# AERIAL WORK PLATFORM OPERATOR'S MANUAL

with Maintenance Information

(GTWY8-1200/ GTWY10-1200/ GTWY12-1200/ GTWY14-1200 Series)



#### Important

Read, understand and obey these safety rules and operating instructions before operating this machine. Only trained and authorized personnel shall be permitted to operate this machine. This manual should be considered a permanent part of your machine and should remain with the machine at all times. If you have any questions, call DINGLI MACHINERY.

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Operator's Manual Safety Rules



#### Danger

Failure to obey the instructions and safety rules in this manual will cause death or serious injury.

#### **Do Not Operate Unless:**

✓ You learn and practice the principles of safe machine operation contained in this operator's manual.

- 1 Avoid hazardous situations. Know and understand the safety rules before going on to the next section.
- 2 Always perform a pre-operation inspection.
- 3 Always perform function tests prior to use.
- 4 Inspect the workplace.
- 5 Only use the machine as it was intended.
- You read, understand and obey the manufacturer's instructions and safety rules— safety and operator's manuals and machine decals.
- You read, understand and obey employer's safety rules and worksite regulations.
- ✓ You read, understand and obey all applicable governmental regulations.
- ✓ You are properly trained to safely operate the machine.

#### **Electrocution Hazards**

This machine is not electrically insulated and will not provide protection from contact with or proximity to electrical current.



Keep away from the machine if it contacts energized power lines or becomes electrically charged. Personnel on the ground or in the platform must not touch or operate the machine until energized power lines are shut off.

Maintain safe distances from electrical power lines and apparatus in accordance with applicable governmental regulations and the following chart.

#### Minimum Safe Voltage Approach Distance

Phase to Phase			Feet	Meters
0	to	300V	Avoid	Contact
300V	to	50KV	10	3.05
50KV	to	200KV	15	4.60
200KV	to	350KV	20	6.10
350KV	to	500KV	25	7.62
500KV	to	750KV	35	10.67
750KV	to	1000KV	45	13.72

Allow for platform movement, electrical line sway or sag and movement due to strong or gusty winds.

Do not use the machine as a ground for welding.

Do not operate an AC powered machine or a DC battery charger unless using a 3-wire grounded extension cord connected to a grounded AC circuit. Do not alter or disable 3-wire grounded plugs.

#### **Tip-over Hazards**

Do not raise the platform unless the base is level, all four outriggers are properly installed and the leveling jacks firmly contact the floor. Do not adjust or remove the outriggers while the platform is occupied or raised.



Do not move the machine while the platform is raised.

Do not place ladders or scaffolds in the platform or against any part of this machine. Do not place or attach overhanging loads to any part of this machine.

Do not transport tools and materials unless they are evenly distributed and can be safely handled by the person in the platform. Do not raise the platform unless the machine is level. Do not set the machine up on a surface where it cannot be leveled using only the leveling jacks.



Do not cause a horizontal force or side load to the machine by raising or lowering a fixed or overhanging load.



Do not push off or pull toward any object outside the platform.

<u>Maximum allowable side force 200N</u> Do not operate the machine near drop-offs, holes, bumps, debris, unstable or slippery surfaces or other possible hazardous conditions.

Do not alter or disable machine components that in any way affect safety and stability. Do not replace items critical to stability with items of different weight or specification. Use only Dingli authorized replacement parts. Do not push the GTWY1200 series from the platform side of the machine.

When moving the machine with a forklift or other transport vehicle, the platform should be fully lowered, the machine should be turned off and no personnel shall remain in the platform. Do not use the machine on a moving or mobile surface or vehicle.

Do not operate the machine in strong or gusty winds. Do not increase the surface area of the platform or the load. Increasing the area exposed to the wind will decrease machine stability.

Occupants, equipment and materials shall not exceed the maximum platform capacity.



#### **Maximum capacity**

Maximum occupancy	1 person	
GTWY14-1200	300 lbs	136 kg
GTWY12-1200	350 lbs	150 kg
GTWY10-1200	350 lbs	150 kg
GTWY8-1200	350 lbs	150 kg

#### **Fall Hazards**

The guard rail system provides fall protection. If occupants of the platform are required to wear personal fall protection equipment (PFPE) due to job site or employer rules, PFPE equipment and its use shall be in accordance with the PFPE manufacturer's instructions and applicable governmental requirements.



Do not sit, stand or climb on the platform guard rails. Maintain a firm footing on the platform floor at all times.

Do not exit the platform while raised. If a power failure occurs, have ground personnel activate the manual lowering valve. Keep the platform floor clear of debris. Lower the platform entry mid-rail before operating.

#### **Collision Hazards**

Operators must comply with employer, job site and governmental rules regarding the use of personal protective equipment.

Check the work area for overhead obstructions or other possible hazards.



Be aware of crushing hazard when grasping the platform guard rail.

Do not lower the platform unless the area



below is clear of personnel and obstructions. Stay clear of descending platform.

Use common sense and

planning to control the movement of the machine on or near inclines.

#### **Improper Use Hazard**

Do not leave the machine unattended unless the key is removed to secure from unauthorized use.

#### **Bodily Injury Hazard**

Do not operate the machine with a hydraulic oil leak. An hydraulic leak can penetrate and/or burn skin.

#### **Explosion and Fire Hazard**

Do not operate the machine or charge the battery in hazardous locations or locations where potentially flammable or explosive gases or particles may be present.



#### **Damaged Machine Hazards**

Do not use a damaged or malfunctioning machine.

Be sure all maintenance has been performed as specified in this manual and the Dingli GTWY Series service manual.

Be sure all decals are in place and legible. Be sure the operator's manuals are complete, legible and in the storage container located on the platform.

Conduct a thorough pre-operation inspection of the machine and test all functions before each work shift. Immediately tag and remove from service a damaged or malfunctioning machine.

Do not use the machine as a ground for welding.

# Battery and Charger Safety-DC

#### **Burn Hazards**

Batteries contain acid.



Always wear protective clothing and eye wear when working with batteries.

The battery pack must remain in an upright position.

Avoid spilling or contacting battery acid. Neutralize battery acid spills with baking soda and water.

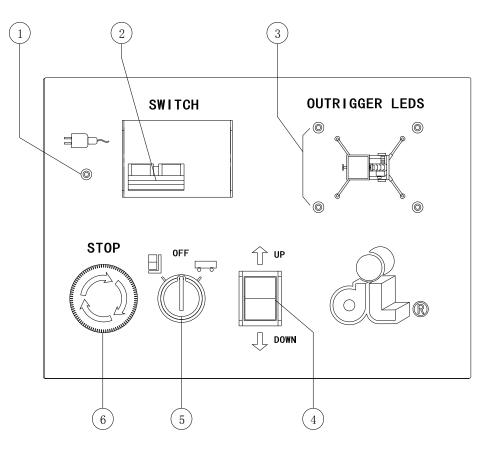
#### **Explosion Hazards**



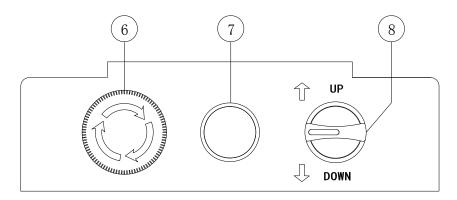
Batteries emit explosive gas. Keep sparks, flames and lighted tobacco away from the battery.

Charge the battery in a well ventilated area. Do not disconnect charger DC output wires from the battery when the charger is on.

#### **Ground Controls**



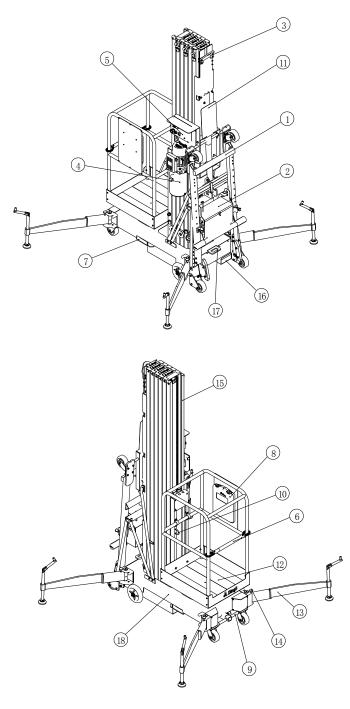
#### **Platform Controls**



- 1. Power light
- 3. Outrigger interlock display lights (four)
- 5. Key switch
- 7. Up/down switch

- 2. Circuit breaker
- 4. Up/down switch
- 6. Red Emergency Stop button
- 8. Control activate button

#### Illustration



- ①Tilt-back strut
- 2 Battery box
- ③Lifting eye
- ④ Hydraulic power unit
- **⑤** Ground controls
- <sup>®</sup> Platform entry mid rail
- Winching/tie-down point
  Manuals storage
  Sliding T-handle
  Harness anchor
- Tilt-back frame
- 12 Platform

- Outrigger with leveling jack
  Outrigger lock pin
  Mast
- Forklift socket
- <sup>®</sup>Winching/tie-down point
- Base



#### **Do Not Operate Unless:**

- You learn and practice the principles of safe machine operation contained in this operator's manual.
- 1 Avoid hazardous situations.
- 2 Always perform a pre-operation inspection.

Know and understand the pre-operation inspection before going on to the next section.

- 3 Always perform the function tests prior to use.
- 4 Inspect the workplace.
- 5 Only use the machine as it was intended.

#### **Fundamentals**

It is the responsibility of the operator to perform a pre-operation inspection and routine maintenance.

The pre-operation inspection is a visual inspection performed by the operator prior to each work shift. The inspection is designed to discover if anything is apparently wrong with a machine before the operator performs the function tests.

The pre-operation inspection also serves to determine if routine maintenance procedures are required. Only routine maintenance items specified in this manual may be performed by the operator.

Refer to the list following and check each of the items.

If damage or any unauthorized variation from factory delivered condition is discovered, the machine must be tagged and removed from service.

Repairs to the machine may only be made by a qualified service technician, according to the manufacturer's specifications. After repairs are completed, the operator must perform a pre-operation inspection again before going on to the function tests.

Scheduled maintenance inspections shall be performed by qualified service technicians, according to the manufacturer's specifications and the requirements listed in the responsibilities manual.

#### Pre-operation Inspection

#### **Pre-operation Inspection**

- Be sure that the operator's manuals are complete, legible and in the storage container located on the platform.
- Be sure that all decals are legible and in place. See Decals section.
- Check for battery fluid leaks and proper fluid level. Add distilled water if needed.
   See Maintenance section. (DC models)
- Check for hydraulic oil leaks and proper oil level. Add oil if needed. See Maintenance section.

Check the following components or areas for damage, improperly installed or missing parts and unauthorized modifications:

- Electrical components, wiring and electrical cables
- AC & DC models: Hydraulic power unit, hoses, fittings and cylinder
- Platform entry mid-rail
- Sequencing cables and pulleys
- Lifting chains and idler wheels
- Nuts, bolts and other fasteners
- Mast columns
- Breather cap
- Outriggers, leveling jacks and footpads

Check entire machine for:

- Dents or damage
- Corrosion or oxidation
- Cracks in welds or structural components
- Inspect and clean battery terminals and all

battery cable connections (DC models)

 Be sure that all structural and other critical components are present and all associated



#### **Observe and Obey:**

☑Only routine maintenance items specified in this manual shall be performed by the operator.

Scheduled maintenance inspections shall be completed by gualified service technicians, according to the manufacturer's specifications and the requirements specified in the responsibilities manual.

#### Maintenance Symbols Legend

OTICE The following symbols have been used in this manual to help communicate the intent of the instructions. When one or more of the symbols appear at the beginning of a maintenance procedure, it conveys the meaning below.



Indicates that tools will be required to perform this procedure.



Indicates that new parts will be required to perform this procedure.

#### Check the Battery - DC Models

Proper battery condition is essential to good machine performance and safe operation. Improper fluid levels or damaged cables and connections can result in component damage and hazardous

AWARNING

conditions.

Electrocution hazard. Contact with hot or live circuits could result in death or serious injury. Remove all rings, watches and other jewelry.

AWARNING

Bodily injury hazard.

Batteries contain acid. Avoid spilling or contacting battery acid. Neutralize battery acid spills with baking soda and water.

Perform this test after fully charging the battery. 1 Put on protective clothing and eye wear. 2 Remove the battery vent caps. 3 Check the battery acid level. If needed,

replenish with distilled water to the bottom of the battery fill tube. Do not overfill.

4 Install the vent caps.

#### Check the Hydraulic Oil Level



Maintaining the hydraulic oil at the proper level is essential to machine operation. Improper hydraulic oil levels can damage hydraulic components. Daily checks allow the inspector to identify changes in oil level that might indicate the presence of hydraulic system problems.

1 Be sure the platform is fully lowered.

2 Check the hydraulic oil level. Do not overfill.

#### Hydraulic oil specifications

Hydraulic oil type Chevron Rando HD equivalent

#### **Scheduled Maintenance**

Maintenance performed quarterly, annually and every two years must be completed by a person trained and qualified to perform maintenance on this machine according to the procedures found in the service manual for this machine.

Machines that have been out of service for more than three months must receive the quarterly inspection before they are put back into service.



#### **Do Not Operate Unless:**

☑You learn and practice the principles of safe machine operation contained in this operator's manual.

1 Avoid hazardous situations.

2 Always perform a pre-operation inspection.

3 Always perform the function tests prior to use.

Know and understand the function tests before going on to the next section.

4 Inspect the workplace.

5 Only use the machine as it was intended.

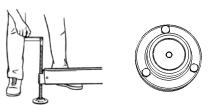
#### **Fundamentals**

The function tests are designed to discover any malfunctions before the machine is put into service. The operator must follow the step-by-step instructions to test all machine functions.

A malfunctioning machine must never be used. If malfunctions are discovered, the machine must be tagged and removed from service. Repairs to the machine may only be made by a qualified service technician, according to the manufacturer's specifications.

#### Setup

- Position the machine on a firm surface directly below the desired work area.
- Connect to the appropriate power source: DC models: Connect the battery pack. AC models: Connect to a grounded 15A AC power supply. Use a 12 gauge / 3.3mm<sup>2</sup> 3-wire grounded extension cord no longer than 50 feet / 13 m.
- $\odot$  Result: The power light should come on.
- 3. Turn on the circuit breaker.
- Insert the key and turn to ground control or platform control.
- Twist the red Emergency Stop buttons to the on position both at the ground and the platform controls.
- Pull the outrigger lock pin up, turn an outrigger out until the outrigger lock pin snaps into place. Adjust the outrigger to level the machine and raise the base casters slightly off the ground. Level the machine using only the outriggers.
- Check the interlock display lights at the ground controls. Confirm that the corresponding light is on.
- Repeat this procedure for each of the remaining outriggers.
- Use the bubble level and adjust the leveling jacks until the machine base is level.



#### **Test Emergency Stop**

- Push in the red Emergency Stop button at the ground controls to the off position.
- 11. Push in the up/down switch at ground control in the direction of intended travel. (Turn the key switch to ground control)
  O Result: The up/down function should not

operate

 Push in the control activate button and rotate the up/down switch at the platform in the direction of intended travel. (Turn the key switch to platform control)

 Result: The up/down function should not operate

- Push in the red Emergency Stop button at the platform controls to the off position.
- Twist the red Emergency Stop button at the ground controls to the on position.
- 15. Push in the up/down switch at ground control in the direction of intended travel. (Turn the key switch to ground control)
  Result: The up/down function should not operate
- Push in the control activate button and rotate the up/down switch at the platform in the direction of intended travel. (Turn the key switch to platform control)

Result: The up/down function should not operate

#### **Test Outrigger Interlock**

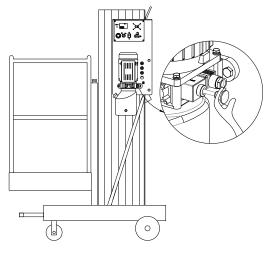
17. Twist to release the red Emergency Stop button at the platform controls.

• Result: The up/down functions should operate.

- Unscrew one leveling jack until the corresponding interlock display light turns off.
- ⊙ Result: The up function should not operate.
- 19. Return the leveling jack to the previous setting and check the bubble level.
- 20. Repeat this procedure for each outrigger.

#### **Test Manual Lowering**

- 21. Raise the platform slightly.
- 22. Activate the manual lowering valve located at the side of the hydraulic unit.
  - Result: The platform should lower.





#### **Do Not Operate Unless:**

You learn and practice the principles of safe machine operation contained in this operator's manual.

1 Avoid hazardous situations.

2 Always perform a pre-operation inspection.

3 Always perform function tests prior to use.

4 Inspect the workplace.

Know and understand the work place inspection before going on to the next section.

5 Only use the machine as it was intended.

#### **Fundamentals**

The workplace inspection helps the operator determine if the workplace is suitable for safe machine operation. It should be performed by the operator prior to moving the machine to the workplace.

It is the operator's responsibility to read and remember the workplace hazards, then watch for and avoid them while moving, setting up and operating the machine.

#### **Workplace Inspection**

Be aware of and avoid the following hazardous situations:

- Drop-offs or holes
- Bumps, floor obstructions or debris
- Slopes that exceed the machine's leveling capability
- Unstable or slippery surfaces
- Overhead obstructions and high voltage conductors
- Hazardous locations
- Inadequate surface support to withstand all load forces imposed by the machine
- Wind and weather conditions
- The presence of unauthorized personnel
- Other possible unsafe conditions



#### Do Not Operate Unless:

☑You learn and practice the principles of safe machine operation contained in this operator's manual.

1 Avoid hazardous situations.

2 Always perform a pre-operation inspection.

3 Always perform function tests prior to use.

4 Inspect the workplace.

5 Only use the machine as it was intended.

#### **Fundamentals**

The Operating Instructions section provides instructions for each aspect of machine operation. It is the operator's responsibility to follow all the safety rules and instructions in the operator's, safety and responsibilities manuals.

Using the machine for anything other than lifting personnel, along with their tools and materials, to an aerial work site is unsafe and dangerous.

If more than one operator is expected to use a machine at different times in the same work shift, each operator is expected to follow all safety rules and instructions in the operator's manual. That means every new operator should perform a pre-operation inspection, function tests and a work place inspection before using the machine.

#### Setup

- Position the machine on a firm surface below the desired work area directly.
- Connect to the appropriate power source: DC models: Connect the battery pack. AC models: Connect to a grounded 15A AC power supply. Use a 12 gauge / 3.3mm<sup>2</sup>
   3-wire grounded extension cord no longer than 50 feet / 13 m. The power light is on.
- 3. Turn the circuit breaker on .
- Insert the key and turn to ground control or platform control as you want.
- Twist to release the red Emergency Stop buttons both at the ground and the platform controls.
- Pull the outrigger lock pin upt ,Turn the outriggers out and adjust to level the machine and raise the base casters slightly off the ground.
- Be sure all four interlock display lights at the ground controls are on and all four outriggers are in firm contact with the ground.
- Use the bubble level to make sure the machine is level.

Note: If adjustment is



necessary, check the bubble level and interlock display again to make sure the machine is level and all four interlock display lights are on.

#### **Emergency Stop**

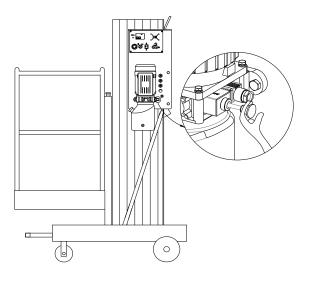
Push in the red Emergency Stop button at the platform controls or at the ground controls to stop the up/down function.

#### **Platform Raise and Lower**

- Twist to release the red Emergency Stop buttons to the on positions at the platform controls and at the ground controls.
- You could move the platform by push in the up/down switch at ground control in the direction of intended travel. (Turn the key switch to ground control)
- You can also move the platform by Push in the control activate button and rotate the up/down switch at platform control in the direction of intended travel. (Turn the key switch to platform control)

#### Manual Lowering

- Activate the manual lowering valve located at the side of the hydraulic unit.
- 2. The platform should lower.



#### **Fall Protection**

Personal fall protection equipment (PFPE) is not required when operating this machine. If PFPE is required by job site or employer rules, the following shall apply: All PFPE must comply with applicable

governmental regulations and must be inspected and used in accordance with the manufacturer's instructions.

#### After Each Use

- Push in the red Emergency Stop buttons at the platform controls and the ground controls.
- Remove the key to secure from unauthorized use.
- Turn off the circuit breaker and the power light is out. Cut out the power and fixed the cable.
- Select a safe storage location—firm, level surface, weather protected, clear of obstruction and traffic.
- 5. Chock the wheels to prevent the machine from rolling.
- 6. DC models: Recharge the battery.

#### **Battery and Charger**

#### Instructions

#### **Observe and Obey:**

☑Do not use an external charger or booster battery.

☑ Charge the battery in a well-ventilated area.

- ☑Use proper AC input voltage for charging as indicated on the charger.
- ☑Use only Dingli authorized battery and charger.

#### Battery Charging Instructions

#### **To Charge Battery**

- 1 Open the battery pack lid to access the battery.
- 2 Remove the battery vent caps and check the battery acid level. If necessary, add only enough distilled water to cover the plates.
  Do not overfill prior to the charge cycle.
- 3 Replace the battery vent caps.
- 4 Be sure that the DC output cord is properly connected to the battery. Black to negative, red to positive.
- 5 Connect the battery charger to a grounded AC circuit.
- 6 The charger will turn off automatically when the battery is fully charged.
- 7 Check the battery acid level when the charge cycle is complete. Replenish with distilled water to the bottom of the fill tube.
   Do not overfill.

(Maintenance free battery needn't do them all, recharge it directly)

#### Transport Instructions



## Transport Instructions

#### **Observe and Obey:**

☑ Be sure the transport vehicle capacity and loading surfaces are sufficient to support the machine weight. See the serial label for the machine weight. Some pick-up truck tailgates are not strong enough to support the weight of the machine and may require reinforcement.
☑ Do not load the machine onto a transport vehicle unless it is parked on a level surface.
☑ The transport vehicle must be secured to prevent rolling while the machine is being loaded.

☑ The machine must be securely fastened to the transport vehicle. Use chains or straps of ample load capacity.

☑Be sure to lock both swivel casters on the tilt-back frame.

☑Do not transport with the machine resting on the tilt-back frame.

#### **Lifting Instructions**

The number of people required to load and unload a machine is dependent on a number of factors, including but not limited to:

- the physical condition, strength and disabilities or prior injuries of the people involved
- the vertical and horizontal distances the machine has to be moved

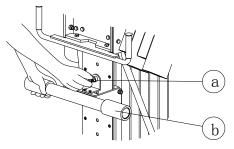
- the number of times the machine will be loaded or unloaded
- the stance, posture and grip used by the people involved
- the lifting techniques used

• the site conditions and weather in which the activity is being performed (i.e., slippery, icy, raining)

The appropriate number of people and proper lifting techniques must be used to prevent physical injury.

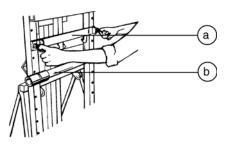
#### Loading for Transport

- 1. Fully lower the platform.
- Push in the red Emergency Stop buttons, turn the key switch to the off position and remove the key. Turn off the circuit breaker. Cut out the power and fixed the cable.
- Pull the lock pin up, turn the outriggers in and place them in the storage station.
- 4. DC models: Disconnect the battery cable and remove the battery pack.
- 5. Inspect the entire machine for loose or unsecured items.
- Slide the stop bracket to the top lock position.



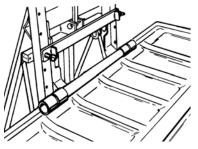
a. stop bracket b. loading pivot All models without tilt-back frame

#### Transport Instructions



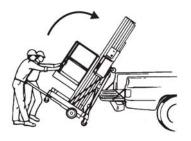
a.stop bracket b.loading pivot All models with tilt-back frame

- 7. Hook the loading pivot to the stop bracket.
- Position the machine flush against the loading surface. Lower and lock the stop bracket to the lowest lock pin position above the loading surface.



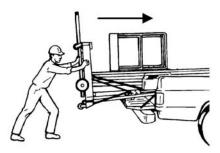
All models with tilt-back frame:

- Be sure both stop bracket lock pins are fully locked. Be sure both tilt-back frame swivel casters are locked.
- Slide out the T-handle until the lock pin snaps into place.
- Lift the T-handle to tilt the machine onto the loading surface. Use the appropriate number of people and proper lifting techniques.



12. Carefully push the machine into the

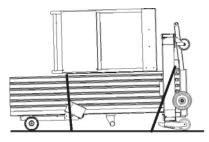
transport position.

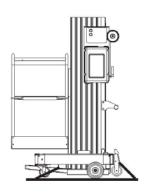


- Return the sliding T-handle to the stowed position.
- Secure the machine base and mast to the transport vehicle. See Securing the Machine following.
- Reverse this procedure to unload the machine.

#### **Securing the Machine**

Use chains or straps of ample load capacity. Use a minimum of 2 chains. Adjust the rigging to prevent damage to the chains.





#### Transport Instructions

#### Winching the Machine onto a

#### **Flatbed Truck**

- 1. Fully lower the platform.
- Push in the red Emergency Stop buttons, turn the key switch to the off position and remove the key. Turn off the circuit breaker. Cut out the power and fixed the cable.
- Remove the outriggers from the base and place them in the storage sockets.
- Inspect the entire machine for loose or unsecured items.
- Connect the cable to the winching point located at the rear of the base.
- Carefully winch the machine onto the truck.
- Secure the machine base to the transport vehicle. See Securing the Machine.

#### Loading the Machine with a

#### Crane

Use the lifting eye mounted on the rear mast column. The battery pack must be removed before lifting the machine with a crane. Disconnect the battery plug before removing the battery pack.



Be sure to inspect the machine and remove any loose or unsecured items.

Always place the lifting hook through the lifting eye so that it points away from the machine.

#### Tilt-back Operation Instructions



#### **Tilt-back Operation Instructions**

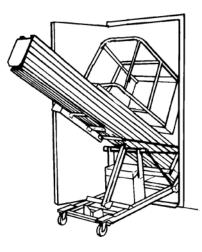
#### **Observe and obey:**

☑ The retaining pin must be inserted to prevent the spring-loaded tilt-back frame from dropping.

Do not tilt the machine back unless the area is clear of personnel and obstructions.
Do not stand behind or under the tilt-back frame when raising or lowering it.

#### **Tilt-back Frame**

The Dingli GTWY1200 Series has a tilt-back frame when height over 2m, which allows the machine to roll through a standard doorway. The tilt-back frame is standard equipment on standard base and GTWY14-1200models, and optional on standard base GTWY8-1200 GTWY10-1200 and GTWY12-1200 models.



#### **Tilting Instructions**

The number of people required for tilt-back and set-up a machine is dependent on a number of factors, including but not limited to:

- the physical condition, strength and disabilities or prior injuries of the people involved
- the vertical and horizontal distances the machine has to be moved
- the number of times the machine will be tilted or set-up
- the stance, posture and grip used by the people involved
- the lifting techniques used
- the site conditions and weather in which the activity is being performed (i.e., slippery, icy, raining)

The appropriate number of people and proper lifting techniques must be used to prevent physical injury.

#### Lowering the Tilt-back

#### Assembly

- Be sure the area behind the machine and under the tilt-back frame is clear of personnel and obstructions.
- 2. Fully lower the platform.
- Turn the outriggers in and place them in the storage station.

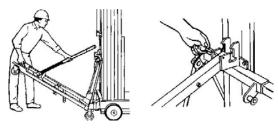
The tilt-back frame is spring loaded and will immediately fall outward



#### Tilt-back Operation Instructions

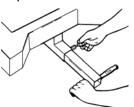
when the retaining pin is removed. Maintain a firm grasp on the tilt-back frame and remove the retaining pin.

- 4. Lower the tilt-back frame and guide the tilt-back strut into the strut socket.
- Insert the retaining pin into the strut socket.



#### **Tilting Back the Machine**

 Slide out the T-handle until the lock pin snaps into place.



 Lift the machine with the T-handle to mid-tilt position—casters on the tilt-back frame are in contact with the floor, and the machine is supported by the extended tilt-back strut. Use the appropriate number of people and proper lifting techniques.



- Continue lifting until the telescoping tilt-back strut is completely compressed.
- 4. Return the sliding T-handle to the stowed position.

#### Returning the Machine to Standing Position

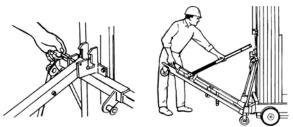
- Be sure the area below the machine base and T-handle is clear of personnel and obstructions.
- Slide out the T-handle until the lock pin snaps into place.



- Carefully pull down the T-handle until the machine rests at midtilt position.
- Lower the machine with the T-handle until the base casters are in contact with the ground. Use the appropriate number of people and proper lifting techniques.
- 5. Return the sliding T-handle to the stowed position.

#### Stowing the Tilt-back Assembly

1. Remove the retaining pin.



- 2. Firmly grasp the tilt-back frame and remove the tilt-back strut from the strut socket.
- 3. Lift the tilt-back frame, hold in an upright

position against the spring and secure with the retaining pin.

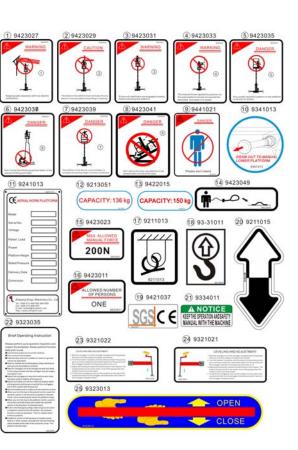


#### Inspection for Decals with

#### Words

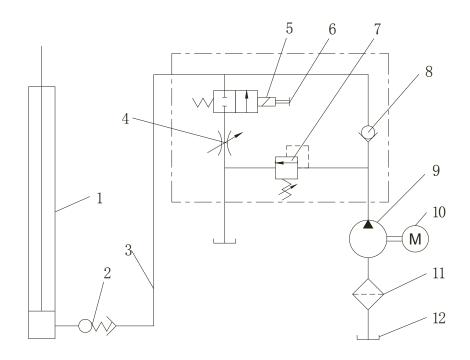
Determine whether the decals on your machine have words or symbols. Use the appropriate inspection to verify that all decals are legible and in place.

Item	Part No.	Description	Qty
1	9423027	Warning - Electrocution Hazards	1
2	9423029	Caution - Collision Hazard	1
3	9423031	Warning - Tip-over Hazards	1
4	9423033	Warning - Tip-over Hazards	1
5	<u>9423035</u>	Danger - Fall Hazards	1
6	<u>9423037</u>	Danger - Tip-over Hazards	1
7	<u>9423039</u>	Danger - Fall Hazards	1
8	<u>9423041</u>	Danger - Collision Hazard	1
9	<u>9441021</u>	Danger - Collision Hazard	1
$\bigcirc$	<u>9341013</u>	Label - Manual lowering valve	1
$\bigcirc$	<u>9241013</u>	Label - Nameplate	1
Ð	<u>9213051</u>	Notion – Max Capacity 136kg	1
13	<u>9422015</u>	Notion - Max Capacity 150kg	1
0	<u>9423049</u>	Notion –Harness anchor	1
13	<u>9423023</u>	Notion - Maximum Manual Force	1
G	<u>9423011</u>	Notion - Maximum occupancy	1
$\bigcirc$	<u>9211013</u>	Notion - Tie-down point	3
13	<u>9331011</u>	Label - Lifting eye	1
0	<u>9211015</u>	Notion - Forklift socket	2
0	<u>9421037</u>	Label -CE	1
ହ	<u>9334011</u>	Label - Manuals storage	1
02	<u>9323035</u>	Notion - Operating Instruction	1
$\odot$	<u>9321022</u>	Notion –Outrigger Adjustment	2
Ø	<u>9321021</u>	Notion - Outrigger Adjustment	2
23	<u>9323013</u>	Label - Lower Mid-rail	1



Machine Specifications			
Height, working maximum		Height, tilt-back	
GTWY8-1200	8m	GTWY14-1200	1950mm
GTWY10-1200	10m	Length, tilt-back	
GTWY12-1200	12m	GTWY14-1200	2950mm
GTWY14-1200	14m	Outrigger footprint (I×w)	
Height, platform maximum		GTWY8-1200	1640×1880mm
GTWY8-1200	6m	GTWY10-1200	1640×1880mm
GTWY10-1200	8m	GTWY12-1200	1640×1880mm
GTWY12-1200	10m	GTWY14-1200	1920×2160mm
GTWY14-1200	12m	Wheel load, maximum	235kg
Lift Capacity		Outrigger load, maximum	186kg
GTWY8-1200	150kg	Platform dimensions (I x w )	690mm×600mm
GTWY10-1200	150kg	Weight	
GTWY12-1200	150kg	GTWY8-1200	AC 366kg DC 404kg
GTWY14-1200	136kg	GTWY10-1200	AC 414kg
Height, stowed		OTM//42 4000	DC 450kg AC 434kg
GTWY8-1200	1990mm	GTWY12-1200	DC 470kg
GTWY10-1200	1990mm	GTWY14-1200	AC 526kg DC 558kg
GTWY12-1200	1990mm	Power source	
GTWY14-1200	2770mm	DC model	12V
Width, stowed		AC model	110V/230V
GTWY8-1200	730mm	Ambient operating temperature	-20°C~45°C
GTWY10-1200	730mm	Sound pressure level at ground workstatio	n <70dBA
GTWY12-1200	730mm	Sound pressure level at platform workstation	on <70dBA
GTWY14-1200	730mm	Vibration value does not exceed	2.5m/s <sup>2</sup>
Length, stowed			
GTWY8-1200	1270mm		
GTWY10-1200	1370mm		
GTWY12-1200	1430mm		
GTWY14-1200	1450mm		

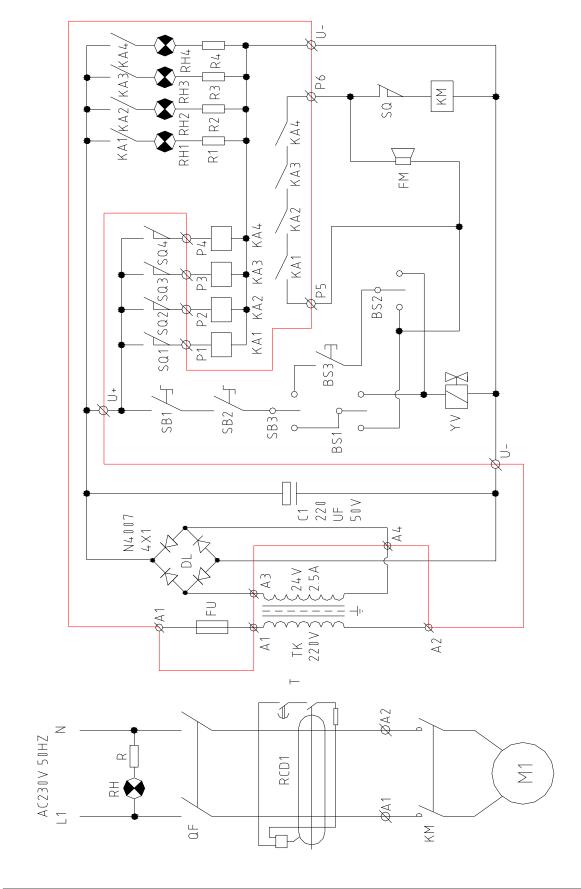
#### Hydraulic Diagram



- 1— Hydraulic Cylinder
- 2— Explosion Relief Valve
- 3— Hose unit
- 4— Throttle Valve
- 5— Solenoid Valve
- 6— Emergency Lowering Device

- 7- Relief valve
- 8— Check valve
- 9— Hydraulic Pump
- 10-Motor
- 11—Filter
- 12—Reservoir

#### **Electrical Diagram**



### Electrical Diagram

Symbol	Description	Model	Qty
RH	Power light	LBD DC5V(red)	1
R	resistor	200K1/4W	1
QF	Circuit breaker	DZ47-32 C16 16A	1
RCD1	Leakage protector	DZ47LE-32 C16 16A	1
KM	Contactor	JQX-12F 24V/30A	1
M1	Motor	MFWC07-(0.75)1.5KW~220V	1
FU	Fuse	7A	1
ΤK	Transformer	LXB40-T 40VA ~220V/24V	1
DL	Rectifier	4-1N4007/600V	1
C1	Capacitor	220UF/50V	1
SB1	Emergency Stop switch	ZB2BS54C/ZB2BZ102C-6A	1
SB2	Emergency Stop switch	ZB2BS54C/ZB2BZ102C-6A	1
SB3	Key switch	90173 24VDC 20A	1
BS1	Up/Down switch	APEM2 10A250VAC	1
BS2	Up/Down switch	ZB2BD5C/ZB2BZ103C-6A	1
BS3	Control activate button	ZB2BA3C/ZB2BZ103C-6A	1
YV	Magnetic valve	DC24V	1
SQ1	Microswitch	AZ8 104 5A-250V/AC	1
SQ2	Microswitch	AZ8 104 5A-250V/AC	1
SQ3	Microswitch	AZ8 104 5A-250V/AC	1
SQ4	Microswitch	AZ8 104 5A-250V/AC	1
KA1	Relay	HRM1H-S-DC24V/5A	1
KA2	Relay	HRM1H-S-DC24V/5A	1
KA3	Relay	HRM1H-S-DC24V/5A	1
KA4	Relay	HRM1H-S-DC24V/5A	1
RH1	Outrigger light	LBD DC5V(red)	
RH2	Outrigger light	LBD DC5V(red)	
RH3	Outrigger light	LBD DC5V(red)	
RH4	Outrigger light	LBD DC5V(red)	
R1	resistor	2K1/4W	
R2	resistor	2K1/4W	
R3	resistor	2K1/4W	
R4	resistor	2K1/4W	
FM	Buzzer	DC24V 1	
SQ	Microswitch	AZ8 104 5A-250V/AC	1

Continuous improvement of our products is a Dingli policy. Product specifications are subject to changewithout notice or obligation.

# Inspection and Repair Log

Date	Comments