

Crane FRH-2500

Important! Refer to section « WARNINGS » and « OPERATION, USE OF THE LIFTING UNIT » for general safety instructions and additional applicable warnings.

∞SEE WARNINGS, ON PAGE 7

∞SEE OPERATION, USE OF THE LIFTING unit, ON PAGE 25

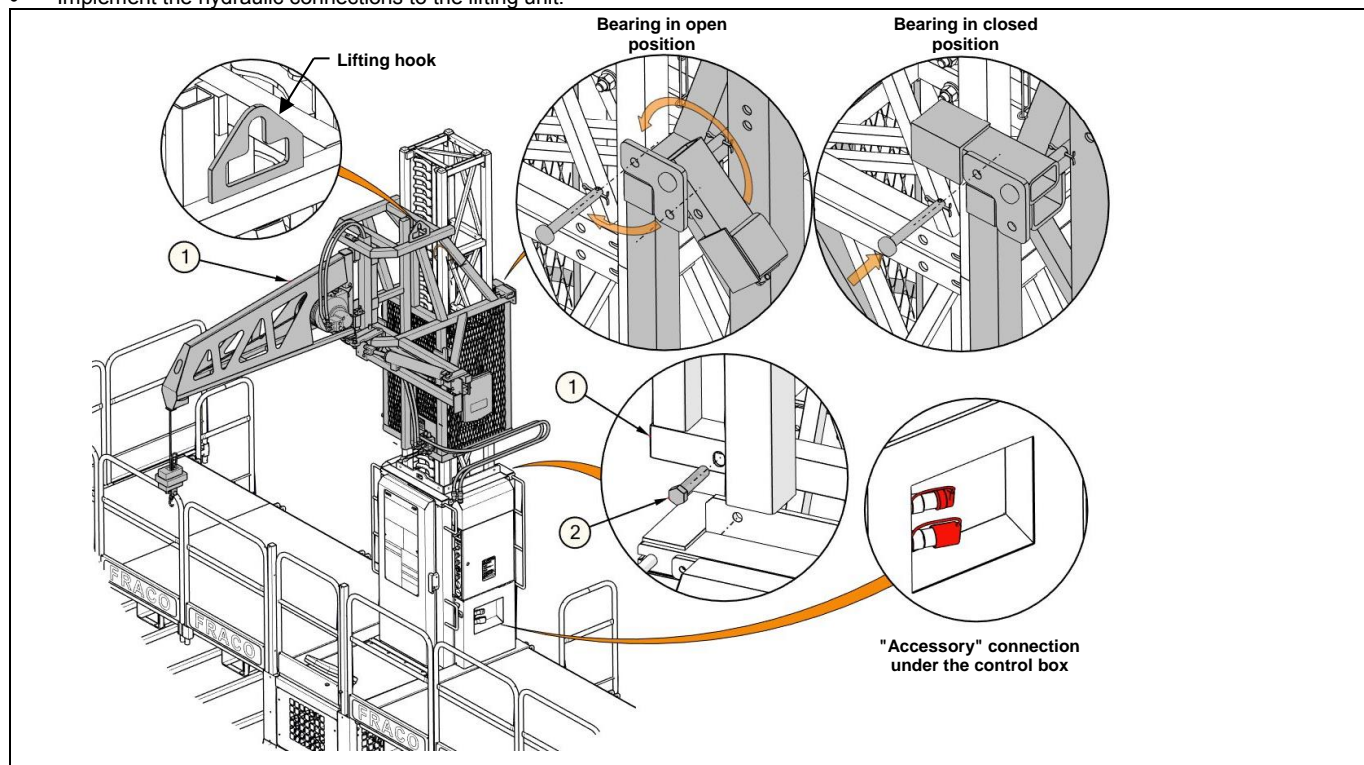
Warning:

- On the ground, establish a marked safety perimeter around the lifting area and prohibit access.
- Before using the portable crane, make sure people around are aware of the potential dangers.
- This equipment must not be used for lifting or moving personnel.
- Use the controls smoothly. Sudden movements may damage the winch.
- Never move or lift loads over a person.
- Do not leave loads suspended for long periods or unattended.
- Always remain at a safe distance from the load.
- Maintain a minimum of five (5) turns of cable on the drum at all times.
- The load must be lifted vertically.
- Allow the equipment to preheat before use, especially during cold temperatures.
- Wear appropriate clothing and keep hands away from moving parts when using the crane.
- Wear your safety harness, attached to a regulatory attachment point, if the guardrails are to be handled.
- ∞SEE REGULATORY ATTACHMENT POINTS, ON PAGE 10
- It is **forbidden** to use a crane on a freestanding base without a wall attach system.
- It is **forbidden** to position the lift unit above the highest mast anchor device when using a portable crane.

Installation

Important! If the platform is installed on a ground base, the first two (2) mast anchors must first be installed. If the platform is installed on a freestanding base, at least one (1) mast anchor must be installed.

- Use the lifting hook provided for said purpose for lifting and moving the portable crane.
- Bolt the structure on top of the lifting unit.
- Once the crane is secured on the lifting unit, place the bearings in the closed position with respect to the segments of the mast sections.
- Implement the hydraulic connections to the lifting unit.



No.	Item	Description	No.	Item	Description
01	12490073	Mobile crane FRH-2500 for 20" x 20" mast	02	BOA-2032	Bolt 3/4"-10unc x 3-1/2" A325 galv.

Figure 123 - Crane FRH-2500

Operation

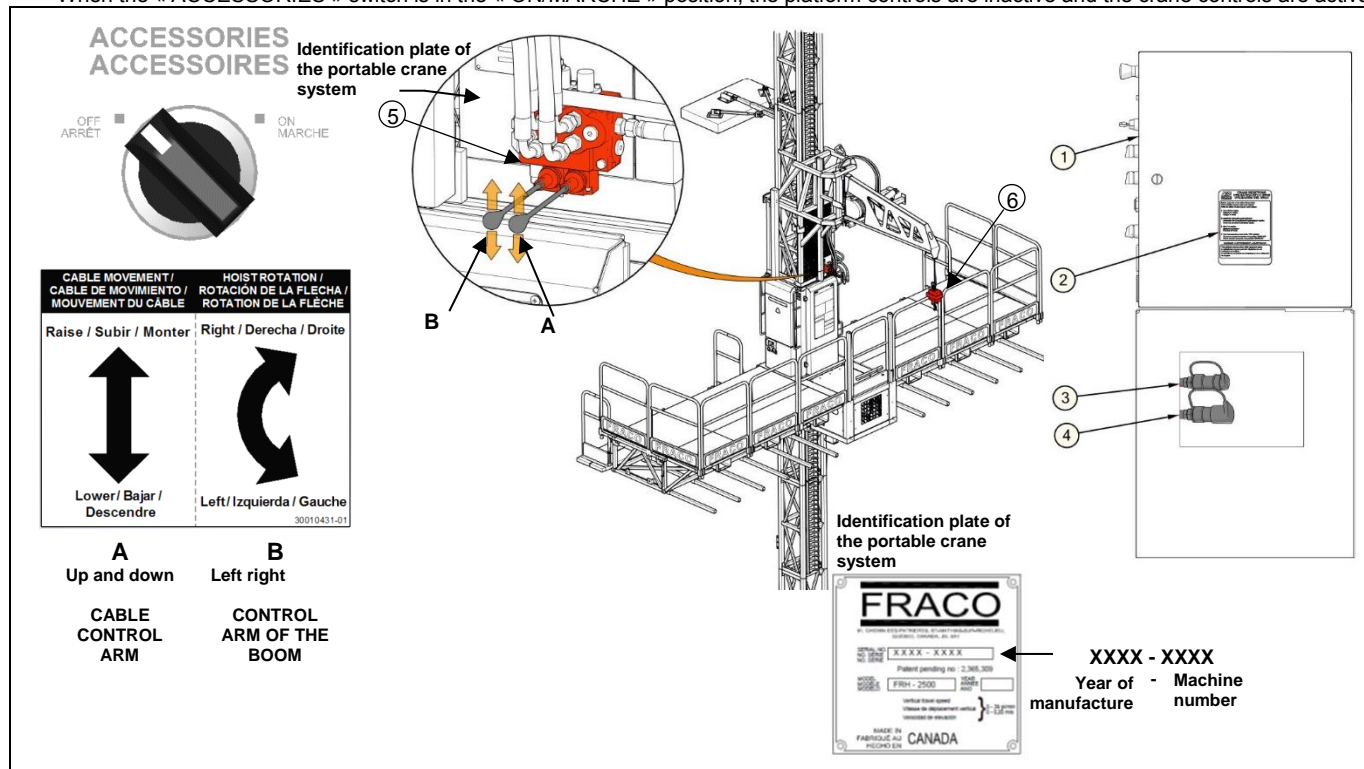
Important! Before use at the beginning of each shift, all points of the **DAILY INSPECTION GRID**, ON PAGE 157, must be checked, including a functional check. During operation, the operator must strictly follow all operating instructions.

Important! The operator of the portable crane must have the necessary skills and training to use the crane.

SEE OPERATION, USE OF THE LIFTING unit, ON PAGE 25

Start the lifting unit and set the « ACCESSORIES » switch to « ON/MARCHE ».

- When the « ACCESSORIES » switch is in the « OFF » position, the platform controls are active and the crane controls are inactive.
- When the « ACCESSORIES » switch is in the « ON/MARCHE » position, the platform controls are inactive and the crane controls are active.



Important! Be sure to read the operating instructions for the crane on the sticker under the crane's hydraulic couplings.

Important! After using the crane, turn the « ACCESSORIES » switch to the « OFF » position.

If you have any questions regarding the portable crane system, please consult the documentation or contact your FRACO representative.

No.	Item	Description	No.	Item	Description
01	32120020	ACT-8 Control Box	04	HYR-5146	Quick coupling NPT-3/4-M portable crane
02	30050233	"Crane operation" sticker	05	32060012	Distributor of the FRH-2500 crane
03	HYR-5147	Quick coupling NPT-3/4-F portable crane	06	28490283	Weight and lifting hook FRH-2500



Adjustment of the hydraulic pressure and installation or replacement of the steel cable must be carried out by a person holding a **valid Level 3 card**. This person must be familiar with the instructions for use, have sufficient experience and be aware of the risks involved in the use of the platform.

Valid for the Braden Gearmatic winch (Model: B64A05 119-01)

Câble Dia.5/16 in 1,850 Psi 2,500 Lb Max			Câble Dia.1/4 in 1,200 Psi 1,000 Lb Max		
Layer	Length	Capacity	Layer	Length	Capacity
1	33' 0"	2,500 lb	1	43' 0"	1,000 lb
2	79' 0"	2,500 lb	2	100' 0"	1,000 lb
3	129' 0"	2,500 lb	3	160' 0"	1,000 lb
4	183' 0"	2,500 lb	4	224' 0"	1,000 lb
5	241' 0"	2,500 lb	5	292' 0"	1,000 lb
			6	364' 0"	1,000 lb

Loading areas

Observe the load distribution.

∞SEE PERMITTED CONFIGURATIONS AND LOAD DISTRIBUTION, ON PAGE 19

Important! Workers must wear a safety harness properly secured to an attachment point before handling the guardrails.

∞SEE REGULATORY REGULATORY, ON PAGE 10

Remove the guardrails where necessary to allow the material to pass through and reposition the guardrails before using the platform.

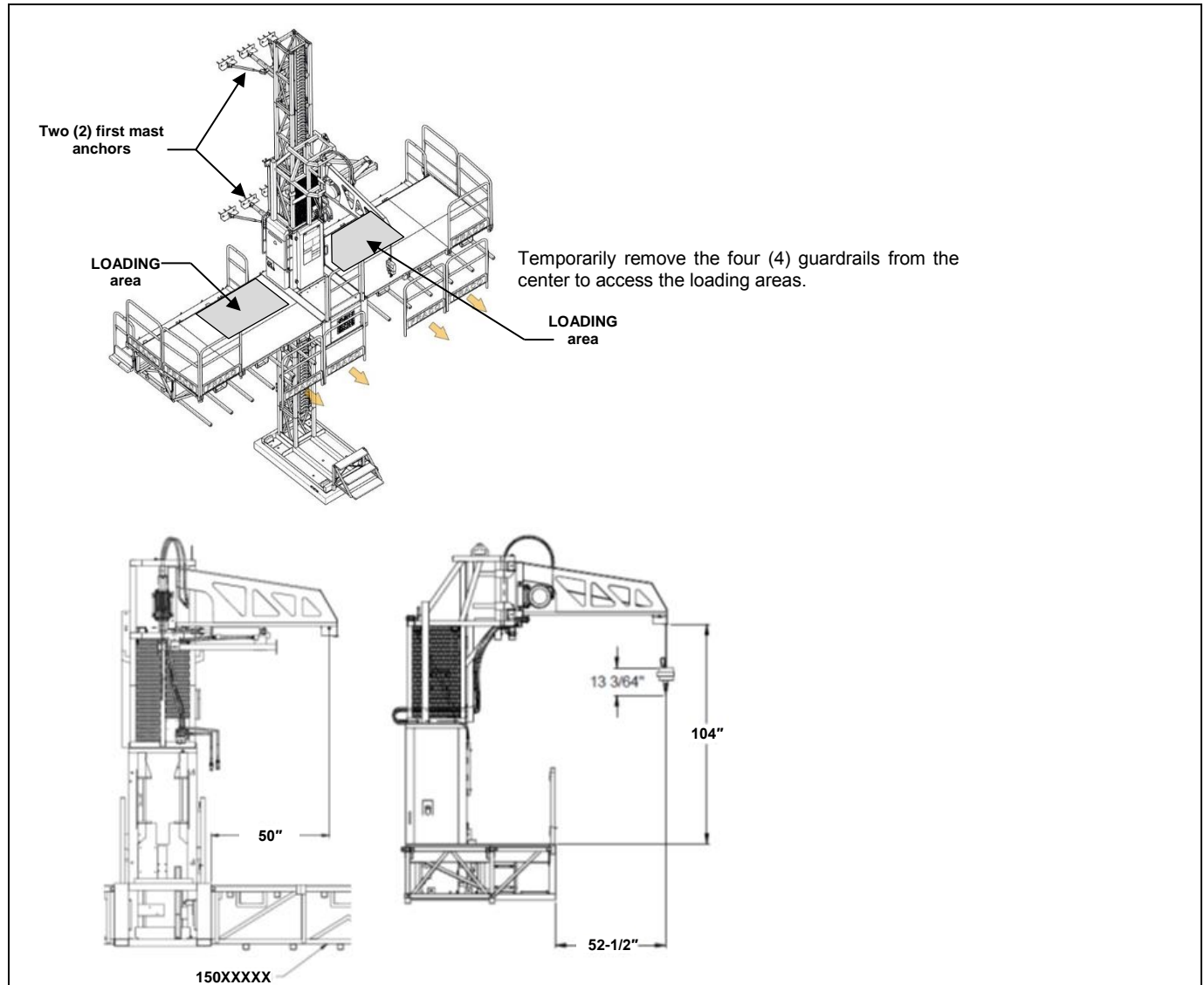


Figure 124 - Crane FRH-2500, loading area

Periodic maintenance

Refer to the « PERIODIC MAINTENANCE » section for applicable points, as well as to the inspection sheet in the model-specific and serial-specific service manual.

∞ SEE PERIODIC MAINTENANCE, ON PAGE 155

∞ SEE DAILY INSPECTION GRID, ON PAGE 157

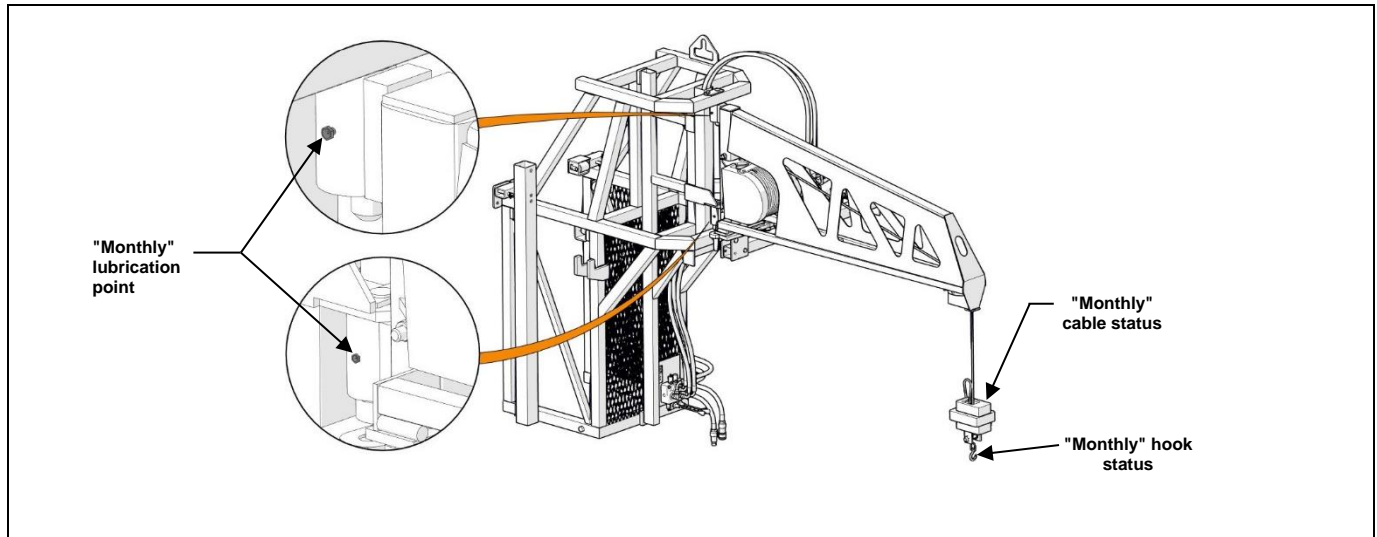


Figure 125 - Crane FRH-2500, maintenance

Crane FRH-4000

Important! Refer to section « WARNINGS" and « OPERATION, USE OF THE LIFTING unit" for general safety instructions and additional applicable warnings.

∞SEE WARNINGS, ON PAGE 7, AND OPERATION, USE OF THE LIFTING unit, ON PAGE 25.

Important! The maximum load is limited to 2 500 lb (1 134 kg) when the FRH-4000 crane is used on an ACT-8 platform. It is also important to respect the maximum punctual loads.

∞SEE PERMITTED CONFIGURATIONS AND LOAD DISTRIBUTION, ON PAGE 19

Warning:

- On the ground, establish a marked safety perimeter around the lifting area and prohibit access.
- Before using the portable crane, make sure people around are aware of the potential dangers.
- This equipment must not be used for lifting or moving personnel.
- Use the controls smoothly. Sudden movements may damage the winch.
- Never move or lift loads over a person.
- Do not leave loads suspended for long periods or unattended.
- Always remain at a safe distance from the load.
- Maintain a minimum of five (5) turns of cable on the drum at all times.
- The load must be lifted vertically.
- Allow the equipment to preheat before use, especially during cold temperatures.
- Wear appropriate clothing and keep hands away from moving parts when using the crane.
- Wear your safety harness, attached to a regulatory attachment point, if the guardrails are to be handled.
- ∞SEE REGULATORY ATTACHMENT POINTS, ON PAGE 10
- It is **forbidden** to use a crane on a freestanding base without a wall attach system.
- It is **forbidden** to position the lift unit above the highest mast anchor device when using a portable crane.

Installation

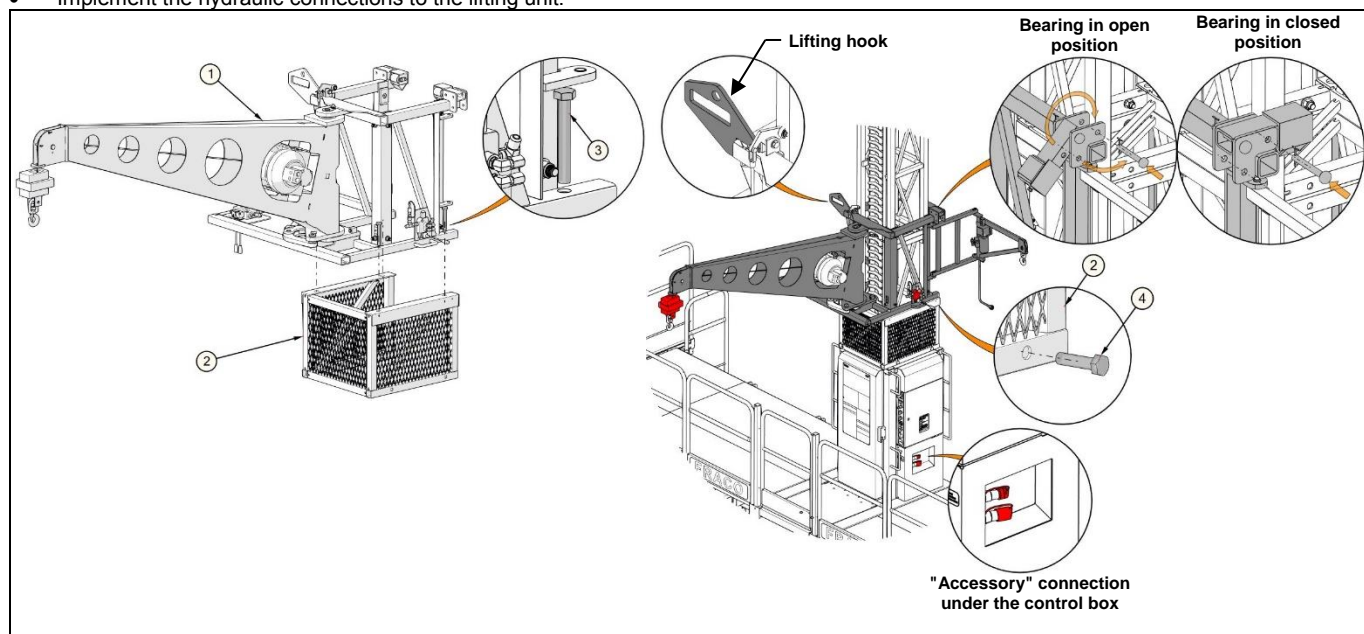
Important! If the platform is installed on a ground base, the first two (2) mast anchors must first be installed. If the platform is installed on a freestanding base, at least one (1) mast anchor must be installed.

Workers must wear a safety harness properly secured to an attachment point before handling the guardrails.

Important! It is impossible to use the crane and extension turnbuckles simultaneously. For platforms requiring more than 13'-4" extensions, be sure to use 10'-0" tapered extensions that do not require turnbuckles.

∞SEE PERMITTED CONFIGURATIONS AND LOAD DISTRIBUTION, ON PAGE 19

- Use the lifting hook provided for said purpose for lifting and moving the portable crane.
- Bolt the structure on top of the lifting unit.
- Once the crane is secured on the lifting unit, place the bearings in the closed position with respect to the segments of the mast sections.
- Implement the hydraulic connections to the lifting unit.



No.	Item	Description	No.	Item	Description
01	28494311	Mobile crane structure FRH-4000 for 20" x 20" mast	03	BOA-2030	Bolt 3/4"-10unc x 5-1/2" A325 galv. assembled
02	20491488	FRH-4000 adapter for ACT-8	04	BOA-2029	Bolt 3/4"-10unc x 3" A325 galv. assembled

Figure 126 - Crane FRH-4000

Operation

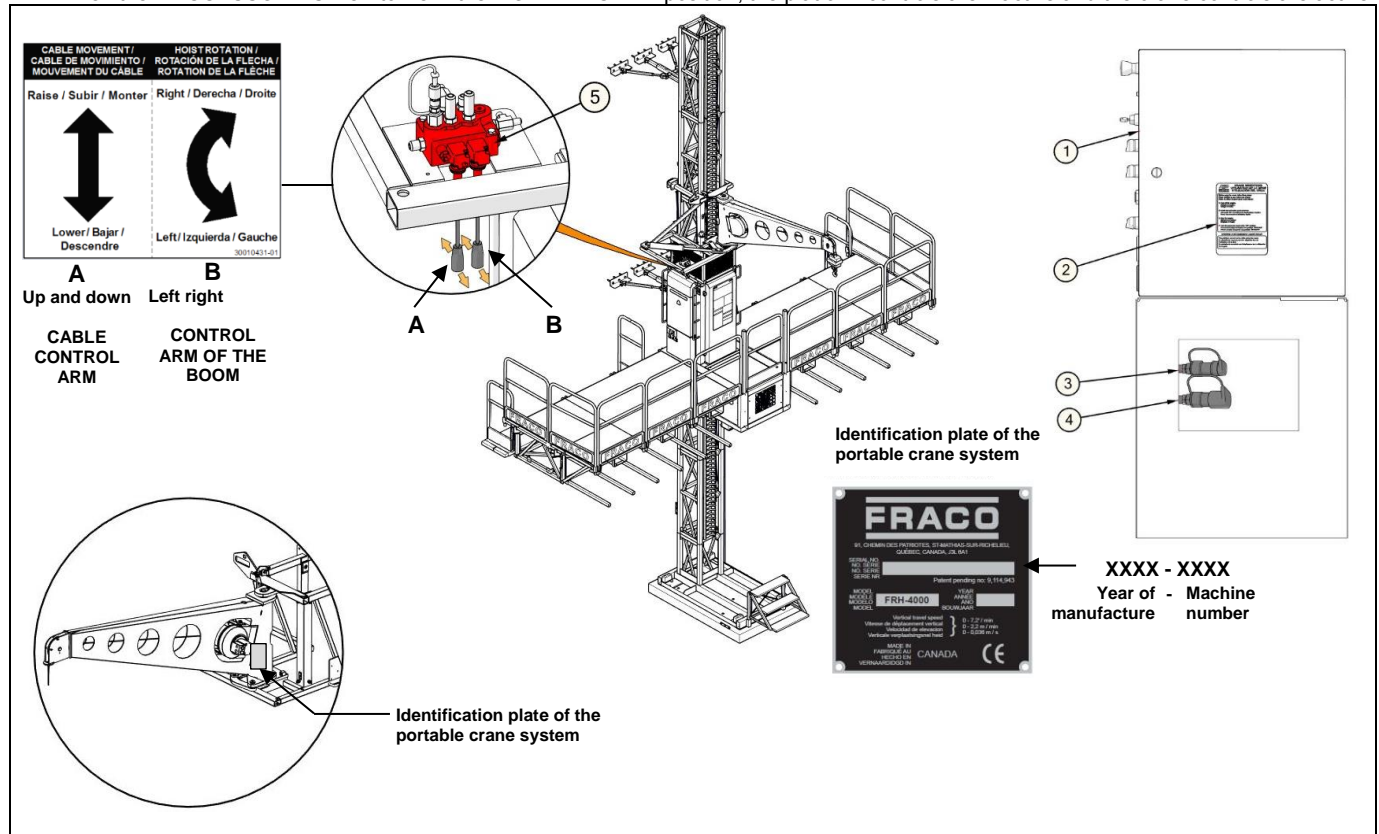
Important! Before use at the beginning of each shift, all points of the **DAILY INSPECTION GRID**, ON **PAGE 157**, must be checked, including a functional check. During operation, the operator must strictly follow all operating instructions.

Important! The operator of the portable crane must have the necessary skills and training to use the crane.

☞ **SEE OPERATION, USE OF THE LIFTING unit, ON PAGE 25**

Start the lifting unit and set the « ACCESSORIES » switch to « ON/MARCHE ».

- When the « ACCESSORIES » switch is in the « OFF » position, the platform controls are active and the crane controls are inactive.
- When the « ACCESSORIES » switch is in the « ON/MARCHE » position, the platform controls are inactive and the crane controls are active.



Important! Be sure to read the operating instructions for the crane on the sticker under the crane's hydraulic couplings.

Important! After using the crane, turn the « ACCESSORIES » switch to the « OFF » position.

If you have any questions regarding the portable crane system, please consult the documentation or contact your FRACO representative.

No.	Item	Description	No.	Item	Description
01	N/A	ACT-8 Control Box	04	HYR-5146	Quick coupling NPT-3/4-M portable crane
02	N/A	"Crane operation » sticker	05	32060056	FRH-4000 double sections valve assembly
03	HYR-5147	Quick coupling NPT-3/4-F portable crane			

Figure 127 - Crane FRH-4000, installation

Valid for the Braden Gearmatic winch (Model: B64A05 119-01)

Cable dia. 3/8 in 2,850 psi 4,000 lb Max			Cable dia. 5/16 in 1,850 psi 2,500 lb Max			Cable dia. 1/4 in 1,200 psi 1,000 lb Max		
Layer	Length	Capacity	Layer	Length	Capacity	Layer	Length	Capacity
1	26'-0"	4 000 lb	1	33'-0"	2 500 lb	1	43'-0"	1 000 lb
2	66'-0"	4 000 lb	2	79'-0"	2 500 lb	2	100'-0"	1 000 lb
3	109'-0"	4 000 lb	3	129'-0"	2 500 lb	3	160'-0"	1 000 lb
4	156'-0"	3 800 lb	4	183'-0"	2 500 lb	4	224'-0"	1 000 lb
			5	241'-0"	2,500 lb	5	292'-0"	1,000 lb
						6	364'-0"	1,000 lb

! Adjustment of the hydraulic pressure and installation or replacement of the steel cable must be carried out by a person holding a **valid Level 3 card**. This person must be familiar with the instructions for use, have sufficient experience and be aware of the risks involved in the use of the platform.

Loading areas

Observe the load distribution.

∞ SEE PERMITTED CONFIGURATIONS AND LOAD DISTRIBUTION, ON PAGE 19

Important! Workers must wear a safety harness properly secured to an attachment point before handling the guardrails.

∞ SEE REGULATORY ATTACHMENT POINTS, ON PAGE 10

Remove the guardrails where necessary to allow the material to pass through and reposition the guardrails before using the platform.

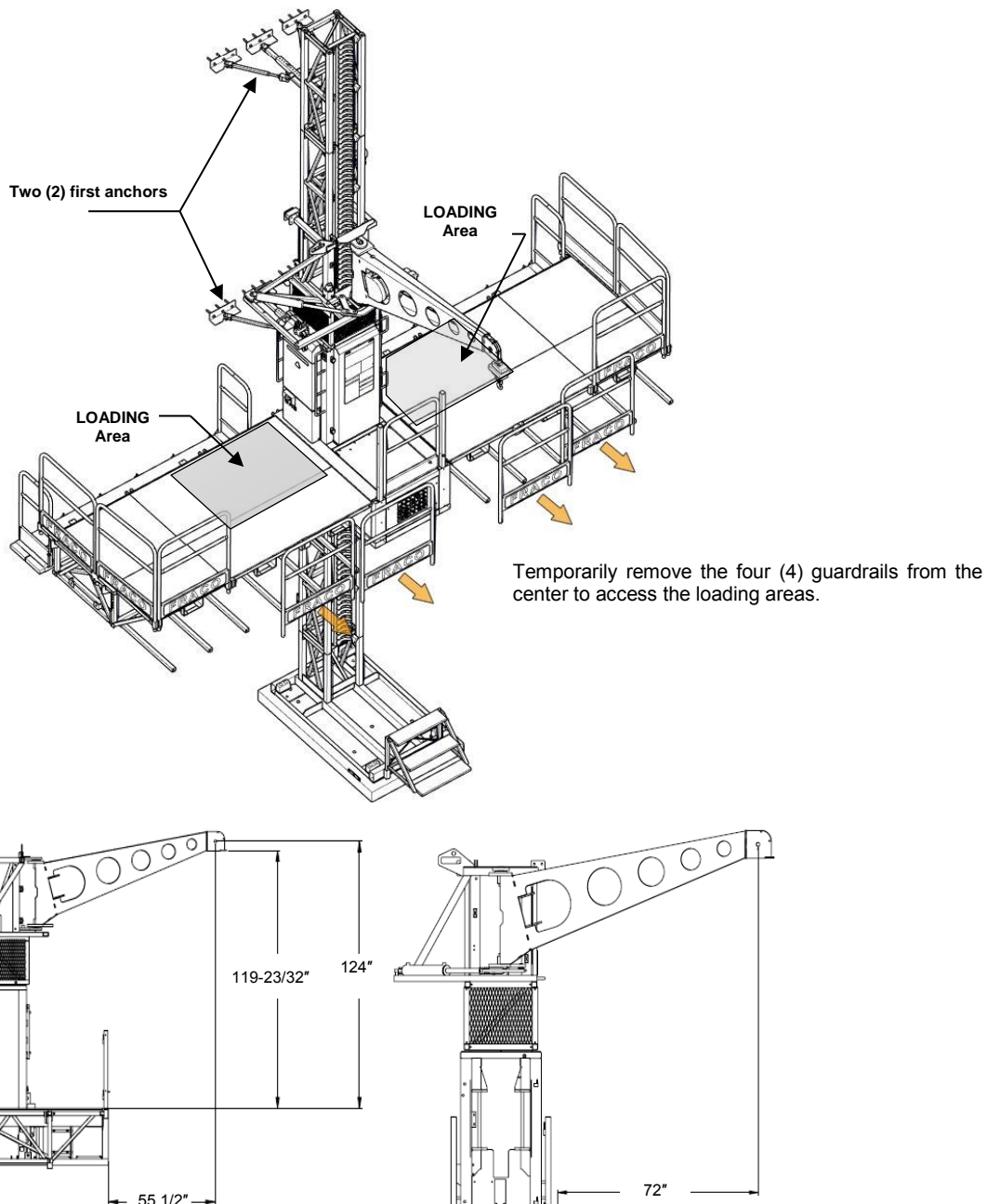


Figure 128 - Crane FRH-4000, loading area

Integrated self-erecting system

Observe the load distribution.

∞ SEE PERMITTED CONFIGURATIONS AND LOAD DISTRIBUTION, ON PAGE 19

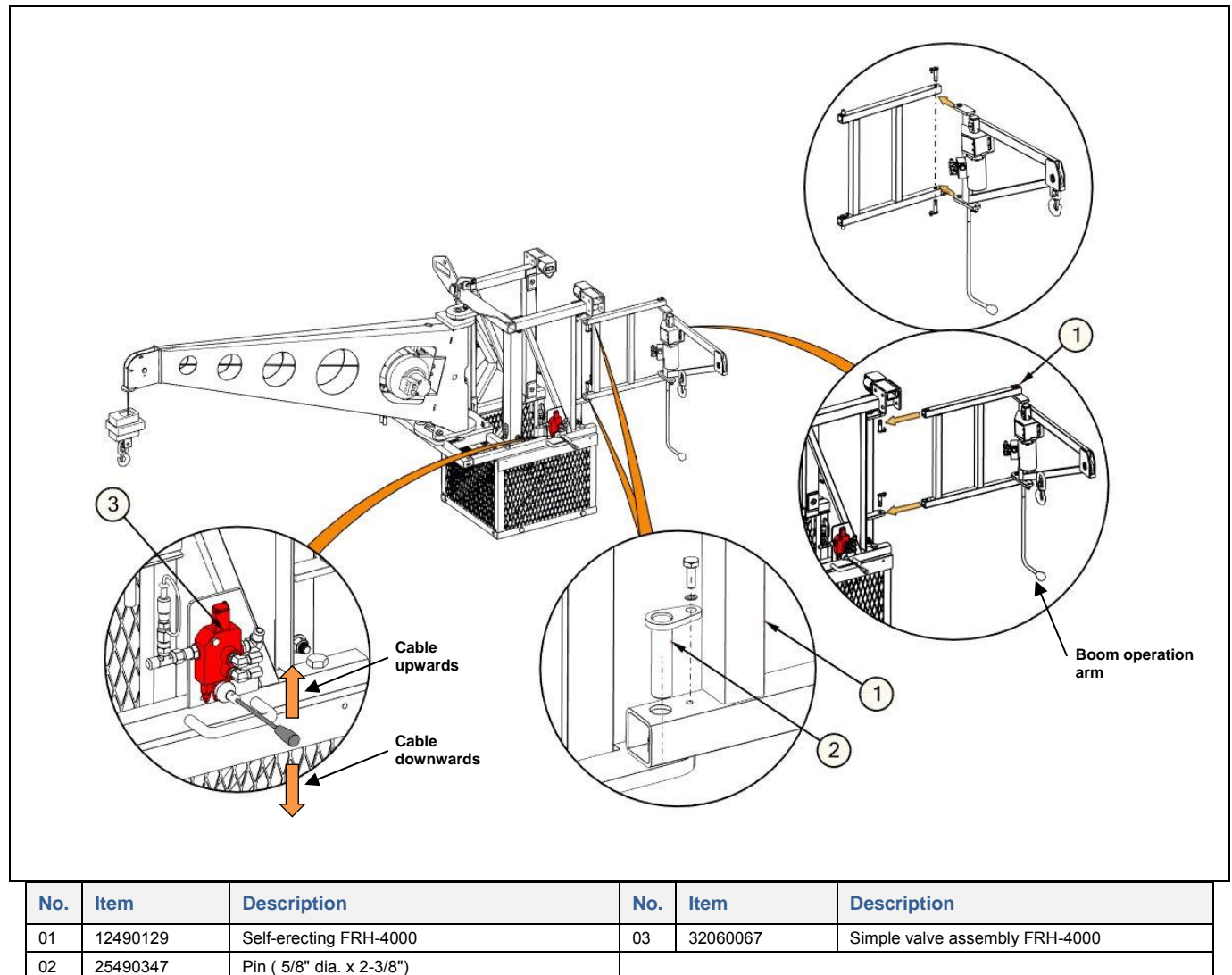


Figure 129 - Crane FRH-4000, integrated self-erecting system

Periodic maintenance

REFER TO THE PERIODIC MAINTENANCE section for applicable points, as well as to the inspection sheet in the model-specific and serial-specific service manual.

∞ SEE PERIODIC MAINTENANCE, ON PAGE 155, AND DAILY INSPECTION GRID, ON PAGE 157

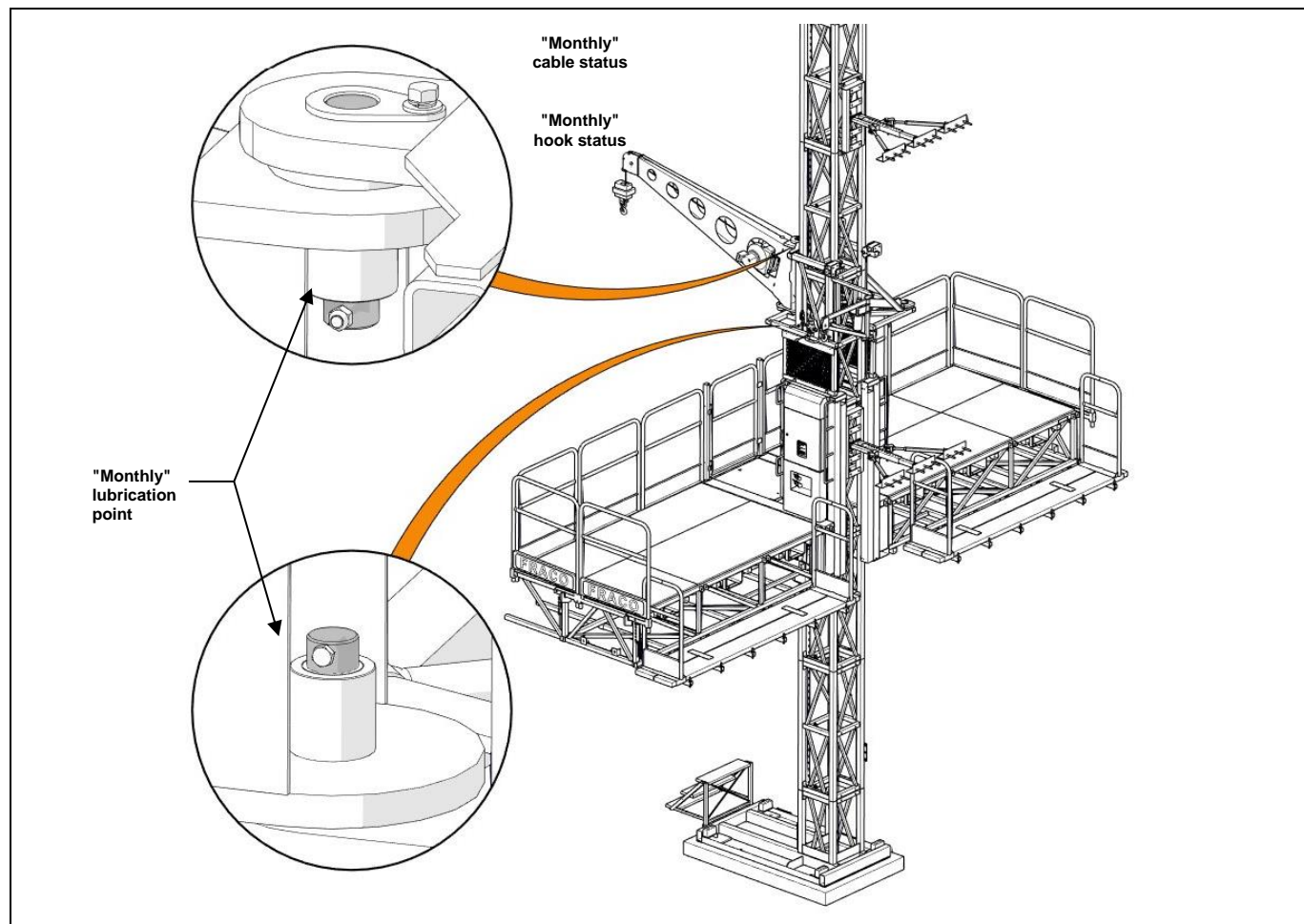


Figure 130 - Crane FRH-4000, maintenance

Crane FRH-2500

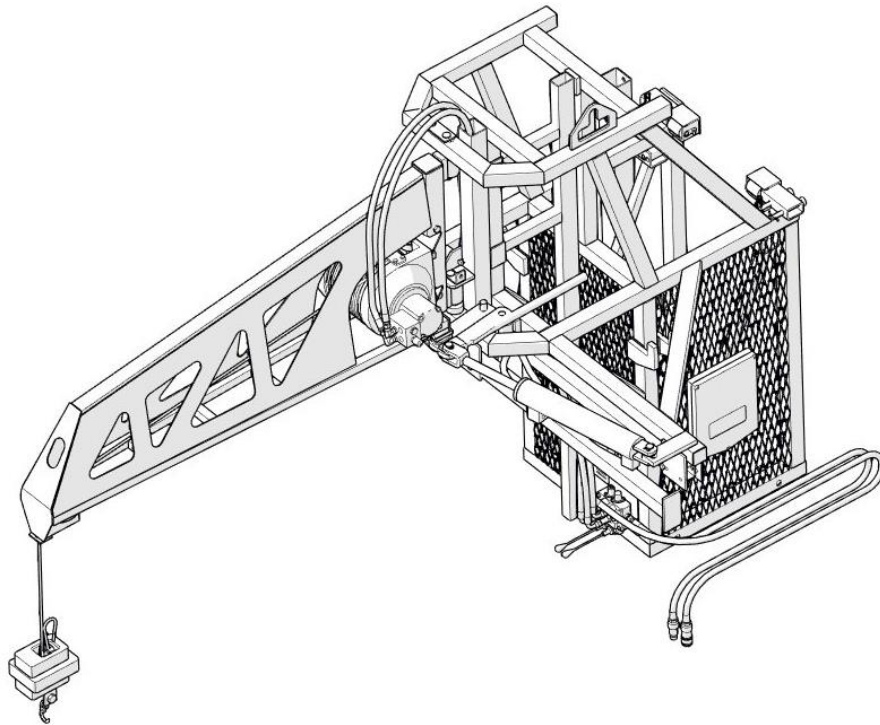
Important! Refer to the « WARNINGS » section and « OPERATION, USE OF THE LIFTING UNIT » for the general safety instructions and additional applicable warnings.

∞SEE WARNINGS, ON PAGE 6

∞SEE OPERATION, USE OF THE LIFTING unit, ON PAGE 25

Warning:

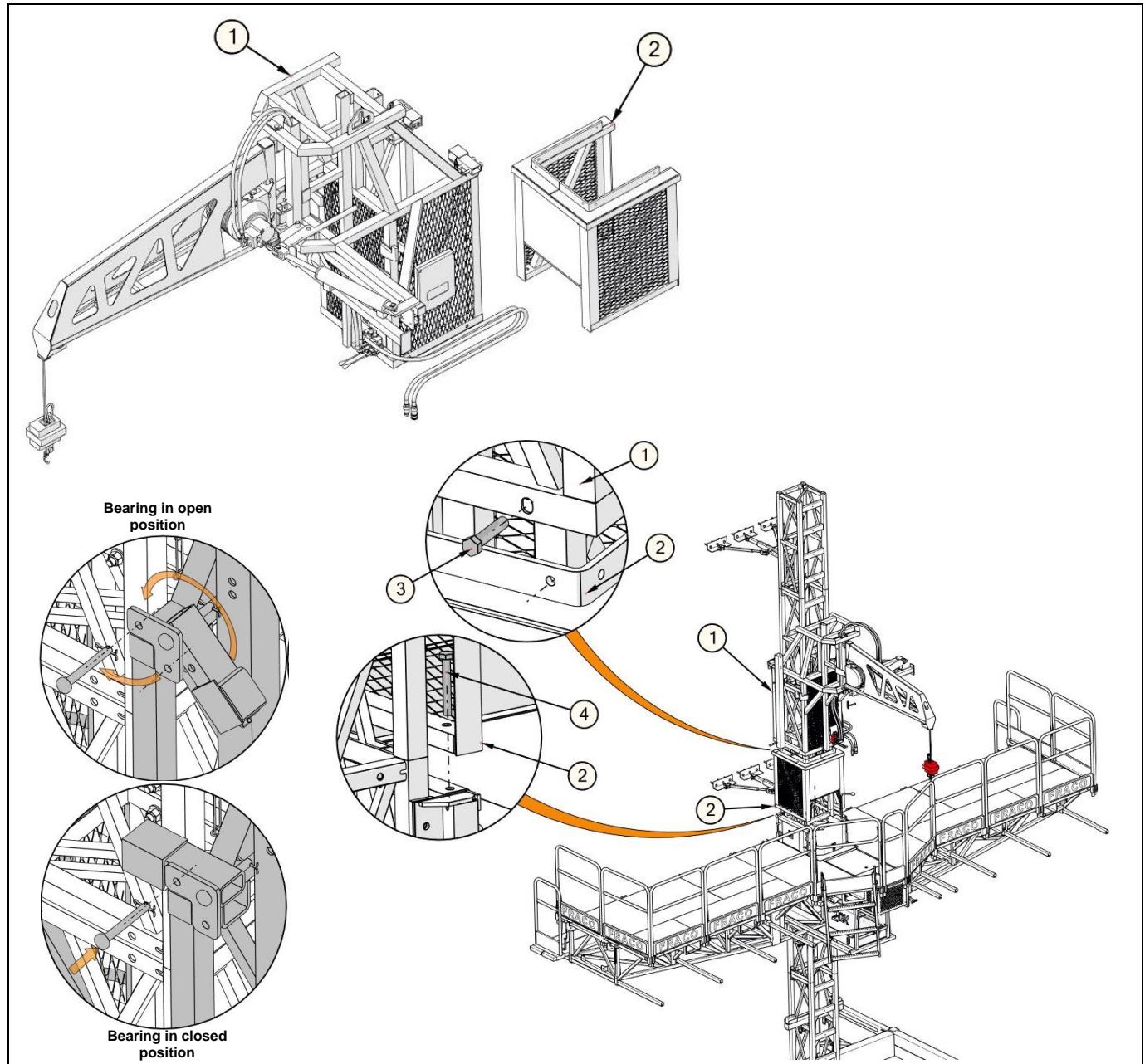
- On the ground, establish a marked safety perimeter around the lifting area and prohibit access.
- Before using the portable crane, make sure people around are aware of the potential dangers.
- This equipment must not be used for lifting or moving personnel.
- Use the controls smoothly as sudden movements may damage the winch.
- Never move or lift loads over a person.
- Do not leave loads suspended for long periods or unattended.
- Always remain at a safe distance from the load.
- Maintain a minimum of five (5) turns of cable on the drum at all times.
- The load must be lifted vertically.
- Allow the equipment to preheat before use, especially during cold temperatures.
- Wear appropriate clothing and keep hands away from moving parts when using the crane.
- Wear your safety harness, attached to a regulatory attachment point, if the guardrails are to be handled.
- ∞SEE REGULATORY ATTACHMENT POINTS, ON PAGE 9
- It is **forbidden** to use a crane on a freestanding base without a wall attach system.
- It is **forbidden** to position the lift unit above the highest mast anchor device when using a portable crane



Installation

Important! If the platform is installed on a ground base, the first two (2) mast anchors must first be installed. If the platform is installed on a freestanding base, at least one (1) mast anchor must be installed.

- Use the lifting hook provided for this purpose.
- Bolt the structure on top of the lifting unit.
- Once the crane is secured on the lifting unit, place the bearings in the closed position with respect to the segments of the mast sections.
- Implement the hydraulic connections to the lifting unit.



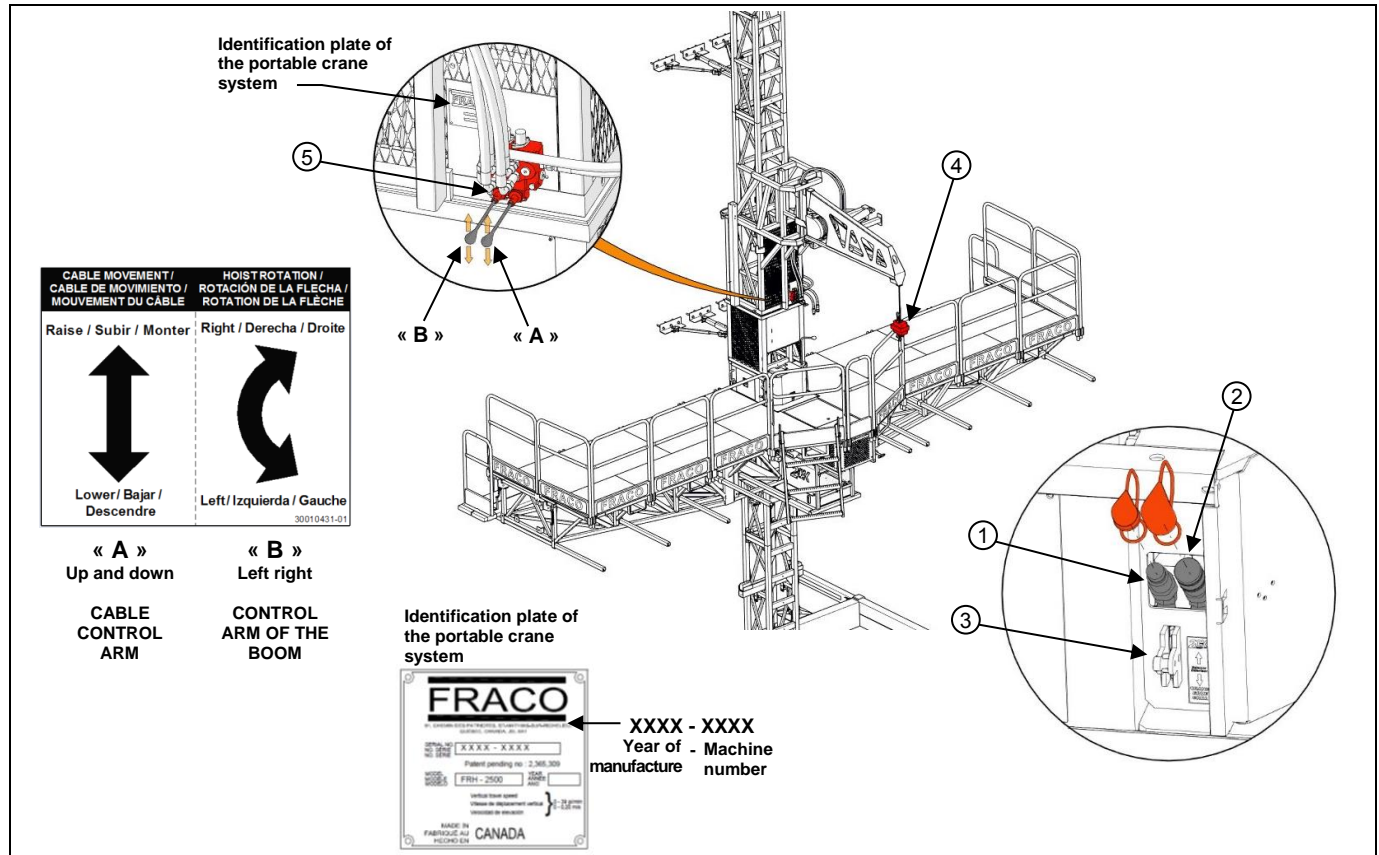
No	Item	Description	No	Item	Description
01	12490073	Mobile crane FRH-2500 for 20" x 20" mast	03	BOA-2032	Bolt 3/4"-10unc x 3-1/2" A325 galv.
02	20490779	Adapter for 20K hoist	04	BOA-2030	Bolt 3/4"-10unc x 5-1/2" A325 galv. assembled

Operation

Important! Before use at the beginning of each shift, all points of the **DAILY INSPECTION GRID**, ON **PAGE 155** must be checked, including a functional check. During operation, the operator must strictly follow all operating instructions.

Important! The portable crane operator must have the necessary skills and training to use the crane.

∞SEE OPERATION, USE OF THE LIFTING UNIT, ON PAGE 25



Important! Be sure to read the operating instructions for the crane on the sticker under the crane's hydraulic couplings.

Important! After using the crane, turn the « ACCESSORIES » switch to the « OFF » position.

If you have any questions regarding the portable crane system, please consult the documentation or contact your FRACO representative.

No	Item	Description	No	Item	Description
01	32070169	3/4" male quick coupling assembly (20K)	04	28490283	FRH2500 Weight and lifting hook
02	32070170	3/4" female quick coupling assembly (20K)	05	32060012	Distributor of the FRH2500 crane
03	28017435	Operation selector handle/shaft (20K)			



Adjustment of the hydraulic pressure and installation or replacement of the steel cable must be carried out by a person holding a **valid Level 3 card**. This person must be familiar with the instructions for use, have sufficient experience and be aware of the risks involved in the use of the platform.

Valid for the Braden Gearmatic winch (Model: B64A05 119-01)

Cable dia. 5/16 in. 1 850 PSI 2 500 lbs. max.			Cable dia. 1/4 in. 1 200 PSI 1 000 lbs. max.		
Layer	Length	Capacity	Layer	Length	Capacity
1	33'-0"	2 500 lb	1	43'-0"	1 000 lb
2	79'-0"	2 500 lb	2	100'-0"	1,000 lb
3	129'-0"	2 500 lb	3	160'-0"	1 000 lb
4	183'-0"	2 500 lb	4	224'-0"	1 000 lb
5	241'-0"	2 500 lb	5	292'-0"	1 000 lb
			6	364'-0"	1 000 lb

Loading areas

Observe the load distributions.

∞ SEE PERMITTED CONFIGURATIONS AND LOAD DISTRIBUTION, ON PAGE 18

Important! Workers must wear a safety harness properly secured to an attachment point before handling the guardrails.

∞ SEE REGULATORY ATTACHMENT POINTS ON PAGE 9

Remove the guardrails to where necessary so that the equipment may pass and replace the guardrails before using the platform.

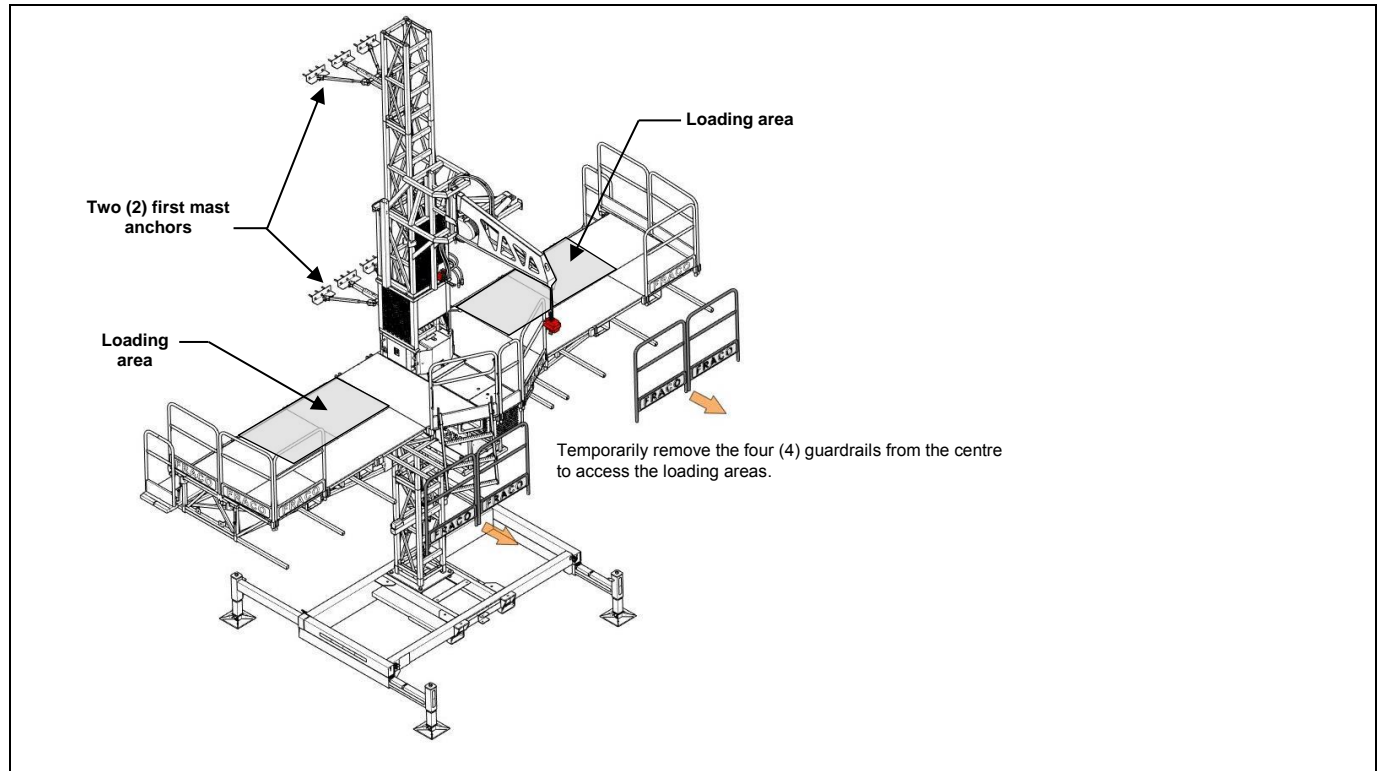


Figure 123 - FRH-2500 Crane, loading area

Periodic maintenance

Refer to the section « PERIODIC MAINTENANCE » for the applicable points, as well as to the inspection sheet in the model-specific and serial-specific service manual.

∞ SEE PERIODIC MAINTENANCE, ON PAGE 154

∞ SEE DAILY INSPECTION GRID, ON PAGE 155

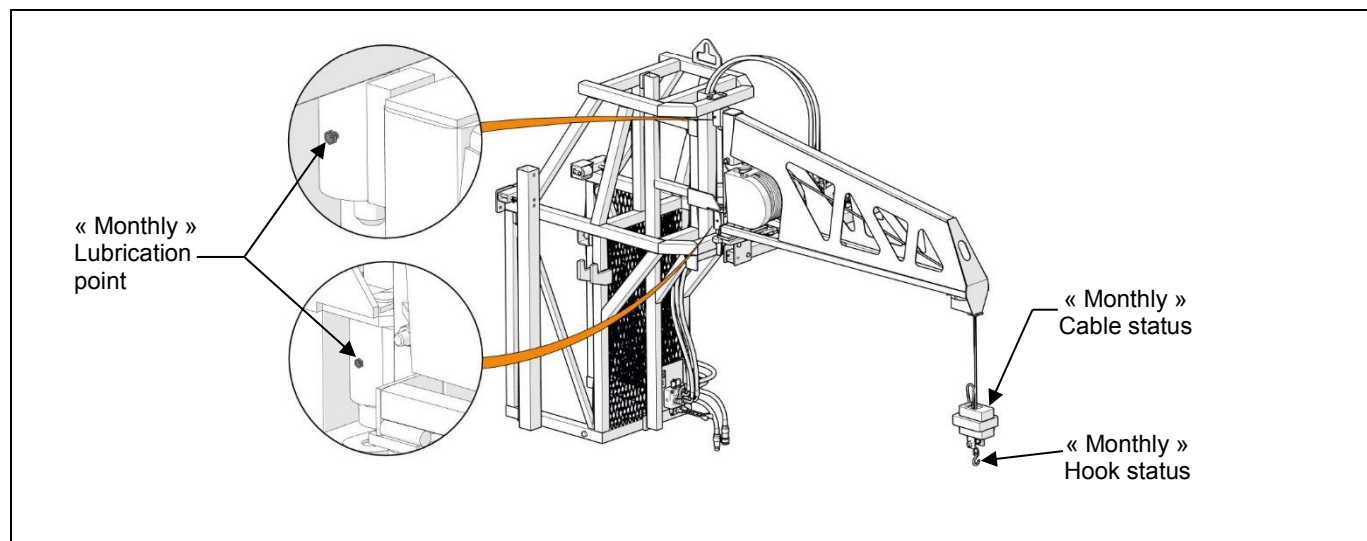


Figure 124 - FRH-2500 Crane, maintenance

Crane FRH-4000

Important! Refer to the « WARNINGS » and « OPERATION, USE OF THE LIFTING unit » section for general safety instructions and additional applicable warnings.

∞SEE WARNINGS, ON PAGE 6 AND OPERATION, USE OF THE LIFTING unit, ON PAGE 25

Warning:

- On the ground, establish a marked safety perimeter around the lifting area and prohibit access.
- Before using the portable crane, make sure people around are aware of the potential dangers.
- This equipment must not be used for lifting or moving personnel.
- Use the controls smoothly as sudden movements may damage the winch.
- Never move or lift loads over a person.
- Do not leave loads suspended for long periods or unattended.
- Always remain at a safe distance from the load.
- Maintain a minimum of five (5) turns of cable on the drum at all times.
- The load must be lifted vertically.
- Allow the equipment to preheat before use, especially during cold temperatures.
- Wear appropriate clothing and keep hands away from moving parts when using the crane.
- Wear your safety harness, attached to a regulatory attachment point, if the guardrails are to be handled.
∞SEE REGULATORY ATTACHMENT POINTS, ON PAGE 9
- It is **forbidden** to use a crane on a freestanding base without a wall attach system.
- It is **forbidden** to position the lift unit above the highest mast anchor device when using a portable crane.

Installation

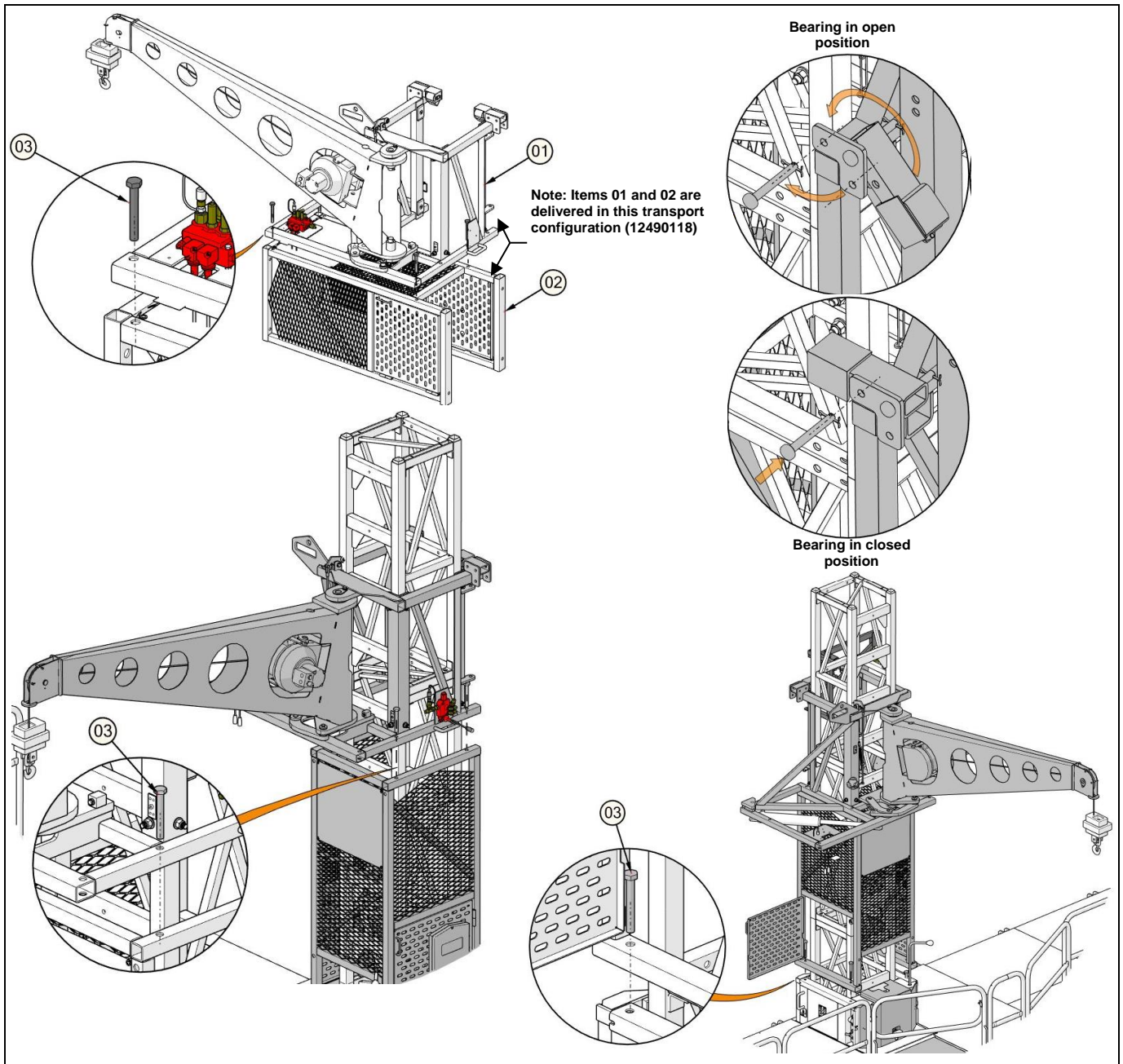
Important! If the platform is installed on a ground base, the first two (2) mast anchors must first be installed. If the platform is installed on a freestanding base, at least one (1) mast anchor must be installed.

Workers must wear a safety harness properly secured to an attachment point before handling the guardrails.

Important! The crane and extension turnbuckles must not be used simultaneously. For platforms requiring more than 13'-4" extensions, be sure to use 10'-0" tapered extensions that do not require turnbuckles.

∞SEE PERMITTED CONFIGURATIONS AND LOAD DISTRIBUTION, ON PAGE 18

- Use the lifting hook provided for this purpose.
- Bolt the structure on top of the lifting unit.
- Once the crane is secured on the lifting unit, place the bearings in the closed position with respect to the segments of the mast sections.
- Implement the hydraulic connections to the lifting unit.

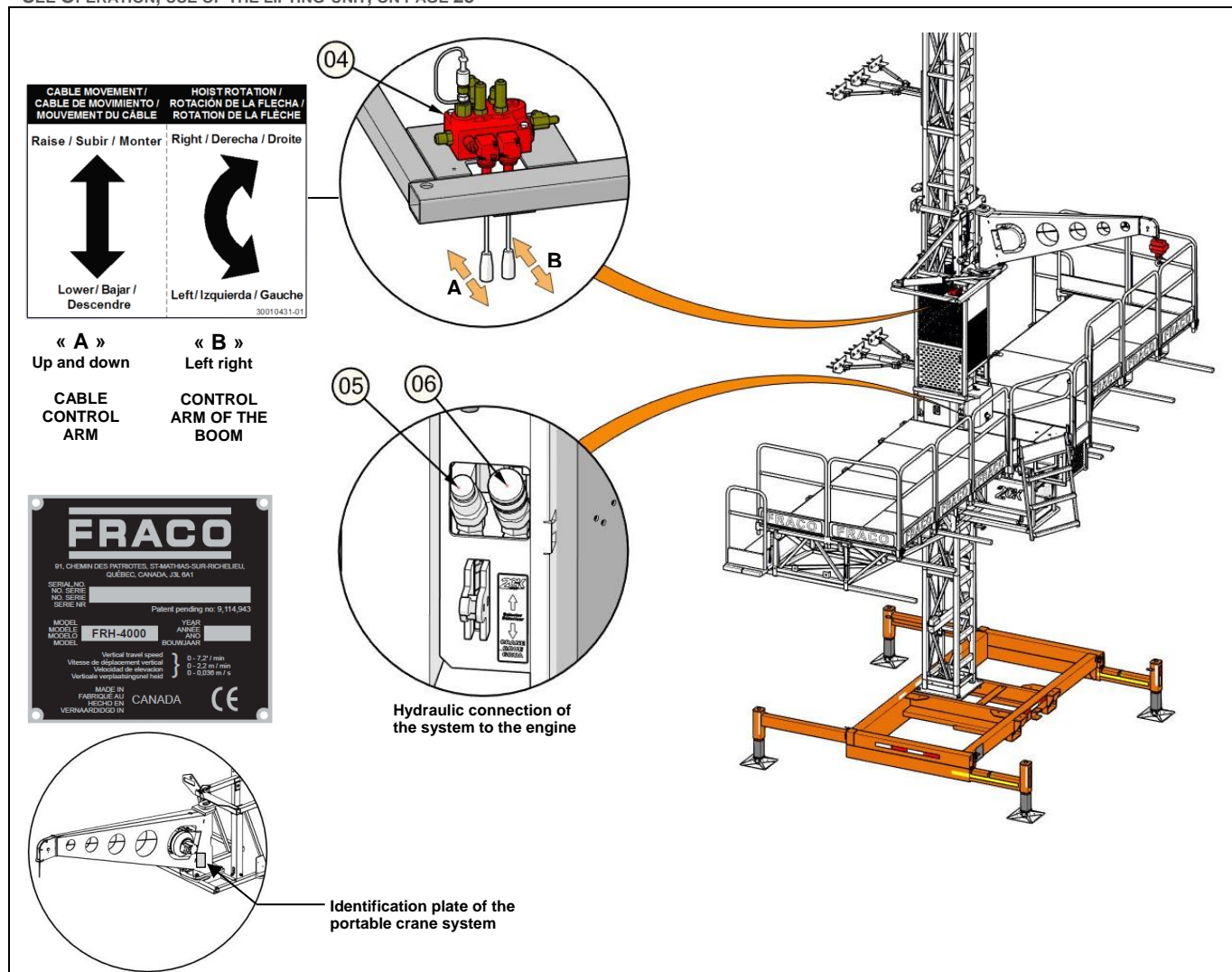


Operation

Important! Before use at the beginning of each shift, all points of the **DAILY INSPECTION GRID**, ON **PAGE 155** must be checked, including a functional check. During operation, the operator must strictly follow all operating instructions.

Important! The portable crane operator must have the necessary skills and training to use the crane.

SEE OPERATION, USE OF THE LIFTING UNIT, ON PAGE 25



No	Item	Description	No	Item	Description
01	28494311	FRH-4000 mobile crane structure for 20" x 20" mast	05	32070169	Male quick connect 3/4" assembly (20K)
02	32060113	Protector screen assembly (FRH-4000)	06	32070170	Female quick 3/4" coupling assembly (20K)
03	BOA-2030	3/4"-10unc x 5-1/2" A325 galv. Assembled bolt	07	32060067	FRH-4000 single valve assembly
04	32060056	FRH-4000 double sections valve assembly	08	12490129	FRH-4000 self-erecting system

Figure 125 - FRH-4000 Crane, installation

Valid for the Braden Gearmatic winch (Model: B64A05 119-01)

Cable dia. 3/8 in. 2 850 PSI 4 000 lbs. max.			Cable dia. 5/16 in. 1 850 PSI 2 500 lbs. max.			Cable dia. 1/4 in. 1 200 PSI 1 000 lbs. max.		
Layer	Length	Capacity	Layer	Length	Capacity	Layer	Length	Capacity
1	26'-0"	4 000 lb	1	33'-0"	2 500 lb	1	43'-0"	1 000 lb
2	66'-0"	4 000 lb	2	76'-0"	2 500 lb	2	100'-0"	1 000 lb
3	109'-0"	4 000 lb	3	129'-0"	2 500 lb	3	160'-0"	1 000 lb
4	156'-0"	3 800 lb	4	183'-0"	2 500 lb	4	224'-0"	1 000 lb
			5	241'-0"	2 500 lb	5	292'-0"	1 000 lb
						6	364'-0"	1 000 lb



The adjustment of the hydraulic pressure and installation or replacement of the steel cable must be carried out by a person holding a **valid Level 3 card**. This person must be familiar with the instructions for use, have sufficient experience and be aware of the risks involved in operating the platform.

Loading areas

Observe the load distribution.

∞ SEE PERMITTED CONFIGURATIONS AND LOAD DISTRIBUTION, ON PAGE 18

ATTENTION: Workers must wear a safety harness properly secured to an attachment point before handling the guardrails.

∞ SEE REGULATORY ATTACHMENT POINTS ON PAGE 9

Remove the guardrails where necessary to allow the material to pass through and reposition the guardrails before using the platform.

Loading area clearance

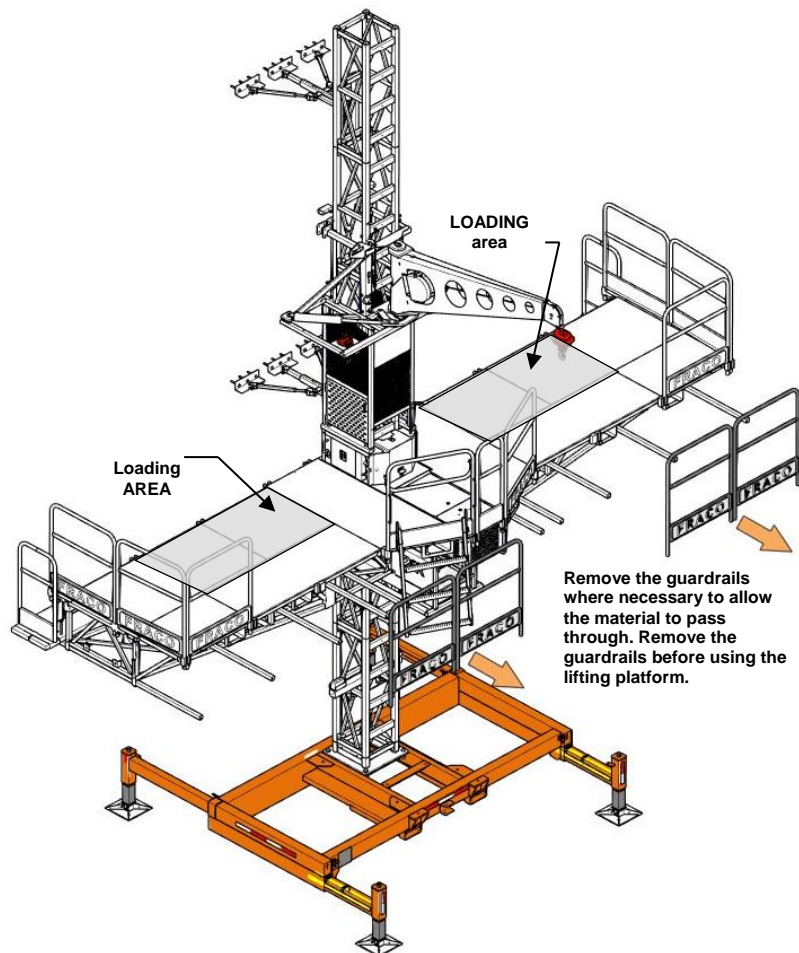


Figure 126 - FRH-4000 Crane, loading area

Periodic maintenance

Refer to the « PERIODIC MAINTENANCE » section for the applicable points, as well as to the inspection sheet in the model-specific and serial-specific service manual.

∞ SEE PERIODIC MAINTENANCE, ON PAGE 154 AND DAILY INSPECTION GRID, ON PAGE 155

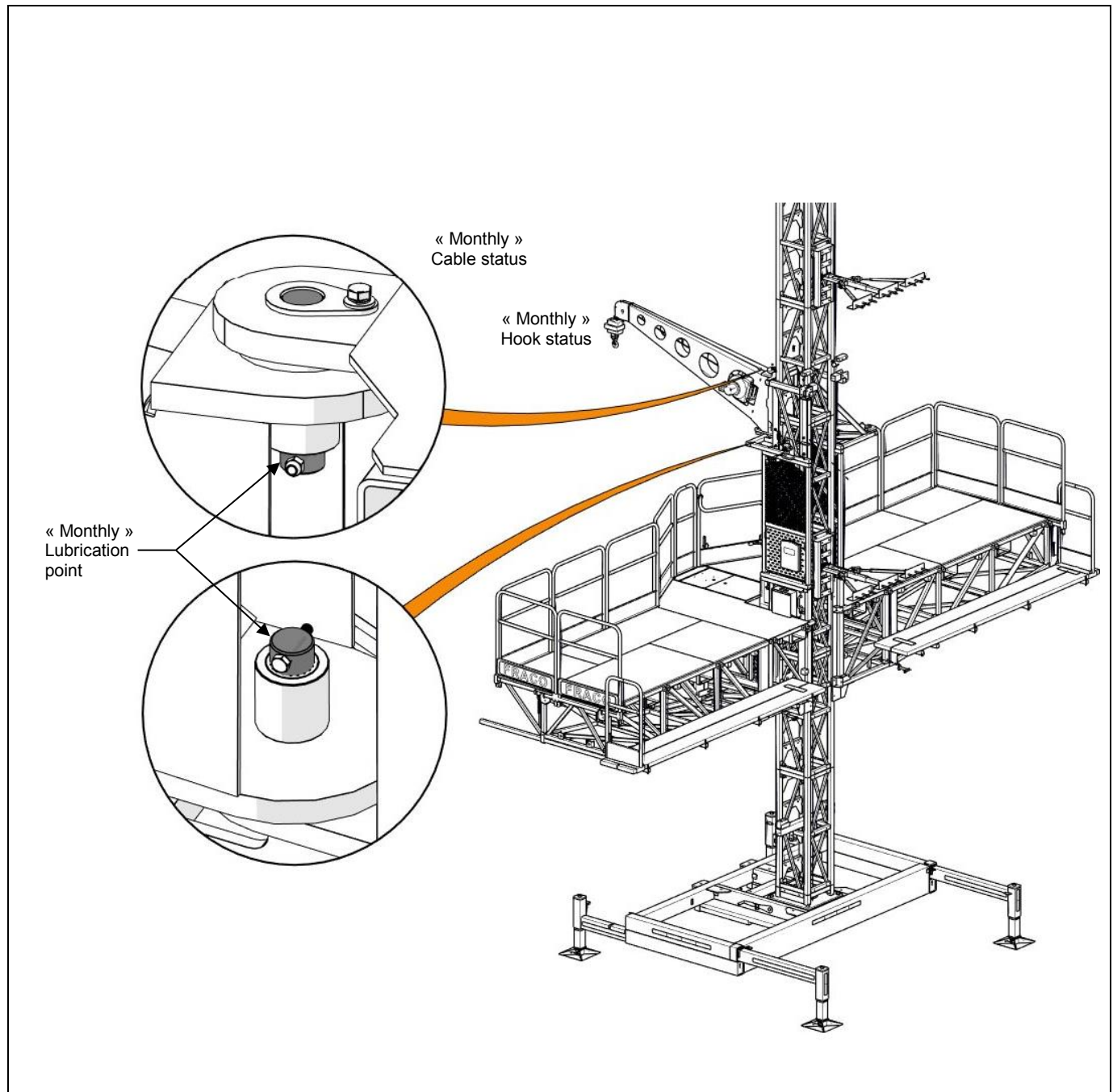


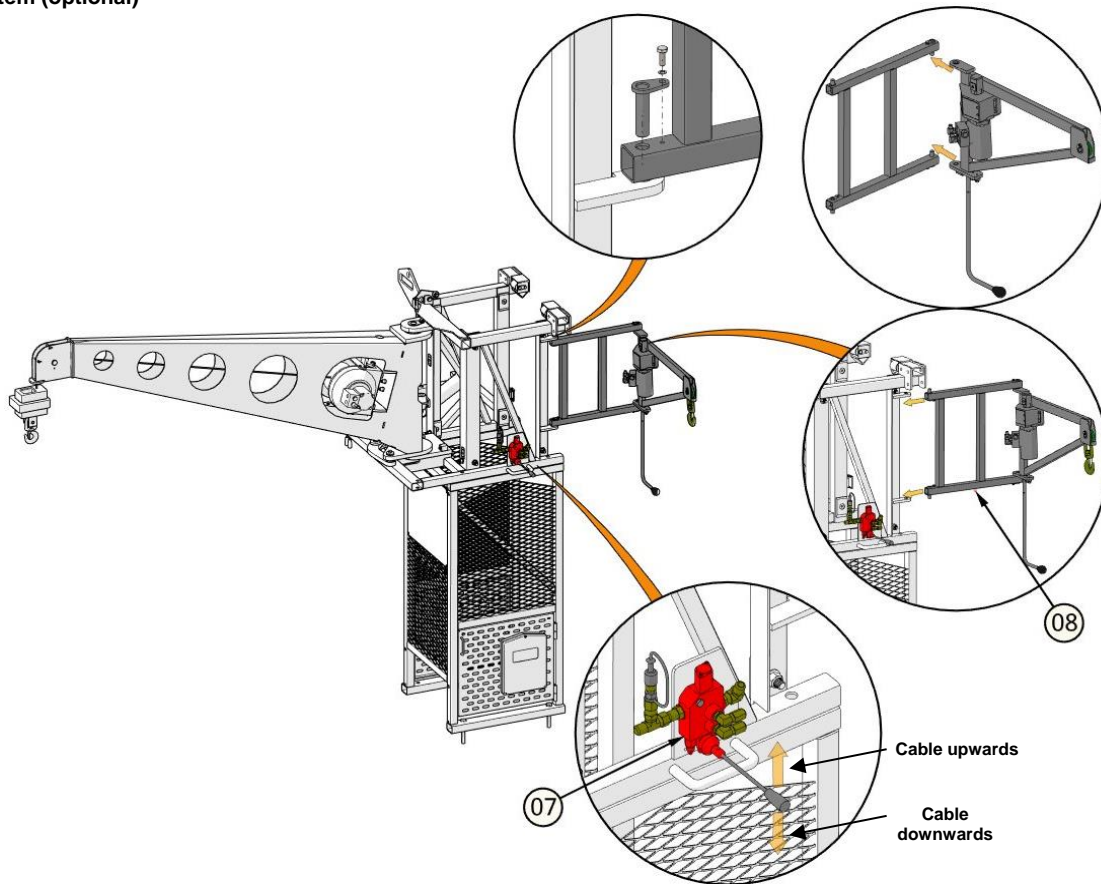
Figure 127 - FRH-4000 Crane, maintenance

Installation of the built-in self-erecting system (optional)

Observe the load distribution.

∞ SEE PERMITTED CONFIGURATIONS AND LOAD DISTRIBUTION, ON PAGE 18

Installation of the built-in self-erecting system (optional)



No	Item	Description	No	Item	Description
01	28494311	Mobile crane structure FRH-4000 for 20" x 20" mast	05	32070169	Male quick connect 3/4" assembly (20K)
02	32060113	Protector screen assembly FRH-4000	06	32070170	Female quick connect 3/4" assembly (20K)
03	BOA-2030	3/4"-10unc x 5-1/2" A325 galv. assembled bolt	07	32060067	Simple valve assembly FRH-4000
04	32060056	FRH-4000 double sections valve assembly	08	12490129	Self-erecting FRH-4000