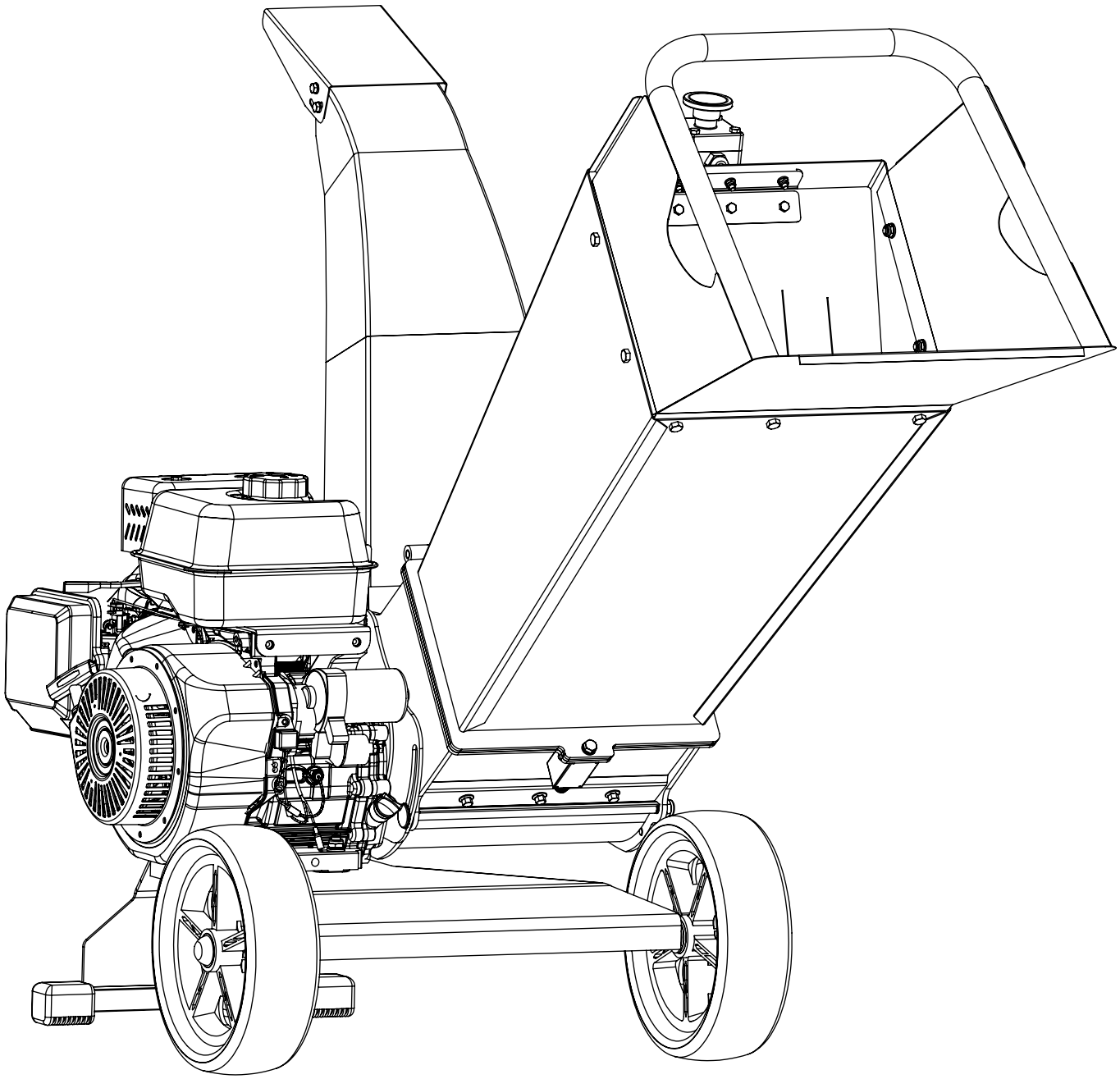
Forest Master Direct Drive Wood Chipper

Models: FM9DD/FM14DD/FM18DD



IMPORTANT: Read this manual fully before assembly and use and observe all safety rules and operating instructions

Thank you for purchasing the Forest Master Direct Drive Wood Chipper. We hope you are 100% satisfied with your product but if you have any questions or queries, please don't hesitate to contact us:

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About Your Product
This manual is for models:
FM9DD - 9hp 306cc Petrol Engine with Pull Start or Electric Start
FM14DD - 14hp 460cc Petrol Engine with Electric Start
FM18DD - 18hp 478cc Petrol Engine with Electric Start

The FM9DD, FM14DD and FM18DD are wood chippers specifically designed to chip all kinds of wood that has been freshly cut up to diameters of 75mm (FM9DD), 100mm (FM14DD) & 125mm (FM18DD). NOTE: Do not insert wood over the diameter specified, roots, trunks or knots, stones, plastic, metal or any other objects that are not specifically wood branches. Do not insert seasoned wood as the chippers are designed for freshly cut soft and hard wood.

When fitted with the optional Mulcher discharge chute (sold separately), they can also be used to mulch weeds, greens, leaves, animal fodder, beet, potatoes, carrots, apples, etc.

Please thoroughly read the safety instructions and guidelines and make sure you are familiar with them before use.

Contents

Specification	FM9DD	FM14DD	FM18DD
Engine	LCT Maxx 9hp 306cc 4 Stroke	LCT Maxx 14hp 460cc 4 Stroke	LCT Maxx 18hp 478cc 4 Stroke
Fuel	Petrol	Petrol	Petrol
Fuel Capacity	3.6 litre	3.6 litre	3.6 litre
Engine Oil Amount	1.1 litre	1.2 litre	1.2 litre
Chipper Blade	Twin Reversible Blades	Twin Reversible Blades	Twin Reversible Blades
Overall Height	1200mm	1220mm	1220mm
Overall Length	1690mm	1690mm	1690mm
Overall Width	690mm	700mm	730mm
Weight	92kg	97kg	106kg
Max Drum RPM	3600rpm	3600rpm	3600rpm
Max Wood Diameter	75mm (3 inch)	100mm (4 inch)	125mm (5 inch)
Starting Mechanism	Pullstart / Electric Start	Pull Start / Electric Start	Electric Start

Safety Instructions

General Safety

- The person using the machine must have adequate knowledge of the functioning and operation of the machine and must have read the manual.
- Operators must be over the age of 18 and must not be under the influence of alcohol, drugs or any other substance that has an adverse effect on reaction speed.
- The material to be fed into the machine should only be wood that is free from nails, screws etc.
- The machine should be positioned on dry, level ground in the proper upright position and there must be no tripping or slipping hazards in the vicinity that could cause harm to the operator.
- Make sure the blades are in good condition and secure.
- Check that all bolts are tight and secure, especially on the hopper and discharge chute.
- Only use the chipper in adequate lighting (i.e. sunlight or sufficient artificial light).

Operation Safety

- When operating the chipper, always wear gloves, ear defenders, helmet and visor or safety glasses and appropriate clothing. Do not wear loose clothing or jewellery.
- The chipper should be operated by one person only. Any other bystanders must always be at least 50 feet from the work area.
- Do not chip wood over the specified maximum diameter.
- Do not chip seasoned wood, the chippers are designed for freshly cut soft and hard wood.
- Do not operate the chipper inside or in a confined space; the exhaust from the engine contains carbon monoxide which is poisonous.
- Never overload or attempt to chip woods beyond the manufacturer's recommendation. It could result in personal injury or damage to the machine.
- Never place any part of your body inside the feed hopper or the discharge chute. Fragments of wood that have not self-fed into the machine should only be pushed with other pieces of wood that you are feeding into the chipper.
- If the chipper gets jammed you must immediately stop the engine or motor.
- Obstructing fragments inside the hopper should only be removed after the motor is turned off and the drum has stopped rotating.
- Never leave the chipper unattended while the motor is running.
- Never stand or move in front of the discharge chute.
- Ensure no wood fragments remain inside the chipper when turning it off.
- Always take into account the time delay needed from switching the machine off for the knife drum to come to a halt.
- If the machine starts to make an unusual noise or vibrate, shut down the engine, disconnect the spark plug wire, wait 5 minutes for the engine to cool down, then inspect for damage. Vibration is generally a warning of trouble. Check damaged parts and clean, repair and/or replace as necessary.
- If the machine topples over during operation, immediately turn off the engine.

Safety with Maintenance

- Inspection and maintenance must be done with the engine off and the spark plug cap removed. Wait 5 minutes for the engine or motor to cool down.
- Any worn or damaged parts must be replaced, to ensure that the chipper is maintained and in a safe state. Only use Forest Master spare parts for replacements. Contact us to arrange.
- Never use the wood chipper with damaged or worn cables.

- Never, under any conditions, remove, bend, cut, fit, weld or otherwise alter standard parts on the wood chipper. This includes all shields and guards.
- Modifications to your machine could cause personal injuries and property damage and will invalidate your warranty.
- Do not use any aggressive cleaning products. The inside of the input hopper, output chute and drum can be cleaned with a hosepipe.
- Never transport the chipper with the motor still running.
- Prior to transport, use appropriate fixing materials to fasten the chipper to the fixing points on the load surface.
- Prior to storing the machine, make sure that it has been restored to a sufficient state (i.e. clean and free from debris). Apply oil to the knives, the knife drum and the bearings to protect them from corrosion. This is especially the case for storage during long periods of inactivity of the appliance.
- Store the machine in a dry, closed room, out of children's reach.

Safety with Petrol

Petrol is a highly flammable liquid. Petrol also gives off flammable vapour that can be easily ignited and cause a fire or explosion. Never overlook the hazards of petrol. Always follow these precautions:

- Never run the engine in an enclosed area or without proper ventilation as the exhaust from the engine contains carbon monoxide, which is an odourless, tasteless and a deadly poisonous gas.
- Store all fuel and oil in containers specifically designed and approved for this purpose and keep away from heat, open flame and the reach of children.
- Replace rubber fuel lines and grommets when worn or damaged and after 5 years of use.
- Fill the petrol tank outdoors with the engine off and allow the engine to cool completely. Don't handle gasoline if you or anyone nearby is smoking, or if you're near anything that could cause it to ignite or explode. Re-install the fuel tank cap and fuel container cap securely.
- If you spill petrol, do not attempt to start the engine. Move the machine away from the area of the spill and avoid creating any source of ignition until the gas vapours have dissipated. Wipe up any fuel to prevent fire hazard and properly dispose of the waste.
- Allow the engine to cool completely before storing in any enclosure. Never store a machine that has gas in the tank, or a fuel container, near an open flame or spark such as a water heater, space heater, clothes dryer or furnace.
- Never make adjustments or repairs with the engine running. Shut down the engine, disconnect the spark plug wire, keeping it away from the spark plug to prevent accidental starting, wait 5 minutes before making adjustments or repairs.
- Never tamper with the engine's governor setting. The governor controls the safe operation speed and protects the engine. Over-speeding the engine is dangerous and will cause damage to the engine and to the other moving parts of the machine. If required, see your authorised dealer for engine governor adjustments.
- Keep combustible substances away from the engine when it is hot.
- Never cover the machine while the exhaust is still hot.
- Do not operate the engine with the air cleaner or carburettor air intake cover removed. Removal of such parts could create a fire hazard. Do not use flammable solutions to clean the air filter.
- The exhaust and engine become very hot and can cause a severe burn; do not touch.

This list of warnings and cautions cannot be all-inclusive. If situations occur that are not covered by this manual, the operator must apply common sense and operate the wood chipper in a safe manner. Contact the dealers for assistance in your area.

Assembly Parts

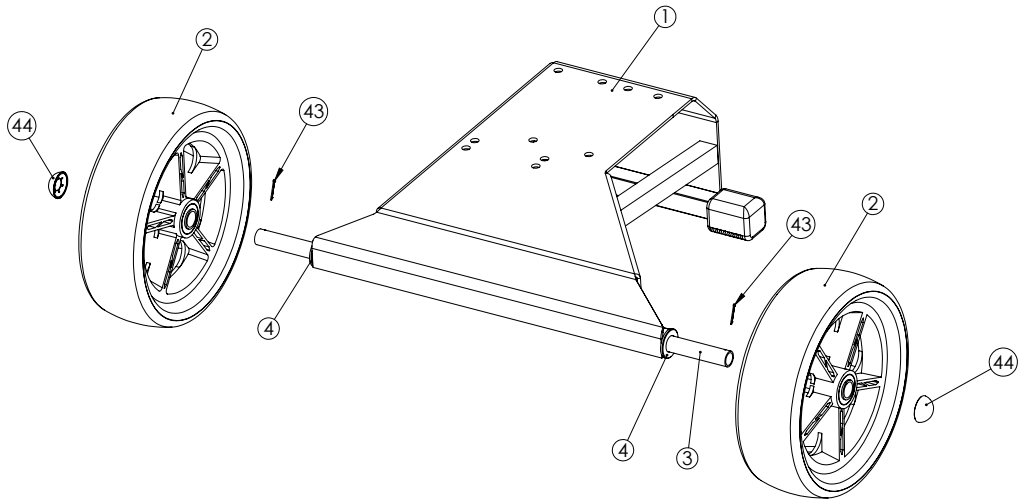
Part Name	Part No.	Qty.
Engine with Drum	8	1
Base	1	1
Feed Hopper	21	1
Feed Hopper Tray	22	1
Discharge Chute	36	1
Axle	3	1
Wheels	2	2
Split Pin	43	2
20mm Washer	4	4
Dome Cap	44	2
M18 x 16 bolt	32	7

Part Name	Part No.	Qty.
M8 Flat Washers	45	14
M8 Spring Washer	60	7
M8 Nyloc Nut	46	7
M8x20 Bolt	55	4

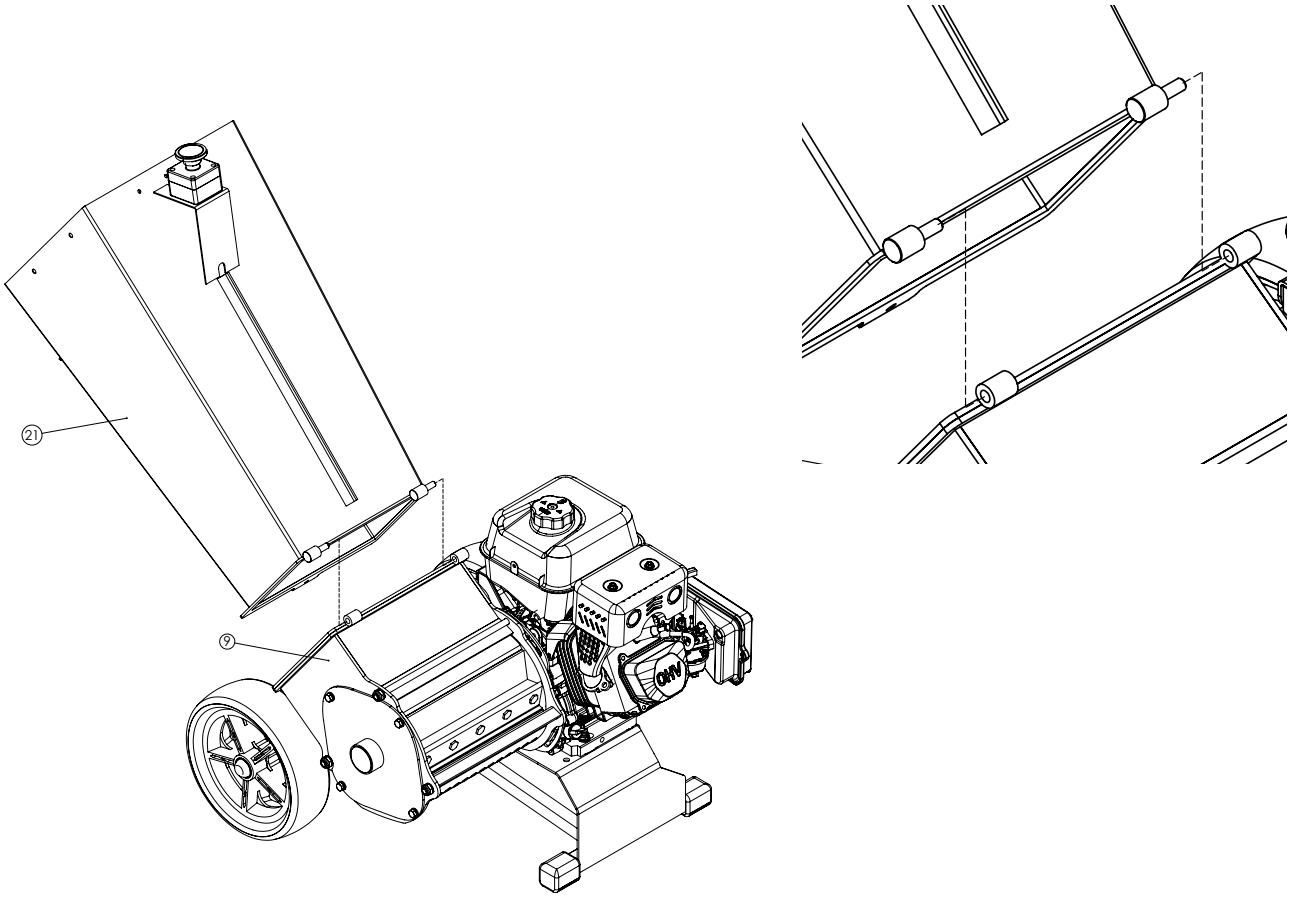
Assembly

Note that the majority of bolts specified are loosely fitted in their correct location for shipping.

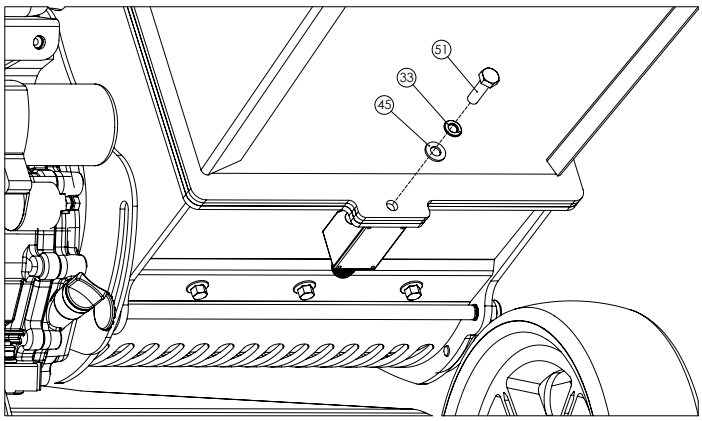
1. Lay all the parts out flat in a suitable assembly area and check to make sure all parts are there.
2. Slide the axle (3) into the square tubing of the base (1) and place a 16mm flat washer (4) on each end of the axle. Note you should only need two washers but four are provided in case the wheels are a bit loose.
3. Next, place the wheels (2) on each end of the axle (3) and secure with a split pin (43) through the small holes on the outer end of the axle (3). Bend the ends of the slit pins back against the axle to secure.
4. Finally, place each dome cap (44) on the ends of the axle (3) and secure the cap by tapping it with a mallet or hammer.



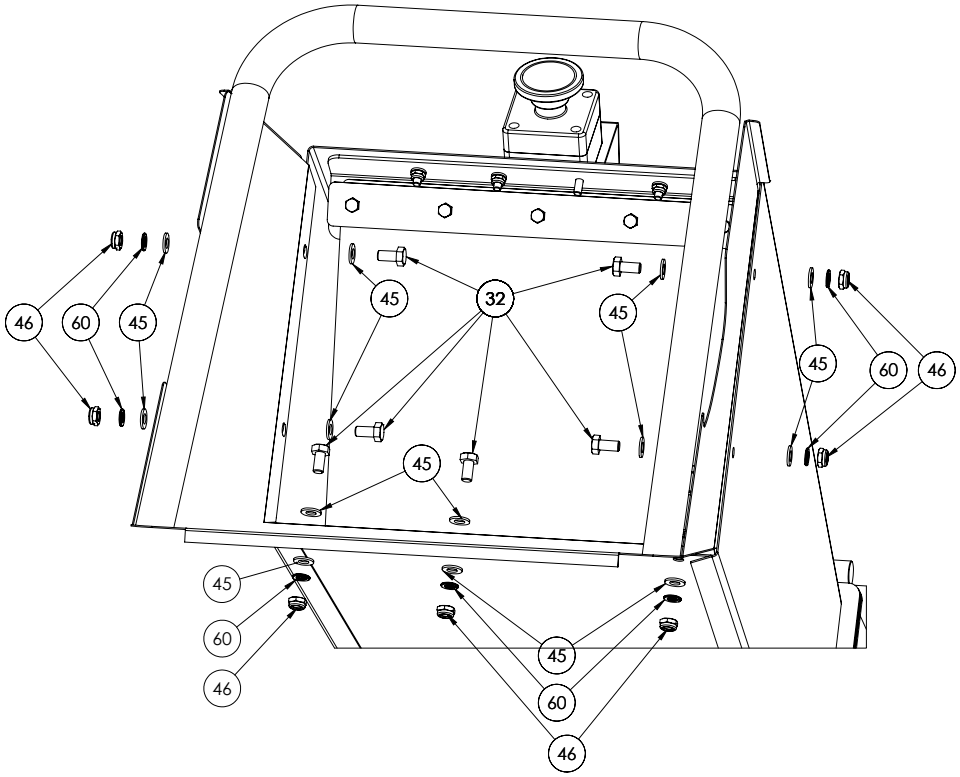
8. Insert the hinge pins on the feed hopper (21) into the ferules on the drum housing (9). The pins are inserted into the ferules from the outside of the housing.



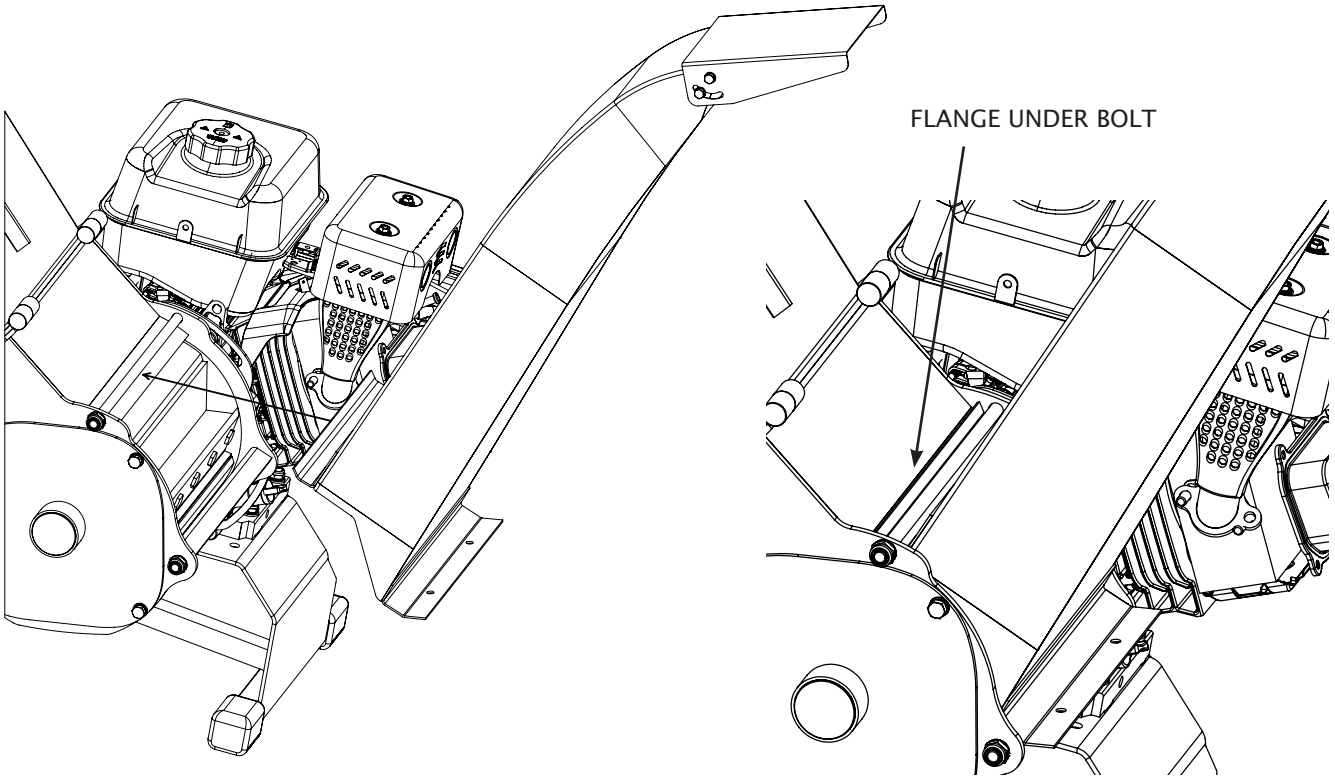
9. Fasten the bottom of the feed hopper (21) to the drum housing (9) using the M8 bolt (51) the M8 spring washer (33) and the M8 washer (45). There is a thread in the flange of the drum housing to fasten the bolt into. The order of assembly is: [Bolt] – [Spring Washer] – [Washer] – [Feed Hopper] – [Drum Housing]. This bolt must be tight for the engine to start as it deactivates the engine cut out. If it is loose the engine will not start



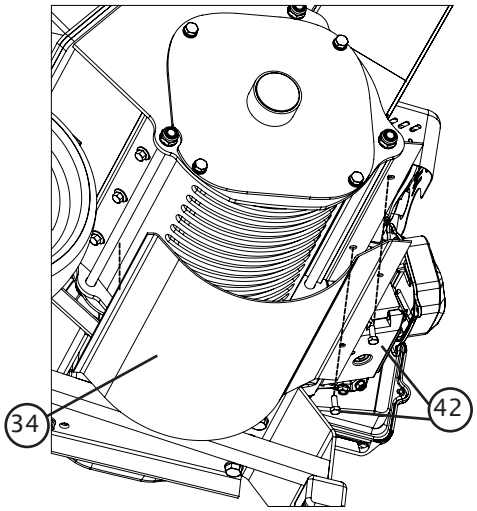
10. Attach the hopper tray (22) to the end of the feed hopper (21). The flanges on the hopper tray fit inside the feed hopper. Secure using 7 x M8x13 bolts (32), 14 x M8 flat washers (45), 7 x M8 spring washers and 7 x M8 nyloc nut (46). The sequence is Bolt - M8 flat washer - hopper parts - M8 flat washer - M8 spring washer - nyloc nut

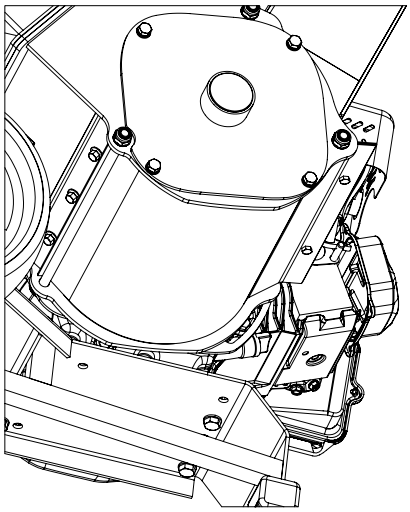


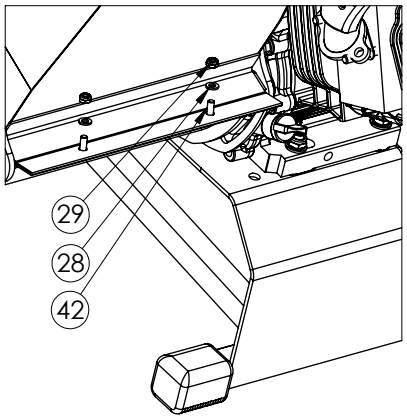
11. Insert the top flange (without bolt holes) of the discharge chute (36) between the upper bolt on the drum housing (9) and the top surface of the drum housing (9). Lower the discharge chute so that it is sitting on the drum housing.



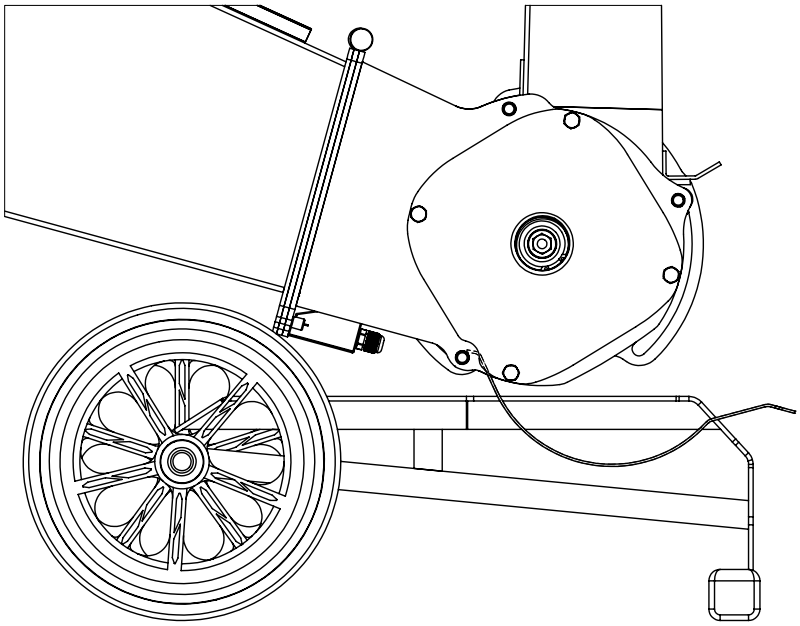
12. Insert the short flange (without bolt holes) of the Lower Blanking Plate (34) between forward most lower drum mounting bolt and the underside of the drum housing (9). Place two M6x16 (42) bolts through the holes on the larger flange and through the holes in the drum housing flange. Secure with two M6 washers (28) and two M6 nuts (29.)







It will be easier to insert the flange between the bolt and the drum housing,if the drum housing is rotated to the minimum angle position. See page 15 for instructions on rotating the drum housing.



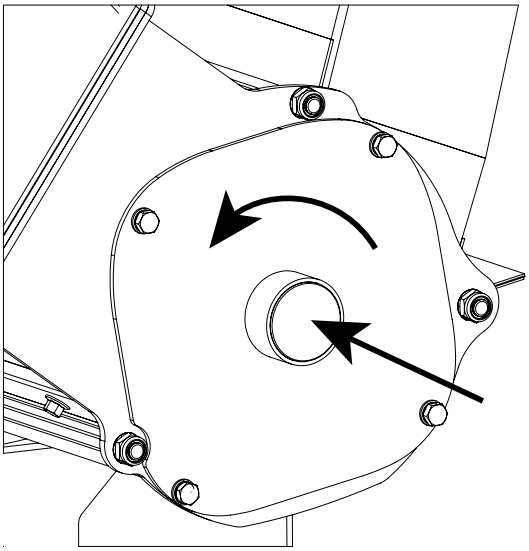
13. Connect the socket on the end of the cable from the emergency stop switch (30), to the matching socket in the wiring harness of the engine.

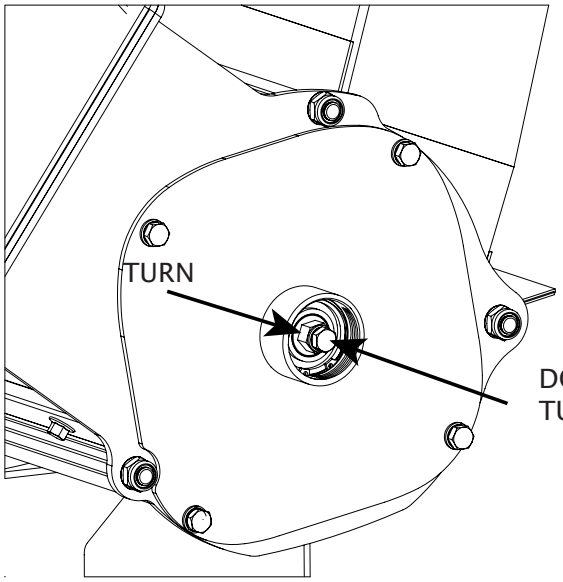
IMPORTANT

The engine is shipped dry of oil unless it has been bought pre-assembled. It must be filled with oil before use, see page 4 for the correct amount. It may be necessary to slightly tip the machine to get the correct amount of oil in. Use 10W-40 in summer for best results. In very cold winters you may want to change to 5W-30

Operation

- Position your wood chipper on flat, dry ground and make sure the machine cannot be moved.
- Before starting, the lower hopper bolt (51) must be nipped tight or the chipper will not start. Tighten tighten finger tight then by a 1/4 turn at a time until it starts.
- Before starting, manually turn the drum to make sure it is not obstructed and moves smoothly. Twist off (anticlockwise) the black plastic cover in the centre of the drum housing. Use a 17mm socket or spanner on the hexagonal part of the drum shaft (not the black bolt in the centre), rotate the drum both ways.



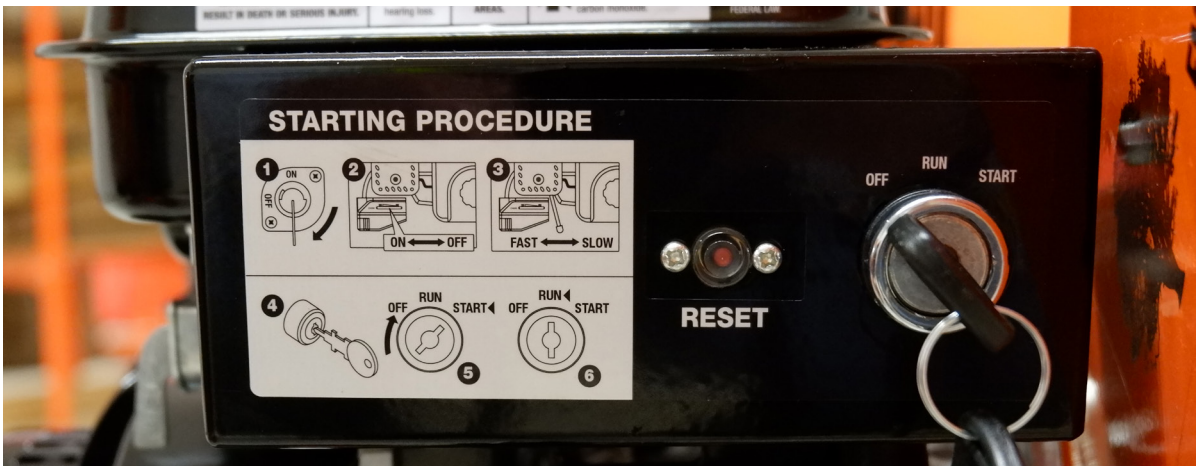


ENGINE OPERATION

DO NOT START THE ENGINE FOR THE FIRST TIME WITHOUT FILLING WITH THE CORRECT AMOUNT OF OIL. The engine may have oil residue from testing but the chipper is not supplied pre-filled.

STARTING THE ENGINE WITH THE ELECTRIC START

- Make sure the fuel shut-off valve is in the “ON” position.
- Move the choke control lever to the “CHOKE” position (As this is a lean burn engine, it may require some choke when starting warm).
- Move the throttle control lever towards the “FAST” position.
- Before starting you should test the pull start to ensure that the cord isn’t tight. If it is tight then the drum is blocked and should be cleared before starting.
- Turn the ignition key to the “Start” position. As soon as the engine starts, allow the key to turn back to the “Run” position. If the engine does not start straight away, DO NOT HOLD THE KEY IN THE “START” POSITION AS YOU WILL FLOOD THE ENGINE.



- Move the choke control lever (if used for cold engine) slowly back to the “RUN” position when the engine is running well.
- If the Wood Chipper has not been running (cold engine), warm up the engine by running the engine at half throttle for 1= to 2 minutes, then advance the engine throttle control to the maximum speed.
- If the electric start does not turn the engine over then the battery may have insufficient charge. Start the engine using the pull start. The engine will trickle charge the battery, 30 minutes of running should provide sufficient charge to start the next time.

PULL START

Make sure the fuel shut-off valve is in the “ON” position.

- Move the choke control lever to the “CHOKE” position (As this is a lean burn engine, it may require some choke when starting warm).
- Move the throttle control lever to the “FAST” position.
- Turn the ignition switch to the “ON” position.
- Grasp the recoil starter handle and slowly pull until you feel resistance. If the pull start is tight and does not pull, the chipper has a blockage and should be cleared before starting. Let the cord retract a little bit then pull the cord rapidly to start the engine. One or two pulls usually starts the engine.
- Move the choke lever (if used for cold engine) slowly back to the “RUN” position when the engine is running well.
- Warm up the engine by running the engine at half throttle for 1 to 2 minutes, then advance the engine throttle control to mulching speed.

Stopping the Engine

Ensure no fragments remain inside the mulcher when turning it off. Allow to run for 1 or 2 minutes without feeding in any material before stopping the chipper. This will help to avoid the risk of blockage for the next time you start the machine.

- Move the throttle lever to “IDLE”
- Turn the ignition switch to the “OFF” position.
-

EMERGENCY STOP

In the event of an emergency, there is a large red emergency stop button on the top of the feed hopper, pressing this will kill the engine.

To reset the kill switch after it has been used, press down on the button and turn anti-clockwise, the button will pop up.

Engine Does Not Start

The LCT engine is a reliable engine that starts very easily. There are three safety cutouts that inhibit the ignition, there is the hopper microswitch, the engine oil level alert and the emergency kill switch, if the engine does not fire then it is almost certainly one of these cutouts is in operation.

- Check that the hopper bolt(51) is tightened, if this is loose the ignition is inhibited.
- Check that the chipper is level. If it is at an angle then the oil level sensor could misread and cut the ignition.
- Check the oil level, (the FM9DD requires a minimum of 1.1 litres of oil, the FM14DD & FM18DD require 1.2 litres of oil) any less than this and the engine will not fire. Add the required minimum amount of oil and if the engine does not fire or runs erratically gradually add a little more. Do not add anymore than an additional 50ml.
- Check that the big red kill switch has not been activated. Press down on the button and turn anti-clockwise to release the kill switch.
- Check that the air filter element is clean and not obstructed. If there is oil in the air filter then the engine has been overfilled with oil. With the machine standing level, remove the crankcase oil filler plug and allow any excess oil to run out until it is just dripping over the lip.

See the Troubleshooting guide in the maintenance section for other problems.

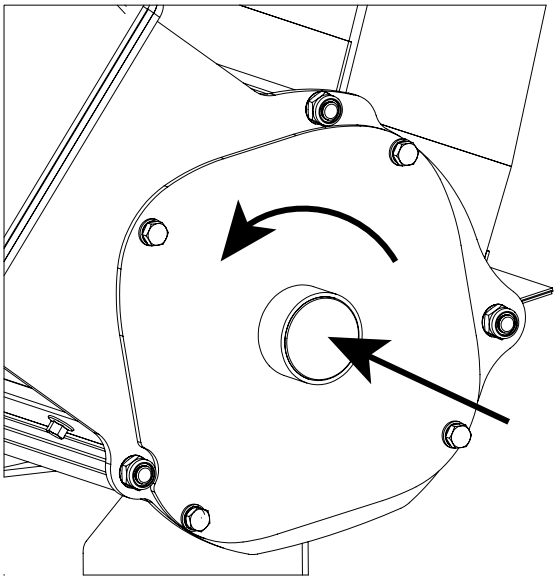
Wood Chipping Operation

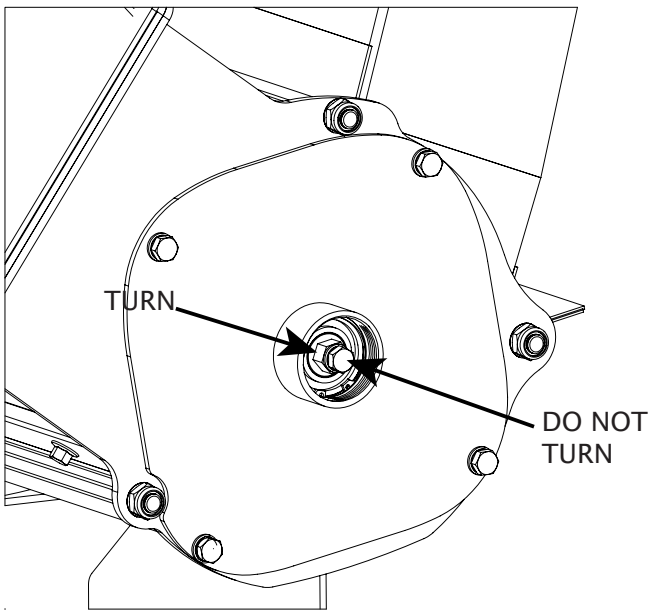
- The diameter of wood and branches should be no greater than 75mm (3") for the FM9DD, 100mm (4") for the FM14DD & 125mm (5") for the FM18DD.
- For best results the wood should be freshly cut, less than 3 days old
- Do not place any part of your body into the chute when loading. This is a very unsafe method and could result in serious injury.
- Do not reach or step across the exit chute whilst the wood chipper is running. This is very unsafe and could result in serious injury.
- The chipper works best with the discharge chute pointing upwards as it reduces the chance of the chippings blocking the discharge chute.
- Do not use the chipper in wet conditions or place wood that is wet in the feed hopper, this can cause the wood to stick to the drum and discharge chute and clog up the chipper.
- When loading wood, place against the bottom side of the chute and let the machine take the wood into the blades. Do not push the wood into the blades as this could damage the machine.
- Do not over load the wood chipper. Let previous wood and branches go through the blades before adding more.
- Always wear gloves, ear defenders, helmet and visor or safety glasses and appropriate clothing when operating the chipper.
- Do not feed the chipper any foreign materials (stones, metal, plastic, string, textile etc.)
- Do not use implements (i.e. fork or shovel) to feed the machine, especially not to push the wood through.

Removing A Blockage from the Chipper

Never attempt to unblock the machine whilst the chipper is running.

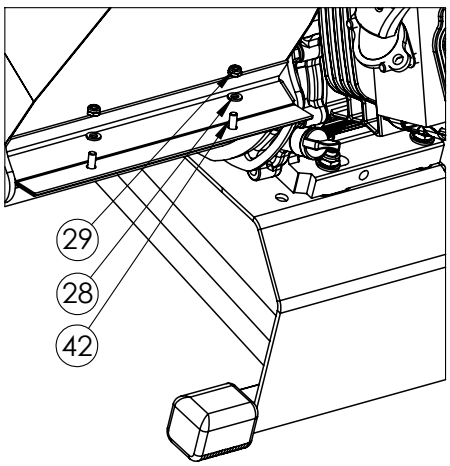
- If the drum stops while chipping, stop the engine IMMEDIATELY and remove the spark plug.
- Remove either or both of the feed hopper and discharge chute by removing the bolt and washers on the bottom of chute and lifting it upward to allow access to the drum. Remove items that are blocking the drum and then restart the machine.
- If the blockage cannot be removed by hand, then it is possible to rotate the drum in reverse. On the drum side of the mulcher, remove the plastic cap by twisting off anticlockwise and beneath there is a hexagonal section of the drum shaft that can be turned (use a 17mm socket) to rotate the drum in reverse.
- DO NOT rotate the drum by the smaller inner black bolt.

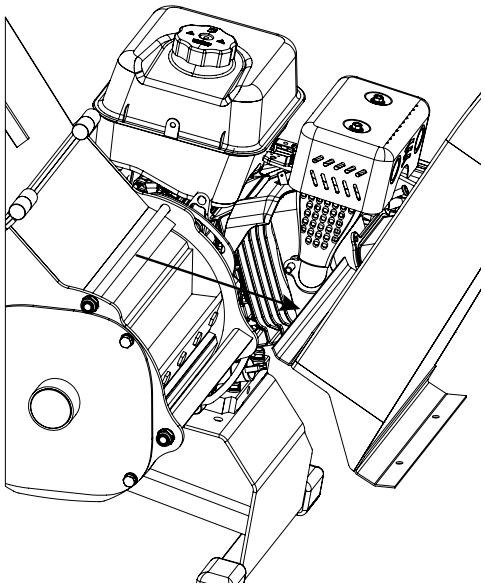


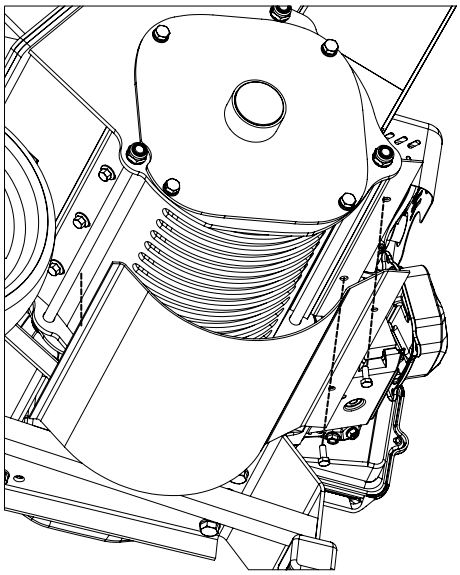


Mulcher Accessory (Sold Separately)
An accessory to allow the mulching of green material, garden waster, kitchen waste, cardboard, etc, can be purchased separately. Fitting this accessory is just a matter of removing the discharge chute and swapping blanking plates.

Remove 2 nuts(29) and 2 washers(28), keep these as they are needed to attach the mulcher chute. Hinge the discharge chute up and withdraw the flange from under the bolt. Remove the lower blanking plate and keep the 2 bolts(42) for re-attaching the chipper discharge chute.



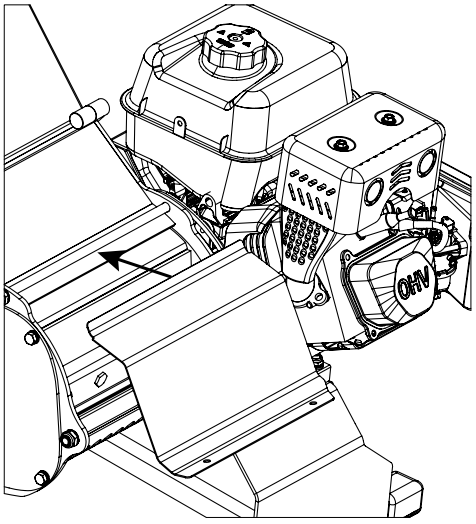


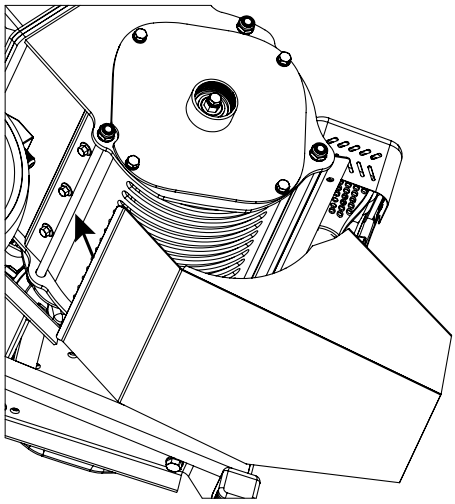


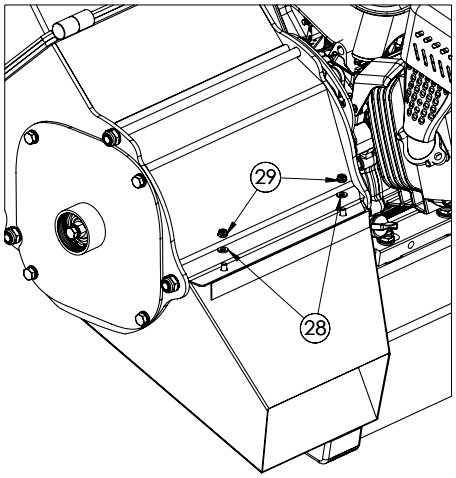
Insert the flange (without bolt holes) of the mulcher upper blanking plate, between the top bolt on the drum housing and the upper face of the drum housing.

Insert the end flange of the mulcher chute, between the lower face of the drum housing and the forward drum housing mounting bolt.

Locate the 2 bolts on the top of the mulcher chute, through the holes in the flange of the upper blanking plate and secure with the 2 nuts(29) and 2 washers(28) removed in the previous step.







Mulching Operation
For mulching, follow the guidelines given on page 15.

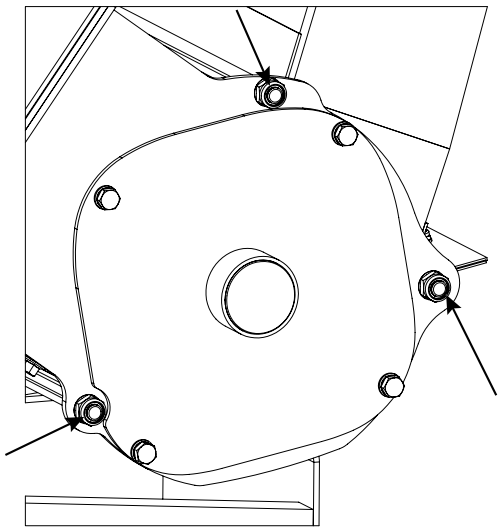
- If mulching wet material the discharge chute should point fully down. A hosepipe can be put into the feed hopper and running water used to help wet material feed in more easily.
- Do not feed the mulcher any foreign materials (stones, metal, plastic, string, textile etc.)
- The mulcher can be used to chop paper, cardboard, cartons, etc. Ensure all staples and tape are removed.
- If the machine blocks while mulching, see the instructions for removing a blockage on page 15.

Cleaning after Mulching
If you have been working with wet material - you may wish to wash down the machine using a hosepipe. To perform this simply spray water down into the hopper feed while the engine is running. After you have finished hosing the mulcher down - leave the engine running for a few minutes to allow the machine to dry itself off.

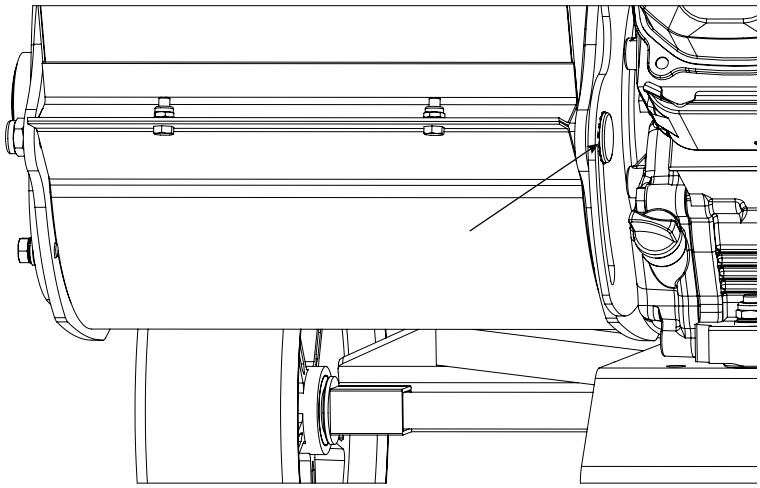
Cleaning after Chipping
You can clean the machine after chipping in the same way but you must remember to remove the lower blanking plate before spraying water down, in order for the water to drain out.

Changing the Feed and Discharge Angles

To slow down or speed up the feed rate, or to alter the discharge angle, the drum housing can be rotated to change the angle of the feed hopper and the discharge chute. The drum housing can be rotated by a maximum of 40 degrees.



Loosen the 3 nuts shown, just sufficiently until the drum housing is free to rotate. DO NOT remove the nuts.



Rotate the drum housing to the required angle then tighten the nuts. To rotate the drum housing, necessary to loosen the bolts, tap them through by 1 or 2mm, the square shoulder of the coach bolts must remain located in the slots in the back plate.

If the drum does not rotate when the bolts are loosened, it is most likely that the serrated washers behind the bolt heads need to be compressed a bit more to allow a bit more freedom to the bolt.

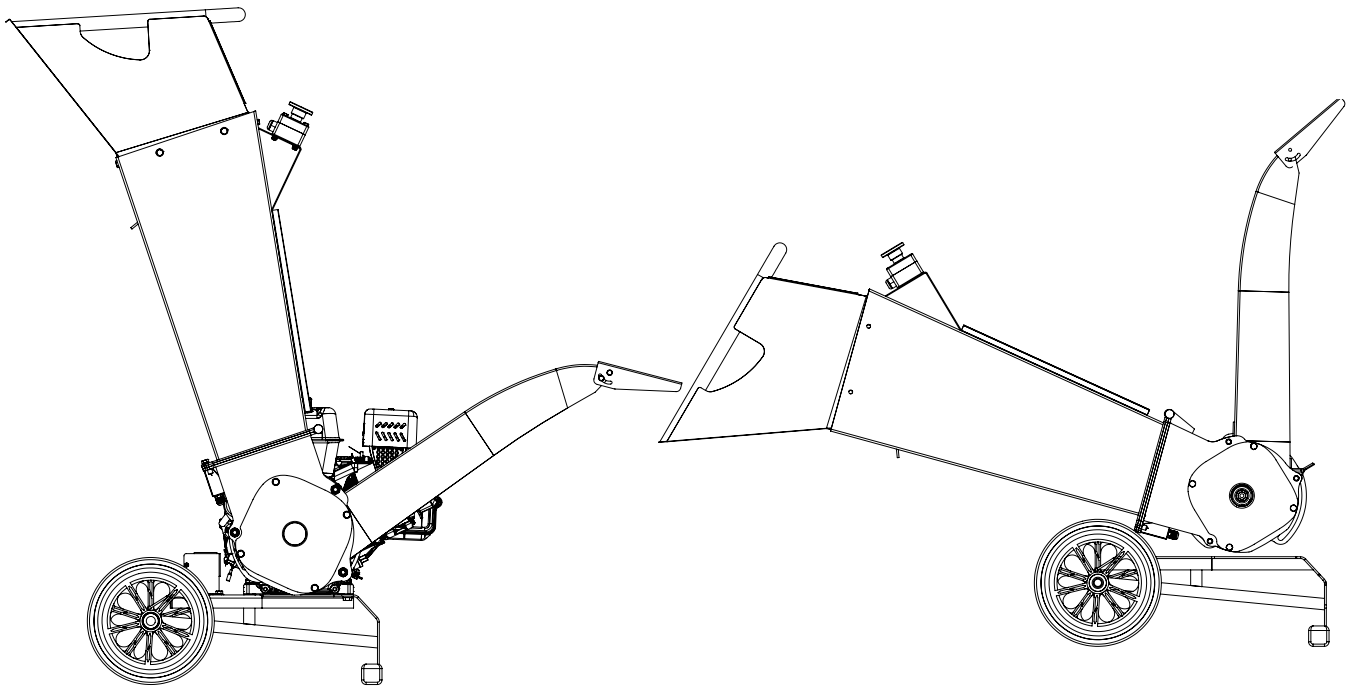
Tighten each of the nuts fully to compress the serrated washers then loosen them and the drum housing should rotate.

Different materials require the chute to be at different angles for the most efficient feeding.

Generally branches, hedge trimmings etc, the hopper should be at lower angles to avoid feeding too quickly and choking the machine. If the engine revs are noticeably dropping off as the material is feeding in then lower the chute angle to slow down the feeding rate. Small thin branches generally need a lower hopper angle to stop them feeding in too quickly. If the material is not self feeding properly, raise the hopper angle to increase the feed rate.

Green wet garden waste such as vegetable waste, flowering shrubs and bushes, etc, feed best with the hopper in the vertical position. Again if the machine starts to choke, lower the hopper angle slightly to slow the feeding rate.
Mixing branches with green material can aid the feeding.

UNDER NO CIRCUMSTANCES ATTEMPT TO ALTER THE ANGLE OF THE CHUTES WITH THE MACHINE RUNNING.



Maximum Hopper Angle Position

Minimum Hopper Angle Position

Maintenance

Regular maintenance is the way to ensure the best performance and long life of your machine. Please refer to this manual and the engine manufacturer's user manual for maintenance procedures.

Before performing any maintenance procedure or inspection, stop the engine, wait five minutes to allow all parts to cool and disconnect the spark plug lead.

Regular Maintenance Checklist

Procedure	Before Each Use	Every 25 Hours	Every 100 Hours
Check Engine Oil Level	X		
Check General Equipment Condition	X		
Check Blades for Sharpness and Wear	X		
Clean Engine Exterior and Cooling		X	
Change Engine Oil		X	
Replace Air Filter		X	
Replace Spark Plug			X

Engine Oil
Do not use the dipstick of the engine to check the oil level. Due to the conditions under which the chipper may be used, the dipstick is not accurate enough, the engine must have the specified quantity of oil. FM9DD 1100ml, FM14DD & FM18DD 1200ml. To change the oil, drain the old oil into a suitable container. Measure out the required amount of oil into a clean container, remove the filler cap, tilt the engine and add the oil. Replace the filler cap before returning the chipper to level.

Engine/Motor Servicing
For the servicing of the petrol engine refer to the engine manufacturer's user manual. If you need help accessing the manual, contact Forest Master.

Replacing and Sharpening the Blades
To remove the blades for sharpening or replacement you will need an appropriate 16mm socket with **NO LEADING TAPER**, as the bolt heads are shallow. If a socket with a leading taper is used, there is a possibility of rounding the bolt head as the socket will slip. A suitable socket can be purchased on the Forest Master website https://forest-master.com/product/hexagonal-impact-socket/.

Undo the bolt at the bottom of the feed hopper and lift the hopper upwards on the hinge to access the drum. Wedge a piece of wood below the drum to stop it rotating. Loosen the bolts holding the blade to the drum and remove the blade. There are two blade positions on the drum and both blades will need to be maintained equally.

Note: The blades are reversible so they can be turned around to use the second edge before they need to be re-sharpened.

Before fitting the blades, thoroughly clean the face of the drum that they sit on, to remove any sap or other debris so that the surface is flat. Apply a small amount of mild threadlock to each bolt and torque them down evenly to 12ftlb / 16nm.

If the blades are re-sharpened, you will need to adjust the base block at the bottom of the drum to close the gap between the edge of the block and the knives. The base block will need to be moved inwards so that there is a gap of around 0.4mm to 0.5mm between the knives and the base block. Make sure the drum rotates freely by moving it by hand using the nut on the outside of the drum.

Charging The Battery
When running between 3300 - 3600 rpm the engine will charge the battery. It takes 2.5 hours of continuous running to fully charge the battery. Repeatedly stopping and starting the engine will drain the battery. If the battery has insufficient charge to start the engine, use a trickle charger. Fully charged battery should be more than 12.9 volts. Charging will be easier if the battery is removed from the battery tray.

Troubleshooting
Most problems are easy to fix. Consult the Troubleshooting Table below or the frequently asked questions on our website https://forest-master.com/faq/ (which is continuously updated) for common problems and their solutions. If you continue to experience problems, or your problem is not listed, contact our technical line on: 0191 276 6553.

Before performing any maintenance procedure or inspection, stop the engine, wait 5 minutes to allow all parts to cool, disconnect the spark plug.

Symptom	Possible Cause
The engine won't start	· Is the ignition switch in the "ON" position? · Is the fuel shut-off valve on? · Are you using fresh, clean fuel? If the fuel is old, change it. Use a fuel stabiliser if you keep fuel longer than 30 days. · Is the spark plug clean? If the spark plug is dirty or cracked, change it. If it's oily, leave it out, hold a rag over the plug hole and pull the recoil cord several times to blow out any oil in the cylinder, then wipe off the plug and reinsert it. · Is there sufficient oil? Check the engine oil level and if necessary top up to the correct level. · Is there dirt in the carburettor? Undo the bolt holding the float chamber to the carburettor, empty out any fuel and clean the inside using fresh, clean petrol. Remove the jet in the bottom of the carburettor and clean it. Refit the jet and the float chamber. · Is the pull start stuck or has more resistance? Check the drum for blockages. · Is the hopper securing bolt tight. If the lower bolt on the hopper is not tightened then the safety cutout will be in operation and the engine won't start.
Pull cord is tight / starter motor clicks, does not turn	· drum blocked. Refer to removing blockage on Page 14.

Symptom	Possible Cause
The engine lacks power or is not running smoothly	· Check that the throttle lever is advanced from the "Idle" position. · Is the air filter clean? If it's dirty change it following the procedure in the engine manufacturer's manual. · Is the spark plug clean? If it's dirty or cracked, change it. If it's oily, leave it out, hold a rag over the plug hole and pull your recoil cord several times to blow out any oil in the cylinder, then wipe off the plug and reinsert it. · Are you using fresh, clean unleaded fuel? If it's old, change it. Use a fuel stabilizer if you keep petrol longer than 30 days. · Does your engine have the right amount of clean oil? If it's dirty, change it following the procedure in the engine manufacturer's manual. · Check the oil level and adjust if needed.
Engine smokes.	· Check the oil level and adjust as needed. · Check the air filter and clean or replace if needed. · You may be using the wrong oil – too light for the temperature. Refer to your engine owner's manual for detailed information. · Clean the cooling fins if they are dirty.
Insufficient drawing through of branches or bad chipping performance.	· Wood is too hard. Is the wood seasoned. Chipping is more efficient with green freshly cut wood less than 3 days old. Seasoned wood does not draw as efficiently. · Are the knives blunt or worn? Sharpen or replace if needed · Are the branches too thick? Maximum diameter is 50mm · Is there too much or too little space between the knives and the base plate? Adjust the bolts on the knives to fit and manual rotate the drum to check if it turns smoothly.
Chipper is producing sawdust	· trying to chip hard wood. Wood should be chipped fresh, ideally within the first three days of cutting

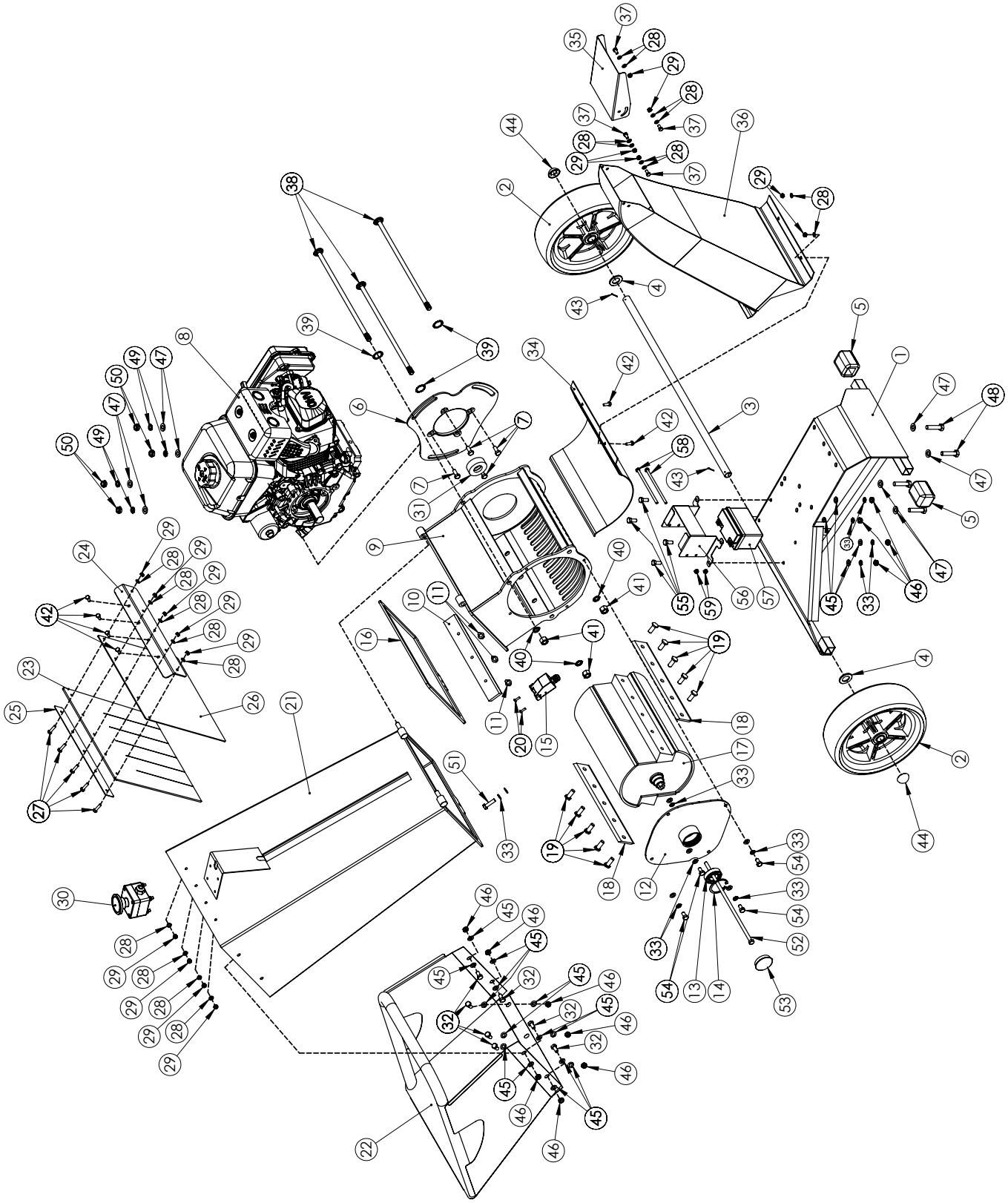
Warranty

This product carries a limited parts warranty for 1 year from the date of purchase. Please keep your proof of purchase as this will be required for any claim.
Should this product become defective, contact the store where it was purchased and either replacement parts will be issued, it will be repaired, or it will be replaced if necessary.

IMPORTANT: NO RESPONSIBILITY IS ACCEPTED FOR INCORRECT USE OF THIS PRODUCT. MODIFICATION OF THIS PRODUCT (UNLESS SAID MODIFICATION HAS BEEN AUTHORISED BY FOREST MASTER) WILL VOID THE WARRANTY.

The Warranty Does Not Cover:
1. Any part that has become inoperative due to misuse, abuse, neglect, accident, improper maintenance or alteration.
2. The unit, if it has not been operated and/or maintained in accordance with the owner's manual.
3. Normal wear.
4. Routine maintenance items such as lubricants and blade sharpening.
5. Normal deterioration of the exterior finish due to use or exposure.

Exploded Diagram



ITEM NO.	PART NAME	QTY.
1	BASE	1
2	WHEEL	2
3	AXLE	1
4	20mm WASHER	2
5	BASE RUBBER FOOT	2
6	BACK PLATE	1
7	UNF 5/16 – 24 x 0.75 Bolt	4
8	PETROL ENGINE	1
9	DRUM HOUSING	1
10	FIXED BLADE	1
11	ISO 4162 - M8 x 12 x 12-N	3
12	DRUM HOUSING OUTER PLATE	1
13	Radial Ball Bearing_SKF 6005 25x47x12	1
14	Circlip for Bores DIN 472 – 47x2	1
15	HOPPER OPEN MICRO SWITCH	1
16	HOPPER RUBBER GASKET	1
17	DRUM	1
18	ROTATING BLADE	2
19	M10x25-25 SHALLOW HEAD BOLT	10
20	ISO 7045 – M4 x 14 - Z - 14N	2
21	HOPPER	1
22	HOPPER TRAY	1
23	RUBBER FINGERS	1
24	HOPPER GUARD MOUNTING BRACKET	1
25	HOPPER GUARD CLAMP PLATE	1
26	HOPPER GUARD PP PLATE	1
27	ISO 4015 - M6 x 20 x 18-N	5
28	Washer ISO 7089 - 6	19
29	ISO 10511-M6-NUT	15
30	EMERGENCY STOP SWITCH	1
31	DRUM SPACER SLEEVE	1
32	ISO 4015 - M8 x 16 x 8-N	7
33	DIN 6905-7.4-FSt M8 SPRING WASHER	10
34	LOWER BLANKING PLATE	1
35	DISCHARGE CHUTE DIRECTION FLAP	1
36	DISCHARGE CHUTE	1
37	ISO 4015 - M6 x 12 x 12-N	4
38	Coach Bolt M12x330	3
39	Serrated Washer M12x0.5	3
40	DIN 6905-11-FSt	3
41	ISO 4034-M12-NUT	3
42	ISO 4015 - M6 x 16 x 16-N	6
43	Split Pin 2mm x 25mm	2
44	Dome Axle Cap	2
45	Washer ISO 7089 - 8	20
46	ISO 10511-M8-NUT	11
47	Washer ISO 7089 - 10	8
48	ISO 4015 - M10 x 45 x 26-N	4
49	DIN 6905-9.3-FSt M10 SPRING WASHER	4

ITEM NO.	PART NAME	QTY.
50	ISO 4034-M10-NUT	4
51	ISO 4015 - M8 x 30 x 28-N	1
52	ISO 4015 – 5/16-24 x 300 x 30-N	1
53	drum end cap	1
54	ISO 4015 - M8 x 15 x 15-N	4
55	ISO 4015 - M8 x 20 x 6-N	4
56	Battery Box	1
57	Battery	1
58	M6x125 Bolts	2
59	ISO 10511-M6-NUT	2
60	M8 Spring Washer	7

FM9DD & FM14DD		
NO.	PART NAME	QTY.
11	ISO 4162 - M8 x 12 x 12-N	2
19	M10x25-25 SHALLOW HEAD BOLT	8
38	Coach Bolt M12x285	3
52	ISO 4015 -5/16-24 x 250 x 30-N	1

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Forest Master House Industry Road
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United Kingdom

UKCA Declaration of Conformity

Translation of the original UKCA declaration of conformity

UKCA

GB hereby declares the following conformity under the UKCA Directive and standards for the following article

Brand: **Forest Master**
Article name: **Wood chipper/shredder**
Art. No.: **FM9DD / FM9DDES / FM14DD / FM14DDES / FM18DD / FM18DDES**

Relevant UKCA directives:
Supply of Machinery (Safety) Regulation 2008
Electromagnetic Compatibility Regulation 2016

Standard references:
BS EN 60335-1:2012+A11+A13+A1+A14+A2
BS EN 50434:2014
BS EN 62233:2008
BS EN ISO 12100:2010
BS EN 55014-1:2017
BS EN 55014-2:2015
BS EN 61000-3-2:2014
BS EN 61000-3-3:2013

Newcastle, UK, date 25.5.2023

Signature / /

Forest Master Ltd
Forest Master House Industry Road
Newcastle Upon Tyne NE6 5XB
United Kingdom

EG-Konformitätserklärung
Original Konformitätserklärung

EC Declaration of Conformity
Translation of the original EC declaration of conformity

Déclaration de conformité CE
Traduction de la déclaration de conformité EC originale

CE

DE	erklärt hiermit die folgende Konformität mit den EU-Richtlinien und Normen für den Artikel
GB	hereby declares the following conformity under the EU Directive and standards for the following article
FR	déclare par la présente la conformité suivante en vertu de la directive européenne et des normes pour l'article suivant

Marke / Brand / Marque: **Forest Master**
Art.-Bezeichnung: **Holzhäcksler/Zerkleinerer**
Article name: **Wood chipper/shredder**
Nom d'article: **Broyeur/broyeur de bois**
Art.-Nr. / Art. No. / Numéro d'article:
FM9DD / FM9DDES / FM14DD / FM14DDES / FM18DD / FM18DDES

Einschlägige EU-Richtlinien / Relevant EU directives / Directives EU pertinentes:
2006/42/EC
Standard Referenzen / Standard references / références normalisées:
EN 60335-1:2012+A11+A13+A1+A14+A2
EN 50434:2014
EN 62233:2008
EN ISO 12100:2010
EN 55014-1:2017
EN 55014-2:2015
EN 61000-3-2:2014
EN 61000-3-3:2013

Newcastle, UK, date 25.5.2023 Signature / /

NOTE: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.

The latest version of the handbook and FAQ can be found on our website at https://forest-master.com/resources/

Manufactured for Forest Master Limited.

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