BETONIERA
CONCRETE MIXER

Model CM 160L
Model CM 180L

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Guarantee

This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt as proof of purchase. This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.
Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission. This guarantee does not affect your statutory rights.

Specifications

Concrete Mixer

Model No.:	CM 160L	CM 180L
Rated Power:	700 W	850 W
Frequency:	50 Hz	50Hz
Motor Speed:	2635/min	2635/min
IP Rate:	44	44
Weight:	55 kg	61 kg

CM 160L		CM 180L
Volt:	220 V	220 V
Current:	3A	3.8A
Drum speed:	31 /min	31/min
Capacity:	155 l	180l

1. General safety rules

WARNING: As with all machinery, there are certain hazards involved with their operation and use. Exercising respect and caution will considerably lessen the risk of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator or damage to property may result.

1. Read and become familiar with the entire operating manual. Learn the machine's applications and limitations as well as the specific potential hazards peculiar to it.
2. Check damaged parts. Before further use of the machine, a guard or other part that is damaged should be checked to ensure that it will operate properly and perform its intended function. Check tor alignment of moving parts, breakage of parts, mounting, or any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
3. Disconnect machine before servicing and when changing accessories such as blades, bits, cutters.
4. Keep guards in place and in working order.
5. Wear ear protectors/defenders.
6. Remove adjusting keys/spanners etc. Form habit of checking to see that keys and spanners etc. are removed from machine before turning it on.
7. Drugs, alcohol, medication. Do not operate the machine while under the influence of drugs, alcohol or any medication.
8. Never stand on the machine. Injury could occur from a fall.
9. Never leave machine running unattended. Turn power off. Don't leave machine until it comes to a complete stop.
10. Always remove plug from electrical outlet when adjusting, changing parts or working on the machine.
11. Ensure the electric cable is fully protected and there is no danger of damage from equipment or

materials. Always inspect the cable before use, and replace if any damage is apparent.

12. Keep your hands well clear of the rotating drum at all times. Never put your hands inside the drum when the machine is switched on.
13. Do not wear jewelry or loose clothing that could be snagged by the rotating drum.
14. Do not open the switch box or motor. A qualified electrician is required to carry on repairs for the electrical problems. Make sure the switch is off before opening the motor covers and do not switch on until the covers are fixed well.
15. This mixer is applied for concrete, seeds etc. Any explosive or corrode materials must not be mixed in this machine.
16. The operator must check the electric source for this machine before operation:
    a. The isolating transformer must be used for supplying this mixer.
    b. there must be a 10A circuit breaker for this machine.
    c. The plug and socket used must reach IP44 at least, and ensure that the plug/socket combination is 3m away from the mixer.
17. Only the original standard of insulation material is allowed for repairing or replacement to assure safety.
18. Do not move the machine when it is under operation.
19. **Electrical requirements**
    Steady state voltage: 0.9-1.1 of nominal voltage.
    Frequency: 0.99-1.01 of nominal frequency continuously; 0.98-1.02 short time.
    HVF: ≤0.02
    The limiting value for peak voltage and for voltage gradient in continuous operation are 358 V and 1.12×10^5 V/s.
20. **Site Operating Conditions**
    a. Altitude are not exceeding 1000m,
    b. Maximum ambient air temperature is +40 ℃, minimum ambient air temperature is not less than 0 ℃,
    c. Storage and transportation temperature range is -15℃～ 40℃.
    d.The relative humidity does not exceed 50% at a maximum temperature of +40℃, higher relative humidity may be permitted at lower temperature (e.g. 90%@ 20℃).
    e. The mixer can be stored or transported under ambient temperatures between -25℃ and +55℃.

2. Electrical connections

Connect the plug to a standard, 220 Volt (50 Hz) electrical supply through an isolating transformer. Over voltage protection should provided in the electrical system. This mixer is provided with a plug in accordance with VDE 0620-1, but the earth pin of the plug not connected.

WARNING!

Since tne cable will produce a voltage drop, it is essential that the conductors in the cable conform to the following specifications.

0 -25 metres	- diameter of conductor	-	1,5mm²
25 -50 metres	- diameter of conductor	-	2,5mm²

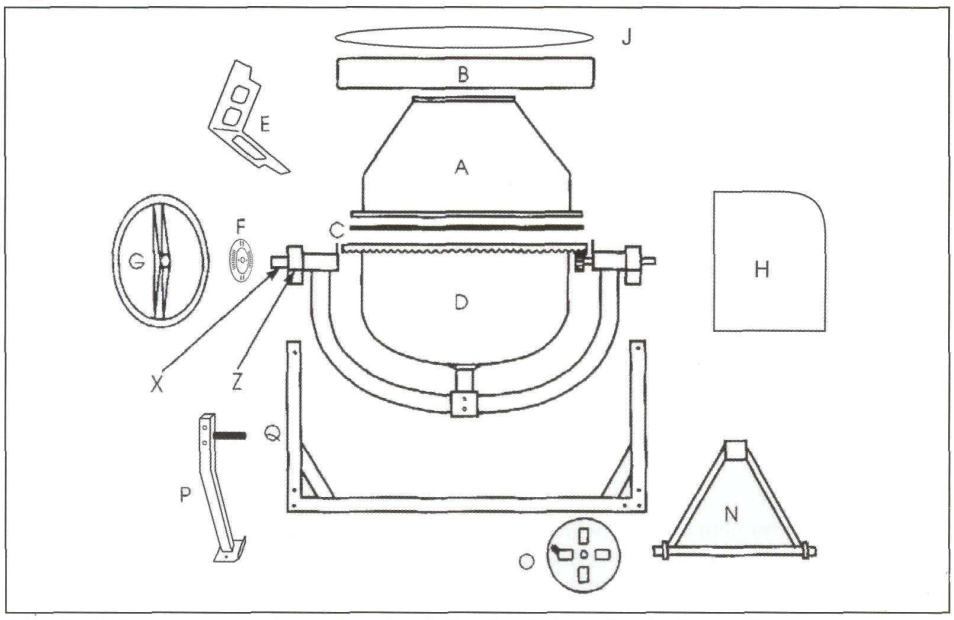
If in doubt, consult a qualified electrician. Do not attempt any electrical repairs yourself.

User should use an isolating transformer as electrical source.

3. Unpacking & Pre-Assembly Check

Remove all components from the packing case and lay them out neatly so that they may be identified and checked for any possible damage during transit.
If any component is found damaged, please contact your dealer immediately,

Fig.1



Check off the components against the following list, and referring to fig. 1.

A) Upper Drum Section
B) Drum Collar
C) Rubber Sealing Ring
D) Bottom Drum Assembly
E) Mixing Blades (2 pcs)
F) Locking Plate
G) Hand Wheel
H) Motor Assembly
I) Gear
J) Gear Cover Sleeve
N) Axle Assembly
O) Wheel (2 pcs)
P) Leg (c/w handle)
Q) Frame

Also included in the packing case is a bag containing all nuts, bolts, washers and fixtures (Please refer to the parts list on page 9 for full list.)

4. Assembly

NOTE: 1. Letters in brackets refer to fig.1
2. Unless otherwise stated, all nuts, bolts, washers and fixings referred to, are supplied.

IMPORTANT!

For maximum safety and to ensure the adjustments are carried out correctly, assistance should be employed during the assembly operation.

1. The Stand
With the frame (Q) lying on its side, attach the Leg (P) in the manner shown in fig.2, using two M8 x 60 bolts, together with nut, spring and flat washers.
Turn the frame over and attach the axle assembly (N) in the same manner (see fig. 2). Slide a wheel on to each stub axle, followed by a large flat washer and locate them using the split pins.
Ensure all nuts are tight before up-righting the stand.

2. The Bottom Drum
Carefully, and with assistance, lower the bottom drum assembly (D), onto the side support of the stand as shown in fig. 3-1, so that the bearing block (Z) slots into the channel provided by the side support.
The large diameter shaft (X) should be at the leg end of the stand.

Then, another people holds the Motor Assembly (H) and put the motor shaft through the hole of the left end of the support arm . Have the bearing block sit into the channel of the side support of the other end (Refer to Fig.3-2& Fig.3-3).

Put on the gear to the motor shaft (Refer to Fig.3-3). Then, lock the gear with a pin.

At each side, line up the holes in the side support with those in the bearing block and enter an M8 x 65 bolt with flat washer and secure using a nut and spring washer to the Locking Plate (F), over the large diameter shaft, at the leg end of the frame, with the rim facing inwards, as shown in fig.4.
Secure with two M10 x 70 bolts, each with a nut, flat and spring washer.

3. The Hand Wheel
Insert the spring, into its holder, adjacent to the hole in the centre of the wheel spar, and holding it in place optional with slight upwards pressure of a finger, slide the wheel over the large diameter shaft so that the shaft retains the spring, and the holes in the bracket Y; (fig. 4), line up with the hole drilled in the shaft.

Insert the M10 x 65" bolt with flat washer at the bolt Fig head, and screw on two nuts. Screw the first nut up against the bracket firmly, but not so tightly so as to prevent the handwheel from pivoting about the bolt. Lock the nut in this position by screwing up the second nut tightly.
NOTE: The handwheel must be allowed to pivot about the bolt so that the lugs on the bracket (Y) can be engaged or disengaged from the slots in the Locking Plate.

4. *The Mixing Blades*
Bolt the blades in place loosely as shown in fig 5, Two holes are provided at the base of the drum into which a M8 x 30 bolt may be inserted from the outside. These bolts are provided with a flat and leather washer.
The leather washer should be up against the drum. A spring washer and a nut should be threaded on loosely on the inside.

Fig.2

Fig3-1

Fig3-2

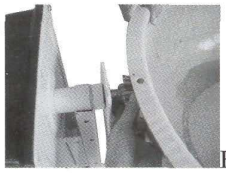


Fig3-3

Fig. 4

Fig.5

NOTE: If you have difficulty in correctly positioning the Mixing Blades, it is helpful if you temporarily mount the Upper Drum on top of the Lower Drum, turning it so that the holes for

the Upper Blade mounting and those in the Upper Drum, line up. Once you are satisfied that the blades are correctly positioned, mark the position of the Upper Drum in relation to the Lower Drum with a chalk or something similar, then remove the Upper a Drum and loosely bolt on the Mixing Blades as described above.

5. The Upper Drum
Apply a film of suitable adhesive (not supplied) to the rim of the drum, according to the manufacturers instructions, and ensuring the rim is perfectly clean and flat. Position the rubber seal on to the rim ensuring the holes in the seal and those in the rim of the drum line up, then apply another film of adhesive to the upper surface of the seal.
With assistance, lower the Upper Drum so that it is over the rim of the Lower Drum, but not seated. Rotate it so that the holes in the rim line up, and at the same time, the holes in the upper mountings of the Mixing Blades, line up with those in the drum. When correctly lined up, seat the Upper Drum firmly onto the rim of the Lower Drum.

NOTE: If you previously marked the position of the Upper Drum, in relation to the Lower Drum, it is a simple matter to realign them.
Insert an M8 x 30 cross headed screw into each of the holes in the rim together with a flat washer, and secure from below with a spring washer and nut ensuring the tightening process is carried out progressively.

Screw the gears 6pcs to the rim of the Lower Drum with nuts (Refer to Fig 6 & Fig 7).

Secure the Mixing Blades to the Upper Drum by inserting the domed headed bolt, with leather washer, through the hole in the drum, from the outside, ensuring the spur on the underside of the head of the bolt engages in the notch in the hole in the drum. The leather washer should be positioned so that it bears against the drum.
Secure the mixing blade on the inside using a flat washer, spring washer and nut. Finally, ensure top and bottom Mixing Blade mountings are tight.

6. The Motor and Motor Covers
Fix the motor assembly (H) to the stand at the Axle assembly side, and then fasten with two M8x 35 bolts, washers and nuts.

Secure the Shaft Covers (#43) (Refer to Fig.8)

7. Drum Collar
Before the collar is attached, it is strongly recommended that a lover of grease (not supplied) be applied to the underside of the serrated rim of the lower drum.
Attach the Drum Collar in the manner shown in fig. 9. The two halves are bolted together using two M8 x 70 mm bolts with a flat washer, spring washer and nut.
Finally, put the Dust-proof cover to the Drum Collar.

NOTE: The Drum Collar is a Safety Feature, and must ALWAYS be in place, DO NOT operate the machine with the Collar removed. The machine is now fully assembled and ready for use.

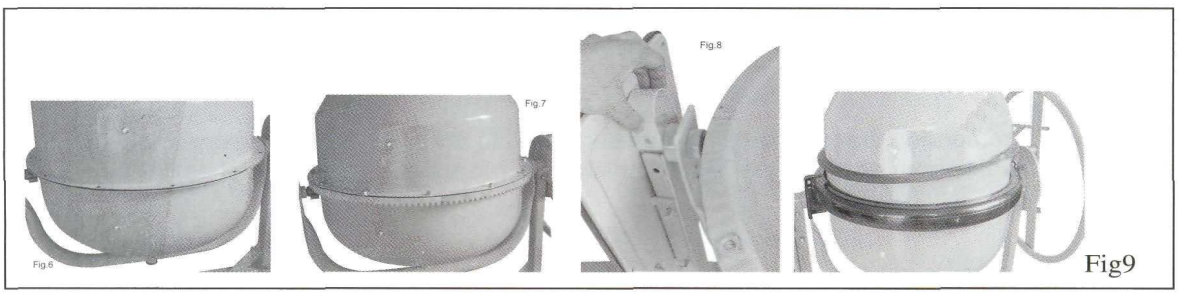


Fig9

5. Operating instructions

Warning!

Never move the mixer when it is under operation!

1. Fix the Cement Mixer on a solid, even surface, make sure to fix the support bracket on the surface using two screws: M10×50mm(not provided).
2. Add materials to the Drum.
   Typical quantities include: 12 liter (14litre for CM180L)of water, 46 kg (54kg for CM180L) of pre-mix concrete.
   Run mixer until all dry materials are liquefied.
3. Check the water level on the front leg and make sure the mixer is on an even place. Fix the mixer to the ground before switching on.

Warning: Do not attempt to move the Cement Mixer when it is full and in operation. Injury to personnel could occur.

4. Connect a (properly rated) outdoor rated extension cord to the Cement Mixer power cord. Plug the extension cord into an approved electrical outlet.
5. Push the Switch On button to begin mixing.
6. When the mixing is complete, turn the Drum Angle as far down as possible to drain all fluids from the drum.
   Filling and emptying the Drum is best done with the Drum rotating.

Caution: Never leave the Cement Mixer running while unattended. Do not turn Cement Mixer off while full of cement.

7. When finished, press the Switch Off button, and disconnect the Power Cord.
8. Immediately clean out the Drum with water. Refer to the MAINTENANCE section following.

6. Maintenance

Before each use

Inspect the power cable and ensure it is completely sound. Ensure also that it is not in danger of being damaged by vehicles, equipment or other operations taking place in the vicinity,

Periodically

Inject a few drops of light oil into the oil points, located on top of the Bearing Blocks and rotate the drum to ensure distribution of oil within the bearing surface. Inspect the paintwork and remove any rust that may be apparent before touching where necessary, with a rust resistant paint.

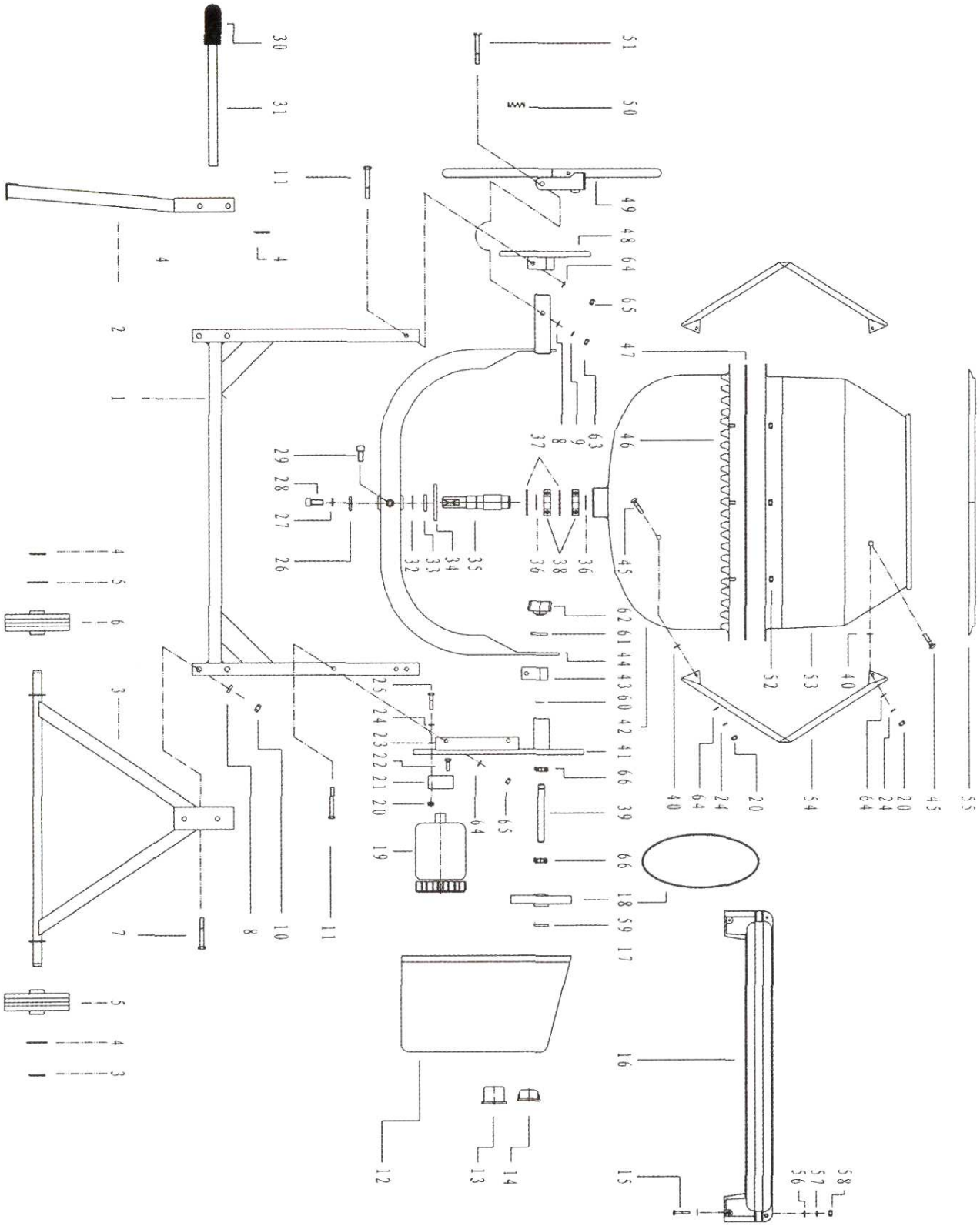
Retighten the V-belt after the first 20 hours of use. Loosen the two Bolts that attach the Motor to the Frame. The V-belt should be tightened until it only deflects about 6mm when 2.2 to 4.5 kg of force is applied between the pulleys. Retighten the Bolts.

After each use.

It is strongly recommended that the machine is hosed down thoroughly with clean water, taking care to prevent water from entering the Motor housing by wrapping a polythene sheet or bag over it.

7. Spare parts list

Item.	Description	Qty.	Item.	Description	Qty.
001	Frame Assy	1	034	Dust-proof cover	1
002	Leg	1	035	Shaft	1
003	Axle Assy	1	036	Shaft Pin 30mm	2
004	Split Pin 3 x 30	3	037	Hole Pin 62mm	2
005	Flat Washer	2	038	Bearing	2
006	Wheel	2	039	Shaft	1
007	Hex Bolt M10 x 70	4	040	Leather Washer	4
008	Flat Washer 10mm	5	041	Motor Cover, Inner	1
009	Spring Washer10mm	1	042	Drum, Lower	1
010	Hex Lock Nut	4	043	Shaft Cover	2
011	Hex Bolt M8 x 70	4	044	Support Pipe Assembly	1
012	Motor Cover, Outer	1	045	Bolt M8 x16	4
013	Socket	1	046	Gear	6
014	Switch	1	047	Sealing Washer	1
015	Hex Bolt M6 x 35	4	048	Adjust Disc Assembly	1
016	Gear Guard	2	049	Round Wheel Handle	1
017	Belt	1	050	Spring	1
018	Drive Pulley	1	051	Hex Bolt M10 x 65	1
019	Motor	1	052	Hex Lock Nut	12
020	Hex Nut M8	6	053	Drum, Upper	1
021	Motor Stand Housing	1	054	Mixing Blade	2
022	Hex Flange Lock Nut M6x30	3	055	Gear Cover Sleeve	1
023	Flat Washer 8mm	2	056	Flat Washer 6mm	8
024	Spring Washer 8mm	6	057	Spring Washer 6mm	4
025	Hex Nut M8x 35	2	058	Hex Nut M6	4
026	Washer	1	059	Split Pin 5 x 40mm	1
027	Spring Washer 12mm	1	060	Shaft Circlip	1
028	Hex Bolt M12 x 25	1	061	Split Pin 5 x 35mm	1
029	Hex Bolt M12 x 30	1	062	Motor Pulley	1
030	Grip	1	063	Hex Nut M10	1
031	Handle	1	064	Flat Washer 8mm	4
032	Adjust Washer	1	065	Hex Lock Nut	4
033	Dust-proof Sleeve	1	066	Bearing	2



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Garantia

Acest produs este garantat fara a lua in considerare defectele de fabricatie pentru o perioada de 12 luni de la data cumpararii lui.
Va rugam pastrati chitanta ca pe o proba la cumpararea produsului. Garantia nu mai este valabila atunci cand produsul se observa ca a fost folosit excesiv sau modificat in vreun fel, sau nu a fost utilizat in scopul pentru care nu a destinat.

SPECIFICATIE

Betoniera

Model nr.	CM 160L	CM 180L	CM 160L		CM180L
Puterea consumata	700 W	850 W	Tensiune	220 V	220 V
Frecventa	50 Hz	50 Hz	Intensitate	3 A	3.8 A
Viteza motor	2635 rpm	2635 rpm	Viteza tambur	31 rpm	31 rpm
Nivelul IP	44	44	Capacitate	155 l	180 l
Greutate	55 kg	55 kg			

1. Reguli generale de siguranta

Atentie. Ca la toate mecanismele, sunt anumite riscuri incluse in modul lor de operare si de utilizare. Luand in considerare si cu atentie aceste reguli vor scadea riscurile ranirilor si accidentelor. Totusi, daca regulile de siguranta elementare sunt neglijate sau ignorate, poate rezulta ranirea operatorului sau distrugerea proprietatii.

Citiți cu atenție înainte de utilizare!

1. Cititi si familiarizati-va cu intregul manual de utilizare. Invatati sa folositi masina, restrictiile acesteia ca si toate riscurile potentiale specifice care pot aparea.
2. Înainte de utilizare, verificați integritatea utilajului. Orice crăpături, fisuri, rupturi, zgomote atipice vor determina oprirea utilajului si executarea reparațiilor ce se impun de către personal specializat. Personalul specializat se va ocupa de repararea sau de inlocuirea componentelor care nu sunt functionale.
3. Deconectati utilajul de la sursa de alimentare cu energie electrica atunci cand schimbati accesoriile.
4. Verificați daca elementele de fixare sunt strânse corespunzător.
5. Se vor folosi ochelari de protecție si antifoane.
6. Pastrati elementele de asamblare in functie de ordinea lor de lucru.
7. Drogurile, alcoolul, medicamentele. Nu lucrati cu uitlajul atunci cand sunteti sub influenta drogurilor, a alcoolului sau a medicamentelor.
8. Operatorul nu va permite staționarea persoanelor neavizate in vecinătatea utilajului.
9. Niciodata nu parasiti utilajul lasandu-l sa functioneze nesupravegheat. Opriti alimentarea cu energie electrica. Nu parasiti utilajul pana cand acesta nu s-a oprit complet.
10. Opriti intotdeauna de la comutator sau debransati de la retea alimentarea cu energie electrica atunci cand reglati, schimbati partile componente sau lucrati cu utilajul.

11. Asigurati-va ca cablul electric este izolat si ca nu prezinta nici un pericol pentru echipament sau pentru materiale.
12. Pastrati-va mainile complet libere in tot timpul rotatiei cuvei. Niciodata nu va introduceti mainile in interiorul cuvei atunci cand utilajul functioneaza.
13. Echipamentul de lucru – se interzice folosirea unor haine largi sau a unor accesorii care pot fi uşor agăţate de organele aflate in mişcare. Se recomanda folosirea echipamentelor electroizolante in timpul lucrului. Parul se va purta strâns si acoperit.
14. Nu desfaceti cutia comutatorului sau carcasa motorului. Este recomandata interventia unui electrician care sa repare eventualele probleme aparute. Asigurati-va ca este oprit comutatorul inainte de desfacerea cutiei motorului si nu reporniti utilajul pana cand capacul nu este bine fixat.
15. Betoniera se foloseste pentru beton cu diferite granulatii de pietris, nisip, etc. Alte materiale explozive sau corozive nu trebuie introduse in acest utilaj.
16. Operatorul trebuie sa verifice sursa de alimentare cu energie electrica inainte de a incepe lucrul cu betoniera :

a. Sursa de alimentare trebuie sa corespunda consumului propriu pentru ca sa alimenteze aceasta betoniera.

b. Trebuie ca intrerupatorul de circuit pentru aceasta betoniera sa aiba 10 A.

c. Stecherul si priza trebuie sa ajunga la IP 44 cel putin, si asigurati-va ca legatura stecher/priza este la 3m distanta de betoniera.

17. Numai materialele izolatoare original standardizate sunt aprobate pentru reparare si inlocuire in conditii de siguranta.
18. Nu miscati sau mutati utilajul cat timp acesta este in functiune.
19. Cerinte electrice

Starea permanenta a tensiunii : 0.9-1.1 din tensiunea nominala.
Frecventa : 0.99-1.01 din frecventa nominala continua, 0.98-1.02 timp scurt.
HVF : ≤ 0.02
Limitarea valorii pentru varfurile de tensiune si pentru tensiunea variabila in operarea continua este de 358 V si 1.12 x 10^3 V/s.

20. Conditii de lucru pe teren

a. Altitudinea sa nu depaseasca 1000m,

b. Temperatura mediului ambiant poate fi de 40℃ si minim 0℃,

c. Depozitarea si transportul in plaja de valori a temperaturii -15℃ ÷ 40℃,

d. Umiditatea relativa nu trebuie sa depaseasca 50% la valoarea maxima a temperaturii de +40℃, umiditatea relativa de o valoare mai mare fiind permisa pentru o temperatura mai scazuta (e.g. 90% la 20℃),

e. Betoniera poate fi transportata si depozitata la valori ale mediului ambiant cuprinse intre – 25℃ si + 55℃.

2. **Conexiunile electrice**

Conectati stecherul la sursa standard de alimentare, 220 volti (50 Hz) prin intermediul unui cablu corespunzator. Protectia impotriva supratensiunii trebuie prevazuta in cadrul sistemului electric. Betoniera este inzestrata cu un stecher care este in concordanta cu VDE 0620-1, dar pinul de impamantare al stecherului nu este conectat.

Atentie!

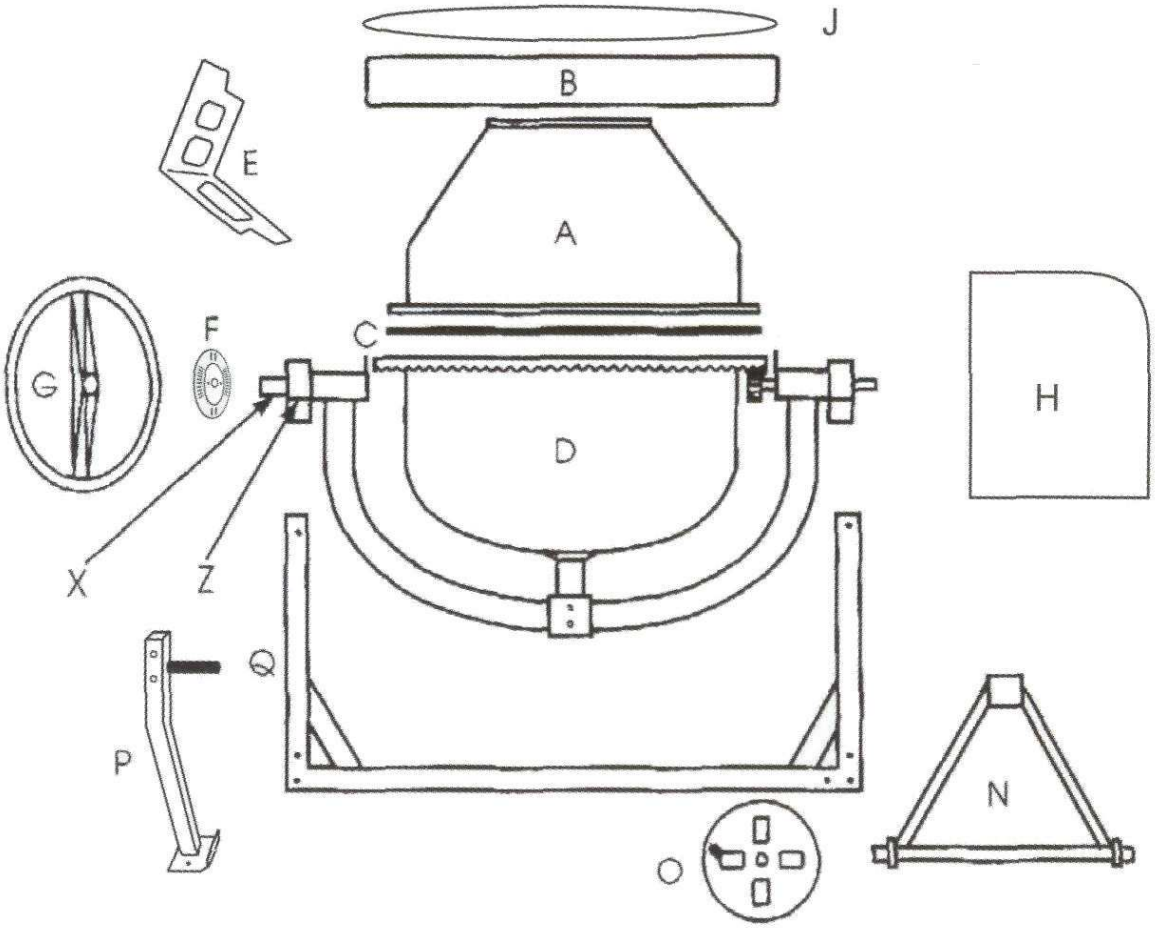
Pana cand cablul va produce o cadere de tensiune, este esential ca toti conductorii care alcatuiesc cablul sa fie conformi urmatoarelor specificatii.

0-25 metri	- diametrul conductorului	-	1.5mm²
25-50 metri	- diametrul conductorului	-	2.5mm²

Daca exista indoieli consultati un electrician. Nu intentionati sa faceti orice fel de reparatii de natura electrica.

Utilizatorul ar trebui sa foloseasca un transformator izolator ca sursa electrica.

3**. Despachetarea & Verificarea preasamblarii**
Inlaturati toate componentele din cutia de impachetare si lasati-le aproape pentru a putea fi mai usor identificate si verificate pentru a observa orice deteriorare aparuta in timpul transportului.
Daca orice componenta este avariata, va rugam contactati imediat furnizorul.



Verificati dupa lista partile componente si faceti referire la fig.1

A) Ansamblu tambur superior
B) Tambur cu guler
C) Garnitura de etansare din cauciuc
D) Ansamblu tambur inferior
E) Palete de amestecare (2 bucati)
F) Flansa de blocare
G) Roata manuala
H) Ansamblul motorului
I) Roata dintata de angrenaj
J) Roata dintata cu manson de protectie
N) Ansamblu cu osie pentru roti
O) Roata (2 bucati)
P) Picior (cu maner)
Q) Cadru

De asemenea mai sunt incluse in cutia de impachetare piulite, suruburi, dispozitive de prindere si saibe de etansare. (Toate elementele componente se regasesc in lista)

4. **Asamblarea**

Nota: 1. Literele din paranteza fac referire la figura 1.
2. Toate piulitele, suruburile, dispozitivele de prindere si saibele de etansare la care se face referire sunt furnizate cu acest produs.

IMPORTANT!

Pentru o siguranta maxima si pentru a va asigura ca reglajele au fost realizate cu grija si corect, este necesar o persoana pentru ajutor in timpul procesului de asamblare.

Fig.2

1. **Suportul**

Cu cadrul (Q) asezat orizontal, atasati piciorul (P) asa cum este indicat in fig.2, folosind doua suruburi M8x60, impreuna cu piulita, saibele elastice si saibele plate.

Intoarceti intreg cadrul si atasati ansamblul osiei (N) in acelasi mod (vezi fig.2). Glisati roata pe fiecare capat al axului, completand cu o saiba plata mare si fixati-le folosind apoi splinturile despicate.

Asigurati-va ca toate piulitele sunt bine stranse inainte de ridicarea intregului suport.

Fig3-1

2. **Partea inferioara a tamburului**

Cu grija, dar si cu ajutorul altei persoane, partea de jos a ansamblului cuvei (D), se fixeaza pe suportul de cadru asa cum este aratat in fig.3-1, si sustinerea rotii de transmisie (Z) se face prin canelurile care intra in canalul prevazut pe aceeasi parte a suportului.

Fig3-2

Diametrul cel mai mare al osiei (X) ar trebui sa intre in capatul de picior de la suport.

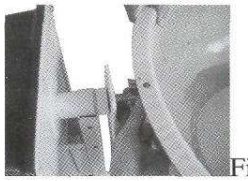


Fig3-3

Atunci, o alta persoana va tine ansamblul motorului (H) si va aseza osia motorului prin gaura din capatul stanga al bratului de suport. In acelasi timp trebuie sa aveti asezata roata de transmisie in canalul din capatul opus partii de suport (Vezi in Fig.3-2 si Fig.3-3).

Asezati in lagar osia motorului (Vezi in Fig.3-3). Apoi, blocati lagarul cu un splint.

Fig. 4

Pe fiecare parte, sunt aliniate gaurile de pe lateralul suportului si in care roata de transmisie va intra cu un surub M8x65 cu o saiba plata si va fi asigurata folosind o piulita si o saiba grower pe flansa de blocare (F), peste diametrul cel mai mare al osiei, la capatul de picior din cadru, cu coroana pe fata interioara, asa cum este aratat in fig.4.

Asigurati cu doua suruburi M10x70, fiecare cu cate o piulita, cu saiba plata si grower.

Fig.5

3. **Roata manuala**

Introduceti saiba in suportul ei, adiacenta gaurii din centrul rotii, si prindeti-o la locul ei cu o miscare usor ascendenta prin presiune cu un deget, glisand roata peste cel mai mare diametru al osiei astfel incat osia sa retina saiba si gaurile in furca Y; (fig.4), a se alinia cu gaura in osie.

Introduceti surubul M10x65 cu garnitura plata si strangeti cu doua piulite. Strangeti prima piulita cu fermitate pe furca, dar nu asa de strans incat sa se blocheze total bascularea rotii manuale in jurul surubului. In aceasta pozitie blocati cu contrapiulita.

NOTA : Rotii manuale trebuie sa i se permita pivotarea in jurul surubului de pe ax, astfel incat actiunea de tragere cu putere de pe furca (Y) sa poata fi preluata sau decuplata de canalele flansei de blocare.

4. **Paletele de amestecare**
Prindeti cu surub paletele in gaurile libere asa cum este aratat in fig.5. Sunt prevazute doua gauri la baza tamburului in care pot fi introduse suruburi M8x30 dinspre exterior.
Aceste suruburi sunt prevazute cu saibe plate si de piele. Saiba de piele ar trebui asezata pe partea exterioara a cuvei sub o saiba plata. Saiba grower si piulita ar trebui asamblate prin interior.

NOTA : Daca aveti dificultati in pozitionarea corecta a paletelor de amestec, va este de ajutor daca montati temporar partea superioara a tamburului peste partea inferioara a tamburului, rotind astfel incat gaurile de montare de pe partea superioara a cuvei sa fie aliniate cu paletele superioare. Odata ce sunteti multumit de pozitionarea corecta a paletelor, marcati pozitia pe partea superioara a cuvei in raport cu partea inferioara a cuvei cu creta sau cu ceva asemanator, apoi mutati partea superioara a cuvei si suruburile ascunse pe paletele de amestecare asa cum a fost descris mai sus.

5. **Partea superioara a cuvei**
Aplicati o pelicula cu un adeziv corespunzator (nu este livrat) pe coroana cuvei, in concordanta cu instructiunile producatorului si asigurati-va ca coroana este curata si plana. Asezati garnitura de cauciuc pe flanse intre cele doua senicuve, potrivind gaurile pentru suruburi in garnitura si acestea in flansa cuvei, apoi aplicati o alta pelicula de adeziv pe suprafata superioara a garniturii. Cu ajutorul altei persoane, coborati partea superioara a cuvei pana la asezarea coroanei pe partea inferioara a cuvei, dar fara a le monta. Rotiti in asa fel incat gaurile din coroana sa fie aliniate si in acelasi timp gaurile din montajul superior al paletelor de amestecare sa fie aliniate cu cele ale cuvei. Cand sunt corect aliniate, montati cuva superioara cu fermitate in coroana partii inferioare a cuvei.
NOTA : Daca anterior ati marcat pozitia tamburului superior in raport cu tamburul inferior este foarte simplu sa realizati realinierea acestora.
Introduceti suruburi M8x30 cu cap in cruce in fiecare din gaurile coroanei impreuna cu o garnitura plana si asigurati strangerea cu saiba grower si piulita, proces care se va face cu grija si progresiv.
Strangeti cele sase segmente ale coroanei pe partea inferioara a cuvei cu piulite (Vezi Fig.6 si Fig.7). In cazul coroanei de plastic. Pentru coroana de fonta, dintr-o bucata aceasta se potriveste la gaurile cuvei, dupa care se va fixa prin strangere ca in cazul anterior.
Asigurati paletele de amestecare de pe cuva superioara prin introducerea unui surub olandez, cu garnitura de piele prin gaura din tambur, din exterior, asigurand o proptea pe dedesubt pentru capul de surub angrenat in canelura gaurii de cuva. Garnitura din piele trebuie pozitionata pe exterior astfel incat sa etanseze cuva.
Asigurati paletele de amestecare prin interior folosind saibe, saibe grower si piulite.
In final, asigurati partea superioara si inferioara a paletelor de amestecare si daca montajul este strans.

6. **Motorul si capacul motorului**
Fixati ansamblul motorului (H) la suportul partii ansamblului de axa, dupa care strangeti cu doua suruburi M8x35, saibe si piulite.
Asigurati capacul axului (#43) (Vezi Fig.8).

7. **Colierul cuvei**
Inainte de a atasa colierul, este recomandata aplicarea unui strat de vaselina de gresaj (nu este livrata) pe partea zimtata de dedesubt a coroanei din partea inferioara a cuvei
Atasati colierul cuvei in modul in care este aratat in fig.9. Cele doua jumatati sunt prinse impreuna folosind doua suruburi M8x70, saiba plata, saiba grower si piulita.
In final, asezati gulerul protector de praf pe colierul cuvei.

NOTA : Colierul cuvei are rolul principal de siguranta si trebuie sa fie INTOTDEAUNA in locul lui, SA NU lucrati cu utilajul atunci cand colierul este indepartat. Betoniera este acum complet asamblata si pregatita pentru utilizare.

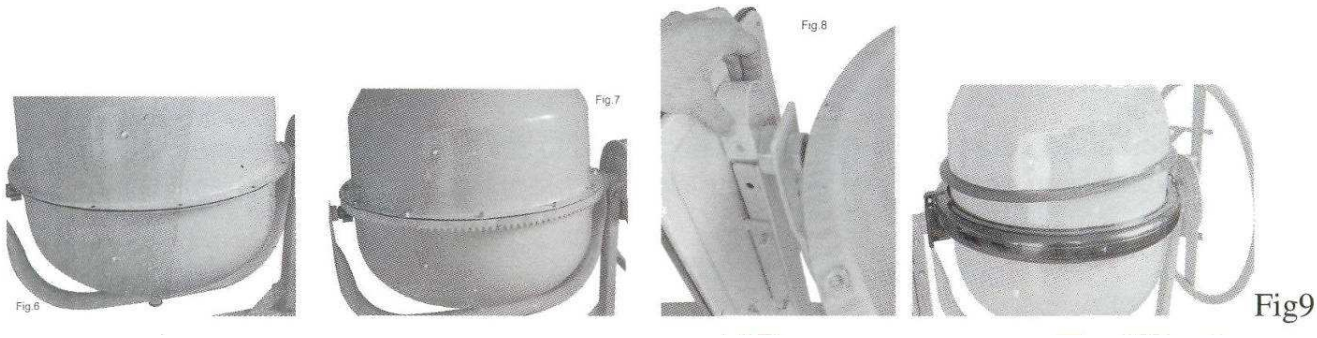


Fig9

5. **Instructiuni de operare**
Atentie!
Niciodata nu deplasati betoniera atunci cand este in functiune!
1. Fixati betoniera pe o suprafata tare si asigurati-va ca ati fixat piciorul suportului pe suprafata folosind doua suruburi M10x50mm (nu sunt prevazute).
2. Adaugati materialele in cuva
Cantitatile caracteristice includ: 12 litri (14 litri pentru CM180L) de apa; 46 kg (54 kg pentru CM180L) pentru preamestecul din beton.
Lasati sa functioneze betoniera pana cand toate materialele uscate devin fluidizate.
3. Verificati nivelul apei pe suportul din fata si asigurati-va ca betoniera functioneaza pe un loc plan. Fizati betoniera pe pamant inainte de a o porni.
Atentie: Nu intentionati sa mutati betoniera cand este incarcata cu materiale si este in functiune. Poate aparea riscul accidentarilor de persoane.
4. Conectati (la tensiunea corecta) un cablu prelungitor exterior de tensiune la cablul electric al betonierei.
5. Apasati butonul comutator de pornire pentru a incepe amestecarea.
6. Cand procesul de amestecare este terminat, intoarceti cuva sub un unghi cat mai inclinat pentru a realiza scurgerea in totalitate a lichidelor din cuva.
Umplerea si golirea cuvei este cel mai bine facuta atunci cand cuva se roteste.
Avertisment: Nu lasati niciodata betoniera sa functioneze fara a fi supravegheata.
Nu opriti niciodata din functionare betoniera atunci cand aceasta este plina cu ciment.
7. Cand ati terminat apasati butonul de oprire si deconectati cablul de alimentare cu energie electrica.
8. Imediat curatati prin exterior cuva cu apa. Urmariti cu atentie urmatoarea sectiune referitoare la intretinerea betonierei.

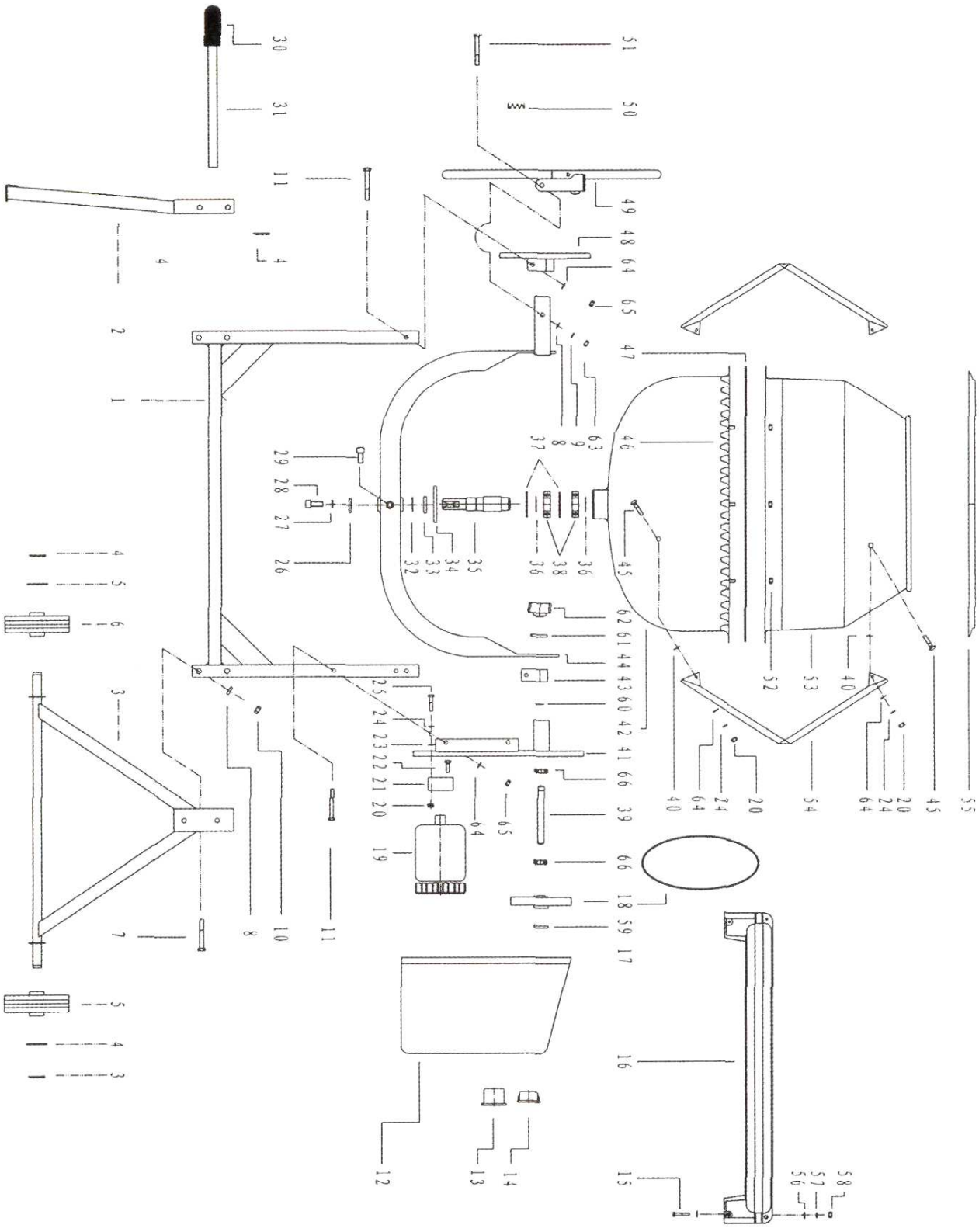
6. **Intretinerea**

Inainte de fiecare utilizare
Verificati cablul de alimentare cu energie electrica si asigurati-va ca nu este deteriorat.
De asemenea asigurati-va ca acest cablu electric nu este in pericol de a fi distrus de vehicule, echipamente sau alte operatii care se desfasoara in vecinatatea betonierei.

Periodic
Introduceti cateva picaturi de ulei usor, nevascos in locurile situate in partea superioara a rotilor de transmisie si rotiti cuva pentru a asigura o distributie a uleiului pe suprafata de rulare. Verificati vopseaua si inlaturati orice urma de rugina care poate aparea si folositi o vopsea rezistenta la rugina.
Re-strangeti cureaua V dupa primele 20 de ore de functionare. Slabiti cele doua suruburi care prind motorul de cadru. Cureaua V trebuie stransa pana cand se abate doar aproximativ 6mm, cand valoarea fortei aplicate intre rotile de transmisie variaza si este de la 2.2 la 4.5 kg. Re-strangeti apoi suruburile.

Dupa fiecare utilizare
Este recomandat ca utilajul sa fie udat cu furtunul cu apa curata, avand grija de a preveni intrarea apei in cutia protectoare a motorului si de a-l acoperi cu o folie sau o punga de polietilena.

7. **Lista partilor componente**

Item.	Descriere	Bucati	Item.	Descriere	Bucati
001	Ansamblu cadru	1	034	Masca de protectie praf	1
002	Suport	1	035	Ax	1
003	Ansamblu osie	1	036	Fus roata dintata	2
004	Pana de siguranta 3x30	3	037	Gaura roata dintata 62mm	2
005	Saiba plana	2	038	Lagar	2
006	Roata	2	039	Ax	1
007	Surub hexagonal M10x70	4	040	Saiba de piele	4
008	Saiba plana 10mm	5	041	Carcasa motor interioara	1
009	Saiba grower 10mm	1	042	Parte inferioara cuva	1
010	Piulita de blocare hexagonala	4	043	Aparatoare ax	2
011	Surub hexagonal M8x70	4	044	Ansamblu de sprijin tub	1
012	Carcasa motor exterioara	1	045	Surub M8x16	4
013	Priza	1	046	Roata dintata	6
014	Comutator	1	047	Saiba de etansare	1
015	Surub hexagonal M6x35	4	048	Ansamblu disc de reglare	1
016	Dispozitiv protectie roata dintata	2	049	Maner circular roata	1
017	Curea	1	050	Arc	1
018	Roata dintata de comanda	1	051	Surub hexagonal M10x65	1
019	Motor	1	052	Piulita hexagonala de blocare	12
020	Piulita hexagonala M8	6	053	Parte superioara cuva	1
021	Suport carcasa motor	1	054	Palete de amestecare	2
022	Flansa cu piulite hexagonale de blocare M6x30	3	055	Manson de protectie roata dintata	1
023	Saiba plana 8mm	2	056	Saiba plana 6mm	8
024	Saiba grower 8mm	6	057	Saiba grower 6mm	4
025	Piulita hexagonala M8x35	2	058	Piulita hexagonala M6	4
026	Saiba	1	059	Pana de siguranta 5x40mm	1
027	Saiba grower 12mm	1	060	Saiba elastica	1
028	Surub hexagonal M12x25	1	061	Pana de siguranta 5x35	1
029	Surub hexagonal M12x30	1	062	Roata de transmisie motor	1
030	Gheara	1	063	Saiba hexagonala M10	1
031	Maner	1	064	Saiba plana	4
032	Saiba de reglare	1	065	Piulita hexagonala de blocare	4
033	Guler de protectie praf	1	066	Lagar	2

8. Schema partilor componente