Grip Factory Munich

YOUR INNOVATIVE PARTNER FOR CAMERA SUPPORT

GF-10

Crane System

Instruction Manual

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Grip Factory Munich GmbH
Fürholzener Straße 1
85386 Eching bei München
Germany

Tel.: +49 (0) 89 319 0 129-0
Fax: +49 (0) 89 319 0 129-9
e-Mail: info@g-f-m.net
http://www.g-f-m.net

Contents:

SAFETY GUIDELINES

The assembly instructions must be read and understood before set-up or operation.
The crane may only be assembled in accordance with the manufacturer's instruction manual.

The GF-10 Crane may only be set-up or operated by trained and experienced personnel. To avoid misuse by untrained personnel, the crane should be dismantled when not in use or under supervision.

The crane may not be assembled or operated under the influence of alcohol, drugs or any other intoxicating substances. The respective protective clothing e.g. gloves, should be worn.

The manufacturer accepts no liability for damages or injuries for incidents or accidents occurring due to negligence by the crane operator or misuse of the crane or disregarding the instruction manual..

Before assembling the crane ensure that the ground surface is stable and cannot give way. The ground surface must be stable enough to support at least 1000 kg/m2 = 2200 lbs/ sq yard.

Crane operation is only allowed with solid tires. Use with pneumatic wheels is not allowed.

The crane dolly must be level at all times. If necessary, level the crane with the provided levelling legs. Whether operating or moving the crane on track or on a solid ground surface it is essential that the track or surface is completely level, stable and free from obstructions.

When operating the crane on track, ensure that the track is level, properly laid and constructed. The correct underlay must be used to ensure that the track and underlay are secured against moving, slipping and collapse. Ensure that the underlay meets the specified support and stability requirements.
Operation on curved track is strictly forbidden.

Use of the crane on insert vehicles, camera cars or any motorised vehicle is not allowed. The manufacturer accepts no liability for damages or injuries for incidents or accidents occurring due to use of the crane on insert vehicles, camera cars or any other motorised vehicles.

Changing weather conditions should be taken into consideration. The crane must be taken out of operation before the operational wind speed reaches:

40km/h. / 25mph. for 1 man operation
35km/h. / 21mph. for 2 man operation
33km/h. / 20mph. for remote operation

The complete lift and panning range of the crane must be kept clear of obstructions at all times. A safety clearance of 0.5m / 19" to surrounding objects and 1m / 39" to persons must be observed on all sides of the crane during operation.

The crane may not be used in the direct vicinity of high voltage power cables. To avoid accidents due to misuse in the vicinity of high voltage power cables, Safety Guidelines especially BGV A1 (formerly VBG 1) as well as BGV A2 (formerly VBG 4) and VDE regulations (especially 0105 part 100) must be adhered to. If the nominal voltage cannot be determined, a minimum clearance of 5m / 16ft must be kept at all times. **Failing to do so can cause fatalities**.

Personnel on board the crane's platform must use safety belts at all times. They should not make any sudden, abrupt movements or lean out over the side of the platform. No loose objects may be stored or placed on the crane platform.

Before the counterweights are removed from the bucket, ensure that the platform is resting on the ground or alternatively supported by an appropriate stable underlay. Gradually remove the counterweights before personnel leave the platform or as the case may be, the remote head or camera are removed.

The manufacturers technical specifications and limits must be adhered to at all times and in no way exceeded.

In the interest of safe crane operation, when operating or moving the crane, abrupt, sudden movements of the crane should be avoided.

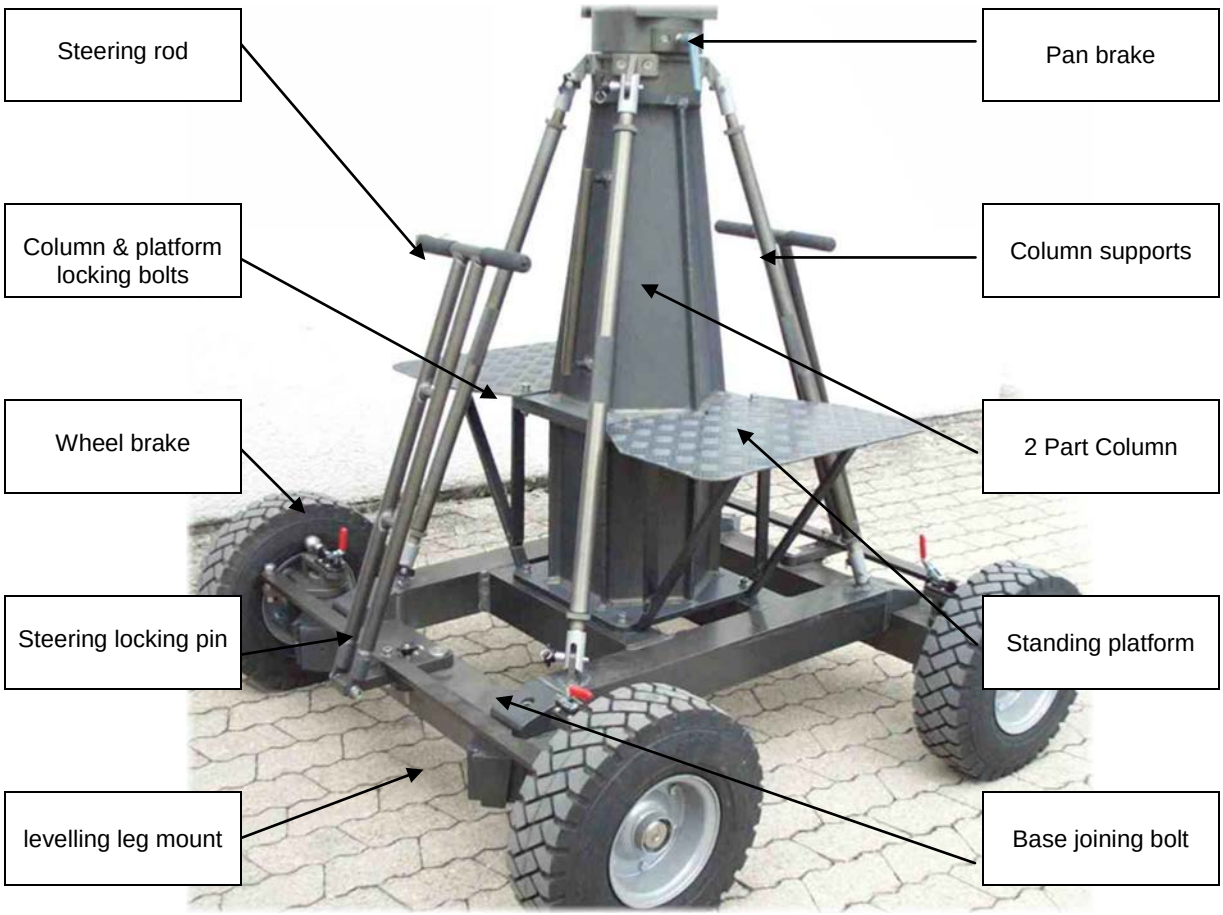
Only original accessories manufactured by GFM may be used with the crane.

General Assembly Procedure – GF-10

Before and during assembly observe the Safety Guidelines.

GF-10 Base Dolly

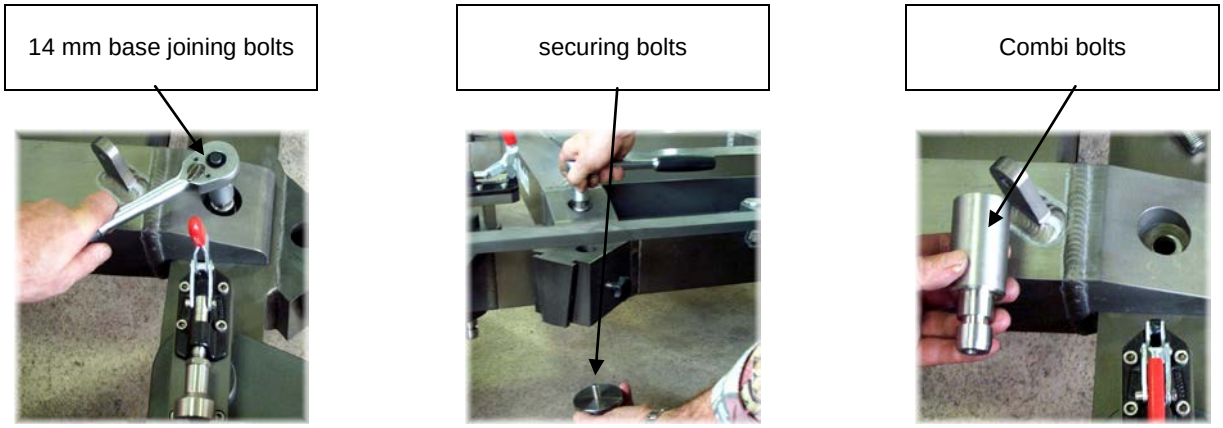
Depending on the crane version that is to be operated, the base dolly can be used either fully assembled for 100cm track or on its all terrain, foam filled wheels or it can be split to enable set up of smaller versions on 62cm track. Refer to the individual versions for correct selection of base dolly.



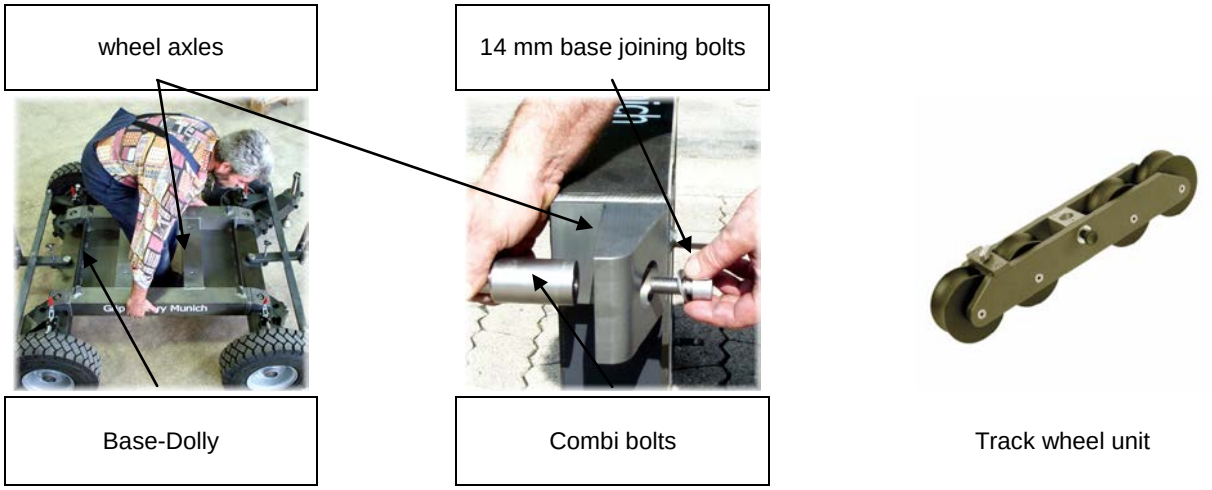
Splitting the Base Dolly (track 62 cm)

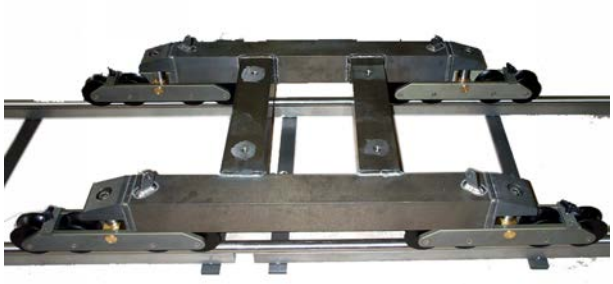
It is easier to split the base if the assembled base dolly is levelled prior to dismantling.

1. Remove all 4 of the base joining bolts located on the top of the base.
   Tip: A 14mm Allen Key is required
2. Remove all 4 of the securing bolts and washers located on the bottom of the base dolly.
   Tip: An 8mm Allen Key is required



3. Remove the mini base from the wheel axles by lifting upwards
4. Connect the 4 track wheel spigots to the base dolly.
   Tip: A 14mm Allen Key is required



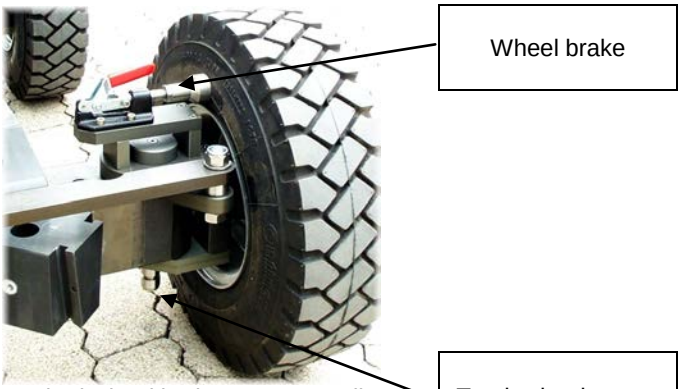


Mini base with Track wheel unit on GF-Track

General Assembly

For all versions:

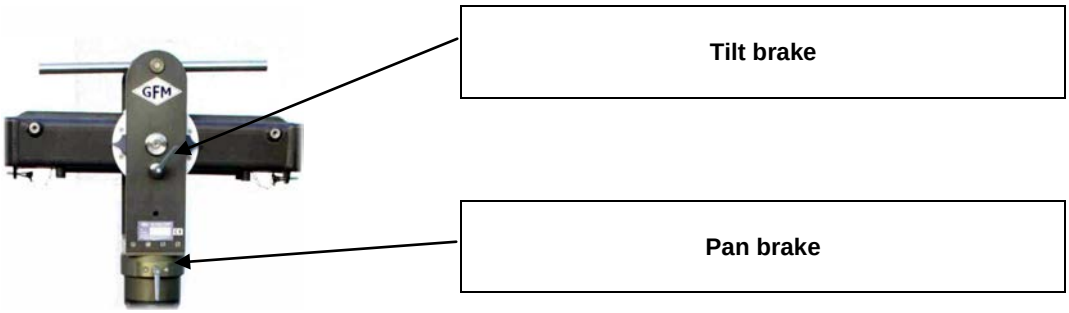
1. Secure the base dolly so that it cannot move or roll. Lock all wheel brakes. Move the steering rod towards the centre of the dolly or remove it so that the set-up personnel do not trip over it.
2. Bolt the crane mounting column to the base dolly. Make sure that the 4 locking bolts are locked securely.
   Tip: the carrying handle on the bazooka should point to either of the steering ends of the dolly.



Locked wheel brake on Base Dolly


Base Dolly with mounting Column, standing platforms

3. Located on the middle section are 2 tilt friction locks which may be used to lock the tilt during set-up. Set the pivot arm at 90° to the centre post and lock these friction locks which can be found on the left and right hand side of the middle section.



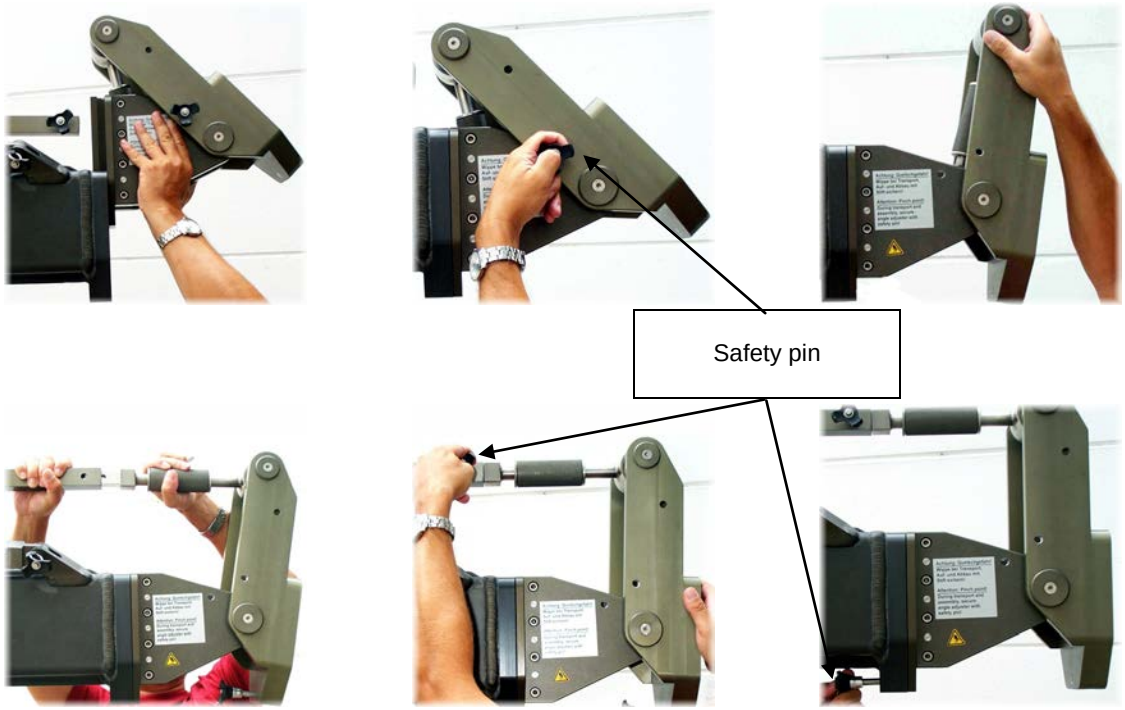
Middle section with pan and tilt lock

4. Mount the middle section on the mounting column. Lock the locking screw tightly.
   Tip: A 12mm Allen key can be found in the mounting column's handle to be used as a lever.
5. Connect the 150cm section to the middle section. Slip the connection flanges into each other and secure with the provided safety pin.
   Tip: To avoid the sections jamming or getting stuck make sure that the sections are joined parallel. Using a small amount of lubricant also helps. We suggest rubbing the joints with an oiled rag.


Mounting an extension arm


Securing the arm with a safety pin

6. Connect one of the angle adjusters to the end of the 150cm section and secure it with the provided safety pin.



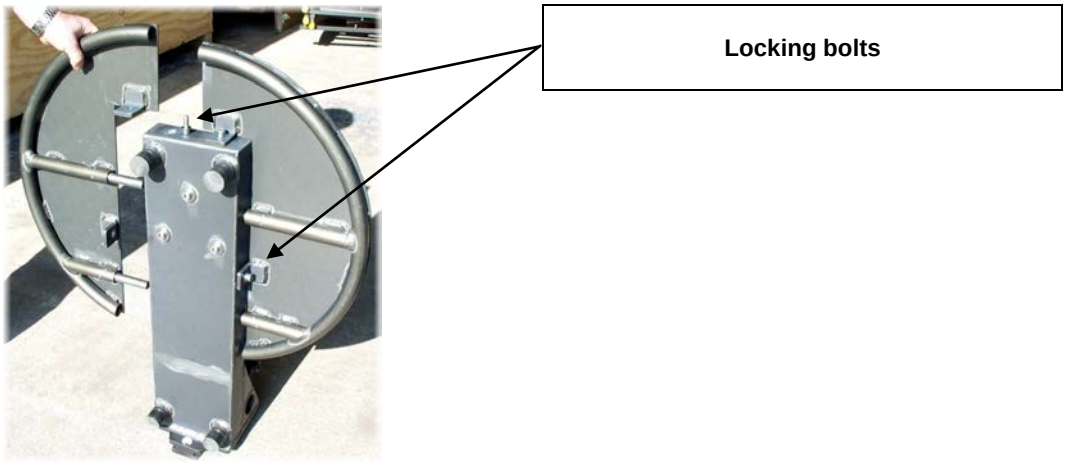
7. Connect the 150cm parallelogram rod to the middle section and to the angle adjuster and secure it with a safety pin at each end.
   Tip: The angle adjuster has an integrated leveller. By turning it, the vertical plate on the angle adjuster can be set to a perfect right angle. Correct setting of the angle adjuster enhances the crane's balance.

The assembly procedure up to this point is the same in all versions . Other versions can be built by replacing the 150cm extension and its parallelogram rod with the 100cm / 3' 3" extension and its parallelogram rod or the 50cm / 1' 6" extension and its parallelogram rod.

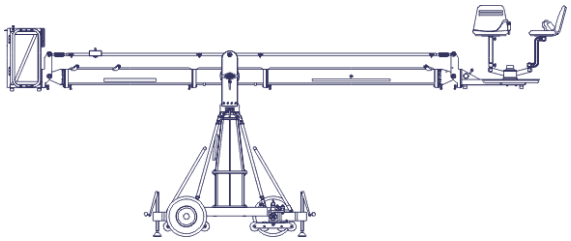
Platform

The platform may be divided into 2 sections by removing the 2 locking bolts and sliding the platform out of its holder.

Always check that the bolts are securely fastened prior to operation.



Version 1 / 150 D



Front extension arms required	1 x 200 cm / 6’ 6”
Rear extension arm required	1 x 150 cm / 5’
Lift range	417 cm / 13’ 8”
Maximum Euro-adapter height	407 cm / 13’ 4“
Lift capacity (working load) 2 pers. + accessories	250 kg / 550 lbs
Counterweight required for max. load	316 kg / 695 lbs
Crane weight (excluding dolly and weights)	256 kg / 556 lbs
Dolly weight	248 kg / 545 lbs
Arm reach (pivot to camera head mount)	323 cm / 10’ 7“
Length of rear end (pivot to outside of bucket)	256 cm / 8’ 4“

Continue from § 7, page 6

8. Connect one of the 200cm / 6’ 6” sections to the middle section. Slip the connection flanges into each other and secure them with the provided safety pin.
9. Connect the remaining angle adjuster to the end of the 200cm / 6’ 6” section and secure it with the provided safety pin.
10. Connect one of the 200cm / 6’ 6” parallelogram rods to the middle section and the angle adjuster and secure it with a safety pin at each end.
11. Connect the platform to the angle adjuster by inserting the male platform flan-ge into the female flange on the angle adjuster. Secure it with the safety pin..
12. Attach the weight bucket to the short end of the crane by inserting the male weight bucket flange into the female flange on the angle adjuster. Secure it with the 2 safety pins on the top of the angle adjuster..

    Tip: The angle adjuster has an integrated leveller. By turning it, the vertical plate on the angle adjuster can be set to a perfect right angle. Correct setting of the angle adjuster enhances the crane’s balance. Level the weight bucket before loading any weights

Before operation, all locking pins, locking screws etc should be inspected to ensure that all assembly sections are securely fastened.

Read “Balancing the crane arm” on page 25

Rigging system

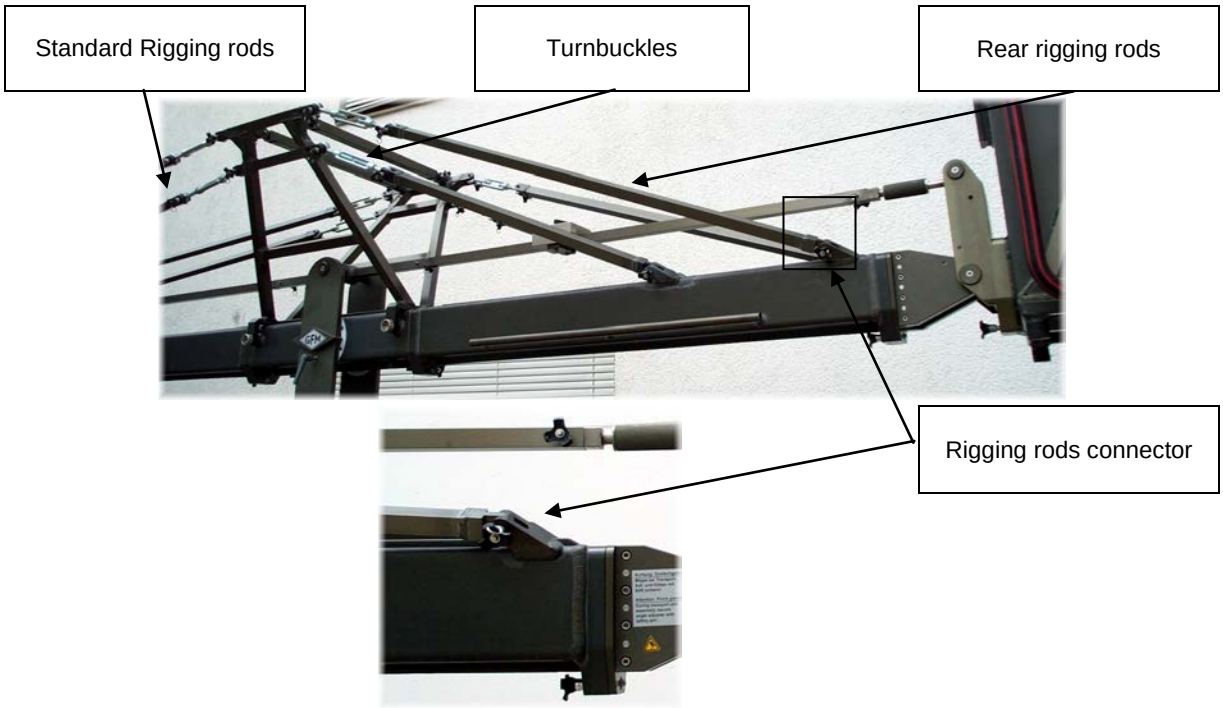
The rigging system must be used from Version 2-150 upwards.

Rigging Harness Assembly

1. Connect the 2 sections of the rigging harness to the middle section of the GF-10. Ensure that the 4 locking bolts are fastened tightly



2. Connect the 2 cross bars to stabilize the rigging harness. Ensure that the 4 locking pins are inserted fully.
3. Connect the turnbuckles to the rear rigging harness and in turn connect the rear rigging rods to the rigging connections on the 150cm / 5’ extension. For all versions, connect 2 x 150cm rods to the top turnbuckles and in turn to the outer connections on the 150cm / 5’ section. Versions 1-150 to 4-150 only require 2 x 150cm rigging rods whereas versions 5-150 to 10-150 require double rigging rods. For these versions add the 2 x short rods to the lower turnbuckles and in turn to the inner connections on the 150cm / 5’ section. Ensure that the locking pins are inserted fully. Hand tighten the rods by turning the turnbuckles until they are taut.



General

The length of the rigging system depends on the number of extension arms assembled. For each extension arm, 1 rigging rod length consisting of 2 rods, is required. For versions using more than 2 x 200cm long sections (versions 5-150 to 10-150), a **double rigging system** must be mounted i.e. top and bottom. During assembly, to support the arm and

ensure that it does not dip, assemble the lower rigging system as soon as the first or second crane arm sections are mounted. When the lower rigging is mounted and adjusted, only then add on additional sections. As soon as the last 200cm / 6' 6" section is mounted, then assemble the top rigging system.

The rigging system consists of rods that go to the front:

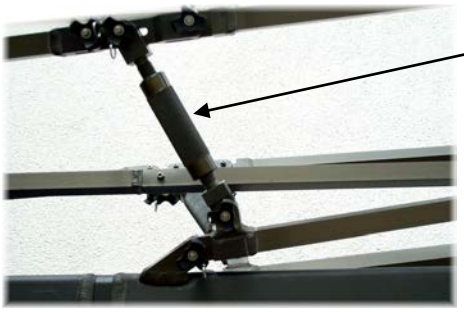
12 x 200cm rods (single ended connections)
2 x 200cm rods (with 1 double ended connection)

Rods that go to the rear:

2 x 150cm rods (single ended connections)
2 x 100cm rods (single ended connections)

Note: the 2 x 200cm rods (with 1 double ended connection) should always be used as the final rods for the lower rigging assembly.

The rigging system should be supported in certain positions with the Adjustable Rigging Support Brackets. The Adjustable Rigging Support Brackets connect to the Rigging Rod Connectors. Please refer to the individual versions.
It is important that the rigging system when taut, should run in a straight line and not bend or dip.



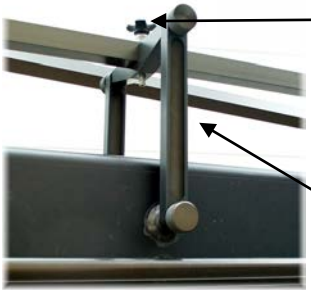
Adjustable rigging support bracket

Rigging rod connector

Tip: Do not load weights until the rigging system is mounted.

Parallelogram Supports

3 sets of parallelogram supports are supplied to support the parallelogram rods. Please refer to the individual versions for instruction as to where to place them.

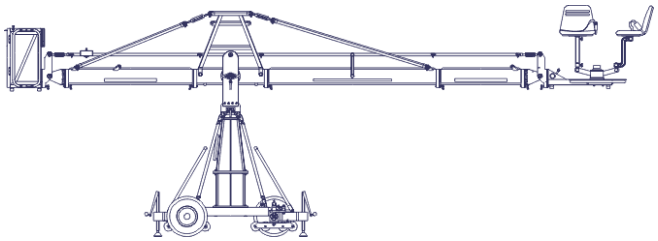


Parallelogram support assembly

Safety pin

Parallelogram support

Version 2 / 150 D



Front extension arms required	1 x 200 cm / 6’ 6” + 100 cm / 3’ 3”
Rear extension arm required	1 x 150 cm / 5’
Lift range	575 cm / 18’ 10”
Maximum Euro-adapter height	486 cm / 15’ 11“
Lift capacity (working load) 2 pers. + accessories	250 kg / 550 lbs
Counterweight required for max. load	480 kg / 1003 lbs
Crane weight (excluding dolly and weights)	289 kg / 635 lbs
Dolly weight	248 kg / 545 lbs
Arm reach (pivot to camera head mount)	421 cm / 13’ 9“
Length of rear end (pivot to outside of bucket)	256 cm / 8’ 4“

Continue from § 7, page 6

4. Connect one of the 200cm / 6’ 6” sections to the middle section. Slip the connection flanges into each other and secure them with the provided safety pin.

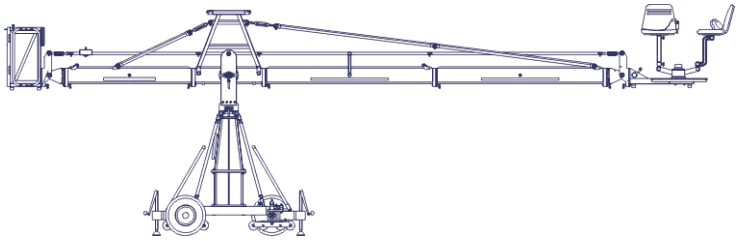
The “Rigging Harness Assembly” is described on page 8.
After reading and following the instructions, please proceed as follows.

5. Connect 2 turnbuckles to the top connection on the front rigging harness.
6. Connect 2 x 200cm/ 6’ 6” rigging rods to the turnbuckles and in turn to the rigging rod connections on the 200cm/ 6’ 6” section. Tighten the turnbuckles until taut.
7. Connect the 100cm /3’ 3” section to the 200cm / 6’ 6” section. Slip the con-nection flanges into each other and secure them with the provided safety pin.
   Note: Support the second section by placing it on a support stand or rostrum.
8. Connect the remaining angle adjuster to the end of the 100cm /3’ 3” section and secure it with the provided safety pin.
9. Connect one of the 200cm / 6’ 6” parallelogram rods to the middle section and then connect the 100cm 3’ 3” parallelogram rod to the 200cm / 6’ 6” rod. Then connect the angle adjuster and secure it with a safety pin at each end.
   Tip: The angle adjuster has an integrated leveller. By turning it, the vertical plate on the angle adjuster can be set to a perfect right angle.
10. Connect the platform to the angle adjuster by inserting the male platform flange into the female flange on the angle adjuster. Secure it with the safety pin.
11. Attach the weight bucket to the short end of the crane by inserting the male weight bucket flange into the female flange on the angle adjuster. Secure it with the 2 safety pins on the top of the angle adjuster.
    Tip: The angle adjuster has an integrated leveller. By turning it, the vertical plate on the angle adjuster can be set to a perfect right angle.Correct setting of the angle adjuster enhances the crane’s balance. Level the weight bucket <u>before</u> loading any weights.

Before operation, all locking pins, locking screws etc should be inspected to ensure that all assembly sections are securely fastened.

Read “Balancing the crane arm” on page 25

Version 3 / 150 D



Front extension arms required	2 x 200 cm / 6’ 6”
Rear extension arm required	1 x 150 cm / 5’
Lift range	737 cm / 24’ 2”
Maximum Euro-adapter height	567 cm / 18’ 7“
Lift capacity (working load) 2 pers. + accessories	250 kg / 550 lbs
Counterweight required for max. load	634 kg / 1394 lbs
Crane weight (excluding dolly and weights)	302 kg / 664 lbs
Dolly weight	248 kg / 545 lbs
Arm reach (pivot to camera head mount)	521 cm / 17’ 1“
Length of rear end (pivot to outside of bucket)	256 cm / 8’ 4“

Continue from § 7, page 6

8. Connect one of the 200cm / 6’ 6” sections to the middle section. Slip the connection flanges into each other and secure them with the provided safety pin.
9. Connect another 200cm / 6’ 6” section to the first 200cm / 6’ 6” section. Slip the connection flanges into each other and secure them with the provided safety pin.
   Note: Support the second section by placing it on a support stand or rostrum.

The “Rigging Harness Assembly” is described on page 8.
After reading and following the instructions, please proceed as follows.

10. Connect 2 turnbuckles to the top connection on the front side of the rigging harness. Ensure that the locking pins are inserted fully.
11. Connect 2 standard rigging rods to the turnbuckles on the front side of the rigging harness. Ensure that the locking pins are inserted fully.
12. Connect another 2 standard rigging rods to the first 2 standard rigging rods. Ensure that the locking pins are inserted fully.
13. Connect the last 2 standard rigging rods to the 2 rigging rod connectors on the second extension arm. Ensure that the locking pins are inserted fully.
14. Hand tighten the rods by turning the turnbuckles until the rods are taut.
15. Connect the angle adjuster to the end of the second 200cm / 6’ 6” section and secure it with the provided safety pin.
16. Connect one of the 200cm / 6’ 6” parallelogram rods to the middle section and then connect the second 200cm / 6’ 6” parallelogram rod to the first 200cm / 6’ 6” rod. Then connect it to the angle adjuster and secure it with a safety pin at each end.
    Tip: The angle adjuster has an integrated leveller. By turning it, the vertical plate on the angle adjuster can be set to a perfect right angle.

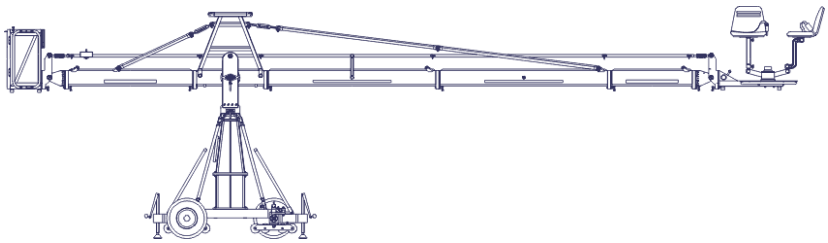
    Note: Support the first parallelogram rod with a parallelogram support set and secure with the locking pin as shown on page 8.
17. Connect the platform to the angle adjuster by inserting the male platform flange into the female flange on the angle adjuster. Secure it with the safety pin.
18. Attach the weight bucket to the short end of the crane by inserting the male weight bucket flange into the female flange on the angle adjuster. Secure it with the 2 safety pins on the top of the angle adjuster.
    Tip: The angle adjuster has an integrated leveller. By turning it, the vertical plate

on the angle adjuster can be set to a perfect right angle. Correct setting of the angle adjuster enhances the crane's balance. Level the weight bucket before loading any weights

Before operation, all locking pins, locking screws etc should be inspected to ensure that all assembly sections are securely fastened.

Read "Balancing the crane arm" on page 25

Version 4 / 150 D



Front extension arms required	2 x 200 cm / 6' 6" + 100 cm / 3' 3"
Rear extension arm required	1 x 150 cm / 5'
Lift range	895 cm / 29' 4"
Maximum Euro-adapter height	646 cm / 21' 2"
Lift capacity (working load) 2 pers. + accessories	250 kg / 550 lbs
Counterweight required for max. load	820 kg / 1804 lbs
Crane weight (excluding dolly and weights)	316 kg / 695 lbs
Dolly weight	248 kg / 545 lbs
Arm reach (pivot to camera head mount)	618 cm / 20' 3"
Length of rear end (pivot to outside of bucket)	256 cm / 8' 4"

Continue from § 7, page 6

8. Connect one of the 200cm / 6' 6" sections to the middle section. Slip the connection flanges into each other and secure them with the provided safety pin.
9. Connect another 200cm / 6' 6" section to the first 200cm / 6' 6" section. Slip the connection flanges into each other and secure them with the provided safety pin.
   Note: Support the second section by placing it on a support stand or rostrum.

The "Rigging Harness Assembly" is described on page 8.
After reading and following the instructions, please proceed as follows.

10. Connect 2 turnbuckles to the top connection on the front side of the rigging harness. Ensure that the locking pins are inserted fully.
11. Connect 2 standard rigging rods to the turnbuckles on the front side of the rigging harness. Ensure that the locking pins are inserted fully.
12. Connect another 2 standard rigging rods to the first 2 standard rigging rods. Ensure that the locking pins are inserted fully.
13. Connect the last 2 standard rigging rods to the 2 rigging rod connectors on the second extension arm. Ensure that the locking pins are inserted fully.
14. Hand tighten the rods by turning the turnbuckles until the rods are taut.
15. Connect the 100cm / 3' 3" section to the second 200cm / 6' 6" section. Slip the connection flanges into each other and secure them with the provided safety pin.
16. Connect the remaining angle adjuster to the end of the 100cm / 3' 3" section and secure it with the provided safety pin.
17. Connect one of the 200cm / 6' 6" parallelogram rods to the middle section and then connect the second 200cm / 6' 6" parallelogram rod to the first 200cm / 6' 6" rod. In turn, connect the 100cm / 3' 3" parallelogram rod to the second 200cm / 6' 6" rod.

Then connect the angle adjuster and secure it with a safety pin at each end.

Tip: The angle adjuster has an integrated leveller. By turning it, the vertical plate on the angle adjuster can be set to a perfect right angle.

Note: Support the first parallelogram rod with a parallelogram support set and secure with the locking pin as shown on page 8.

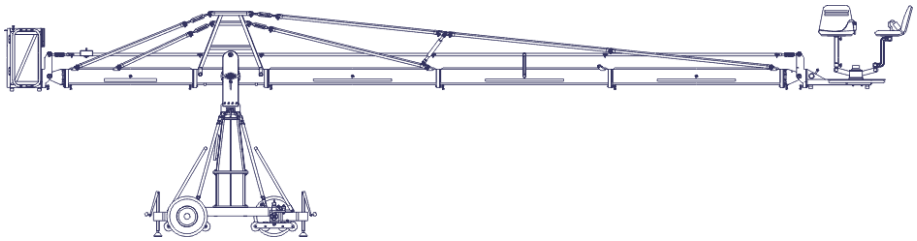
18. Connect the platform to the angle adjuster by inserting the male platform flange into the female flange on the angle adjuster. Secure it with the safety pin.
19. Attach the weight bucket to the short end of the crane by inserting the male weight bucket flange into the female flange on the angle adjuster. Secure it with the 2 safety pins on the top of the angle adjuster.

    Tip: The angle adjuster has an integrated leveller. By turning it, the vertical plate on the angle adjuster can be set to a perfect right angle. Correct setting of the angle adjuster enhances the crane's balance. Level the weight bucket before loading any weights

Before operation, all locking pins, locking screws etc should be inspected to ensure that all assembly sections are securely fastened.

Read "Balancing the crane arm" on page 25

Version 5 / 150 D



Front extension arms required	3 x 200 cm / 6' 6"
Rear extension arm required	1 x 150 cm / 5'
Lift range	1057 cm / 34' 8"
Maximum Euro-adapter height	726 cm / 23' 9"
Lift capacity (working load) 2 pers. + accessories	200 kg / 440 lbs
Counterweight required for max. load	826 kg / 1817 lbs
Crane weight (excluding dolly and weights)	341 kg / 750 lbs
Dolly weight	248 kg / 545 lbs
Arm reach (pivot to camera head mount)	718 cm / 23' 6"
Length of rear end (pivot to outside of bucket)	256 cm / 8' 4"

Continue from § 7, page 6

8. Connect one of the 200cm / 6' 6" sections to the middle section. Slip the connection flanges into each other and secure them with the provided safety pin.

The "Rigging Harness Assembly" is described on page 8.
After reading and following the instructions, please proceed as follows.

9. Connect 4 turnbuckles to the top and bottom connections on the front rigging harness.
10. Connect 2 x 200cm/ 6' 6" rigging rods (**with double end connection**) to the bottom turnbuckles and in turn to the rigging rod connections on the first 200cm/ 6' 6" section. Tighten the turnbuckles until taut.
11. Connect another 200cm / 6' 6" section to the first 200cm / 6' 6" section. Slip the connection flanges into each other and secure them with the provided safety pin.

    Note: Support the second section by placing it on a support stand or rostrum.
12. Connect the third 200cm / 6' 6" section to the second 200cm / 6' 6" section. Slip the

connection flanges into each other and secure them with the provided safety pin.

13. Connect 2 standard rigging rods to the top turnbuckles on the front side of the rigging harness. Ensure that the locking pins are inserted fully.
14. Connect 2 rigging rod connectors to the first 2 standard rigging rods. Ensure that the locking pins are inserted fully.
15. Connect another 2 standard rigging rods to the 2 rigging rod connectors. Ensure that the locking pins are inserted fully.
16. Connect another 2 standard rigging rods to the second 2 rigging rods. Ensure that the locking pins are inserted fully.
17. Connect the last 2 standard rigging rods to the 2 rigging rod connectors on the third extension arm. Ensure that the locking pins are inserted fully.
18. Hand tighten the rods by turning the turnbuckles until the rods are taut.
19. Connect an adjustable rigging support bracket between the rigging rod connector and front **double end connection** on the lower rigging rod. Adjust the support bracket until the top rods run in a straight line.
20. Connect the remaining angle adjuster to the end of the third 200cm / 6’ 6” section and secure it with the provided safety pin..
21. Connect one of the 200cm / 6’ 6” parallelogram rods to the middle section and then connect the second 200cm / 6’ 6” parallelogram rod to the first 200cm / 6’ 6” rod. In turn, connect the third 200cm / 6’ 6” parallelogram rod to the second 200cm / 6’ 6” rod. Then connect the angle adjuster and secure it with a safety pin at each end.

    Tip: The angle adjuster has an integrated leveller. By turning it, the vertical plate on the angle adjuster can be set to a perfect right angle.

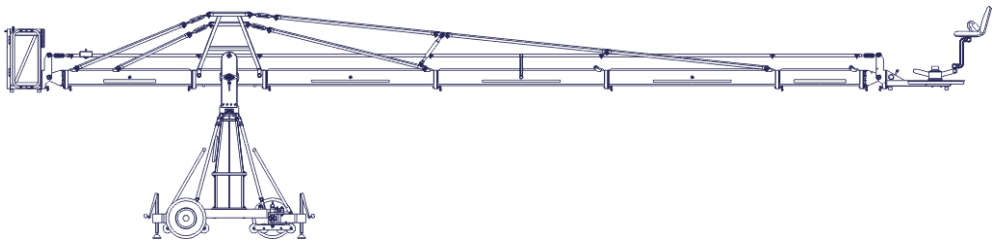
    Note: Support the first parallelogram rod with a parallelogram support set and secure with the locking pin as shown on page 8.
22. Connect the platform to the angle adjuster by inserting the male platform flange into the female flange on the angle adjuster. Secure it with the safety pin.
23. Attach the weight bucket to the short end of the crane by inserting the male weight bucket flange into the female flange on the angle adjuster. Secure it with the 2 safety pins on the top of the angle adjuster.

    Tip: The angle adjuster has an integrated leveller. By turning it, the vertical plate on the angle adjuster can be set to a perfect right angle. Correct setting of the angle adjuster enhances the crane’s balance. Level the weight bucket before loading any weights

Before operation, all locking pins, locking screws etc should be inspected to ensure that all assembly sections are securely fastened.

Read “Balancing the crane arm” on page 25

Version 6 / 150 D



Front extension arms required	3 x 200 cm / 6’ 6” + 100 cm / 3’ 3”
Rear extension arm required	1 x 150 cm / 5’
Lift range	1215 cm / 39’ 10”
Maximum Euro-adapter height	805 cm / 26’ 4“
Lift capacity (working load) 1 pers. + accessories	156 kg / 343 lbs
Counterweight required for max. load	834 kg / 1834 lbs
Crane weight (excluding dolly and weights)	347 kg / 768 lbs
Dolly weight	248 kg / 545 lbs
Arm reach (pivot to camera head mount)	816 cm / 26’ 9“
Length of rear end (pivot to outside of bucket)	256 cm / 8’ 4“

Continue from § 7, page 6

8. Connect one of the 200cm / 6’ 6” sections to the middle section. Slip the connection flanges into each other and secure them with the provided safety pin.

The “Rigging Harness Assembly” is described on page 8.
After reading and following the instructions, please proceed as follows.

9. Connect 4 turnbuckles to the top and bottom connections on the front rigging harness.
10. Connect 2 x 200cm/ 6’ 6” rigging rods (**with double end connection**) to the bottom turnbuckles and in turn to the rigging rod connections on the first 200cm/ 6’ 6” section. Tighten the turnbuckles until taut.
11. Connect another 200cm / 6’ 6” section to the first 200cm / 6’ 6” section. Slip the connection flanges into each other and secure them with the provided safety pin.
    Note: Support the second section by placing it on a support stand or rostrum.
12. Connect the third 200cm / 6’ 6” section to the second 200cm / 6’ 6” section. Slip the connection flanges into each other and secure them with the provided safety pin.
    Note: Support the third section by placing it on a support stand or rostrum.
13. Connect the 100cm / 3’ 3” section to the third 200cm / 6’ 6” section. Slip the connection flanges into each other and secure them with the provided safety pin.
14. Connect 2 standard rigging rods to the top turnbuckles on the front side of the rigging harness. Ensure that the locking pins are inserted fully.
15. Connect 2 rigging rod connectors to the first 2 standard rigging rods. Ensure that the locking pins are inserted fully.
16. Connect another 2 standard rigging rods to the 2 rigging rod connectors. Ensure that the locking pins are inserted fully.
17. Connect another 2 standard rigging rods to the second 2 rigging rods. Ensure that the locking pins are inserted fully.
18. Connect the last 2 standard rigging rods to the 2 rigging rod connectors on the third extension arm. Ensure that the locking pins are inserted fully.
19. Hand tighten the rods by turning the turnbuckles until the rods are taut.
20. Connect an adjustable rigging support bracket between the rigging rod connector and front double end connection on the lower rigging rod. Adjust the support bracket until the top rods run in a straight line.

21. Connect the remaining angle adjuster to the end of the 100cm / 3’ 3” section and secure it with the provided safety pin.
22. Connect one of the 200cm / 6’ 6” parallelogram rods to the middle section and then connect the second 200cm / 6’ 6” parallelogram rod to the first 200cm / 6’ 6” rod. In turn, connect the third 200cm / 6’ 6” parallelogram rod to the second 200cm / 6’ 6” rod. In turn, connect the 100cm / 3’ 3” parallelogram rod to the third 200cm / 6’ 6” rod. Then connect it to the angle adjuster and secure it with a safety pins at each end.

    Tip: The angle adjuster has an integrated leveller. By turning it, the vertical plate on the angle adjuster can be set to a perfect right angle.

    Note: Support the first parallelogram rod with a parallelogram support set and secure with the locking pin as shown on page 8.
23. Connect the platform to the angle adjuster by inserting the male platform flange into the female flange on the angle adjuster. Secure it with the safety pin.
24. Attach the weight bucket to the short end of the crane by inserting the male weight bucket flange into the female flange on the angle adjuster. Secure it with the 2 safety pins on the top of the angle adjuster.

    Tip: The angle adjuster has an integrated leveller. By turning it, the vertical plate on the angle adjuster can be set to a perfect right angle. Correct setting of the angle adjuster enhances the crane’s balance. Level the weight bucket before loading any weights

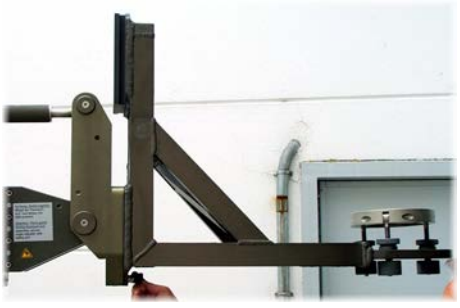
Before operation, all locking pins, locking screws etc should be inspected to ensure that all assembly sections are securely fastened.

Read “Balancing the crane arm” on page 25

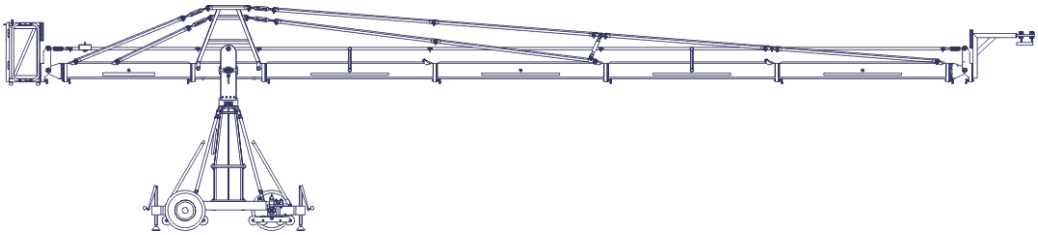
Remote Head Mount

The Remote Head Mount is connected to the angle adjuster. Secure with locking pin.

The Remote Head Mount may also be mounted inverted and is connected in the same way to the angle adjuster. Secure with locking pin.



Version 7 / 150 D



Front extension arms required	4 x 200 cm / 6’ 6”
Rear extension arm required	1 x 150 cm / 5’
Lift range	1376 cm / 45’ 1”
Maximum Euro-adapter height	903 cm / 29’ 7“
Lift capacity (working load) camera + accessories	100 kg / 220 lbs
Counterweight required for max. load	714 kg / 1570 lbs
Crane weight (excluding dolly and weights)	345 kg / 759 lbs
Dolly weight	248 kg / 545 lbs
Arm reach (pivot to camera head mount)	920 cm / 30’ 2“
Length of rear end (pivot to outside of bucket)	256 cm / 8’ 4“

Continue from § 7, page 6

8. Connect one of the 200cm / 6’ 6” sections to the middle section. Slip the connection flanges into each other and secure them with the provided safety pin.
9. Connect another 200cm / 6’ 6” section to the first 200cm / 6’ 6” section. Slip the connection flanges into each other and secure them with the provided safety pin.
   Note: Support the second section by placing it on a support stand or rostrum.

The “Rigging Harness Assembly” is described on page 8.
After reading and following the instructions, please proceed as follows.

10. Connect 4 turnbuckles to the top and bottom connections on the front rigging harness.
11. Connect 2 x 200cm/ 6’ 6” rigging rods to the bottom turnbuckles and secure them with the provided safety pins.
12. Connect 2 x 200cm/ 6’ 6” rigging rods (**with double end connection**) to the first 2 rigging rods and in turn to the rigging rod connections on the second 200cm/ 6’ 6” section. Tighten the turnbuckles until taut.
13. Connect another 200cm / 6’ 6” section to the second 200cm / 6’ 6” section. Slip the connection flanges into each other and secure them with the provided safety pin.
    Note: Support the third section by placing it on a support stand or rostrum.
14. Connect the fourth 200cm / 6’ 6” section to the third 200cm / 6’ 6” section. Slip the connection flanges into each other and secure them with the provided safety pin.
    Note: Support the fourth section by placing it on a support stand or rostrum.
15. Connect 2 standard rigging rods to the top turnbuckles on the front side of the rigging harness. Ensure that the locking pins are inserted fully.
16. Connect another 2 standard rigging rods to the first 2 rigging rods. Ensure that the locking pins are inserted fully.
17. Connect 2 rigging rod connectors to the second 2 standard rigging rods. Ensure that the locking pins are inserted fully.
18. Connect another 2 standard rigging rods to the 2 rigging rod connectors. Ensure that the locking pins are inserted fully.
19. Connect another 2 standard rigging rods to the third 2 rigging rods. Ensure that the locking pins are inserted fully.
20. Connect the last 2 standard rigging rods to the 2 rigging rod connectors on the fourth

extension arm. Ensure that the locking pins are inserted fully.

21. Hand tighten the rods by turning the turnbuckles until the rods are taut.
22. Connect an adjustable rigging support bracket between the rigging rod connector on the second top rods and front **double end connection** on the second lower rigging rod. Adjust the support bracket until the top rods run in a straight line.
23. Connect the remaining angle adjuster to the end of the fourth 200cm / 6’ 6” section and secure it with the provided safety pin.
24. Connect one of the 200cm / 6’ 6” parallelogram rods to the middle section and then connect the second 200cm / 6’ 6” parallelogram rod to the first 200cm / 6’ 6” rod. In turn, connect the third 200cm / 6’ 6” parallelogram rod to the second 200cm / 6’ 6” rod. In turn, connect the fourth 200cm / 6’ 6” parallelogram rod to the third 200cm / 6’ 6” rod. Then connect it to the angle adjuster and secure it with a safety pins at each end.

    Tip: The angle adjuster has an integrated leveller. By turning it, the vertical plate on the angle adjuster can be set to a perfect right angle.

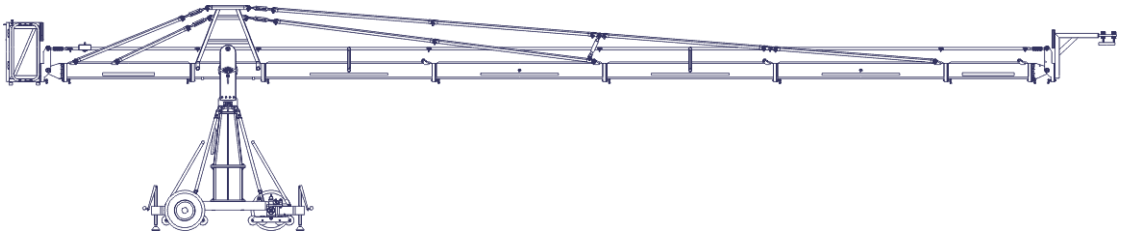
    Note: Support the first and third parallelogram rods each with a parallelogram support set and secure with the locking pin as shown on page 8.
25. Connect the Remote Head Mount (as seen on page 16) to the angle adjuster by inserting the male flange into the female flange on the angle adjuster. Secure it with the safety pin.
26. Attach the weight bucket to the short end of the crane by inserting the male weight bucket flange into the female flange on the angle adjuster. Secure it with the 2 safety pins on the top of the angle adjuster.

    Tip: The angle adjuster has an integrated leveller. By turning it, the vertical plate on the angle adjuster can be set to a perfect right angle. Correct setting of the angle adjuster enhances the crane’s balance. Level the weight bucket <u>before</u> loading any weights.

Before operation, all locking pins, locking screws etc should be inspected to ensure that all assembly sections are securely fastened.

Read “Balancing the crane arm” on page 25

Version 8 / 150 D



Front extension arms required	4 x 200 cm / 6’ 6” + 100 cm / 3’ 3”
Rear extension arm required	1 x 150 cm / 5’
Lift range	1534 cm / 50’ 3”
Maximum Euro-adapter height	982 cm / 32’ 2“
Lift capacity (working load) camera + accessories	100 kg / 220 lbs
Counterweight required for max. load	792 kg / 1742 lbs
Crane weight (excluding dolly and weights)	358 kg / 787 lbs
Dolly weight	248 kg / 545 lbs
Arm reach (pivot to camera head mount)	1017 cm / 33’ 4“
Length of rear end (pivot to outside of bucket)	256 cm / 8’ 4“

Continue from § 7, page 6

8. Connect one of the 200cm / 6’ 6” sections to the middle section. Slip the connection flanges into each other and secure them with the provided safety pin.
9. Connect another 200cm / 6’ 6” section to the first 200cm / 6’ 6” section. Slip the connection flanges into each other and secure them with the provided safety pin.
   Note: Support the second section by placing it on a support stand or rostrum.

The “Rigging Harness Assembly” is described on page 8.
After reading and following the instructions, please proceed as follows.

10. Connect 4 turnbuckles to the top and bottom connections on the rigging harness.
11. Connect 2 x 200cm/ 6’ 6” rigging rods to the bottom turnbuckles and secure them with the provided safety pins.
12. Connect 2 x 200cm/ 6’ 6” rigging rods (**with double end connection**) to the first 2 rigging rods and in turn to the rigging rod connections on the second 200cm/ 6’ 6” section. Tighten the turnbuckles until taut.
13. Connect another 200cm / 6’ 6” section to the second 200cm / 6’ 6” section. Slip the connection flanges into each other and secure them with the provided safety pin.
    Note: Support the third section by placing it on a support stand or rostrum.
14. Connect the fourth 200cm / 6’ 6” section to the third 200cm / 6’ 6” section. Slip the connection flanges into each other and secure them with the provided safety pin
15. Connect the 100cm / 3’ 3” section to the fourth 200cm / 6’ 6” section. Slip the connection flanges into each other and secure them with the provided safety pin.
16. Connect 2 standard rigging rods to the turnbuckles on the front side of the rigging harness. Ensure that the locking pins are inserted fully.
17. Connect another 2 standard rigging rods to the first 2 rigging rods. Ensure that the locking pins are inserted fully.
18. Connect 2 rigging rod connectors to the second 2 standard rigging rods. Ensure that the locking pins are inserted fully.
19. Connect another 2 standard rigging rods to the 2 rigging rod connectors. Ensure that the locking pins are inserted fully.
20. Connect another 2 standard rigging rods to the third 2 rigging rods. Ensure that the locking pins are inserted fully.
21. Connect the last 2 standard rigging rods to the 2 rigging rod connectors on the third

extension arm. Ensure that the locking pins are inserted fully.

22. Hand tighten the rods by turning the turnbuckles until the rods are taut.
23. Connect an adjustable rigging support bracket between the rigging rod connector on the second top rods and front double end connection on the second lower rigging rod. Adjust the support bracket until the top rods run in a straight line.
24. Connect the remaining angle adjuster to the end of the 100cm / 3’ 3” section and secure it with the provided safety pin.
25. Connect one of the 200cm / 6’ 6” parallelogram rods to the middle section and then connect the second 200cm / 6’ 6” parallelogram rod to the first 200cm / 6’ 6” rod. In turn, connect the third 200cm / 6’ 6” parallelogram rod to the second 200cm / 6’ 6” rod. In turn, connect the fourth 200cm / 6’ 6” parallelogram rod to the third 200cm / 6’ 6” rod. In turn, connect the 100cm / 3’ 3” parallelogram rod to the fourth 200cm / 6’ 6” rod. Then connect it to the angle adjuster and secure it with a safety pins at each end.

    Tip: The angle adjuster has an integrated leveller. By turning it, the vertical plate on the angle adjuster can be set to a perfect right angle.

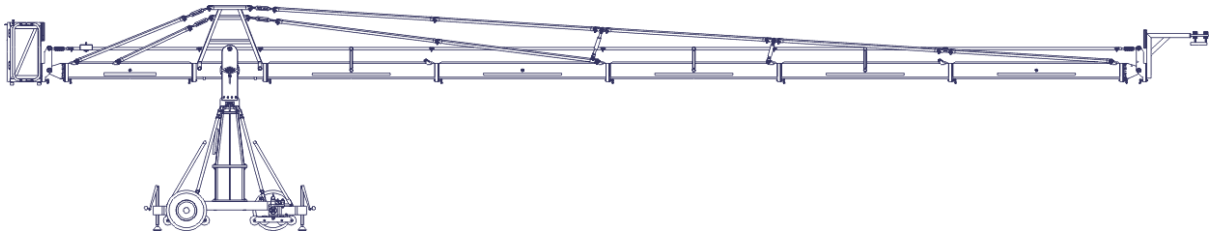
    Note: Support the first and third and fourth parallelogram rods each with a parallelogram support set and secure with the locking pin as shown on page 8.
26. Connect the Remote Head Mount (as seen on page 16) to the angle adjuster by inserting the male flange into the female flange on the angle adjuster. Secure it with the safety pin.
27. Attach the weight bucket to the short end of the crane by inserting the male weight bucket flange into the female flange on the angle adjuster. Secure it with the 2 safety pins on the top of the angle adjuster.

    Tip: The angle adjuster has an integrated leveller. By turning it, the vertical plate on the angle adjuster can be set to a perfect right angle. Correct setting of the angle adjuster enhances the crane’s balance. Level the weight bucket before loading any weights.

Before operation, all locking pins, locking screws etc should be inspected to ensure that all assembly sections are securely fastened.

Read “Balancing the crane arm” on page 25

Version 9 / 150 D



Front extension arms required	5 x 200 cm / 6’ 6”
Rear extension arm required	1 x 150 cm / 5’
Lift range	1696 cm / 55’ 7”
Maximum Euro-adapter height	1063 cm / 34’ 10“
Lift capacity (working load) camera + accessories	75 kg / 165 lbs
Counterweight required for max. load	840 kg / 1848 lbs
Crane weight (excluding dolly and weights)	373 kg / 820 lbs
Dolly weight	248 kg / 545 lbs
Arm reach (pivot to camera head mount)	1117 cm / 36’ 7“
Length of rear end (pivot to outside of bucket)	256 cm / 8’ 4“

Continue from § 7, page 6

8. Connect one of the 200cm / 6’ 6” sections to the middle section. Slip the connection flanges into each other and secure them with the provided safety pin.
9. Connect another 200cm / 6’ 6” section to the first 200cm / 6’ 6” section. Slip the connection flanges into each other and secure them with the provided safety pin.
   Note: Support the second section by placing it on a support stand or rostrum.

The “Rigging Harness Assembly” is described on page 8.
After reading and following the instructions, please proceed as follows.

10. Connect 4 turnbuckles to the top and bottom connections on the front rigging harness.
11. Connect 2 x 200cm/ 6’ 6” rigging rods to the bottom turnbuckles and secure them with the provided safety pins.
12. Connect 2 x 200cm/ 6’ 6” rigging rods (**with double end connection**) to the first 2 rigging rods and in turn to the rigging rod connections on the second 200cm/ 6’ 6” section. Tighten the turnbuckles until taut.
13. Connect another 200cm / 6’ 6” section to the second 200cm / 6’ 6” section. Slip the connection flanges into each other and secure them with the provided safety pin.
    Note: Support the third section by placing it on a support stand or rostrum.
14. Connect the fourth 200cm / 6’ 6” section to the third 200cm / 6’ 6” section. Slip the connection flanges into each other and secure them with the provided safety pin.
    Note: Support the fourth section by placing it on a support stand or rostrum.
15. Connect the fifth 200cm / 6’ 6” section to the fourth 200cm / 6’ 6” section. Slip the connection flanges into each other and secure them with the provided safety pin.
16. Connect 2 standard rigging rods to the turnbuckles on the top front side of the rigging harness. Ensure that the locking pins are inserted fully.
17. Connect another 2 standard rigging rods to the first 2 rigging rods. Ensure that the locking pins are inserted fully.
18. Connect 2 rigging rod connectors to the second 2 standard rigging rods. Ensure that the locking pins are inserted fully.
19. Connect another 2 standard rigging rods to the 2 rigging rod connectors. Ensure that the locking pins are inserted fully.
20. Connect 2 rigging rod connectors to the third 2 standard rigging rods. Ensure that the

locking pins are inserted fully.

21. Connect another 2 standard rigging rods to the rigging rod connectors. Ensure that the locking pins are inserted fully.
22. Connect 2 rigging rod connectors to the fourth 2 standard rigging rods. Ensure that the locking pins are inserted fully.
23. Connect another 2 standard rigging rods to the 2 rigging rod connectors. Ensure that the locking pins are inserted fully.
24. Connect the last 2 standard rigging rods to the 2 rigging rod connectors on the fifth extension arm. Ensure that the locking pins are inserted fully.
25. Hand tighten the rods by turning the turnbuckles until the rods are taut.
26. Connect an adjustable rigging support bracket between the rigging rod connector on the second top rods and front **double end connection** on the second lower rigging rod. Adjust the support bracket until the top rods run in a straight line.
27. Connect an adjustable rigging support bracket between the rigging rod connector on the third top rods and 2 rigging rod connectors on the third extension arm. Adjust the support bracket until the top rods run in a straight line.
28. Connect the remaining angle adjuster to the end of the fifth 200cm / 6’ 6” section and secure it with the provided safety pin.
29. Connect one of the 200cm / 6’ 6” parallelogram rods to the middle section and then connect the second 200cm / 6’ 6” parallelogram rod to the first 200cm / 6’ 6” rod. In turn, connect the third 200cm / 6’ 6” parallelogram rod to the second 200cm / 6’ 6” rod. In turn, connect the fourth 200cm / 6’ 6” parallelogram rod to the third 200cm / 6’ 6” rod. In turn, connect the fifth 200cm / 6’ 6” parallelogram rod to the fourth 200cm / 6’ 6” rod. Then connect it to the angle adjuster and secure it with a safety pins at each end.

    Tip: The angle adjuster has an integrated leveller. By turning it, the vertical plate on the angle adjuster can be set to a perfect right angle.

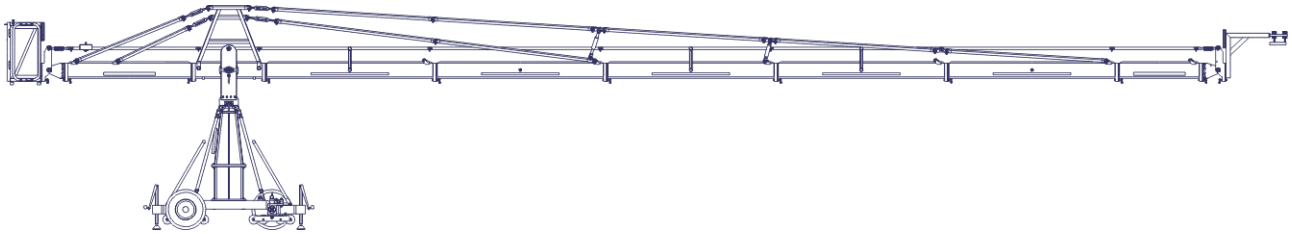
    Note: Support the first and third and fourth parallelogram rods each with a parallelogram support set and secure with the locking pin as shown on page 8.
30. Connect the Remote Head Mount (as seen on page 16) to the angle adjuster by inserting the male flange into the female flange on the angle adjuster. Secure it with the safety pin.
31. Attach the weight bucket to the short end of the crane by inserting the male weight bucket flange into the female flange on the angle adjuster. Secure it with the 2 safety pins on the top of the angle adjuster.

    Tip: The angle adjuster has an integrated leveller. By turning it, the vertical plate on the angle adjuster can be set to a perfect right angle. Correct setting of the angle adjuster enhances the crane’s balance. Level the weight bucket <u>before</u> loading any weights.

Before operation, all locking pins, locking screws etc should be inspected to ensure that all assembly sections are securely fastened.

Read “Balancing the crane arm” on page 25

Version 10 / 150 D



Front extension arms required	5 x 200 cm / 6’ 6” + 100 cm / 3’ 3”
Rear extension arm required	1 x 150 cm / 5’
Lift range	1854 cm / 60’ 9”
Maximum Euro-adapter height	1142 cm / 37’ 5“
Lift capacity (working load) camera + accessories	53 kg / 116 lbs
Counterweight required for max. load	834 kg / 1834 lbs
Crane weight (excluding dolly and weights)	387 kg / 851 lbs
Dolly weight	248 kg / 545 lbs
Arm reach (pivot to camera head mount)	1215 cm / 39’ 10“
Length of rear end (pivot to outside of bucket)	256 cm / 8’ 4“

Continue from § 7, page 6

8. Connect one of the 200cm / 6’ 6” sections to the middle section. Slip the connection flanges into each other and secure them with the provided safety pin.
9. Connect another 200cm / 6’ 6” section to the first 200cm / 6’ 6” section. Slip the connection flanges into each other and secure them with the provided safety pin.
   Note: Support the second section by placing it on a support stand or rostrum.

The “Rigging Harness Assembly” is described on page 8.
After reading and following the instructions, please proceed as follows.

10. Connect 4 turnbuckles to the top and bottom connections on the rigging harness.
11. Connect 2 x 200cm/ 6’ 6” rigging rods to the bottom turnbuckles and secure them with the provided safety pins.
12. Connect 2 x 200cm/ 6’ 6” rigging rods (**with double end connection**) to the first 2 rigging rods and in turn to the rigging rod connections on the second 200cm/ 6’ 6” section. Tighten the turnbuckles until taut.
13. Connect another 200cm / 6’ 6” section to the second 200cm / 6’ 6” section. Slip the connection flanges into each other and secure them with the provided safety pin.
    Note: Support the third section by placing it on a support stand or rostrum.
14. Connect the fourth 200cm / 6’ 6” section to the third 200cm / 6’ 6” section. Slip the connection flanges into each other and secure them with the provided safety pin
    Note: Support the fourth section by placing it on a support stand or rostrum.
15. Connect the fifth 200cm / 6’ 6” section to the fourth 200cm / 6’ 6” section. Slip the connection flanges into each other and secure them with the provided safety pin.
16. Connect the 100cm / 3’ 3” section to the fifth 200cm / 6’ 6” section. Slip the connection flanges into each other and secure them with the provided safety pin.
17. Connect 2 standard rigging rods to the turnbuckles on the top front side of the rigging harness. Ensure that the locking pins are inserted fully.
18. Connect another 2 standard rigging rods to the first 2 rigging rods. Ensure that the locking pins are inserted fully.
19. Connect 2 rigging rod connectors to the second 2 standard rigging rods. Ensure that the locking pins are inserted fully.
20. Connect another 2 standard rigging rods to the 2 rigging rod connectors. Ensure that

the locking pins are inserted fully.

21. Connect 2 rigging rod connectors to the third 2 standard rigging rods. Ensure that the locking pins are inserted fully.
22. Connect another 2 standard rigging rods to the rigging rod connectors. Ensure that the locking pins are inserted fully.
23. Connect 2 rigging rod connectors to the fourth 2 standard rigging rods. Ensure that the locking pins are inserted fully.
24. Connect another 2 standard rigging rods to the 2 rigging rod connectors. Ensure that the locking pins are inserted fully.
25. Connect the last 2 standard rigging rods to the 2 rigging rod connectors on the fifth extension arm. Ensure that the locking pins are inserted fully.
26. Hand tighten the rods by turning the turnbuckles until the rods are taut.
27. Connect an adjustable rigging support bracket between the rigging rod connector on the second top rods and front double end connection on the second lower rigging rod. Adjust the support bracket until the top rods run in a straight line.
28. Connect an adjustable rigging support bracket between the rigging rod connector on the third top rods and 2 rigging rod connectors on the third extension arm. Adjust the support bracket until the top rods run in a straight line.
29. Connect the remaining angle adjuster to the end of the 100cm / 3’ 3” section and secure it with the provided safety pin.
30. Connect one of the 200cm / 6’ 6” parallelogram rods to the middle section and then connect the second 200cm / 6’ 6” parallelogram rod to the first 200cm / 6’ 6” rod. In turn, connect the third 200cm / 6’ 6” parallelogram rod to the second 200cm / 6’ 6” rod. In turn, connect the fourth 200cm / 6’ 6” parallelogram rod to the third 200cm / 6’ 6” rod. In turn, connect the fifth 200cm / 6’ 6” parallelogram rod to the fourth 200cm / 6’ 6” rod. In turn, connect the 100cm / 3’ 3” parallelogram rod to the fifth 200cm / 6’ 6” rod. Then connect it to the angle adjuster and secure it with a safety pins at each end.

    Tip: The angle adjuster has an integrated leveller. By turning it, the vertical plate on the angle adjuster can be set to a perfect right angle.

    Note: Support the first and third and fourth parallelogram rods each with a parallelogram support set and secure with the locking pin as shown on page 8.
31. Connect the Remote Head Mount (as seen on page 16) to the angle adjuster by inserting the male flange into the female flange on the angle adjuster. Secure it with the safety pin.
32. Attach the weight bucket to the short end of the crane by inserting the male weight bucket flange into the female flange on the angle adjuster. Secure it with the 2 safety pins on the top of the angle adjuster.

    Tip: The angle adjuster has an integrated leveller. By turning it, the vertical plate on the angle adjuster can be set to a perfect right angle. Correct setting of the angle adjuster enhances the crane’s balance. Level the weight bucket before loading any weights.

Before operation, all locking pins, locking screws etc should be inspected to ensure that all assembly sections are securely fastened.

Read “Balancing the crane arm” on page 25

Balancing the crane arm

Attention : When loading the crane the maximum working load capacities and payloads must never be exceeded.

After the assembly procedure has been completed the seat arms, seats, risers, camera etc may now be assembled on the platform or the remote head system may be mounted. **An itemized weight list for GFM accessories may be found below.** Place the correct amount of counterweight in the weight bucket to balance the load. Depending on the version that has been set-up, the camera operator / operators can then take their position on the platform.

Attention: The safety belts provided must be fastened upon sitting down and kept fastened at all times when on the platform.

Only original GFM seats, seat arms, risers etc may be used.

Working load capacity = Camera operator / operators + accessories

Attention: we recommend that the camera and remote head are additionally secured to the remote head mount with a safety cord.

Place the required amount of counterweights in the weight bucket so that the crane arm becomes balanced and remains in the horizontal position. If necessary, the crane can be fine balanced by adjusting the sliding weight on the rear parallelogram at the weight bucket. Do not forget to lock the sliding weight in position before tilting the arm. The counterweight bucket door must be locked when operating the crane.

Deloading:

Attention: The counterweights must always be gradually removed from the counterweight bucket before personnel leave the platform.

When the weights are removed, the platform personnel should dismount one at a time. Extreme caution must be given to the shifting payload at all times. When dismantling the crane it is essential that the whole platform is supported fully by a stable underlay i.e. rostrum or ground surface. In any case the platform should not be in the air without support.

General Safety

Attention: all necessary precautions should be taken so that unauthorized third parties cannot use or operate the crane and also to ensure that only authourized personnel have access to it.

Operational conditions:

At a wind speed of 40 km/h – 25 mph for 1 man operation
35 km/h – 21 mph for 2 man operation
33 km/h – 20 mph for remote operation
crane operation must be stopped and the crane secured, dismounted and the necessary safety precautions taken.
If, for example, it takes 2 mins. to unload the counterweights and take the necessary precautions to secure the crane, one must commence with the procedure at a wind speed of 28 km/h - 17.5 mph. DIN15019, part 1, section 6.13.
The crane may not be used in a lightening storm as there is the danger of electrocution.

Accessories for GF- 10 crane

Levelling leg

Monitor carrier

Push bar

Track wheel with brake

Notice:

When operating the crane with the **push bar** mounted on the dolly, pay attention that the crane arm at no time collides with the push bar.
Always use the levelling legs to level the crane when on uneven surfaces.

Accessories for GF-10 Crane platform weight list

Qty.	Description		Weight kg	Weight lbs
1	**Seat arm combined 10cm / 4"**	AL-2210	0,75 kg	1,65 lbs
1	**Seat arm combined 20cm / 8"**	AL-2220	1,15 kg	2,53 lbs
1	**Seat arm combined 30cm / 12"**	AL-2230	1,60 kg	3,52 lbs
1	**Seat arm vertical 10cm / 4"**	AL-2211	1,25 kg	2,75 lbs
1	**Seat arm vertical 20cm / 8"**	AL-2212	1,75 kg	3,85 lbs
1	**Seat arm vertical 30cm / 12"**	AL-2213	2,20 kg	4,84 lbs
1	**Crane seat with seat belt**	AL-1030	7,20 kg	15,84 lbs
1	**Riser 10 cm / 4"**	AL-2310	2,80 kg	6,16 lbs
1	**Riser 20cm / 8"**	AL-2320	2,95 kg	6,49 lbs
1	**Riser 30cm / 12"**	AL-2330	3,40 kg	7,48 lbs
1	**Riser 40cm / 16"**	AL-2340	3,80 kg	8,36 lbs
1	**Riser 50cm / 20"**	AL-2350	4,25 kg	9,35 lbs
1	**Connection pin**	AL-2240	0,40 kg	0,88 lbs
1	**Ball Adapter**	AL-2150	2,17 kg	4,77 lbs

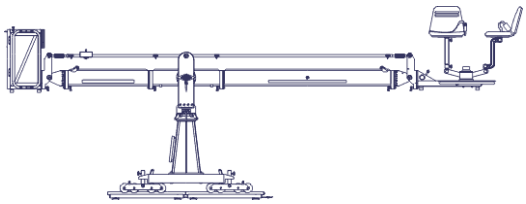
Transport trolley for the GF-10 Crane

The above photos show the practical transport solution for the GF-10 Crane System. The GFM trolley fits the complete system with dolly and column as an extra unit.

Technical Specifications GF-10 Crane System

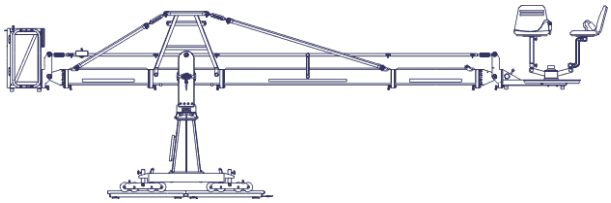
With 100cm section to weight bucket and split column, 62cm base

Version 1 / 100 S



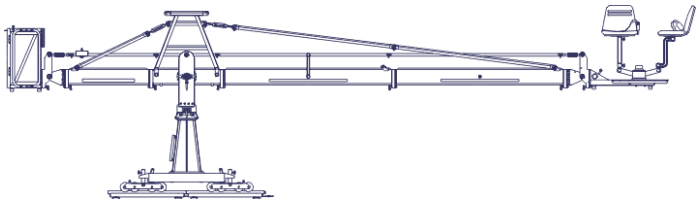
Front extension arms required	1 x 200 cm / 6’ 6”
Rear extension arm required	1 x 100 cm / 3’ 3”
Lift range	417 cm / 13’ 8”
Maximum Euro-adapter height	362 cm / 11’ 10“
Lift capacity (working load) 2 pers. + accessories	250 kg / 550 lbs
Counterweight required for max. load	432 kg / 950 lbs
Crane weight (excluding dolly and weights)	225 kg / 495 lbs
Dolly weight	49 kg / 107 lbs
Arm reach (pivot to camera head mount)	323 cm / 10’ 7“
Length of rear end (pivot to outside of bucket)	206 cm / 6’ 9“

Version 2 / 100 S



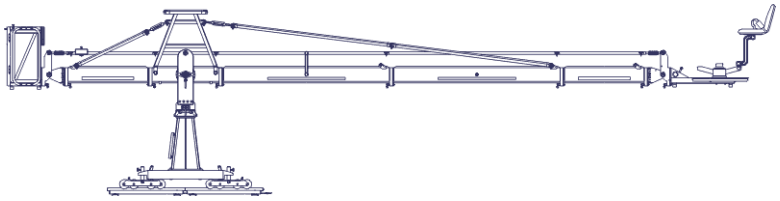
Front extension arms required	1 x 200 cm / 6’ 6” + 100 cm / 3’ 3”
Rear extension arm required	1 x 100 cm / 3’ 3”
Lift range	575cm / 18’ 10”
Maximum Euro-adapter height	441cm / 14’ 5”
Lift capacity (working load) 2 pers. + accessories	250 kg / 550 lbs
Counterweight required for max. load	638 kg / 1403 lbs
Crane weight (excluding dolly and weights)	260 kg / 572 lbs
Dolly weight	49 kg / 107 lbs
Arm reach (pivot to camera head mount)	421cm / 13’ 9”
Length of rear end (pivot to outside of bucket)	206 cm / 6’ 9“

Version 3 / 100 S



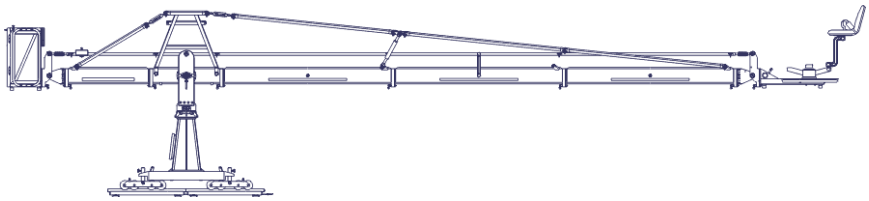
Front extension arms required	2 x 200 cm / 6’ 6”
Rear extension arm required	1 x 100 cm / 3’ 3”
Lift range	737cm / 24’ 2”
Maximum Euro-adapter height	521cm / 17’ 1”
Lift capacity (working load) 2 pers. + accessories	250 kg / 550 lbs
Counterweight required for max. load	840 kg / 1848 lbs
Crane weight (excluding dolly and weights)	273 kg / 600 lbs
Dolly weight	49 kg / 107 lbs
Arm reach (pivot to camera head mount)	521 cm / 17’ 1“
Length of rear end (pivot to outside of bucket)	206 cm / 6’ 9“

Version 4 / 100 S



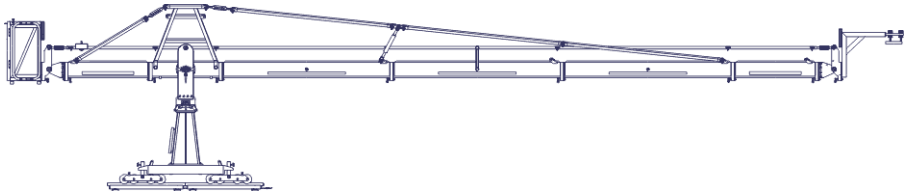
Front extension arms required	2 x 200 cm / 6’ 6” + 100 cm / 3’ 3”
Rear extension arm required	1 x 100 cm / 3’ 3”
Lift range	895cm / 29’ 4”
Maximum Euro-adapter height	600cm / 19’ 8”
Lift capacity (working load) 1 pers. + accessories	180 kg / 396 lbs
Counterweight required for max. load	820 kg / 1804 lbs
Crane weight (excluding dolly and weights)	280 kg / 616 lbs
Dolly weight	49 kg / 107 lbs
Arm reach (pivot to camera head mount)	618 cm / 20’ 3”
Length of rear end (pivot to outside of bucket)	206 cm / 6’ 9“

Version 5 / 100 S



Front extension arms required	3 x 200 cm / 6’ 6”
Rear extension arm required	1 x 100 cm / 3’ 3”
Lift range	1057cm / 34’ 8”
Maximum Euro-adapter height	681cm / 22’ 4”
Lift capacity (working load) 1 pers. + accessories	130 kg / 286 lbs
Counterweight required for max. load	812 kg / 1786 lbs
Crane weight (excluding dolly and weights)	295 kg / 649 lbs
Dolly weight	49 kg / 107 lbs
Arm reach (pivot to camera head mount)	718 cm / 23’ 6“
Length of rear end (pivot to outside of bucket)	206 cm / 6’ 9“

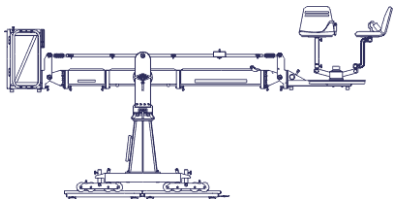
Version 6 / 100 S



Front extension arms required	3 x 200 cm / 6’ 6” + 100 cm / 3’ 3”
Rear extension arm required	1 x 100 cm / 3’ 3”
Lift range	1215cm / 39’ 10”
Maximum Euro-adapter height	777cm / 25’ 5”
Lift capacity (working load) camera + accessories	80 kg / 176 lbs
Counterweight required for max. load	670 kg / 1474 lbs
Crane weight (excluding dolly and weights)	288 kg / 633 lbs
Dolly weight	49 kg / 107 lbs
Arm reach (pivot to camera head mount)	820 cm / 26’ 10”
Length of rear end (pivot to outside of bucket)	206 cm / 6’ 9“

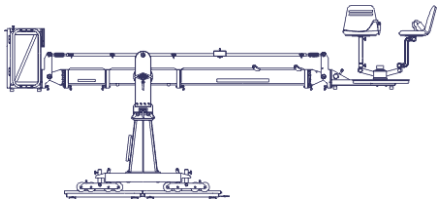
With 50cm section to weight bucket and split column

Version 1 / 50 S



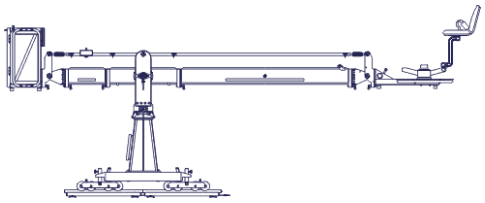
Front extension arms required	1 x 100 cm / 3’ 3”
Rear extension arm required	1 x 50 cm / 20”
Lift range	256 cm / 8’ 4“
Maximum Euro-adapter height	281 cm / 9’ 4”
Lift capacity (working load) 2 pers. + accessories	250 kg / 550 lbs
Counterweight required for max. load	390 kg / 858 lbs
Crane weight (excluding dolly and weights)	211 kg / 464 lbs
Dolly weight	49 kg / 107 lbs
Arm reach (pivot to camera head mount)	223 cm / 7’ 3“
Length of rear end (pivot to outside of bucket)	156 cm / 5’ 1“

Version 2 / 50 S



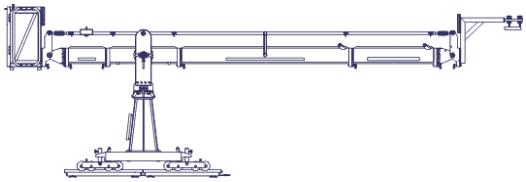
Front extension arms required	1 x 150 cm / 5’
Rear extension arm required	1 x 50 cm / 20”
Lift range	336 cm / 11’
Maximum Euro-adapter height	321cm / 10’ 6”
Lift capacity (working load) 2 pers. + accessories	200 kg / 440 lbs
Counterweight required for max. load	432 kg / 950 lbs
Crane weight (excluding dolly and weights)	217 kg / 477 lbs
Dolly weight	49 kg / 107 lbs
Arm reach (pivot to camera head mount)	273cm / 8’ 11”
Length of rear end (pivot to outside of bucket)	156 cm / 5’ 1“

Version 3 / 50 S



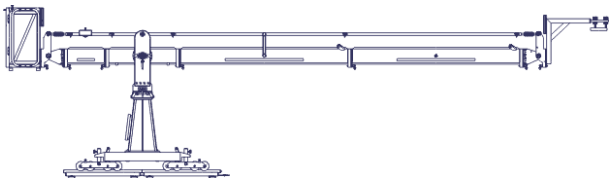
Front extension arms required	1 x 200 cm / 6’ 6”
Rear extension arm required	1 x 50 cm / 20”
Lift range	417cm / 13’ 8”
Maximum Euro-adapter height	362cm / 11’ 10”
Lift capacity (working load) 1 pers. + accessories	160 kg / 550 lbs
Counterweight required for max. load	456 kg / 1003 lbs
Crane weight (excluding dolly and weights)	221 kg / 486 lbs
Dolly weight	49 kg / 107 lbs
Arm reach (pivot to camera head mount)	323 cm / 10’ 7“
Length of rear end (pivot to outside of bucket)	156 cm / 5’ 1“

Version 4 / 50 S



Front extension arms required	1 x 200 cm / 6’ 6” + 100 cm / 3’ 3”
Rear extension arm required	1 x 50 cm / 20”
Lift range	575cm / 18’ 10”
Maximum Euro-adapter height	457cm / 14’ 11”
Lift capacity (working load) camera + accessories	80 kg / 176 lbs
Counterweight required for max. load	368 kg / 809 lbs
Crane weight (excluding dolly and weights)	208 kg / 457 lbs
Dolly weight	49 kg / 107 lbs
Arm reach (pivot to camera head mount)	424 cm / 13’ 11”
Length of rear end (pivot to outside of bucket)	156 cm / 5’ 1“

Version 5 / 50 S



Front extension arms required	2 x 200 cm / 6’ 6”
Rear extension arm required	1 x 50 cm / 20”
Lift range	737cm / 24’ 2”
Maximum Euro-adapter height	538cm / 17’ 7”
Lift capacity (working load) camera + accessories	60 kg / 132 lbs
Counterweight required for max. load	418 kg / 919 lbs
Crane weight (excluding dolly and weights)	217 kg / 477 lbs
Dolly weight	49 kg / 107 lbs
Arm reach (pivot to camera head mount)	524 cm / 17’ 2“
Length of rear end (pivot to outside of bucket)	156 cm / 5’ 1“