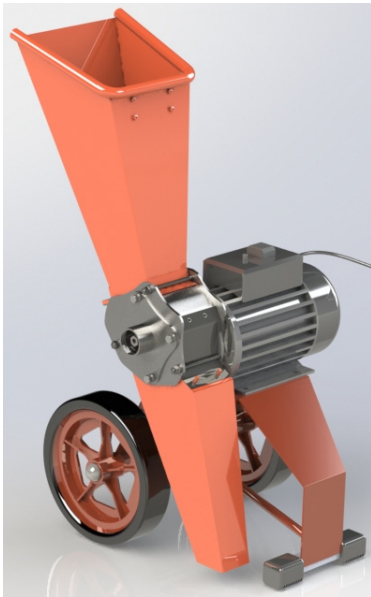


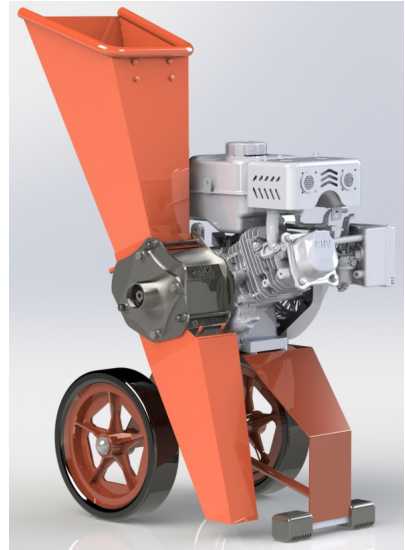
Forest Master Direct Drive Garden Mulcher



Model: FM6DD-MUL/FM6DDES-MUL/FM4DDE-MUL



FM4DDE-MUL



FM6DD-MUL

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 Mulcher. We hope you are 100% satisfied with your product but if you have any questions or queries, please don't hesitate to contact us:

Forest Master Ltd
Industry Road
Heaton
Newcastle Upon Tyne
NE6 5XB

Sales Tel: +44 (0)191 265 5000
Email: info@forest-master.com
Website: www.forest-master.com
Technical Enquiries Tel: +44 (0)191 276 6553

About Your Product

This manual is for models:

FM6DD-MUL - 6hp Petrol Engine

FM6DDES-MUL - 6hp Petrol Engine with Electric Start

FM4DDE-MUL - 4hp Electric Motor

The FM6DD-MUL, FM6DDES-MUL and FM4DDE-MUL are garden mulchers designed to mulch weeds, greens, leaves, animal fodder, beet, potatoes, carrots, apples, etc. They will also mulch cardboard & paper. NOTE: Do not insert garden waste that contains stones, plastic, metal or any other objects may damage the blades. Cardboard and paper must be free of staples.

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

CE Regulation Parts

To comply with CE regulation (countries within the EU), the Hopper Safety Plate (9) must be installed for your own safety (Check exploded diagram for parts).

For non-CE regulation (e.g. use in the United States or outside of Europe) these parts can be removed to make the mulcher easier to use, but at the risk of your own safety. Forest Master Ltd will accept no responsibility for injuries caused by using the mulcher without these parts installed.

The drum can be rotated to change the angle of the feed hopper and the discharge chute. Note however that for CE regulations the exit of the discharge chute should be no more than 30mm from the ground. The chipper is shipped with the drum set at the correct position for this.



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Specifications

Specification	FM6DD-MUL / FM6D-DES-MUL	FM4DDE-MUL
Engine/Motor	LCT Maxx 6hp 208cc 4 Stroke	Forest Master 4hp 2800W Electric Motor
Fuel/Input	Petrol	230V
Mulcher Blade	Twin Reversible Blades	Twin Reversible Blades
Overall Height	780mm	780mm
Overall Length	910mm	910mm
Overall Width	480mm	390mm
Weight	38kg	35kg
Max Drum RPM	3600rpm	2800rpm
Max Feed Diameter	50mm / 2"	50mm / 2"
Starting Mechanism	Pullstart / Electric Start	N/A



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 garden waste, etc, 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 mulcher in adequate lighting (i.e. sunlight or sufficient artificial light).
- Never use either the petrol or electric mulcher in the rain.
- If preparing your FM6DD-MUL petrol mulcher for return for whatever reason, you must ensure the engine is safe for transport. **YOU MUST DRAIN ALL FUEL AND OIL FROM THE ENGINE.** By agreeing to our collection, you are confirming and verifying that you have taken all precautionary measures to ensure the safe transit of the item.

Operation Safety

- When operating the mulcher, always wear gloves, ear defenders, helmet and visor or safety glasses and appropriate clothing. Do not wear loose clothing or jewellery.
- The mulcher should be operated by one person only. Any other bystanders must always be at least 50 feet from the work area.
- Do not operate the FM6DD-MUL inside or in a confined space; the exhaust from the engine contains carbon monoxide which is poisonous.
- Never overload or attempt to mulch waste 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 garden waste that have not self-fed into the machine should only be pushed with other garden waste that you are feeding into the mulcher.
- If the mulcher gets jammed you must immediately stop the engine or motor.
- Obstructed fragments inside the hopper should only be removed when the motor is turned off and the drum has stopped rotating.



- Never leave the mulcher unattended while the motor is running.
- Never move in front of the discharge chute.
- Ensure no fragments remain inside the mulcher 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 (FM6DD-MUL) or plug socket (FM4DDE-MUL), wait 5 minutes for the engine or motor 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 or motor and for the FM4DDE-MUL model, disconnect the power cable.
- When using the FM4DDE-MUL, always use on a circuit that has an RCD to prevent the chance of an electric shock.

Safety with Maintenance

- Inspection and maintenance must be done with the motor and driving unit switched off and the spark plug cap removed (FM6DD-MUL) or power cable (FM4DDE-MUL) disconnected. Wait 5 minutes for the engine or motor to cool down.
- Any worn or damaged parts must be replaced, to ensure that the mulcher is maintained and in a safe state. Only use Forest Master spare parts for replacements. Contact us to arrange.
- Never use the mulcher with damaged or worn cables.
- Never, under any conditions, remove, bend, cut, fit, weld or otherwise alter standard parts on the mulcher. 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 feed and discharge chutes and drum can be cleaned with a pressure washer.
- Never transport the mulcher with the motor still running.
- Prior to transport, use appropriate fixing materials to fasten the mulcher 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 (FM6DD-MUL)

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 mulcher in a safe manner. Contact the dealers for assistance in your area.



Assembly Parts

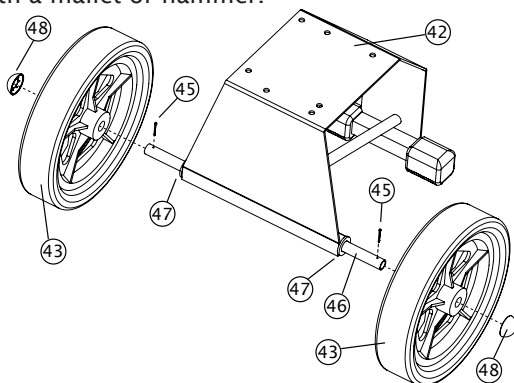
Part Name	Part No.	Qty.
Engine/Motor with Drum	60	1
Base	42	1
Feed Hopper	1	1
Discharge Chute	34	1
Axle	46	1
Wheels	43	2
Split Pin	45	2
16mm Washer	47	2
Dome Cap	48	2
M8x35 Bolts	56	4

Part Name	Part No.	Qty.
M8 Washers	33	8
M8 Spring Washer	30	4
M8 Nut	57	4
M8x110 Bolt	49	2
M8 Serrated Washer	55	2
M6x23 Bolt	51	1
M6 Washer	41	3
M6 Spring Washer	59	3
M6x12 Bolt	50	2
M3 x 60 Bolt	39	2
M3 Nut	40	2

Assembly

Note that the majority of bolts required, 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 (46) into the square tubing of the base (42) and place a 16mm flat washer (47) on each end of the axle.
3. Next, place the wheels (43) on each end of the axle (46) and secure with a split pin (45) through the small holes on the outer of the axle (46).
4. Finally, place each dome cap (48) on the ends of the axle (46) and secure the cap by tapping it with a mallet or hammer.

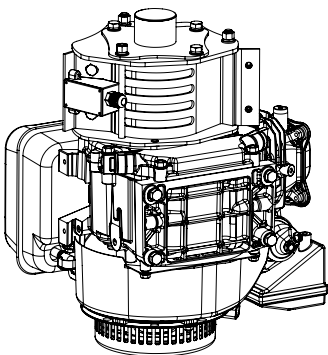




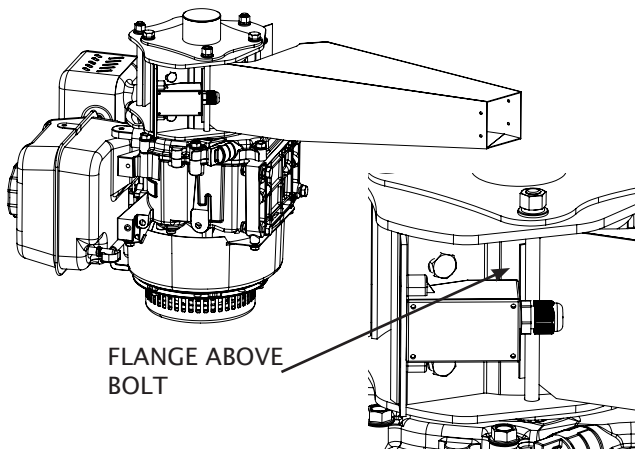
Fitting the Discharge Chute

PLEASE ENSURE THAT THE ENGINE HAS NOT BEEN FILLED WITH OIL OR PETROL AT THIS TIME.

5. First, place the engine/motor unit on its side as demonstrated in the image displayed to the right hand side.

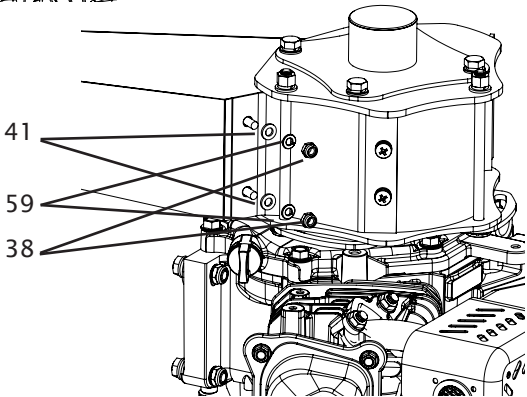


Assembly



6. Slide the discharge chute (63) up to the drum housing (14) and insert the flange on the top edge of the discharge chute between the lower face of the drum housing and the rearmost lower drum mounting bolt. The upper flange of the discharge chute should slide in above the bolt as displayed in the image to the left.

7. The two bolts on the top of the chute should locate through the two holes on the drum flange. After sliding the discharge chute into place, you can then secure and fasten the chute using the necessary M6 nuts (38), M6 spring washers (59) and M6 washers (41).



The order is discharge chute, M6 washer, M6 spring washer, nut.



8. Place the engine/motor (60) on top of the base (42), lining the engine/motor mounting holes with the bolt holes of the base.
9. Fastening the engine and motor through the following methods:

Engine (FM6DD-MUL/FM6DDES-MUL)

For the electric start FM6DDES-MUL, see page 11 for instructions on mounting the battery tray, this is secured using the bolts that also secure the engine so must be attached at the same time.

Fasten the engine (60) with the M8 bolts (56), M8 washers (33), M8 spring washers (30) and M8 nuts (57). The order of assembly is:

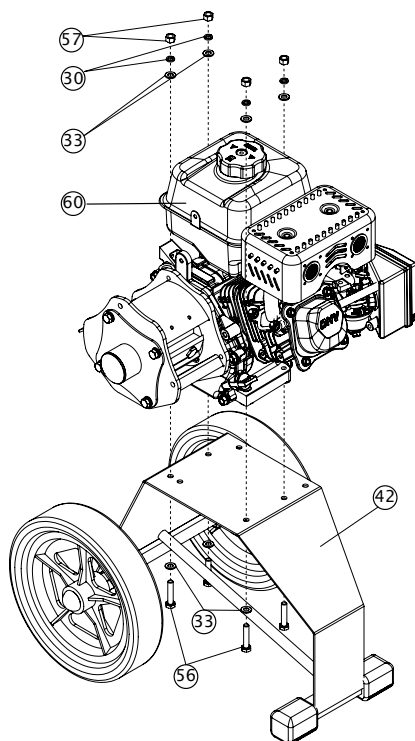
[Bolt] - [Washer] - [Base] - [Engine] - [Washer] - [Spring Washer] - [Nut].

Motor (FM4DDE-MUL)

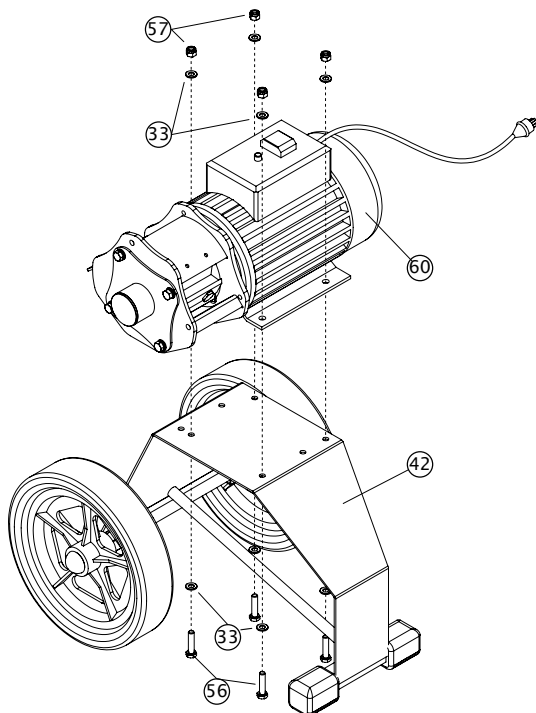
Fasten the motor (60) with the M8 bolts (56), M8 washers (33) and M8 Lock Nuts (57). The order of assembly is:

[Bolt] - [Washer] - [Base] - [Motor] - [Washer] - [Lock Nut].

Note that the nuts used are nyloc nuts that have a nylon collar to stop the nut loosening. To screw the nut fully onto the bolt you will need to use a socket or spanner.



FM6DD-MUL



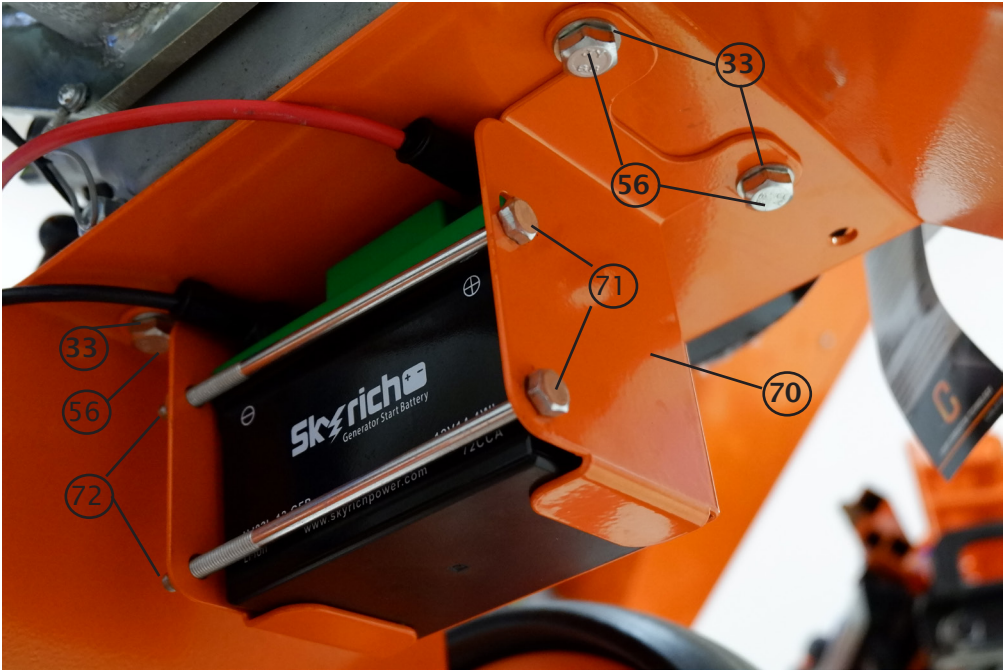
FM4DDE-MUL



FM6DDES-MUL Battery tray attachment

Part Name	Part No.	Qty.
Battery Tray	70	1
M5x125 Bolt	71	2
M5 Nut	72	2
Battery	73	1
Ignition Key	74	2

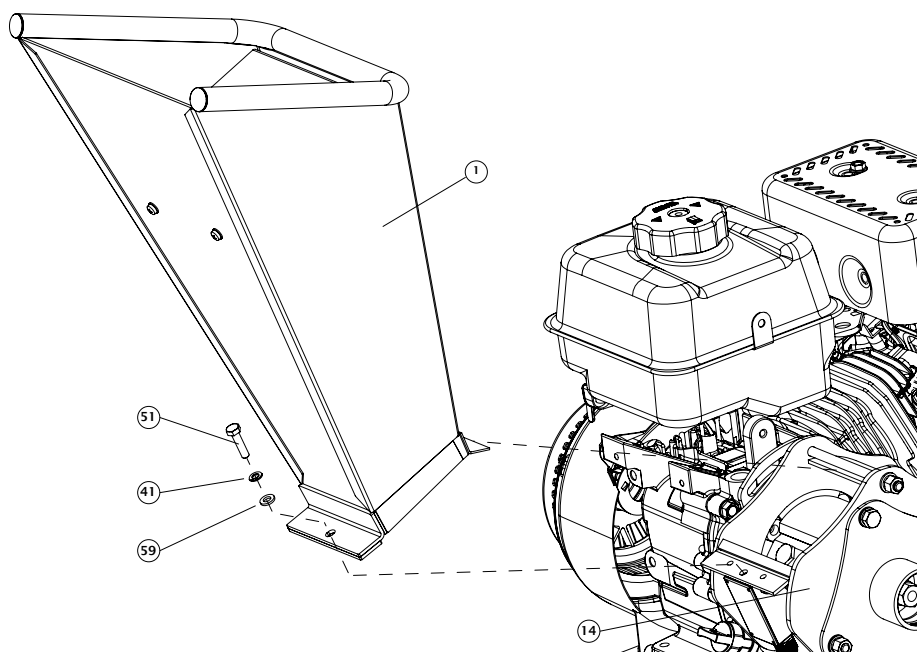
Attach the battery tray (70) to the underside of the base (42) using the 4 M8x35 bolts (56) and 4 M8 washers (33) that also secure the engine to the base.



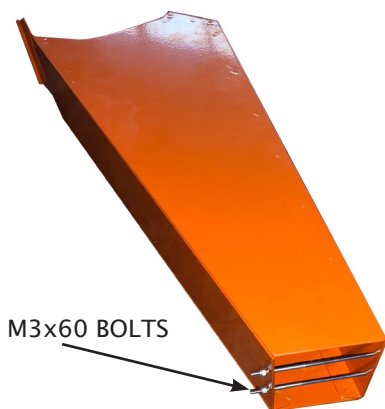
Connect the battery wires to the terminals on the battery (red to positive(+)). Place the battery on the tray and secure using the two M5 x 125 bolts (71) and nuts (72).



10. Place the feed hopper (1) on the drum housing (14) so that the flange on the upper face of the feed hopper between the top face of the drum housing and the upper drum mounting bolt.
11. Fasten the bottom of the feed hopper (1) to the drum housing (14) using the M6 bolts (51) the M6 washer (41) and the M6 spring washer (59). There is a thread in the drum housing to fasten the bolt into. The order of assembly is: [Bolt] - [Spring Washer] - [Washer] - [Feed Hopper] - [Drum Housing].



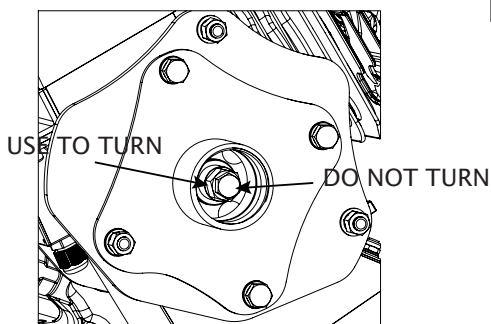
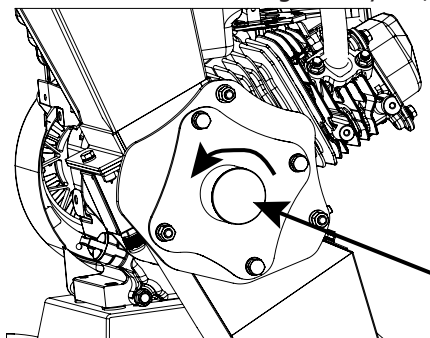
12. If in the EU/UK fit the 2 M3x60 bolts (39) and M3 nuts (40) through the holes in end of the discharge chute.
13. The petrol engine is shipped dry of oil. It must be filled with 600ml of oil before use. It must be filled with the mulcher level on level ground. It is recommended to use 5W-40 in winter and 10W-40 in summer.





Operation

- Position your mulcher on flat, dry ground and make sure the machine cannot be moved.
- 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. Using your forefinger and thumb to grasp the hexagonal part of the drum shaft (not the black bolt in the centre), rotate the drum both ways, it should turn easily. With the FM6DD-MUL & FM6DDES-MUL you will have to use a socket to turn all the way around due to the compression.
- Before starting the lower hopper bolt (51) must be nipped tight by hand or the mulcher will not start. Tighten by a 1/4 turn at a time until it starts.



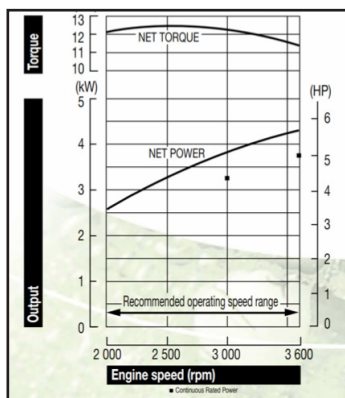
Engine Operation for FM6DD-MUL/FM6DDES-MUL Petrol Mulcher

DO NOT START THE ENGINE FOR THE FIRST TIME WITHOUT FILLING WITH 600 ml OF OIL. The engine may have oil residue but the engine is not supplied pre-filled unless you have paid for assembly before delivery.

STARTING THE ENGINE

FM6DD-MUL Pull Start

- Make sure the fuel shut-off valve is in the “ON” position.
- Move the choke control lever to the “CHOKE” position (should only be needed if the engine is cold or not starting).
- 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 on the FM6DD-MUL, the mulcher 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.



NOTE: Higher revs does not necessarily mean more torque to the blade drum. As you can see from the power map, the highest amount of torque is achieved around the 2500 rpm mark, and therefore is the most efficient speed to maintain the engine for mulching. We advise you do not increase the revs to the maximum for mulching unless required, as this works the engine harder for less results and could shorten the long-term life span of the engine (and use more petrol).

FM6DDES-MUL Electric Start

- Make sure the fuel shut-off valve is in the “ON” position.
- Move the choke control lever to the “CHOKE” position (should only be needed if the engine is cold or not starting).
- Move the throttle control lever to the “SLOW/IDLE” position.
- Before starting your FM6DDES-MUL, you should test the pull start to ensure that the cord isn’t tight.
- 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.



- 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.

Stopping the Engine

Ensure no fragments remain inside the mulcher when turning it off. Allow to run for 1 min 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.

Engine Does Not Start

The LCT engine is a reliable engine that starts very easily. There are two safety cut-outs that inhibit the ignition, one is the hopper microswitch, the other is the engine oil level alert, 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 engine requires a minimum of 600ml of oil, any less than this and the engine will not fire. The maximum amount of oil is 650ml but do not automatically add 650ml of oil, always add 600ml and if the engine does not fire or runs erratically gradually add a little more.
- 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.



Motor Operation for FM4DDE-MUL Electric Mulcher

Starting the Motor

- Plug the power cable into a 230V mains socket or extension cable that is no longer than 10m and has a wire size of 2.5mm². The extension cable must be no thinner than the cable fitted to the mulcher. For the UK the motor plug is fitted with a 13 amp machine fuse and the motor is protected by a 10 amp trip. EU models are fitted with a 16 amp plug and a 13 amp trip. Do not use any type of fuse other than a machine fuse.
- Press the green "ON" button.
- Run the motor for 1 - 2 minutes to ensure the mulcher is running freely before use.

Stopping

Ensure no fragments remain inside the mulcher when turning it off. Allow to run for 1 min 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.

- Press the red "OFF" button.
- Disconnect the power cable from the mains socket.

Motor Does Not Start

If the motor does not start then in most cases it will be one of two problems.

- Check that the hopper bolt(51) is tightened. If this bolt is loose then the motor will not start.
- Check the trip reset button under the clear plastic dome next to the on off buttons. If the motor has tripped, it will be because the drum is blocked, follow the instructions on page 17 for unblocking the drum.

Other causes may be

- Check the fuse in the plug, replace it with a 13amp fuse that is known to work. Do not use any type of fuse other than a machine fuse.
- Check the power cable for any cuts, nicks, etc.
- Check that a household RCD has not tripped.

Mulcher Operation

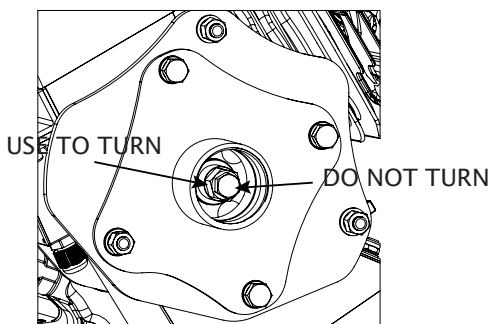
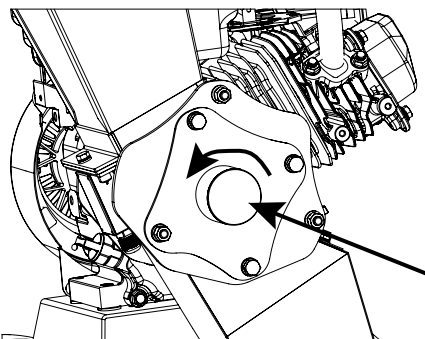
- Do not place any part of your body into the chute when loading. This is a very unsafe method and could result in serious injury.
- Do not reach or step across the exit chute whilst the mulcher is running. This is very unsafe and could result in serious injury.
- The mulcher works best with the discharge chute pointing downwards as it reduces the chance of the mulched material blocking the discharge chute.
- Do not use the mulcher in wet conditions.
- If mulching wet material the discharge chute should point fully down.
- When loading garden waste, etc, place against the bottom side of the chute and let the machine take the garden material into the blades. Do not push the material into the blades as this could damage the machine.



- Do not over load the mulcher. Let previous material go through the blades before adding more.
- Always wear gloves, ear defenders, helmet and visor or safety glasses and appropriate clothing when operating the mulcher.
- Do not feed the mulcher 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 garden waste through.
- The mulcher can be used to chop paper, cardboard, cartons, etc. Ensure all staples and tape are removed.

Removing A Blockage from the Mulcher

- Never attempt to unblock the machine whilst the mulcher is running.
- If the drum stops while mulching, stop the engine IMMEDIATELY and remove the spark plug (FM6DD-MUL/FM6DDES-MUL) or disconnect the power cable (FM4DDE-MUL).
- Unhinge either the feed hopper or 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.
- If the blockage is cleared you should be able to rotate the drum by grasping the hexagonal shaft with your thumb and forefinger.
- DO NOT rotate the drum by the smaller inner black bolt.



Cleaning the Mulcher

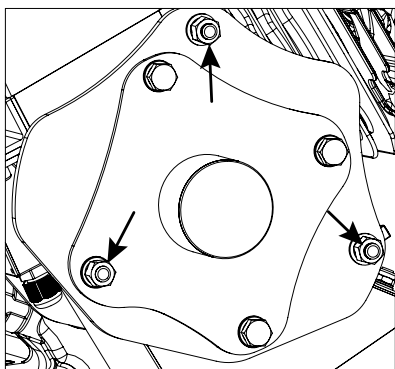
If you have been working with wet material - you may wish to wash down the machine using a hosepipe. To perform this simply spray water down into the mulcher hopper feed while the engine is running. After you have finished hosing the mulcher down - leave the engine running for a few minutes to allow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



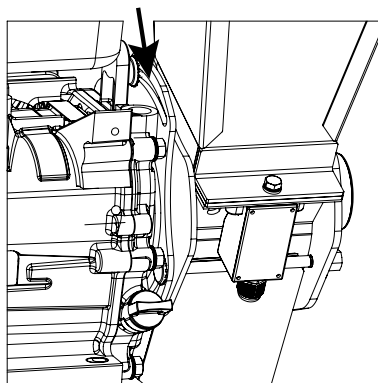
Changing the Feed and Discharge Angles

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.

Note however that for CE regulation compliance, the exit of the discharge chute should be no more than 30mm from the ground. The chipper is shipped with the drum set at the correct position to comply with this.

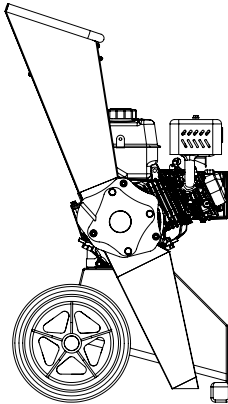


Loosen the 3 nuts shown, just sufficiently until the drum housing is free to rotate. DO NOT remove the nuts.

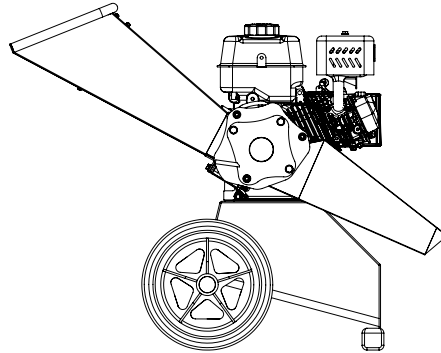


Rotate the drum housing to the required angle then tighten the nuts. The square shoulder of the coach bolts must remain located in the slots in the back plate.

NOTE: You may find after loosening the nuts that the drum housing does not turn or is very stiff to turn. This is because occasionally the serrated washers under one of the bolt heads have not been compressed enough and the bolt may jam against the motor. In this case, tighten the nut fully on the bolt to compress the washer further then loosen the nut and the drum housing should rotate.



Maximum Hopper Angle
CE Position



Minimum Hopper Angle

Frequently Asked Questions

<p>Will the machine chip wood/branches</p>	<p>The shredder/mulcher is perfectly capable of receiving and processing wood branches, sticks etc. The resulting material size produced by the machine however will be from 10mm down – you will not receive large wood chips from the wood placed into the machine. If you wish to process wood into larger wood chips, then you will require our wood chipping accessory kit for the mulcher.</p> <p>When shredding hedge trimmings and branches for best results the wood should be freshly cut, less than 3 days old. Drier wood can be chipped but this will reduce the lifetime of the blades and very dry wood will tend to produce sawdust and block the machine.</p>
<p>Can I shred cardboard with this machine</p>	<p>The shredder/mulcher is perfectly capable of processing both paper and cardboard. However, cardboard can take the edge off the blades quicker than when using the mulcher to process standard green waste. If you see a drop in performance in the machine after processing cardboard, it's likely because the sharp edge has been removed from the blades.</p> <p>These blades can be sharpened using an angle grinder or you can purchase spare replacement blades directly from ourselves. Remember that the blades are also reversible so once one side dulls, you can simply reverse the blades over and use a fresh set.</p>



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. Disconnect the spark plug wire (FM6DD-MUL/FM6DDES-MUL) or the power cable (FM4DDE-MUL).

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 (FM6DD-MUL/FM6DDES-MUL)

Do not use the dipstick of the engine on the FM6DD-MUL/FM6DDES-MUL to check the oil level. Due to the conditions under which the mulcher may be used, the dipstick is not accurate enough, the engine must have 600ml of oil. To ensure the oil level is sufficient, place the mulcher on level ground, remove the oil cap on the side of the engine (next to the discharge chute) and make sure that the oil is full to the brim of the cap. If not, add oil until it flows out of the hole, replace the cap and wipe off any excess oil. Do not tip the mulcher up to fill with oil.

Engine/Motor Servicing

For the service of the petrol engine (FM6DD-MUL/FM6DDES-MUL) refer to the engine manufacturer's user manual. If you need help accessing the manual, contact Forest Master.

Charging The Battery

The engine will trickle charge the FM6DD-MUL starter battery while it is running. If however the battery has insufficient charge, 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.



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. Forest Master sell a suitable socket on our website <https://forest-master.com/product/hexagonal-impact-socket/>

Undo the bolt at the bottom of the feed hopper (51) and lift the hopper clear to access the drum. Loosen the bolts (17) 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.

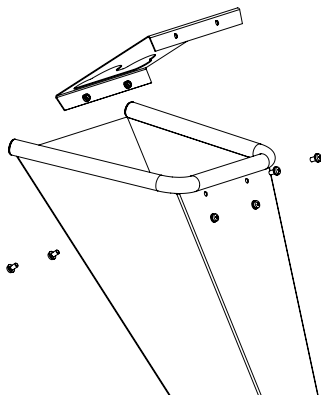
Note: The blades are reversible so they can be turned around to use the second edge before they need to be re-sharpened.

If the blades are re-sharpened, you will need to adjust the base block (26) 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 0.25mm 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. When refitting the blades, you should use a small amount of mild thread lock to secure each bolt.

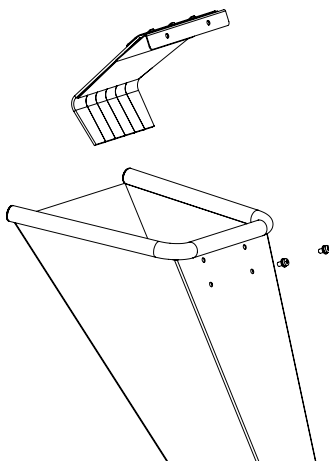
Cleaning The Hopper

To clean the inside of the hopper of any material adhering to it, the CE plate and the rubber curtain can be removed. Remove the 4 screws and washers holding the CE plate and lift it out. Then remove the 2 screws holding the rubber flap, do not remove the 3 screws joining the flap sections together.

CE PLATE



RUBBER FLAP





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. For spare parts contact 01912655000.

Before performing any maintenance procedure or inspection, stop the engine, wait 5 minutes to allow all parts to cool. Disconnect the spark plug (FM6DD-MUL) or the power cable (FM4DDE-MUL).

Symptom	Possible Cause
The engine won't start (Petrol)	<ul style="list-style-type: none">• 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 stabilizer 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, 600ml.• 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.
The engine lacks power or is not running smoothly (Petrol). (Continued over page)	<ul style="list-style-type: none">• Check that the throttle lever is in the "RUN" 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.•



Symptom	Possible Cause
The engine lacks power or is not running smoothly (Petrol).	<ul style="list-style-type: none"> • 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 (Petrol).	<ul style="list-style-type: none"> • 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.
The motor won't start (Electric)	<ul style="list-style-type: none"> • If you press the start button on the mulcher and don't feel or hear a click of the button, then this typically means that the mulcher isn't receiving power. • Is the plug connected to a power outlet? • If you're using an extension cable, only use a cable of 2.5mm² with a maximum length of 10m. Smaller or longer cables could result in loss of power to the motor. Check the fuse in the plug. If it has blown, change it. Do not replace the fuse with anything other than machine / slow blow fuses. • Check the power cable, the plug and the switch for damage (both the supplied power lead and any extension cable being used). If there is damage, change it. • Is the motor too hot? The motor is protected with a thermistor if overheating. Wait for it to cool down and try again. • Has the motor tripped. Press the reset button under the clear dome next to the on/off switches • 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 motor won't start.
Motor cuts out or does not start.	<ul style="list-style-type: none"> • Is the motor too hot or overheating? Wait 10 minutes for the motor to cool down and try again. • Is there a blockage in the drum? Inspect the drum and remove any potential blockages. • Does the motor need to be reset? Press the reset button on the motor (next to the on off switches).



Symptom	Possible Cause
Pull cord is tight / starter motor clicks, does not turn	<ul style="list-style-type: none">• drum blocked. Refer to removing blockage on Page 17.
Motor is humming but mulcher isn't operating (electric)	<ul style="list-style-type: none">• Drum is blocked. Refer to removing blockage on Page 17.
Insufficient drawing through or bad mulching performance.	<ul style="list-style-type: none">• Are the knives blunt or worn? Sharpen or replace if needed• Are the stems too thick?• Is there too much or too little space between the knives and the base block. Adjust the bolts on the base block and move it in or out to close or open the gap. Manually rotate the drum to check if it turns smoothly.



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.

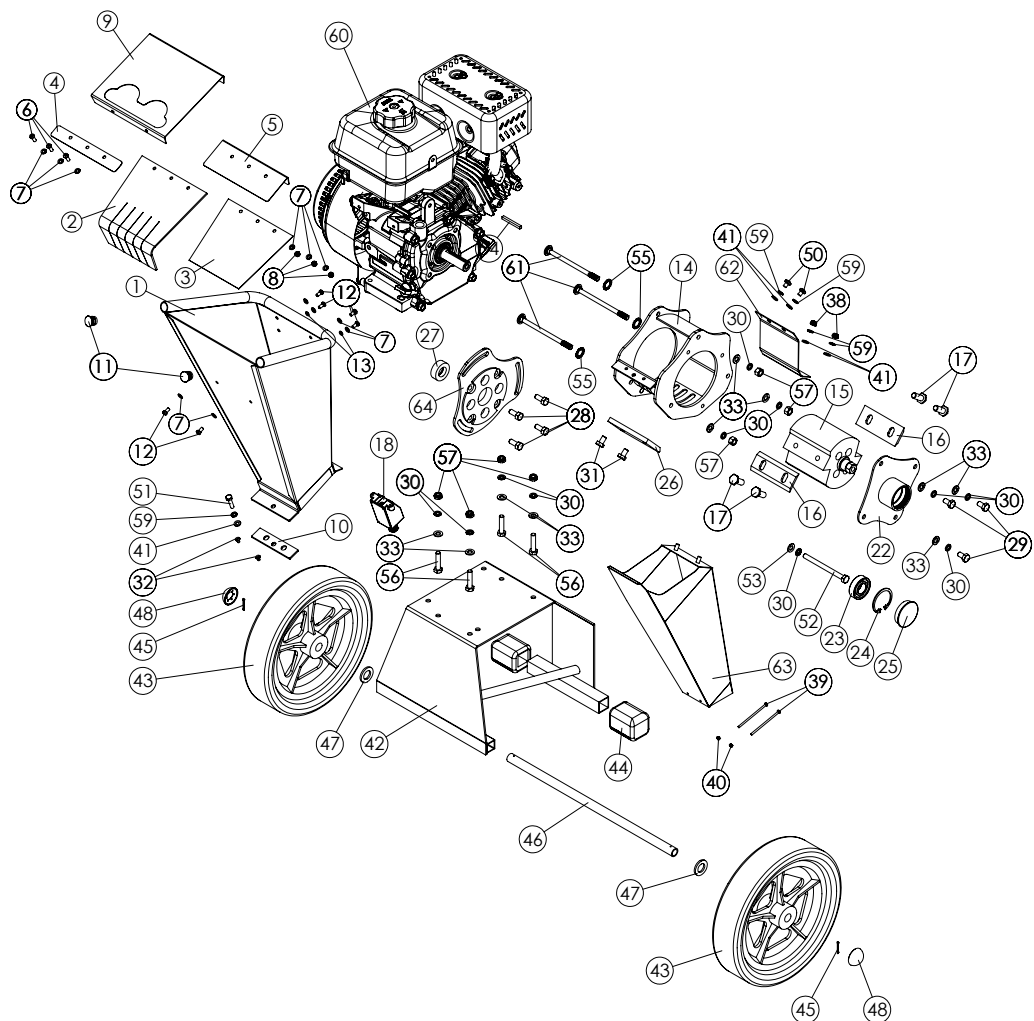
IMPORTANT: NO RESPONSIBILITY IS ACCEPTED FOR INCORRECT USE OF THIS PRODUCT. MODIFICATION OF THIS PRODUCT (UNLESS SAID MODIFICATION HAS BEEN AUTHORISED BY FOREST MASTER) WILL VOID THE WARRANTY.

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.



FM6DD-MUL/FM6DDES-MUL Exploded Diagram (Petrol)





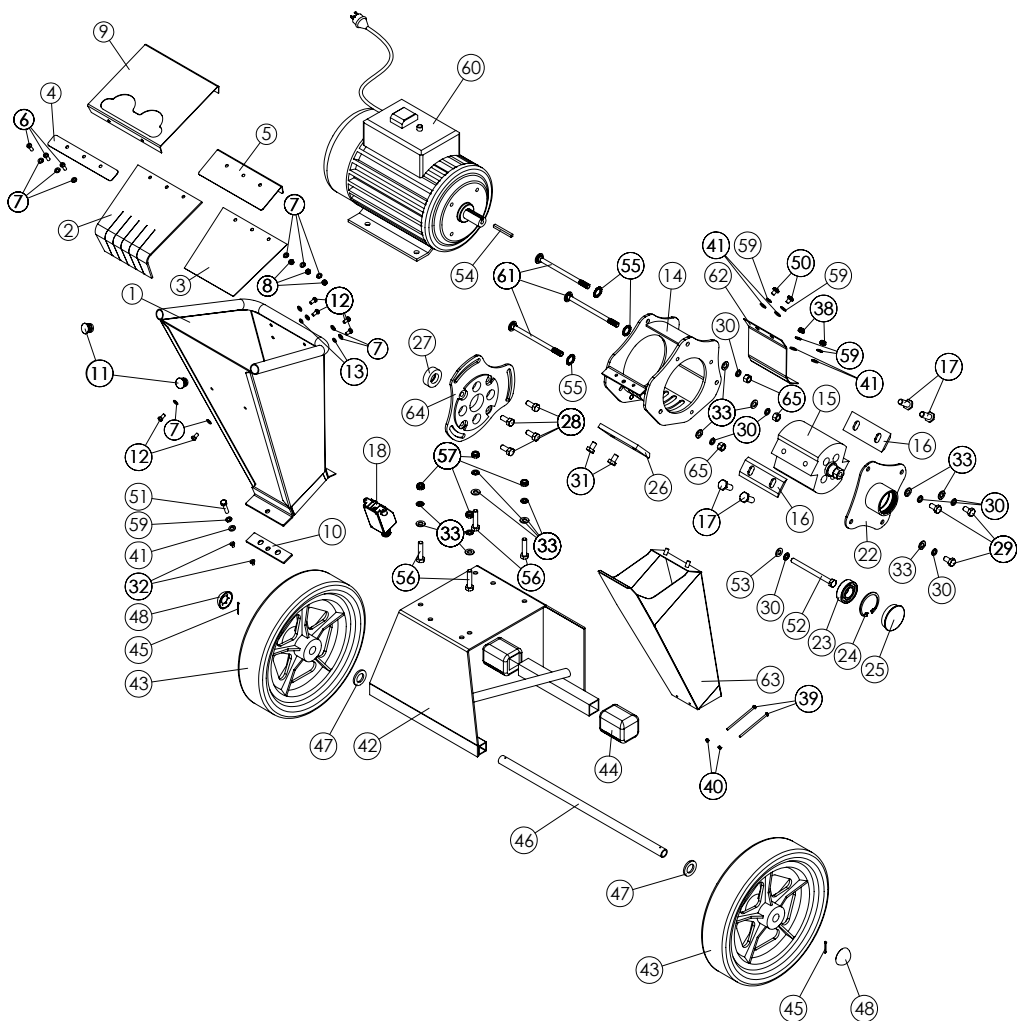
Part No.	Description	Qty
1	Feed Hopper	1
2	Rubber Curtain	1
3	PP Plate	1
4	Rubber Curtain Fixed Plate	1
5	Rubber Curtain Fixed Bend Steel	1
6	Rubber Curtain Fixed Bolts M5x12	3
7	Rubber Curtain Flat Washer Φ5.0	13
8	Rubber Curtain Lock Nut M5	3
9	Hopper Safety Plate	1
10	Hopper Rubber Gasket	1
11	Hopper Round Tube End Cap	2
12	Safety Plate and Rubber Curtain Mounting Bolts M5X10	7
13	Spring Washer M5	3
14	Drum Housing	1
15	Drum	1
16	Drum Blade	2
17	Drum Blade Bolt M10x25	4
18	Hopper Opening Micro Switch	1
22	Drum Housing Outer Plate	1
23	Drum Bearing 20×42×12	1
24	Bearing Circlip	1
25	Drum Housing Outer Plate End Cap	1
26	Bottom Blade	1
27	Drum Spacer Sleeve	1
28	Drum Housing Mounting Bolt 5/16-24×20	4
29	Drum Housing Outer Plate Mounting Bolt M8x15	3
30	M8 Spring Washer	11
31	M8×10Bottom Blade Flange Lock Bolts	2
32	M4×10 Micro Switch Box Fixed Bolts	2
33	Flat Washer Φ8×1.6	14
38	Nut M6	2
39	M3 x 60 Discharge Chute Safety Bolt	2
40	M3 Discharge Chute Safety Nut	2
41	Flat Washer Φ6×1.0	5
42	Base	1
43	Wheel	2
44	Front Foot Rubber Cap	2
45	Split Pin 1.6×20	2
46	Axle Φ16×2	1
47	Φ16 Flat Washer	2
48	Φ16 Dome Cap	2

Part No.	Description	Qty
50	Discharge Chute Bolt M6x12	2
51	Hopper Bolt M6×23	1
52	Drum Bolt 5/16-24×100	1
53	Flat Washer Φ8×3.0	1
54	Key	1
55	Serrated Washer Φ10×1.0	3
56	Engine or Motor Fix Bolt M8×35	4
57	M8 Nuts	4
58	Serrated Washer Φ5×0.6 (see note 1)	1
59	Spring Washer Φ6	3
60	Petrol Engine	1
61	Coach Bolt M8 x 125	3
62	Upper Blanking Plate	1
63	Mulcher Discharge Chute	1
64	Drum Rotation Mounting Plate	1

Note 1: 1 x part 12, 1 x part 13, 1 x part 7 & 1 x part 58 used to secure the micro switch ground wire. These are not shown in the exploded view.



FM4DDE-MUL Exploded Diagram (Electric)





Part No.	Description	Qty
1	Feed Hopper	1
2	Rubber Curtain	1
3	PP Plate	1
4	Rubber Curtain Fixed Plate	1
5	Rubber Curtain Fixed Bend Steel	1
6	Rubber Curtain Fixed Bolts M5×12	3
7	Rubber Curtain Flat Washer Φ5.0	12
8	Rubber Curtain Lock Nut M5	3
9	Hopper Safety Plate	1
10	Hopper Rubber Gasket	1
11	Hopper Round Tube End Cap	2
12	Safety Plate and Rubber Curtain Mounting Bolts M5X10	6
13	Spring Washer M5	2
14	Drum Housing	1
15	Drum	1
16	Drum Blade	2
17	Drum Blade Bolt M10x25	4
18	Hopper Opening Micro Switch	1
22	Drum Housing Outer Plate	1
23	Drum Bearing 20×42×12	1
24	Bearing Circlip	1
25	Drum Housing Outer Plate End Cap	1
26	Bottom Blade	1
27	Drum Spacer Sleeve	1
28	Drum Housing Mounting Bolt 5/16-24×20	4
29	Drum Housing Outer Plate Mounting Bolt M8x15	3
30	M8 Spring Washer	11
31	M8×10Bottom Blade Flange Lock Bolts	2
32	M4×10 Micro Switch Box Fixed Bolts	2
33	Flat Washer Φ8×1.6	14
38	Nut M6	2
39	M3 x 60 Discharge Chute Safety Bolt	2
40	M3 Discharge Chute Safety Nut	2
41	Flat Washer Φ6×1.0	5
42	Base	1
43	Wheel	2
44	Front Foot Rubber Cap	2
45	Split Pin 1.6×20	2
46	Axle Φ16×2	1
47	Φ16 Flat Washer	2
48	Φ16 Dome Cap	2

Part No.	Description	Qty
50	Discharge Chute Bolt M6x12	2
51	Hopper Bolt M6×23	1
52	Drum Bolt 5/16-24×100	1
53	Flat Washer Φ8×3.0	1
54	Key	1
55	Serrated Washer Φ10×1.0	3
56	Engine or Motor Fix Bolt M8×35	4
57	M8 Lock Nuts	4
59	Spring Washer Φ6	3
60	Electric Motor	1
61	Coach Bolt M8 x 125	3
62	Upper Blanking Plate	1
63	Mulcher Discharge Chute	1
64	Drum Rotation Mounting Plate	1
65	M8 Nuts	3

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.

Registered Office:

Forest Master Ltd, Industry Road, Heaton, Newcastle Upon Tyne, NE6 5XB, United Kingdom.

Tel: +44 191 2966939 - email: info@forest-master.com - web: www.forest-master.com