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Introduction

Thank you for choosing Dragon Equipment. Our Lifting Machinery is designed to give safe and reliable service if operated in accordance with the instructions which are provided as a guide to familiarise the operator with the controls, inspections, start-up, operating, and shutdown procedures.

Limitations

- The LF1000 Lifter is designed to lift and transport a load of up to 1000 kg.
- A maximum unloaded tracking angle of 20°.
- When **loaded**, only operate or track on an area that is level and stable.

Delivery

All Dragon Equipment LF1000 Machines have a full pre-delivery inspection before leaving the factory and are ready to use. Read and understand this instruction manual before attempting to operate or move the lifter. In particular, read pages 4-8 which contain important health and safety information and advice.

Important Health and Safety Information

Before using your new lifter, please take the time to read this manual. Failure to do so could result in:

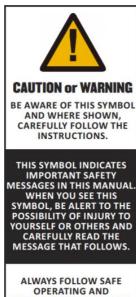
- Personal injury.
- Equipment damage.
- Property damage.
- Third-party injuries.

The machine must be properly operated and maintained to keep it in a safe and efficient functioning condition. Ensure that all controls are free of mud, grease, or other matter that might cause slips hazardous to the operator or other personnel. Report all malfunctions to those responsible for maintenance or site safety. Do not operate the equipment until corrected. Normal service or maintenance performed as required can prevent unexpected and unnecessary downtime. This handbook describes general inspections, servicing and operation with the normal safety precautions required for normal operation.

This manual covers the operation and maintenance of the Dragon Equipment

LF1000. All information in this manual on how to operate the machine safely is based on the latest product information available at the time of purchase. All operators must be properly trained in safe working practices before operating this machine.

Dragon Equipment's policy of continuous improvement on the design of its products may result in modifications to the lifter or its accessories. Dragon Equipment reserves the right to make modifications at any time without notice and obligation. This may result in minor discrepancies between this manual and the purchased product.





Specifications

Width: 840mm
 Length: 2,197mm
 Height: 1984mm
 Weight: 715 Kg

Engine Power: 10kW (14 HP)Start: Electric and Recoil

• Fuel: Petrol

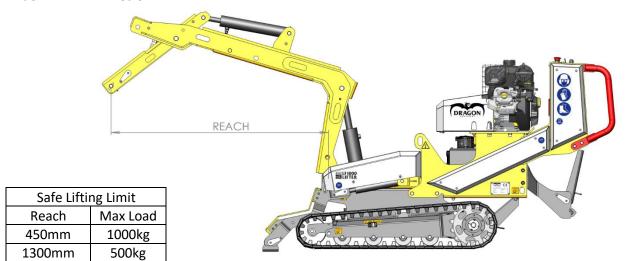


Figure 1: Safe Lifting Limit

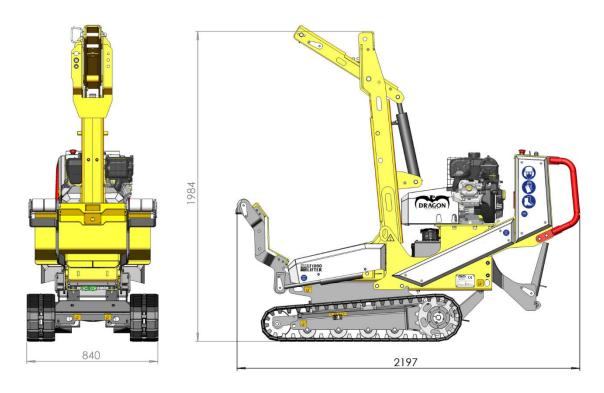


Figure 2: LF1000 Lifter Dimensions



Parts Locator

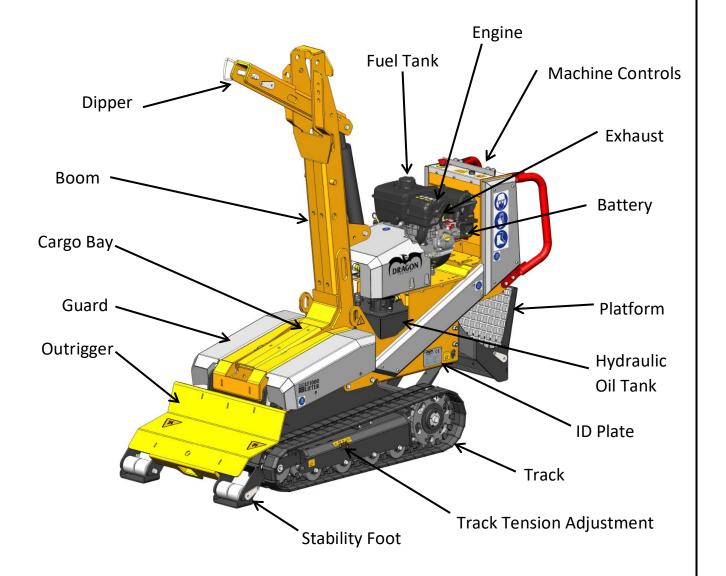


Figure 3: Parts Locator

The LF1000 has the following fixed guards for the protection of the operator and environment:

- **Hydraulic Guard**: Protects hydraulic cylinders from damage during operation.
- **Control Tower Guard**: Protects valves from the environment.
- Hose Guards: Prevents damage to hoses.
- Pump Guard: Prevents damage to hydraulic pumps.
- Electrical Guard: Prevents damage to engine wiring.

These guards may be removed for maintenance only. The operator must ensure guards are in place before operation.



Safe Working

Operator's Personal Protective Equipment (PPE)

- Suitable work gloves.
- Steel toe cap safety boots complying with ISO 20345:2011.
- Appropriate close-fitting clothing.
- Never wear loose clothing, rings, watches etc. that might catch the controls.
- High-visibility clothing complying with ISO 20471:2013 if required.
- Ear, Head and Eye Protection if required.



Basic Operation Safety

The operator should be aware of the following points:

- Ensure when transporting loads the ground is level and stable.
- Never leave the lifter unattended when in operation or with the engine running.
- If an accident occurs, stop the machine, remove the key and call the emergency services immediately.

General Safety Matters

- Always ensure the engine has stopped and cooled down before making any adjustments, undertaking maintenance, refuelling or cleaning.
- Always ensure there is no risk of the machine moving during operation. Be aware of slope inclines and surface conditions.
- If there are any fluid leaks, cease operating the machine, stop the engine and repair before continuing.
- Take regular breaks, and do not operate the machine when tired.
- Ensure protective guards are in place before operating the machine. Failure to do so may result in personal injury or loss of life.
- Always operate the lifter in a well-ventilated area to prevent the build-up of exhaust fumes.
- Ensure a fire extinguisher is available on site.
- Ensure a personal first aid kit is available and know its location.
- Do not operate the lifter in low light levels and be aware of changeable weather.
- Do not smoke when refuelling.
- Do not allow individuals to operate the machine who have not been trained.
- Do not climb onto the machine.
- Do not touch exposed wiring due to the risk of electric shock.
- Do not use the lifter inside buildings without sufficient ventilation.



Engine Noise

Noise levels above 80dB (A) will be experienced in the working position. Prolonged exposure to loud noise may cause permanent hearing loss. All persons within close vicinity of the lifter must also wear ear protection (EN 352) at all times to prevent possible hearing damage.

The average sound pressure level at one metre for the Vanguard 400 is:

| 3600FL | 3600NL | 3000FL | 3000NL |
|--------|--------|--------|--------|
| [dBA] | [dBA] | [dBA] | [dBA] |
| 96.8 | 93.8 | 94.4 | 90.4 |

While operating the lifter ensure that all individuals comply with the Control of Noise at Work Regulations 2005 (Noise Regulations 2005) to prevent or reduce risks to health and safety from exposure to noise at work.

Refuelling

- Follow standard Health and Safety practices.
- Stop the engine and allow it to cool.
- Never smoke or permit naked flames nearby.
- Store fuel away from any ignition sources.
- Fuel storage containers must be approved, clearly display appropriate labels and have securely fitting caps.
- Use a funnel when refuelling and ensure the fuel cap is refitted securely.
- Avoid skin contact with fuel. If it gets into the eyes wash it out with sterile water immediately and seek medical advice as soon as possible.
- Always clean up after any spillages and change clothes if appropriate.





Operating Instructions

Storage and Parking

When parking the machine overnight, or for an extended period, the following procedure in addition to that given in 'Stopping the Engine' will help maintain it in good condition for subsequent use:

- Fill the fuel tank before parking the machine overnight or for extended periods to prevent condensation.
- Always park on level ground where possible. If it must be parked on a slope, position the machine at right angles to the slope and block tracks securely.
- Remove the key to a place of safety.

NOTE: Always park the machine with the auxiliary attachment in contact with the ground.

NOTE: Ensure the equipment cannot be started or used by unauthorised or untrained personnel

To recommission after storage the following checks must be carried out:

- Check all fluid levels.
- Check for fluid leaks.
- Check the tension of the rubber tracks.
- Check the operation of all controls.
- Check the action of the Throttle/Stop Lever.
- Check the action of all E-Stop buttons.

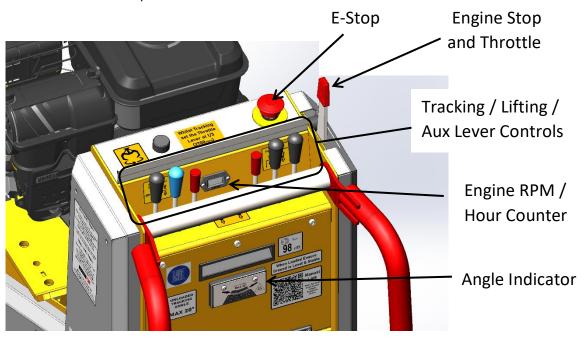


Figure 4: Summary of Switches, Controls and Gauges



Starting the Machine

Checks Before Starting

- Ensure the machine is located on firm flat ground.
- Check all guards are fitted.
- Carefully inspect tracks for cuts or other damage.
- Visually check for fluid leaks.
- Ensure there is sufficient fuel in the fuel tank.
- Ensure that all track levers are in the neutral position.



WARNING

Do not use or attempt to start the lifter without the protective guarding in place. Failure to do so may result in personal injury or loss of life.

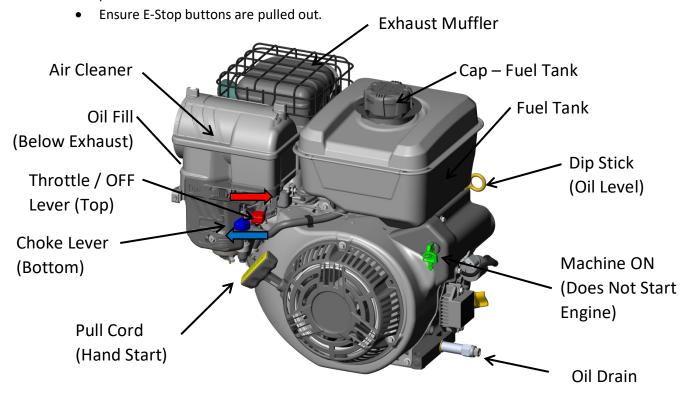


Figure 5: Engine Parts and Controls

Starting Procedure

Do not place the engine under full load at full speed immediately after starting. Always allow the engine to fully circulate lubricant and warm up gradually before operating at full speed and load.

- Move the throttle lever in direction of (BLUE arrow) to the halfway position.
- Pull choke control to the full choke position in direction of the BLUE arrow.
- Insert the key into the ignition.
- Ensure E-Stop buttons are pulled out.
- Turn the key clockwise to turn ON the machine, the engine will crank over.
- Release the key as soon as the engine starts.
- Push the choke control to the off position soon after starting. Normally within 1-2 seconds
- Allow the engine to warm up.



NOTE: To extend the life of the starter motor, use only short starting cycles - 5 seconds max.

Stopping the Machine

- Move the throttle lever to the STOP position in the direction of the RED arrow. This will turn off the fuel and stop the engine in one action.
- For more detailed information refer to the Engine Owner's Manual.

NOTE: Do not use the E-Stop to turn the engine off.

NOTE: Do not try to turn the key to the off position, use the throttle lever to turn off engine.

Emergency Stopping

Should the machine need to be stopped in an emergency, push the E-Stop button. This is located on the Track Tower Control Panel. The engine cannot be restarted until the activated E-Stop button is reset. Before resetting the E-Stop button inspect the machine to ensure it is safe to continue operation.

NOTE:

- If the engine is not to be restarted move the throttle control to off.
- Failure to move the lever may cause fuel to pump when moving the machine and fill the engine with petrol.
- This will hinder starting or damage the engine permanently.



Tracking the Machine

The Machine can be tracked at the same time using the Lifting and Auxiliary Controls.

Tracking Controls

The lifter utilises the following controls for tracking:

- Left-hand track lever.
- Right-hand track lever.
- E-Stop.

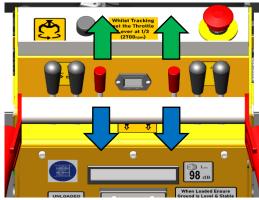


Figure 6: Tracking Controls

Checks Before Tracking

- Always face the direction the machine is travelling.
- Make sure the area around the machine is clear of personnel and obstructions before tracking.
- Always operate straight up or down slopes. Tracking across a slope can cause a sideslip and possible rollover.

NOTE:

- Track the lifter in reverse so the operator is above the LF1000 Lifter when **unloaded** and negotiating slopes greater than 10 degrees or loading onto a trailer see Figure 7.
- The maximum side traverse angle on a slope is 20° when unloaded, see Figure 7.
- When **loaded** ensure the ground is level and stable.

Tracking Procedure

- To steer the machine, apply pressure to the control levers.
 - Apply equal forward pressure on both levers to make the machine move forward in the desired direction at speed.
 - o To steer the machine, apply differing pressure to the control levers.
 - Applying equal pressure on both levers to the reverse position will make the machine move backwards at the desired speed.







DO NOT track the machine on slopes greater than 20° when unloaded.

The Maximum Tracking angle when loaded will depend on site conditions, attachments, load etc.





NOTE: The machine can be operated from the ground or the working platform to increase visibility.

Figure 7: Tracking Angle Limits



Figure 8: Operation When Loaded



When loaded ensure the ground is level and stable.

Avoid tracking across slopes.

Always reverse down slopes when loaded.

Operate the machine from the platform for increased visibility.



Lifting

The machine has a main boom, dipper arm and outrigger (front stability foot), which doubles up as a load stabiliser when tracking. The lifting arm can have various optional accessories fitted, such as a log grab or post-hole borer. Auxiliary accessory hydraulic hoses are connected via the quick-release couplers on the top of the boom. Male (fluid flow OUT) and Female (fluid flow IN).

Lifting and Auxiliary Controls



Figure 9: LF1000 Lifter and Auxiliary Controls

- 1. Boom Control Lever pushing the lever forwards tilts to boom forwards and pulling the lever back tilts the boom backwards.
- 2. Outrigger Control Lever pushing the lever forwards lowers the Outrigger and pulling the lever backwards raises the Outrigger.
- 3. Dipper Control Lever pushing the lever forwards raises the dipper arm and pulling the lever backwards lowers the dipper arm.
- 4. Aux Control Lever moving the lever forwards or backwards has the opposite action. The action will depend on the accessory fitted.

General Lifting Operation

- Approach the load and fully lower the outrigger to aid stability.
- Position the lifting hook or accessory over the load using the Boom and Dipper control levers.
- Securely rig the load to the lifting eye or utilise the auxiliary accessory if applicable.
- Lift the load onto the Cargo Bay using the Boom and Dipper control levers.
- Raise the Outrigger to secure the load.
- Use additional ties to secure the load if required.
- Track load as required.
- Unloading is the reverse of loading.

NOTE: When loaded ensure the ground is level and stable.



Accessories

Auxiliary Accessory Fitment

- Ensure the machine is turned OFF.
- Attach the required accessory to the mounting boss using the supplied fixings.
- Remove coupler dust caps.
- Ensure the coupler's faces are clean of dirt or grime.
- Connect the hydraulic hoses to the auxiliary service ports on the top of the boom.

Disconnection advice:

- Operate the accessory several times to relieve any pressure in the system before removing the quick-release fittings.
- Remove the hoses before disconnecting the accessory from the attachment point.

NOTE: The auxiliary lever is kept in the MID POSITION when DISCONNECTED.

NOTE: ALWAYS park the machine with the auxiliary attachment in contact with the ground.

Attaching the Tow Ball and/or Dozer Blade

- To use the Tow Ball insert it into the Outrigger as shown and secure it with the pin.
- The Dozer Blade can be inserted into the opening on the front of the Outrigger and secured using the Tow Ball and securing with a pin.
- The Tow Ball can be stored in the Dipper Arm when not in use (For storage purposes only).

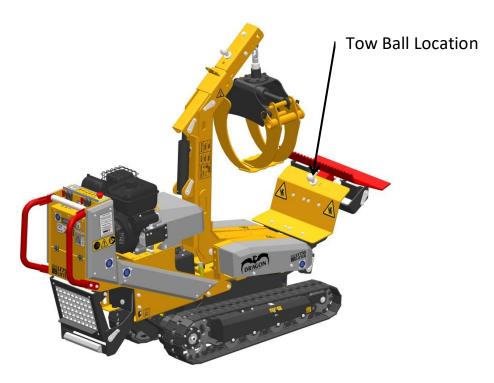


Figure 10: Tow Ball and Dozer Blade Attachment



Log Grab Accessory and Operation

- The log grab accessory is designed for handling timber and brash only.
- Max opening width of 1,300mm
- Max lifting weight of 1000Kgs 450mm from pivot pin and 500kgs 1300mm from pivot pin
- Push the lever forwards to **Open** the log grab and pull the lever backwards to **Close**.
- 1. Approach the load and fully lower the outrigger to aid stability.

NOTE: Track backwards/forwards as required.



2. Position the log grab over the timber using the Boom and Dipper control levers, then open the Log grab.



Close the log grab jaws around the timber.
 NOTE: Ensure the TIMBER IS EVENLY
 DISTRIBUTED before lifting.



4. Lift the load and place onto the cargo bay. NOTE: Ensure the timber is resting on the cargo bay and secure.



5. Raise the outrigger and ensure the timber is secure, use straps if required.

NOTE: DO NOT suspend timber from the dipper when transporting.



6. Unloading is the reverse of loading.

NOTE: Increase visibility by using the operator's platform.

NOTE: When loaded ensure ground is level and stable.

NOTE: ALWAYS park the machine with the log grab in contact with the ground.



Figure 11: Log Grab Operation



Troubleshooting

- The machine will not track:
 - Item jammed into drive sprocket change direction and remove the item.
 - o Ensure the hydraulic oil level is correct
- The machine will not lift:
 - o Throttle control is set too slow– ensure the lever is fully across.
 - o Ensure the hydraulic oil level is correct
- The machine lifts erratically:
 - Throttle control is set too slow– ensure the lever is fully across.
- The engine will not crank:
 - o Battery charge low charge as required or replace.
 - Use the Hand Pull to start the engine This will also charge the battery.
 - o The fuel lever not been turned off remove Spark Plug to allow fuel to evaporate.
- The engine will crank, but not start:
 - o Ensure all the E-Stops are in the off position.
 - o Engine too hot turn off choke as not required.
 - o Engine too cold turn on choke as required.
 - No fuel in the tank check the level and fill as required.
 - Wrong fuel in the tank drain fuel from the tank and carburettor and replace with the correct grade of petrol.



Service Instructions

Safe Maintenance

While carrying out maintenance, handle the LF1000 Lifter components with care to avoid injury, it is recommended that gloves are worn while carrying out servicing to minimise the risk of contact with hazardous materials. The major components of this machine are heavy and if required, lifting equipment should be used.

Securing the LF1000 Lifter

The method of securing the LF1000 Lifter can vary depending on the type of carrier and position of tie-down points available on the carrier. It is recommended that correctly rated ratchet straps are used to secure the



WARNING

Always immobilise the machine before undertaking any maintenance work on the lifter by removing the ignition key and disconnecting the battery. Ensure the lifter is stable and on level ground before performing any maintenance.

machine via the track frame or over the tracks to the carrier lashing points. This must be carried out by competent qualified personnel. Failure to secure the load correctly could result in chassis and/or undercarriage damage or loss of load.

Lubrication and Servicing

Lubrication is an essential part of preventive maintenance. The instructions regarding types of lubricants and the frequency of their application must be followed to prolong the life of the machine. Periodic lubrication of moving parts helps prevent the possibility of mechanical failures. Thoroughly clean all fittings, caps, plugs etc., to prevent dirt from entering the system while servicing. Lubricants must be at operating temperatures when draining.

Do not operate any system unless the oil level is within the operating range as indicated on the dipstick, level plug or sight glass. All change and service periods are recommendations based on average operating conditions. Lubricants showing evidence of excessive heat, oxidation or dirt should be changed more frequently to prevent these conditions. Lubricants change and service periods must be established based on individual job conditions.

Recommended Lubricants

- Engine Vanguard ® Synthetic 15W-50
- Hydraulic VG32 Mineral Oil
- Grease Shell Gadus S3 V100 premium multi-purpose grease

Spares

Only fit genuine Dragon Equipment LF1000 Lifter spares. Failure to do so will invalidate the warranty and may result in damage to the lifter, personal injury or even loss of life.



Service Schedule

| First 5 Hours | | | | | |
|---|---|--|--|--|--|
| Change engine oil Refer to engine manual | | | | | |
| Check for hydraulic oil leaks | Page 19 | | | | |
| Every 8 Hours or Daily | | | | | |
| Check engine oil level | Refer to engine manual | | | | |
| Clean Area around muffler and engine controls | Refer to engine manual | | | | |
| Clean air intake grille | Refer to engine manual | | | | |
| Check hydraulic oil leaks | Page 19 | | | | |
| Visually check the machine for damage | | | | | |
| Every Month | | | | | |
| Grease all lubrication points and check track tension | Page 21 | | | | |
| First 50 hours | | | | | |
| Change hydraulic oil filter Page 20 | | | | | |
| Every 100 Hours or Annually | | | | | |
| Service exhaust system | Service exhaust system Refer to engine manual | | | | |
| Every 200 Hours or Annually | | | | | |
| Change engine oil | Refer to engine manual | | | | |
| Clean air filter¹ | Refer to engine manual | | | | |
| Every 600 Hours or Every 3 years | | | | | |
| Replace air filter | Refer to engine manual | | | | |
| Annually | | | | | |
| Replace spark plug | Refer to engine manual | | | | |
| Service fuel system | Refer to engine manual | | | | |
| Service cooling system¹ | Refer to engine manual | | | | |
| Check valve clearance ² | Refer to engine manual | | | | |
| Change hydraulic oil and replace hydraulic oil filter | Page 20 | | | | |
| Check fittings | Page 22 | | | | |

In Dusty conditions or when airborne debris is present, clean more often.

Engine Servicing

All engine servicing must be performed in accordance with the Engine Manufacturer's Handbook provided with the machine.

NOTE: Failure to adhere to this may invalidate the warranty and/or shorten engine life.

Hydraulic Hose Check

All hydraulic hoses should be regularly inspected for chafing and leaks. The hydraulic system is pressurized to 200 Bar (2900 PSI) and the hoses must be kept in good condition. New seals should be installed during reassembly if any hydraulic components are changed. Fittings should then be retightened.



Not required unless engine performance problems are noted.

Changing the Hydraulic Oil Filter

- Undo the filter cap as shown in Figure 12.
- Partially remove the filter and allow the oil to drain for five minutes.
- Remove the filter once all hydraulic oil has drained.
- Install a new filter element and refit the filter cap to the filter housing. Take care, not to over-tighten the three bolts.

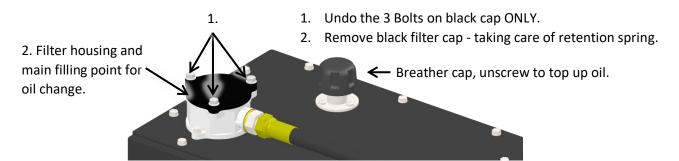


Figure 12: Changing the Hydraluiic Oil Filter

Changing Hydraulic Oil and Filter

- Remove the drain plug and allow the oil to drain into a suitable container.
- Undo the filter cap as shown in Figure 12.
- Partially remove the filter and allow the oil to drain for five minutes.
- Clean the magnet (if fitted) and refit the drain plug. Note: the presence of excessive debris.
- Refill with VG 32 hydraulic oil to Nominal Oil Level Approximately 25 litres as shown below.
- Install a new filter element and refit the filter cap to the filter housing. Take care, not to over-tighten the three bolts.



Figure 13: Hydraulic Oil level



Grease Moving Parts

Periodic lubrication of moving parts will help reduce the possibility of mechanical failures.

- Grease nipples on all hydraulic cylinders, as shown below.
- Grease pins on the boom, dipper, outrigger and log grab if fitted, as shown below.

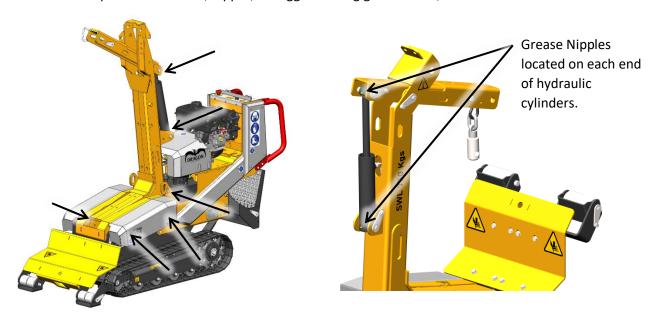


Figure 14: Grease Nipples and Pins

Grease Track Tensioners

- The correct tension is about 10-15mm up and down movement over the length of the track.
- Avoid over-tensioning tracks. Aside from causing unnecessary wear and friction on the drivetrain, pumping excessive pressure into the idler grease adjuster will cause the seals to fail.

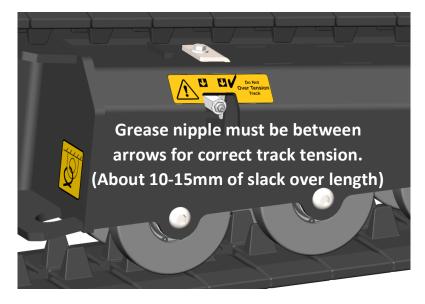


Figure 15: Track Tension



Check Fittings

The Dragon Equipment LF1000 Lifter is subject to large loads during its normal course of operation. Therefore, there is a possibility that nuts, bolts and other fastenings can lose their torque over time. Checks must be made at regular intervals to ensure the security of these fasteners by using a torque wrench to the required torque (see below).

NOTE: Uncalibrated torque wrenches can be inaccurate by as much as 25%. Therefore, a calibrated torque wrench is essential to achieve the tightening torques.

| | Size | Pitch | Torque lb-ft | Torque Nm |
|---------------------|------|----------|--------------|-----------|
| General Bolt | M8 | Standard | 20 | 27 |
| General Bolt | M10 | Standard | 45 | 61 |
| General Bolt | M12 | Standard | 65 | 88 |

Hazardous Materials and End of Machine Life

The following hazardous materials are within Dragon Equipment machines:

- Engine oil.
- Petrol.
- Grease.
- Hydraulic oil.

MATERIAL SAFETY DATA SHEETS FOR HAZARDOUS MATERIALS ARE AVAILABLE ON REQUEST. REFER TO THESE FOR FIRST AID AND FIRE PROTECTION MEASURES.

Recommended procedures and safety precautions must be followed for the safe handling, removal and disposal of hazardous materials. Avoid direct contact and store in a cool, well-ventilated area away from sources of ignition, strong oxidising agents and strong acids. Ensure any spillages are dealt with immediately under local/regional law by preventing any ground or drainage system contamination.

End of machine life

At the end of the machine's life, follow approved local waste and disposal methods for recycling materials, while ensuring you adhere to all applicable local/regional Health and Safety and Environmental laws. If disassembling the machine structure, refer to the maintenance instructions while being aware of any parts with mechanical pressure or tension applied. It is recommended that items are separated into material groups where possible and recycled using appropriate local agencies. Once decommissioned, supply the serial number to Dragon Equipment to close the machine's records.



Battery Safety Information

The rechargeable Li-Ion polymer battery is a sealed unit that is not hazardous when used according to the manufacturer's recommendations. Under normal conditions of use, the solid electrode materials and Gel electrolyte they contain are non-reactive provided that the battery integrity is maintained.

Safety Advice:

- Keep out of reach from children.
- Keep away from moisture.
- Do not breathe dust.
- In case of contact with eyes, rinse immediately with plenty of water for 15 minutes and seek medical attention.
- Wear safety goggles or glasses with side shields if handling a leaking or ruptured battery.
- Use Viton rubber gloves and a rubber apron if handling a leaking or ruptured battery.
- Skin Contact: Wash immediately with water and soap.
- Inhalation of Vented Gas: Remove to fresh air. Get medical attention.
- Ingestion: Get medical attention immediately.

Fire and Explosion Data:

- Extinguishing Media Dry chemicals, water.
- Fire-Fighting Procedures Use a self-contained breathing apparatus and protective clothing.
- Unusual Fire and Explosion Hazards Toxic gases (HF, PF6) will be formed if a fire involves cells or batteries. Cells or batteries may flame or leak potentially hazardous organic vapours if exposed to excessive heat, fire or over-voltage conditions. Damaged or opened cells or batteries may result in rapid heat and the release of flammable vapours.

Storage and Handling / Use:

- Do not store batteries in a manner that allows terminals to short-circuit.
- Do not place batteries near heating sources, or exposed to direct sunlight for long periods. Elevated temperatures can result in reduced battery service life.
- Charging Battery. Use only approved chargers and procedures. Improperly charging a cell or battery may cause the cell or battery to ignite or be damaged.
- Battery Disassembly. Never disassemble a battery. Should a battery unintentionally be crushed, thus releasing its contents, rubber gloves must be used to handle all battery components. Avoid inhalation of any vapours that may be emitted.
- Battery Short Circuit. Do not short-circuit a battery. A short circuit can result in overheating
 of the terminals and provide an ignition source. More than a momentary short circuit will
 generally reduce the cell or battery service life and can ignite surrounding materials or
 materials within the cell or battery if the seal integrity is damaged. Extended short-circuiting
 creates a high temperature in the cell and at the terminals. Physical contact with high
 temperatures can cause skin burns. In addition, an extended short circuit may cause the cell
 or battery to ignite.
- Avoid reversing cell polarity within a battery assembly. Reversing cell polarity may cause the cell or battery to flame or emit gases.



Warranty Statement

Each machine supplied by Dragon Equipment Ltd is accompanied by a registration form that must be completed in full and returned to:

Sales Manager (email: sales@dragon-equipment.co.uk)

Failure to register your machine may invalidate the manufacturer's warranty.

Liability

The warranty period begins when the product is delivered to the first purchaser. Only genuine parts may be used to carry out repairs. Failure to use only genuine parts may invalidate the Manufacturer's Warranty.

Dragon Equipment Ltd will not be held responsible if:

- The machine has been used to perform tasks that demand outside of its design and strength limitations.
- The machine has undergone modifications not approved by Dragon Equipment Ltd.
- Conditions of use have been abnormal.
- Normal maintenance as set out and detailed by Dragon Equipment Ltd has not been adhered to.

Limitations

- Normal maintenance and servicing and any materials used to carry out routine servicing are not covered by this warranty.
- Service items include lubricants, coolants, filters, spark plugs, drive belts, and leaks (oil and air). Plus: paintwork, worn parts and tracks.
- The warranty liability of Dragon Equipment Ltd is limited to the diagnosis, repair or replacement of the defective part depending on the product terms and conditions.
- Dragon Equipment Ltd shall be under no liability whatever to the customer for any indirect loss and/or expense (including loss of profit) suffered by the customer arising out of a breach by Dragon Equipment Ltd of this contract.

Warranty Audits and Surveys

Dragon Equipment Ltd reserves the right to carry out audits and inspections concerning any reimbursed or outstanding warranty claims to determine that all relevant details and information is correct.

Service Bulletins

Dragon Equipment Ltd may occasionally issue service bulletins to keep the customer up to date as to any improvements or changes that may take place on the complete assembly or component parts.

Warranty Terms

One year or 1000 hours whichever occurs first from the date of installation.



Warranty Claim Submission Procedures

Claims must be reported accurately along with all relevant details given, as follows:

- OWNERS NAME AND ADDRESS: to include site location, if different.
- MACHINE TYPE:
- DATE OF FAILURE:
- INSTALLATION DATE: The actual date of installation, not the invoice date.
- SERIAL NUMBER: Serial number of the unit.
- ENGINE NUMBER: Serial number of the engine.
- HOURS USED: State hours used on elapsed hour indicator.
- DETAILS OF FAILURE: Give a full report on the failure.

Accurate information is vital to determine the following:

- That the failure is to be covered under the terms and conditions of the warranty. If this is the case, then the costs will be covered by Dragon Equipment Ltd.
- If the failure is determined to be non-warrantable, further authorisation to continue will be sought before any rectification work takes place.

The information above must be provided even if your warranty claim is a "parts only" claim. The reported faulty/defective part must be immediately returned to Dragon Equipment Ltd to enable full inspection of the parts to be carried out. If the failure is covered under the terms and conditions of the warranty a credit note will be despatched to the customer. If the failure is deemed non-warrantable, an invoice will be raised accordingly.



Decals

| Part No. | | Part No. | |
|------------------|--------------------------|-------------------|--------------------------------------|
| | Docale | | Decale |
| Description: | Decal: | Description: | Decal: |
| No. Req' Per MC: | | No. Req' Per MC: | |
| 30-D-00373-A: | | 30-D-0807-A: | Do Not Over Tension |
| CAUTION! | | Correct Track | Track |
| Keep Hands Out | | Tension | Do Not Over Tension |
| (Large) | | (Left and Right) | Over Tension Track |
| 2 No. Off | | 1 No. Off | |
| 30-D-00414-A: | | 30-D-01041-B | |
| Read the Manual | | SWL 1000 Kgs V1 | SAFE LIFTING REACH MAX LOAD LF1000 |
| Before use. | | 2 No. Off | 1300 _{mm} 500 _{kg} |
| 1 No. Off | | | |
| 30-D-00378-A: | ^ | 30-D-00379-A: | |
| Lifting Eye | | Hold Down Point | |
| (For Machine | | | |
| Weight Only) | <u> </u> | 6 No. OFF | |
| 2 No. Off | | | |
| 30-D-00924-A | | 30-D-01126-A | |
| Dragon | | LF1000 Lifter | MADE IN 1 E 1000 |
| Equipment | | 160X50 V1 | BRITAIN LF 1000 |
| 250X125 V1 | DRAGON | | LIFTER |
| | EQUIPMENT / | 3 No. Off | |
| 2 No. Off | | | |
| 30-D-00927-A | | 30-D-00928-A | UNLOADED |
| Level and Stable | | Unloaded | TRACKING |
| Ground V1 | When Loaded Ensure | | ANGLE |
| Ground VI | Ground is Level & Stable | Tracking Angle V1 | ANGLE |
| 1 No. Off | | 1 No. Off | MAX 20° |
| 30-D-01065-A | Whilst Tracking | 30-D-01064-A | |
| Detuci Fuel V4 | set the Throttle | Datual Fred 174 | PETROL |
| Petrol Fuel V1 | Lever at 1/3 | Petrol Fuel V1 | FEIRUL |
| 1 No. Off | (2700 _{rpm}) | 2 No. Off | |



30-D-00926-A

Starting and Stopping the Engine V2

1 No. Off

Starting the Engine

Move Throttle Lever to 1/2 way position Move Choke lever as required. Turn Key Clockwise to Crank Engine

Turn off choke as soon as Engine has Move Lever to the Right Turns off Choke

Stopping the Engine

Move the Throttle lever to the Right The Engine will STOP The Fuel Is also turned off with the Lever in the Far Right Position

Do Not Use the E-STOP to Stop Engine when in Normal Use. The E-STOP is for Emergency use ONLY

30-D-00419-B:

QR Manual Link

1 No. Off



Manual Link

to get Access Dragon Equipment Online

30-D-00811-A:

Part of how to start the engine

1 No. Off



30-D-00950-A

CAUTION Keep Hands Out V2 (Small)

2 No. Off



30-D-00416-A:

Noise Level (Wear Ear Protection)

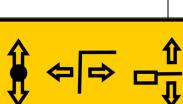
1 No. Off



30-D-01042-A

Lever Controls V2 184x64

1 No. Off



Outrigger

Boom Track





Dipper



Aux Accessory

30-D-00374-A:

Personal Protective Equipment required

1 No. Off





30-D-00375-A:

DANGER Do Not operate without the guard in place.

7 No. Off



30-D-01066-A

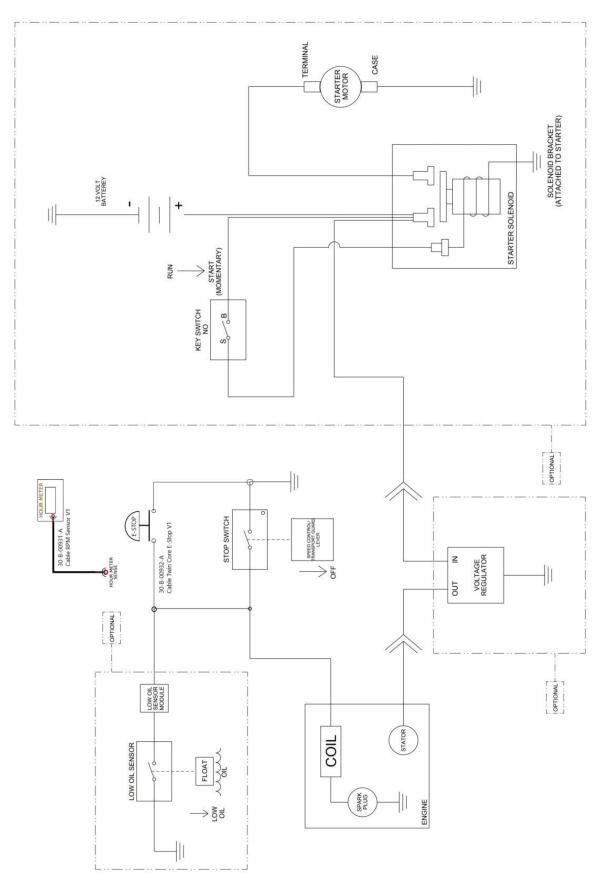
Petrol Fuel V1 1 No. Off



Manual V2.4 (Mk2)

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Electrical Circuit Schematic





Electrical Component Parts List

| Item | Part No. | Description | Quantity |
|------------|--------------|-----------------------------|----------|
| Hour Meter | 30-B-00693-A | Hours Counter V1 | 1 |
| Cable | 30-B-00951-A | Cable RPM Sensor V1 | 1 |
| Cable | 30-B-00952-A | Cable Twin Core E-Stop V1 | 1 |
| E-Stop | 30-B-00692-A | E-Stop Button | 2 |
| Battery | 30-B-00719-A | Battery with Foam 12v 9 135 | 1 |
| Cable | 30-B-00747-A | Cable Start Positive V1 | 1 |
| Cable | 30-B-00748-A | Cable Start Negative V1 | 1 |



Hydraulic Circuit Schematic (1101) 3/8 Outrigger 999 RH4508 **Bulkhead Layout** (2) (1103) (2) 22 (%) 73 Track (23) = (12)

(5)



Manual V2.4 (Mk2) (19)

23

15

23 g[∓] ±

Valve Layout

Hydraulic Hose and Component Parts List

| It | em No. | Part No. | Description | Quantity |
|--------------------|--------|--------------|--|----------|
| | | 30-A-00193-C | Hydraulic Tank Assy V1 (including Ancillaries) | 1 |
| | | 30-B-00196-A | Gasket 25 Ltr | 1 |
| | | 30-B-00742-A | Oil Hydraulic Grade 32 (25Ltr) | 1 |
| | 1 | 30-B-00718-A | Level Gauge Hydraulic | 1 |
| | 2 | 30-B-00715-A | Breather Hydraulic Tank V1 | 1 |
| | 3 | 30-B-00201-A | Filter Body V1 | 1 |
| | | 30-B-00720-A | Filter Hydraulic V1 | 1 |
| | 4 | 30-B-00203-A | GRP 2, GRP 2 Tandem Pump 6cc X 6cc | 1 |
| | 5 | 30-B-00763-A | Tracking Valve Triple V1 | 2 |
| | 6 | 30-A-00781-A | Drive Kit Petrol V1 | 1 |
| | 7 | 30-B-00157-A | Motor 350cc 32mm Shaft | 2 |
| | 1101 | 30-B-01101-A | Left Hand Return 3/8 860mm | 1 |
| | 1102 | 30-B-01102-A | Right Hand Return 3/8 880mm | 1 |
| | 1103 | 30-B-01103-A | Pump2 Right Hand Track 3/8 1200mm | 1 |
| | 1104 | 30-B-01104-A | Pump1 Left Hand Track 3/8 1200mm | 1 |
| | 1105 | 30-B-01105-A | Pump2 Left Tank 3/4 470mm | 1 |
| | 1106 | 30-B-01106-A | Pump1 right Tank 3/4 600mm | 1 |
| | 1107 | 30-B-01107-A | Left Hand Extender Ram Foot 1/4" 1000mm | 1 |
| | 1108 | 30-B-01108-A | RHCompressed Ram Foot 1/4" 1060mm | 1 |
| Hose Kit Lifter V1 | 1109 | 30-B-01109-A | Right Hand Extender Ram Foot 1/4" 185mm | 1 |
| ifte | 1110 | 30-B-01110-A | Left Hand Compressed Foot 1/4" 395mm | 1 |
| l H | 1111 | 30-B-01111-A | Valve Compressed Foot 1/4" 1250mm | 1 |
| se X | 1112 | 30-B-01112-A | Valve Extender Foot 2 1/4" 1350mm | 1 |
| НОS | 1113 | 30-B-01113-A | Main Ram Extend 1/4" 600mm | 1 |
| -1 | 1114 | 30-B-01114-A | Main Ram Compress 1/4" 885mm | 1 |
| 30-B-00953-A | 1115 | 30-B-01115-A | Valve Main Extend 1/4" 1270mm | 1 |
| ì60 | 1116 | 30-B-01116-A | Valve Main Compression Ram 1/4" 1250mm | 1 |
| ·B-C | 1117 | 30-B-01117-A | Dipper Ram Compress 1/4 1830mm | 1 |
| 30- | 1118 | 30-B-01118-A | Dipper Ram Extend 1/4 1595mm | 1 |
| | 1119 | 30-B-01119-A | Valve Dipper Compress 1/4 1280mm | 1 |
| | 1120 | 30-B-01120-A | Valve Dipper Extend 1/4 1240mm | 1 |
| | 1121 | 30-B-01121-A | Aux Hose 3/8 3640mm | 1 |
| | 1122 | 30-B-01122-A | Aux Hose 3/8 3760mm | 1 |
| | 1123 | 30-B-01123-A | Track Motor Hose 3/8 1740mm | 4 |
| | 1124 | 30-B-01124-A | Log Grab Hose 1/4 1660mm | 1 |
| | 1125 | 30-B-01125-A | Log Grab Hose 1/4 1790mm | 1 |



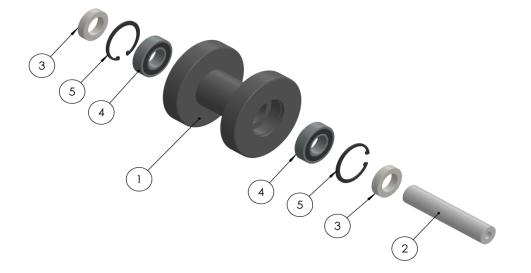
Part Diagrams

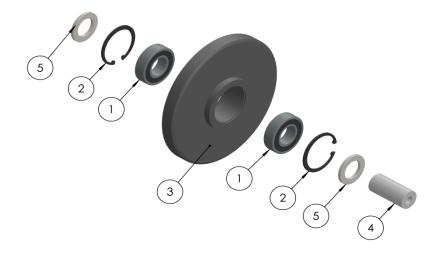
| Drawing 1: Track Tensioner Wheel and Lower Roller Assy | 33 |
|--|----|
| Drawing 2: Track Assy 180x60x47 RH and LH V1 | 34 |
| Drawing 3: Track Base 4W840W V4 | 35 |
| Drawing 4: Hydraulic Tank Assy V2 | 36 |
| Drawing 5: Petrol Engine and Pump Assy V1 | 37 |
| Drawing 6: Track Tower Assy V3 | 38 |
| Drawing 7: Platform Folding Assy V1 | 39 |
| Drawing 8: Tracking Power Unit Briggs 4W840W | 40 |
| Drawing 9: LF1000 Head Unit (Boom and Dipper) | 41 |
| Drawing 10: LF1000 Head Unit (OutRigger) | 42 |
| Drawing 11: LF1000 Head Unit (Main) | 43 |
| Drawing 12: LE1000 Lifter and Machine Guards | 44 |



| пем но. | PART NUMBER | DESCRIPTION | QTY. | |
|---------|--------------|---------------------------|------|--|
| 1 | 30-M-00490-A | Lower Track Wheel V2 | 1 | |
| 2 | 30-M-00055-B | Lower Wheel Spindle | 1 | |
| 3 | 30-F-00093-A | 42x25.5x10mm Spacer | 2 | |
| 4 | 30-B-00159-A | 6205-2RS-C3 | 2 | |
| 5 | 30-B-00677-A | Ø52mm (Un-Sprung Ø56.2mm) | 2 | |

| пем но. | PART NUMBER | DESCRIPTION | QTY. |
|---------|--------------|---------------------------|------|
| 1 | 30-B-00159-A | 6205-2RS-C3 | 2 |
| 2 | 30-B-00677-A | Ø52mm (Un-Sprung Ø56.2mm) | 2 |
| 3 | 30-M-00043-B | Tensioner Wheel V1 | 1 |
| 4 | 30-M-00094-B | Axle Tensioner Wheel V1 | 1 |
| 5 | 30-F-00095-A | 25.5x41x4 Spacer | 2 |



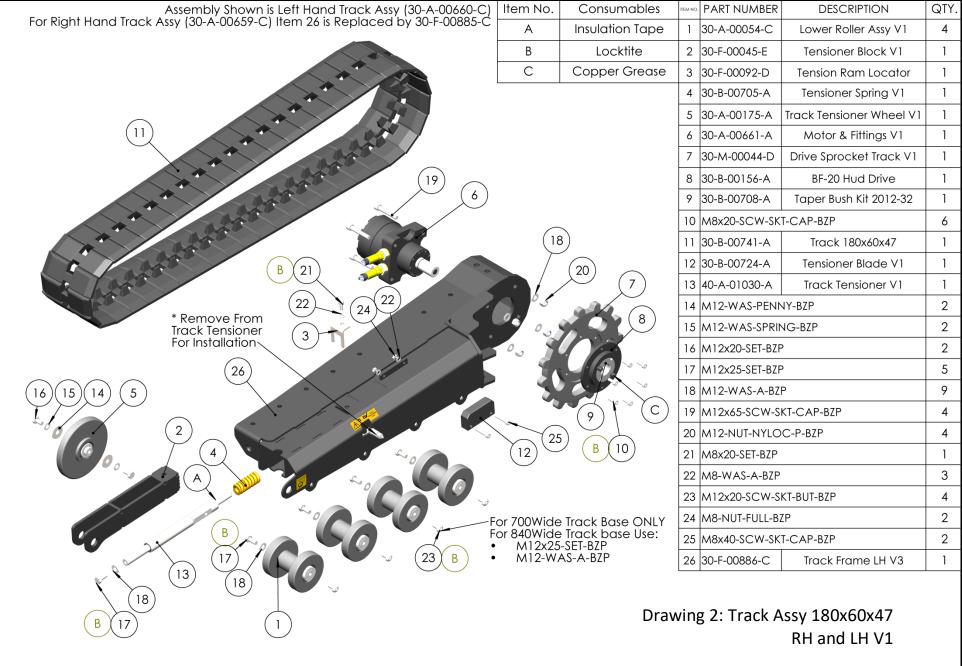


Drawing 1: Track Tensioner Wheel and Lower Roller Assy

30-A-00175-A

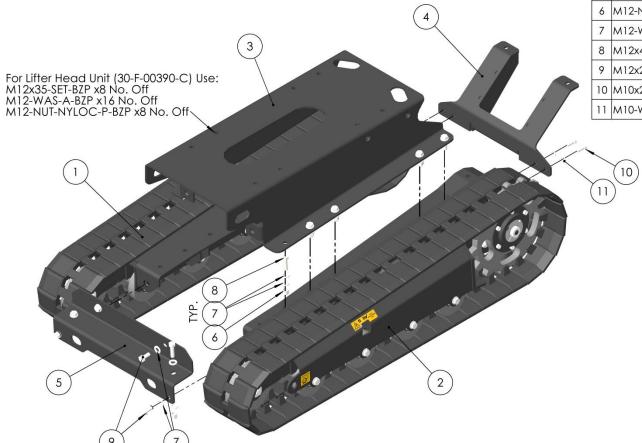
BRITAIN LF 1000 LIFTER Manual V2.4 (Mk2) 30-A-00054-C

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BRITAIN LF 1000
LIFTER

Manual V2.4 (Mk2) 30-A-00659-A



PART NUMBER **DESCRIPTION** QTY. 1 30-A-00659-C Track Assy 180X60X-- RH V1 2 30-A-00659-C Track Assy 180X60X-- RH V1 3 30-F-00941-B Support Frame Assy V6 4 30-F-00954-A 1 Tow Bracket V2 5 30-F-00957-B X-Member V3 12 6 M12-NUT-NYLOC-P-BZP 7 M12-WAS-A-BZP 28 8 M12x40-SET-BZP 12 9 M12x25-SET-BZP 4 10 M10x25-SET-BZP 4 11 M10-WAS-A-BZP

4Wheel 840Wide

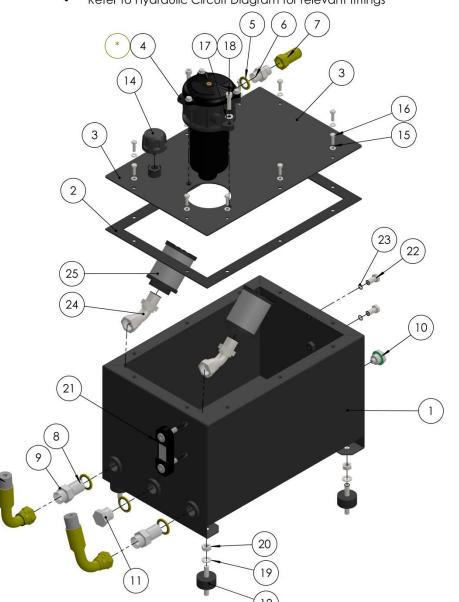
Drawing 3: Track Base 4W840W V4

40-A-0942-A



Notes:

- Use Sealant for filter body (Item 4) & Level guage blanking bolts (item 22) replacement filter for item 4 Part No. 30-B-00788-A Filter Hydrlauic V2 Refer to Hydraulic Circuit Diagram for relevant fittings

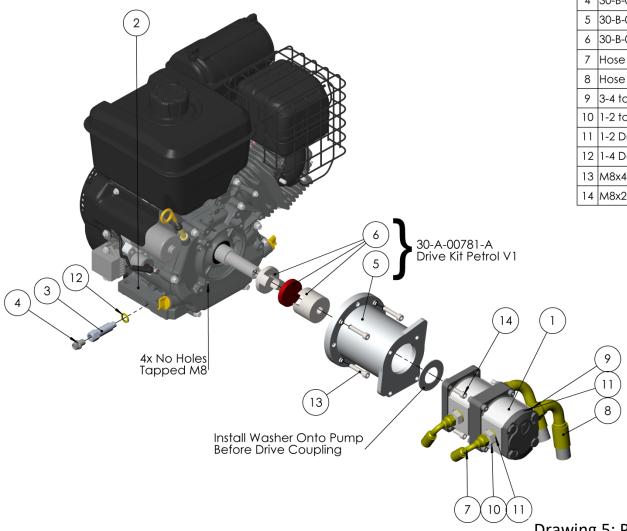


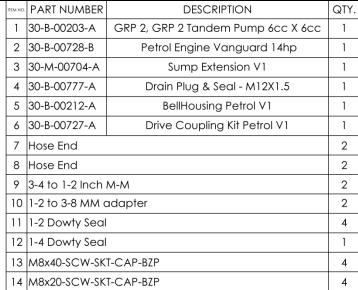
| ITEM NO. | PART NUMBER | DESCRIPTION | QTY. |
|----------|---|---|---|
| 1 | 30-F-00237-D | Oil Tank 40Ltrs V1 | 1 |
| 2 | 30-B-00196-A | Gasket 25 Ltr | 1 |
| 3 | 30-F-00786-A | Oil Tank Lid Assy V3 | 1 |
| 4 | 30-B-00787-A | 1-2 10 MICRON RETURN LINE FILTER V2 | 1 |
| 5 | 1-2 Dowty Sea | I | 1 |
| 6 | 1-2 MM adapt | er | 1 |
| 7 | Hose End | | 1 |
| 8 | 3-4 Dowty Sea | 1 | 3 |
| 9 | 3/4 Inch M/M | Adapter Extra Long | 2 |
| 10 | 30-B-00679-A | Drain Plug Magnetic 1-2 Inch BSP | 1 |
| 11 | 3-4 Blanking Pl | ug | 1 |
| 12 | 30-B-00355-A | AV Mount 40x20xM10 M-M | 4 |
| 13 | Hose End | | 2 |
| 14 | 30-B-00715-A | Breather Hydraulic Tank V1 | 1 |
| 15 | M6-WAS-A-BZF | o | 11 |
| 16 | M6x20-SET-BZP | | 10 |
| 17 | M8-WAS-A-BZF | 5 | 2 |
| 18 | M8x30-SCW-Sk | (T-CAP-BZP | 2 |
| 19 | M10-WAS-A-BZ | ZP | 4 |
| 20 | M10-NUT-FULL- | BZP | 4 |
| 21 | 30-B-00718-A | Level Gauge Hydraulic | 1 |
| 22 | M10x20-SET-BZ | Р | 2 |
| 23 | 30-B-01063-A | O-Ring Ø10x1.5 | 2 |
| 24 | 3/4" 45° Male - | Female | 2 |
| 25 | 30-B-01060-A | Suction Strainer V1 | 2 |
| | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 | 1 30-F-00237-D 2 30-B-00196-A 3 30-F-00786-A 4 30-B-00787-A 5 1-2 Dowty Sec 6 1-2 MM adapt 7 Hose End 8 3-4 Dowty Sec 9 3/4 Inch M/M 10 30-B-00679-A 11 3-4 Blanking PI 12 30-B-00355-A 13 Hose End 14 30-B-00715-A 15 M6-WAS-A-BZF 16 M6x20-SET-BZP 17 M8-WAS-A-BZF 18 M8x30-SCW-SK 19 M10-WAS-A-BZ 20 M10-NUT-FULL- 21 30-B-00718-A 22 M10x20-SET-BZ 23 30-B-01063-A 24 3/4" 45° Male | 1 30-F-00237-D Oil Tank 40Ltrs V1 2 30-B-00196-A Gasket 25 Ltr 3 30-F-00786-A Oil Tank Lid Assy V3 4 30-B-00787-A 1-2 10 MICRON RETURN LINE FILTER V2 5 1-2 Dowty Sea 6 1-2 MM adapter 7 Hose End 8 3-4 Dowty Sea 9 3/4 Inch M/M Adapter Extra Long 10 30-B-00679-A Drain Plug Magnetic 1-2 Inch BSP 11 3-4 Blanking Plug 12 30-B-00355-A AV Mount 40x20xM10 M-M 13 Hose End 14 30-B-00715-A Breather Hydraulic Tank V1 15 M6-WAS-A-BZP 16 M6x20-SET-BZP 17 M8-WAS-A-BZP 18 M8x30-SCW-SKT-CAP-BZP 19 M10-WAS-A-BZP 20 M10-NUT-FULL-BZP 21 30-B-00718-A Level Gauge Hydraulic 22 M10x20-SET-BZP 23 30-B-01063-A O-Ring Ø10x1.5 24 3/4" 45° Male - Female |

Drawing 4: Hydraulic Tank Assy V2

30-A-00784-A



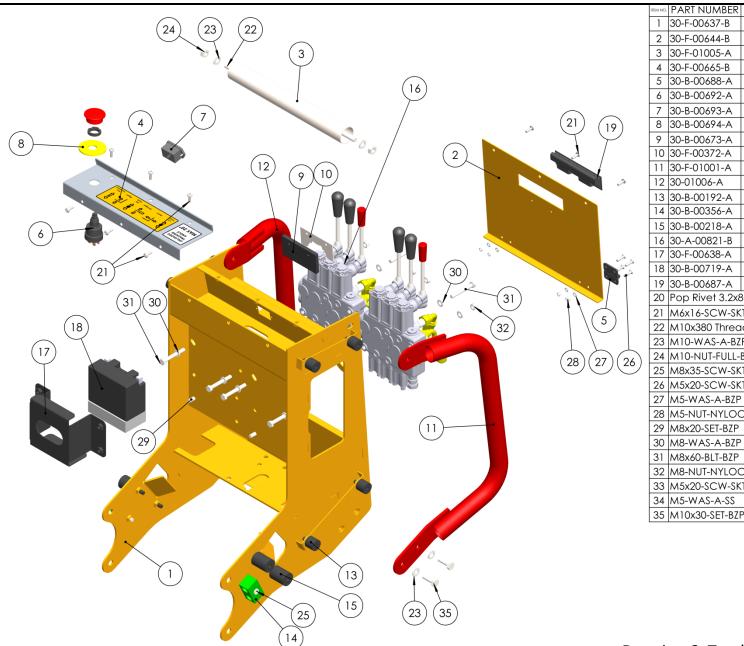




Drawing 5: Petrol Engine and Pump Assy V1

40-A-00542-A



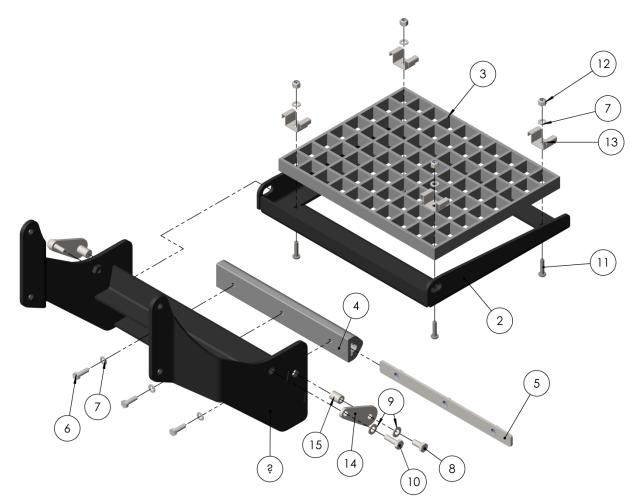


| 2 3 3 3 4 3 | 30-F-00637-B 30-F-00644-B | Tracking Tower V3 Panel Track Tower V3 | 1 |
|-------------------|------------------------------|--|----|
| 3 3 | | Panel Track Tower V3 | 1 |
| 4 | 00 5 01005 4 | | |
| - | 30-F-01005-A | Control Bar V2 | 1 |
| | 30-F-00665-B | Control Panel V6 | 1 |
| 5 | 30-B-00688-A | Hinge V2 | 2 |
| 6 | 30-B-00692-A | E-Stop Button | 1 |
| 7 | 30-B-00693-A | Hours Counter V1 | 1 |
| 8 | 30-B-00694-A | Yellow Ring 58x19x3 V1 | 1 |
| 9 | 30-B-00673-A | Ball Inclinometer Tiltmeter, ±45° | 1 |
| 10 | 30-F-00372-A | 45 Deg Cover Plate | 1 |
| 11 | 30-F-01001-A | Body Rail Support RH V1 | 1 |
| 12 | 30-01006-A | Body Rail Support RH V1 | 1 |
| 13 | 30-B-00192-A | AV Mount 25x22xM8 F-M | 8 |
| 14 | 30-B-00356-A | 3-8 twin hose clamp | 4 |
| 15 | 30-B-00218-A | AV Mount 40x30xM8 F-M | 4 |
| 16 | 30-A-00821-B | | 2 |
| 17 | 30-F-00638-A | Battery Box V4 | 1 |
| 18 | 30-B-00719-A | Battery & Foam 12v 9 135 | 1 |
| 19 | 30-B-00687-A | Handle V1 | 2 |
| 20 | Pop Rivet 3.2x8 | 3 | 2 |
| 21 | M6x16-SCW-SK | T-BUT-SS | 9 |
| 22 | M10x380 Threaded Rod | | 1 |
| 23 | M10-WAS-A-BZP | | 6 |
| 24 | M10-NUT-FULL-BZP | | 2 |
| 25 | M8x35-SCW-SK | T-CAP-BZP | 2 |
| 26 | M5x20-SCW-SK | T-CSK-SS | 8 |
| 27 | M5-WAS-A-BZP | | 4 |
| 28 | M5-NUT-NYLOC-P-BZP | | 6 |
| 29 | M8x20-SET-BZP | | 2 |
| 30 | M8-WAS-A-BZP | | 12 |
| 31 | M8x60-BLT-BZP | | 6 |
| 32 | M8-NUT-NYLOC | C-P-BZP | 4 |
| 33 | M5x20-SCW-SKT-BUT-SS | | 2 |
| 34 | M5-WAS-A-SS | | 2 |
| 35 | M10x30-SET-BZP | | 4 |

DESCRIPTION

Drawing 6: Track Tower Assy V3

40-A-00635-B

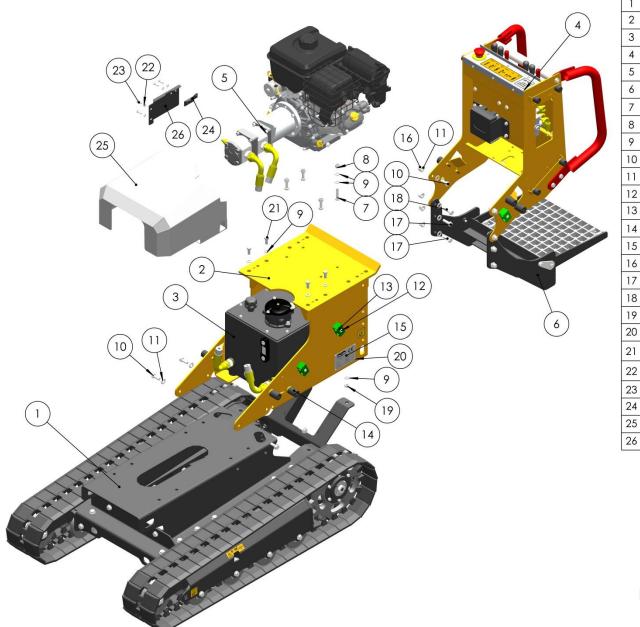


| ITEM NO. | PART NUMBER | DESCRIPTION | QTY. | |
|----------|--------------------------------|------------------------------|------|--|
| 1 | 30-F-00623-B | Platform Main Bracket | 1 | |
| 2 | 30-F-00626-B | Platform Folding V1 | 1 | |
| 3 | 30-B-00919-A | Floor Grid V1 | 1 | |
| 4 | 30-F-00629-A | Buffer Rubber D V1 | 1 | |
| 5 | 30-F-00633-A | Buffer Retainer V1 | 1 | |
| 6 | M8x25-SET-BZP | | 3 | |
| 7 | M8-WAS-A-BZP | M8-WAS-A-BZP | | |
| 8 | M10x20-SET-BZP | | 2 | |
| 9 | M10-WAS-A-BZP | | 4 | |
| 10 | M10x30-SET-BZP | | 2 | |
| 11 | M8x30-SCW-SKT-BUT-SS | | 4 | |
| 12 | M8-NUT-NYLOC-P-BZP | | 4 | |
| 13 | 30-B-00935-A Saddle Clip V1 | | 4 | |
| 14 | 10-F-00144-C Retainer Plate V2 | | 2 | |
| 15 | 30-M-00914-A | 30-M-00914-A Pin Platform V1 | | |

Drawing 7: Platform Folding Assy V1

40-A-00657-A



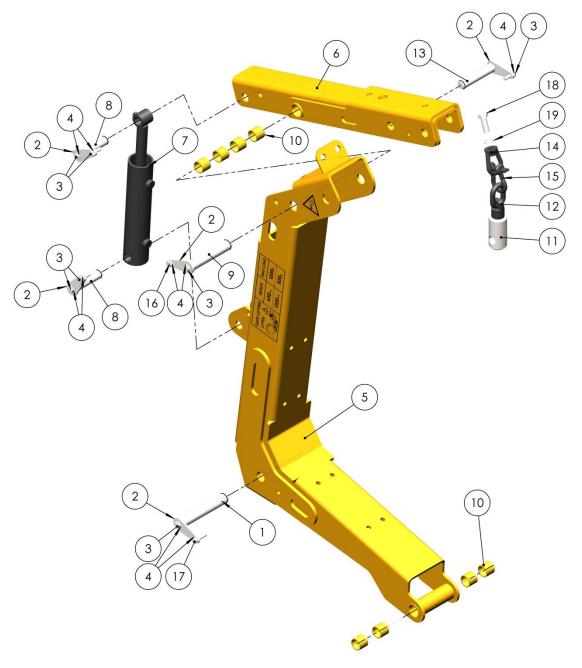


| ITEM NO. | PART NUMBER | DESCRIPTION | QTY. |
|----------|---------------------|------------------------------|------|
| 1 | 40-A-00942-A | Track Base 4W840W V2 | 1 |
| 2 | 30-F-00750-C | Bracket Engine Mount V3 | 1 |
| 3 | 30-A-00784-A | Hydraulic Tank Assy V2 | 1 |
| 4 | 40-A-00635-B | Track Tower Assy V3 | 1 |
| 5 | 40-A-00542-A | Petrol Engine & Pump Assy V1 | 1 |
| 6 | 40-A-00657-A | Platform Folding Assy V1 | 1 |
| 7 | M10x50-SET-BZF | 9 | 4 |
| 8 | M10-NUT-NYLC | OC-T-BZP | 4 |
| 9 | M10-WAS-A-BZ | P | 16 |
| 10 | M12x30-SET-BZF | D | 6 |
| 11 | M12-WAS-A-BZ | P | 20 |
| 12 | M8x35-SCW-SK | T-CAP-BZP | 4 |
| 13 | 30-B-00356-A | 3-8 twin hose clamp | 8 |
| 14 | 30-B-00218-A | AV Mount 40x30xM8 F-M | 4 |
| 15 | 30-B-00347-A | Machine Information Plate V1 | 1 |
| 16 | M12-NUT-NYLOC-P-BZP | | 8 |
| 17 | M12x35-SET-BZP | | 4 |
| 18 | M12x40-SET-BZF | • | 2 |
| 19 | M10-NUT-FULL- | BZP | 4 |
| 20 | Pop Rivet 4.8x1 | 10 | 4 |
| 21 | M10x25-SET-BZP | | 4 |
| 22 | M6-WAS-A-BZP | | 4 |
| 23 | M6x20-SET-BZP | | 4 |
| 24 | 30-F-01047-A | Bracket Guard Wiring V2 | 1 |
| 25 | 30-F-01044-B | Guard Pump V1 | 1 |
| 26 | 30-F-01048-A | Guard Wiring V2 | 1 |

Drawing 8: Tracking Power Unit Briggs 4W840W

40-A-00943-B





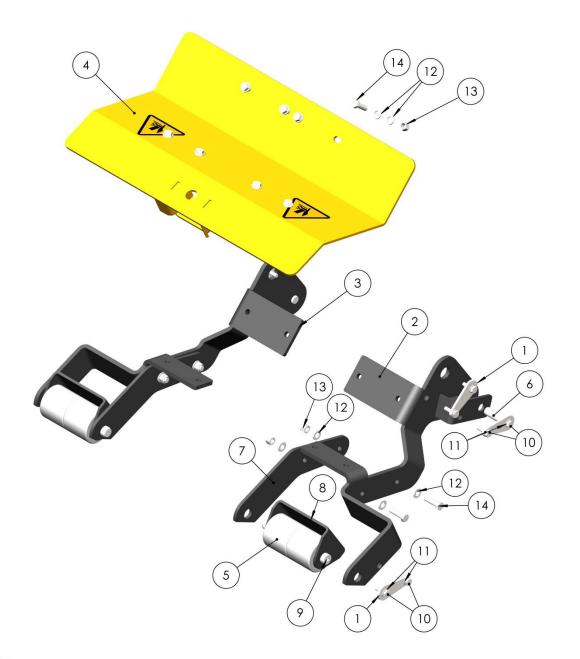
| ITEM NO. | PART NUMBER | DESCRIPTION | QTY. |
|----------|----------------|-----------------------|------|
| 1 | 30-M-00791-A | Pin Ram V2 | 1 |
| 2 | 10-F-00144-C | Retainer Plate V2 | 5 |
| 3 | M10x30-SET-BZP | | 8 |
| 4 | M10-WAS-A-BZP | | 10 |
| 5 | 30-F-00400-E | Main Lift Arm V1 JH 1 | 1 |
| 6 | 30-F-00408-F | Lift Arm V2 | 1 |
| 7 | 30-B-00947-A | Cylinder 60x30x200 V1 | 1 |
| 8 | 30-M-01012-A | Pin Ram V6 | 2 |
| 9 | 30-M-00909-B | Pin Lift Arm V1 | 1 |
| 10 | 30-B-01008-A | Bush 30x35x30 | 8 |
| 11 | 30-M-00918-B | Boss LogGrab V1 | 1 |
| 12 | 30-B-00936-A | Swivel Joint M16 1.2T | 1 |
| 13 | 30-M-00907-A | Pin Ram V3 | 1 |
| 14 | 30-B-01038-A | Lifting Eye M16 | 1 |
| 15 | 30-B-01039-A | Lifting Shackle | 1 |
| 16 | M10x25-SET-BZP | | 1 |
| 17 | M10x40-SET-BZP | | 1 |
| 18 | M16x45-SET-BZP | | 1 |
| 19 | M16-WAS-A-BZP | | 1 |

Drawing 9: LF1000 Head Unit (Boom and Dipper)

40-A-00961-B

Manual V2.4 (Mk2)

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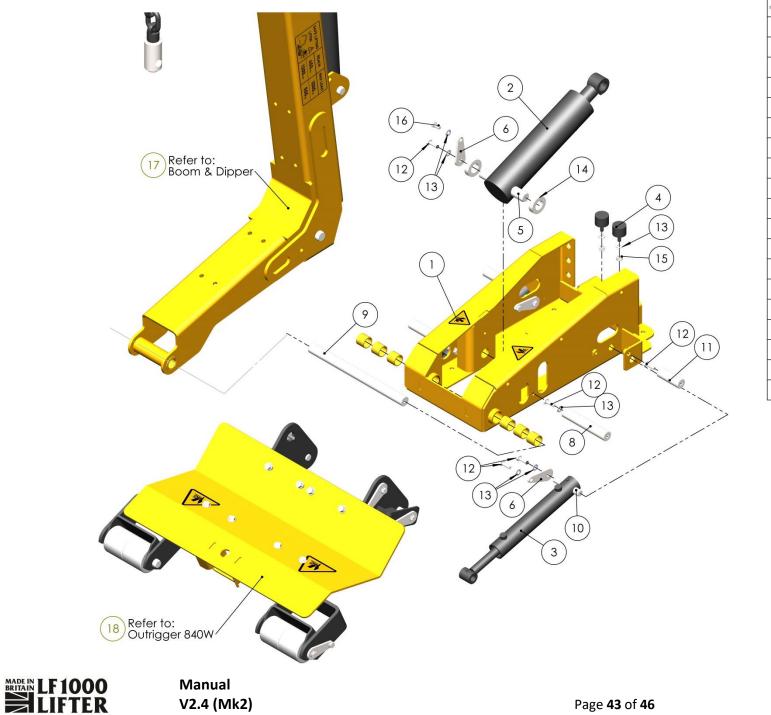
| ITEM NO. | PART NUMBER | DESCRIPTION | QTY. |
|----------|---------------------|---|------|
| 1 | 10-F-00144-C | Retainer Plate V2 | 6 |
| 2 | 30-F-00971-C | Outriger Leg Assy V2 | 1 |
| 3 | 30-B-00972-A | Outrigger Leg Assy V2 - Opp Hand 971 | 1 |
| 4 | 30-F-00967-A | Support V6 | 1 |
| 5 | 30-B-00920-A | Roller Wheel V1 | 4 |
| 6 | 30-M-00908-A | Pin Ram V4 | 2 |
| 7 | 30-F-00792-A | Wheel Support V1 | 2 |
| 8 | 30-F-00805-A | Foot Lift Pad V1 | 2 |
| 9 | 30-M-00912-A | Pin Roller V1 | 2 |
| 10 | M10x30-SET-BZF | | 12 |
| 11 | M10-WAS-A-BZ | P | 12 |
| 12 | M12-WAS-A-BZP | | 24 |
| 13 | M12-NUT-NYLOC-P-BZP | | 12 |
| 14 | M12x40-SET-BZF | | 12 |

Outrigger 840W Assy

Drawing 10: LF1000 Head Unit (OutRigger)

40-A-00961-B





| ITEM NO. | PART NUMBER | DESCRIPTION | QTY. |
|----------|--------------------------------|-----------------------|------|
| 1 | 30-F-00390-C | Base Channel Frame V2 | 1 |
| 2 | 30-B-00403-A | Cylinder V2 | 1 |
| 3 | 30-B-00406-A | Cylinder V3 | 2 |
| 4 | 30-B-00922-A | Buffer 40x30 M10x25 | 2 |
| 5 | 30-M-00791-A | Pin Ram V2 | 1 |
| 6 | 10-F-00144-C | Retainer Plate V2 | 3 |
| 7 | 30-B-00186-A | 3/8 Inch Dowty Seal | 1 |
| 8 | 30-M-00975-A | Stand Off Guard V3 | 2 |
| 9 | 30-M-00910-A | Pin Lift Arm V2 | 1 |
| 10 | 30-M-01013-A | Pin Ram V7 | 2 |
| 11 | 30-M-00800-A | Stand Off Guard V2 | 2 |
| 12 | M10x30-SET-BZP | | 9 |
| 13 | M10-WAS-A-BZP | | 10 |
| 14 | 30-B-00915-A 30mm Split Collar | | 2 |
| 15 | M10-NUT-NYLOC-P-BZP | | 2 |
| 16 | M10x20-SET-BZP | | 1 |
| 17 | Boom & Dipper Assy | | 1 |
| 18 | Outrigger 840W Assy | | 1 |
| 19 | 30-B-01008-A | Bush 30x35x30 | 6 |

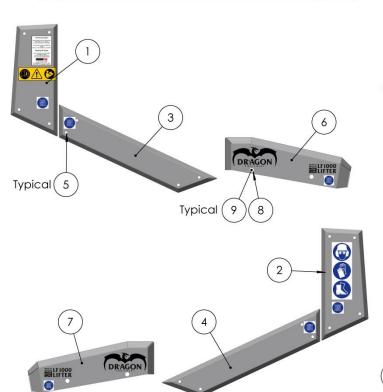
Drawing 11: LF1000 Head Unit (Main)

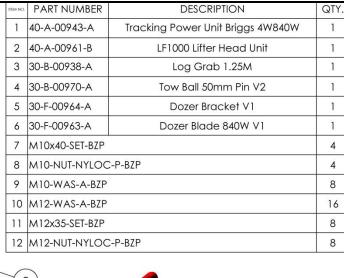
40-A-00961-B

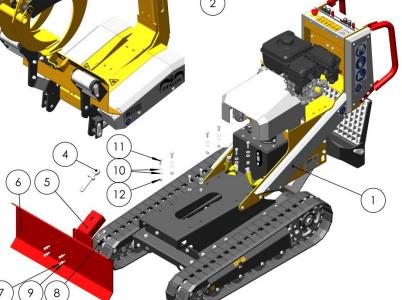
V2.4 (Mk2)

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| ITEM NO. | PART NUMBER | DESCRIPTION | QTY. |
|----------|-----------------------|------------------------------------|------|
| 1 | 30-F-00893-A | Guard Side Tower | 1 |
| 2 | 30-F-00892-A | Guard Hose V2 | 1 |
| 3 | 30-F-00891-A | Guard Side Tower V2 - Opp Hand 890 | 1 |
| 4 | 30-F-00890-A | Guard Side Tower V2 | 1 |
| 5 | M8x10-SCW-SKT-BUT-BZP | | 16 |
| 6 | 30-F-00976-B | 30-F-00976-B Guard Side Ram LH V2 | |
| 7 | 30-F-00977-B | Guard Side Ram RH V2 | 1 |
| 8 | M10-WAS-A-BZP | | 10 |
| 9 | M10x30-SET-BZP | | 10 |







Drawing 12: LF1000 Lifter and Machine Guards

50-A-00959-A



Declaration of Conformity

EC Declaration of Conformity



We

Dragon Equipment Limited

Of

Unit 3 Anglia Business Park Wattisham Road Ringshall Suffolk IP14 2HX

This declaration of conformity is issued under the sole responsibility of the manufacturer and includes the following models:

Dragon Equipment LF1000 Lifter

The object of the declaration described above is in conformity with the relevant Community harmonisation legislation:

- Machinery Directive 2006/42/EC
- Electromagnetic Compatibility Directive 2014/30/EU
- Noise Emission in the Environment by Equipment for use Outdoors 2000/14/EC

Signed for and on behalf of Dragon Equipment Limited by:

Mr Jeff Haines (Managing Director)

Dated: 01 March 2021



Identification Plate

Information regarding the machine model, code, chassis serial number, power and machine weight can be found on the serial number plate. This plate is located on the rear left-hand side of the machine and the serial number should always be referenced in any correspondence with the dealer or manufacturer.



Figure 16: Identification Plate