

SERVICE/PARTS MANUAL MODELS: 65CM, 75CM, 95CM, 105CM



CHAMPION®
CONCRETE MIXER

A 100% employee-owned American manufacturer

REVISION: B 2/2002 P/N 56395

Discount Equipment

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65CM, 75CM, 95CM, 105CM

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User Information

Foreword

These instructions include:

Safety regulations Operating instructions Maintenance instructions

These instructions have been prepared for operation on the construction site and for the maintenance engineer.

These instructions are intended to simplify operation of the machine and to avoid malfunctions through improper operation.

Observing the maintenance instructions will increase the reliability and service life of the machine when used on the construction site and reduce repair costs and downtimes.

Always keep these instructions at the place of use of the machine.

Only operate the machine as instructed and follow these instructions.

Observe the safety regulations as well as the guidelines of the civil engineering trade association. Observe the safety rules for operation and the pertinent regulations for the prevention of accidents.

Stone Construction Equipment, Inc. is not liable for the function of the machine when used in an improper manner or for other than the intended purpose.

Operating errors, improper maintenance and the use of incorrect operating materials are not covered by the warranty.

The above information does not extend the warranty and liability conditions of business of Stone Construction Equipment, Inc.

1.	Machine Type:
	Machine S/N:
2.	Engine Type:
	Engine S/N:
3.	VIN:
4.	Purchase Date:
5.	Dealer/Distributor Information:
	Name:
	Address:
	Phone #:
	Fax #:
6.	Battery Manufacturer:
	Battery Type:
	Battery S/N:

Location of above information:

- 1. Information on S/N tag.
- Information on engine tag.
- Information on S/N tag if applicable.
- Date you purchased machine.
- Dealer machine was purchased from.
- Information on battery and battery warranty card.

Stone Construction Equipment, Inc. P.O. Box 150, Honeoye, New York 14471 Phone: (800) 888-9926

Fax: (716) 229-2363

NOTE PAGE

Stone 65CM, 75CM, 95CM, 105CM Mixer - Specifications

Model	Operating Wt.	Batch Capacity (bags)	Batch Capacity	Total Volume	LxWxH	Power Source
65CM	690 lbs. (w/8hp Honda) 313 kg	1/2 - 1 bag	6 cu. ft.	9.0 cu. ft. .255 cu. m.	78 x 46 x 58 (in) 198.1 x 116.8 x 147.3 (cm)	1 hp / .75 kW Electric 5 hp / 3.7 kW B&S 5.5 hp / 4.1 kW Honda 6 hp / 4.5 kW Robin 6 hp / 4.5 kW Diesel 8.5 hp / 6.3 kW Robin 8 hp / 6 kW B&S Kool Bore 8 hp / 5.9 kW B&S I/P 8 hp / 6 kW Honda 10 hp / 7.5 kW B&S I/P
75CM	696 lbs. (w/8hp Honda) 315.7 kg	3/4 - 1 1/4 bags	7 cu. ft.	9.5 cu. ft. .27 cu. m.	78 x 46 x 58 (in) 198.1 x 116.8 x 147.3 (cm)	1 hp / .75 kW Electric 5 hp / 3.7 kW B&S 5.5 hp / 4.1 kW Honda 6 hp / 4.5 kW Robin 6 hp / 4.5 kW Diesel 8.5 hp / 6.3 kW Robin 8 hp / 6 kW B&S Kool Bore 8 hp / 5.9 kW B&S I/P 8 hp / 6 kW Honda 10 hp / 7.5 kW B&S I/P
95CM	800 lbs. (w/8hp Honda) 362.9 kg	1 - 1 1/2 bags	9 cu. ft. .255 cu. m.	15.1 cu. ft. .43 cu. m.	84 x 56 x 65 (in) 213.4 x 142.2 x 165.1 (cm)	1 1/2 hp / 1.1 kW Electric 6 hp / 4.5 kW Diesel 8.5 hp / 6.3 kW Robin 8 hp / 6 kW B&S Kool Bore 8 hp / 5.9 kW B&S I/P 8 hp / 6 kW Honda 10 hp / 7.5 kW B&S I/P
105CM	821 lbs. (w/8hp Honda) 372.4 kg	1 1/4 - 1 3/4 bags	10 cu. ft.	15.6 cu. ft.	85 x 56 x 65 (in) 215.9 x 142.2 x 165.1 (cm)	1 hp / 1.1 kW Electric 6 hp / 4.5 kW Diesel 8.5 hp / 6.3 kW Robin 8 hp / 6 kW B&S Kool Bore 8 hp / 5.9 kW B&S I/P 8 hp / 6 kW Honda 10 hp / 7.5 kW B&S I/P

Technical Data

Imperial Torque Chart

SAE GRADE 5 Coarse Thread, Zinc-Plated		
SIZE	TOR	QUE
	ft. lbs.	Nm
1/4 - 20 (.250)	6	8
5/16 - 18 (.3125)	13	18
3/8 - 16 (.375)	23	31
7/16 - 14 (.4375)	37	50
1/2 - 13 (.500)	57	77
9/16 - 12 (.5625)	82	111
5/8 - 11 (.625)	112	152
3/4 - 10 (.750)	200	271
7/8 - 9 (.875)	322	436.5
1 - 8 (1.000)	483	655

SAE GRADE 8 Coarse Thread, Zinc-Plated			
SIZE	TORG	QUE	
	ft. lbs.	Nm	
1/4 - 20 (.250)	9	12	
5/16 - 18 (.3125)	18	24	
3/8 - 16 (.375)	33	45	
7/16 - 14 (.4375)	52	70	
1/2 - 13 (.500)	80	108	
9/16 - 12 (.5625)	115	156	
5/8 - 11 (.625)	159	215	
3/4 - 10 (.750)	282	382	
7/8 - 9 (.875)	454	615	
1 - 8 (1.000)	682	925	

SAE GRADE 5 Fine Thread, Zinc-Plated		
SIZE	TOR	QUE
	ft. lbs.	Nm
1/4 - 28 (.250)	7	10
5/16 - 24 (.3125)	14	19
3/8 - 24 (.375)	26	35
7/16 - 20 (.4375)	41	56
1/2 - 20 (.500)	64	87
9/16 - 18 (.5625)	91	123
5/8 - 18 (.625)	128	173
3/4 - 16 (.750)	223	302
7/8 - 14 (.875)	355	481
1 - 12 (1.000)	529	717
1 -14 (1.000)	541	733

SAE GRADE 8 Fine Thread, Zinc-Plated			
SIZE	TORO	QUE	
	ft. lbs.	Nm	
1/4 - 28 (.250)	10	14	
5/16 - 24 (.3125)	20	27	
3/8 - 24 (.375)	37	50	
7/16 - 20 (.4375)	58	79	
1/2 - 20 (.500)	90	122	
9/16 - 18 (.5625)	129	175	
5/8 - 18 (.625)	180	244	
3/4 - 16 (.750)	315	427	
7/8 - 9 (.875)	501	679	
1 - 12 (1.000)	746	1011	
1 -14 (1.000)	764	1036	

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Technical Data

Metric Torque Chart

Property Class 8.8 ZINC-PLATED Coars

ZING-FLATLI
SIZE
M6
M8
M10
M12
M14
M16
M20
M24

Coarse Thread

Odaisc	·····ouu
Nm	ft. lbs.
9.9	7
24	18
48	35
83	61
132	97
200	148
390	288
675	498

Fine Thread

Nm	ft. lbs.
NA	NA
25	18
49	36
88	65
140	103
210	155
425	313
720	531

Property Class 10.9 ZINC-PLATED Coarse

SIZE
M6
M8
M10
M12
M14
M16
M20
M24

Coarse Thread

Coarse	illieau
Nm	ft. lbs.
14	10
34	25
67	49
117	86
185	136
285	210
550	406
950	701

Fine Thread

Nm	ft. lbs.
NA	NA
35	26
68	50
125	92
192	142
295	218
600	443
1000	738

Property Class 12.9

ZINC-PLATED

SIZE
M6
M8
M10
M12
M14
M16
M20
M24

Coarse Thread		
Nm	ft. lbs.	
16.5	12	
40	30	
81	60	
140	103	
220	162	
340	251	
660	487	
1140	841	

Fine Thread

Nm	ft. lbs.
NA	NA
42	31
82	60
150	111
235	173
350	258
720	531
1200	885

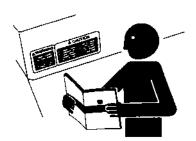
Conversion Factor: 1 ft. lb. = 1.3558 Nm

Before using this equipment, study this entire manual to become familiar with its operation. Do not allow untrained or unauthorized personnel, especially children, to operate this equipment. Use only factory authorized parts for service.

Safety Precautions

When warning decals are destroyed or missing, contact the Manufacturer immediately at 1-800-888-9926 for replacement. For the safety of yourself and others, it is imperative that the following rules are observed. Failure to do so may result in serious injury or death.

FOLLOW SAFETY INSTRUCTIONS



Read all safety messages and decals in this manual and on your machine safety signs carefully. Keep decals in good condition. Replace missing or damaged decals. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs and decals are available through your dealer.

Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

If you do not understand any part of this manual and need assistance, contact your dealer.



This notation appears before warnings in the text. It means that the step which follows must be carried out to avoid the possibility of personal injury or death. These warnings are intended to help the technician avoid any potential hazards encountered in the normal service procedures. We strongly recommend that the reader takes advantage of the information provided to prevent personal injury or injury to others.

A DANGER

A WARNING

ACAUTION

UNDERSTAND SIGNAL WORDS

A signal word – DANGER, WARNING, or CAUTION – is used with the safety-alert symbol. DANGER identifies the most serious hazards.

DANGER or WARNING safety signs are located near specific hazards. General precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.

Safety Precautions



USE COMMON SENSE WHEN HANDLING FUELS

- Transport and handle fuel only when contained in approved safety container.
- Do not smoke when refueling or during any other fuel handling operation.
- Do not refuel while the engine is running or while it is still hot.
- If fuel is spilled during refueling, wipe it off from the engine immediately and discard the rag in a safe place.
- Do not operate the equipment if fuel or oil leaks exist repair immediately.
- Never operate this equipment in an explosive atmosphere.



- Always use the proper size grounded extension cord, conforming to the National Electric Code and Local Ordinances.
- Inspect all extensions and electrical cords for cuts, frayed wire and broken connectors before use. Do not use cords if not in good condition.
- Do not route extension cords through standing water.
- Do not operate the mixer in standing water.
- When cleaning the mixer, never spray water on the electric motor.



HOT SURFACES

- Avoid contact with hot exhaust systems and engines.
- Allow all components in the engine compartment to cool before performing any service work.



- Never leave mixer unattended while running.
- Mix only concrete.

Safety Precautions

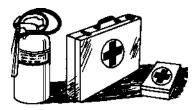


- Never perform any work on the mixer while it is running.
- Before working on the mixer, stop the engine and disconnect the spark plug wire(s) to prevent accidental starting. On electric models, disconnect the electric cord at the mixer.
- Keep cowl closed and latched during the operation, close and latch cowl immediately after starting.
- Keep hands, clothing and jewelry away from all moving parts.
- Keep all guards in place, including drum guards.
- Never place your hands or any solid object into the drum while the mixer is in operation.

WEAR PROTECTIVE CLOTHING



- Wear close fitting clothing and safety equipment appropriate to the job.
- Prolonged exposure to loud noise can cause impairment or loss of hearing.
- Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.
- Operating equipment safely requires the full attention of the operator. Do not wear radio or music headphones while operating machine.



PREPARE FOR EMERGENCIES

- Be prepared if a fire starts.
- Keep a first aid kit and fire extinguisher handy.
- Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.

Safety Precautions



Warning-Eye Protection

• Always wear splash goggles when operating mixer.



Warning-Towing

• Warning: Do not tow the mixer with the drum in the dump position. Mixer may become unstable and tip over when hitting a curb, pothole, or other obstruction.



 Warning: Always properly attach safety chains before mixer is towed. Maximum towing speed 55 m.p.h. (90 km/hr). Reduce speed according to highway conditions.



• Starting fluid (ether) is highly flammable, do not use or an explosion or fire may result.



- Never operate unit in a poorly ventilated or enclosed area.
- Avoid prolonged breathing of exhaust gases.
- Engine exhaust fumes can cause sickness or death.

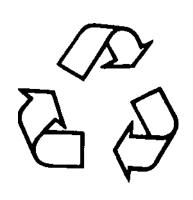
Safety Precautions

PRACTICE SAFE MAINTENANCE



- Understand service procedure before doing work. Keep area clean and dry.
- Never lubricate, service or adjust machine while it is moving. Keep hands, feet, and clothing from power-driven parts. Disengage all power and operate controls to relieve pressure. Lower equipment to the ground. Stop the engine. Remove the key. Allow machine to cool.
- Securely support any machine elements that must be raised for service work.
- Keep all parts in good condition and properly installed. Repair damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.
- Disconnect battery ground cable (-) before making adjustments on electrical systems or welding on machine.

DISPOSE OF WASTE PROPERLY



- Improperly disposing of waste can threaten the environment and ecology. Potentially harmful waste used with equipment include such items as oil, fuel, coolant, brake fluid, filters, and batteries.
- Use leakproof containers when draining fluids. Do not use food or beverage containers that may mislead someone into drinking from them.
- Do not pour waste onto the ground, down a drain, or into any water source.
- Air conditioning refrigerants escaping into the air can damage the Earth's atmosphere. Government regulations may require a certified air conditioning service center to recover and recycle used air conditioning refrigerants.
- Inquire on the proper way to recycle or dispose of waste from your local environmental or recycling center.

SAFETY DECALS - FOR THE SAFETY OF YOURSELF AND OTHERS REPLACE ANY DAMAGED OR MISSING SAFETY DECALS.

- Warning Decal (SN-92) P/N 55011
- Safety Instruction Decal (SN-67A) P/N 55046
- Warning Decal (SN-8) P/N 55127
- Safety Chain Decal (Front Post, SN-66) P/N 55121

Maintenance and Lubrication/ Drum, Spindle, Bearing Replacement/Cleaning/Towing

MAINTENANCE AND LUBRICATION

To get long and trouble-free service from this mixer, it is essential that you perform periodic maintenance on the engine and machine mechanisms. Follow the guide lines listed below.

REPLACEMENT OF DRUM, SPINDLE & BEARINGS

The Pipe Plug (Item 1) is sealed in the bearing house with loctite 262. It may be necessary to apply heat to the housing for removal. Apply loctite 262 upon reassembly to ensure proper locking and sealing.

Note that all adjustments must be made with drum in the vertical (drum-up) position. Impact drivers may not be used as they will return incorrect torque readings.

65/75/95/105CM--Loosen side bolt and retighten finger-tight. Torque spindle bolt to 40 ft. lb. Loosen spindle bolt one (1) turn and re-torque to 25 ft. lb. Loosen side bolt one (1) turn and re-torque to 30 ft. lb.

CLEANING

For consistent performance, long life and continued high quality mixing of cement, thoroughly clean the mixer inside and out at the end of each day's operation. Drum may be scoured by 2 minute operation with gravel and water mixture. Discharge, then hose down drum inside and outside. Keep mixer clean.

Before cleaning, shut off the engine or motor and disconnect the spark plug wire or electric cord to prevent accidental starting. Spray the mixer with water before the mix dries to remove any accumulations. Dried mix should be scraped out as necessary. DO NOT beat on drum with shovel, hammer or other device to break up accumulations of dried mix, as this will dent and damage the drum.

AWARNING

NEVER POUR OR SPRAY WATER OVER THE ENGINE OR MOTOR.

NEVER PUT HANDS OR ANY OBJECT INTO THE DRUM WHILE THE ENGINE OR MOTOR IS RUNNING.

ALWAYS DISCONNECT THE SPARK PLUG WIRE OR ELECTRIC CORD WHEN CLEANING INSIDE DRUM.

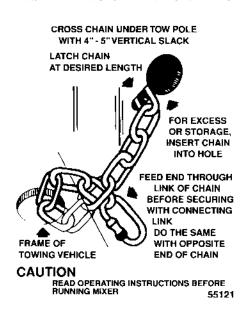
TOWING

Before attempting to tow this mixer, check the state and local laws that apply to your intended route and check the following:

- 1. Hitch attached to the towing vehicle securely.
- 2. Tow pole fully extended and bolted to mixer securely.
- 3. Safety chain hooked up properly (see illustration below or decal on mixer front post).

Installing Chain to Vehicle

INSTALLING CHAIN TO VEHICLE



- 4. Lug nuts, wheel nuts and axle mount nuts tight.
- 5. Drum rotated straight down, dump handle lock pin firmly seated into the tilt disc.
- 6. Tires in good shape and at proper inflation as follows:

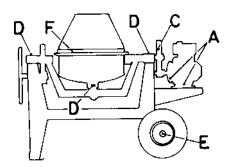
Tire size 4.80 x 12 @ 60 P.S.I. (65CM & 75CM) Tire size 6.50 x 13 @ 35 P.S.I. (95CM & 105CM)

Refer to FRAME AND DRUM ASSEMBLY and AXLE ASSEMBLY section of this manual for parts identification and location.

AWARNING

DO NOT EXCEED A TOWING SPEED OF 55 MILES/HR (90 KM/HR). FOR POOR ROAD CONDITIONS OR INCLEMENT WEATHER, REDUCE SPEED ACCORDINGLY.

Schedule



NOTE: Cowl removed for clarity. Do not operate mixer with cowl removed.

- **A.** ENGINE Daily check the oil levels in the engine and engine reduction unit. The engine warranty is **VOID** if run without oil. Since there are many options available on this mixer, consult the ENGINE MANUAL for specific recommendations as to oil level, oil type required and frequency of oil changes required. For maximum service life from the engine, follow those recommendations.
- **B.** * **WEEKLY** Grease idler shaft pillow block bearings on electric drive models.
- *WEEKLY Check diesel gearbox oil level. Oil level should be visible at pipe plug. Lubricate diesel gearbox with SAE30W to SAE80W oil as needed.
- **C. WEEKLY** Lubricate chain and sprockets on chain drive models with a few drips of SAE 30 motor oil or any spray chain lube.

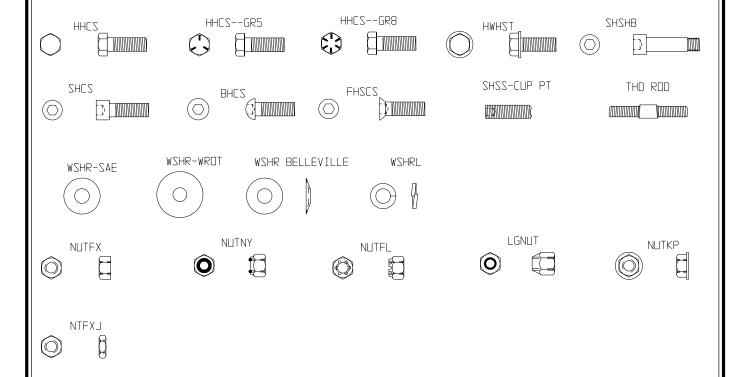
- **D. MONTHLY** Grease trunnions (2) places and drum spindle (2) places.
- **E.** YEARLY Repack (4) tapered roller bearings in wheel hubs and replace wheel seals. Install washer and nut. Torque to 20 ft. lbs. back off one turn, torque to 7 ft. lbs. back off to first slot in nut and insert cotter key.
- **F. DO NOT** lubricate pinion and ring gear. They will collect abrasive materials and accelerate wear.

Lubricate diesel gearbox with SAE30W oil as needed.

Use any Grade #1 lithium base grease for the above applications.

- * See Exploded Views with Parts Section of this manual for exact location.
- * Gearbox gasket kit P/N 23197.

Hardware Identification



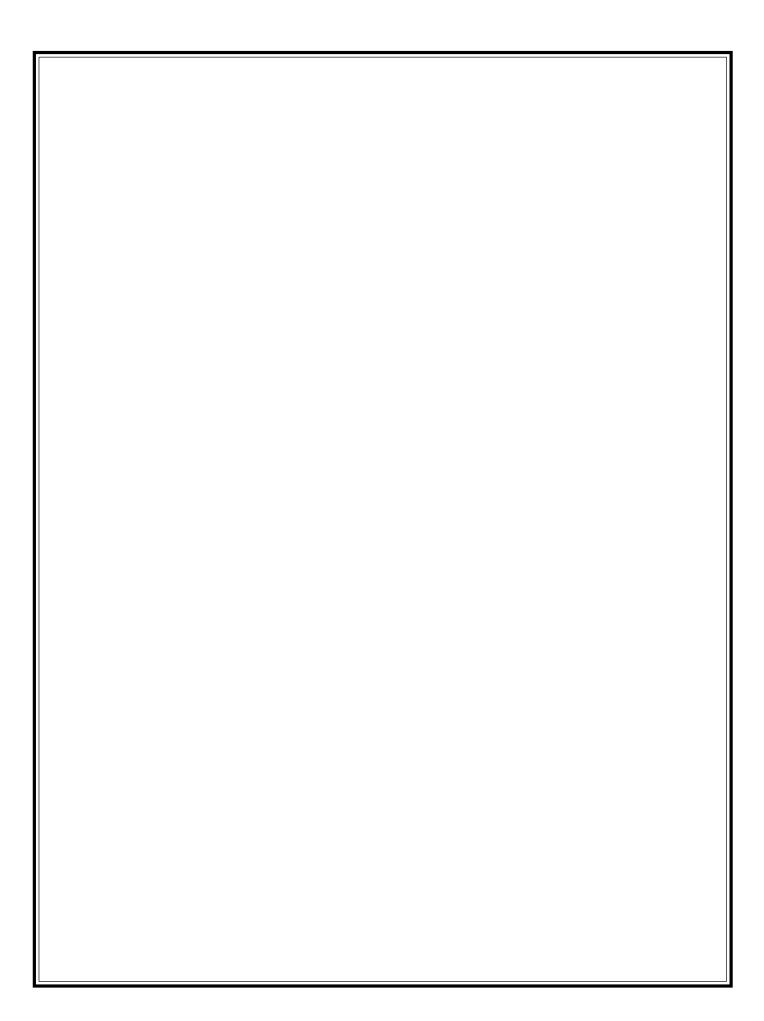
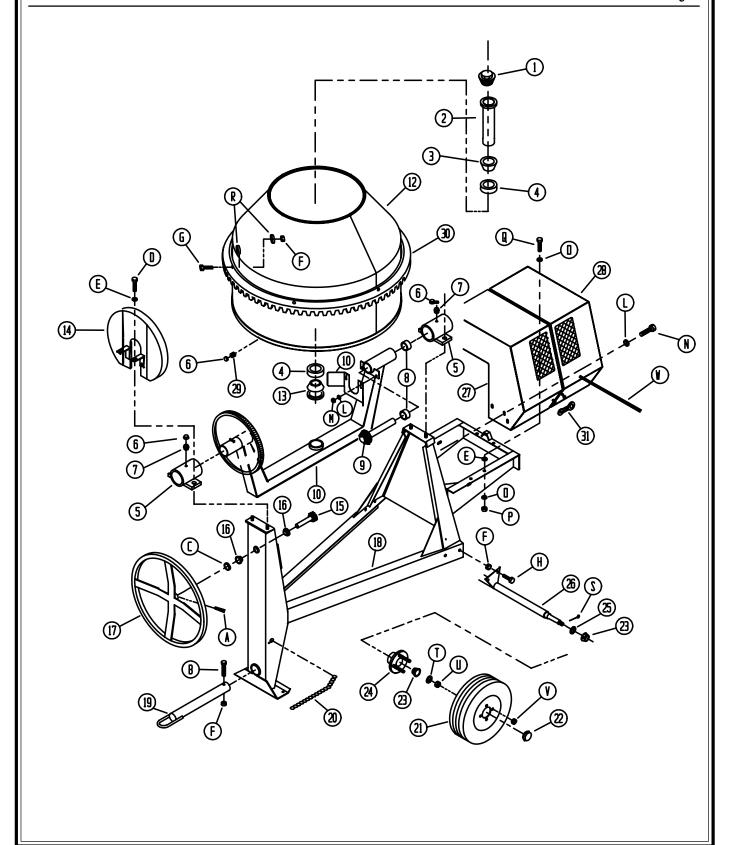


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Exploded Views with Parts

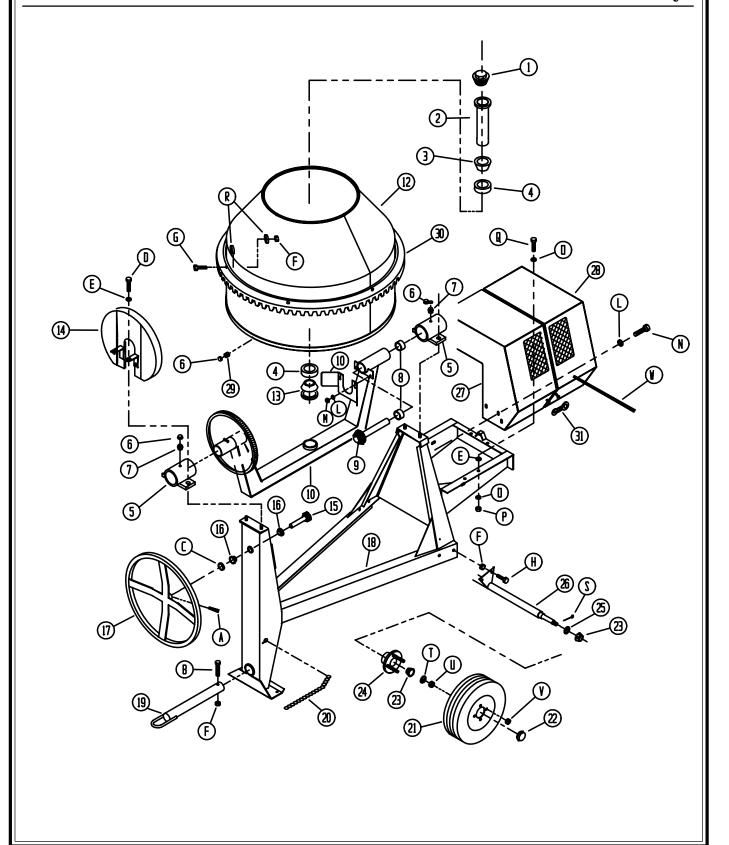
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Frame and Drum Assembly



Frame and Drum Assembly

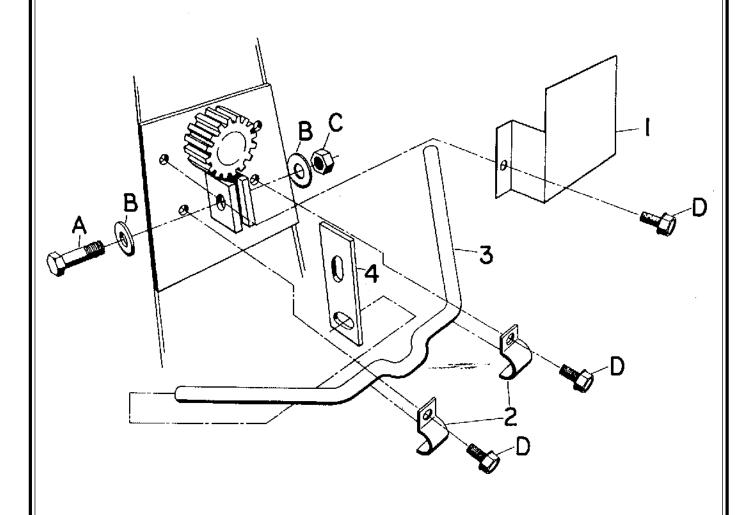
ITEM	PART NO.	DESCRIPTION	QTY.
1	46022	Pipe Plug	1
2	27267	Spindle Assembly	1
3	32086	Bearing	1
4	32160	Race	2
5	24349-2	Trunnion Weld	2
6	47001	Caplug Blue	3
7	46042	Fitting	2
8	32039	Bearing	2
9	21487	Shaft Drive Assembly	1
10	21839-2	Yoke Weld 65CM/75CM	1
	21840-2	Yoke Weld 95CM/105CM	1
11	27144-2	Pinion Guard	1
12	24336-2	Drum Weld with Gear 65CM	1
	22919-2	Drum Weld with Gear 75CM	1
	27280-2	Drum Weld with Gear 95CM	1
	22920-2	Drum Weld with Gear 105CM	1
13	32161	Bearing with Seal	1
14	27617-2	Guard Brake Upper	1
15**	22029	Shaft Tilt	1
16	32032	Bushing Nylon	2
17	22096-2	Handwheel	1
18	22027-2	Frame 65CM/75CM	1
	22026-2	Frame 95CM/105CM	1
19	26096-2	Towpole Pintle	1
	22194	Towpole Ball Hitch (not shown)	1
	27549	Towpole Pin Hitch (not shown)	1
20	21655	Safety Chain Kit	1
21	32306	Tire and Rim 65CM/75CM	2
	32307	Tire and Rim 95CM/105CM	2
22	34573	Dust Cap	2
23	32051	Bearing Cone	4
24	34501	Hub	2
25	32052	Seal Wheel Hub	2
26	22031-2	Axle Hub 65CM/75CM	1
	21460-2	Axle Hub 95CM/105CM	1



Frame and Drum Assembly

ITEM 27	PART NO. 44406-2	DESCRIPTION Cowl STRY Gas	QTY. 1
	44407-2	Cowl STRY Electric	1
	44411-2	Cowl MVBL Diesel	1
28	44383-2	Cowl MVBL	1
29	46057	Fitting B711MH	1
30*	26095-2	Ring Gear 65CM/75CM	1
	26317-2	Ring Gear 95CM/105CM	1
31	47182	Latch Rubber	1
++	22036	Axle Assembly 65CM/75CM	1
	22069	Axle Assembly 95CM/105CM	1
+++	23228	Kit Cowl Full	1
++++	23221	Kit Cowl MVBL	1
A	80077	PINSP 5/16 X 2	1
В	80197	HHCS 1/2 - 13 X 4	1
C	24622	WSHR PINION	1
D	80031	HWHTB 1/2 - 13 X 1-1/2	5
E	80118	WSHR 1/2 WROT ZN 65CM/75CM	6
	80118	WSHR 1/2 WROT ZN 95CM/105CM	12
F	80051	NUTNY 1/2 - 13	11
G	80089	HHCS 1/2-13 X 1-3/4 65CM/75CM	6
	80732	HHCS 1/2-13 X 2 95CM/105CM	6
Н	80104	HHCS 1/2-12 X 1-1/4	4
I	80204	HHCS 5/8-11 X 1-1/2	1
J	80337	WSHR 5/8	1
K	27413	WSHR DRUM 5/8	1
L	80348	WSHR 5/16	4
M	80114	NUTNY 5/16-18	2
N	80085	HWHTB 5/16-18	2
О	80342	WSHR 3/8 SAE	8
P	80056	NUTNY 3/8-16	2
Q	80145	HHCS 3/8-16 X 1-1/4	4
R	26326	WSHR 9/16 X 1-3/4 X 1/4	6
S	80316	PINCT 1/8 X 1-1/2	2
T	80344	WSHR 3/4	2
U	80054	NUTFX 3/4-16	2
V	80045	LGNUT 1/2-20	8
W	44368	PIN HINGE	1

Completely assembled axle/hub assembly includes items, 22, 23, 24, 25, 26, 8, 1, & U Kit Cowl Full includes items 27, 28, 31, W, & Decals Kit Cowl MVBL includes items 28, 31, W, & Decals Included in item 12. Can be sold separately. Lubricate with low viscosity oil assembly.

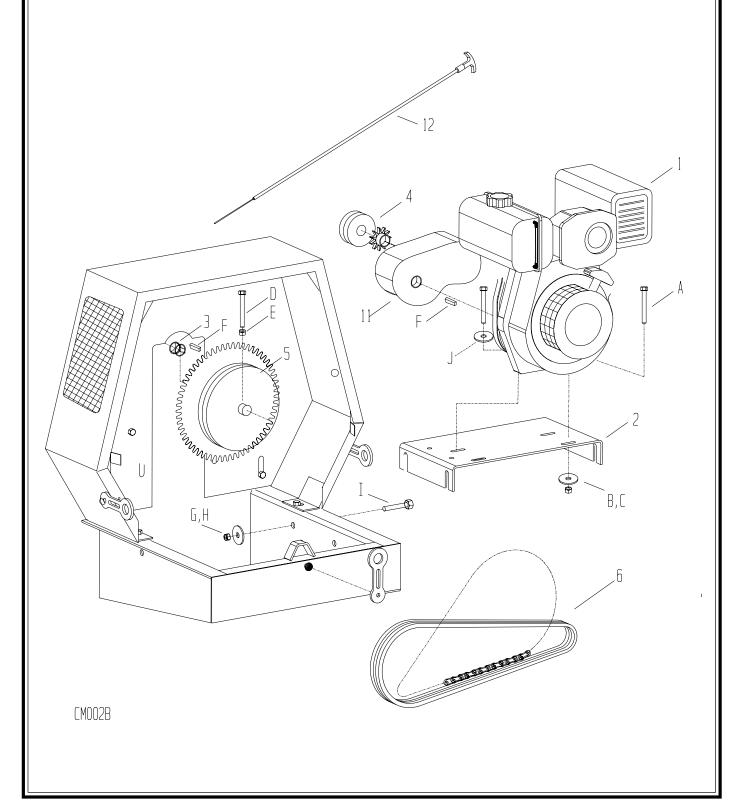


Tilt Mechanism

ITEM	PART NO.	DESCRIPTION	QTY.
1	27618-2	Guard Brake – Lower	1
2	27559-2	Bracket Clutch Handle	1
3	27621-2	Brake Handle	1
4	27619-2	Dog, Brake	1
A	80145	HHCS 3/8-16 x 1-1/4 ZN	1
В	80342	WSHR 3/8 SAE ZN	2
C	80056	NUTNY 3/8-16 ZN	1
D	80085	HWHTB 5/16-18 x 1 ZN	4

When servicing tilt mechanism, bolt A should be tightened so approximately 17-18 pounds of force is required to disengage the tilt dog.

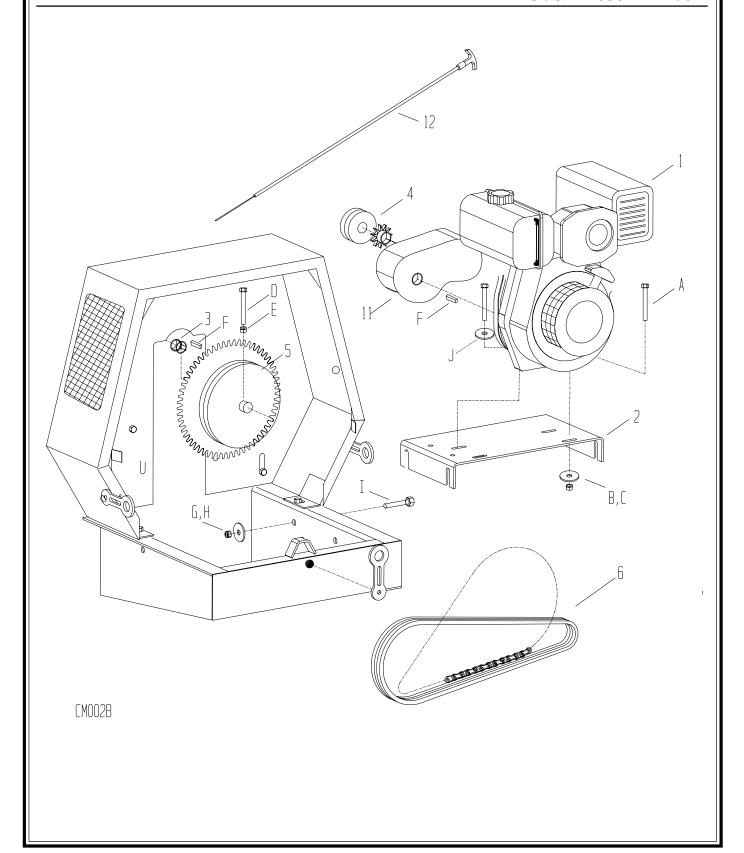
65CM, 75CM, 95CM, 105CM Gas/Diesel Drive



65CM, 75CM, 95CM, 105CM Gas/ Diesel Drive

	PART NO.	DESCRIPTION	QTY.
1	31213	Engine 5.5hp Honda 65CM/75CM	1
	30585	Engine 5hp B&S 65CM/75CM	1
	30596	Engine 6hp Robin	1
	30245	Engine 6hp Yanmar	1
	30597	Engine 8.5hp Robin	1
	30319	Engine 8hp B&S I/P	1
	30338	Engine 8hp B&S	1
	30155	Engine 8hp Honda	1
	42999	Engine 10hp B&S I/P	1
2	28040-2	65CM/75CM Motor Base (Except 6hp Yanmar)	1
	39666-2	65CM/75CM Motor Base (6hp Yanmar)	1
	28045-2	95CM/105CM Motor Base (Except 6hp Yanmar)	1
	39664-2	95CM/105CM Motor Base (6hp Yanmar)	1
3	32176	Collar Locking	1
4	34982	Sheave 2AK30 x ³ / ₄	1
4	34982		1
4		(5.5hp Honda, 5hp B&S, 6hp Robin)	1
4	34982 34984	(5.5hp Honda, 5hp B&S, 6hp Robin) Sheave 2AK30 x 1 (8.5hp Robin,	1
4		(5.5hp Honda, 5hp B&S, 6hp Robin) Sheave 2AK30 x 1 (8.5hp Robin, 7hp/6hp Yanmar, 8hp B&S, 8hp Honda,	
4	34984	(5.5hp Honda, 5hp B&S, 6hp Robin) Sheave 2AK30 x 1 (8.5hp Robin, 7hp/6hp Yanmar, 8hp B&S, 8hp Honda, 10hp B&S)	
5	34984 34986	(5.5hp Honda, 5hp B&S, 6hp Robin) Sheave 2AK30 x 1 (8.5hp Robin, 7hp/6hp Yanmar, 8hp B&S, 8hp Honda, 10hp B&S) Sheave 2AK94 x 1-3/16	1
5	34984 34986 35934	(5.5hp Honda, 5hp B&S, 6hp Robin) Sheave 2AK30 x 1 (8.5hp Robin, 7hp/6hp Yanmar, 8hp B&S, 8hp Honda, 10hp B&S) Sheave 2AK94 x 1-3/16 V-Belt A37 (6hp Yanmar, 8hp B&S, 8hp Honda)	1 1 2
5	34984 34986	(5.5hp Honda, 5hp B&S, 6hp Robin) Sheave 2AK30 x 1 (8.5hp Robin, 7hp/6hp Yanmar, 8hp B&S, 8hp Honda, 10hp B&S) Sheave 2AK94 x 1-3/16 V-Belt A37 (6hp Yanmar, 8hp B&S, 8hp Honda) V-Belt A39 (5.5hp Honda, 5hp B&S,	1
5	34984 34986 35934	(5.5hp Honda, 5hp B&S, 6hp Robin) Sheave 2AK30 x 1 (8.5hp Robin, 7hp/6hp Yanmar, 8hp B&S, 8hp Honda, 10hp B&S) Sheave 2AK94 x 1-3/16 V-Belt A37 (6hp Yanmar, 8hp B&S, 8hp Honda)	1 1 2
5	34984 34986 35934	(5.5hp Honda, 5hp B&S, 6hp Robin) Sheave 2AK30 x 1 (8.5hp Robin, 7hp/6hp Yanmar, 8hp B&S, 8hp Honda, 10hp B&S) Sheave 2AK94 x 1-3/16 V-Belt A37 (6hp Yanmar, 8hp B&S, 8hp Honda) V-Belt A39 (5.5hp Honda, 5hp B&S,	1 1 2
4 5 6 Chain Drive	34984 34986 35934 35280	(5.5hp Honda, 5hp B&S, 6hp Robin) Sheave 2AK30 x 1 (8.5hp Robin, 7hp/6hp Yanmar, 8hp B&S, 8hp Honda, 10hp B&S) Sheave 2AK94 x 1-3/16 V-Belt A37 (6hp Yanmar, 8hp B&S, 8hp Honda) V-Belt A39 (5.5hp Honda, 5hp B&S,	1 1 2
5 6 Chain Drive	34984 34986 35934 35280 Components	(5.5hp Honda, 5hp B&S, 6hp Robin) Sheave 2AK30 x 1 (8.5hp Robin, 7hp/6hp Yanmar, 8hp B&S, 8hp Honda, 10hp B&S) Sheave 2AK94 x 1-3/16 V-Belt A37 (6hp Yanmar, 8hp B&S, 8hp Honda) V-Belt A39 (5.5hp Honda, 5hp B&S, 6/8.5hp Robin, 10hp B&S)	1 1 2 2
5 6 Chain Drive	34984 34986 35934 35280 Components	(5.5hp Honda, 5hp B&S, 6hp Robin) Sheave 2AK30 x 1 (8.5hp Robin, 7hp/6hp Yanmar, 8hp B&S, 8hp Honda, 10hp B&S) Sheave 2AK94 x 1-3/16 V-Belt A37 (6hp Yanmar, 8hp B&S, 8hp Honda) V-Belt A39 (5.5hp Honda, 5hp B&S, 6/8.5hp Robin, 10hp B&S)	1 1 2 2
5 6 Chain Drive	34984 34986 35934 35280 Components	(5.5hp Honda, 5hp B&S, 6hp Robin) Sheave 2AK30 x 1 (8.5hp Robin, 7hp/6hp Yanmar, 8hp B&S, 8hp Honda, 10hp B&S) Sheave 2AK94 x 1-3/16 V-Belt A37 (6hp Yanmar, 8hp B&S, 8hp Honda) V-Belt A39 (5.5hp Honda, 5hp B&S, 6/8.5hp Robin, 10hp B&S) Sprocket 50B11 x 3/4 (5.5hp Honda, 5hp B&S, 6hp Robin)	1 1 2 2

65CM, 75CM, 95CM, 105CM Gas/Diesel Drive

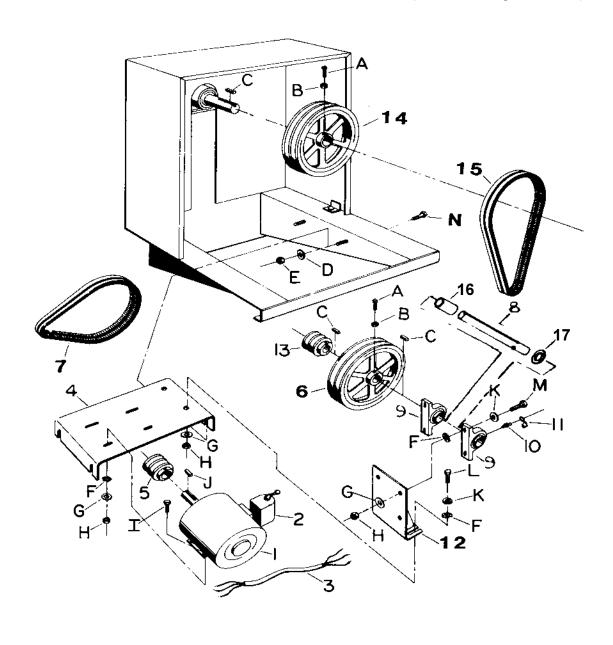


65CM, 75CM, 95CM, 105CM Gas/Diesel Drive

ITEM	PART NO.	DESCRIPTION	QTY.
6	22040	Set Chain 56 Pitches (6hp Yanmar, 8hp B&S, 8hp Honda)	1
	22041	Set Chain 60 Pitches (5.5H/5 B&S, 6/8.5 Robin, 10 B&S)	1
11	39667	Reducer Gear 6:1 (6hp Yanmar)	1
12	35346	Throttle (Yanmar Diesel)	1
A	80467	HHCS 5/16-18 x 1-3/4 ZN (5.5hp Honda, 5hp B&S, 6hp Robin)	4
	80169	HHCS 5/16-18 x 2 ZN (8hp/10hp B&S)	4
	80178	HHCS 3/8-16 x 2 ZN (8hp Honda, 6hp Yanmar, 8.5hp Robin)	4
В	80114	NUTNY 5/16-18 ZN	4
		(5.5hp Honda, 5hp B&S, 6hp Robin,8hp/10hp B&S)	
	80056	NUTNY 3/8-16 ZN (8.5hp Robin, 8hp Honda, 6hp Yanmar)	4
C	26325	WSHR Motor Base	4
D	80259	SQHSS 5/16-18 x 1-1/2 ZN	1
E	80245	NUTFX 5/16-18 ZN	1
F	80100	Key 1/4 x 1/4 x 1	2
G	80051	NUTNY 1/2-13 ZN	4
Н	80118	WSHR ½ WROT	4
I	80075	HHCS 1/2-13 x 1-1/2 ZN	4
J	26326	WSHR 9/16 x 1-3/4 x 1/4 Pln	1

65CM & 75CM Electric Drive

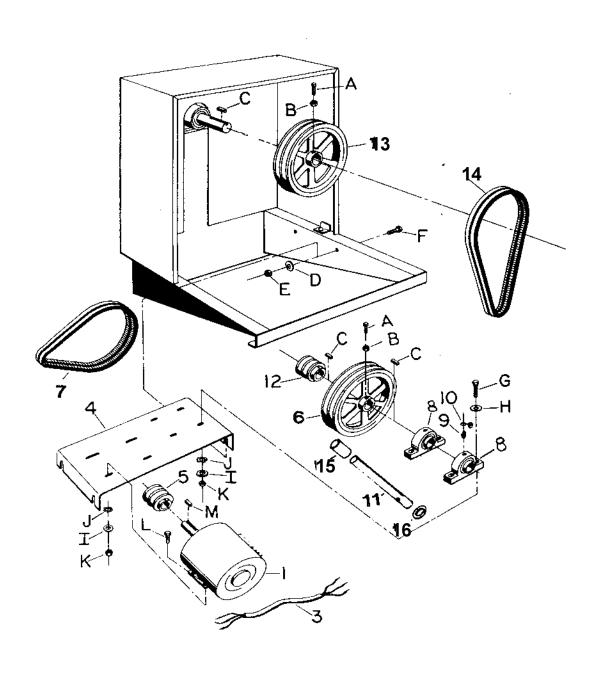
(Belt drive diagram shown)



65CM & 75CM Electric Drive

ITEM	PART NO.	DESCRIPTION	QTY.
1	30007	Motor 1HP Electric	1
2	36017	Dual VLTG CNTRL A-17	1
3	48016	Cord 12/3 SO	3 ft.
4	28044-2	Motor Base / Electric	1
5	34068	Sheave 2AK23 X 7/8	1
6	35278	Sheave 2AK61 X 1	1
7	35799	V-Belt A-24 (set of 2)	1
8	22509	Shaft Assembly	1
9	32208	Pillow Block	2
10	46042	Fitting	2
11	47001	Caplug Blue	2
12	22044	Bracket Weld Idle 65CM & 75CM	1
13	34984	Sheave 2AK30 X 1 Belt Drive	1
	34126	Sprocket 50B14 X 1 Chain Drive	1
14	34992	Sheave 2AK114 X 1-3/16 Belt Drive	1
	34138	Sprocket 50B48 X 1-3/16 Chain Drive	1
15	35277	V-Belt A45 Belt Drive	2
	22047	Set Chain RC50 70 Pitches Chain Drive	1
#	34104	Link Conn #50 Chain Drive	1
16	29138	Spacer Pillow Block	1
17	38122	Washer Retainer Pin	1
*	21170	Motor Assy Electric 1HP	1
A	80259	SQHSS 5/16-18 x 1-1/2 ZN	1
В	80245	NUTFX 5/16-18 ZN	1
С	80100	Key 1/4 X 1/4 X 1	3
D	80118	WSHR 1/2 WROT ZN	4
E	80051	NUTNY 1/2-13 ZN	5
F	80119	WSHRLT 3/8 INT/EXT	10
G	26325	WSHR MTR BASE	10
Н	80146	NUTNY 3/8-16 ZN	10
I	80145	HHCS 3/8-16 X 1-1/4 ZN	4
J	80061	Key 1/4 X 1/4 X 1-1/2	1
K	80348	WSHR 5/16 WROT ZN	6
L	80176	HHCS 3/8-16 X 1-1/2	2
M	80178	HHCS 3/8-16 X 1-3/4 ZN	4
N	80713	HHCS 1/2-13 X 1-1/2	4

Complete Idle Assembly 21300 (Includes Spacer, Shaft, and Bearings)
* Includes items 1 & 2
Included with 22047 Chain Set



95CM & 105CM Electric Drive

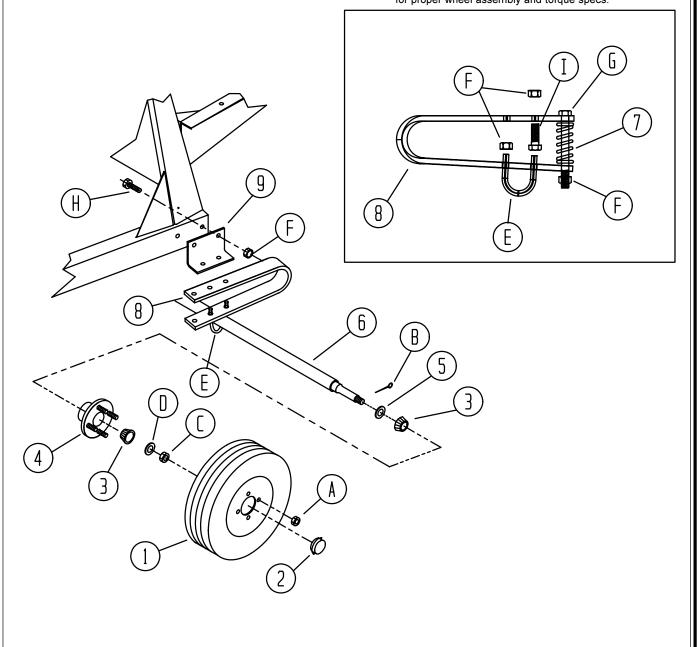
ITE	M PART NO.	DESCRIPTION	QTY.
1	30315	Motor Assy 1.5HP Electric	1
3	48344	Cord 10/3 SO	1 ft.
4	28051-2	Motor Base/Electric 1.5 Electric	1
5	34068	Sheave 2AK23-7/8	1
6	35278	Sheave 2AK61 X 1	1
7	34617	V-Belt A28	2
8	32208	Pillow Block	2
9	46042	Fitting	2
10	47001	Caplug Blue	2
11	22509	Shaft Assembly	1
12	34984	Sheave 2AK30 X 1 Belt Drive	1
	35284	Sprocket 50B11 X 1 Chain Drive	1
13	34992	Sheave 2AK114 X 1-3/16 Belt Drive	1
	34099	Sprocket 50B38 X 1-3/16 Chain Drive	1
14	34989	V-Belt A51 Belt Drive	2
	22048	Set Chain RC50 72 Pitches Chain Drive	1
#	34104	Link Conn #50 Chain Drive	1
15	29138	Spacer Pillow Block	1
16	38122	Washer Retainer Pin	1
A	80259	SQHSS 5/16-18 x 1-1/2 ZN	1
В	80245	NUTFX 5/16-18 ZN	1
С	80100	Key 1/4 X 1/4 X 1	3
D	80118	WSHR 1/2 WROT ZN	4
Е	80051	NUTNY 1/2-13 ZN	5
F	80713	HHCS 1/2-13 X 1-1/2 ZN	4
G	80072	HHCS 3/8-16 X 1-3/4 ZN	4
Н	80348	WSHR 5/16 WROT ZN	4
I	26325	WSHR MTR BASE	8
J	80119	WSHRLT 3/8 INT/EXT	8
K	80146	NUTNY 3/8-16 ZN	8
L	80145	HHCS 3/8-16 X 1-1/4 ZN	4
M	80061	Key 1/4 X 1/4 X 1-1/2	1

Complete Idler Assembly 21300 (Includes Spacer, Shaft, and Bearings)

[#] Included with 22048 Chain Set

Spring Axle Assembly

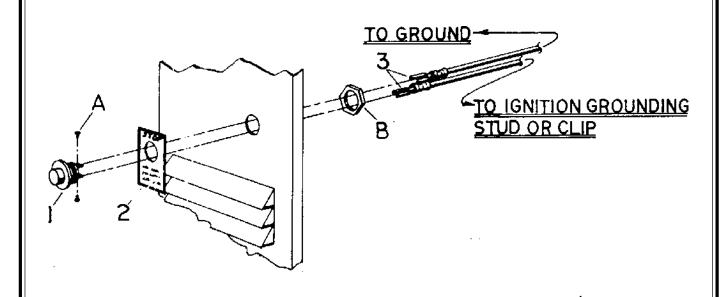
See **MAINTENANCE AND LUBRICATION** section for proper wheel assembly and torque specs.

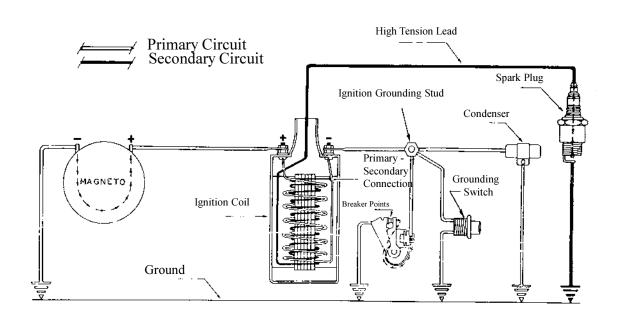


Spring Axle Assembly

ITEM	PART NO.	DESCRIPTION	QTY.
1	32307	Tire and Rim 6.50 X 13	2
2	34573	Dust Cap	2
3	32051	Bearing Cone	4
4	34501	Hub	2
5	32052	Seal, Wheel Hub	2
6	21460-2	Axle 56" Spg	1
7	34972	Coil Spring	2
8	26971-2	Spring	2
9	26949-2	Brkt Spg	2
A	80045	LGNUT 1/2-20 ZN	8
В	80315	PINCT 3/16 X 2 ZN	2
C	80054	NTSFX 3/4-16 ZN	2
D	80344	WSHR 3/4 SAE ZN	2
E	26195	U-BOLT	2
F	80051	NUTNY 1/2-13 ZN	14
G	80052	HHCS 1/2-13 X 6-1/2	2
Н	80104	HHCS 1/2-13 X 1-1/4	4
I	80075	HHCS 1/2-13 X 1-1/2	4

65CM, 75CM, 95CM, 105CM Grounding Switch





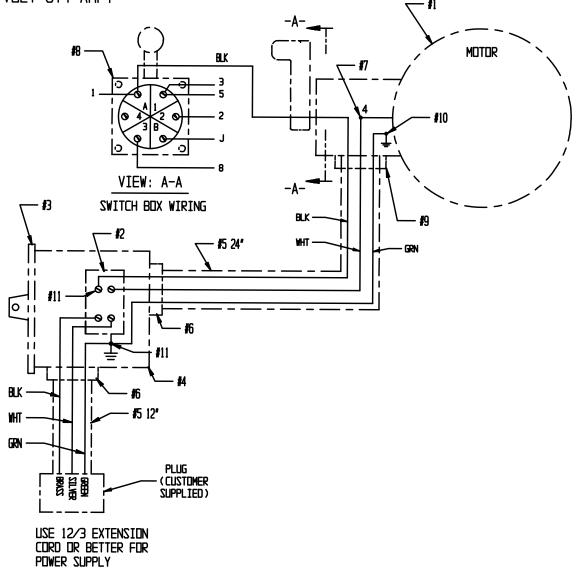
65CM, 75CM, 95CM, 105CM Grounding Switch

ITEM	PART NO.	DESCRIPTION	QTY.
1	36099	Grounding Switch	1
2	55054	Decal Engine Stop	1
3	21930	Lead Ground 110	2
		(22 V 1/4 P	
A	*	6-32 X 1/4 Pan Head Screw	2
В	*	Lock Nut	1
	*	These parts not available separately, they come with the grounding switch only.	

The switch is a single pole single throw (SPST) normally open, momentary contact push button which grounds out the ignition voltage when pressed. To stop the engine, depress the button and hold in until the engine comes to a complete stop.

Periodically inspect the grounding switch and associated wiring to make sure the system is operating properly. Make sure that there are no loose connections or bare / broken wires. Also make sure that the grounding switch wires are fastened securely out of the way of hot exhaust and engine parts, moving drive components, and pinch points.

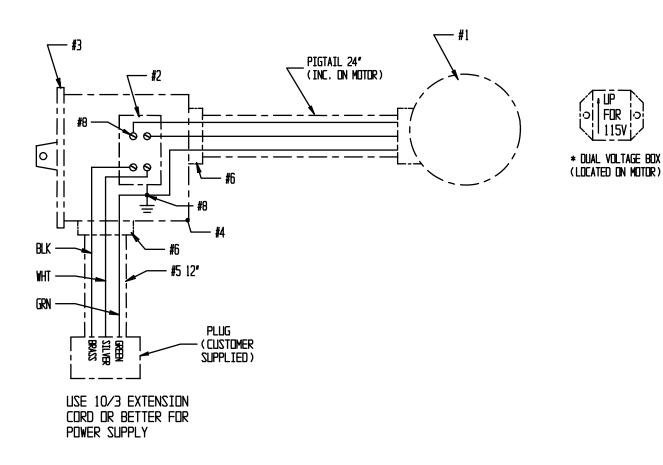
1 HP ELECTRIC WIRING / 1 PHASE 115 VOLT 12.8 AMP. 230 VOLT 6.4 AMP.



Electric Wiring - 1 HP

ITEM	PART NO.	DESCRIPTION	QTY.
1	30007	Motor Baldor L1401M	1
2	36379	Switch 30AC-2	1
3	36381	Cover Switch PVC	1
4	36380	Box Switch	1
5	48016	Cord 12/3 SO	3 ft.
6	36382	Cord Grip	2
7	48241	Wire Nut Red	2
8	36017	Dual Voltage Control	1
9	48014	Cord Grip	1
10	48031	Term Ring #10 Insul 12-10	1
11	48346	Term Spade #10 Insul 12-10	6

1-1/2 HP ELECTRIC WIRING / 1 PHASE STANDARD WIRING 115 VOLT 19 AMP. FOR 230 VOLT 9.5 AMP. ROTATE * DUAL VOLTAGE BOX 180 DEGREE, USE PROPER PLUG



Electric Wiring - 1-1/2 HP

ITEM	PART NO.	DESCRIPTION	QTY.
1	30315	Motor 1-1/2 HP 115/230V 1PH	1
2	36379	Switch 30AC-2	1
3	36381	Cover Switch PVC	1
4	36380	Box Switch	1
5	48344	Cord 10/3 SO	1 ft.
6	36383	Cord Grip	2
7	48241	Wire Nut Red	2
8	48346	Term Spade #10 Insul 12-10	6

Decal Identification



A WARNING

Shut off machine to service or clean.

550



A WARNING

Do not run machine with cover open.

5501

NOTICE

CONTACT THE MANUFACTURER IMMEDIATELY AT 1-800-888-9926 IF SAFETY OR HAZARD DECALS OR OWNER'S MANUAL ARE MISSING FROM THIS EQUIPMENT.

55156

SAFETY INSTRUCTION

CAUTION: READ OWNER'S SERVICE MANUAL BEFORE OPERATING OR SERVICING

THIS MACHINE.

CAUTION: ALWAYS KEEP UNAUTHORIZED.

INEXPERIENCED, UNTRAINED PEOPLE AWAY FROM THIS MACHINE.

ATTACK THE MACHINE

CAUTION: ROTATING AND MOVING PARTS WILL CAUSE INJURY IF CONTACTED. MAKE

SURE GUARDS AND SAFETY DEVICES ARE IN PLACE BEFORE THIS MACHINE IS OPERATED. MAKE SURE ENGINE IS SHUT DOWN AND SPARK PLUG WIRE DISCONNECTED BEFORE SERVICING THE MACHINE OR APPROACHING THE MOVING PARTS IF ELECTRIC MOTOR.

DISCONNECT PLUG.

CAUTION: NEVER LEAVE MACHINE UNATTENDED WHEN OPERATING. ALWAYS STOP

ENGINE OR MOTOR BEFORE ADDING FUEL OR OIL.

55046

SAFETY CHAIN "PATENT #4180281"

CROSS CHAIN UNDER TOW POLE WITH 4" - 5" VERTICAL SLACK

LATCH CHAIN
AT DESIRED LENGTH

FEE
BE

FOR EXCESS OR STORAGE, INSERT CHAIN INTO HOLE

FEED END THROUGH
LINK OF CHAIN
BEFORE SECURING
WITH CONNECTING
LINK

DO THE SAME WITH OPPOSITE END OF CHAIN

CAUTION

TOWING VEHICLE

FRAME OF

READ OPERATING INSTRUCTIONS BEFORE RUNNING MIXER 5512

55128

A DANGER GASOLINE

Stop engine & extinguish all flames & smoking materials before refueling! Use a safety can!

WARNING

Always stop engine when cleaning or adjusting machine. If electric motor pull plug.

5512

Decal Identification

ITEM	PART NO.	DESCRIPTION	QTY.
1	55010	Decal Warning Shut Off	1
2	55011	Decal Warning Cover	1
3	55046	Decal Safety Instruction	1
4	55121	Decal Safety Chain	1
5	55127	Decal Warning Cleaning	1
6	55128	Decal Danger Gasoline	1
7	55156	Decal Notice	1
8	55148	Decal Warning Diesel	1

