EN

Tumbling Composter 18.5/28 Gallons (70/105 Liter)

Owner's Manual
Description - Features - Composting
Assembly Instructions

28 Gallons Model

18.5 Gallons Model

Assembly Instructions
www.dfomer.com/Tumbling-Composter-70L-Assembly

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EN

Tumbling Composter

Owner's Manual

WARNINGS

⚠ Do not exceed maximum weight of: for 28 Gallons Model - 70 Lbs (32 kg).
for 18.5 Gallons Model - 45 Lbs (20 kg)
⚠ Not intended for storage of flammable or caustic chemicals.
⚠ Not for mixing concrete.
⚠ Not intended for use by children or pets. To avoid suffocation do not allow children to play inside.
⚠ Repair or replace broken parts immediately.
⚠ Do not sit or stand on frame or barrel.
⚠ Manufacturer is not responsible for damage caused by weather or misuse.
⚠ Avoid excess heat from any auxiliary source.

Caution - When tumbling the composter in low temperatures (below 0°C/32°F) frozen contents might cause external shell breakage.

GENERAL SAFETY AND CARE INSTRUCTIONS

- Use caution when tumbling. Keep pets, children, and other people safely clear of composter.
- Keep hands away from barrel to frame pinch points when tumbling.
- Excessive speed in tumbling may cause injury to user.
- Lid needs to locked before tumbling.
- Lock barrel in upright position after each use.
- Clean barrel and lid with a garden hose after each compost cycle. Do not use cleaning products inside the barrel. The micro-organisms and insects that create compost will perish if exposed to cleaning solutions and fumes.

WARRANTY
2 years warranty

WHY COMPOST

Composting In Your Garden - Composting is the natural way of recycling. All plants that die at the end of the season can be consumed by living animals and microscopic creatures. The result of their excrement is compost, which is actually a combination of digested and undigested food, and is left on the ground to create a rich and soft soil.
Composting in your backyard or garden is the willingly controlled decomposition of organic materials in order to produce compost. It is an easy process and environmentally friendly. In fact, you are creating the best additive for extremely productive garden soil.

How Is Composting Environmentally Friendly? - It reduces the amount of solid waste that would be thrown away into trash collection. Garden trimmings and kitchen trash make up about 1/3 of all your waste.
All this amounts to millions of tons that, instead of being wasted, can be turned into useful compost. It is also a great way to reduce or eliminate the need to add additional fertiliser to your garden. Compost is a natural way to help your garden thrive.

COMPOSTING INFORMATION AND TIPS!

The Tumbling Composter contains a mechanism with rods or fins that mixes and breaks up larger clusters to activate and "fasten" the decomposing process. Such composters are able to reach a temperature of more than 140°F (60°C). In order for compost to be efficient, it requires a correct mixture ratio of "brown" (carbon) and "green" (nitrogen) materials (see LIST OF KEY COMPONENTS FOR GREAT COMPOST). Water should be added only when necessary and the tumbler should be turned every other day or so to keep all ingredients, microorganisms, and moisture evenly distributed. Within a few weeks, your Tumbling Composter will transform your scraps into this natural fertiliser named compost.

COMPOST CAN BE PRODUCED WITH YOUR TUMBLER IN TWO DIFFERENT PROCESSES:

1. The best method: Produce compost in batches, loading up the tumbler until full, and leave it to break down until completed. When running two tumblers simultaneously, one can start adding waste to the second tumbler and wait for the first to complete its decomposing process. Refraining from adding more materials to the current batch of working compost will ensure better results. A batch with new waste materials can then be started when the first is completed. A second composter required for this method.
2. Another method is continuous composting, where one adds more and more material, mixing fresh waste into the decomposing process. When choosing this method with the tumbler, one should stop adding when the tumbler is almost full, and let the contents decompose. Once this batch is completed you can start the entire process again.

LIST OF KEY COMPONENTS FOR GREAT COMPOST

Decomposing Process - When trying the process for the first time, it may be surprising how many small creatures are participating in decomposition. This mixture of creatures, which include many insects, bugs, slugs, bacteria, and mushrooms, form what is called a "food web." Adding a small quantity of soil to this mixture can be used to start the process. The creatures in the soil will actually contribute and speed up decomposition.

Each and every member of the food web has its own contribution to your compost and it must be left alone to do its job. If any of the member organisms is removed by using agents such as pesticides, the natural cycle will be disturbed and the compost will be infected by pesticides.

Ingredients - Basic ingredients for composting are: nitrogen, carbon, water and air. Water and air should be readily available. Providing the remaining ingredients is somewhat more complicated. They are actually referred to as "greens" and "browns" (not meaning the color but green = rich in nitrogen, and brown = rich in carbon). The "green" ingredients represent the protein for the active creatures, and the "brown" ingredients supplying the energy. Any plant in your garden can be used to "feed" these creatures. The Tumbling Composter should simply be filled with these ingredients and mixed. Water must be added separately and the composter must be tumbled to add air. The composter should then be left alone to let the decomposing process take place.

Nitrogen / Carbon Ratio - The ideal mix is 3/4 "brown" and 1/4 "green" ingredients by volume. Such a mixture of "brown" and "green" ingredients will ensure that the mass maintains the appropriate quantity of humidity and air, and hastens the decomposing process. An increased amount of nitrogen will generate a heavy mass, which will slow down the decomposing process. Then may be the right time to add more "brown" ingredients!

Nitrogen - "Green" ingredients range from lawn clippings and green leaves to manures and garden trimmings and are all ideal sources of nitrogen for composting. The same can be said of kitchen waste, such as vegetable and fruit leftovers, which also generate nitrogen. Kitchen waste can be kept in a plastic container under the sink and should be cut up into smaller pieces before adding them to the composter.

Carbon - "Brown" garden ingredients such as dry leaves, twigs, or hay provide the carbon part of the mixture and will ensure a lighter and aerated compost. Carbon is best provided by using dry leaves. Dry leaves can be collected, shredded, and stored to be used all year round. If the mixture gets too wet or contains too much nitrogen, add dry leaves. (Refer to BASIC NITROGEN / CARBON CHART for more detailed information).

Water - Neglecting humidity is a common mistake made during the composting process. The compost should remain humid throughout the process. About 50% humidity is acceptable. How can we make sure that such levels are achieved? One can simply open the compost tumbler, grab and squeeze a handful of material in your hand; if a few drops of water are released, it is probably humid enough, if not, water should be added by inserting a hose deep into the mixture so that not just the upper layer will get wet. Let excess water drain out through the ventilation bores. The mixture should remain humid, but not wet.

Air - All creatures and mushrooms in the compost mixture need oxygen during the process. If the mixture is too dense or gets too humid, the air supply into the mixture is cut off and the laboring creatures will probably be exterminated. The process will slow down and a nauseating stink will start. To prevent this and hasten the process, the tumbler must be rotated every second day or so. This would also be a good time to add shredded leaves from the stockpile. Preventing moisture can also be achieved by opening the composter lid for a few hours.

Don't be afraid to make mistakes during the process, you will learn from experience. It would be a good idea to write down these experiences and keep some records; they might come in useful in the end! Refer to TROUBLESHOOTING for more detailed information.

NOTE: The decomposing process has a lot to do with the surface area the tiny creatures have to operate on. The best results are achieved when individual pieces in the decomposing mixture are kept small. So, cut or shred larger ingredients into smaller pieces. A lawn mower can be used to shred dry leaves when no shredder is available.

BASIC NITROGEN/CARBON CHART

MATERIAL	CARBON/ NITROGEN	INFO
Table scraps	Nitrogen	Add with dry carbon items.
Fruit & vegetable scraps	Nitrogen	Add with dry carbon items.
Chicken/rabbit manure	Nitrogen	Excellent compost 'activator', use in moderation.
Coffee grounds	Nitrogen	Filters may also be included.
Tea leaves	Nitrogen	Loose or in bags.
Grass clippings	Nitrogen	Add in thin layers so they don't mat into clumps and putrefy.

MATERIAL	CARBON/ NITROGEN	INFO
Garden plants	Nitrogen	Use disease-free plants only.
Lawn & garden weeds	Nitrogen	Only use weeds which have not gone to seed.
Flowers, cuttings	Nitrogen	Chop up any long woody stems.
Seaweed and kelp	Nitrogen	Rinse first; good source for trace minerals.
Eggshells	Neutral	Best when crushed.
Leaves	Carbon	Leaves break down faster when shredded.
Straw or hay	Carbon	Straw is best; hay (with seeds) is less ideal.
Pine needles	Carbon	Acidic; use in moderate amounts.
Wood ash	Carbon	Only use ash from clean materials; sprinkle lightly.
Cardboard	Carbon	Shred material to avoid matting.
Corn cobs, stalks	Carbon	Slow to decompose; best if chopped up.
Dryer lint	Carbon	Best if from natural fibers.
Wood chips	Carbon	High carbon content can overwhelm, and shut down, an otherwise good compost batch; use sparingly.
Sawdust	Carbon	High carbon content can overwhelm, and shut down, an otherwise good compost batch; use sparingly. Be sure sawdust is clean, with no machine oil or chain oil residues from cutting equipment. Do not use sawdust from painted or treated lumber.

AVOID ADDING THESE INGREDIENTS TO THE COMPOST MIXTURE:

- **Meat, fish, fats and bones** - These could ferment or putrefy, causing odours, and attracting flies, rodents or other animals that can be pests.
- **Other foods like dairy products, sauces, salad dressing, and cooking oil** - These too could ferment or putrefy, causing odours, and attracting flies, rodents or other animals that can be pests.
- **Paper products** – Should be recycled. They may contain chemicals that are bad for your compost.
- Ashes - Wood ashes may be very useful but in small quantities. Never put BBQ grill ashes directly into the compost mixture.
- **Dog and cat faeces** - May cause a risk of adding diseases! Moderately adding chicken, horse, cow, and rabbit manure may be fine.
- **Perpetual weeds that have turned to seed or diseased plants** - Not to be used as they can spread with the compost.
- **Any cooked or canned foods that contain salt** - Salt kills the little creatures that do the composting in your mixture.

Important: Do not add any part of the Black Walnut tree; it contains a chemical that may prevent the growth of some plants, tomatoes in particular.

TROUBLESHOOTING

SYMPTOM	PROBLEM(S)	SOLUTION(S)
Odour	Too much nitrogen	Mix in "brown" material and rotate tumbler
	Too much moisture	
	Lack of oxygen	
The Mixture Does Not Heat Up	Lack of nitrogen	Mix in "brown" material and rotate tumbler
	Lack of oxygen	Rotate tumbler
	Lack of humidity	Humidify mix
	Too much humidity	Mix in "brown" material and rotate tumbler
	Particle size is too large	Cut or grind materials
Attracts Animals Or Pests	Mixture contains bones, meat, or fatty foods, or animal manure	AVOID ADDING THESE MATERIALS TO THE MIXTURE. (See AVOID ADDING THESE MATERIALS TO THE MIXTURE)

SOME TIPS AND TRICKS

Critical Quantity – To make your composting process more efficient, a critical quantity is required in order to generate a heat core. You should start with a minimum of 1 cubic foot (28 liter/7.5 Gallon) of ingredients, But of course, the more the better. The Tumbling Composter can hold about 6.5 cubic feet (182 liter/48.5 Gallon).
A properly combined mixture will reach a working temperature of about 140° F (60° C) in about five days. At this time, the mixture will be "settling". This is a good sign that the mixture is decomposing as it should.

NOTE: Once the mixture gets to proper size, do not add any more raw ingredients to the working compost, but rather start a new batch with new ingredients. If you add more ingredients, it will restart the mixture from the beginning. This is why we suggest operating at least a couple of tumblers.

When Is The Process Completed? - The compost is ready when the original ingredients have turned into a uniform, dark brown, crumbly product with a pleasant, earthy aroma. Dump the compost out of the tumbler, leaving a little bit inside as starter microbes for your next batch.

WHEN AND HOW TO USE COMPOST

Garden fertiliser and Soil Building - Compost can be used throughout the season as a garden fertiliser. Simply side dress vegetables and flowers for a slow-release food source and improved disease prevention. Till in compost in spring and fall to improve tilth, increase fertility and aid in water retention for sandy soils or water drainage for clay soils.

Lawn Feeding - Screened compost (compost that has been sifted to collect the smaller particles) can be applied as a lawn fertiliser throughout the season. It will provide a wonderful slow-release food as well as assist in lawn disease prevention.

Potting Mix (potted plants, seed starting) - Compost can be added to potting soil to create a nutrient-rich mixture.

LOCATION FOR YOUR TUMBLING COMPOSTER

Choose a flat, level surface convenient to your source materials (kitchen scraps, lawn clippings, garden, etc.)

Since microbes work best at elevated temperatures, temperature is key to the breakdown of compost. Although microbes generate their own heat as they work, you can help keep them warm by positioning the Compost Tumbler out of excessive wind and in full sunlight. In hotter areas of the country a shady location may work as well. The fastest decomposition occurs between 140˚F (60˚C) and 160˚F (71˚C), but some breakdown will occur as long as the compost is kept above freezing.

WINTER - Since the Tumbling Composter is portable, it can be moved (even when full) by one or two people to convenient locations. In winter, place it by your back door to avoid a long walk to recycle kitchen scraps. Although the microbes stop working when the batch freezes, freezing breaks down fibers in organic material, thus speeding up decomposition in spring. In winter, do not turn the unit, but keep adding waste.
When spring arrives and the material defrosts, tumble and begin adding materials in the correct portions. You may find you need to add a lot of carbon material to achieve the correct ratio, so do not overfill the Tumbling Composter during winter.

If you do not use the Tumbling Composter in winter, move it to a location sheltered from high winds and snow. Ideally, it should be stored in a garage or shed.

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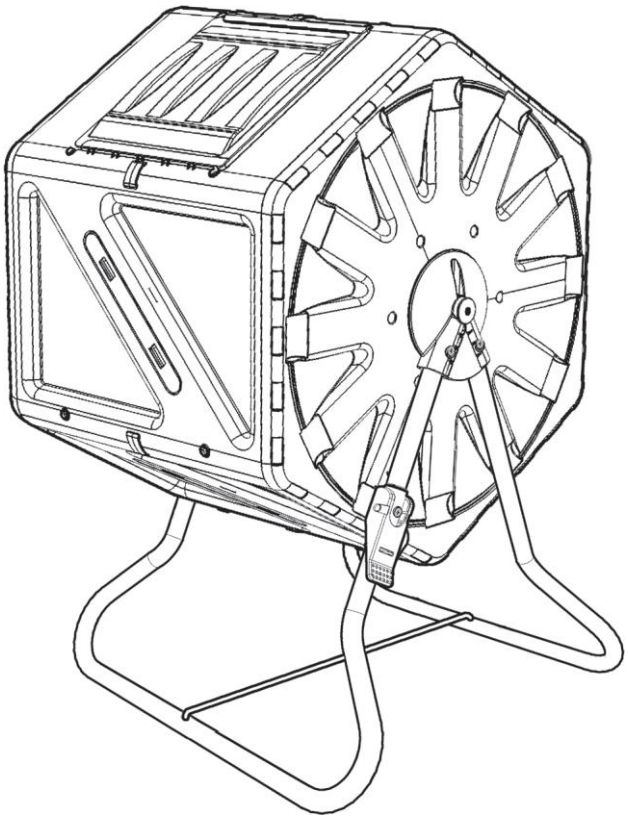
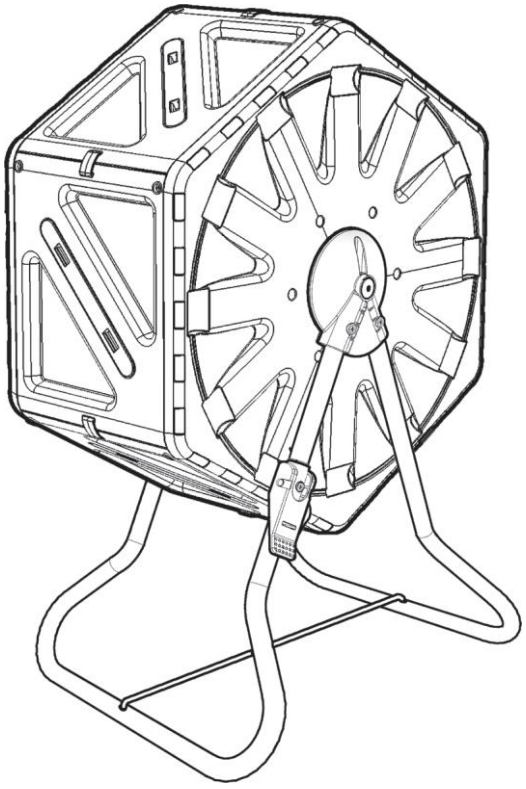
ASSEMBLY INSTRUCTIONS

Tools Required: PhillipsScrewdriver

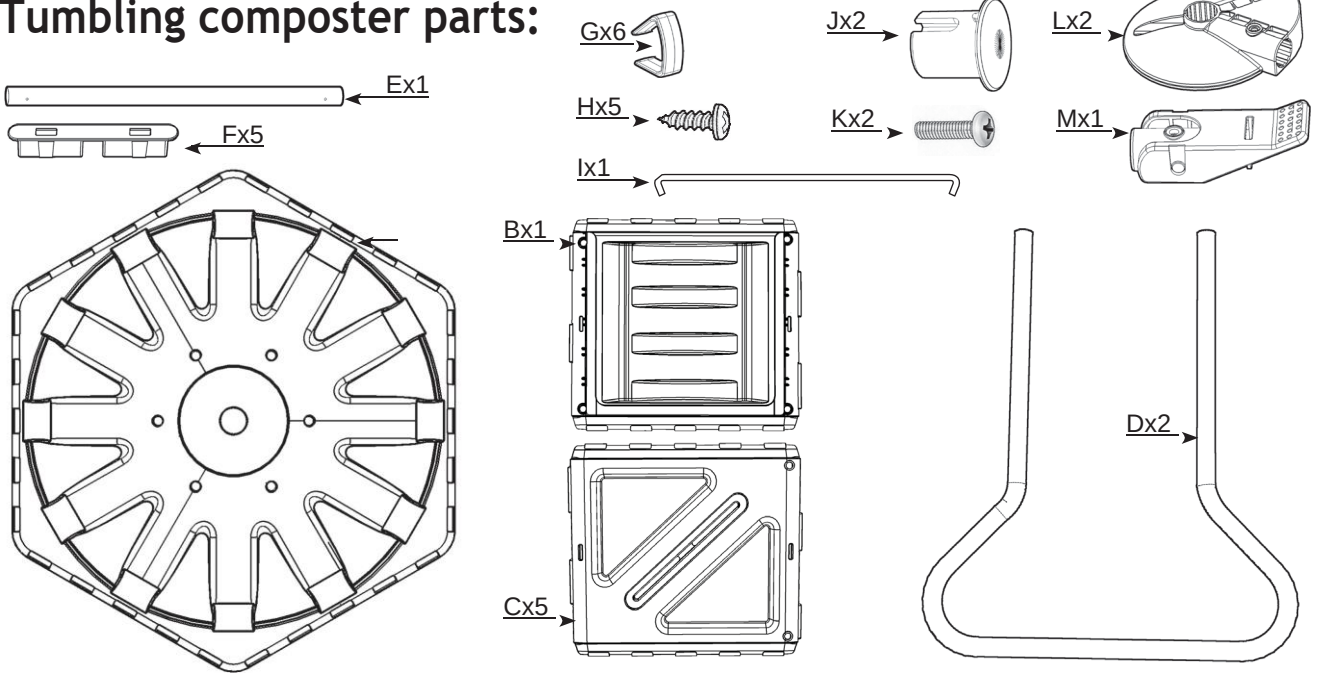


28 Gallons Model



18.5 Gallons Model

Tumbling composter parts:



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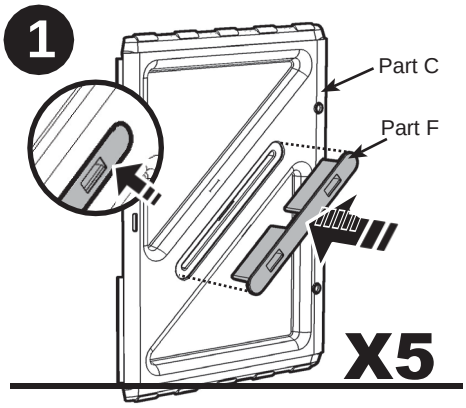

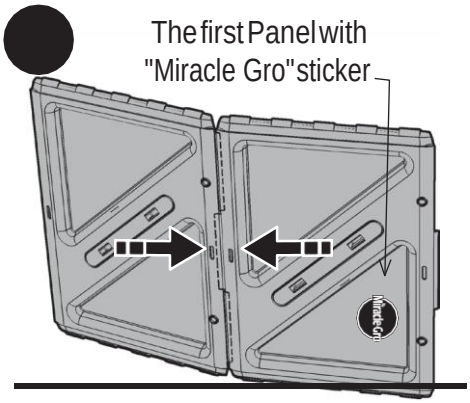

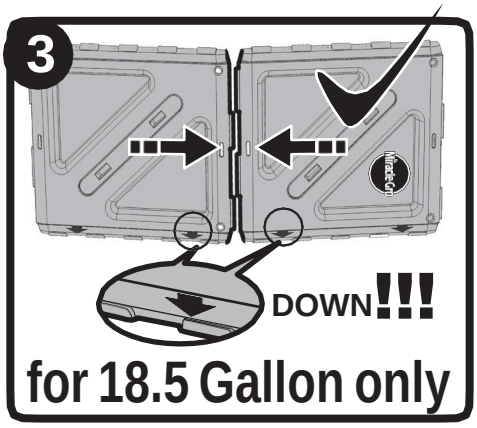

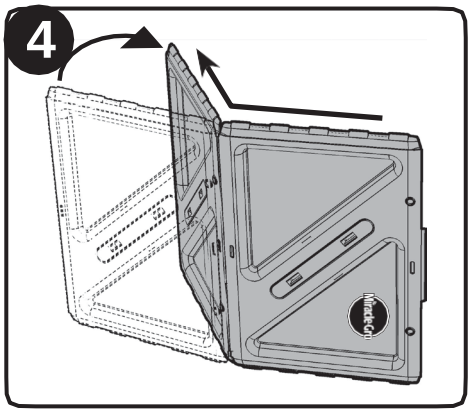

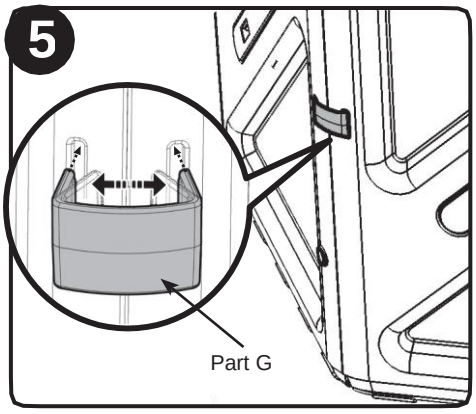

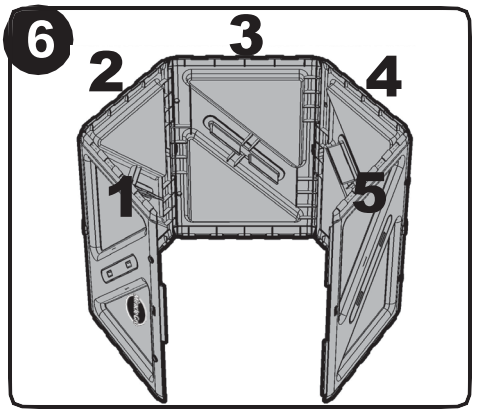

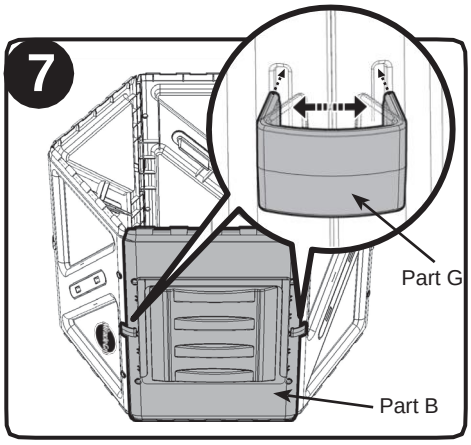

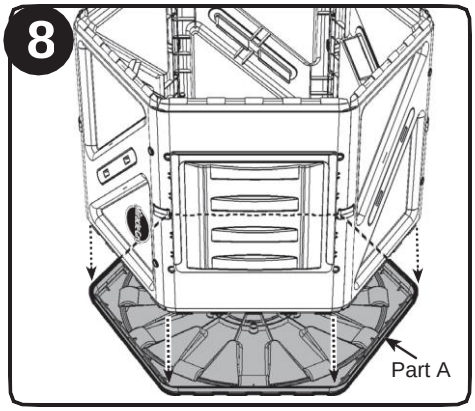

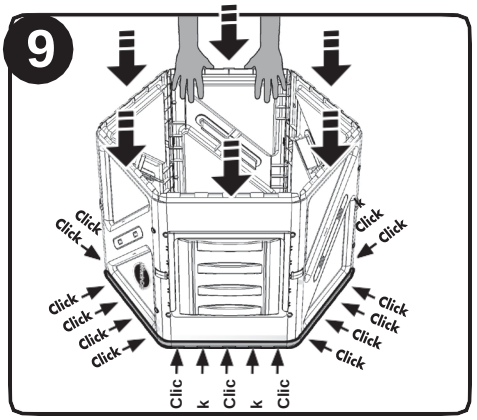

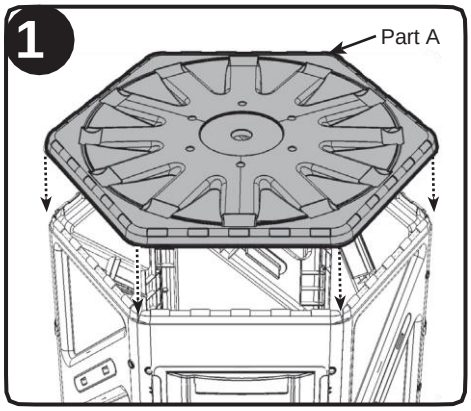

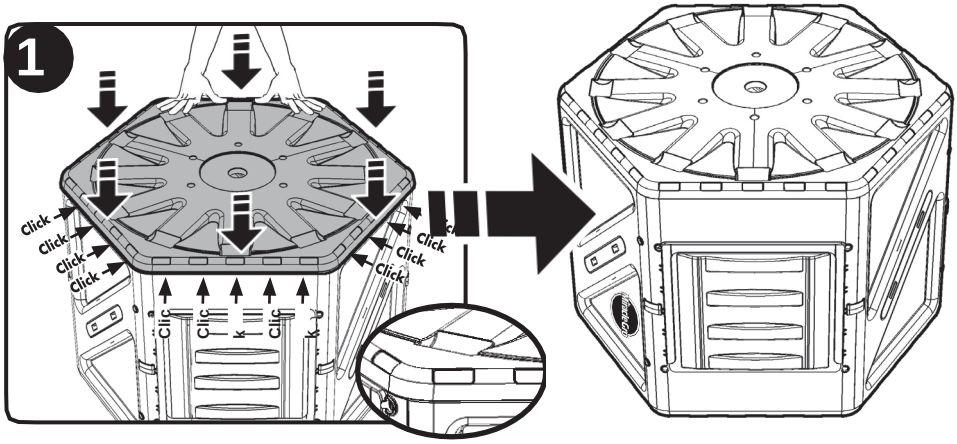

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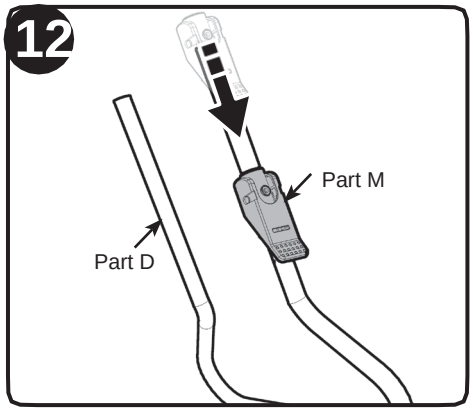

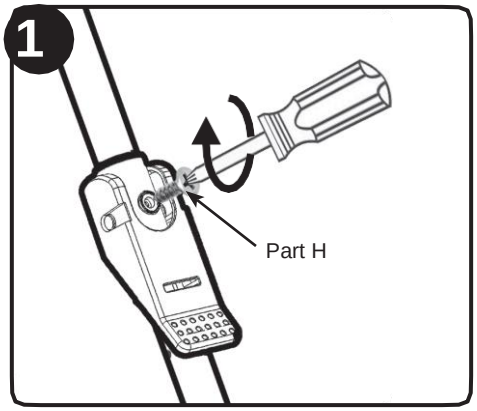

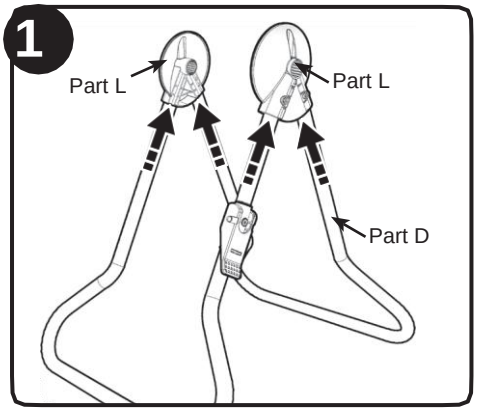

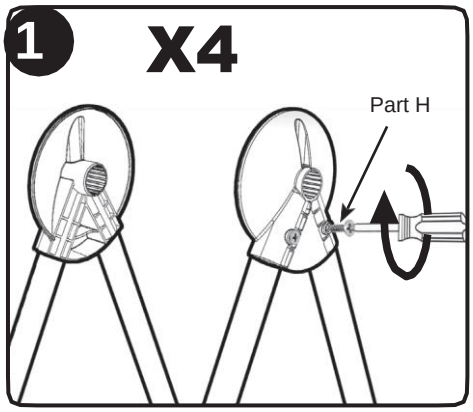

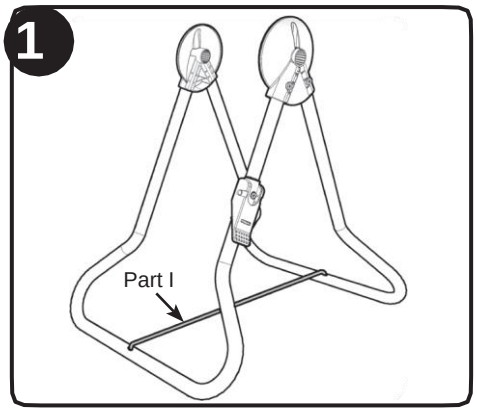

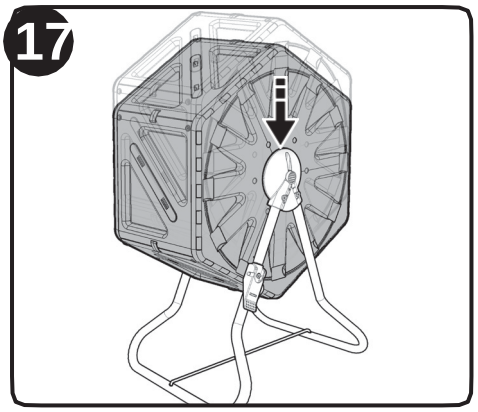

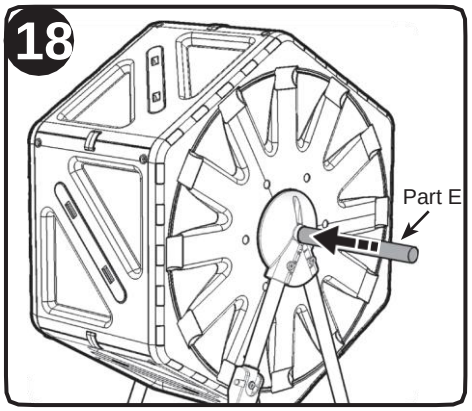

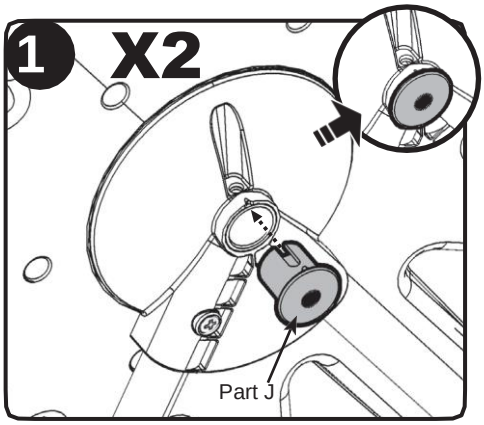

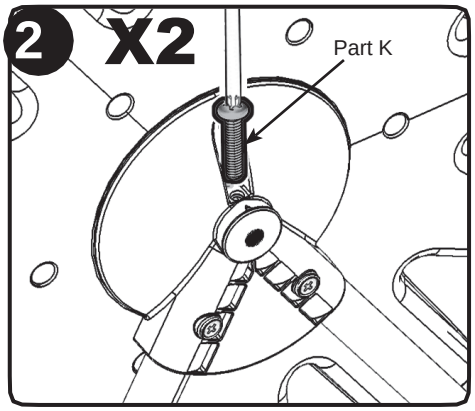

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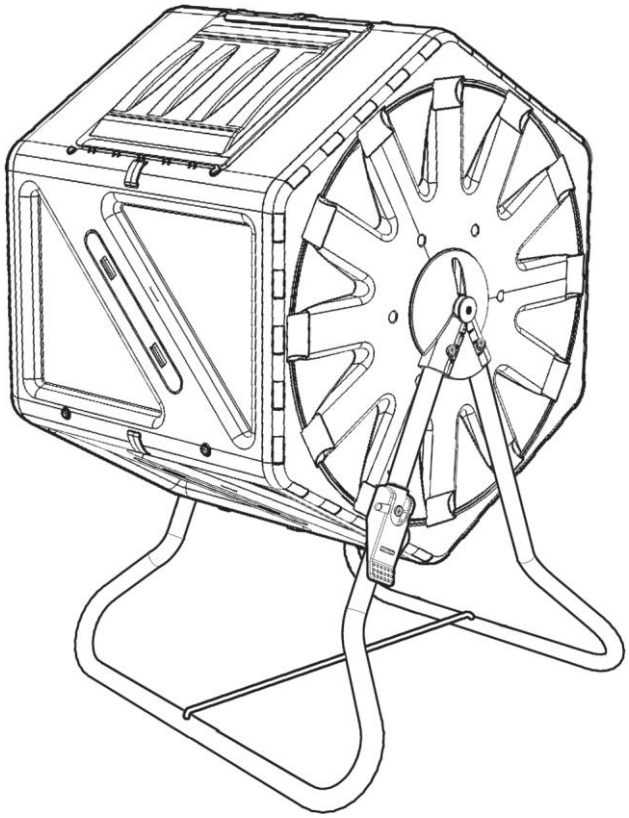

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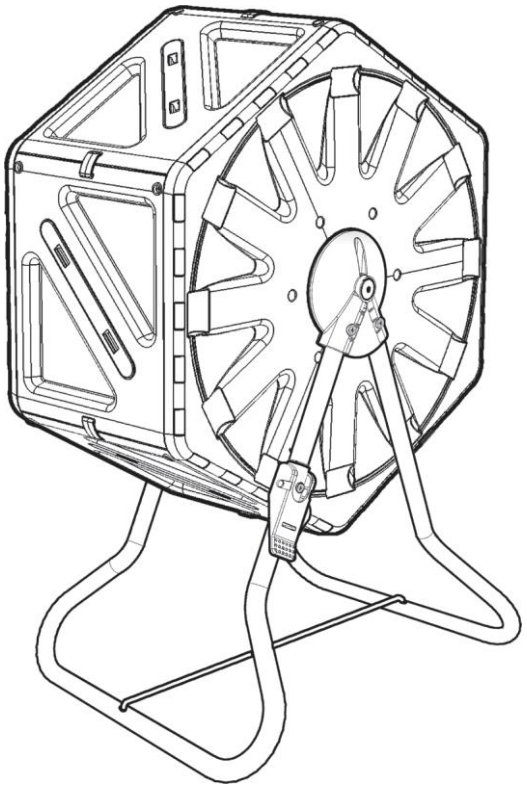

18.5 Gallons Model