

Please read and save these instructions. Read through this owner's manual carefully before using product. Protect yourself and others by observing all safety information, warnings, and cautions. Failure to comply with instructions could result in personal injury and/or damage to product or property. Please retain instructions for future reference.



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**WHEELBARROW MIXER, 3 1/2 CU.FT.
10N693**

Description

10N693 features a heavy-duty frame and a durable easy-to-clean plastic drum that won't rust or corrode. Removable handles allow for compact storage.



**WHEELBARROW MIXER, 4 3/4 CU.FT.
10N694**

Description

10N694 has a welded steel frame, metal drum, torsion bar suspension and an easy-to-use dump mechanism to control material discharge.



Specifications and Dimensions

Model	Size (cu.ft)	Motor	Dimensions (Inches)			Drum Dia (In)	Drum Opening (In)	Net Weight (Lbs)
			Length	Width	Height			
10N693	3 1/2	1/2HP 115V	48-1/2"	25-1/2"	41-3/4"	20-1/2"	16-3/4"	106
10N694	4 3/4	3/4HP 120V	55-1/2"	28"	49-1/2"	22-1/2"	15-3/4"	130



WHEELBARROW MIXER, 3 1/2 CU.FT.

WHEELBARROW MIXER, 4 3/4 CU.FT.

General Safety Information

These mixers are designed for mixing concrete, cement, mortar, fertilizer, soil or any other similar materials. The machine should not be used for any other purpose than that stated above. The inappropriate use of any machine can cause serious damage and/or bodily harm to the environment and operator. It is imperative that the operator of this equipment be responsible for the operational environment of the mixer. Please be prepared and well-informed for all specific requirements precautions and work hazards that may and/or do exist at the jobsite.

⚠ CAUTION *Do not operate this equipment until you have read and understood all the enclosed Operator's Manual. Read all the sections in this manual PRIOR to attempting to service, maintain or operate this equipment.*

Before operating the mixer ensure that it is structurally and mechanically safe by checking the following:

- a. Are there any loose, worn or damaged parts and decals?
- b. Is the machine, particularly the drive gear and mixing drum gear, clean and free of debris?
- c. Are there any cracks or damage on the drum and motor?
- d. Are there any standing pools of water or other conductive liquids and materials that can interfere with the safe operation of the machine at the jobsite?
- e. Is there a reliable source of grounded electricity?
- f. If using an extension cord, is it in good condition and conforming to local safety codes?

⚠ WARNING *If any of the above checks fails, please take necessary steps to maintain or repair the unit before operating it in any environment.*

1. All bolts and nuts must be fixed tightly.
2. Keep hands and clothing away from any moving parts while the mixer is running.
3. Clear the work area around the machine to prevent tripping or falling onto the mixer.
4. Don't expose power tools to rain. Don't use power tools in damp or wet locations.
5. Do not wear loose clothing or jewelry. They can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
6. Operate on level ground to prevent the mixer from tipping over.
7. Keep all unauthorized and untrained people away from the mixer at all times.
8. Do not operate this mixer under the influence of alcohol or while taking medication that impairs your reactions.
9. NEVER run the mixer unattended, turn off the motor when you leave the machine.
10. Do not pull the cord to disconnect it. Keep the cord away from heat, oil, and sharp edges.
11. Use factory authorized parts for replacement.
12. Wear safety glasses when mixer is in use.
13. Never attempt to move the mixer while the motor is on.
14. The largest tie pressure value for 10N693 is 30 PSI.

⚠ WARNING *When using this mixer, basic safety Precautions should always be followed to reduce the risk of fire, electric shock and personal injury.*



WHEELBARROW MIXER, 3 1/2 CU.FT.

**10N693
WHEELBARROW MIXER, 3 1/2 CU.FT.**

Unpacking

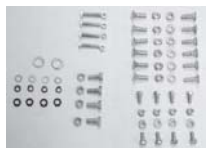
After unpacking unit, inspect carefully for any damage that may have occurred during transit. Check for loose, missing, or damaged parts. Shipping damage claim must be filed with carrier. Do not attempt assembly or operation without any of these listed parts.



Left & right wheelbarrow frames.



Protective guards, allen keys, handle grips, pins and castle nuts.



Assorted nuts & bolts for assembly.



Handle bars, axle and front support bar.



Electric motor, drive belt, jackshaft and lock ring.



Wheels
(Largest Tire Pressure 30PSI)



Components for mixing drum assembly.

Verify that all of the following components are included in your Mixer.

Assembly

Assembling the Frame

- Sort through all the components and set aside pieces required for the frame (Fig.1)
- Slide wheels onto either side of the axle.
- Place side frames as shown onto axle, taking care that both frames are aligned and perpendicular to the axle (Fig.2)
- Insert a metal washer onto either end of axle.
- Screw on one castle nut on either side of axle, taking care to line up slots on the nut with the holes on the axle. Insert one cotter pin through castle nut slots and into the hole on the axle. Repeat on the other side. Do Not Bend Cotter Pin At This Time (Fig.3)



Fig.1



Fig.2



Fig.3

- Attach front support bar with bolts provided (Fig.4)

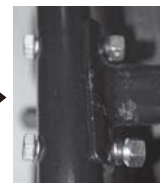


Fig.4

- Bolt on drum support beam. Check that jackshaft adjustment plate and drum shaft is facing up, and motor guard plate is facing out on the back as shown. (Fig.5) Loosen bolts on jackshaft attachment plate for future adjustment. Ensure that plate moves easily up and down and from side to side. (Fig.6)



Fig.5

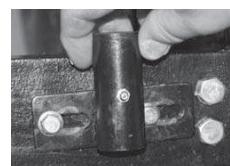


Fig.6





WHEELBARROW MIXER, 3 1/2 CU.FT.

- Inspect that frame assembly is straight and well-aligned. Tighten all nuts and bolts to set frame assembly (Fig.7)



Fig.7

Assembling the Mixer Drum:

- Sort through all the components and set aside pieces required for the drum. Remove lock ring from rod (Fig.8)
- Place rubber protection pad onto drum attachment plate assembly. Ensure pad fits flush with plate assembly (Fig.9)
- Slide assembly inside drum and through opening at the bottom. Verify that all holes line up through the drum and assembly (Fig.10)



Fig.8



Fig.9



Fig.10

- Place bolts through the holes to attach assembly to drum as shown (Fig.11)
- Slide mixing drum gear onto shaft. Bolt mixing drum gear, drum, and assembly together with matching nuts. Do not overtighten (Fig.12)
- Complete drum assembly as shown (Fig.13)



Fig.11

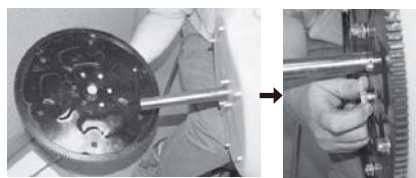


Fig.12

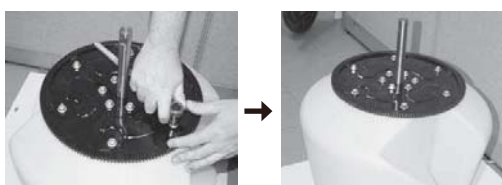


Fig.13

Attaching the Motor, and Drive Assembly to Frame

- Sort through all the components and set aside pieces required for mounting the motor and drive assembly. (Fig.14)
- Remove lock ring from jackshaft (Fig.15)



Fig.14



Fig.15

- Bolt motor onto guides on left side frame. (Fig.16)
- Slide jackshaft and drive pulley into jackshaft plate on the drum support beam. Ensure that the lock ring is removed from jackshaft. (Fig.17). (Fig.18) shows the incorrect positioning of the lock ring.
- The motor and drive assembly should be mounted onto cart as shown. (Fig.19).
- Slip v-pulley drive belt onto both pulleys, taking care to place belt securely inside each groove. (Fig.20)



Fig.16



Fig.17



Fig.18



Fig.19



Fig.20

7. Adjusting belt tension and placement:

- Place a ruler across both pulleys. Adjust belt placement by using the jackshaft mounting plate, shifting the plate until both pulleys are flush and aligned to ruler. (Fig.21) Finger tighten bolts on the adjustment plate. (Fig.22)
- Place drum onto drum support beam. There may be a gap between the drive assembly gear and the mixing drum gear. (Fig.23)



Fig.21



Fig.22



Fig.23





WHEELBARROW MIXER, 3 1/2 CU.FT.

c. Loosen bolts on adjustment plate to shift jackshaft towards mixer drum. (Fig.24). Set jack shaft such that the drum gear is centered onto drive gear, and that their teeth are set flush and straight to each other. (Fig.25) Tighten bolts on adjustment plate to set placement.

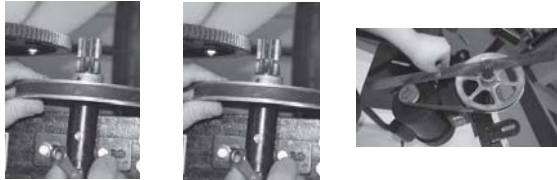


Fig.24 Fig.25 Fig.26

d. Place a ruler across both pulleys to verify belt alignment and tension. (Fig.26) If the pulleys are not aligned to ruler, loosen motor mounting bolts on motor and adjust motor along guides (Fig.27) until both pulleys and belt are properly set. (Fig.28).

8. Refer to (Fig.29) to verify frame assembly with the motor and drive assembly attached.

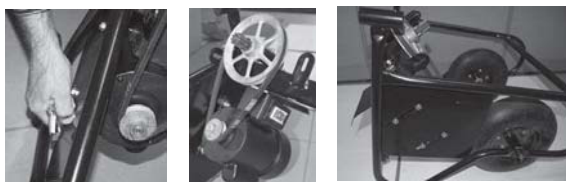


Fig.27 Fig.28 Fig.29

Attaching the Mixer Drum to the Cart Base

1. Slide washer onto shaft of mixer drum (Fig.30).
2. Place assembly onto drum support mount (Fig.31)
3. Verify that the drum gear and drive gear are aligned as shown (Fig.32). Adjust as per "Adjusting belt tension and placement" section detailed above if needed.

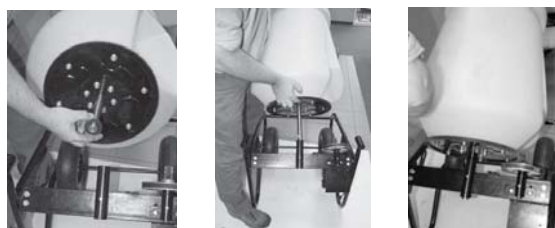


Fig.30 Fig.31 Fig.32

4. Turn mixer drum to ensure smooth movement of gears and drive belt (Fig.33). If there are any unexpected noises or movement, such as excessive rattling or wobbly pulleys, remove mixer drum and check that all components have been properly mounted and securely attached.

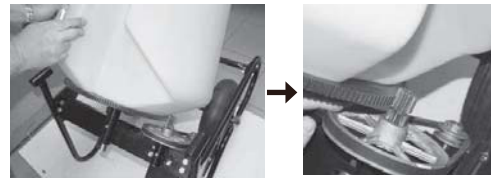


Fig.33

5. Check that the mixer resembles (Fig.34) at this stage, where all gears are flush to each other, the drive belt tension is correctly set and the motor is securely bolted the frame.
6. Attaching Gear Guards:

a. Remove mixer drum from base assembly and place plastic guard for motor and v-pulley over drive mechanism. (Fig.35)



Fig.34 Fig.35

- b. Replace mixer drum (Fig.36)
- c. Ensure that there is sufficient clearance between drum gear and drive gear and the plastic guard such that the drum turns freely without slipping onto plastic guard. (Fig.37)
- d. Remove mixer drum and place plastic guard for drum gear as shown. (Fig.38). The guard should wrap over the guard tabs on the support bar.



Fig.36 Fig.37 Fig.38

e. Install bolts to secure guards to frame. The drive gear should be centered in the opening of drive gear guard such that it is free from touching the sides and that it can turn freely. Tighten bolts on the guards (Fig.39)

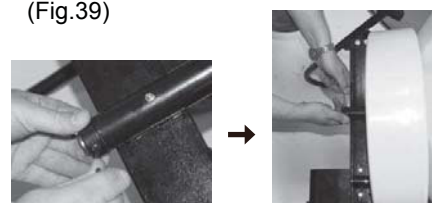


Fig.40





WHEELBARROW MIXER, 3 1/2 CU.FT.

WHEELBARROW MIXER, 4 3/4 CU.FT.

Completing your Mixer:

1. Slide handle bars through the allotted space at the top of each side frame. Due to the drum design, you may have to turn the drum slightly so that the handle bars may slide through without hitting the drum.
2. Insert one handle attachment clip on each side through the frame and handle bar.
3. Slip one handle grip over each handle bar and slide them on until they are snug on the handle. (Fig.41).
4. Inspect mixer for any further adjustments that may be required. Adjust accordingly, and check for any loose nuts and bolts. Tighten any bolts or nuts to set mixer. Bend the cotter pins to secure wheels to the axle.
5. Grease jackshaft and drum shaft through zerks before operating.
6. The mixer is now in its working position. (Fig.42).
7. To transport the mixer, remove handle attachment clips, slide handles forward, and re-insert the clips at the ends of the handle bar as shown. (Fig.43.) If you have any difficulties moving the handle bars, turn the drum until handles slide through.



Fig.41



Fig.42

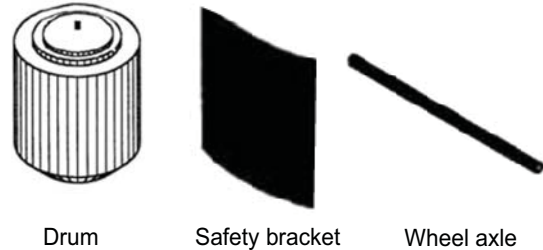


Fig.43

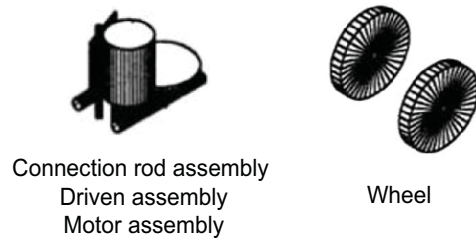
10N694

WHEELBARROW MIXER, 4 3/4 CU.FT.

Unpacking



Drum Safety bracket Wheel axle



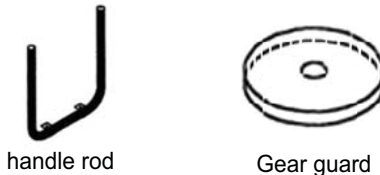
Connection rod assembly
Driven assembly
Motor assembly

Wheel



Support

Driven belt gear cover



handle rod

Gear guard

Verify that all of the following components are included in your Mixer.

Assembly

The assembly steps of the 10N694 are almost the same of the 10N693. Please refer to the above information to assembly. The below is the assembly chart of 10N694.

1. Assemble the connection rod assembly, driven assembly, motor assembly to the handle (Fig.44).
2. Assemble the drum bottom plate and gear guard to the frame (Fig.45).

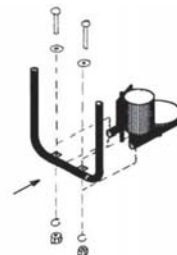


Fig.44



Fig.45





WHEELBARROW MIXER, 4 3/4 CU.FT.

3. Assemble the axle on the support and set the wheel clip on the axle. Then assembly the support and drum to the frame (Fig.46) .

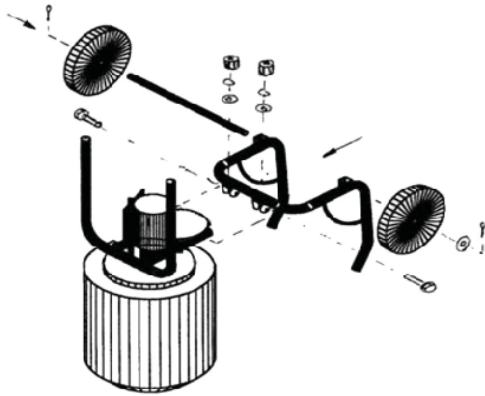


Fig.46

4. Assemble the driven belt gear cover and the safety bracket to the frame (Fig.47) .

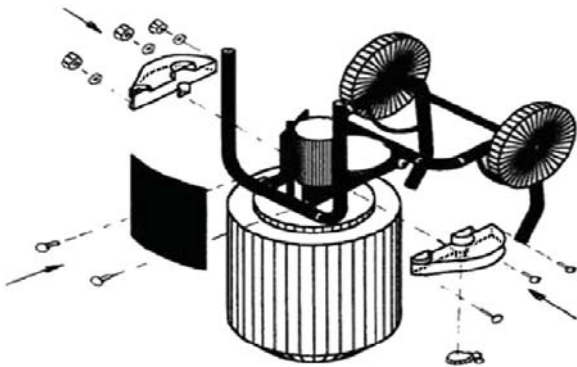


Fig.47

Operation

A. Loading the Mixer

1. Mixing Mortar

- a. You will need:
 - i. 2 x 80 lb bags pre-mix cement
 - ii. 2 gallons of water (+1/2 gallon for finish)
- b. Slowly add in 1 bag of pre-mix cement.
- c. Pour in 2 gallons of water into mixing drum, and allow mixer to slowly fold in mixture.

NOTE: Mixture will be very sloppy.

- d. Once the mixture is well mixed, SLOWLY add in remaining bag of pre-mix. Allow machine to thoroughly mix the mixture.
- e. Add remaining water to adjust concrete to desired consistency.

2. Mixing Concrete

- a. You will need:
 - i. Gravel or small round stones
 - ii. Portland cement
 - iii. Masonry sand
 - iv. 2 gallons of water (+1/2 gallon for finish)
- b. Using a 8.5" x 12" square point shovel add 6 shovels full of gravel or round stones.
- c. Using the same shovel, add in 2 shovels full of Portland cement.
- d. Add in 4 shovels full of masonry sand.
- e. Slowly pour in 2 gallons of water into mixing drum.

NOTE: Your mixture's consistency will vary according to the moisture content in the sand and gravel used.

B. Unloading the Mixer

When mixture reaches desired consistency, lift mixer using the handles and pour mixture out as required. Never allow mixture to harden. Add water as required to maintain moisture level. Do not stop mixer from rotating as mixture may sit and harden.

Maintenance

Cleaning the mixer

1. After each batch of concrete has been used, spray water into the rotating drum, allowing the water to rinse out any concrete or mortar.
2. Add one shovel full of coarse sand into drum to scour drum and remove any remaining mixture.
3. Empty mixer of the sand, water and any remaining debris. Repeat if necessary.
4. Ensure that the drum is completely clean before mixing the next batch of concrete or mortar. A clean drum is essential to obtain the best mixing results.
5. Shut down mixer and disconnect from power source.

Storing The Mixer

1. Ensure that the area in which the machine will be stored is well-ventilated and free of any potential fire hazards such as open flames, gas appliances, furnaces, water heaters, and other appliances.
2. Clean and lubricate machine prior to storage.
3. Touch-up any scratches or damaged area exposing metal to the elements.
4. Order and re-apply any safety labels. Refer to "Information on Safety Decals" in "Parts Breakdown Section" of the manual for placement and parts numbers.
5. Store unit in storage position in a covered or indoor storage area for increased protection and longevity.





WHEELBARROW MIXER, 3 1/2 CU.FT.

WHEELBARROW MIXER, 4 3/4 CU.FT.

Troubleshooting Chart

Symptom	Possible Causes	Corrective Action
Drum rotates rough.	1. Defective gearbox?	1. Check that the gears and bearings are not worn. Replace as necessary.
	2. Worn V-belt?	2. Replace V-belt.
	3. Loose pulley?	3. Tighten or replace pulley.
Drum does not rotate at all.	1. Incorrect or no voltage being supplied to electric motor?	1. Check that the electric motor has the correct supply voltage.
	2. Power to electric motor?	2. Inspect power source and extension cord. Push reset button on electric motor.
	3. Broken V-belt?	3. Replace V-belt.
	4. Defective gearbox?	4. Check that the gears and bearings are not broken. Replace as necessary.
	5. Defective motor?	5. Replace motor.

Warranty

LIMITED ONE-YEAR WARRANTY

Should this product fail to perform satisfactorily due to a defect or poor workmanship within ONE YEAR from the date of purchase, return it to the place of purchase and it will be replaced, free of charge. Incidental or consequential damages are excluded from this warranty.

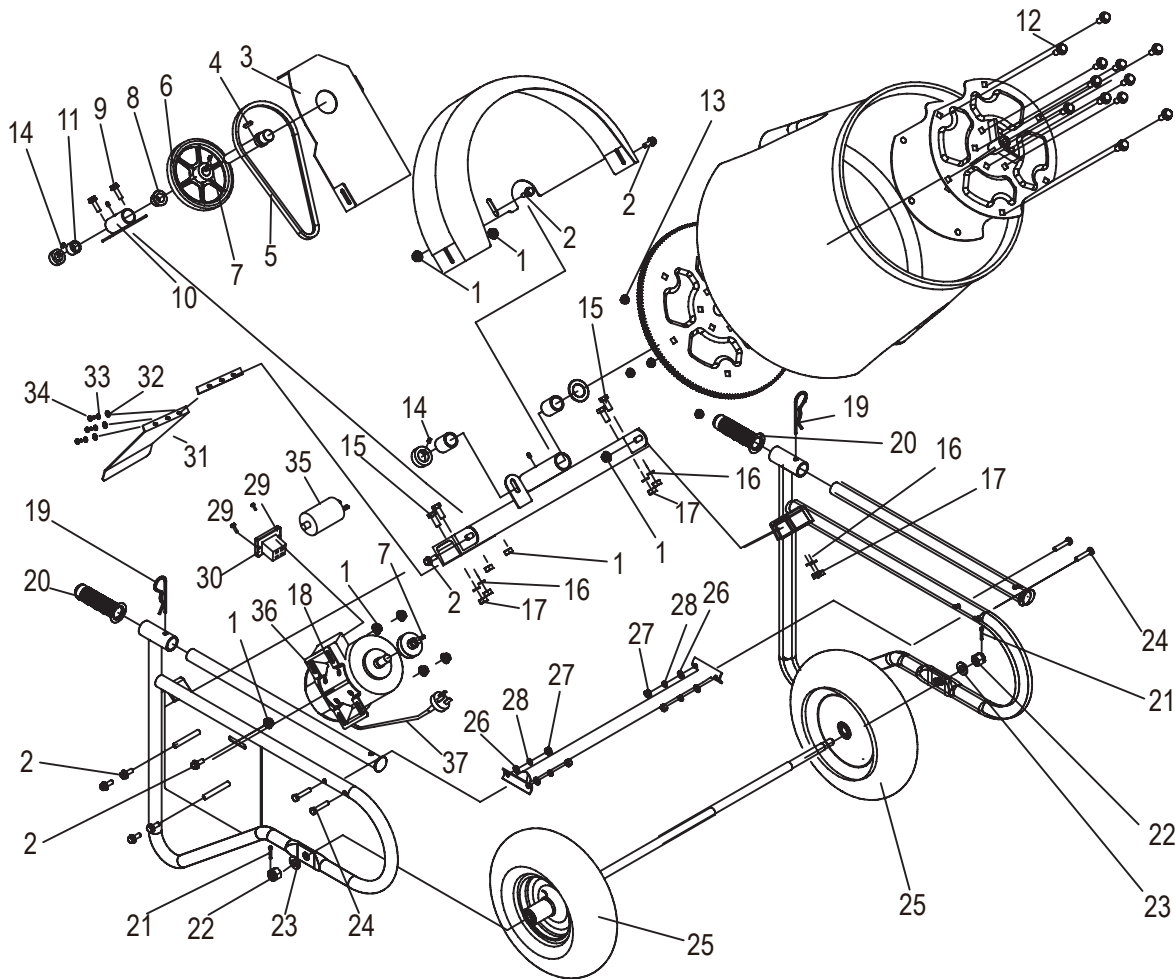
For Repair Parts, call 1-800-323-0620
24 hours a day - 365 days a year

To order spare parts, please provide the following information:

1. Machine Make
2. Model Number
3. Machine Serial Number
4. Quantity Required of Each Part
5. Part Numbers
6. Part Descriptions.



WHEELBARROW MIXER, 3 1/2 CU.FT.



Reference Number	Description	Part Number	Qty.
1	Hex Flange Nut M8	*	10
2	Hex Flange Bolt M8 x 19	*	8
3	Plastic Guard for Motor and V-Pulley	TT3100207G	1
4	Key 6 x 19	*	1
5	V Belt	TT116174G	1
6	Drive Belt V-Pulley	TT3100202G	1
7	Hex Socket Screw M6 x 8	*	2
8	Gear Shaft Bushing	TT3100204G	1
9	Hex Flange Bolt M8 x 24	*	2
10	Gear Positioning Sleeve Assembly	TT3100208G	1
11	Jackshaft Bushing	TT3100205G	1
12	Carriage Bolt M10 x 29	*	12
13	Hex Flange Nut M10	*	12
14	Hex Socket Screw M8 x 8	*	2
15	Hex Bolt M10 x 25	*	4





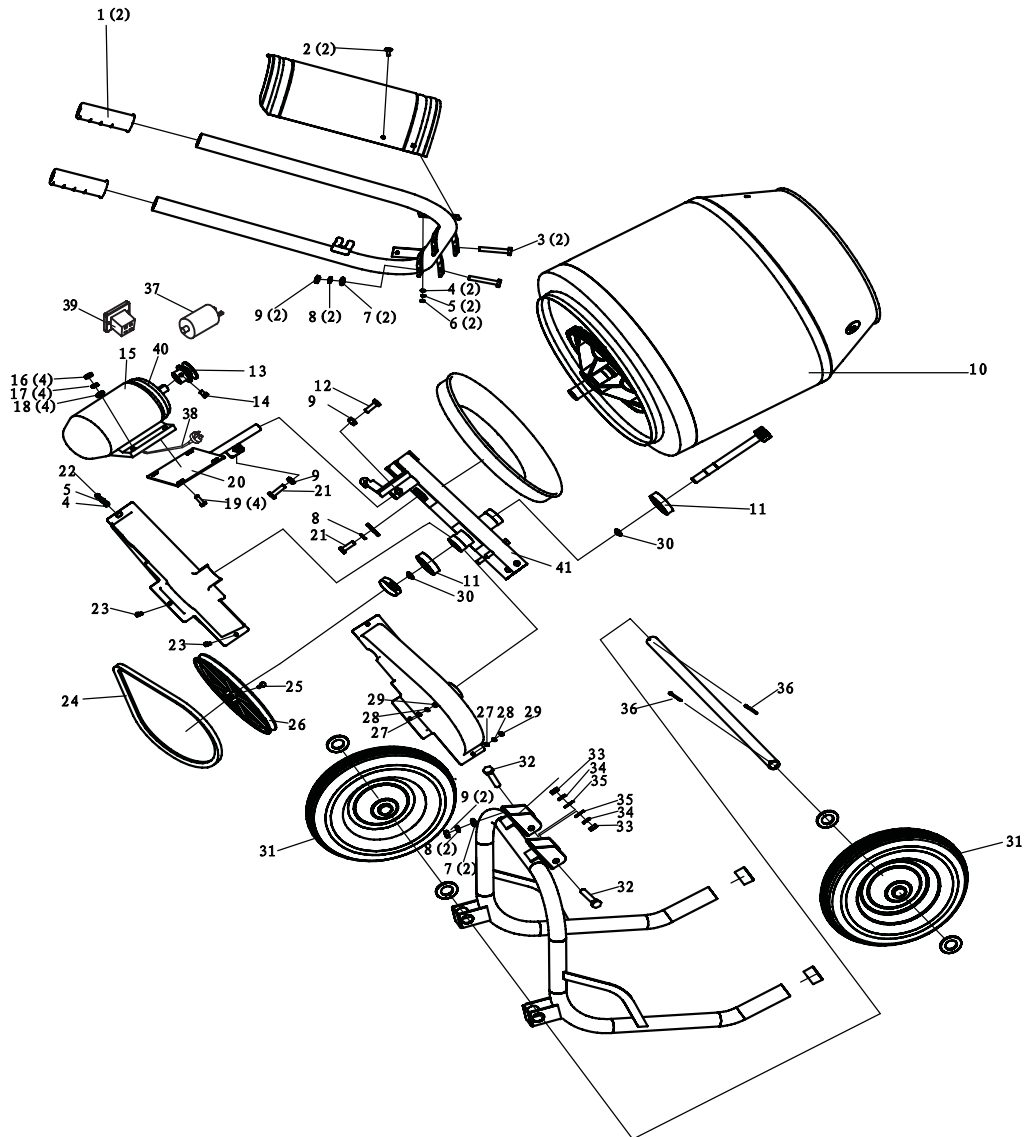
WHEELBARROW MIXER, 3 1/2 CU.FT.

Reference Number	Description	Part Number	Qty.
16	Lock Washer ϕ 10	*	4
17	Hex Nut M10	*	4
18	1/2HP Induction Motor	TT3210201G	1
19	Handle Attachment Clip	TT321010702G	2
20	PVC Handle Grip	TT321010704G	2
21	Cotter Pin ϕ 3.2x25	*	2
22	Castle Nut M14	*	2
23	Wheel Spacer ϕ 14	*	2
24	Hex Bolt M8 x 40	*	4
25	Wheel	TT3210103G	2
26	Washers for Front Support Beam ϕ 8	*	4
27	Hex Nut for Front Support Beam M8	*	4
28	Lock Washer ϕ 8	*	4
29	Philips Screw ST4.2 x 16	*	2
30	Power Switch	TTKJD16G	1
31	Motor Cover Backplate	TT3210102G	1
32	Washer ϕ 5	*	3
33	Lock Washer ϕ 5	*	3
34	Philips Screw M5 x 8	*	3
35	Capacitor 100uf/125v	TT3211602G	1
36	Switch Box	TT3211103G	1
37	Plug	TT3211102G	1

(*) Standard hardware item, available locally.



WHEELBARROW MIXER, 4 3/4 CU.F.T.



Reference Number	Description	Part Number	Qty.
1	Handle Grip	TT3810104G	2
2	Slotted large raised cheese head screws M6 x16	*	2
3	Hex Bolt M10 x65	*	2
4	Flat Washer φ6	*	3
5	Lock Washer φ6	*	3
6	Hex Nut M6	*	2
7	Flat Washer φ10	*	4
8	Lock Washer φ10	*	5
9	Hex Nut M10	*	4
10	Mixing Drum Assy	TT3810204G	1





WHEELBARROW MIXER, 4 3/4 CU.F.T.

Reference Number	Description	Part Number	Qty.
11	Bearing 6203	*	2
12	Hex Bolt M10 x 35	*	1
13	V Belt Drive Pulley	TT317113G	1
14	Hex Bolt M8 x 12	*	1
15	Motor	TT3310103G	1
16	Hex Nut M8	*	4
17	Lock Washer ϕ 8	*	4
18	Flat Washer ϕ 8	*	4
19	Hex Bolt M8 x 28	*	4
20	Motor base cover Assy A	TT9712002G	1
21	Hex Bolt M10 x 30	*	2
22	Hex Bolt M6 x 12	*	1
23	Hex Bolt M5 x 12	*	2
24	V Belt	TT115441997G	1
25	Hex Bolt M6 x 20	*	1
26	Drive Belt V-Pulley	TT3810302G	1
27	Flat Washer ϕ 5	*	2
28	Lock Washer ϕ 5	*	2
29	Hex Nut M5	*	2
30	Block Retaining Ring For Shaft ϕ 17	*	2
31	Wheel	TT3810603G	2
32	Hex Bolt M12 x 65	*	2
33	Hex Nut M12	*	2
34	Lock Washer ϕ 12	*	2
35	Flat Washer ϕ 12	*	2
36	Cotter Pin 4 x 35	*	2
37	Capacitor 300uf/125v	TT3811201G	1
38	Plug	TT3811101G	1
39	Switch	TT3811302G	1
40	Switch Box	TT3811702G	1
41	Support Beam for Drum Assy	TT3810301G	1

(*) Standard hardware item, available locally.