the mast remains plumb on both its front and side axis. Refer to p. 32 of the *Masts and Wall Ties* section for instructions about the installation of wall ties.

14- Install as many mast sections as the plan layout requires and as is allowed. A setup should not be raised above 250' (76 m), unless authorized by Hydro Mobile prior to installation.

15- When the setup has been raised at more than 30' (9 m) above base level, install a retractable rest platform to access the platform by climbing up the mast. Refer to p. 45 of the *Accessories* section for more information on the installation and use of a retractable rest platform.

16- Lower the motorized unit to base level, verifying wall ties and mast bolts on the way down and making sure that all are properly secured and in good condition.

17- Proceed with the installation of bridges. Refer to the *Load Capacities* section on p. 38 for the number of bridges allowed in a setup.

18- Make a final verification of the setup before authorizing workers to use the motorized unit. Make sure the access stairs and all the guardrails are in place and secure (see p. 43, p. 44 and p. 46 of the *Accessories* section for more information about guardrails and access stairs). In all cases where workers are exposed to fall hazards greater than specified by OSHA or local regulations, the installation of guardrails or face guardrails is **mandatory**.

19- Adjust outriggers and install planks, as required (see p. 42 of the *Accessories* section for more information).

WARNING
A setup should not be raised above 250' (76 m) unless authorized by Hydro Mobile prior to installation.

Setup and configurations (cont'd)

Multiple mast installation

(requires two bearing bridge adapters – sold separately)

1- In reference to the plan/layout drawing, make sure that all the motorized units and components required are available. Establish the position of each motorized unit, determine if there are obstacles and what are the cribbing and wall tie requirements.

2- Set up the first motorized unit as described in the standard installation instructions (single mast) on p. 14 (steps 1 through 19).

3- If that motorized unit is equipped with an access bridge, make sure to install the bearing bridge structure on the **opposite** (left) side of the motorized unit. Refer to p. 23 of the *Bridges* section for more information on the installation of a bearing bridge structure and to p. 47 of the *Accessories* section for more information on the use and installation of an access bridge.

4- Determine the position of the second motorized unit according to the length of the bearing bridge setup. For more information on calculating the ideal distance between two motorized units in a multiple mast installation, refer to p. 23 of the *Bridges* section. Refer also to the *Load Capacities* section on p. 38 for the maximum number of bridges permitted in a bearing bridge setup.

5- Before lowering the second motorized unit, determine where the cribbing and the mudsills will rest. The bearing surface under the motorized unit must be level, clear of debris and have the proper bearing capacity (see *Minimum Bearing Surface Capacities* table, fig. 1.21, p. 13). Set the cribbing and lower the motorized unit.

6- Using the level provided in the storage container, verify the plumbness of the mast on both its front and side axis. If required, level the motorized unit using the main jacks and the screw jacks on the base.

7- Proceed with the installation of the bearing bridge structure. Refer to p. 23 of the *Bridges* section for more information on the installation of bearing bridges.

8- Plug in the inclinometers at both ends of the bearing bridge structure. Refer to p. 18 of the *Safety Devices* section for more information on the use and installation of an inclinometer in a bearing bridge structure.

9- Proceed with the installation of cantilever bridges on the sides of the motorized units opposite to the bearing structure, as required. Refer to p. 22 of the *Bridges* section for more information on a cantilever installation and to the *Load Capacities* section on p. 38 for the maximum number of bridges allowed in a setup.

10- Make a final verification of the setup before authorizing workers to use the motorized unit. Make sure the access stairs and all the guardrails are in place and secure (see p. 43, p. 44 and p. 46 of the *Accessories* section for more information about guardrails and access stairs). Adjust outriggers and install planks, as required (see p. 42 of the *Accessories* section for more information).

WARNING

If a motorized unit is equipped with an **access bridge**, the **bearing bridge structure** must be installed on the **opposite** (left) side of the motorized unit.

Setup and configurations (cont'd)

Lifting and moving a motorized unit setup

The lift and displacement of a motorized unit setup must be done with extreme care, using proper certified lifting equipment. The **maximum length** of a P Series motorized unit setup that can be lifted and transported by a **small capacity forklift** (using the base transport tubes) is 17'–5" (5,3 m).When using a **high capacity forklift** or a **crane** to lift and transport a motorized unit setup by the base (forklift only) or with a sling, the **maximum length** of the setup is 27'–5" (8,4 m). It is **mandatory** to refer to and comply with the capacities and limitations of the lifting device as specified by the manufacturer. It is **mandatory** to remove any installed access bridge before lifting and transporting a motorized unit setup. It is also **mandatory** to make sure that the weight of the setup is **equally balanced** on each side of the mast before lifting and transporting a motorized unit setup.

Preparation

1- Before lifting and moving the motorized unit setup, make sure that all workers have stepped down from the motorized unit and that all tools, equipment and loads have been removed from the platform.

2- Remove the access stairs, as well as all the planking and wall ties. Make sure that all the guardrails and other components are secure.

3- In reference to the plan/layout drawing, establish the position where the motorized unit setup must be moved to and determine if there are obstacles.

4- Make sure that the lifting, transport and destination areas are clear of workers and equipment and that there are no obstacles.

Lifting a setup by the base – using a forklift

1- When using a forklift to lift and move the motorized unit setup by the **base** (fig. 1.22), make sure that the forks are inserted in the forklift tubes located on the base (fig. 1.5, p. 9).

Lifting and moving a setup with a sling

1- When using a sling and a forklift (fig. 1.23) or a crane (fig. 1.25) to lift and move the motorized unit setup by the mast (fig. 1.24), make sure to select a sling that can withstand a minimum weight of 6000 lb (2722 kg).

2- Secure the sling to the top first rung of the mast. If using a forklift, make sure the forks are slightly tilted back away from the mast (fig. 1.24) to prevent the structure from slipping.

3- Make sure that a worker, wearing adequate individual protection, is standing on the ground to help stabilize the structure during the lift, transport and landing of the motorized unit setup.

4- Refer to p. 14 for instructions on the installation of a single mast setup. Refer to p. 48 for more information about the transport and storage of a motorized unit.

Fig. 1.22

Lifting by the base

Fig. 1.24

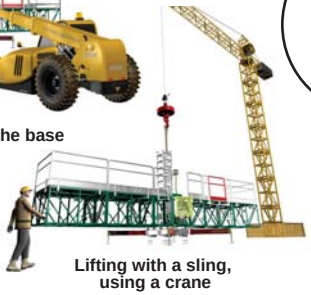


Fig. 1.25

Lifting with a sling, using a crane

Lifting with a sling, using a forklift

Fig. 1.23

Safety Devices

Inclinometer (Leveling Control Device)

(available for the 10' (3 m) / min model only)

Used only in bearing configurations on the 10' (3 m)/min model of the P Series, the inclinometer is located on the bearing bridge adapter (fig. 2.2 and 2.3) and must **absolutely** be linked to the electrical system of the motorized unit through its main electrical power supply box (fig. 2.4). For more information on the installation and the use of a bearing bridge adapter, see p. 23 of the *Bridges* section.

Connection

1- Disconnect the bypass connection (loop) (fig.2.5).
2- Plug in the inclinometer connection cable.

Detection of a ± 2-degree slope

1- When the motorized unit is in movement, if the inclinometer detects a slope of ± 2 degrees (fig. 2.1), the power supply of the solenoid valves is shut off. The motorized unit stops moving but the engine is still running.
2- To bring the bearing installation back to level and resume operation, bypass the inclinometer signal **on the lowest motorized unit of the installation** by pushing in and holding the inclinometer bypass button on the joystick control box (fig. 2.6) and raising the motorized unit until the setup is level again.

Operation in a cantilever configuration

1- To operate the motorized unit in a cantilever configuration only, disconnect the inclinometer connection cable (fig. 2.5).
2- Plug in the bypass connection cable.

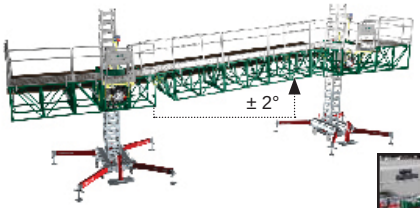


Fig. 2.1

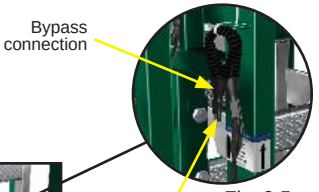


Fig. 2.5

Fig. 2.4

Model 10' (3 m)/ min only

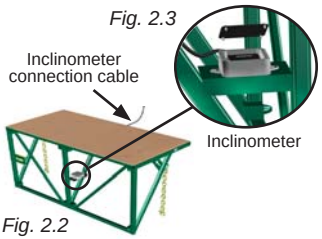


Fig. 2.3

Fig. 2.2

Inclinometer bypass button

Fig. 2.6

WARNING
Daily verification and testing of all the inclinometers are recommended **before** operating the motorized units.

Safety Devices (cont'd)

Safety Hooks System

Activation of the safety hooks system

1- In the event of an activation of the safety hooks system, the competent person must contact the distributor or the Hydro Mobile technical support team.
2- All precautions must be immediately taken to ensure the safe return of all workers to base level according to the evacuation plan (see step 14 on p. 7 of the *Performance and Safety* section).
3- Make sure the safety hooks system is properly engaged (fig. 2.8).
4- Determine what caused the activation of the safety hooks system.
5- Offload the motorized unit as much as possible.
6- Visually inspect the mast, the cylinder and secondary hooks and all the components related to the lifting mechanism for any damages possibly caused by the incident.
7- Take the necessary actions to have the motorized unit repaired properly, according to Hydro Mobile standards. It is **mandatory** to visually inspect the safety hooks and replace the hook that was activated. Any **triggered** safety hook **cannot be used a second time and must be replaced immediately** before operating the motorized unit. It is **mandatory** to also replace the safety hook bolt and nut.
8- Once all the mandatory corrective actions described in the previous steps have been carried out, make sure that the cylinder hook and the secondary hook are engaged on a mast rung (fig. 4.11, p. 29) and **carefully lower** the motorized unit to base level.
9- In all cases, the motorized unit must be thoroughly inspected and all necessary repairs must be made according to Hydro Mobile's recommendations before resuming normal operation of the motorized unit.

Fig. 2.7 Safety hooks in normal working position

Fig. 2.8 Safety hooks in emergency activation position

Fall Protection Equipment

(not provided)

The use of fall protection equipment is **mandatory** when climbing or descending the mast when the height of lift is over 10' (3 m). The use of fall protection equipment is also mandatory when modifying the planking configuration (add shock absorbing lanyard). It is **mandatory** to wear a full body harness and to hook it to a self-retracting lifeline.

1- Attach a rope to the self-retracting lifeline hook for easy retrieval from base level. Use the designated tie points on the motorized unit to secure the fall protection equipment.
2- When modifying planking, use the designated fall protection tie points underneath the bridge for security (fig. 1.2, p.8 and fig. 5.11, p. 35).

Safety Devices (cont'd)

Emergency Descent Control Device

(standard on 10' (3 m) / min model only)

In the event of an engine failure, a shortage of gasoline or broken parts, start up the emergency motor by turning the ignition key to the ON position, then pushing and holding down the emergency descent button of the control box (fig. 2.9).

Emergency descent procedure

1- Before initiating the descent, make sure that the motorized unit and plank outriggers clear the building, balconies, etc.
2- Unlock the lowering cam on both the cylinder hook and the secondary hook by sliding the locking device latch away from the cam and locking it (fig. 4.10, p. 29).
3- Make sure the emergency motor is running and that the cylinder hook and the secondary hook are side by side and properly engaged on the same rung (fig. 4.11, p. 29).
4- Lower the control lever so the secondary hook lowering cam can swing toward the mast. The emergency motor will slow down when the cylinder has retracted completely.
5- Raise the control lever to extend the hydraulic cylinder completely. The emergency motor will slow down when the cylinder is fully extended.
6- Lower the control lever so the cylinder retracts itself enough to engage the secondary hook onto the mast rung (and not the lowering cam).
7- Raise the control lever again to extend the cylinder completely and force its lowering cam to swing toward the mast.
8- Lower the control lever so the cylinder retracts itself completely. Raise the control lever until the cylinder hook is engaged on the mast rung. Both the cylinder and secondary hooks will be side by side on the same rung.
9- Repeat steps 4 through 8 to continue lowering the platform.
10- Monitor the last 10' (3 m) of descent to base level to ensure the proper seating of the access stairs and the access bridge, if necessary.

INCLUDES LEAFLET FOR
110/230 VOLTS EMERGENCY
DESCENT CONTROL DEVICE
(SEE FOLLOWING PAGE)

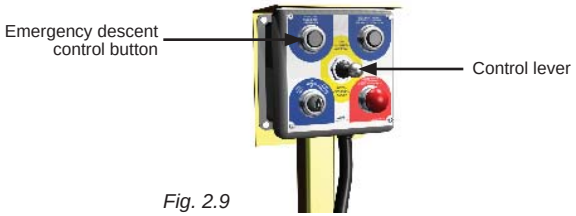


Fig. 2.9

WARNING
This device was designed for emergency descent only. Do not use this device to raise the platform.

WARNING
To pass wall ties, slide the planks away from in front of the masts and open the wall tie door. The use of fall protection equipment is **mandatory** for this operation. The use of shorter planks will facilitate this task.

OPERATING PROCEDURE

IMPORTANT NOTICE: THIS OPERATING PROCEDURE IS NOT INCLUDED IN VERSION 4.0 OF THE P SERIES OPERATOR'S MANUAL. OWNERS OF P SERIES MOTORIZED UNITS WITH **SERIAL NUMBER P-0638 AND UP** SHOULD READ THIS PROCEDURE CAREFULLY AND INSERT IT IN THE OPERATOR'S MANUAL INCLUDED WITH THE UNIT.

Emergency Descent Control Device

In the event of an engine failure, a shortage of gasoline or broken parts, it is recommended to use the emergency descent control device to bring the workers and the motorized unit safely back to base level. It is not recommended to use the emergency control device if the failure is due to a malfunction of the cylinder, a malfunction of one or both hooks or a leak in the hydraulic system.

PROCEDURE

1- Before initiating the descent, make sure that the motorized unit and plank outriggers clear the building, balconies, etc.

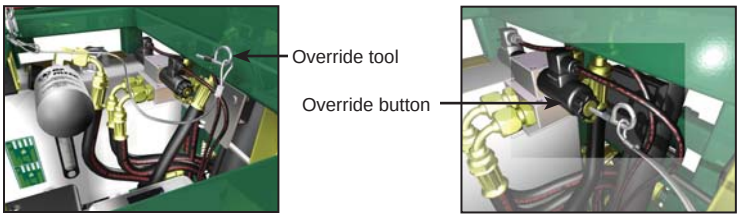
2- Unlock the lowering cam on both the cylinder hook and the secondary hook by sliding the locking device latch away from the cam and locking it.

3- Open the engine access door. Connect the power cord of the emergency descent motor to an appropriate, reliable power source, using an extension cord, if necessary. The emergency motor will start immediately once it is plugged into the power source.

4- To **lower** the motorized unit setup, press and hold the left-hand override button using the small override tool provided.

5- To **raise** the motorized unit setup, press and hold the right-hand override button using the small override tool provided.

6- Monitor the last 10' (or 3 m) of descent to base level to ensure the proper seating of the access stairs and the access bridge, if necessary.



Press and hold the override button

WARNING
It is not recommended to use the emergency descent control devices if the failure is due to a malfunction of the cylinder, a malfunction of one or both hooks or a leak in the hydraulic system.

WARNING
Emergency descent control devices are designed to be used for lowering the platform **in case of an emergency only**. These devices should not be used to operate the motorized unit under normal conditions.

Standard bridge

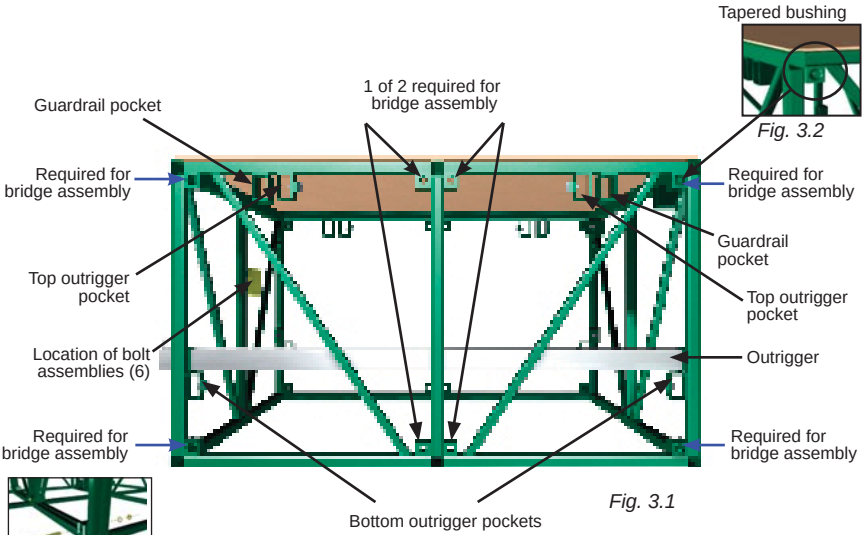


Fig. 3.2

Fig. 3.1

Bolt for assembly

Fig. 3.3

Installation

1- Align both bridges using the tapered bushings (blue arrows, fig. 3.1).

2- Assemble both bridges together using one 5/8" x 5 1/2" (GR8) hex bolt, one 5/8" (GR8) lock washer and one 5/8" (GR8) nut in each of the four corner tapered bushings (fig. 3.1 and 3.2) and in one of the pairs of tapered bushings in the middle of the bridge (using both top and bottom bushings on the same side – left or right, fig. 3.1).

3- Set up bridges alternately on each side of the mast in such a sequence as to warrant the balance of the structure.

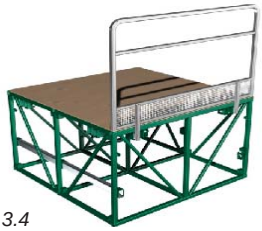


Fig. 3.4

60" (1.5 m) bridge

60" (1.5 m) bridge with extension

Fig. 3.5

30" (76 cm) bridge

Fig. 3.6

Fig. 3.7

30" (76 cm) bridge with extension

Bridge Installation Accessories

Bridge installation support bracket

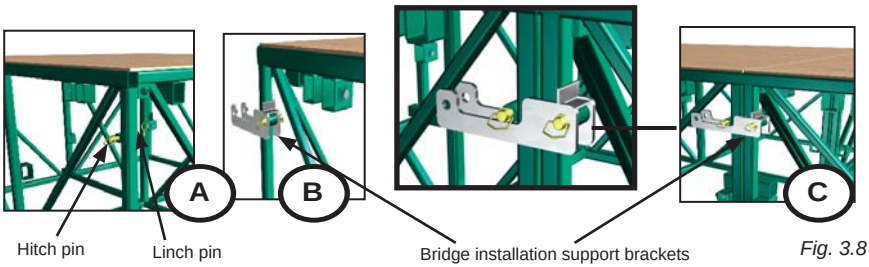


Fig. 3.8

Step A: Under the bridge to be installed, slide hitch pins in the designated holes on both sides of the bridge and secure them with linch pins.

Step B: Using other hitch pin and linch pin assemblies, attach the bridge installation support brackets to the bridge already bolted to the base.

Step C: Lift the bridge to be installed and lower it down so that the hitch pins are completely supported by the bridge installation support brackets. Assemble the bridges using the appropriate bolts and nuts. Remove the brackets when the bridges are bolted together.

NOTE
The bridge installation support brackets and the bridge installation method described above can only be used when the motorized unit is at base level.

Cantilever Bridge

Installation

1- Make sure that the inclinometer bypass connection is plugged in. For more information on the use and installation of bearing bridge adapters, see p. 23 of this section. For more information on inclinometer and bypass connections, see p. 18 of the *Safety Devices* section.

2- Using bridge installation support brackets or any other lifting device such as a crane or a forklift, bolt a bridge assembly to the motorized unit on one side of the mast.

3- Bolt a second bridge assembly on the other side of the mast.

4- Install as many additional bridges as required and allowed. It is important to install each bridge alternately on one side, then on the other side of the mast, to avoid throwing the structure out of balance. The number of bridges should be equal on both sides of a cantilever installation. Refer to the *Load Capacities* section on p. 38 for information on the number of bridges allowed in a cantilever bridge configuration.

5- For any configuration other than described in the previous steps or in the *Load Capacities* section, contact the distributor or the Hydro Mobile technical support team.

Bearing Bridge

(requires the use of two motorized units and two bearing bridge adapters – sold separately)

Installation

1- Position and level the first motorized unit as described in the *Motorized Unit* section, on p. 14.

2- Install the first mast section as described in the *Masts and Wall Ties* section, on p. 31.

3- Raise the motorized unit (“A”, fig. 3.9) by 2 rungs [20”(50 cm)] to facilitate the installation of the first cantilever bridge.

4- Install a standard 30” (76 cm) bridge as a cantilever bridge facing the area where the bearing bridge will be installed (“B”, fig. 3.9). **The upper corner of the diagonal brace on the cantilever bridge should point outwards**, as shown in fig. 3.10 on p. 24.

5- At base level, assemble the complete bearing bridge structure (“D”, fig. 3.9) using standard 60” (1,5 m) or 30” (76 cm) bridges. Install 30” (76 cm) bearing bridge adapters at both ends of the bearing bridge structure (“C”, fig. 3.9).

6- Measure the length of the bearing bridge and subtract 9” x 2 = 18” (23 cm x 2 = 46 cm) to obtain the ideal distance between two motorized units.

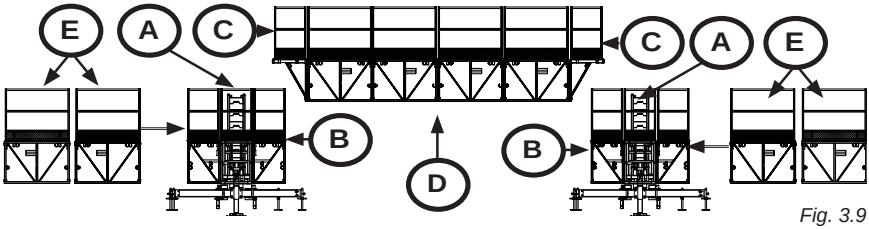


Fig. 3.9

7- Repeat steps 1, 2 and 3 for the installation of the second motorized unit, while making sure that the ideal distance is kept between this motorized unit and the first one installed (see step 6), in order to have an overlap of 9” (23 cm) at each end of the motorized units. Make sure that there are no access bridges installed on the bearing side of the structure.

8- Using a forklift, a crane or any other lifting device, lift the bearing bridge assembly from the ground and lower it down onto the two motorized units making sure the overlap is between 6” and 12” (15 and 30 cm) at each end.

9- Install one bearing bridge safety chain by making a loop at the top end of the diagonal brace on the 30” (76 cm) bridge. Insert the chain into the cross plate, making sure the slack does not exceed one link when pulling it tightly towards the cross plate (fig. 3.10, p. 24) and plug in the inclinometer. Repeat this step for the second bearing bridge chain on this bearing bridge adapter and for each bearing bridge chain on the other bearing bridge adapter, at the other end of the bearing bridge.

WARNING

In a bearing bridge setup (multiple masts), it is imperative that two competent persons handle all rise and descent operations and coordinate the motion of the two motorized units.

WARNING

When raising or lowering motorized units linked by a bearing bridge, any bridge slope should not to exceed a maximum of 2º or 1” / 12” (2,5 cm / 30,5 cm).

Bearing Bridge (cont'd)

Installation (cont'd)

10- Install all other cantilever bridges ("E", fig. 3.9) on the ends of the motorized units opposite to the bearing bridge structure. In a bearing bridge setup (multiple masts), it is **mandatory** to install any additional cantilever bridge **after** the bearing bridge has been installed to avoid throwing the structure off balance.

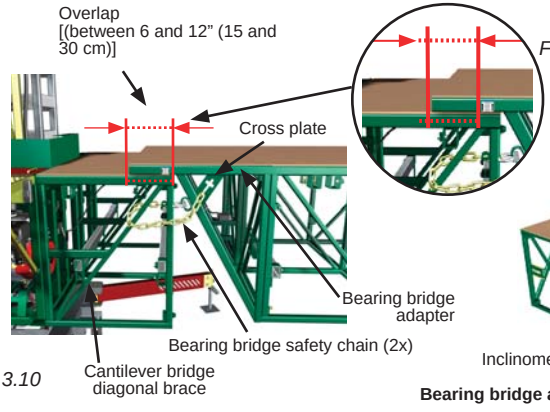
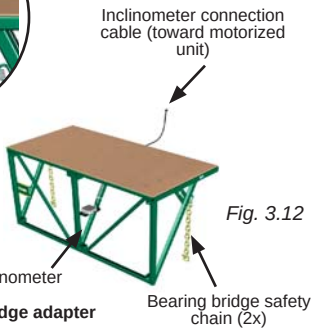


Fig. 3.10

Fig. 3.11



Bearing bridge adapter

Fig. 3.12

WARNING
The diagonal brace of the 30" (76 cm) cantilever bridge should always point outwards (as shown in fig. 3.10).

Dismantlement

1- To dismantle a bearing bridge structure, lower both motorized units linked by that structure until the units are 2 rungs above base level [20" (50 cm)] (see step 3 of the installation instructions, on p. 23). It is important to read carefully and assimilate the safety warnings included below and on the previous page about the rise and descent operations of a structure with a bearing bridge.

2- Completely unload the working platform and make workers step off the structure.

3- First dismantle any cantilever bridges added to the structure (see step 10 of the installation instructions, on p. 24), beginning with those on the outer ends of the structure ("E", fig. 3.9). Unhook the bearing bridge safety chains and unplug the inclinometers. Using a forklift, a crane or any other lifting device, slightly raise the bearing bridge and lower it on the ground to dismantle it.

Safety instructions

1- In a bearing bridge setup (multiple masts), it is **mandatory** to install any additional cantilever bridge **after** the bearing bridge structure has been installed to avoid throwing the structure off balance. Dismantle all the components of the structure in reverse order.

2- It is imperative that two competent persons handle all rise and descent operations and coordinate the motion of the two motorized units linked by a bearing bridge to ensure that the structure slope does not exceed 2º (see fig. 2.1 on p. 18 of the *Safety Devices* section).

3- **Daily** verification and testing of all the inclinometers are recommended **before** operating the motorized units.

4- It is also important to make sure that all safety chains are properly hooked at all times (see step 9 of the installation instructions on p. 23).

Forward/Back Extension Bridge
(optional)

The extension bridge (used in front or in back of a motorized unit setup) is assembled using a regular bridge and the optional forward extension kit, which includes an outrigger and three forward extension plate assemblies. In a configuration using a **forward** or **back** extension, the bridge used as an extension must be attached to the **second** bridge assembly closest to the mast in the setup, as shown in fig. 3.15.

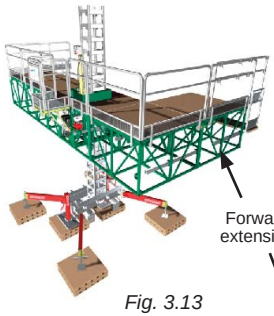


Fig. 3.13

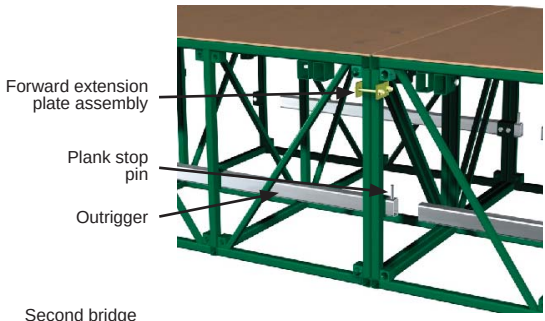


Fig. 3.14

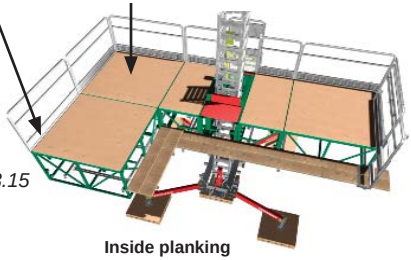


Fig. 3.15

Installation

1- Remove the plank stop pins from the outriggers and slide the outriggers in the bottom outrigger pockets of the bridge assembly, leaving about 6” (15 cm) protruding from the bridge. Do not tighten the bolts.

2- Align the bridge that will be used as an extension with the bridge assembly and slide the protruding ends of the outriggers from the bridge assembly in the bottom outrigger pockets of the back or forward extension. Insert a plank stop pin in each outrigger (fig. 3.14).

3- Install the forward extension plate assemblies at the top of each of the vertical tubes of the bridge assembly in order to hold both bridges tightly together (fig. 3.14). Make sure all the nuts and bolts are tight.

4- Tighten all the nuts and bolts on the outriggers.

5- Install the appropriate guardrails on the back or forward extension.

6- If required, install cross box kits to plank the inside corner of the bridge used as an extension (see fig. 3.15). For more information on the use and installation of cross boxes, refer to p. 43 of the *Accessories* section.

7- If required, use the forward/back extension to store counterweight material or to install top outriggers and planking on the opposite end of the bridge assembly and apply counterweight.

For more information on the load capacities of forward and back extensions, refer to p. 40 to p. 41 of the *Load Capacities* section. For any configuration using back or forward extensions other than those described in this manual, contact the distributor or the Hydro Mobile technical support team.

Bridge Deck Extension

(optional)

Bridge deck extensions can be attached to both 60” (1,5 m) and 30” (76 cm) bridges and are used to extend the width of the work area from 5’ (1,5 m) to 7’ (2,1 m), increasing the space available for circulation on the setup. To ensure stability, the number of bridge deck extensions installed must be equal on either side of the mast.

Bridge deck extensions **must be used only for the circulation of workers on the setup** and **must not be used as a storage area for material, tools, equipment or any other load**. The weight of each bridge deck extension installed must be taken into account when calculating the load capacity of a setup. Refer to the *Weight of Components* table on p. 11 of the *Motorized Unit* section. For information on the number of bridges allowed in a configuration, refer to the *Load Capacities* section on p. 38.

Installation

1- Slide an outrigger in the top outrigger pocket of the bridge and insert a toggle pin in the hole located halfway on the outrigger to prevent it from slipping out of the outrigger pocket.

2- Pull out the outrigger until the toggle pins is snug against the outrigger pocket.

3- Tighten the nut and bolt of the outrigger pocket to secure the outrigger in place.

4- Repeat steps 1 through 3 for the second outrigger.

5- Insert the bridge deck extension on the outriggers until it is snug against the bridge. Tighten the nuts and bolts on the extension to secure it in place.

6- Insert plank stop pins in each of the outriggers and install the appropriate guardrails on the deck extension.

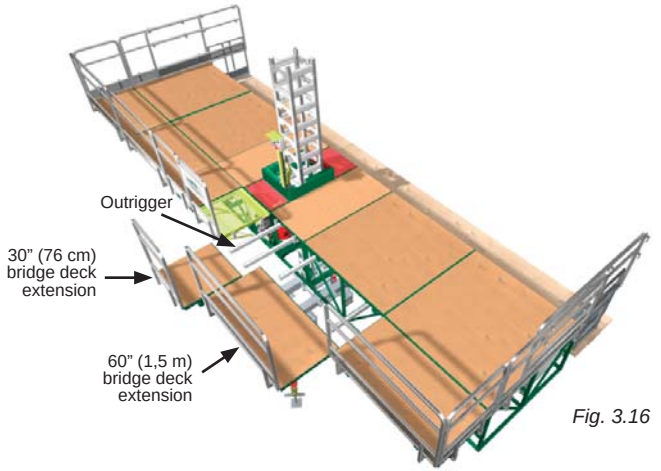


Fig. 3.16

Power Pack and Operating Components

Overview of power pack and operating components

Fig. 4.1

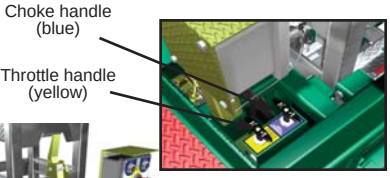


Fig. 4.2

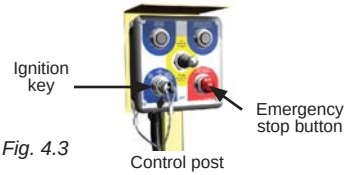


Fig. 4.3

Fig. 4.4

Fig. 4.5

Startup preparation instructions

1- Pull the spring latch (fig. 4.5) and pull the control post (fig. 4.3) completely out of its storage position. Rotate the control post to 180º so that controls are facing the rear platform extension (behind operator). Pull the spring latch again and let the control post slide down until the spring latch is engaged and locks the control post in place.

2- To store the control post, pull the spring latch and pull the control post out. Rotate the control post to 180º so that the controls are facing the mast. Pull the spring latch again and slide in the control post until it is completely inside its storage location. Make sure the spring latch is engaged and locks it in place.

3- Open the engine access door (fig. 4.1).

4- Check the hydraulic oil level to make sure it is at least 3/4 full. Replenish if necessary.

5- Check the gasoline level and refill if necessary.

6- Check the engine oil level and refill if necessary.

7- If the motorized unit is brand-new, connect the battery.

8- Move the engine gasoline valve lever to the ON position.

Engine and motorized unit startup procedure

1- If the engine is cold, pull out the choke handle to the closed position (blue control cable, fig. 4.2). If the engine is warm, leave the choke handle in the open position.

2- Pull out the throttle handle about halfway (yellow control cable, fig. 4.2).

3- Turn and maintain the ignition key at the START position (fig. 4.3) to start the engine (hold for a maximum of 10 seconds). Release the key as soon as the engine is running. Use the ignition key to shut down the engine. **The emergency stop button must never be used to shut down the engine, except in case of emergency**.

4- Slowly push down the choke handle all the way to the open position.

5- Adjust the engine speed by pulling the throttle handle up to reach maximum RPM and lock it.

WARNING

The emergency stop button must never be used to shut down the engine, except in case of emergency, as this could leave the ignition on and drain the battery.

Power Pack and Operating Components (cont'd)

Raising the platform

1- Before initiating the ascent, make sure that the motorized unit and plank outriggers clear the building, balconies, etc.

2- Lock the lowering cam on both the cylinder hook and the secondary hook by sliding each locking device latch toward the cam and locking it (fig. 4.7).

3- Make sure the engine is running at full throttle and that the cylinder hook and the secondary hook are side by side and properly engaged on the same rung (fig. 4.11, p. 29).

4- Raise the control lever and let the hydraulic cylinder become fully extended (to a height equal to two rungs, fig. 4.6). The engine will slow down when the cylinder is fully extended.

5- Lower the control lever so the cylinder hook drops slightly, enough to engage onto the mast rung. Before raising the platform, make sure that the cylinder hook is properly engaged on the mast rung by checking visually. With the control lever still at the down position, let the platform rise until the secondary hook is also engaged onto the rung. The lift can vary from 10" to 20" (25,4 to 50,8 cm), or a height equal to one or two mast rungs.

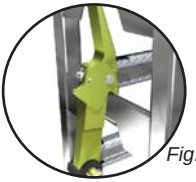
6- Repeat steps 3, 4 and 5 to continue raising the platform.

7- Add mast sections and wall ties when required. Refer to p. 31 of the *Masts and Wall Ties* section for instructions on the installation of mast sections.

Fig. 4.6

Fig. 4.8

Incorrect



Correct

Fig. 4.9

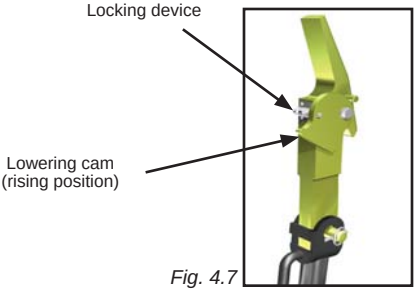


Fig. 4.7

Hook in rising position

WARNING

Make sure the cylinder hook and the secondary hook are properly engaged on the mast rung before raising or lowering platform (fig. 4.9). Failure to engage hooks properly can cause the platform to drop. For additional safety, it is also recommended that any rise or descent operation be done only when the secondary hook is engaged on the mast rung and side by side with the cylinder hook (fig. 4.11, p. 29).

Power Pack and Operating Components (cont'd)

Lowering the platform

1- Before initiating the descent, make sure that the motorized unit and plank outriggers clear the building, balconies, etc.
2- Unlock the lowering cam on both the cylinder hook and the secondary hook by sliding the locking device latch away from the cam and locking it (fig. 4.10).
3- Make sure the engine is running at full throttle and that both the cylinder hook and the secondary hook are side by side and properly engaged on the same rung (fig. 4.11).
4- Lower the control lever so the secondary hook lowering cam can swing toward the mast. The engine will slow down when the cylinder has retracted completely.
5- Raise the control lever to extend the cylinder completely. The engine will slow down when the cylinder is fully extended.
6- Lower the control lever so the cylinder retracts itself enough to engage the secondary hook onto the mast rung (and not the lowering cam).
7- Raise the control lever again to extend the cylinder completely and force its lowering cam to swing toward the mast.
8 Lower the control lever so the cylinder retracts itself completely. Raise the control lever until the cylinder hook is engaged on the mast rung. Both the cylinder and secondary hooks will be side by side on the same rung.
9- Repeat steps 3 through 8 to continue lowering the platform.
10- Remove wall ties and mast sections when required during the descent. Refer to the *Masts and Wall Ties* section on p. 31 for instructions on dismantling masts and removing wall ties.
11- Monitor the last 10' (3 m) of descent to base level to ensure the proper seating of the access stairs and the access bridge.

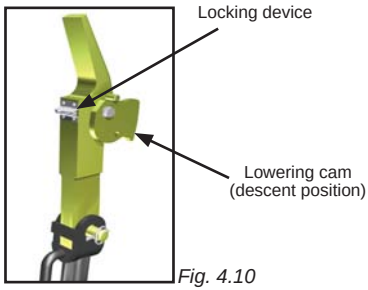


Fig. 4.10
Hook in descent position

Fig. 4.11
Hooks side by side on the same mast rung
(lowering cams are locked in this view)

WARNING
To pass wall ties, slide planks away from in front of the masts and open the wall tie door. The use of fall protection equipment is **mandatory** for this operation. The use of shorter planks will facilitate this task.

Power Pack and Operating Components (cont'd)

Maintenance of the cylinder hook

To ensure safe and trouble-free operation of the cylinder hook, it is mandatory to inspect the rubber hook **daily** or before every working shift. Worn rubbers must be replaced immediately, before operating the motorized unit. A worn and defective rubber will prevent the hook from working correctly and engage properly on mast rungs.

Inspection

1- Hold the hook firmly by the cylinder (fig. 4.12) and pull the hook head all the way back.

2- Let go of the hook head and verify its position.

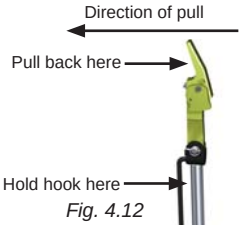


Fig. 4.12

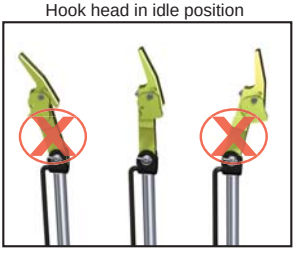


Fig. 4.13

3- The hook head **must not** lean towards or away from the mast, but stand up straight as in "B" in fig. 4.13. If the position of the hook head is as in "A" or "C" in fig. 4.14, the rubber must be replaced immediately.

Replacement of the rubber

1- Remove the linch pin and slide out the clevis pin (fig. 4.14). Lift the hook from the cylinder.
2- Remove the defective rubber.
3- Cut **slight** beveled edges lengthwise on the replacement rubber (see fig. 4.15) so that it fits snugly against the welding tracks at the bottom of the pocket.
4- Insert the replacement rubber in the top part of the cylinder. Slide in the hook and verify that the holes in the hook and the holes in the top part of the cylinder align properly, with no more than 1/16" to 1/8" (1,6 mm to 3,2 mm) of play. **The rubber must be lightly compressed**. Trim the bottom part of the rubber until the holes align correctly.
5- Once the rubber fits correctly, replace the hook and secure it in place with the clevis and linch pins.
6- Test the operation of the cylinder hook as described in steps 1 through 3 of the inspection instructions.

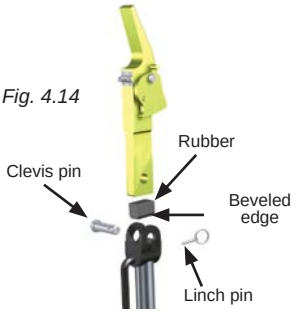


Fig. 4.14

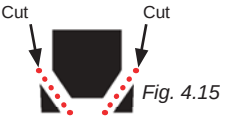


Fig. 4.15

Cut beveled edges on the replacement rubber only deep enough for fitting

Masts

Installation

1- To connect one mast section to another, insert the connecting lug of the top mast section into the bottom mast section, making sure the masts line up square and that rungs for the hooks are on the same side.

2- Slide the 5/8" x 6 1/2" toggle bolt, washer and nut onto the connecting lug (fig. 5.2) and tighten by hand. Perform this operation for all (4) corners.

3- Tighten all toggle bolts to 120 lb-ft (163 Nm) of torque. Use a cross pattern sequence when tightening (fig. 5.1).

4- Repeat steps 1, 2 and 3 for each mast section to be installed at every 5' (1,5 m) of rise.

5- For faster assembly or dismantling, 20' (6,1 m) sections of masts can be pre-assembled. For personal safety, the use of a sling is recommended when manipulating pre-assembled mast sections.

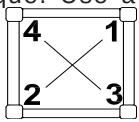


Fig. 5.1

6- Always make sure that the mast assembly is plumb on both the front and side axis.

Removal and transport

1- To remove one mast section, loosen the toggle bolt assembly and disengage from the connecting lug (fig. 5.2). Perform this operation for all four (4) corners.

2- Pull the top mast off the bottom mast and unload it using a forklift or a crane. If mast sections are to be stored on the platform during dismantling, make sure they are distributed equally on each side of the mast to ensure good balance.

3- Store mast sections on a flat surface away from work areas and construction traffic.

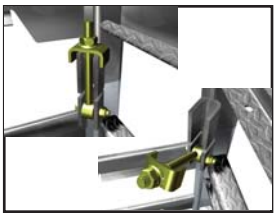


Fig. 5.2

4- Masts can be carried in 20' (6,1 m) sections provided they lay horizontally on a flat surface.

5- For best results when carrying mast sections in bundles, it is recommended to strap them in groups of nine (9). Make sure that mast sections positioned in the middle are securely strapped to the other sections to prevent them from slipping out during transport.

Fig. 5.3

WARNING / AVERTISSEMENT / AVISO

Make sure all mast bolts are tightened to the proper torque and are in good condition before using the platform.

When using brand-new mast sections, pre-install mast sections to the top of work area and verify all mast bolts on the way down to make sure they are tightened to the proper torque as galvanized coating may have compressed.

In all cases, tighten mast bolts to a torque of 120 lbf-ft (163 N-m). Failure to tighten bolts properly may lead to serious injury or death.

A0801900-0001

Il faut s'assurer que tous les boulons de mâts sont resserrés au bon couple de serrage et qu'ils sont en bon état avant d'utiliser la plate-forme.

La couche de finition galvanisée peut se compresser. Lorsque les sections de mât utilisées sont neuves, il faut faire la pré-installation des sections de mât jusqu'au sommet de la zone de travail et vérifier chaque boulon de mât en redescendant, afin de s'assurer qu'ils sont tous resserrés au bon couple de serrage.

Dans tous les cas, il faut resserrer les boulons de mât à un couple de serrage de 163 N-m (120 lb-pi). Le défaut de resserrer les boulons correctement peut entraîner des blessures sérieuses, voire la mort.

Fijar de manera segura los bolones de las mástiles antes de utilizar la plataforma. Al utilizar equipos nuevos, instalar todos los mástiles hasta el tope del edificio (fijar mástiles a la pared según las instrucciones del manual del operario) y apretar los bolones bajando la plataforma a su nivel bajo de trabajo. La fuerza de apretó no debe superar los 163 N-m (120 lb-pi).

Nota: Descuidar del apretó de los bolones puede causar graves heridas o la muerte.

Wall Ties

Installation of wallmounts

1- Loosen and remove the 5/8" bolt and nut assemblies on the tower bracket.
2- Slide the tower bracket assembly diagonally into the mast, making sure to install the tower bracket as close as possible to the upper rung so as not to impede footing when climbing up or down.
3- Replace and tighten the bolt and nut assemblies on the tower bracket until the bracket holds the mast firmly [60 lb (80 Nm) of torque].
4- Refer to the diagrams illustrated in fig. 5.7, on p. 33, for the plank configuration appropriate to the setup. Refer to the *Wall Tie Components Requirements* table in fig. 5.8, on p. 34, and choose the components required according to the plank configuration.
5- Pin the required center wallmount to the tower bracket using clevis pins and hitch pin clips (fig. 5.6).
6- Pin the center wallmount to the wall anchor (see p. 36 and p. 37 for information about anchors) and adjust its length until the mast is perfectly plumb on the front axis. Use the threaded rod and the pin for adjustment, leaving a maximum length of threaded rod inside the wallmount tube for added strength.
7- Install the required angle wallmounts (25° angle, fig. 5.5) and use the threaded rods to adjust their length until the mast is perfectly plumb on the side axis.

WARNING

Wind

Do not use a mast climbing work platform system when wind speed exceeds 35 mph (56 km/h).

When motorized unit is not in use

- It is **mandatory** to leave the platform between two anchor points when the motorized unit is not in use.
- It is **mandatory** to remove all loads from the setup when the motorized unit is not in use.
- It is **mandatory** to leave all the counterweights applied on the bridge extensions in place on the setup when the motorized unit is not in use.
- In a freestanding installation, the motorized unit must be brought down to base level when not in use.

WALL TIE SCHEDULE

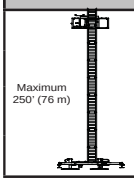
Platform height	Standard setup (single or twin mast) (2 or 3 planks)		Forward extension (single or twin mast) (2 or 3 planks)	
 Maximum 250' (76 m)	Maximum overhang above the last tie level	20' (6,1 m)	**No overhang allowed**	
	All subsequent: every	20' (6,1 m)	All subsequent: every	20' (6,1 m)
	First set between	3' to 10' (0,9 m to 3 m)	First set between	3' to 10' (0,9 m to 3 m)
	Maximum freestanding height allowed	20' (6,1 m)	**No freestanding allowed**	

Fig. 5.4

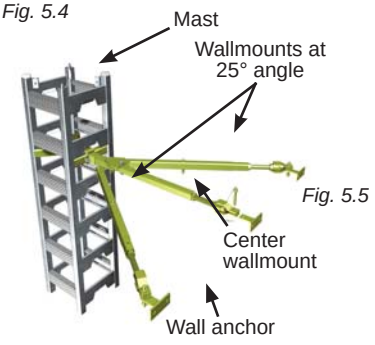


Fig. 5.5

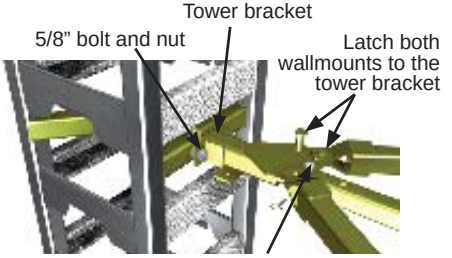


Fig. 5.6

Wall Ties (cont'd)

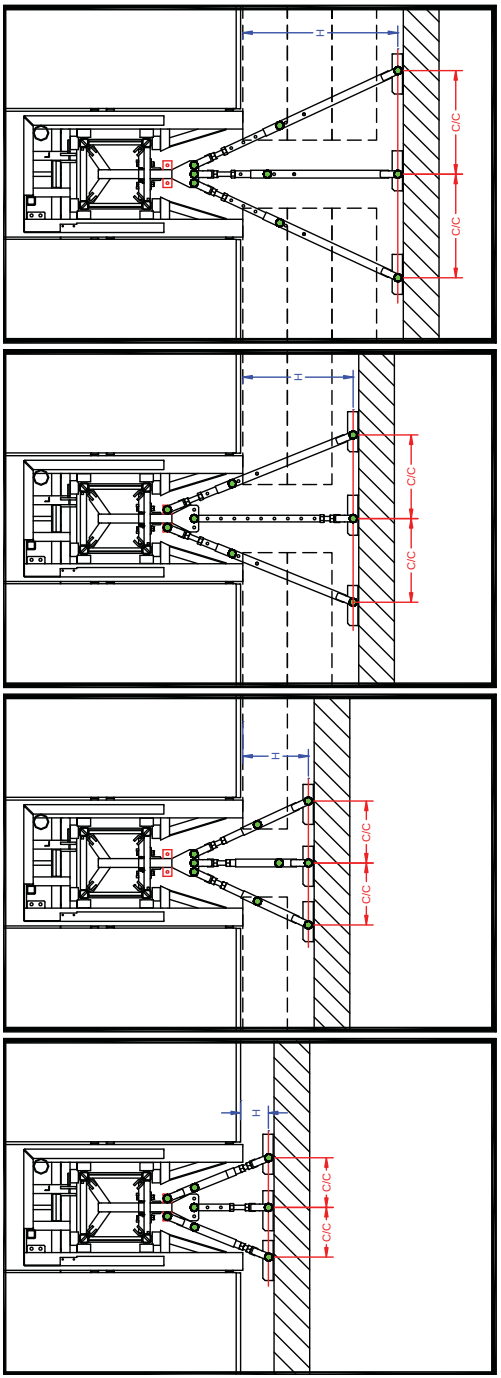
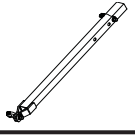
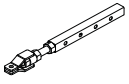
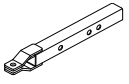


Fig. 5.7

Fig. 5.8

WALL TIE COMPONENTS REQUIREMENTS

			COMPONENTS					
								
Diagram	**Number of planks**	**Distances from motorized unit to face of work (H)**	**Wallmount male assembly**	**Wallmount female assembly**	**Wallmount short male assembly**	**Wallmount short female assembly**	**Wallmount pin assembly**	**Center to center distances (C/C)**
A	0	6" (15,2 cm)	0	0	3	2	8	11" (27,9 cm)
B	1	15" (38,1 cm)	0	0	3	3	9	14" (35,6 cm)
C	2	25" (63,5 cm)	3	2	0	0	8	19" (48,3 cm)
D	3	35" (88,9 cm)	3	3	0	0	9	23" (58,4 cm)

1- Parts required are based on number of planks x 10" (25,4 cm) + 6 to 8" (15,2 to 20,2 cm) of play
2- The H and C/C distances are given only as a reference. Tolerance rate is of ± 2" (5 cm).

Wall Ties (cont'd)

Passing of wall ties

To safely pass wall ties, slide planks away from the front area of the mast (fig. 5.9) and open the wall tie door (fig. 5.9 and 5.10). The use of fall protection equipment is mandatory for this operation. The use of shorter planks will facilitate this task.

The use of appropriate fall protection equipment is mandatory when modifying the plank configuration. It is also mandatory to use the designated tie points located on the motorized unit and on the bridge substructure to anchor the fall protection equipment (fig. 5.10 and fig 5.11).

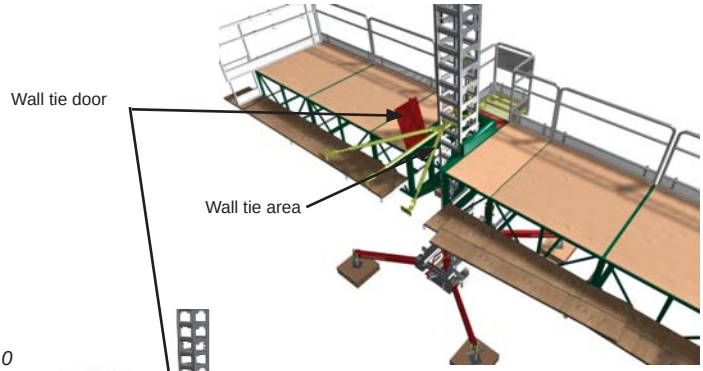
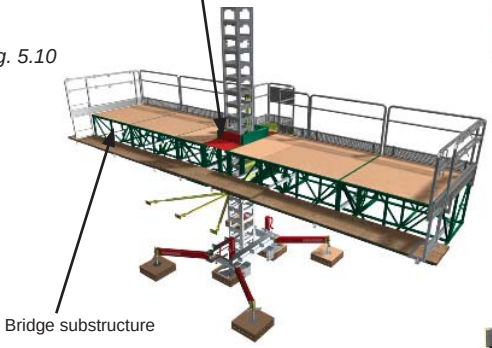


Fig. 5.9

Fig. 5.10



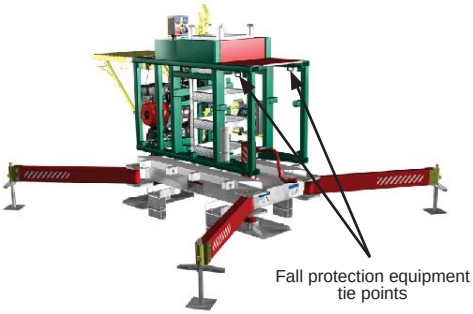


Fig. 5.11

Wall Ties (cont'd)

Anchors

Anchor types

Before attaching masts to the building using the wall tie system, anchors must be installed on a solid component of the building structure. Concrete slabs, columns, steel beams, relief angles and other structural elements can be used provided they can sustain 3000 lb (1360 kg) of tension / compression and 1500 lb (680 kg) of shear force. There are 4 types of anchors that can be used depending on the building structure.

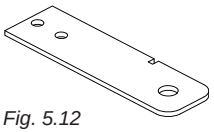


Fig. 5.12
Welded anchor

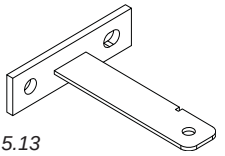


Fig. 5.13
Fixed anchor
3 to 12" (7,6 to 30,5 cm),
by 1" (2,5 cm) increments

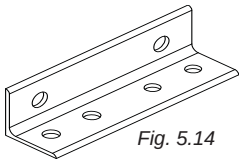


Fig. 5.14
Floor or wall
anchor

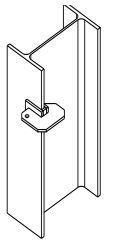


Fig. 5.15
Beam anchor,
max. flange 7/8"
(2,2 cm)

Fig. 5.16

WARNING / AVERTISSEMENT / AVISO

Anchors must be installed on a structure capable of withstanding 3000 lb *(1360 kg)* of tension or compression and 1500 lb of *(680 kg)* shear. Adjust wallmounts until tower is plumb.	Les ancrages doivent être installés sur une structure pouvant résister à une traction ou compression de 3000 lb *(1360 kg)* et une force de cisaillement de 1500 lb *(680 kg)*. Ajuster les attaches murales de façon à mettre le mât de niveau.	Los anclajes deben ser puestos sobre una estructura capaz de resistir a una tracción o compresión de 1360 kg. y una fuerza de cizallamiento de 680 kg. Ajustar las ataduras murales para poner el mástil de plomo.

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Wall Ties (cont'd)

Anchors (cont'd)

Installation

1- While the work is in progress and the platform is rising, install the wall anchors as per the wall tie schedule (fig. 5.4, p. 32).
2- Measure the distance from the edge of the slab to the face of the brick (fig. 5.21).
3- Select the appropriate anchor size.

Removal

Cut off the fixed anchor at the mortar joint using a grinder. Apply a coat of anti-rust paint or cold galvanization, let dry and fill the cavity with mortar.

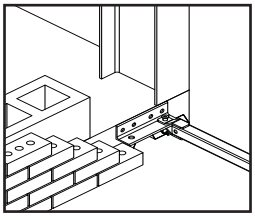


Fig. 5.17
Floor or wall anchor

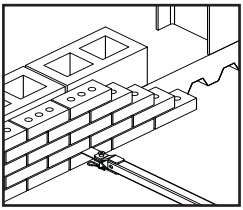


Fig. 5.18
Fixed anchor
3 to 12" (7,6 to 30,5 cm)
1" (2,5 cm) increments

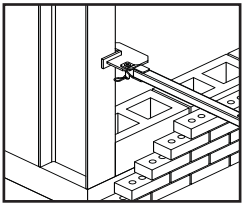


Fig. 5.19
Beam anchor

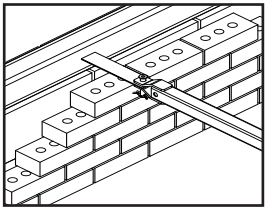


Fig. 5.20
Welded anchor
(on steel structure)

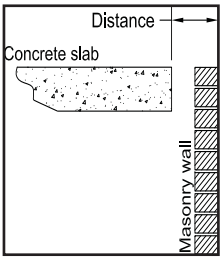


Fig. 5.21

Fixed anchor selection table		
Distance (inches)	**Distance (mm)**	**Fixed anchor required**
3 3/4 @ 4 1/4	95 @ 108	4" (101 mm)
4 3/4 @ 5 1/4	120 @ 133	5" (127 mm)
6 3/4 @ 7 1/4	172 @ 184	6" (152 mm)
7 3/4 @ 8 1/4	196 @ 210	7" (178 mm)
8 3/4 @ 9 1/4	222 @ 235	8" (203 mm)
9 3/4 @ 10 1/4	248 @ 260	9" (229 mm)
10 3/4 @ 11 1/4	273 @ 286	10" (254 mm)
11 3/4 @ 12 1/4	298 @ 311	11" (279 mm)
12 3/4 @ 13 1/4	324 @ 337	12" (305 mm)

Fig. 5.22

Load Capacities

WARNING

To ensure safety at all times on a mast climbing work platform system, bridges should not be loaded beyond their maximum rated weight capacities. In addition, to prevent a mast climbing work platform system from stalling because of an overload, maximum rated load capacities of the motorized unit(s) should be observed. Overloading a mast climbing work platform system could result in serious injury or death.

Weights and measures – Equivalencies
(IMPERIAL – METRIC)

Feet/ Inches	Meters
15”	0,4 m
5’	1,5 m
7’–5”	2,3 m
17’–5”	5,3 m
27’–5”	8,4 m
55’–10”	17 m
63’–4”	19,3 m
68’–4”	20,8 m
73’–4”	22,4 m
78’–4”	23,9 m
83’–4”	25,4 m

Lb	Kg
275 lb	125 kg
300 lb	136 kg
400 lb	181 kg
500 lb	227 kg
550 lb	249 kg
700 lb	318 kg
750 lb	340 kg
800 lb	363 kg
875 lb	397 kg
950 lb	431 kg
1000 lb	454 kg
1150 lb	522 kg
1350 lb	612 kg
1400 lb	635 kg
1500 lb	680 kg
1750 lb	794 kg

Lb	Kg
1900 lb	862 kg
2000 lb	907 kg
2150 lb	975 kg
2350 lb	1066 kg
2500 lb	1134 kg
2750 lb	1247 kg
3000 lb	1361 kg
3500 lb	1588 kg
3750 lb	1701 kg
6750 lb	3062 kg
6900 lb	3130 kg
6925 lb	3141 kg
7000 lb	3175 kg
7400 lb	3357 kg
7500 lb	3402 kg
7800 lb	3538 kg
7850 lb	3561 kg

Fig. 6.1

NOTES

1- The weight of planks and any additional accessory being used must be deducted from the load capacities shown above.

2- The cantilever bridges must have the same length on either side of the mast at all times (single mast configuration).

3- Each worker’s weight (265 lb or 120 kg per worker) must be deducted from load capacities shown in the diagram included above.

4- It is mandatory to have a minimum of two (2) workers for each of the configurations shown above or a maximum of one (1) worker per platform or bridge area of 15 linear feet (4,57 linear meters). The option allowing the greatest number of workers takes precedence over any other. However, the weight of each person working in a given area (bridge or platform) reduces the load capacity of that area.

Load Capacities (cont'd)

Evenly distributed – Multiple mast setup

Imperial measures illustrated below. All weights are in pounds (lb). For metric equivalencies, refer to the table in fig. 6.1 on p. 38.

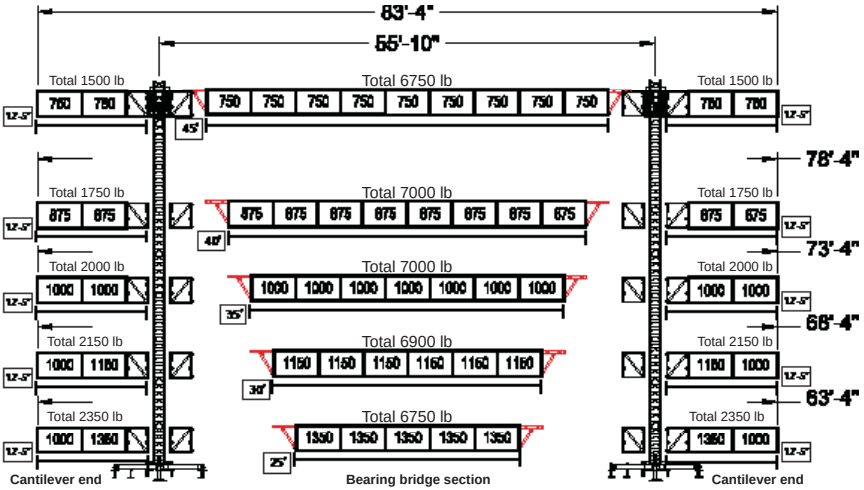


Fig. 6.2

NOTE: The configuration illustrated above requires the use of two motorized units and two optional bearing bridge adapters (shown in red). It is **mandatory** to have two 60" (1,5 m) bridges and one 30" (76 cm) bridge at each cantilever end of a bearing bridge setup (as shown in fig. 6.2). For any configuration other than those illustrated above, contact the distributor or the Hydro Mobile technical support team.

Evenly distributed – Single mast setup

Imperial measures illustrated below. All weights are in pounds (lb). For metric equivalencies, refer to the table in fig. 6.1 on p. 38.

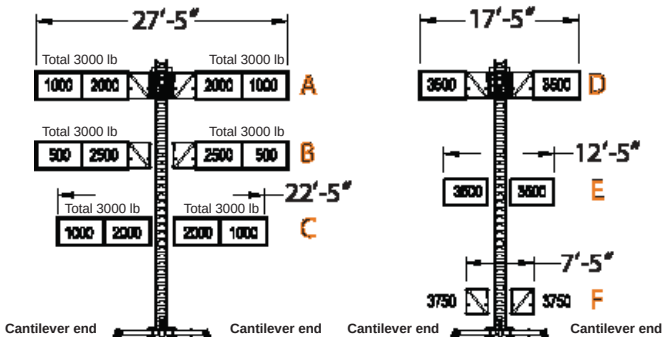


Fig. 6.3

NOTE: For any configuration other than those illustrated above, contact the distributor or the Hydro Mobile technical support team.

LEGEND

	Bridge – 60" (1,5 m)		Bridge – 30" (76 cm)	CW	Counterweight
X'	Length of bridge setup		Bearing bridge adapter		Bridge used as extension

NOTE: To ensure safety at all times, refer to notes and warning on p. 38 for more information on load capacities.

Load Capacities (cont'd)

Point-load distribution – Multiple mast setup

Imperial measures illustrated below. All weights are in pounds (lb). For metric equivalencies, refer to the table in fig. 6.1 on p. 38.

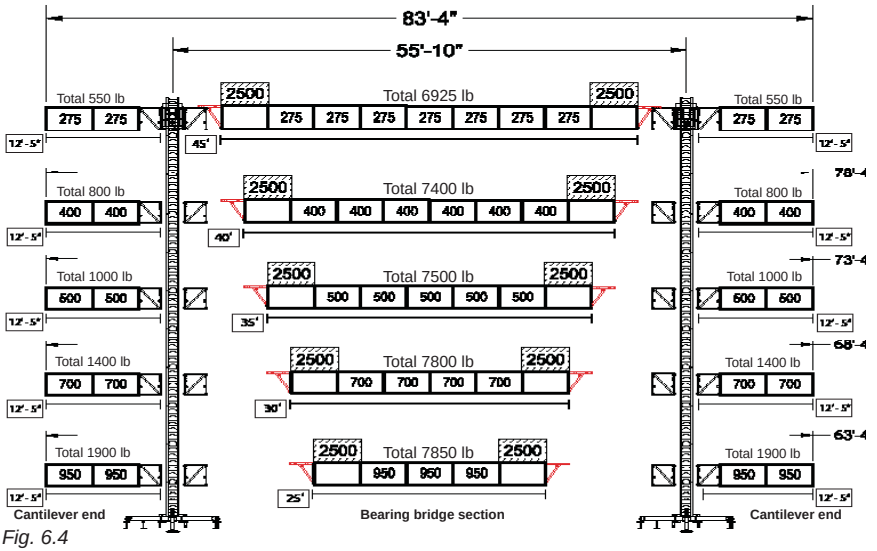
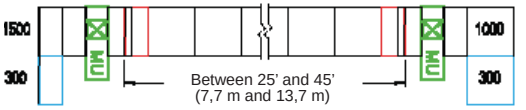


Fig. 6.4

NOTE: The configuration illustrated above requires the use of two motorized units and two optional bearing bridge adapters (shown in red). It is **mandatory** to have two 60" (1,5 m) bridges and one 30" (76 cm) bridge at each cantilever end of a bearing bridge setup (as shown in fig. 6.4). For any configuration other than those illustrated above, contact the distributor or the Hydro Mobile technical support team.

Back / forward extension – Bearing bridge setup

Imperial measures illustrated below. All weights are in pounds (lb). For metric equivalencies, refer to the table in fig. 6.1 on p. 38.



Bearing bridge setup with back extension

Fig. 6.5

Bearing bridge setup with forward extension

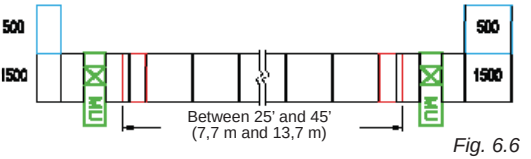


Fig. 6.6

NOTE: For the load capacities of the bearing bridges in the setups illustrated in fig. 6.5 and fig. 6.6, refer to the bearing bridge capacities illustrated in fig. 6.2 and 6.4. For any configuration other than those illustrated above, contact the distributor or the Hydro Mobile technical support team.

LEGEND

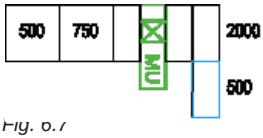
- Bridge – 60" (1,5 m)
- X' Length of bridge setup
- or Bridge – 30" (76 cm)
- or Bearing bridge adapter
- CW Counterweight
- Bridge used as extension

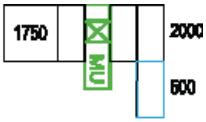
NOTE: To ensure safety at all times, refer to notes and warning on p. 38 for more information on load capacities.

Load Capacities (cont'd)

30" (76 cm) Back / forward extension – Cantilever bridge setup

Imperial measures illustrated below. All weights are in pounds (lb). For metric equivalencies, refer to the table in fig. 6.1 on p. 38.





Cantilever bridge setup with 30" back extension

Fig. 6.7

Cantilever bridge setup with 30" forward extension

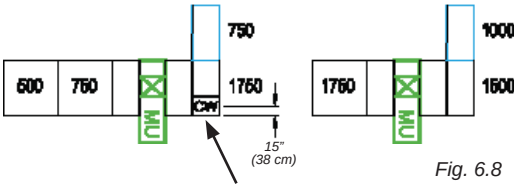


Fig. 6.8

Mandatory 750 lb (340 kg) counterweight (CW) located within 15" (38 cm) from edge of bridge

NOTE: For any configuration other than those illustrated above, contact the distributor or the Hydro Mobile technical support team.

60" (1,5 m) Back / forward extension – Cantilever bridge setup

Imperial measures illustrated below. All weights are in pounds (lb). For metric equivalencies, refer to the table in fig. 6.1 on p. 38.

Cantilever bridge setup with 60" (1,5 m) forward extension

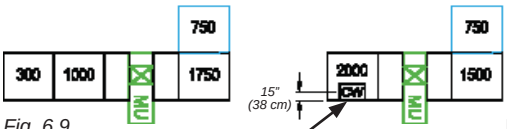


Fig. 6.9

Mandatory 750 lb (340 kg) counterweight (CW) located within 15" (38 cm) from edge of bridge

Mandatory 500 lb (227 kg) counterweight (CW) located within 15" (38 cm) from edge of bridge

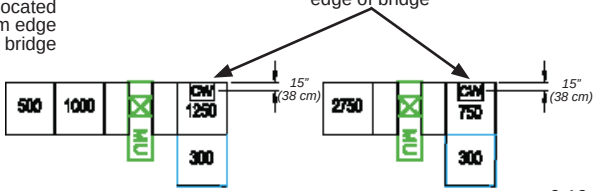


Fig. 6.10

Cantilever bridge setup with 60" (1,5 m) back extension

NOTE: For any configuration other than those illustrated above, contact the distributor or the Hydro Mobile technical support team.

LEGEND

	Bridge – 60" (1,5 m)	or	Bridge – 30" (76 cm)	CW	Counterweight
X'	Length of bridge setup	or	Bearing bridge adapter		Bridge used as extension

NOTE: To ensure safety at all times, refer to notes and warning on p. 38 for more information on load capacities.

Outriggers

Standard 63" (1,6 m) outriggers can be installed at two levels on a bridge as plank support (fig. 7.1). Plank support outriggers must be installed every 5' (1,5 m). P Series outriggers are not designed to support the weight of material (fig. 7.2).

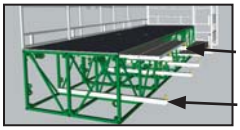


Fig. 7.1

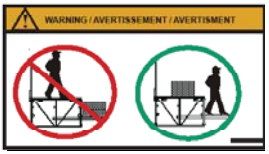
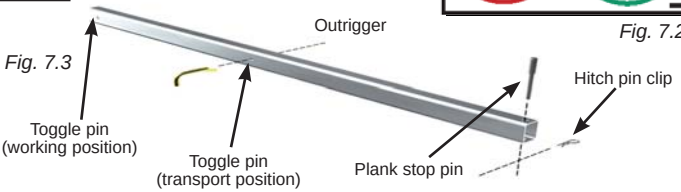


Fig. 7.2

Fig. 7.3



In a standard 0 to 3-plank configuration, each P Series outrigger has a maximum load capacity of 500 lb (227 kg).

Standard outriggers, used either at the top or bottom position, can be pulled out to a maximum of 30" (76 cm). Longer outriggers are available for special applications. For any other configuration using longer outriggers, contact the distributor or the Hydro Mobile technical support team.

Installation

1- Remove the toggle pin and the plank stop pin (fig. 7.3) and slide the outrigger in the top or bottom outrigger pockets on the bridge (see fig. 3.1 of the *Bridges* section, on p. 21), leaving enough length to install planking. Replace the plank stop pin.

2- Once the planks are in place, push in the outrigger until the plank stop pin rests snugly against the planks.

3- Secure the outrigger in place by sliding in the toggle pin at one extremity (see the working position in fig. 7.3) and tightening the outrigger pocket bolt.

WARNING
In a standard, recommended three-plank configuration, each outrigger has a maximum load capacity of 500 lb (227 kg).

Universal Plank Safety Support
(optional)

The universal plank safety support is installed at the extremities of planking to prevent planks from lifting, tipping and slipping.

Fig. 7.5

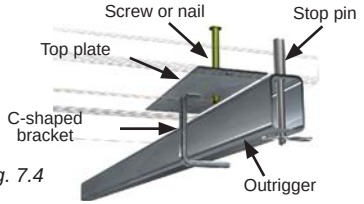


Fig. 7.4

Installation

1- Remove the stop pin (fig. 7.4) and slide the plank safety support between two planks.

2- Secure the C-shaped bracket around the outrigger and replace the stop pin.

3- Using screws or nails, secure the top plate of the plank safety support to the planks (fig. 7.5).

Cross Boxes
(optional)

Cross boxes are used to install auxiliary outriggers, as required when planking the inside corner of a forward extension or the recessed area in a wall.

Installation

1- Remove the toggle pins and the plank stop pins from two outriggers.
2- Slide a cross box on the back and the front of each of the two outriggers. Replace the toggle pins and tighten the outrigger pocket bolt on each of the outriggers.
3- Slide the transversal outriggers through the cross boxes until they are halfway through.
4- Install a cross box on each transversal outrigger and extend each outrigger in position.
5- Slide auxiliary outriggers through the cross boxes on the transversal outriggers until they are in position. Secure them in place with toggle pins. Install a plank stop pin in each of the auxiliary outriggers.
6- Once the planks are in place, adjust the auxiliary outriggers until the plank stop pins rest snugly against the planks.
7- Secure the outriggers in place by tightening all the bolts on the cross boxes.

Guardrails

Appropriate guardrails must be installed on each P Series bridge to ensure the safety of workers at all times.

Installation

1- Slide a guardrail adapter L bracket (fig. 7.7) in each of the two guardrail pockets at the top of the bridge (see fig. 7.6 and fig. 3.1 on p. 21 of the *Bridges* section) and secure them with toggle pins.
2- Insert the guardrail legs in the vertical part of the adapter brackets and tighten the bolts on the adapter brackets to secure the guardrail.
3- Install as many guardrails as is required by the setup. Make sure that all guardrails are appropriately locked together (fig. 7.8).

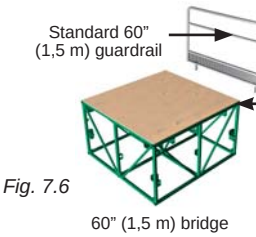


Fig. 7.6

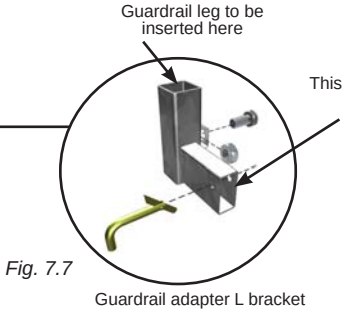


Fig. 7.7

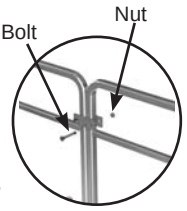


Fig.7.8
Locking of two guardrails

Guardrails (cont'd)

Movable Guardrails
(optional)

To ensure the safety of workers in a more flexible way, movable guardrails may be installed on bridges. Follow the installation steps of a standard guardrail and secure the movable guardrail to the standard guardrail with toggle pins.

Fig. 7.9

Movable guardrail

Plank-End Guardrails

Plank-end guardrails must be installed at the ends of planking as fall protection. In a standard, recommended three-plank configuration, the opening must be closed by placing two plank-end guardrails **face to face**.

Fig. 7.10

Installation

1- Slide the bottom end of the plank-end guardrail over the end of two planks.
2- Drive one or two nails or screws into the planks through the top plate to secure the guardrail in place.
3- In a standard, recommended three-plank configuration using two plank-end guardrails,make sure the first guardrail is installed **backwards**. Repeat steps 1 and 2 for the installation of the second guardrail.

Note: Two plank-end guardrails face to face are shown in fig. 7.10.

Face Guardrail Brackets
(optional)

Face guardrail brackets must be installed when the distance between the end of planking (or deck, if not using plank) and the structure is greater than what local regulation allows or 6" (15 cm) (ex. recess in a wall, end of a building, etc.), the most stringent of conditions taking precedence over the others.

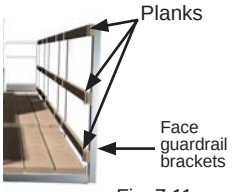


Fig. 7.11

Installation

1- Remove the plank stop pin from the outrigger and slide the face guardrail bracket inside the outrigger tube.
2- Secure in place by sliding the plank stop pin through the face guardrail bracket and the outrigger. Tighten all the outrigger pocket bolts properly.
3- Repeat steps 1 and 2 for each guardrail face bracket required to secure the hazardous opening.
4- Insert planks in the hooks of each face guardrail bracket to cover the hazardous opening (fig. 7.11). Secure the planks in place with nails or screws.

Access Equipment
Retractable Rest Platform
(optional)

The use of an automatically retractable rest platform is recommended to reach work areas at heights between 30' and 69' (9 m and 21 m). It is not recommended to climb up the mast to reach work areas at heights over 69' (21 m) because of the time and effort required to reach such heights. Alternate equipment such as a rapid mast climber, for instance Hydro Mobile's F Series, or a conventional scaffold stair system will prove to be more efficient.

Installation

1- For safety reasons, it is recommended that the rest platform be installed from the platform of the motorized unit or from a man basket underneath the motorized unit. The rest platform must be installed on the right side of the mast, when the platform of the motorized unit has been raised to more than 30' (9 m) from base level.
2- Remove the 3/8" nuts and bolts from the folder part.
3- Unfold the rest platform and leave the handle on top (fig. 7.12).
4- Slide the rest platform inside the mast with its rectangular step resting against the left side of the mast (fig. 7.14).
5- Install the folder part on a lateral rung facing the wall using 3/8" bolts and nuts.
6- Let the rest platform retract slowly inside the mast.
7- Remove the 3/8" bolt and nut from the handle.
8- Install the handle 5 rungs above the rest platform (fig. 7.15). Fasten with the 3/8" bolt and nut.
9- Test the rest platform by raising the handle. Doing so will retrieve the rest platform from inside the mast. When the handle is released the rest platform will fold and retract inside the mast.
10- If the rest platform unfolds and retracts as and when it should, it is safe to use the rest platform.

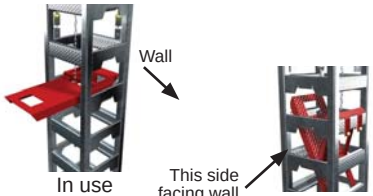


Fig. 7.13

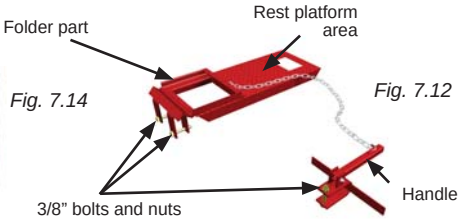


Fig. 7.14

Fig. 7.12

Using the retractable rest platform

1- Climb up the mast until one step above the rest platform.
2- Raise the handle to a vertical position to retrieve the rest platform from inside the mast.
3- Step on the rest platform only when the handle is in a vertical position.
4- Once on the rest platform, release the handle.
5- Resuming the climb up the mast will make the rest platform retract into the mast automatically.

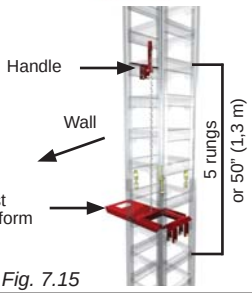


Fig. 7.15

WARNING
The use of a retractable rest platform is recommended to access work areas at heights between 30' and 69' (9 m and 21 m). It is not recommended to climb up the mast to reach work areas at heights over 69' (21 m) because of the time and effort required to reach such heights.

Access Equipment (cont'd)

Access Stairs
(optional)

When the motorized unit is at base level, workers may use the optional access stairs to reach the platform.

Installation

1- Install the guardrail door by sliding the guardrail legs in the guardrail pockets on the bridge. Secure the guardrail door with two toggle pins.
2- Slide the top part of the stairs into the top outrigger pockets. Secure in place by sliding in two toggle pins and tightening each outrigger pocket bolt.
3- Unfold the stair brace.
4- Secure the stair brace to the bottom truss of the bridge with two toggle pins.
5- Install the stairs handrail and secure in place with two toggle pins.

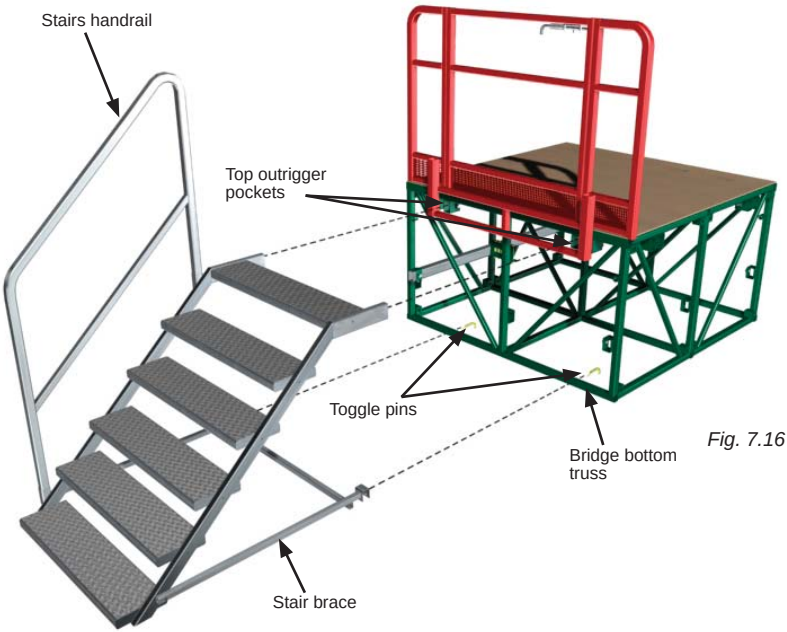


Fig. 7.16

WARNING
Access stairs can only be used when the motorized unit is at base pedestal level.

Access Equipment (cont'd)

Access Bridge
(optional)

To reach the work area when the motorized unit is at a height above 10' (3 m), it is recommended to use a staircase or an opening in the building. The platform may also be accessed by climbing up mast rungs to an optional access bridge, then up the ladder of that access bridge onto the work area (fig. 7.17).

Installation

1- To install the access bridge, raise the motorized unit by two or three rungs.

2- Using bridge installation support brackets or any other lifting device such as a crane or a forklift, bolt the access bridge assembly on the **right side** of the motorized unit. Refer to p. 21 of the *Bridges* section for more information about the installation of a bridge.

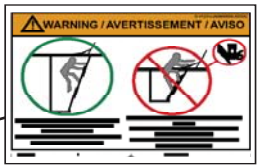
3- Loosen the 3/8" bolts to pull out all three access walkway legs (fig. 7.17). Secure in place by tightening the bolts.

4- Lower the motorized unit carefully until the access walkway legs touch the ground.

5- Remove the two locking bars at the bottom of the bridge assembly and slide them into their storage location (fig. 7.18).

6- Raise the motorized unit to completely unfold the access walkway and the flip up access step. The access ladder must only be used when it is **fully extended**. Once it is fully extended, the access walkway can be accessed by climbing up the mast rungs, stepping on the flip-up access step and then on the walkway. Climb up the access ladder and reach the platform through the access door. Make sure the access door is closed when it is not used.

Fig. 7.19



Warning stickers located inside the access door

Fig. 7.20

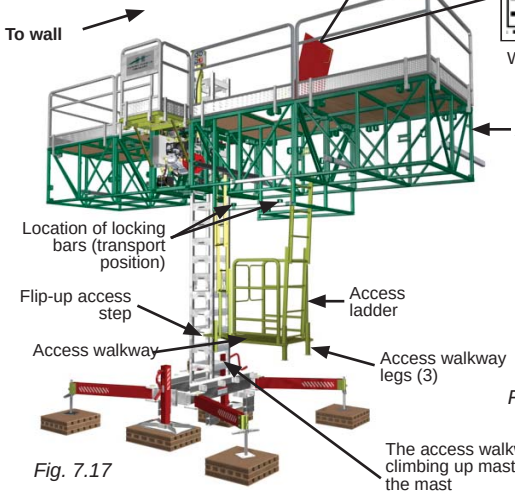
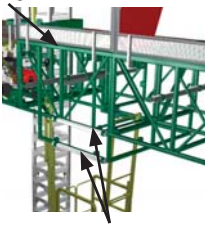


Fig. 7.17



Location of locking bars (storage position)

Fig. 7.18

WARNING
The access bridge must be installed on the **right side** of the mast **ONLY** (fig. 7.17) and a bearing bridge installation cannot be positioned on the same side as the access bridge.

Transport and Storage

Transport of the motorized unit

1- Lower the motorized unit, removing anchors, wall ties and mast sections on the way down. Refer to the *Masts and Wall Ties* section on p. 31 for instructions on dismantling masts and removing wall ties. If mast sections are to be stored on the platform during dismantling, make sure they are distributed equally on each side of the mast to ensure good balance. Refer to the *Load Capacities* section on p. 38 to avoid overloading the platform.

2- Monitor the last 10' (3 m) of descent to base level to ensure the proper seating of the access bridge and the access stairs.

3- If the motorized unit is equipped with an access bridge, lower the motorized unit until the access walkway is completely folded and nested inside the access bridge. Remove the locking bars from their storage location and insert them into the designated pockets for transport. Loosen the bolts on the three access walkway legs. Push in the access walkway legs and secure in place by tightening the bolts. Refer to p. 47 of the *Accessories* section for more information on the access bridge.

4- Lower the motorized unit to base level.

5- Turn off the engine. Open the engine access door. Pull the spring latch and slide in the control post until the spring latch is engaged. Move the Honda engine gasoline valve lever to the OFF positon.

6- Remove all bridges and their guardrails, including the access stairs and the access bridge, if necessary.

7- Remove all the motorized unit guardrails and secure them for transport. Fold the rear platform extension and secure for transport.

8- Lower the main jacks until the motorized unit rests on the base support blocks or the optional caster wheels. For road transportation, if the motorized unit is equipped with the optional caster wheels, make sure the unit is not resting on them by placing wood cribbing under the base.

9- Remove and store the screw jacks in their storage location on the motorized unit. Push in and lock all base outriggers.

10- Refer to p. 17 of the *Motorized Unit* section for more information on the lifting and transport of a motorized unit.

Storage of the motorized unit

1- Follow all the steps described in the transport procedure.

2- If the motorized unit is to be stored for any significant length of time, disconnect the battery.

3- Before storing the motorized unit, make sure to place sufficient cribbing under the base to prevent freezing water from causing damages to the bottom of the structure.

WARNING

Before transporting or storing a motorized unit, make sure that the gasoline valve lever has been turned off. Disconnect the battery if the motorized unit is to be stored for any significant length of time. When storing a motorized unit, there should be sufficient cribbing under the base to prevent freezing water from causing damages to the bottom of the structure.

Maintenance

Proper maintenance and service will warrant safe, economical, and trouble-free operation of a P Series motorized unit [10'(3 m)/min and 3'(0,9 m)/min models]. The following pages include maintenance schedules and routine inspection procedures. While **daily** and **weekly** maintenance operations can be performed by a competent person, it is **mandatory** that any inspection or maintenance operation scheduled to be performed every **month** and every **year** be carried out by an **appropriately trained and competent authorized technician**.

Daily and weekly maintenance operations are only necessary when the motorized unit is in use. The owner is responsible for all other maintenance operations (monthly and yearly) and these should be carried out whether the motorized unit is in use or not. The **yearly** maintenance operations should be carried out in a **workshop** where non-destructive test techniques can be applied.

In order to ensure operational safety and avoid failures, the owner must make sure that all scheduled maintenance operations have been effectively and timely carried out according to the maintenance schedules included in this manual. Maintenance logs must be kept on record for warranty purposes. Blank copies of the maintenance logs (daily, weekly, monthly) should be available on job sites at all times to be filled out when scheduled maintenance operations are carried out. Maintenance log templates on pages 51 to 59 of this manual can be used to make copies.

Tools required on job site	
Quantity	**Description**
1	15/16" open end wrench (supplied)
1	level (supplied)
1	measuring tape
1	banding cutter
1	2-lb hammer
1	1/2" drive 18" ratchet
1	15/16" x 1/2" drive deep socket
2	4" x 20' (10 cm x 6 m) straps

Fig. 8.1

WARNING
It is **mandatory** that any inspection or maintenance operation scheduled to be performed every **month** and every **year** be carried out by an appropriately trained and competent technician.

Maintenance (cont'd)

Adjustment of the Relief Valve

To obtain optimal system performance, the oil pressure of the hydraulic system must be set appropriately.

To adjust the relief valve pressure:

1- If the engine is running, shut it down. Unscrew the test port cap located on the distribution block (fig. 8.2 and fig. 8.3). Install the pressure gauge (fig. 8.4) and the appropriate adapter on the test port.
2- Start the engine and make sure it runs at full throttle. Raise the control lever and let the hydraulic cylinder become fully extended (to a height equal to two rungs, see fig. 4.6 on p. 26). The engine will slow down when the cylinder is fully extended.
3- Keep the control lever raised and the hydraulic cylinder fully extended and let the engine run at least 10-15 seconds for a more precise reading of the pressure gauge.
4- With the engine still running and the cylinder fully extended, use an hexagonal key and turn the adjustment bolt (fig. 8.3) to adjust the pressure of the relief valve to the appropriate setting*. Turn the bolt clockwise to increase the pressure level and counter-clockwise to lower it.
5- Lower the control lever and allow the cylinder to retract. Shut down the engine.
6- Remove the pressure gauge and replace the test port cap.
7- Check the hydraulic oil level and refill as required** (see p. 25 for startup instructions).

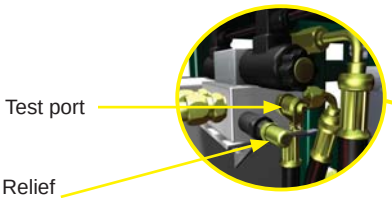


Fig. 8.3

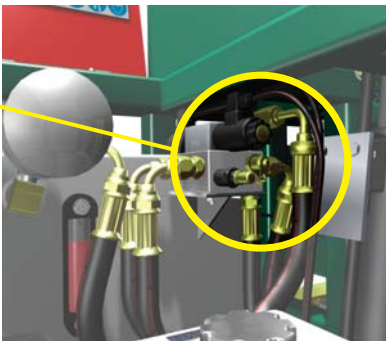


Fig. 8.2

Fig. 8.4

* Relief valve pressure should be set at 1700 psi for the 3' (0,9 m) / min model and at 1900 psi for the 10' (3 m) / min model.
** Use ATF Dextron III Spec-GM6297-M or ATF Mercon Spec-M2C185A oil.

MAINTENANCE LOGS

DAILY MAINTENANCE LOG

(to be performed by a competent person daily or before every working shift)

IDENTIFICATION RECORD	
Model	
Motorized unit serial number	

Company name		
Job site	Address	
	City	
	State/Province	
	Country	
	Zip/Postal Code	

Signature of competent person

Name of competent person
(IN PRINT)

Date of inspection

Comments

HYDRO MOBILE

www.hydro-mobile.com

DAILY MAINTENANCE LOG

(to be performed by a competent person daily or before every working shift)

Element	OK	Inspection / action
Base		Check the solidity and stability of the cribbing under the base.
		Check the stability of the screw jacks on the base and make sure the base outriggers are locked in the right position.
Drive unit		Visually inspect the spring of the secondary hook and grease if required.
		Visually inspect and test the cylinder hook and replace the rubber bushing if required.
		Visually inspect the safety hooks below the platform and make sure they can move freely. Grease the safety hooks if required.
		Visually inspect the guide rollers, the cylinder, the hooks and the springs and make sure that they are clear of debris.
		Visually inspect the platform and the accessories and make sure that they are clear of debris.
		Check the hydraulic oil level. The oil level should be between 3/4 and 7/8 full with the cylinder fully retracted (closed position). Replenish with ATF Dextron III Spec-GM6297 or ATF Mercon Spec-M2C185A hydraulic oil if required.
		Check for leaks and wear on the cylinder, hydraulic fittings, hoses and on the engine(s).
Doors and guardrails		Visually inspect the doors and guardrails and make sure that they are working properly and are secure.
		Make sure that there are no fall hazards.
Bridges and structure		If the motorized unit is used in a bearing bridge configuration, visually inspect the bearing bridge installation and the chains to make sure that they are secure.
		Visually inspect the inclinometers and make sure that they are properly plugged in. Test the inclinometers and make sure that they are functioning correctly.
Masts		Visually inspect the masts and make sure that they are plumb on both their front and side axis.
Wall ties		Visually inspect each bolt, anchor and wallmount, and make sure that each is properly fastened or tightened.
Emergency descent system		Perform a test of the emergency descent system and make sure that it is working properly.
Honda engine		Perform the recommended **daily** maintenance on the engine, as per the Honda engine owner's manual instructions.
		Make sure that gasoline and oil levels are adequate. Replenish if necessary.
		Note: To prevent any damages caused by insufficient oil levels, the Honda engine on P Series motorized units is equipped with a control device that will shut down the engine when the oil level drops below the safety limit. It should be noted that the ignition key will remain at the ON position.

WEEKLY MAINTENANCE LOG

(to be performed every week by a competent person)

IDENTIFICATION RECORD	
Model	
Motorized unit serial number	

Company name		
Job site	Address	
	City	
	State/Province	
	Country	
	Zip/Postal Code	

Signature of competent person

Name of competent person
(IN PRINT)

Date of inspection

Comments

HYDRO MOBILE

www.hydro-mobile.com

WEEKLY MAINTENANCE LOG

(to be performed every week by a competent person)

Element	OK	Inspection / action
Scheduled maintenance		Make sure that all the steps included in the **daily** maintenance list have been carried out.
Honda engine		Perform the recommended **weekly** maintenance on the engine, as per the Honda engine owner's manual instructions.
Drive unit		Check for leaks and wear on the cylinder, hydraulic fittings, hoses and on the engine(s).
		Visually inspect all the guide rollers and make sure that they are clear of debris and properly lubricated. Grease as required, using only Prolab GS100 #288400 grease.
Bridges and structure		Visually inspect the structure for excessive wear, damage or distortion caused by overloads.
Masts		Visually inspect each mast bolt and make sure that it is in place and tightened properly.
		Visually inspect each mast bolt washer and replace if required.

MONTHLY MAINTENANCE LOG

(to be performed every month by a competent authorized technician)

IDENTIFICATION RECORD	
Model	
Motorized unit serial number	

Company name		
Job site	Address	
	City	
	State/Province	
	Country	
	Zip/Postal Code	

Signature of authorized technician

Name of authorized technician
(IN PRINT)

Date of inspection

Comments

HYDRO MOBILE

MONTHLY MAINTENANCE LOG

(to be performed every month by a competent authorized technician)

Element	OK	Inspection / action
Scheduled maintenance		Make sure that all the steps included in the **daily** and **weekly** maintenance lists have been carried out.
Honda engine		Perform the recommended **monthly** maintenance on the engine, as per the Honda engine owner's manual instructions..
Base		Clean and lubricate the screw jacks.
		Clean the base outriggers.
Drive unit		Visually inspect the cylinder, secondary and safety hooks and make sure that they are clear of debris. Make sure that all the connection bolts are in place and secure.
		Grease the cylinder and secondary hooks at their pivot point.
		Visually inspect the lowering cams to make sure they can move freely and repair them as required (not too loose).

It is **mandatory** that any inspection or maintenance operation scheduled to be performed once a month be carried out by an appropriately trained and competent authorized technician.

YEARLY MAINTENANCE LOG

(to be performed every month by a competent authorized technician)

IDENTIFICATION RECORD	
Model	
Motorized unit serial number	

Company name		
Job site	Address	
	City	
	State/Province	
	Country	
	Zip/Postal Code	

Signature of authorized technician

Name of authorized technician
(IN PRINT)

Date of inspection

Comments

HYDRO MOBILE

YEARLY MAINTENANCE LOG

(to be performed every month by a competent authorized technician)

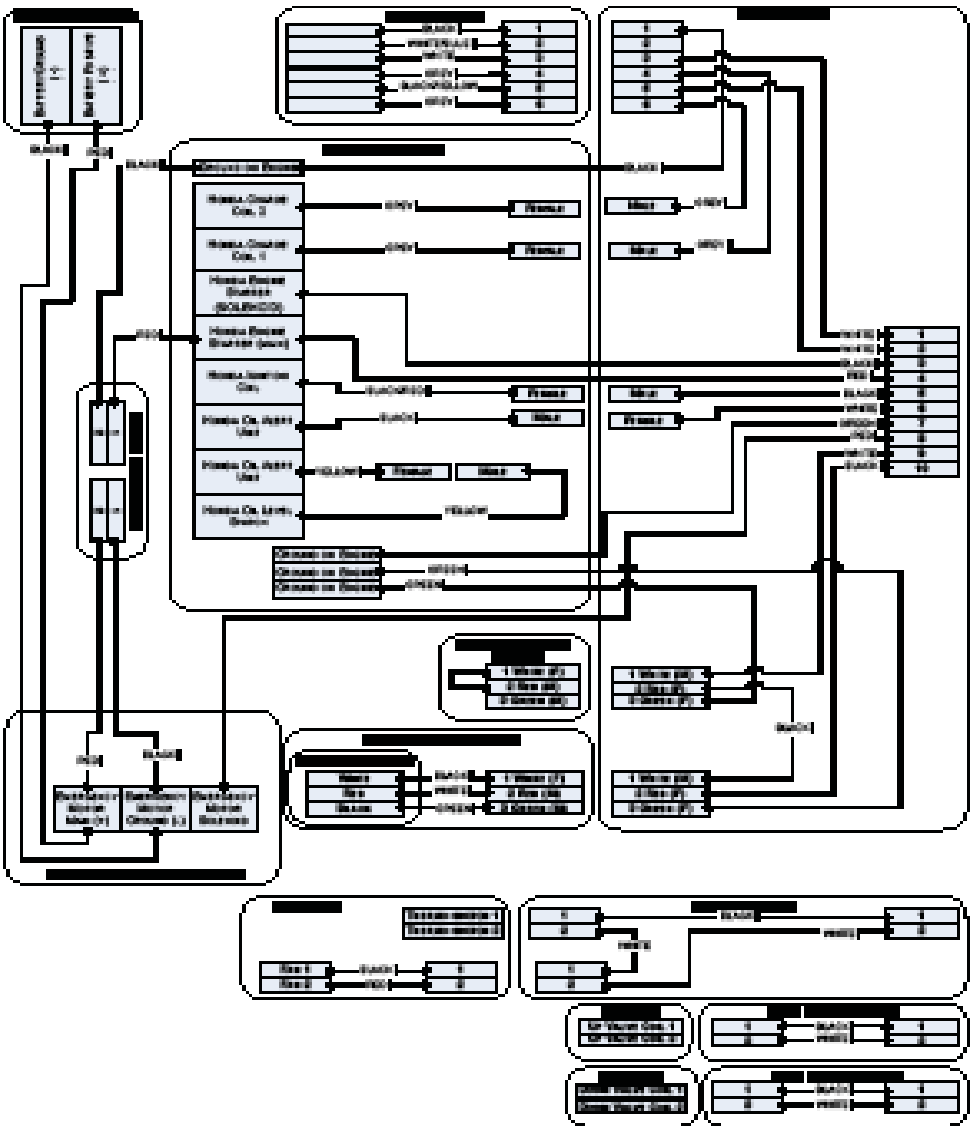
Element	OK	Inspection / action
Scheduled maintenance		Make sure that all the steps included in the **daily**, **weekly** and **monthly** maintenance lists have been carried out.
Honda engine		Perform the recommended **yearly** maintenance on the 24 HP engine, as per the Honda engine owner's manual instructions.
Bridges and structure		Visually inspect the structure for any signs of excessive wear or damage.
		Visually inspect the structure for paint defects and make touchup repairs or repaint the motorized unit, if necessary. [1]
		Visually inspect all the bridges for welding defects, damaged parts and excessive rust or corrosion.
Drive unit		Check the hydraulic pressure of the relief valve and adjust accordingly. [2]
		Change the hydraulic oil and the hydraulic oil filter.
		Check the voltage of the battery and recharge or replace it, if necessary. The battery voltage should be 12 volts.
Masts		Inspect the mast sections for any welding defects, damaged parts and excesesive rust or corrosion.

[1] Green paint universal code specifications: #4338-00901-501
Red paint universal code specifications: #2000-38920-501

[2] Relief valve pressure must be set at 1900 psi on the 10' (3 m)/min model and at 1700 psi on the 3' (0.9 m)/min model. For more information, refer to p. 50 of the *Transport, Storage and Maintenance* section of the P Series Operator's manual.

It is **mandatory** that any inspection or maintenance operation scheduled to be performed once a year be carried out by an appropriately trained and competent authorized technician.

Maintenance (cont'd)
Electrical Diagram - GX340 *
(GX340 Honda engine)



THIS ELECTRICAL DIAGRAM APPLIES TO UNITS EQUIPPED WITH A GX340 HONDA ENGINE AND WITH THE

- PU-0296 and above
- PU-0263, PU-0272 to PU-0275, PU-0277, PU-0278, PU-0280, PU-0281, PU-0283 to PU-0285, PU-0289 to PU

For units equipped with a GX340 Honda engine with a serial number not included in the above list or for units equipp
Web site at www.hydro-mobile.com. A copy of those diagrams can also be obtained by contacting the distributor or th

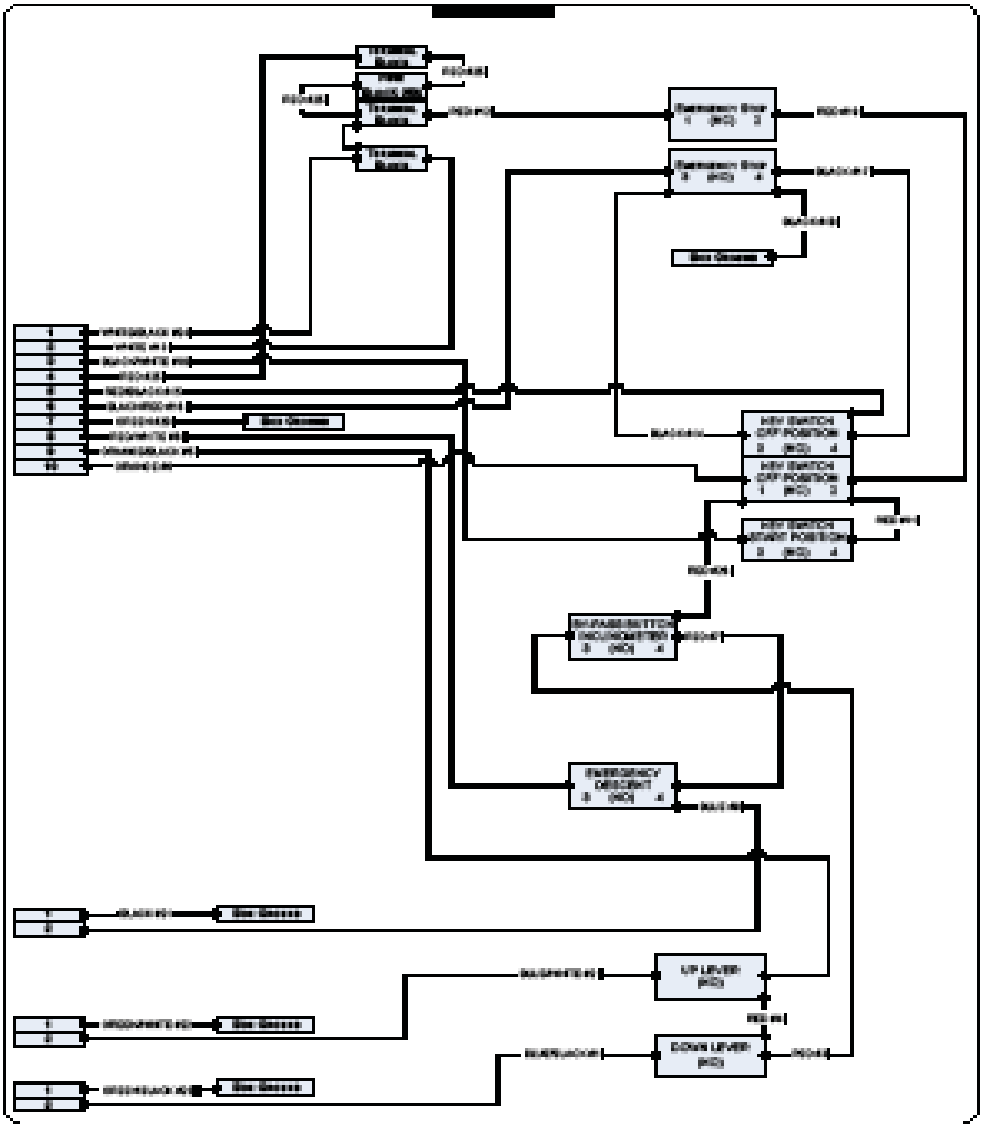


Fig. 8.6

FOLLOWING SERIAL NUMBERS:

-0291, PU-0293 and PU-0294

ed with a GX270 Honda engine, electrical diagrams can be downloaded directly from the Hydro Mobile
he Hydro Mobile technical support team.

Maintenance (cont'd)
Hydraulic Diagram *

# ITEM	CODE	DESCRIPTION
1	A0410405-0000	ENGINE HONDA 11 HP (18A) GX340 (STARTER)
2	A0411500-0004	ENGINE HYDRAULIC GEAR PUMP PLP 10-8 (P)
3	A0470203-0009	VALVE CHECK CVT-04-SAE
4	A0470204-0001	VALVE RELIEF CARTRIDGE TYPE (RV5-10)
5	A0470210-0006	VALVE DIRECTIONAL ELECTRIC 12VDC - P
6	A0580000-0001	CYLINDER 3 1/2x23 1/2x1 1/2
7	A0470200-0000	VALVE COUNTERBALANCE SUN 3000 PSI(W/CAP)
8	11018102-0-00000-0	CYLINDER ASS'Y - M2
9	A0411200-0001	HYDRAULIC OIL COOLER EMMER. 2024K2P
10	A0470203-0004	VALVE CHECK IN LINE (VUC34/PA1.5/BSP)
11	A0410000-0002	ENGINE FILTER OIL W/INDICATOR (MPSG-050)
12	A0410499-0002	MOTOR SAFETY M326-016-00-01P (SERIE P)

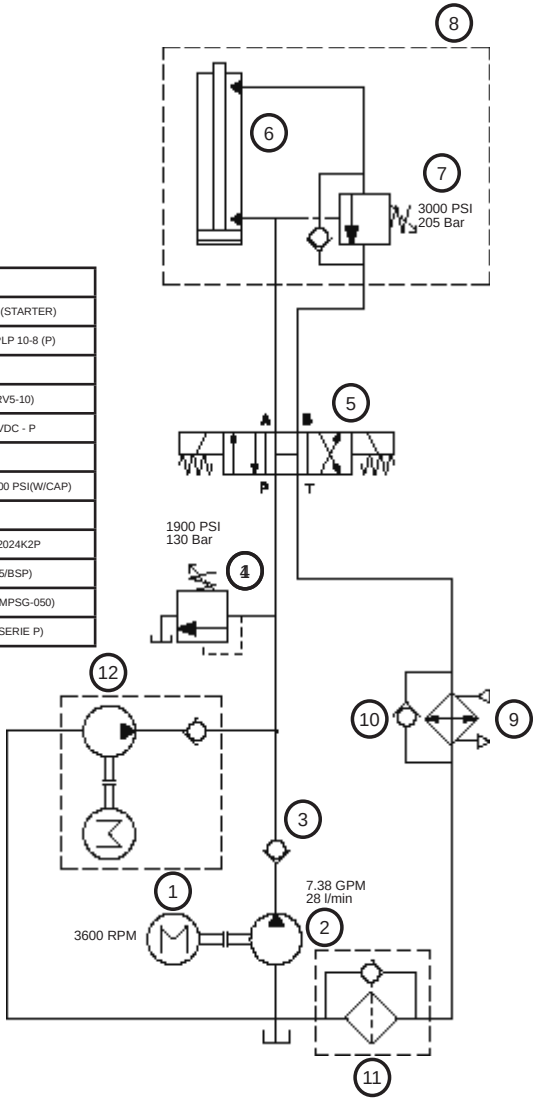


Fig. 8.9

*** NOTE**
This hydraulic diagram is for the Honda GX340 engine, standard only on the 10' (3 m) / min model of the P Series. Contact Hydro Mobile for a copy of the hydraulic diagram for the Honda GX270 engine, standard on the 3' (0,9 m) / min model.

JOB EQUIPMENT CHECK LIST

Company name		
Contact name		
Job site	Address	
	City	
	State/Province	
	Country	
	Zip/Postal Code	
	Telephone	
	Fax	

Motorized Units and Mast Sections					
Ok	**Item**	**Quantity**	**Ok**	**Item**	**Quantity**
	P Series motorized unit			Mast sections	

Bridges					
Ok	**Item**	**Quantity**	**Ok**	**Item**	**Quantity**
	30” (76 cm) bridge			Bridge extension	
	60” (1,5 m) bridge			Bearing bridge adapter	
	Access bridge				

Outriggers and Support Accessories					
Ok	**Item**	**Quantity**	**Ok**	**Item**	**Quantity**
	5’ (1,5 m) plank support outrigger			Plank safety support	
	7’ (2 m) plank support outrigger			Plank-end guardrail	
	Cross box			Face guardrail bracket	

Wall Ties and Anchors					
Ok	**Item**	**Quantity**	**Ok**	**Item**	**Quantity**
	Reusable anchor			Beam clamp anchor	
	Welded anchor			Mast bracket (tower bracket)	
	Fixed anchor [3 to 12” (7,6 to 30,5 cm)]			Standard wallmount	
	Floor or wall anchor			Wallmount extension	

For orders or information:

1-888-484-9376 (US)
(toll free in the United States)
450 589-8100 (Canada)
+33.6.84.77.53.16 (Europe)

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Personal Training Record – Hydro Mobile Equipment				
General training information		**Procedural check list** (by instructor / installer)		
Customer name (same as rented or sold to)		Lifting/handling and positioning unit(s)	**Yes**	**No**
Customer phone number (required)		Base installation procedure		
		Bridge assembly, placement and installation		
Trainee name		Cantilever assembly		
		Mast assembly		
Instructor / Installer name		Ties and anchors		
		Guardrails and doors procedure		
Date of training		Hoisting procedure		
		Material loading procedure		
Location of training		Rise and descent procedure		
		Review of Operator's manual		
Duration of training		Maintenance procedure		
Trainee name and signature		Instructor / installer name and signature		
Comments from instructor / installer				

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User Training Record – Hydro Mobile Equipment				
General training information		**Procedural check list** (by instructor / installer)		
Customer name (same as rented or sold to)		**Hazard recognition and response**	**Yes**	**No**
Customer phone number (required)		Electrical exposures and considerations		
		Falls and falling objects		
Trainee name		Proper usage of scaffold		
		Maximum intended loads		
Instructor / Installer name		**Trained by competent person**	**Yes**	**No**
		Erection of an installation		
Competent person		Dismantling of an installation		
		Moving the motorized unit		
Job number		Operation of the motorized unit		
		Repairing the motorized unit		
Date of training		Inspection of the motorized unit		
		Maintenance of the motorized unit		
Location of training		**These are the minimum requirements for employee training according to Occupational Safety and Health Administration (OSHA) regulation no. 29CFR1926.454**		
Duration of training				
Trainee name and signature		Instructor / installer name and signature		
Comments from instructor / installer				

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