

2018

Service Rig Procedures



Special Instructions/Conditions of Use

Reading user procedure manual prior to use is essential

Only persons that have been deemed competent in the operation of the system should operate the system

Rigscape

2018/09/13

Rev 1.15



Ride Inc. Manuals & Supplements Inserts Table of Contents Page

This manual is intended to provide information for the guidance of the rig worker. Accuracy of content cannot be absolutely guaranteed. Anyone who needs to rely on any Particular subject in this manual is advised to verify it independently by contact your RIDE Inc. representative. Information presented here is subject to change, and RIDE Inc. Reserves the right to make changes to these manuals or procedures without notice. This Manual is subject to change as we improve or modify our products.

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Actual product specifications may vary, and features, functionality and other product Specifications are subject to change without notice or obligation.

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RIDE Inc. recommends that a function test be performed upon rig up and/or if the system Setup has been manipulated in any way.



R.I.D.E. Inc. Rigscope Procedures

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i.) Specifications:

- Weights:
 - 16 lbs (7kg) trolley
 - 58 lbs. (28 kg) Rigscope shuttle
 - 160 lbs. (75 kg) Magnegress
 - 37 lbs. (18 kg) tension link
 - 85 lbs. (40 kg) Bear Claw park-on anchor
 - 170 lbs. (80 kg) Bear Claw double park-on anchor.
- Capacity - 310 lbs (140 kg) – 1 person

Maximum allowable wind speed for Rigscope operation:

- Double service rig: 58 mph - 50 knots - 93 kph
- Double drilling rig: 58 mph - 50 knots - 93 kph
- Triple drilling rig: 58 mph - 50 knots - 93 kph

Anchor requirements:

- Ground Anchor must resist 3,600 lbs. (1633 kg) @ 30° upward angle.

Cable Life:

- There is a 5 year maximum cable life.
 - At any time no cable should be used if frayed or damaged in anyway.



Waivers

Warning: This product is part of an emergency descent system. The user must follow manufacturer's instructions for each part of the system. These instructions must be provided to the user of this equipment. The user must read & understand these instructions before using this equipment. Manufacturer's instructions must be followed for proper use & maintenance of this equipment. Alterations or misuse of this equipment, or failure to follow instructions, may result in serious injury or death.

Important: If you have questions on the use, care or suitability of this equipment for your application, contact RIDE Inc. **(780-621-1570)**

Warning: Do not use a body belt with this equipment. Body belts do not support your entire body, which may result in serious injury or death.

Warning: It is the responsibility of the user of this equipment to be oriented in the correct care & use of this equipment. The user & purchaser must be aware of the operating characteristics, application limits & consequences of improper use of this equipment.

Warning: Training must be conducted without exposing the trainee to a fall hazard. Training should be repeated on a periodic basis.

Inspection: A formal inspection should be completed if the system parameters are changed, such as after a system is moved, re-rigged or the anchorage is moved or should an upset condition should arise.

A visual inspection must be done by the user before every use.



1. Safety Warnings

1.1. Read these warnings carefully before inspecting, setting up, installing, using, or tearing down the Rigscope/Magnegress system.

1.1.1. Wear mandatory personal protection equipment at all times.

1.1.2. Do not attempt to lift or move the Magnegress by yourself.

1.1.3. Use proper lifting techniques when inspecting, setting up, installing or tearing down the Rigscope/Magnegress system.

1.1.4. Watch for crush points when inspecting, setting up, installing, using, or tearing down the Rigscope/Magnegress system.

1.1.5. Watch for tripping hazards when inspecting, setting up, installing, using, or tearing down the Rigscope/Magnegress system.

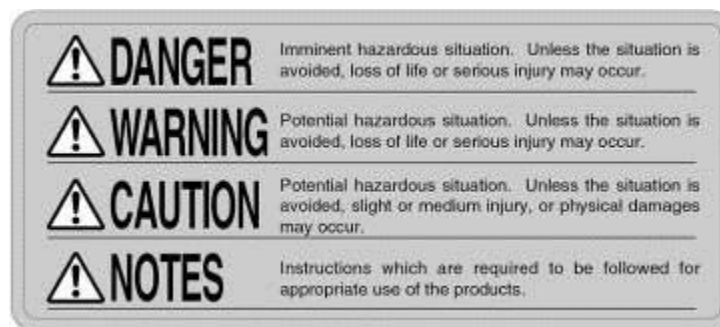
1.1.6. Do not use the Rigscope/Magnegress system unless you are wearing a safety harness and are secured only to the trolley fall-arrest device and shuttle working lanyard attachment ears.

1.1.7. This device is designed for single occupancy only

1.1.8. Do not use if cable, trolley or anchor is damaged.

1.2. Instructions in this manual

1.2.1. The instructions in this manual are classified into “DANGER”, “WARNING”, “CAUTION” and “NOTES”, according to the degree of risk and hindrance.





2. Setup (Rod Basket)

2.1. Checklist

2.1.1. Create a copy of the checklist on the following page & use for your records.

Checklist

| Section | Set-Up Check list | Daily Check List |
|---------|--|--|
| 3. | Setup (Rod Basket) | |
| 2.2. | Choosing Cable _____ | |
| 2.3. | Docking Station _____ | |
| 2.4. | Magnegress Placement _____ | Landing Area Clear _____ |
| 2.5. | Park-On Anchor Assembly _____ | Secondary Weight in Place _____ |
| 2.6. | Magnegress Cable Installation _____ | |
| 2.7. | Tension Indicator _____ | Stored Away Properly _____ |
| 2.8. | Magnegress Override Brake _____ | All 3 Cover Pins in Place _____ |
| 2.9. | Trolley _____ | Cold Swage Positioned Properly _____ |
| 2.9.1 | SRL Installation _____ | Inspect & Function Test _____ |
| 2.10. | Tri-Handle _____ | Mounting Bolt in Place with Safety Pin _____ |
| 2.11. | Box-Handle _____ | Mounting Bolt in Place with Safety Pin _____ |
| 2.12. | Box-Handle & Fall Arrest Trolley _____ | Mounting Bolt in Place with Safety Pin _____ |
| 2.16. | Operation _____ | |
| 2.17. | Tear Down _____ | |

Print Name _____

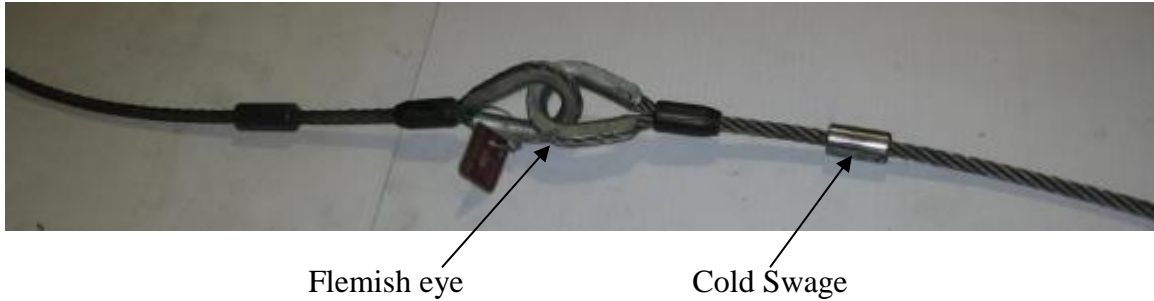
Signature _____

Date _____



2.1. Choosing cable

- Rod basket – Long cable
- Tubing board – Short cable



- 2.1.1. Inspect the cable for frays, kinks or any other damage. Check the Flemish eyes & cold swages for damage or wear.

Danger: Do not operate system with cable including the Flemish & swage that is in any way damaged.

Note: Call your local distributor for replacement cable.



2.2. Docking Station

2.2.1. Tri-handle

2.2.2. **Method 1:** Installing cable into docking station then installing docking station.



2.2.2.1. Ensure the spring clip is installed correctly & undamaged in the docking station magnetic pocket.

2.2.2.2. Check the magnet side of the pocket for debris or damage to the magnet.



2.2.2.3. Fasten a hoisting sling securely around the docking station, attach the assembly to the winch & tag line. (If mounting the docking station without the cable proceed to 4.2.3.)



2.2.2.4. Remove sheave gate safety pin.



2.2.2.5. Open sheave gate & slide out sheave assembly.

2.2.2.6. Check that the sheave rotates freely on the shaft.

2.2.2.7. Confirm the spring clip is installed correctly & undamaged.



- 2.2.2.8. Create a 180° return bend on cable and push it through the underside of the docking station until the 180° return bend is exposed about 6” through the sheave gate opening.



- 2.2.2.9. Insert sheave inside the 180° back bend & line up the flats on the sheave shaft to the slots in the docking system.



2.2.2.10. Draw or pull both the cable & sheave until the sheave pin is completely bottomed out in the slot.



2.2.2.11. Flip down the sheave gate into its closed position & install the safety pin.



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- 2.2.2.12. Winch docking station to the mounting position mounted on the platform.



Warning: Ensure clear communication between the winch operator & the person installing the docking station.

- 2.2.2.13. Mount the docking station to the platform's mounting point. Use the supplied bolt, nut & safety pin.

- 2.2.2.14. Remove the hoisting sling from the docking station.

- 2.2.3. **Method 2:** Connecting cable after mounting docking station.



- 2.2.3.1. Mount the docking station to the platform's mounting point. Use the supplied bolt & safety pin.

- 2.2.3.2. Remove the hoisting sling from the docking station.



2.2.3.3. Fasten a hoisting sling securely to the cable leaving approximately 6 ft (2.8 m) of tail.

Warning: Potential sheave dropping, crush points, overhead hazards for people below, body positioning & fall restraints hazards.



2.2.3.4. Winch the cable to the docking station.



- 2.2.3.5. Remove sheave gate safety pin.
- 2.2.3.6. Ensure the spring clip is installed correctly & undamaged in the docking station magnetic pocket.
- 2.2.3.7. Check the magnet side of the pocket for debris or damage to the magnet



- 2.2.3.8. Open sheave gate & slide out sheave assembly.
- 2.2.3.9. Check that the sheave rotates freely on the shaft.
- 2.2.3.10. Confirm the spring clip is installed correctly & undamaged.



- 2.2.3.11. Create a 180° return bend on cable and push it through the underside of the docking station until the 180° returning bend is exposed about 6” through the sheave gate opening.



- 2.2.3.12. Insert sheave inside the 180° back bend & line up the flats on the sheave shaft to the slots in the docking system.



- 2.2.3.13. Draw or pull both the cable & sheave until the sheave pin is completely bottomed out in the slot.



- 2.2.3.14. Flip down the sheave gate into its closed position & install the safety pin.

Warning: Potential strain, tripping, overhead & crush point hazards.

2.2.4. Box-handle



- 2.2.5. Install the docking station pivot bolt, cup, nut & cotter pin. Check that it rotates left to right freely (approx. total rotation 40°).



Sheave

2.2.6. Remove rotating sheave cover plate bolt & rotate the cover open.

Warning: Potential bolt dropping, crush points, overhead hazard for personnel below, body positioning & fall restraints hazards.

Danger: Do not replace the bolt with any other grade or length bolt.

2.2.7. Check for free rotation of sheave in docking station.

2.2.8. Check for wear or damage to the sheave groove.

2.2.9. Check the docking station's sheave shaft bolt nut & cotter for damage.



2.2.10. Create a 180° return bend on cable and insert it from the open side of the sheave assembly of the Breakaway docking station.



2.2.11. Draw or pull the cable to the sheave & rotate the sheave assembly cover closed & replace bolt securely & install jamb nut.

2.2.12. Disconnect the hoisting sling & the winch line from the cable.



2.3. Magnegress Placement



- 2.3.1. Walk until the cable equalizes. The cable should have a slight tension to the feel. Mark the end of the cable loop on the ground with the heel of your boot. The cable can be walked out 20° either side of center. Walk the cable back until the cable has slackened.

Warning: Releasing the cable while still under tension from the anchor position could harm personnel and/or damage equipment.

- 2.3.2. Follow the steps below for the Bear Claw anchor system.



Caution: The Magnegress weighs 160lbs. (75 kg).



2.3.2.16. Position the back of the Magnegress frame approximately in line to your mark on the ground.



2.3.3. Remove the protective cover, exposing the Magnegress system.



2.3.4. Remove the long adjustment bolt from the receiver tube on the Magnegress frame & the short stopper bolt from the tension link.



2.3.5. Install the tension link into the receiver tube from the back side of the Magnegress. Turn the pinion hand wheel clockwise to draw the tension link into the receiver tube until the stopper bolt hole is fully exposed on the front side of the receiver tube.



2.3.6. Insert the stopper bolt, nut & safety pin.

Note: Rack notches face up & towards the pinion hand wheel.
Installation of tension link to receiver tube is made easier with two people.



2.4. Anchor Assembly - Bear Claw double park-on



Caution: Bear Claw anchor weighs 85 lbs. (40kg) per component.

Danger: The anchor must meet or exceed the manufacturer's specifications:

- Anchor — capable of resisting a pull of 3,600 lbs. (1633 kg) @ 30° upward angle as per engineered specifications



2.4.1. Position the Bear Claw park-on anchor so it attaches to the tension link & install anchor bolt through tension link. Install nut & safety pin.

Warning: The Bear Claw double park-on anchor is designed to work only one way. The single ear on the front of the front anchor is for the tension link. A double ear on the rear of the front anchor & a double ear on the front of the rear anchor are for the joiner cable to be installed between the Bear Claws with the supplied bolts. The rear Bear Claw anchor can only be used with the joiner cable to the front anchor. Never connect the rear Bear Claw anchor directly to the tension link.



2.4.2. Position the secondary Bear Claw park-on anchor so it attaches to the joiner cable & install joiner cable bolt through two ears capturing the cable between them. Install nut & safety pin.



2.4.3. Drag the rear Bear Claw anchor back away from the front anchor until the cable becomes taut.



2.4.4. Align the Magnegress system to the top anchor point.



2.4.5. Secure 2200 lbs. (1000kg) onto the Bear Claw double park-on anchor.

Note: If using a truck ensure both front wheels engage onto both of the anchor's saddles at the same time.

Note: The truck may have to be rocked forward & back slightly to securely seat the Bear Claws of the anchor into the soil.

Danger: Ensure all company lock out procedures are performed on the anchoring vehicle.



2.4.6. Alternatively Drive on with the aid of a block.

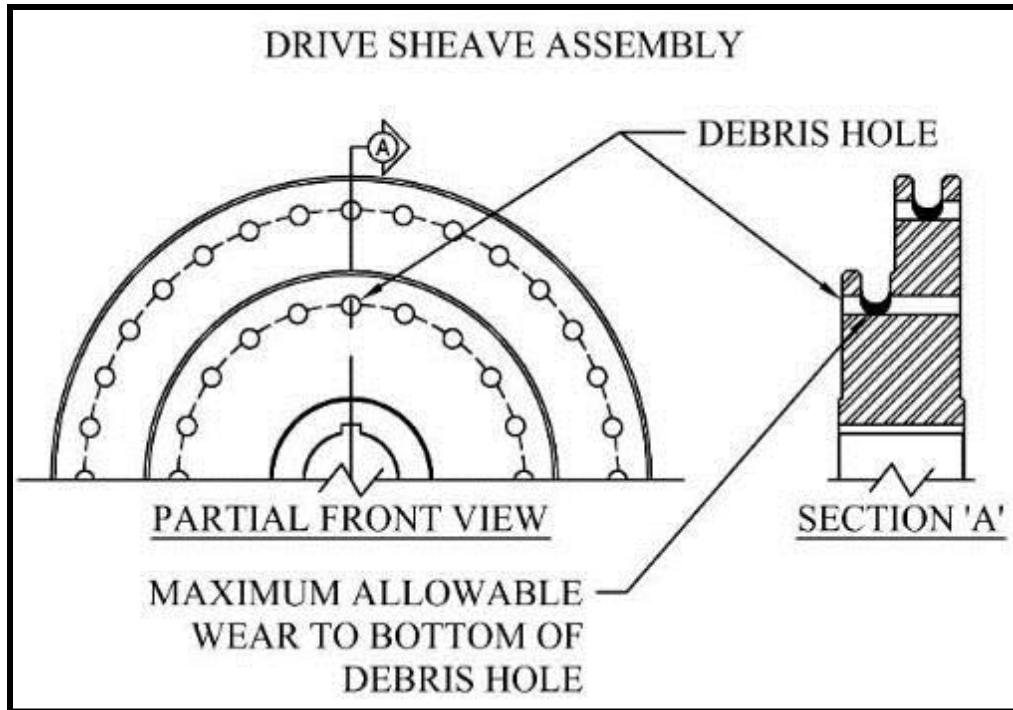
2.4.7. If alternate anchor system is used the tension bar must still be secured to the anchor using supplied bolt.



2.5.3. Keeping the cable separated grasp cable firmly & walk towards the desired anchor position.

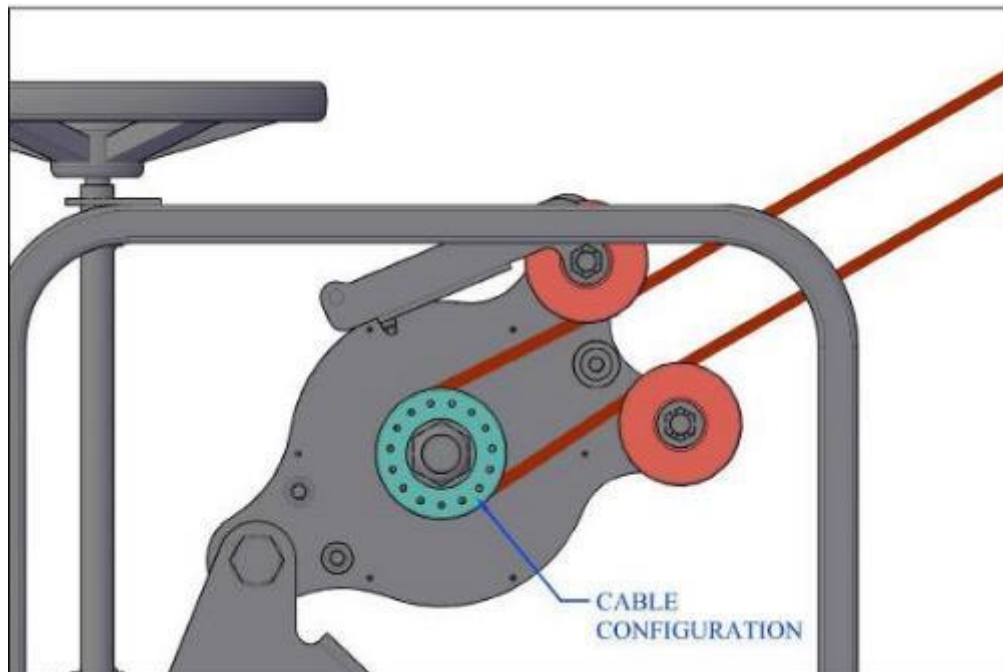


2.5.4. Install the cable on the proper sized sheave as per cover plate decal.



2.5.5. Check the drive sheave debris holes for debris &/or wear.

Note: Sheaves may vary in sizes due to different applications



2.5.6. Cable thread configuration



Flemish Eyes

- 2.5.7. Create a 180° return bend on cable and insert it around the drive sheave & in between the idler sheaves of the Magnegress. Ensure the Flemish eyes are on the upper cable travelling to the top of the top sheave.



- 2.5.8. Cable must line up with corresponding idler sheave grooves when installed on the drive sheave.

Danger: Incorrect setup could result in a serious injury.

Warning: Never grab the Flemish eye cable connections directly. The 2 Flemish eye contact areas are an extreme crush point area.

Warning: Check the cable for twist.

2.6. Tension Indicator



- 2.6.1. Rotate out the tension indicator. Side slip the cable across the back stop pin until the cable slips to the top of the back stop pin.



- 2.6.2. Turn the pinion hand wheel clock-wise, move the brake assembly towards anchor there by tightening the cable, tighten until the indicator pad becomes flush with the top face of the tension indicator. When the two hole line up on cage and tension link, insert the adjustment bolt, install the nut and safety pin.

Warning: Never stick anything except the supplied bolts into the adjustment bolt holes.

Note: It is recommended to go to the next tighter hole in the tension link if the receiver tube hole is between holes.



2.6.3. Again, side-slip the tensioned cable off of the back stop pin.



2.6.4. Rotate the tension indicator back into the stored position.

2.7. Magnegress Override-Brake Setup

- 2.7.1. After the cable is installed onto the Magnegress begin the Magnegress Override-brake procedures.



- 2.7.2. With the cover off check that the brake pad moves freely & that the spring returns the pad to its resting position against the back plate of the cover (arrow).



- 2.7.3. Place the cover onto the Magnegress brake system.



2.7.4. Insert all three cover safety pins.

2.7.5. The following steps are only required when the override-brake is required.



2.7.6. Check to see that the spring pin is properly inserted into the override-brake handle.



2.7.7. Insert handle into the override-brake hub.



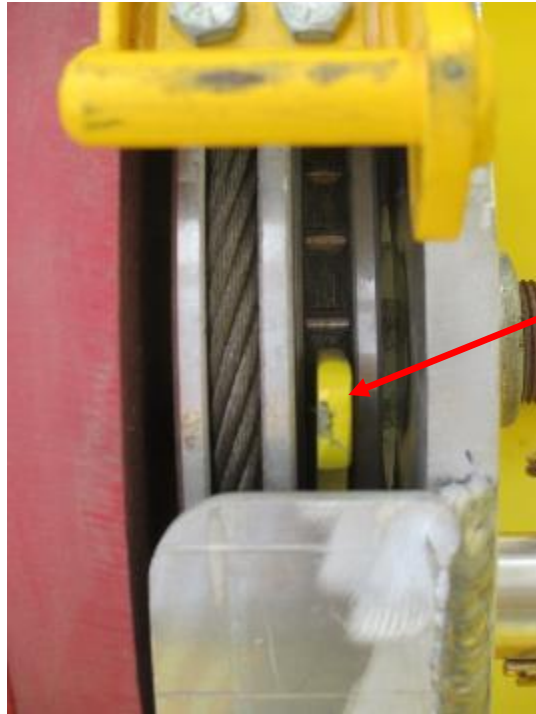
2.7.8. Insert safety pin into the back side of the handle.



2.7.9. This is a view of the assembled override-brake with handle installed.



2.7.10. Apply pressure on the handle as in the direction indicated on the Magnegress cover.



2.7.11. The override brake pad (arrow) should ride the center of the outer sheave.

Note: Cover plate will not fit on the Magnegress housing if something is not properly in place. If this happens check cable orientation on sheave, tension indicator orientation or debris.

Danger: All 3 cover plate pins must be installed during operation.

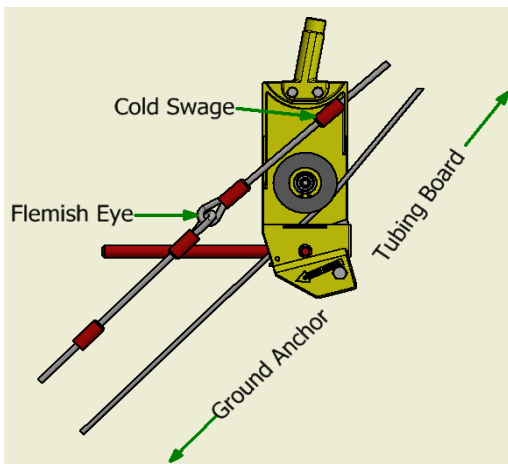


2.7.12. Re-install the Magnegress protective cover.

2.8. Trolley



- 2.8.1. Pull & turn the lock-pin knob to lift the locking pin out of the locking pin opening.
- 2.8.2. Rotate the sheave gate knob on the trolley counter clockwise until the knob becomes completely disconnected from the threaded shaft.



- 2.8.3. Place the cold swage, located on the upside or tubing board side of the Flemish eye, inside the trolley, above the sheave. Insert the lower cable inside the trolley as well but underneath the sheave (arrow points towards Magnegress).

Caution: Ensure Flemish eye swage is not getting pinched in between the gate & body while tightening the sheave gate knob.

Danger: The cold cable swage must become trapped inside the trolley on the top side of the sheave.



- 2.8.4. Close the sheave gate & tighten the sheave gate knob clockwise until snug. Turn the lock-pin knob until it drops into the lock position (DO NOT use wrenches to tighten). Inspect the sheave gate's locator flap for damage & for proper fit.

Note: The sheave gate knob may have to be rotated counter-clockwise slightly to allow for the lock pin to engage.

Caution: Ensure Flemish eye swage is not getting pinched in between the gate & body while tightening the sheave gate knob.

Danger: The cold cable swage must become trapped inside the trolley on the top side of the sheave.

Note: The OEM cable has a swage on either side of the Flemish eye. This allows for the initial setup of the cable on the docking station sheave to be orientated either way. This ensures that a cable swage will always be on the top side of the Flemish eye.

Note: If the trolley is mounted on the bottom swage this will impede on the docking of the trolley.



- 2.8.5. Check tri-handle the docking pin on the trolley for debris or damage. The top of the pin mates to the magnet & debris will affect the strength of this connection.

2.9. Tri-handle



- 2.9.1. Insert the tri-handle into the trolley receiver tube & install the keeper bolt, nut & safety pin. (Handle mounting hole will only line up when inserted correctly)



- 2.9.2. Attach the SRL (Self-Retracting Lanyard) into the SRL anchor point at the end of the tri-handle shank.



Danger: Inspect SRL device as per the manufacturer's specification.



- 2.9.2.1. Pulling the lower cable towards the Magnegress & pulling the upper cable towards the docking station will propel the trolley up to the person at the docking station waiting to guide it into place.



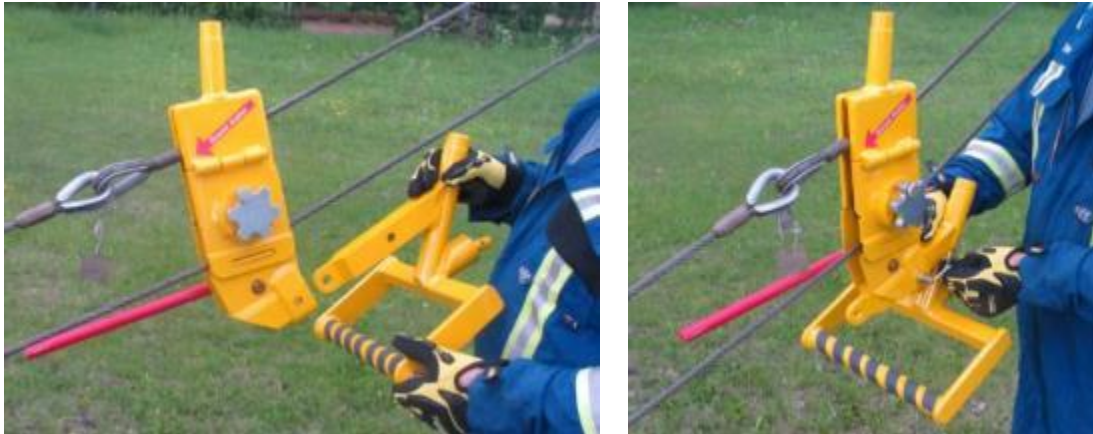
- 2.9.2.2. Guide the docking pin on the trolley housing into the docking station's receiver tube.



- 2.9.3. Upon entering onto the working platform the SRL must be connected to a certified harness on the rear shoulder-height D-Ring before disconnecting from the platform mounted fall-arrest.
- 2.9.4. It is very important that you connect before you disconnect. Connect to the SRL on the Tri-Handle. Once you confirm the connection is secure you may disconnect from the platform mounted fall-arrest.

Danger: You must not be tied off to anything other than the Tri-Handle at this point.

2.10. Box-handle only



- 2.10.1. Insert the Box-handle into the trolley receiver tube & install the keeper bolt, nut & safety pin. (Handle mounting hole will only line up when inserted correctly)



- 2.10.2. Attach the SRL (Self-Retracting Lanyard) into the SRL anchor point at the end of the Box-handle shank.



Danger: Inspect SRL device as per the manufacturer's specification.



- 2.10.2.1. Pulling the lower cable towards the Magnegress & pulling the upper cable towards the docking station will propel the trolley up to the person at the docking station waiting to guide it into place.



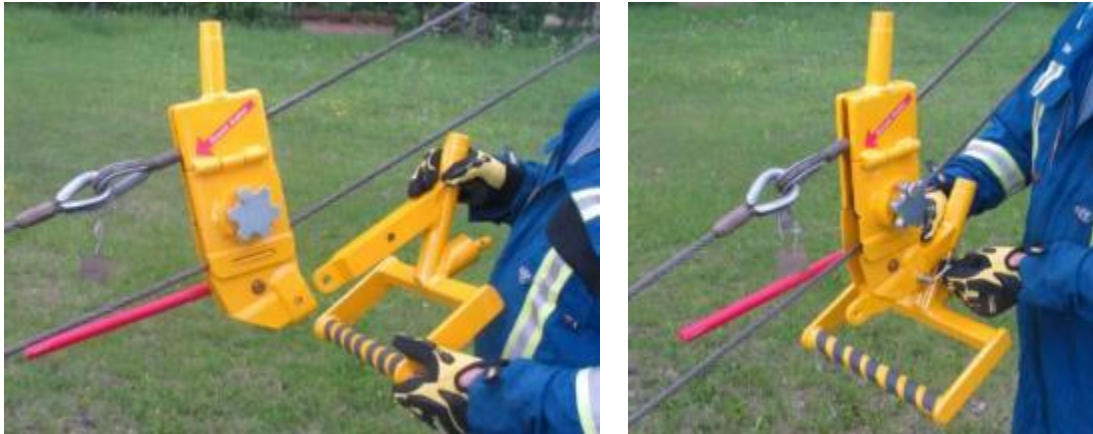
- 2.10.2.2. Guide the docking pin on the trolley housing into the docking station's receiver tube.



- 2.10.3. Upon entering onto the working platform the SRL must be connected to a certified harness on the rear shoulder-height D-Ring before disconnecting from the platform mounted fall-arrest.
- 2.10.4. It is very important that you connect before you disconnect. Connect to the SRL on the Box-Handle. Once you confirm the connection is secure you may disconnect from the platform mounted fall-arrest.

Danger: You must not be tied off to anything other than the Box-Handle at this point.

2.11. Box-handle & fall arrest trolley



2.11.1. Insert the box-handle connector bar into the trolley receiver tube & install the keeper bolt, nut & safety pin.



2.11.2. Insert the box-handle receiving pin into the receiving tube of the SRL mount spacer.

Note: Recommended SRL 10' (3 m) MSA cable workman.



2.11.3. Install the pin through this assembly.



Danger: Inspect SRL device as per the manufacturer's specification.



2.11.4. Inspect entire system for defects.



2.12. Box-handle & fall Arrest Trolley New Connection System



2.12.1. Insert the box-handle connector bar into the trolley receiver tube & install the keeper bolt, nut & safety pin.



2.12.2. Intersect the two ends of the fall Arrest Assembly through the open slots. If properly installed the keystone will end up on the top



2.12.3. Simultaneously pivot & rotate the Spacer Bar/Fall Arrest assembly & install the pivoting fall arrest trolley by rotating the arm around both cables.

Note: Recommended SRL 10' (3 m) MSA cable workman.



2.12.4. Install the pin through this assembly.



Danger: Inspect SRL device as per the manufacturer’s specification.



2.12.5. Inspect entire system for defects.



2.13. Hoisting up to the docking station can be done in 2 different ways.

Method: 1

- 2.13.1.1. Connect a platform mounted winch cable to the trolley & winch it up to the docking station, slowing at the top and guiding the trolley into the docking station by hand. Disconnect the winch cable after docking is complete.

Warning: Clear communication must be established between the person on the winch & the person docking the trolley to ensure not to over pull on the winch causing damage to the system.



Method: 2

- 2.13.1.2. Pulling the lower cable towards the Magnegress & pulling the upper cable towards the docking station will propel the trolley & box-handle assembly up to the person at the docking station waiting to guide it into place.



- 2.13.1.3. Guide the docking pin on the trolley housing into the docking station's receiver tube.

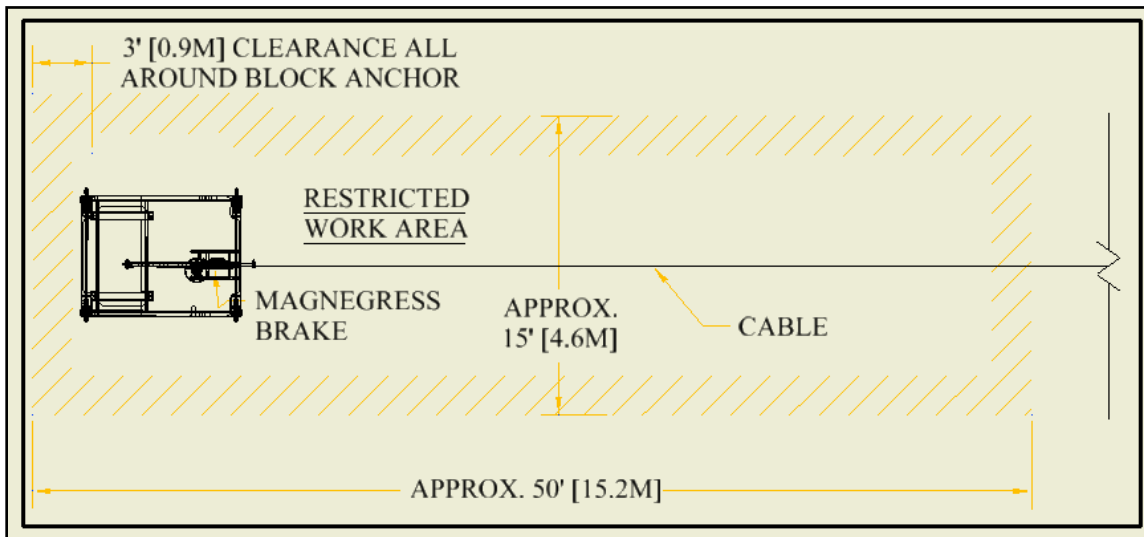
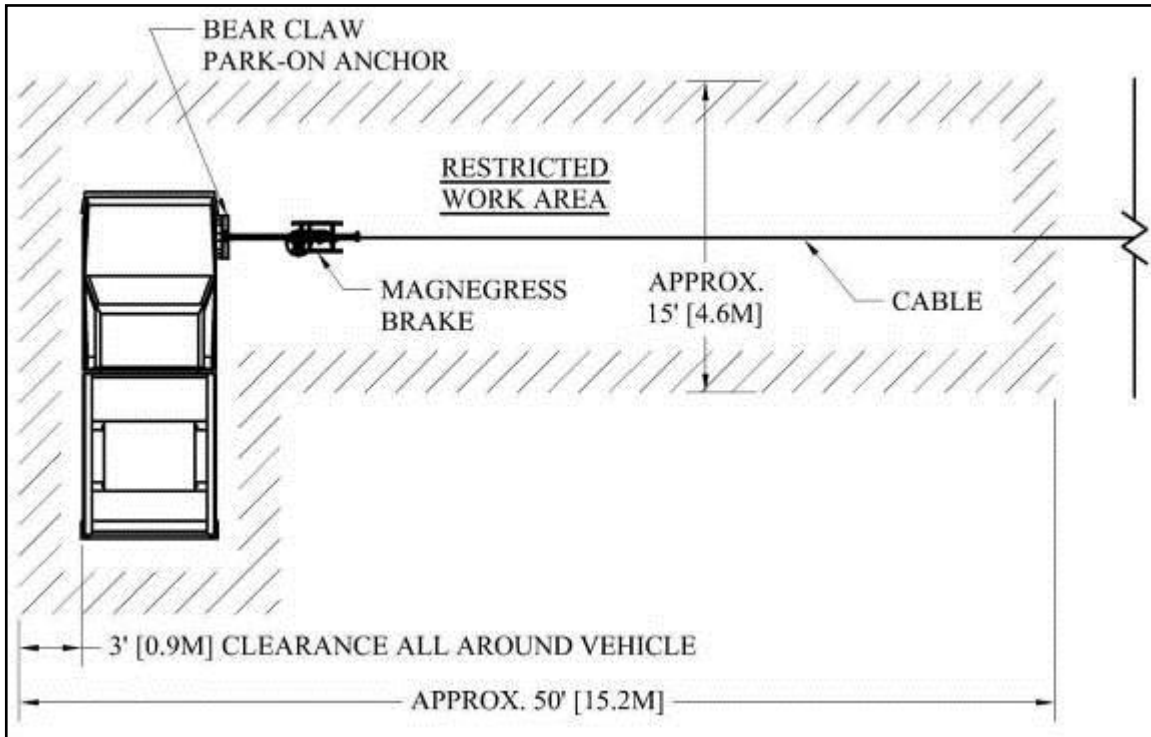


- 2.13.2. Upon entering onto the working platform the SRL must be connected to a certified harness on the rear shoulder-height D-Ring before disconnecting from the platform mounted fall-arrest.
- 2.13.3. It is very important that you connect before you disconnect. Connect to the fall-arrest on the trolley. Once you confirm the connection is secure you may disconnect from the platform mounted fall-arrest.

Danger: You must not be tied off to anything other than the fall arrest trolley at this point.



2.14.4. Establish and clear restricted work area.



Danger: Ensure all personnel and operators of vehicles or equipment are aware of the cable, block anchor or anchoring vehicle and restricted area.

Danger: Ensure all company lock out procedures are performed on the anchoring vehicle.

Note: Nylon ribbon may be attached to the cable as a visual aid.



2.15. Operation

2.15.4. Safety notes reminder

- 2.15.4.1. **Read these warnings carefully before inspecting, setting up, installing, using, or tearing down the system.**
- 2.15.4.2. **Wear mandatory personal protection equipment at all times.**
- 2.15.4.3. **Use proper lifting techniques when inspecting, setting up, installing, or tearing down the system. Refer to Specifications (i.) for product weights.**
- 2.15.4.4. **Watch for crush points when inspecting, setting up, installing, using, or tearing down the system.**
- 2.15.4.5. **Watch for tripping hazards when inspecting, setting up, installing, using, or tearing down the system.**
- 2.15.4.6. **Do not use the system unless you are wearing a safety harness and are secured only to the fall-arrest.**
- 2.15.4.7. **This is designed for single person only.**
- 2.15.4.8. **Never drive over your cables.**
- 2.15.4.9. **Double check the system every day if set up for extended periods between moves.**
- 2.15.4.10. **Ensure all personnel and operators of vehicles or equipment are aware of the cable, anchor, anchor vehicle and restricted area.**
- 2.15.4.11. **An investigation must follow any and all incidents to determine the cause and the corrective actions to be taken. Notify the manufacturer, RIDE Inc. at 780-621-1570.**



2.15. General Operations

Caution: The pre-shift inspection must be conducted by the person riding the tri-handle system before every shift



2.15.1.1. Turn, grasp the tri-handle.



2.15.1.2. Applying weight to the tri-handle releases the trolley from the docking station. The Magnegress brake will automatically control your descent.



2.15.1.3. Undocking using overhead fall-arrest.



2.15.1.4. If the worker uses the overhead fall-arrest, his weight will disengage the trolley from the docking station.

Caution: The tri-handle should be used in all situations to prevent unnecessary strain on the fall-arrest system.

2.15.1.5. Record every run of the system in the Descent log supplied at the back of the manual.



2.16. Teardown

2.16.1. This procedure assumes the main trolley is still attached to the platform. If the main trolley has been run down to the ground, then continue with Step 4.4 of this procedure.

Option A:

2.16.2. Ride the main trolley down to the ground.

Option B:

2.16.3. Undock trolley from docking station & leave suspended on line.

2.16.4. From ground position pull trolley down with cable using the hand over hand technique.

2.16.5. Remove the SRL (self-retracting Lanyard) from the box-handle & uninstall the box-handle from the trolley by removing the keeper bolt, nut & safety pin.

2.16.6. Pull the lock-pin knob then turn to the unlocked position & loosen the trolley sheave gate knob until the gate is opened. Section 2.8.1

Caution: Watch for crush points when removing trolley from cable.

2.16.7. Remove the upper & lower cable from inside the trolley housing. Section 2.8.3

2.16.8. Remove the Magnegress housing cover plate & the 3 cover plate keeper pins. Section **Error! Reference source not found.**

2.16.9. Turn the pinion hand wheel clock-wise to remove tension on the adjustment bolt at this point, remove the adjustment bolt. Then turn the pinion wheel counter clock-wise all the way to the stopper bolt to loosening the cable. Section 2.6.2

Caution: Watch for crush points when removing the cable.

2.16.10. Remove the cable from the Magnegress brake housing. Section 2.5.7



RIDE Inc. Rigscope Service Rig Procedures Manual

Warning: Releasing the cable while still under tension from the docking station could slide fast & hit personnel and/or equipment.

- 2.16.11. Install the Magnegress housing cover plate & re-install the 3 cover plate keeper pins. Section 2.5.1
- 2.16.12. Remove the tension link stopper bolt, nut & safety pin. Section 2.3.6
- 2.16.13. Uninstall the tension link from the receiver tube from the back side of the Magnegress housing receiver tube. Turn the pinion hand wheel counter clockwise to push the tension link out & remove link. Section 2.3.5
- 2.16.14. If using the bear claw anchor, drive off the anchor. Section 2.4.5
- 2.16.15. Remove the tension link from the anchor system. Reinstall the bolts, nuts & safety pins at each end of the tension link. Section 2.4.1
- 2.16.16. Move the 85 lbs (40 kg) anchor & the 160 lbs (75 kg) Magnegress system to their transportation/storage location.



3. Setup (Tubing Board Box-Handle & Break Away Bar)

3.1. Checklist

3.1.1. Create a copy of the checklist on the following page & use for your records.

Checklist

| Section | Setup Check | Daily Check List |
|---|--|--|
| 3 Setup (Tubing Board Breakaway Box-Handle & Break Away Bar) | | |
| 3.2. | Pivoting Davit Arm Setup _____ | |
| 3.3. | Choosing Cable _____ | |
| 3.4. | Davit Sheave Cable Install _____ | |
| 3.5. | Magnegress Placement _____ | Landing Area Clear _____ |
| 3.6. | Park-On Anchor Assembly _____ | Secondary Weight in Place _____ |
| 3.7. | Concrete Anchor Placement _____ | Landing Area Clear _____ |
| 3.8. | Magnegress Cable Installation _____ | |
| 3.9. | Tension Indicator _____ | Stored Away Properly _____ |
| 3.10. | Magnegress Override Brake _____ | All 3 Cover Pins in Place _____ |
| 3.11. | Trolley _____ | Cold Swage Positioned Properly _____ |
| 3.12. | Breakaway Box-Handle _____ | Mounting Bolt in Place with Safety Pin _____ |
| 3.12.2 | Fall Arrest Trolley & Spacer Bar _____ | Connecting Pins In Place _____ |
| 3.12.3 | SRL Installation _____ | Inspected and Function Tested _____ |
| 3.12.16 | Attach Break-Away Bar _____ | Check Cable Connection _____ |
| 3.15. | Operation _____ | |
| 3.16. | Tear Down _____ | |

Print Name _____

Signature _____

Date _____



3.2. Pivoting Davit arm setup

- 3.2.1. The pivoting davit arm was designed to fold away during transport.
- 3.2.2. After the archway has been erected confirm the pins securing the back rail are installed.
- 3.2.3. The cable can remain connected to the davit sheave during transport if the situation allows.



- 3.2.4. Remove the safety pins from the davit locking pins. Rotate the davit arm slightly by hand to remove the tension on the locking pins. Rotate the locking pins off stopper plates & lower the pins until it bottoms out. Also secure the sling onto the davit arm at this point.

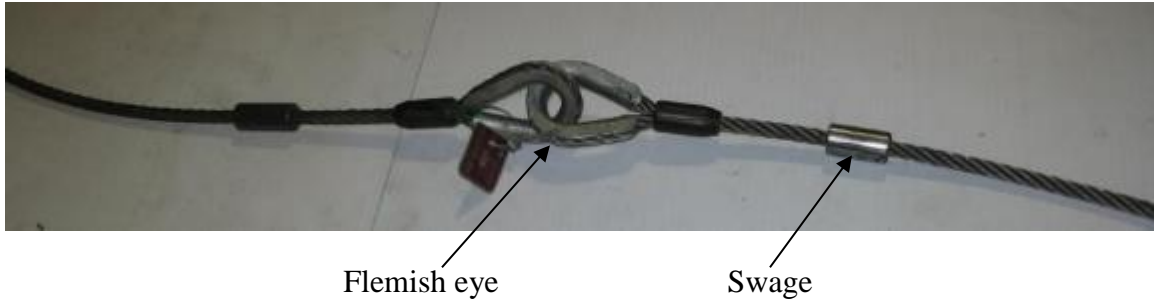


- 3.2.5. Using the rig mounted winch, rotate the davit arm into its working position. Push the locking pins into the locking position, rotate them so they rest on the stopper plates & install the safety pins.



3.3. Choosing cable

- Rod basket – Long cable
- Tubing board – Short cable



3.3.1. Inspect the cable for frays, kinks or any other damage. Check the Flemish eyes & swages for damage or wear.

Danger: Do not operate system with cable including the Flemish & swage that is in any way damaged.

Note: Call your local distributor for replacement cable.



- 3.4.3. Install the docking station pivot bolt, cup, nut & cotter pin. Check that it rotates left to right freely (approx. total rotation 40°).



Sheave

- 3.4.4. Remove rotating sheave cover plate bolt & rotate the cover open.

Warning: Potential bolt dropping, crush points, overhead hazard for personnel below, body positioning & fall restraints hazards.

Danger: Do not replace the bolt with any other grade or length bolt.

- 3.4.5. Check for free rotation of sheave in docking station.
3.4.6. Check for wear or damage to the sheave groove.
3.4.7. Check the docking station's sheave shaft bolt nut & cotter for damage.



3.4.8. Create a 180° return bend on cable and insert it from the open side of the sheave assembly of the Breakaway docking station.

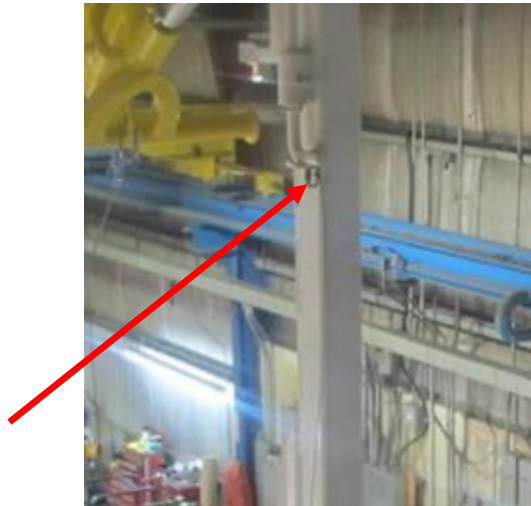


3.4.9. Draw or pull the cable to the sheave & rotate the sheave assembly cover closed & replace bolt securely & install jamb nut.

3.4.10. Disconnect the hoisting sling & the winch line from the cable.



3.4.11. If the archway is not pre-equipped with the welded holster & release brackets install them as shown with the bolts facing opposite the anchor.



3.4.12. Again if not equipped, drill a 3/8" hole in the davit arm locking pin rest tab & insert a quick link (red arrow)

Warning: Potential strain, tripping, overhead & crush point hazards.



3.5. Magnegress Placement



3.5.1. Walk until the cable equalizes. The cable should have a slight tension to the feel. Mark the end of the cable loop on the ground with the heel of your boot. The cable can be walked out 20° either side of center. Walk the cable back until the cable has slackened.

Warning: Releasing the cable while still under tension from the anchor position could harm personnel and/or damage equipment.

Follow the steps below for the Bear Claw anchor system.



Caution: The Magnegress weighs 160lbs. (75 kg).



3.5.2. Position the back of the Magnegress frame approximately in line to your mark on the ground.



3.5.3. Remove the protective cover, exposing the Magnegress system.



- 3.5.4. Remove the long adjustment bolt from the receiver tube on the Magnegress frame & the short stopper bolt from the tension link.



- 3.5.5. Install the tension link into the receiver tube from the back side of the Magnegress. Turn the pinion hand wheel clockwise to draw the tension link into the receiver tube until the stopper bolt hole is fully exposed on the front side of the receiver tube.



3.5.6. Insert the stopper bolt, nut & safety pin.

Note: Rack notches face up & towards the pinion hand wheel.
Installation of tension link to receiver tube is made easier with two people.



3.6. Anchor assembly - Bear Claw double park-on



Caution: Bear Claw anchor weighs 85 lbs (40kg) per component.

Danger: The anchor must meet or exceed the Breakaway manufacturer's specifications:

- Anchor — capable of resisting a pull of 3,600 lbs. (1633 kg) @ 30° upward angle as per engineered specifications



- 3.6.1. Position the Bear Claw park-on anchor so it attaches to the tension link & install anchor bolt through tension link. Install nut & safety pin.

Warning: The Bear Claw double park-on anchor is designed to work only one way. The single ear on the front of the front anchor is for the tension link. A double ear on the rear of the front anchor & a double ear on the front of the rear anchor are for the joiner cable to be installed between the Bear Claws with the supplied bolts. The rear Bear Claw anchor can only be used with the joiner cable to the front anchor. Never connect the rear Bear Claw anchor directly to the tension link.



- 3.6.2. Position the secondary Bear Claw park-on anchor so it attaches to the joiner cable & install joiner cable bolt through two ears capturing the cable between them. Install nut & safety pin.



- 3.6.3. Drag the rear Bear Claw anchor back away from the front anchor until the cable becomes taut.



- 3.6.4. Align the Magnegress system to the top anchor point.



3.6.5. Secure 2200 lbs (1000kg) onto the Bear Claw double park-on anchor.

Note: If using a truck ensure both front wheels engage onto both of the anchor's saddles at the same time.

Note: The truck may have to be rocked forward & back slightly to securely seat the Bear Claws of the anchor into the soil.

Danger: Ensure all company lock out procedures are performed on the anchoring vehicle.



3.6.6. Alternatively Drive on with the aid of a block.

3.6.7. If alternate anchor system is used the tension bar must still be secured to the anchor using supplied bolt.



3.7. Magnegress/Anchor Placement (if equipped with concrete pour-in anchor)



3.7.1. With the anchor slightly elevated raise the transportation legs prior to placement



3.7.2. Position the front of the anchor approximately in line to your mark on the ground.



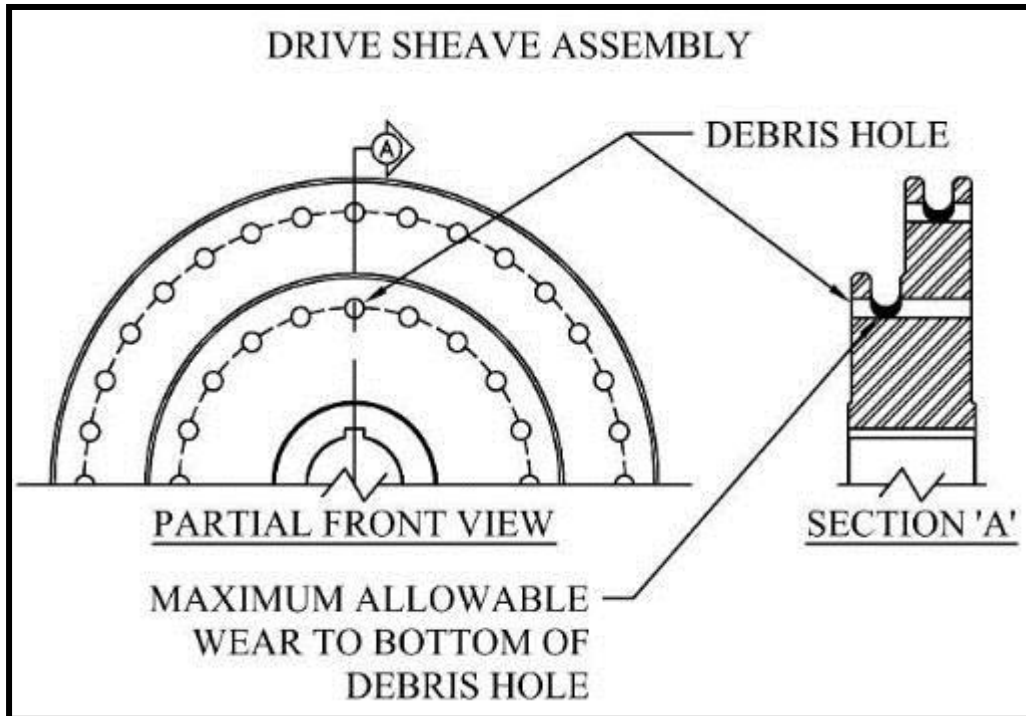
3.7.3. Remove the protective cover, exposing the Magnegress system.



3.8.3. Keeping the cable separated grasp cable firmly & walk towards the desired anchor position.

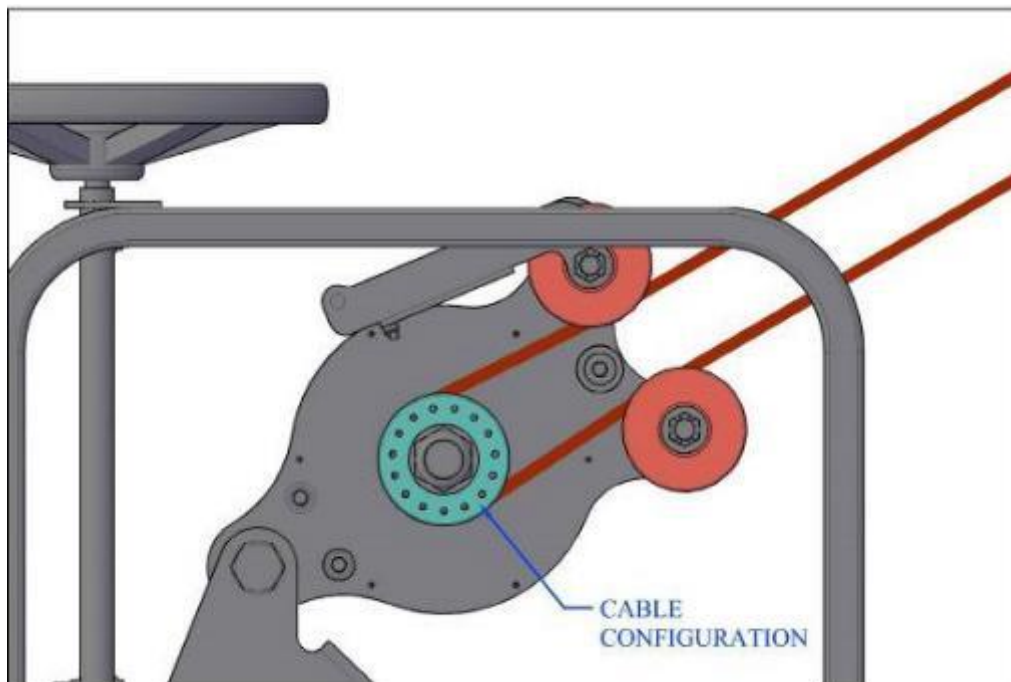


3.8.4. Install the cable on the proper sized sheave as per cover plate decal.



3.8.5. Check the drive sheave debris holes for debris &/or wear.

Note: Sheaves may vary in sizes due to different applications



3.8.6. Cable thread configuration



Flemish Eyes

- 3.8.7. Create a 180° return bend on cable and insert it around the drive sheave & in between the idler sheaves of the Magnegress. Ensure the Flemish eyes are on the upper cable travelling to the top of the top sheave.



- 3.8.8. Cable must line up with corresponding idler sheave grooves when installed on the drive sheave.

Danger: Incorrect setup could result in a serious injury.

Warning: Never grab the Flemish eye cable connections directly. The 2 Flemish eye contact areas are an extreme crush point area.

Warning: Check the cable for twist.



3.9. Tension Indicator



3.9.1. Rotate out the tension indicator. Side slip the cable across the back stop pin until the cable slips to the top of the back stop pin.



3.9.2. Turn the pinion hand wheel clock-wise, move the brake assembly towards anchor there by tightening the cable, tighten until the indicator pad becomes flush with the top face of the tension indicator. When the two holes line up, insert the adjustment bolt, install the nut and safety pin.

Warning: Never stick anything except the supplied bolts into the adjustment bolt holes.

Note: It is recommended to go to the next tighter hole in the tension link if the receiver tube hole is between holes.



3.9.3. Again, side-slip the tensioned cable off of the back stop pin.



3.9.4. Rotate the tension indicator back into the stored position.

3.10. Magnegress Override-Brake Setup

3.10.1. After the cable is installed onto the Magnegress begin the Magnegress Override-brake procedures.



3.10.2. With the cover off check that the brake pad moves freely & that the spring returns the pad to its resting position against the back plate of the cover (arrow).



3.10.3. Place the cover onto the Magnegress brake system.



3.10.4. Insert all three cover safety pins.

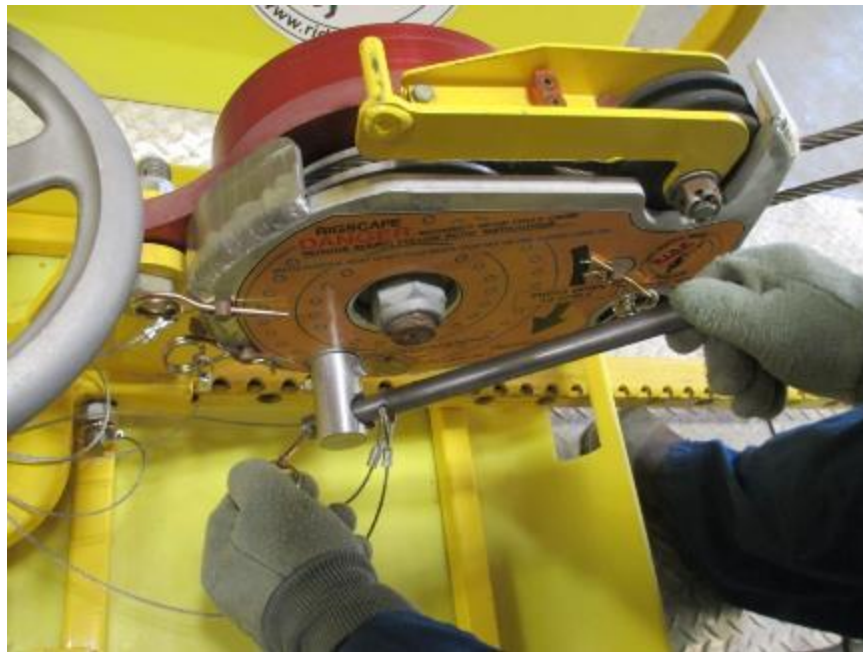
3.10.5. The following steps are only required when the override-brake is required.



3.10.6. Check to see that the spring pin is properly inserted into the override-brake handle.



3.10.7. Insert handle into the override-brake hub.



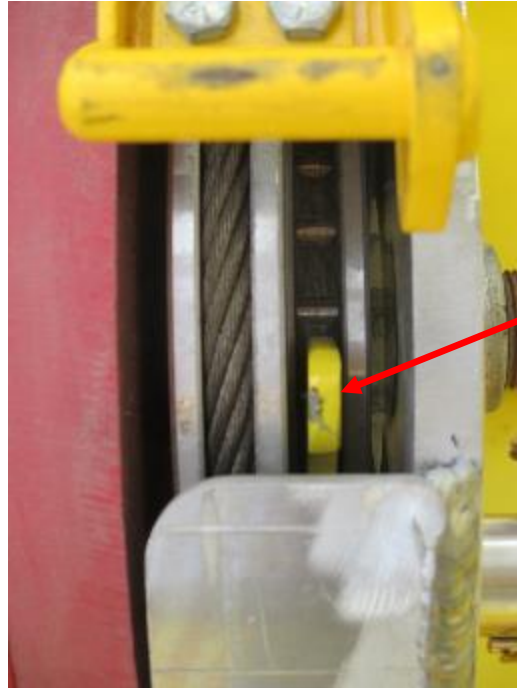
3.10.8. Insert safety pin into the back side of the handle.



3.10.9. This is a view of the assembled override-brake with handle installed.



3.10.10. Apply pressure on the handle as in the direction indicated on the Magnegress cover.



3.10.11. The override brake pad (arrow) should ride the center of the outer sheave.

Note: Cover plate will not fit on the Magnegress housing if something is not properly in place. If this happens check cable orientation on sheave, tension indicator orientation or debris.

Danger: All 3 cover plate pins must be installed during operation.



3.10.12. Re-install the Magnegress protective cover.

3.11. Trolley



3.11.1. Pull & turn the lock-pin knob to lift the locking pin out of the locking pin opening.

3.11.2. Rotate the sheave gate knob on the trolley counter clockwise until the knob becomes completely disconnected from the threaded shaft.



3.11.3. Check that the secondary brake operates freely, the brake pad is not excessively worn & that the sheave rotates freely. The brake should spring back away from the sheave automatically.



- 3.11.4. Place the cold swage, located on the upside or tubing board side of the Flemish eye, inside the trolley, above the sheave. Insert the lower cable inside the trolley as well but underneath the sheave (arrow points towards Magnegress).

Caution: Ensure Flemish eye swage is not getting pinched in between the gate & body while tightening the sheave gate knob.

Danger: The cold cable swage must become trapped inside the trolley on the top side of the sheave.



- 3.11.5. Close the sheave gate & tighten the sheave gate knob clockwise until snug. Turn the lock-pin knob until it drops into the lock position (DO NOT use wrenches to tighten). Inspect the sheave gate's locator flap for damage & for proper fit.

Note: The sheave gate knob may have to be rotated counter-clockwise slightly to allow for the lock pin to engage.

3.12. Breakaway Box-Handle with Trolley



3.12.1. Insert the box-handle connector bar into the trolley receiver tube & install the keeper bolt, nut & safety pin.



3.12.2 Insert the Fall Arrest Trolley pin into the Spacer bar & pin the assembly.





3.12.3. Install the pivoting fall arrest trolley by rotating the arm around both cables.



3.12.2. Install the pivoting SRL (Self-Retracting Lanyard) mount by rotating the arm (arrow) around both cables.



3.12.3. Attach the SRL (Self-Retracting Lanyard) into the SRL anchor hole of the mount.

Note: Recommended SRL 10' (3 m) MSA cable workman.



3.12.4. Insert the box-handle receiving pin into the receiving tube of the SRL mount spacer.



3.12.5. Install the pin through this assembly.



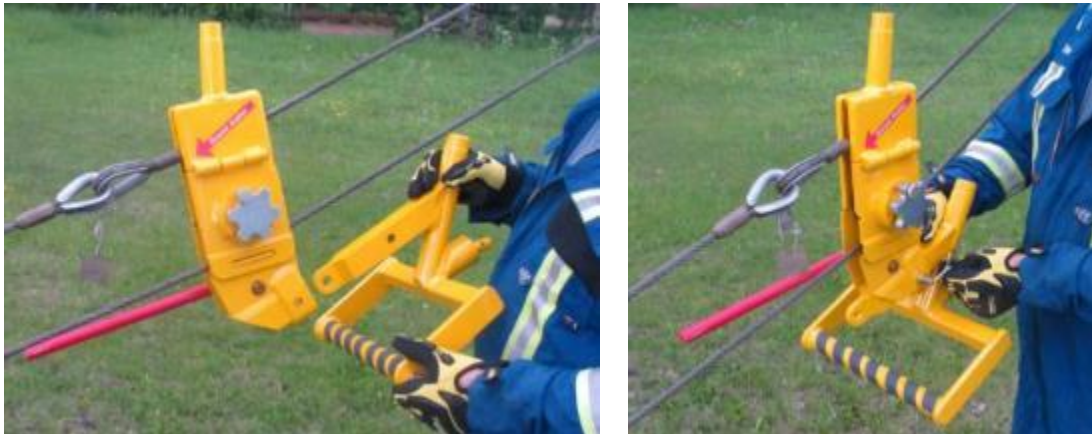
Danger: Inspect SRL device as per the manufacturer's specification.



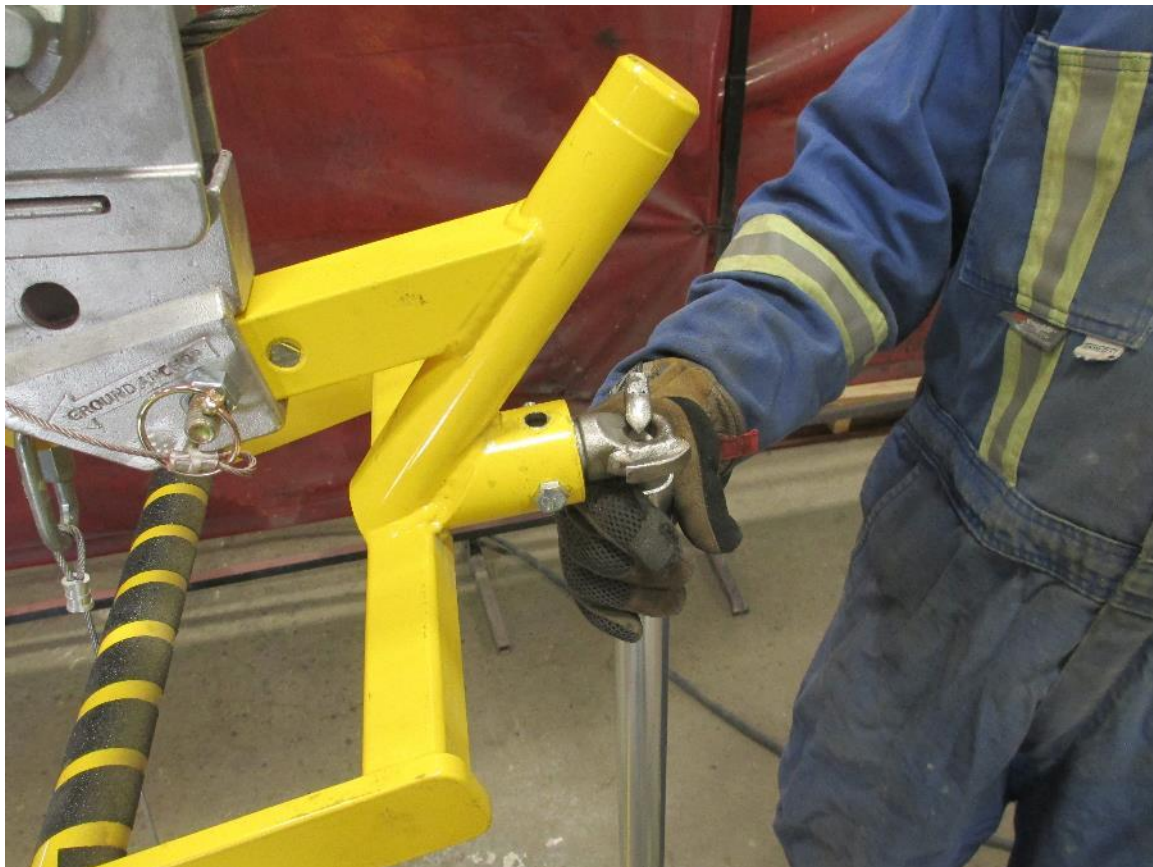
3.12.6. Attach break-away bar cable to front of box-handle



3.13. Breakaway Box-Handle with Trolley New Connection System



3.13.1. Insert the box-handle connector bar into the trolley receiver tube & install the keeper bolt, nut & safety pin.



3.13.2. Intersect the two ends through the open slots.



3.13.3. Pivot & rotate the Trolley & Spacer Bar assembly.



3.13.4. Install the pivoting fall arrest trolley by rotating the arm around both cables.



3.13.5. Connect the spacer bar to the fall arrest trolley



3.13.6. Attach the SRL (Self-Retracting Lanyard) into the SRL anchor hole of the mount.



Note: Recommended SRL 10' (3 m) MSA cable workman.



Danger: Inspect SRL device as per the manufacturer's specification.



3.14. Hoisting up to the docking station can be done in 2 different ways.

Method: 1

3.14.1. Connect a platform mounted winch cable to the trolley & winch it up to the docking station, slowing at the top and guiding the trolley into the docking station by hand. Disconnect the winch cable after docking is complete.

Warning: Clear communication must be established between the person on the winch & the person docking the trolley to ensure not to over pull on the winch causing damage to the system.



Method: 2

3.14.2. Pulling the lower cable towards the Magnegress & pulling the upper cable towards the docking station will propel the trolley & box-handle assembly up to the person at the docking station waiting to guide it into place.



3.14.3. Guide the box-handle into the receiving magnetic cup on the archway.



3.14.4. Insert the breakaway bar into the holster bracket then slide the other end of the bar into the release bracket & into place with the release pin.

Note: The hole with the cable on the breakaway bar must be facing up towards the box-handle.



3.14.5. Upon entering onto the working platform the SRL must be connected to a certified harness to the rear shoulder-height D-Ring before disconnecting from the rig mounted fall arrest.

3.14.6. It is very imperative that you connect before you disconnect. Connect to the fall-arrest on the Breakaway box-handle's SRL mount. Once you confirm the connection is secure you may disconnect from the rig mounted fall-arrest.

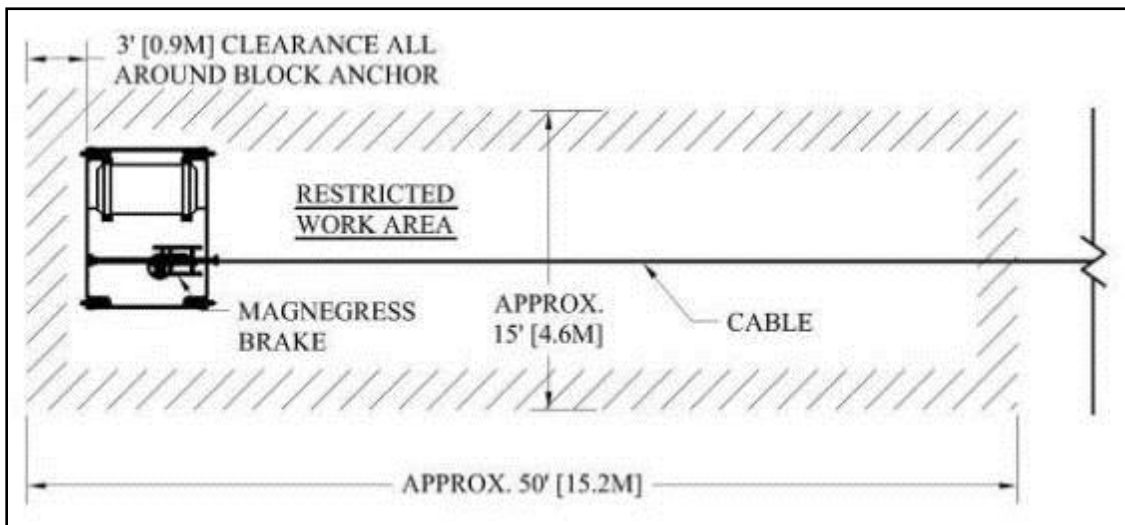
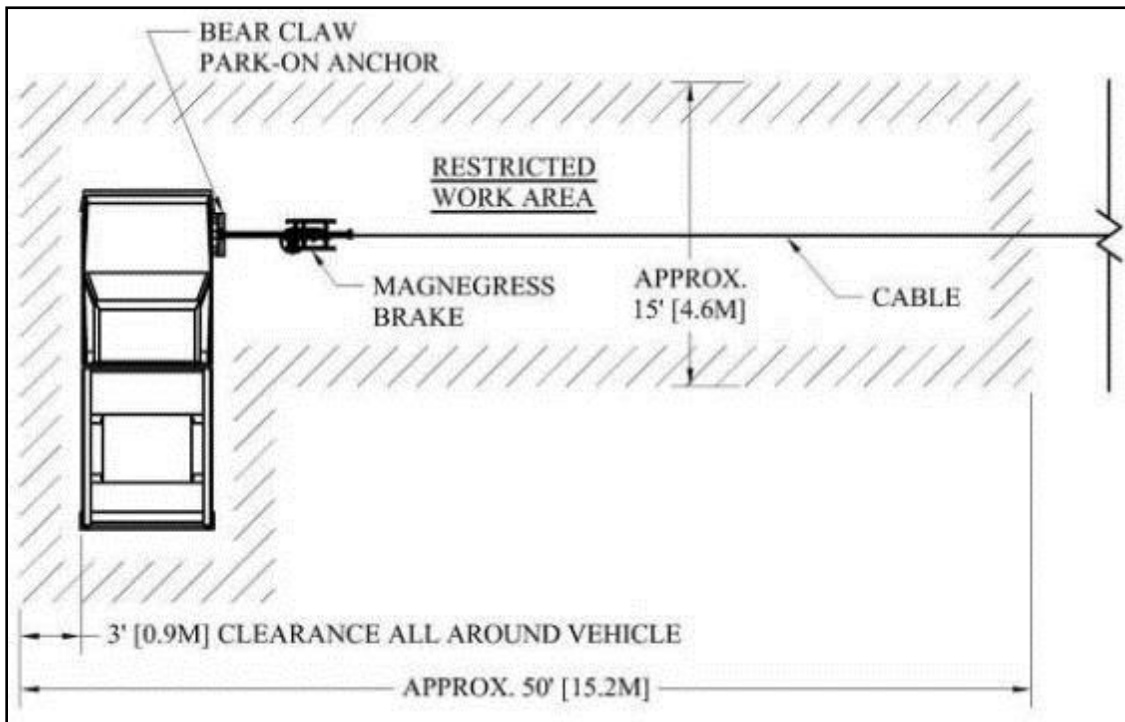
Danger: You must not be tied off to anything other than the Breakaway system at this point.



3.14.7. Connect the box-handle mounted work positioning lanyard to your harness waist belt D-ring.



3.14.8. Establish and clear restricted work area.



Danger: Ensure all personnel and operators of vehicles or equipment are aware of the cable, block anchor or anchoring vehicle and restricted area.

Danger: Ensure all company lock out procedures are performed on the anchoring vehicle.

Note: Nylon ribbon may be attached to the cable as a visual aid.



3.15.

Operation

3.15.1. Safety notes reminder

- 3.15.1.1. **Read these warnings carefully before inspecting, setting up, installing, using, or tearing down the Breakaway system.**
- 3.15.1.2. **Wear mandatory personal protection equipment at all times.**
- 3.15.1.3. **Use proper lifting techniques when inspecting, setting up, installing, or tearing down the Breakaway system. Refer to Specifications (i.) for product weights.**
- 3.15.1.4. **Watch for crush points when inspecting, setting up, installing, using, or tearing down the Breakaway system.**
- 3.15.1.5. **Watch for tripping hazards when inspecting, setting up, installing, using, or tearing down the Breakaway system.**
- 3.15.1.6. **Do not use the Breakaway system unless you are wearing a safety harness and are secured only to the Breakaway fall-arrest device and working lanyard.**
- 3.15.1.7. **This Breakaway is designed for single person only.**
- 3.15.1.8. **Never drive over your cables**
- 3.15.1.9. **Double check the system every day if set up for extended periods between moves.**
- 3.15.1.10. **Ensure all personnel and operators of vehicles or equipment are aware of the cable, anchor, anchor vehicle and restricted area.**
- 3.15.1.11. **An investigation must follow any and all incidents to determine the cause and the corrective actions to be taken. Notify the manufacturer, RIDE Inc. at 780-621-1570.**



3.15 General Operations

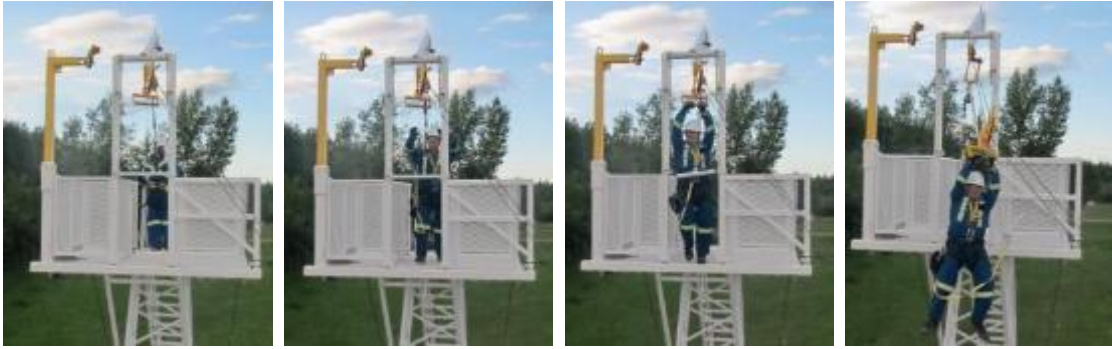


- 3.15.1.1 It is very important that you connect before you disconnect. Connect to the SRL on the Breakaway box-handle. Once you confirm the connection is secure you may disconnect from the rig mounted fall-arrest.

Danger: You must not be tied off to anything other than the Breakaway box-handle at this point.



- 3.15.1.2. Connect the box-handle mounted work positioning lanyard to your harness waist belt D-ring.



3.15.1.3. If the alarm sounds or an emergency occurs, in one motion as you walk off the working platform lift the latch pin from the release pocket & the breakaway bar will contact you mid torso. Grab the box-handle & step off the platform. The weight activated release mechanism will then disengage the box-handle.

Caution:

Ensure that the work position lanyard is controlled upon exit. This means:

3.15.1.4. Grab the work positioning lanyard approximately in the middle with your hand ensuring that the work positioning lanyard will not snag on any obstructions at the point of egress.



3.15.1.5. The Magnegress brake will automatically control your descent.

3.15.1.6. Record every run of the Breakaway system in the Log Book.



3.16. Teardown

- 3.16.1. This procedure assumes the Breakaway box-handle is still attached to the rig platform. If the Breakaway box-handle has been run down to the ground, then continue with Step 4.3 of this procedure.

Option A:

- 3.16.2. Ride the Breakaway box-handle down to the ground.

Option B:

- 3.16.3. Undock box-handle from docking station & leave suspended on line.
- 3.16.4. From ground position pull box-handle down with cable using the hand over hand technique.
- 3.16.5. Detach the SRL (Self-Retracting Lanyard) & box-handle mounted lanyard from the box-handle. Picture 4.4.5
- 3.16.6. If require & you haven't already uninstalled the box-handle, remove the SRL mount spacer from the box-handle by removing the keeper bolt, nut & safety pin. Replace bolt, nut & pin into the disassembled spacer. Picture 4.4.4
- 3.16.7. Disconnect the box-handle from the trolley by removing the keeper bolt, nut & safety pin. Replace bolt, nut & pin into the disassembled system. Picture 4.4.1
- 3.16.8. Pull the lock-pin knob then turn to the unlocked position & loosen the trolley sheave gate knob until the gate is opened. Picture 4.3.1

Caution: Watch for crush points when removing trolley from cable.

- 3.16.9. Remove the upper & lower cable from inside the trolley housing. Picture 4.3.3
- 3.16.10. Remove the Magnegress housing cover plate & the 3 cover plate keeper pins. Picture 4.2.3



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- 3.16.11. Turn the pinion hand wheel clock-wise to remove tension on the adjustment bolt at this point, a second person should be used to remove the adjustment bolt. Then turn the pinion wheel counter clock-wise all the way to the stopper bolt to loosening the cable. Picture 4.2.10

Caution: Watch for crush points when removing the cable.

- 3.16.12. Remove the cable from the Magnegress brake housing.

Warning: Releasing the cable while still under tension from the docking station could slide fast & hit personnel and/or equipment.

- 3.16.13. Install the Magnegress housing cover plate & re-install the 3 cover plate keeper pins.

- 3.16.14. Remove the tension link stopper bolt, nut & safety pin.

- 3.16.15. With a coworker's assistance uninstall the tension link from the receiver tube from the back side of the Magnegress housing receiver tube. Turn the pinion hand wheel counter clockwise to push the tension link out & remove link.

- 3.16.16. Remove the tension link from the anchor system. Reinstall the bolts, nuts & safety pins at each end of the tension link.

- 3.16.17. If using the bear claw anchor, drive off the anchor.

- 3.16.18. Using two or more people move the 85 lbs (40 kg) anchor & the 160 lbs (75 kg) Magnegress system to their transportation/storage location.



4. Setup (Tubing Board)

4.1. Checklist

4.1.1. Create a copy of the checklist on the following page & use for your records.

Checklist

| Section | Setup Check List | Daily Checklist |
|---------|------------------|-----------------|
|---------|------------------|-----------------|

4 Setup (Tubing Board Shuttle)

- | | | |
|--|-------|--|
| 4.2. Pivoting Davit Arm Setup | _____ | |
| 4.3. Choosing Cable | | |
| 4.4. Davit Sheave Cable Install | _____ | |
| 4.5. Magnegress Placement | _____ | Landing Area Clear_____ |
| 4.6. Park-On Anchor Assembly | _____ | Secondary Weight in Place_____ |
| 4.7. Concrete Anchor Placement | _____ | Landing Area Clear_____ |
| 4.8. Magnegress Cable Installation | _____ | |
| 4.9. Tension Indicator | _____ | Store Away Properly_____ |
| 4.10. Magnegress Override Brake | _____ | All 3 Cover Pins In Place_____ |
| 4.11. Trolley | _____ | Mounting Bolt in Place with Safety Pin_____ |
| 4.12. Rigscope Shuttle | _____ | Secondary Safety Cable in place Pin has gap_____ |
| 4.12.2. Fall Arrest Trolley&Spacer Bar | _____ | Connecting Pins in Place_____ |
| 4.12.9. SRL Installation | _____ | Inspected and Function Tested_____ |
| 4.13. Operation | _____ | |
| 4.14. Tear Down | _____ | |

Print Name _____

Signature_____

Date_____



4.2. Pivoting Davit arm setup

- 4.2.1. The pivoting davit arm was designed to fold away during transport.
- 4.2.2. After the archway has been erected confirm the pins securing the back rail are installed.
- 4.2.3. The cable can remain connected to the davit sheave during transport if the situation allows.



- 4.2.4. Remove the safety pins from the davit locking pins. Rotate the davit arm slightly by hand to remove the tension on the locking pins. Rotate the locking pins off stopper plates & lower the pins until it bottoms out. Also secure the sling onto the davit arm at this point.

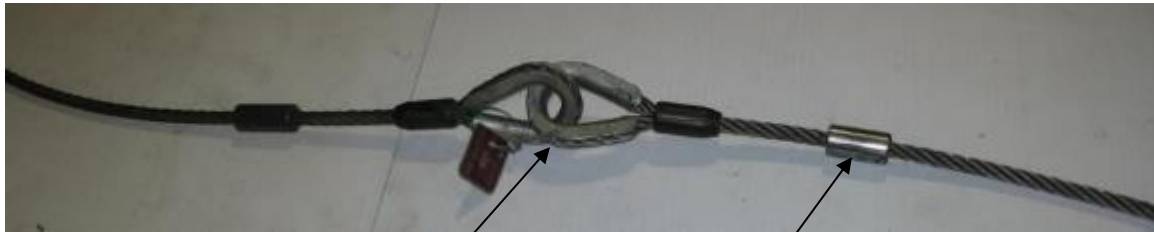


- 4.2.5. Using the rig mounted winch, rotate the davit arm into it working position. Push the locking pins into the locking position, rotate them so they rest on the stopper plates & install the safety pins.



4.3. Choosing cable

- Rod basket – Long cable
- Tubing board – Short cable



Flemish eye

Swage

- 4.3.1. Inspect the cable for frays, kinks or any other damage. Check the Flemish eyes & swages for damage or wear.

Danger: Do not operate system with cable including the Flemish & swage that is in any way damaged.

Note: Call your local distributor for replacement cable.



4.4. Davit Sheave Cable Installation



4.4.1. Fasten a hoisting sling securely to the cable leaving approximately 6 ft (2.8 m) of tail.



4.4.2. Winch the cable to the docking station.



Sheave

- 4.4.3. Remove rotating sheave cover plate bolt & rotate the cover open.

Warning: Potential bolt dropping, crush points, overhead hazard for personnel below, body positioning & fall restraints hazards.

Danger: Do not replace the bolt with any other grade or length bolt.

- 4.4.4. Check for free rotation of sheave in docking station.
4.4.5. Check for wear or damage to the sheave groove.
4.4.6. Check the docking station's sheave shaft bolt nut & cotter for damage.



- 4.4.7. Create a 180° return bend on cable and insert it from the open side of the sheave assembly of the Rigscope docking station.



- 4.4.8. Draw or pull the cable to the sheave & rotate the sheave assembly cover closed, replace bolt securely & install jamb nut.



- 4.4.9. Inspect the docking station pivot bolt, nut & cotter pin for damage. Check that it rotates left to right freely (approx. total rotation 40°).
- 4.4.10. Disconnect the hoisting sling & the winch line from the cable.



- 4.4.11. Ensure the spring clip is installed correctly on the top side of the docking station magnetic pocket.

Warning: Potential strain, tripping, overhead & crush point hazards.

4.5. Magnegress Placement



- 4.5.1. Walk until the cable equalizes. The cable should have a slight tension to the feel. Mark the end of the cable loop on the ground with the heel of your boot. The cable can be walked out 20° either side of center. Walk the cable back until the cable has slackened.

Warning: Releasing the cable while still under tension from the anchor position could harm personnel and/or damage equipment.



4.5.2. Follow the steps below for the Bear Claw anchor system.



Caution: The Magnegress weighs 160lbs. (75 kg).



4.5.3. Position the back of the Magnegress frame approximately in line to your mark on the ground.



4.5.4. Remove the protective cover, exposing the Magnegress system.



4.5.5. Remove the long adjustment bolt from the receiver tube on the Magnegress frame & the short stopper bolt from the tension link.



- 4.5.6. Install the tension link into the receiver tube from the back side of the Magnegress. Turn the pinion hand wheel clockwise to draw the tension link into the receiver tube until the stopper bolt hole is fully exposed on the front side of the receiver tube.



- 4.5.7. Insert the stopper bolt, nut & safety pin.

Note: Rack notches face up & towards the pinion hand wheel.
Installation of tension link to receiver tube is made easier with two people.



4.6. Anchor assembly - Bear Claw double park-on



Caution: Bear Claw anchor weighs 85 lbs (40kg) per component.

Danger: The anchor must meet or exceed the Rigscope manufacturer's specifications:

- Anchor — capable of resisting a pull of 3,600 lbs. (1633 kg) @ 30° upward angle as per engineered specifications



- 4.6.1. Position the Bear Claw park-on anchor so it attaches to the tension link & install anchor bolt through tension link. Install nut & safety pin.

Warning: The Bear Claw double park-on anchor is designed to work only one way. The single ear on the front of the front anchor is for the tension link. A double ear on the rear of the front anchor & a double ear on the front of the rear anchor are for the joiner cable to be installed between the Bear Claws with the supplied bolts. The rear Bear Claw anchor can only be used with the joiner cable to the front anchor. Never connect the rear Bear Claw anchor directly to the tension link.



- 4.6.2. Position the secondary Bear Claw park-on anchor so it attaches to the joiner cable & install joiner cable bolt through two ears capturing the cable between them. Install nut & safety pin.



- 4.6.3. Drag the rear Bear Claw anchor back away from the front anchor until the cable becomes taut.



- 4.6.4. Align the Magnegress system to the top anchor point.



4.6.5. Secure 2200 lbs (1000kg) onto the Bear Claw double park-on anchor.

Note: If using a truck ensure both front wheels engage onto both of the anchor's saddles at the same time.

Note: The truck may have to be rocked forward & back slightly to securely seat the Bear Claws of the anchor into the soil.

Danger: Ensure all company lock out procedures are performed on the anchoring vehicle.



4.6.6. Alternatively Drive on with the aid of a block.

4.6.7. If alternate anchor system is used the tension bar must still be secured to the anchor using supplied bolt.



4.7. Magnegress/Anchor Placement (if equipped with concrete pour-in anchor)



4.7.1. With the anchor slightly elevated raise the transportation legs prior to placement



4.7.2. Position the front of the anchor approximately in line to your mark on the ground.



4.7.3. Remove the protective cover, exposing the Magnegress system.



4.8. Magnegress Cable Install

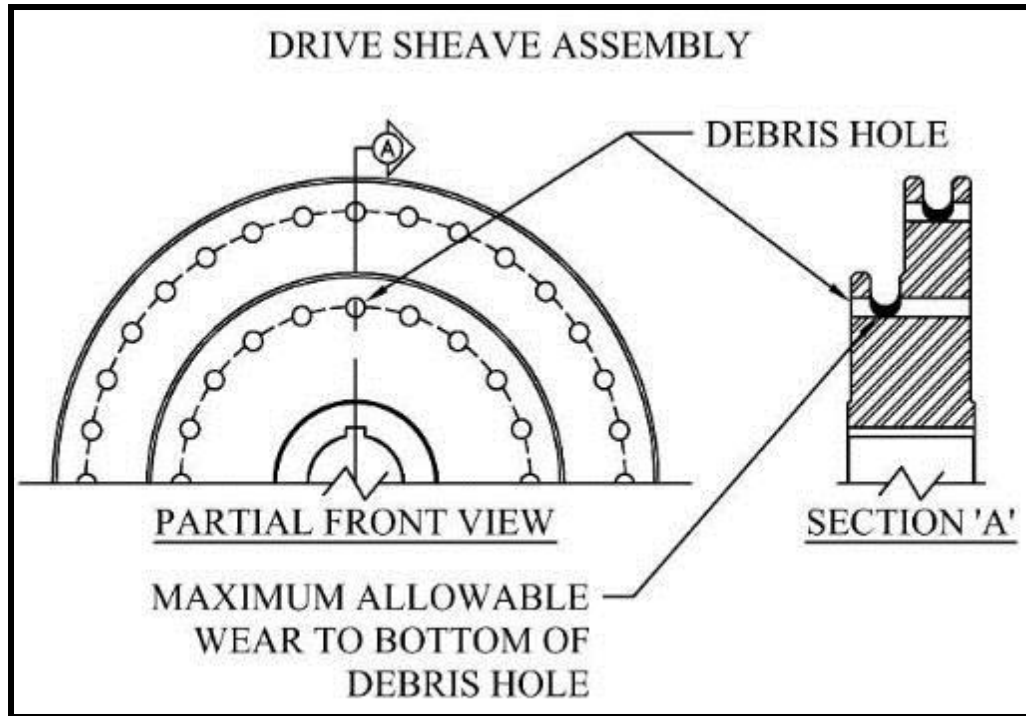


4.8.1. Remove the sheave cover plate from Magnegress brake housing.

Note: Ensure that the cover plate & pins do not become engulfed in foreign debris.
Eg: mud, ice, packed snow.

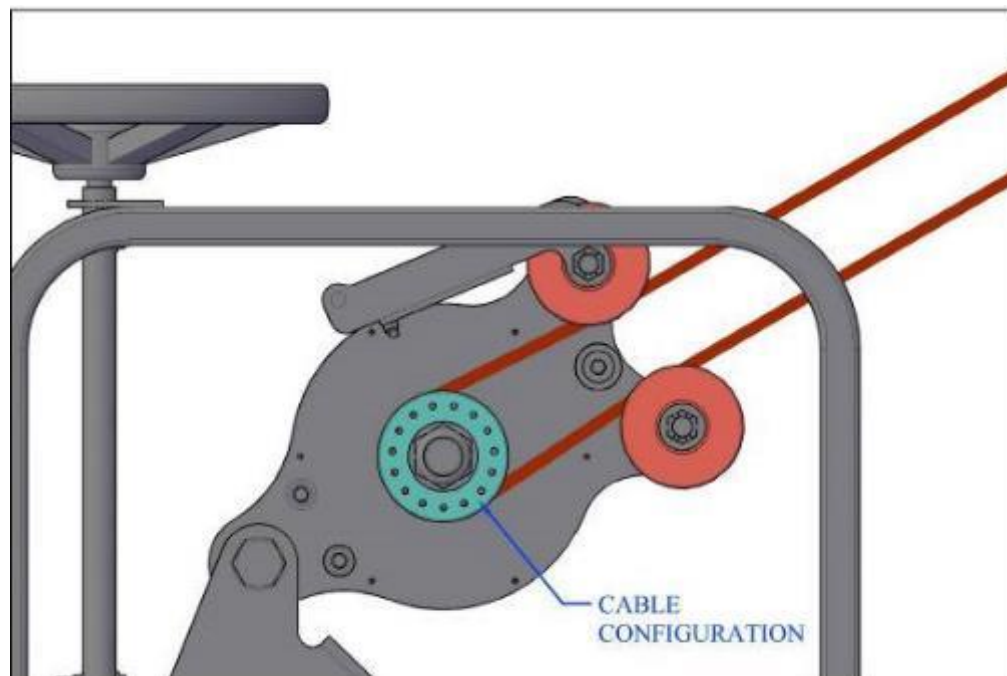


4.8.2. Standing directly under the Rigscap docking station, ensure the cable is not twisted, by holding each part of the looped cable in each hand & extending your arms out to your sides spreading the looped cable apart.



4.8.5. Check the drive sheave debris holes for debris &/or wear.

Note: Sheaves may vary in sizes due to different applications



4.8.6. Cable thread configuration



Flemish Eyes

- 4.8.7. Create a 180° return bend on cable and insert it around the drive sheave & in between the idler sheaves of the Magnegress. Ensure the Flemish eyes are on the upper cable travelling to the top of the top sheave.



- 4.8.8. Cable must line up with corresponding idler sheave grooves when installed on the drive sheave.

Danger: Incorrect setup could result in a serious injury.

Warning: Never grab the Flemish eye cable connections directly. The 2 Flemish eye contact areas are an extreme crush point area.

Warning: Check the cable for twist.

4.9. Tension Indicator



- 4.9.1. Rotate out the tension indicator. Side slip the cable across the back stop pin until the cable slips to the top of the back stop pin.



- 4.9.2. Turn the pinion hand wheel clock-wise, move the brake assembly towards anchor there by tightening the cable, tighten until the indicator pad becomes flush with the top face of the tension indicator. When the two holes line up, insert the adjustment bolt, install the nut and safety pin.

Warning: Never stick anything except the supplied bolts into the adjustment bolt holes.

Note: It is recommended to go to the next tighter hole in the tension link if the receiver tube hole is between holes.



4.9.3. Again, side-slip the tensioned cable off of the back stop pin.



4.9.4. Rotate the tension indicator back into the stored position.

4.10. Magnegress Override-Brake Setup

- 4.10.1. After the cable is installed onto the Magnegress begin the Magnegress Override-brake procedures.



- 4.10.2. With the cover off check that the brake pad moves freely & that the spring returns the pad to its resting position against the back plate of the cover (arrow).



- 4.10.3. Place the cover onto the Magnegress brake system.



4.10.4. Insert all three cover safety pins.

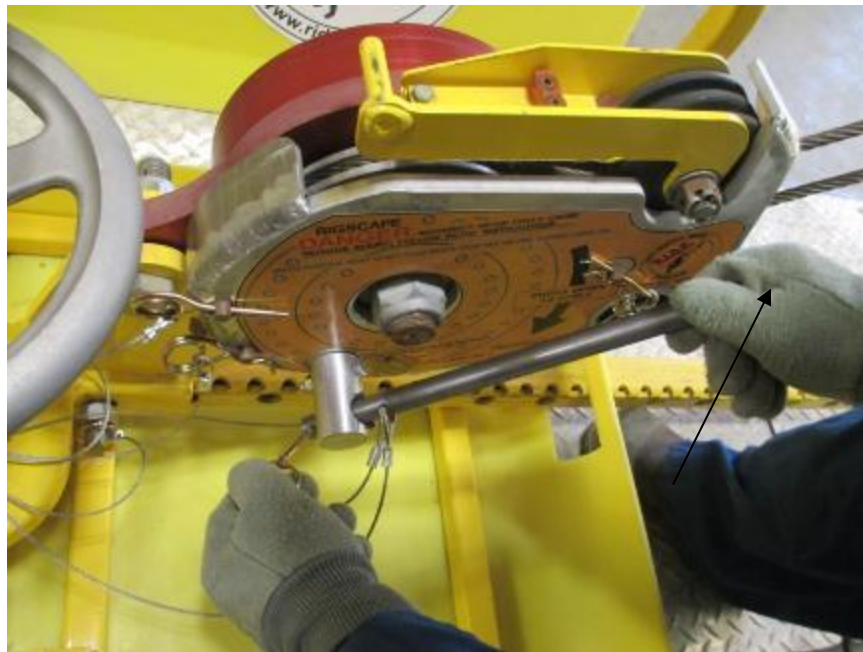
4.10.5. The following steps are only required when the override-brake is required.



4.10.6. Check to see that the spring pin is properly inserted into the override-brake handle.



4.10.7. Insert handle into the override-brake hub.



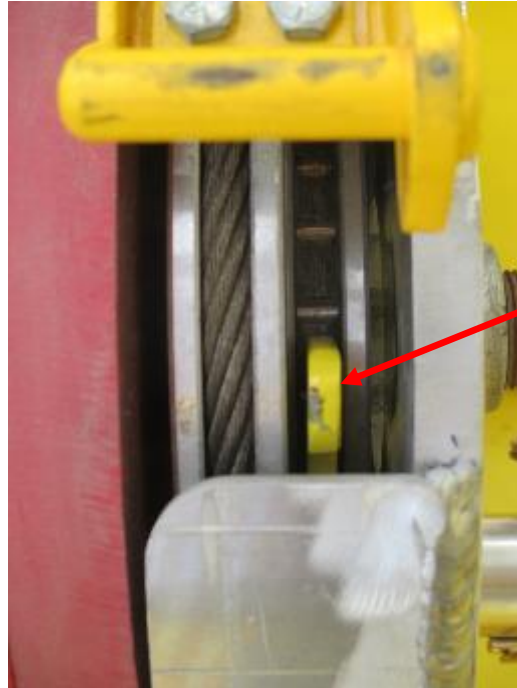
4.10.8. Insert safety pin into the back side of the handle.



4.10.9. This is a view of the assembled override-brake with handle installed.



4.10.10. Apply pressure on the handle as in the direction indicated on the Magnepress cover.



4.10.11. The override brake pad (arrow) should ride the center of the outer sheave.

Note: Cover plate will not fit on the Magnegress housing if something is not properly in place. If this happens check cable orientation on sheave, tension indicator orientation or debris.

Danger: All 3 cover plate pins must be installed during operation.



4.10.12. Re-install the Magnegress protective cover.

4.11. Trolley



4.11.1. Pull & turn the lock-pin knob to lift the locking pin out of the locking pin opening.

4.11.2. Rotate the sheave gate knob on the trolley counter clockwise until the knob becomes completely disconnected from the threaded shaft.



4.11.3. Check that the secondary brake operates freely, the brake pad is not excessively worn & that the sheave rotates freely. The brake should spring back away from the sheave automatically.



- 4.11.4. Place the cold swage, located on the upside or tubing board side of the Flemish eye, inside the trolley, above the sheave. Insert the lower cable inside the trolley as well but underneath the sheave (arrow points towards Magnegress).

Caution: Ensure Flemish eye swage is not getting pinched in between the gate & body while tightening the sheave gate knob.

Danger: The cold cable swage must become trapped inside the trolley on the top side of the sheave.



- 4.11.5. Close the sheave gate & tighten the sheave gate knob clockwise until snug. Turn the lock-pin knob until it drops into the lock position (DO NOT use wrenches to tighten). Inspect the sheave gate's locator flap for damage & for proper fit.

Note: The sheave gate knob may have to be rotated counter-clockwise slightly to allow for the lock pin to engage.



4.12. Rigscape shuttle



4.12.1. Insert the shuttle connector tube into the trolley receiver tube & install the keeper bolt, nut & safety pin.



4.12.2. Insert the Fall Arrest Trolley pin into the Spacer bar & pin the assembly.



4.12.3. Intersect the two ends through the open slots.



4.12.4. Pivot & rotate the Trolley & Spacer Bar assembly.



4.12.5. Install the pivoting SRL (Self-Retracting Lanyard) mount by rotating the arm (arrow) around both cables.



4.12.6. Attach the SRL (Self-Retracting Lanyard) into the SRL anchor hole of the mount.

Note: Recommended SRL 10' (3 m) MSA cable workman.



4.12.7. Insert the shuttle receiving pin into the receiving tube of the SRL mount spacer.



4.12.8. Install the pin through this assembly.



4.12.9. Lower the seat into the working position.



Danger: Inspect SRL device as per the manufacturer's specification.



4.12.10. Inspect entire system for defects.



4.12.11. Hoisting up to the docking station can be done in 2 different ways.

Method: 1

4.12.11.1. Connect a platform mounted winch cable to the trolley & winch it up to the docking station, slowing at the top and guiding the trolley into the docking station by hand. Disconnect the winch cable after docking is complete.

Warning: Clear communication must be established between the person on the winch & the person docking the trolley to ensure not to over pull on the winch causing damage to the system.



Method: 2

4.12.11.2. Pulling the lower cable towards the Magnegress & pulling the upper cable towards the docking station will propel the trolley & shuttle assembly up to the person at the docking station waiting to guide it into place.



4.12.12. Guide the shuttle into the receiving tracks on the archway.



4.12.13. Guide the two docking pins into the docking station's magnetic receiver tubes.



4.12.14. Insert safety cable pin from the one side of the shuttle into the receiver mount on the other side of the shuttle.

Danger: The pin must fit within the notch in the track on the archway.



4.12.15. Upon entering onto the working platform the SRL must be connected to a certified harness to the rear shoulder-height D-Ring before disconnecting from the rig mounted fall arrest.

4.12.16. It is very imperative that you connect before you disconnect. Connect to the fall-arrest on the Rigscope shuttle's SRL mount. Once you confirm the connection is secure you may disconnect from the rig mounted fall-arrest.

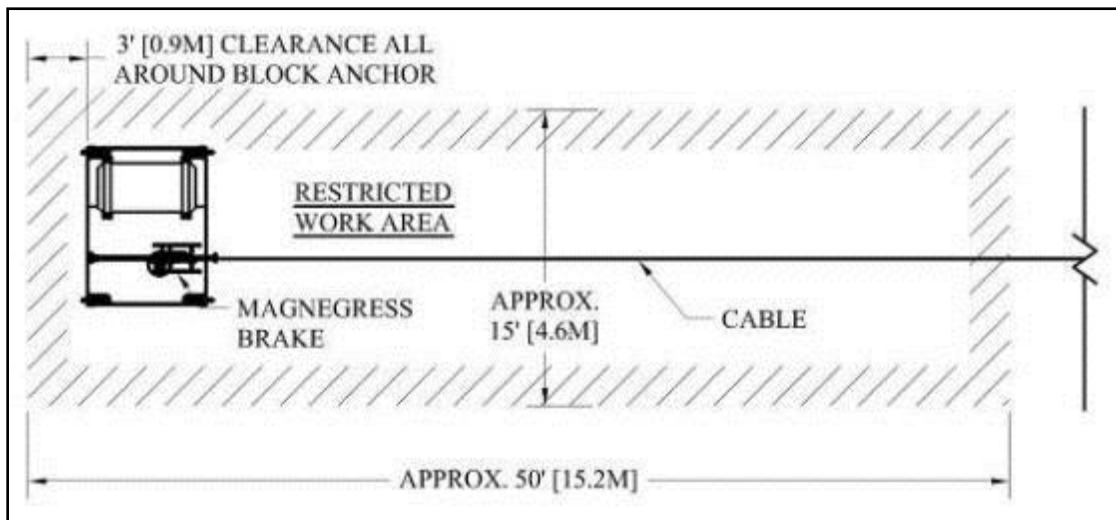
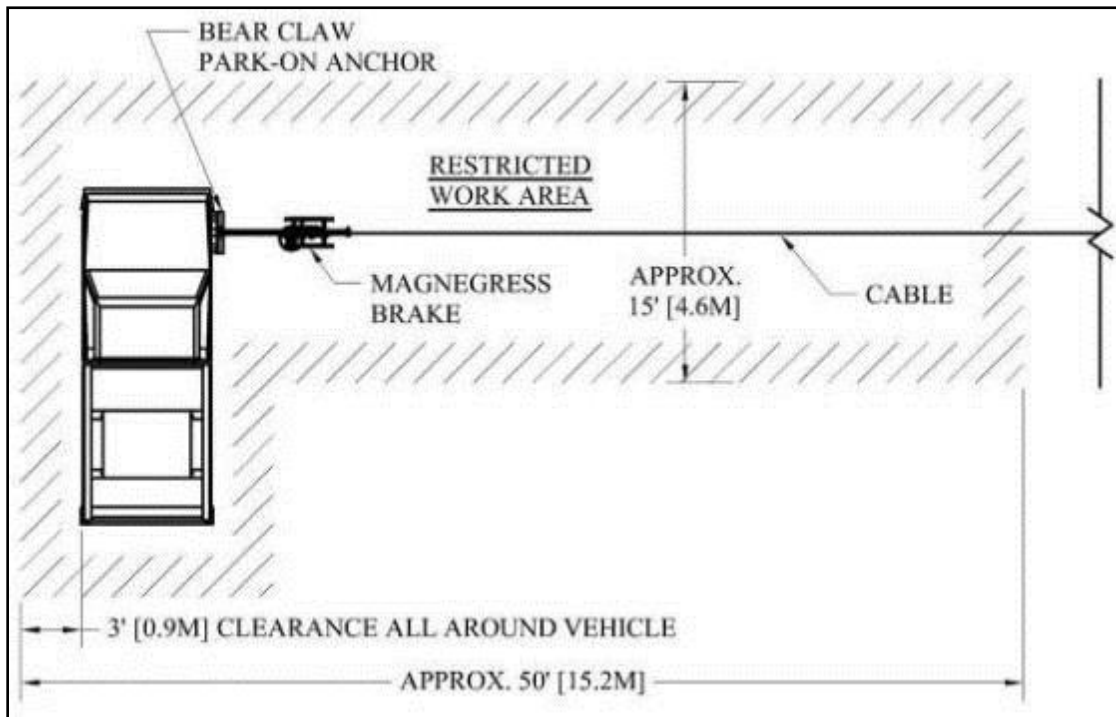
Danger: You must not be tied off to anything other than the Rigscope system at this point.



4.12.17. Connect the shuttle mounted work positioning lanyard to your harness waist belt D-ring.



4.12.18. Establish and clear restricted work area.



Danger: Ensure all personnel and operators of vehicles or equipment are aware of the cable, block anchor or anchoring vehicle and restricted area.

Danger: Ensure all company lock out procedures are performed on the anchoring vehicle.

Note: Nylon ribbon may be attached to the cable as a visual aid.



4.13. Operation

4.13.1. Safety notes reminder

- 4.13.1.1. **Read these warnings carefully before inspecting, setting up, installing, using, or tearing down the Rigscope system.**
- 4.13.1.2. **Wear mandatory personal protection equipment at all times.**
- 4.13.1.3. **Use proper lifting techniques when inspecting, setting up, installing, or tearing down the Rigscope system. Refer to Specifications (i.) for product weights.**
- 4.13.1.4. **Watch for crush points when inspecting, setting up, installing, using, or tearing down the Rigscope system.**
- 4.13.1.5. **Watch for tripping hazards when inspecting, setting up, installing, using, or tearing down the Rigscope system.**
- 4.13.1.6. **Do not use the Rigscope system unless you are wearing a safety harness and are secured only to the Rigscope fall-arrest device and working lanyard.**
- 4.13.1.7. **This Rigscope is designed for single person only.**
- 4.13.1.8. **Never drive over your cables**
- 4.13.1.9. **Double check the system every day if set up for extended periods between moves.**
- 4.13.1.10. **Ensure all personnel and operators of vehicles or equipment are aware of the cable, anchor, anchor vehicle and restricted area.**
- 4.13.1.11. **An investigation must follow any and all incidents to determine the cause and the corrective actions to be taken. Notify the manufacturer, RIDE Inc. at 780-621-1570.**



4.13. General Operations



- 4.13.2. It is very important that you connect before you disconnect. Connect to the SRL on the Rigscape shuttle. Once you confirm the connection is secure you may disconnect from the rig mounted fall-arrest.

Danger: You must not be tied off to anything other than the Rigscape shuttle at this point.



- 4.13.2.1. Connect the shuttle mounted work positioning lanyard to your harness waist belt D-ring.



- 4.13.2.2. If the alarm sounds or an emergency occurs, in one motion as you walk off the working platform the safety cable will contact the lower part of your thigh & release the shuttle's secondary securement. Step onto the shuttle seat. The weight activated release mechanism will then disengage the shuttle.



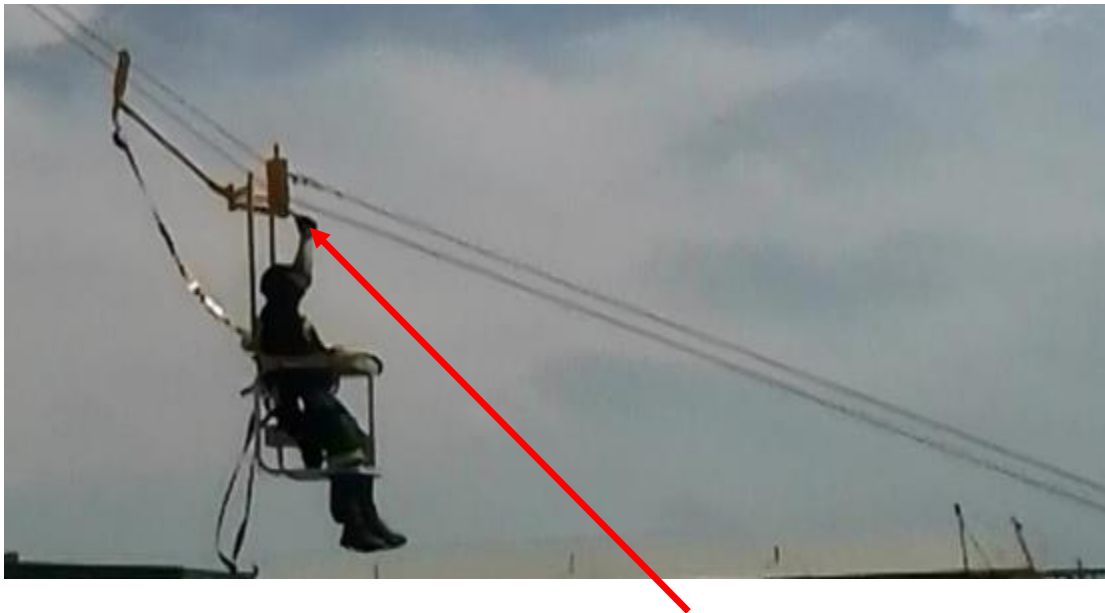
RIDE Inc. Rigscope Service Rig Procedures Manual

Caution: Ensure that the work position lanyard is controlled upon exit. This means:

- 4.13.2.3. Grab the work positioning lanyard approximately in the middle with your hand ensuring that the work positioning lanyard will not snag on any obstructions at the point of egress.



- 4.13.2.4. The Magnegress brake will automatically control your descent.



- 4.13.2.5. The Rigscape system is equipped with a redundant brake & is simply operated by pulling down on handle (arrow).

- 4.13.2.6. Record every run of the Rigscape system in the Log Book.



4.14. Teardown

4.14.2. This procedure assumes the Rigscope shuttle is still attached to the rig platform. If the Rigscope shuttle has been run down to the ground, then continue with Step 4.3 of this procedure.

Option A:

4.14.3. Ride the Rigscope shuttle down to the ground.

Option B:

4.14.4. Undock shuttle from docking station & leave suspended on line.

4.14.5. From ground position pull shuttle down with cable using the hand over hand technique.

4.14.6. Detach the SRL (Self-Retracting Lanyard) & shuttle mounted lanyard from the shuttle. Picture 4.4.5

4.14.7. If require & you haven't already uninstalled the shuttle, remove the SRL mount spacer from the shuttle by removing the keeper bolt, nut & safety pin. Replace bolt, nut & pin into the disassembled spacer. Picture 4.4.4

4.14.8. Disconnect the shuttle from the trolley by removing the keeper bolt, nut & safety pin. Replace bolt, nut & pin into the disassembled system. Picture 4.4.1

4.14.9. Pull the lock-pin knob then turn to the unlocked position & loosen the trolley sheave gate knob until the gate is opened. Picture 4.3.1

Caution: Watch for crush points when removing trolley from cable.

4.14.10. Remove the upper & lower cable from inside the trolley housing. Picture 4.3.3

4.14.11. Remove the Magnegress housing cover plate & the 3 cover plate keeper pins. Picture 4.2.3



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- 4.14.12. Turn the pinion hand wheel clock-wise to remove tension on the adjustment bolt at this point, a second person should be used to remove the adjustment bolt. Then turn the pinion wheel counter clock-wise all the way to the stopper bolt to loosening the cable. Picture 4.2.10

Caution: Watch for crush points when removing the cable.

- 4.14.13. Remove the cable from the Magnegress brake housing.

Warning: Releasing the cable while still under tension from the docking station could slide fast & hit personnel and/or equipment.

- 4.14.14. Install the Magnegress housing cover plate & re-install the 3 cover plate keeper pins.

- 4.14.15. Remove the tension link stopper bolt, nut & safety pin.

- 4.14.16. With a coworker's assistance uninstall the tension link from the receiver tube from the back side of the Magnegress housing receiver tube. Turn the pinion hand wheel counter clockwise to push the tension link out & remove link.

- 4.14.17. Remove the tension link from the anchor system. Reinstall the bolts, nuts & safety pins at each end of the tension link.

- 4.14.18. If using the bear claw anchor, drive off the anchor.

- 4.14.19. Using two or more people move the 85 lbs (40 kg) anchor & the 160 lbs (75 kg) Magnegress system to their transportation/storage location.



5 Maintenance

5.1 The RIDE system is virtually maintenance free. All maintenance on the RIDE system has to be performed but a qualified RIDE technician with the exception of the Archway Davit Arm

Grease monthly

Grease Nipple



Danger: If any damage is found, the system is to be tagged & taken out of service. Send in the damaged component for service and/or repair.



6. Descent Log

- 6.1. Every time the Rigscope system is used, its use must be recorded in a Log Book.
- 6.2. The Log must accompany the Rigscope system when it goes for its annual inspection / certification.
- 6.3. Sample decent log on following page.



| 6.4 | | | | | | | | | | Ensure the logs are up to date and accompany the system when sent in for the 3 year inspection. | | | | | | | | | |
|---|--------------|-----------|----------|--|---------------------------|----------|-----------|--|-----------------|---|--|--|--|--|-------------|--|--|--|--|
| R.I.D.E. Inc. | | | | | | | | | | | | | | | | | | | |
| Descent Log | | | | | | | | | | | | | | | | | | | |
| Rigscope Serial # _____ | | | | | Magnegress Serial # _____ | | | | | Company _____ | | | | | Rig # _____ | | | | |
| Company Contact _____ | | | | | | | | | | Phone # _____ | | | | | | | | | |
| Date | Rider | | | | Authorized by | | | | Application use | | | | | | | | | | |
| | Name (print) | Signature | position | | Name (print) | position | Signature | | | | | | | | | | | | |
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| Inspection and Maintenance Reminders: | | | | | | | | | | Application Code | | | | | | | | | |
| 1. 1 year from in service date a visual inspection require by a qualified person authorized by Manufacture & documented | | | | | | | | | | :Training . Trg | | | | | | | | | |
| 2. Structural Inspection every 3 years. (by a qualified person authorized by Manufacture & documented) | | | | | | | | | | :Emergency . Emg | | | | | | | | | |
| 3. Inspect sheaves for wear as indicated on the side plate and/or in the manual | | | | | | | | | | :Rig out . RO | | | | | | | | | |
| 4. Inspect cable for wear or damage. | | | | | | | | | | | | | | | | | | | |



RIDE Inc. Rigscope Service Rig Procedures Manual

| 6.4 | | | | | | | | | | Ensure the logs are up to date and accompany the system when sent in for the 3 year inspection. | | | | | | | | | |
|--|--------------|-----------|----------|--|---------------------------|----------|-----------|--|-----------------|---|--|--|--|--|-------------|--|--|--|--|
| R.I.D.E. Inc. | | | | | | | | | | | | | | | | | | | |
| Descent Log | | | | | | | | | | | | | | | | | | | |
| Rigscope Serial # _____ | | | | | Magnegress Serial # _____ | | | | | Company _____ | | | | | Rig # _____ | | | | |
| Company Contact _____ | | | | | | | | | | Phone # _____ | | | | | | | | | |
| Date | Rider | | | | Authorized by | | | | Application use | | | | | | | | | | |
| | Name (print) | Signature | position | | Name (print) | position | Signature | | | | | | | | | | | | |
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| Inspection and Maintenance Reminders: | | | | | | | | | | Application Code | | | | | | | | | |
| 1. 1 year from in service date a visual inspection requires by a qualified person authorized by Manufacture & documented | | | | | | | | | | :Training . Trg | | | | | | | | | |
| 2. Structural Inspection every 3 years. (by a qualified person authorized by Manufacture & documented) | | | | | | | | | | :Emergency . Emg | | | | | | | | | |
| 3. Inspect sheaves for wear as indicated on the side plate and/or in the manual | | | | | | | | | | :Rig out . RO | | | | | | | | | |
| 4. Inspect cable for wear or damage. | | | | | | | | | | | | | | | | | | | |



RIDE Inc. Rigscope Service Rig Procedures Manual

| 6.4 | | | | | | | | | | Ensure the logs are up to date and accompany the system when sent in for the 3 year inspection. | | | | | | | | | |
|--|--------------|-----------|----------|--|---------------------------|----------|-----------|--|-----------------|---|--|--|--|--|-------------|--|--|--|--|
| R.I.D.E. Inc. | | | | | | | | | | | | | | | | | | | |
| Descent Log | | | | | | | | | | | | | | | | | | | |
| Rigscope Serial # _____ | | | | | Magnegress Serial # _____ | | | | | Company _____ | | | | | Rig # _____ | | | | |
| Company Contact _____ | | | | | | | | | | Phone # _____ | | | | | | | | | |
| Date | Rider | | | | Authorized by | | | | Application use | | | | | | | | | | |
| | Name (print) | Signature | position | | Name (print) | position | Signature | | | | | | | | | | | | |
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| 4. Inspect cable for wear or damage. | | | | | | | | | | | | | | | | | | | |



7. Appendix

Rig Specific Information

A) Company: _____

B) Rig #: _____ C) Contact Person: _____

D) Contact Phone: _____

E) Rig Type: single double stiff mast telescopic

F) Style: Franks Skytop Crown

Cardwell Cooper Pemco

Wilson Kremco Other _____

G) Rod Basket sheave Height: _____

H) Tubing Board sheave Height: _____

I) Ground Anchor to Well Head Center: _____

J) Ground Anchor Point to Back of Tubing Board: _____

K) Cable Length (Rod Basket): _____

L) Cable Length (Tubing Board): _____

M) Rigscope Serial #: _____



2017

RIDE Inc. Archway

Gate Operation Procedures



Special Instructions/Conditions of Use

Reading user procedure manual prior to use is essential

Only persons that have been deemed competent in the operation of the system should operate the system

Archway Gate

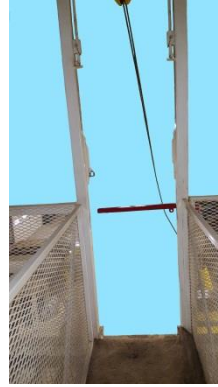
2017/11/21

Rev 1.0



RIDE Archway Gate Operation

Under normal operations when the Ride shuttle is not in its docked position the gate is closed



This provide a safety barrier in the archway opening for the worker



Gate remains closed while the worker docks the RIDE shuttle





Once shuttle docked and secondary cable is in place the gate is opened



Gate Operation

Gate Closed
Step#3

To Open:

Step#1

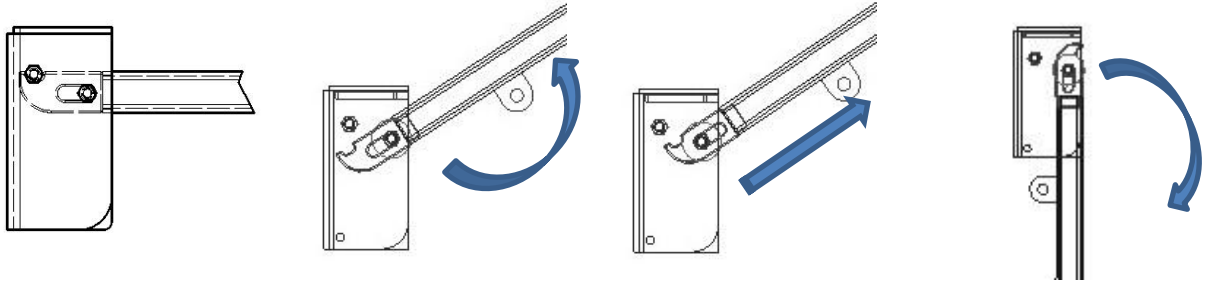
Step#2

bar

Raise Bar

Pull bar outward

Lower



Gate remains open at all times while shuttle docked.

