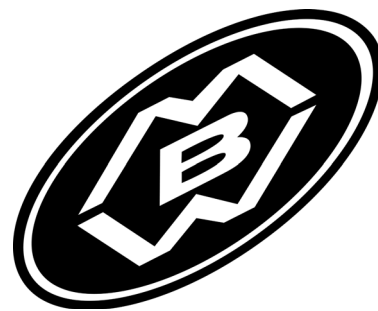


OPERATOR'S SAFETY AND SERVICE MANUAL



MM60 MM80 MM90

This manual covers the following serial numbers and higher for each model listed:

MM60	7011600
MM80	7032000
MM90	7051100



MORTAR & PLASTER MIXERS

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CAUTION(PRECAUCIÓN)

Improper towing can lead to damage or injury.

Before Towing:

1. Check running gear and tow bar.
 2. Lock drum in tow position.
 3. Check tow pin for proper installation and good condition.
 4. USE SAFETY CHAINS when towing.
- MAXIMUM TOW SPEED: 50 mph**
Un remolque incorrecto puede

provocar daños materiales o lesiones.

Antes del remolque:

1. Revise el funcionamiento de los engranajes y de la barra de remolque.
2. Bloquee el tambor en la posición de remolque.
3. Verifique que el pasador de remolque esté bien instalado y en buen estado.
4. USE CADENAS DE SEGURIDAD al remolcar la máquina.

MÁX. VELOCIDAD DE REMOLQUE: 80 KPH

15972

15072

U.S. PATENT 6,695,467

17949

17949 - Not included with decal set



17129

17129

MM90

21034 "MM90"

21032 "MM80"

21031 "MM60"

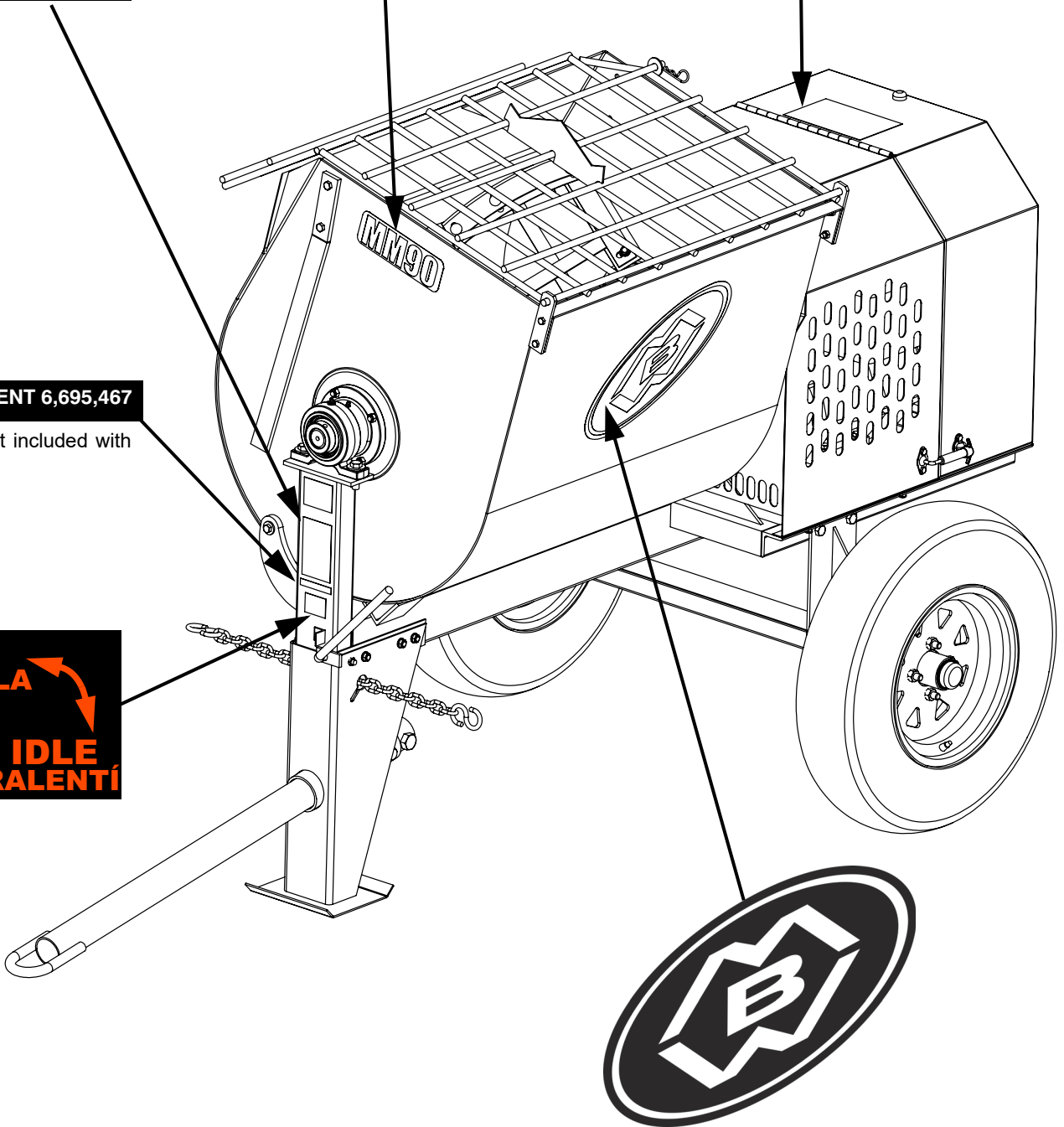
CAUTION (PRECAUCIÓN)#

- Read the operating instructions before operating this piece of equipment. Lea las Instrucciones Operativas antes de hacer funcionar esta parte del equipo.
- Keep unauthorized, inexperienced, untrained people away from this equipment. Mantenga a las personas no autorizadas y sin entrenamiento alejadas de este equipo.
- ROTATING AND MOVING PARTS!** Make sure all guards and safety devices are in place. **¡PIEZAS ROTATIVAS Y MOVILES!** Asegúrese de que todas las guardas y dispositivos de seguridad estén colocados en sus lugares.
- DO NOT RUN** this machine in an enclosed area. The engine produces carbon monoxide, a **POISONOUS** gas. **NO HAGA FUNCIONAR** esta máquina en una zona encerrada. El motor produce monóxido de carbono, un **GAS VENENOSO**.
- Avoid breathing dust produced while operating machine, wear OSHA specified dust mask/respirator. Evite respirar el polvo producido durante el funcionamiento de la máquina, use mascarilla contra el polvo y respirador especificada por OSHA.
- SHUT OFF** the engine before servicing, cleaning or adding fuel to engine or machine.

Failure to comply could result in serious bodily injury

El no cumplir con estas instrucciones puede producir como resultado lesiones corporales graves. (15070)

15070



21033 - Not included with decal set

3Safety Decals (Decal Set #15074)

PUSH TO STOP
PULSE PARA DETENER



16546

WARNING

Operating, servicing and maintaining this equipment can expose you to chemicals, including engine exhaust, phthalates and lead, which are known to the state of California to cause cancer and birth defects or other reproductive harm. Avoid breathing engine exhaust. Do not operate equipment in confined areas. For more information go to www.P65Warnings.ca.gov

21820


MIXER(MEZCLADORA)
OPERATING INSTRUCTIONS
INSTRUCCIONES DE OPERACION

1. Check oil in engine compartment.
2. MAKE SURE grid is CLOSED before starting and during operation. Place engagement lever in "IDLE" position before starting engine.
3. Open fuel valve.
4. Open throttle to "FAST" position.
5. Close throttle on engine. A warm engine may not need to be choked.
6. Pull starter rope.
7. After starting, turn choke off, let engine warm up at idle.
8. Open throttle to "FAST" position. CLOSE SHROUDD! Place engagement lever in "MIX" position, change mixer.
9. TO STOP: Place engagement lever in "IDLE" position, return throttle to idle, close fuel valve, press stop button.
10. Before towing, check that drum is locked in towing position, and tow pin is properly installed and in good condition.
11. Before towing, check that drum is locked in towing position, and tow pin is properly installed and in good condition.

1. Revisar el aceite en el cárter del motor.
2. CERRARSE de que la rejilla está CERRADA antes del arranque y durante la operación.
3. Coloque la palanca de engranaje en la posición de "TRALENT" antes de arrancar el motor.
4. Abra la válvula de combustible.
5. Cierre el estrangulador del motor. Si el motor está tibio, puede que no requiere estrangulamiento.
6. Tire de la cuerda de arranque.
7. Trine de la cuerda de arranque.
8. Abra el acelerador y póngalo en la posición "RÁPIDA". CIERRE LA CUBIERTA Coloque la palanca de engranaje en la posición "TRALENT". cargue la mezcladora.
9. PARA DETENERLA: Coloque la palanca de engranaje en la posición "TRALENT", vuelva el estrangulador a ralentí, cierre la válvula de combustible y pulse el botón de parada.
10. Antes del remolque, verifique que el tambor está bloqueado en la posición de remolque, y que el pino está correctamente instalado y en buen estado.
MAXIMUM TOW SPEED: 50 MPH
MÁX. VELOCIDAD DE REMOLQUE: 80 KPH

15071

WARNING
ADVERTENCIA



ENGINE EXHAUST IS HAZARDOUS IF INHALED
USE ONLY IN A WELL VENTILATED AREA
EL GAS DEL ESCAPE DEL MOTOR ES PELIGROSO SI SE INHALA
USE LA MAQUINA SOLO EN UNA ZONA BIEN VENTILADA

15076

15076

WARNING
ADVERTENCIA

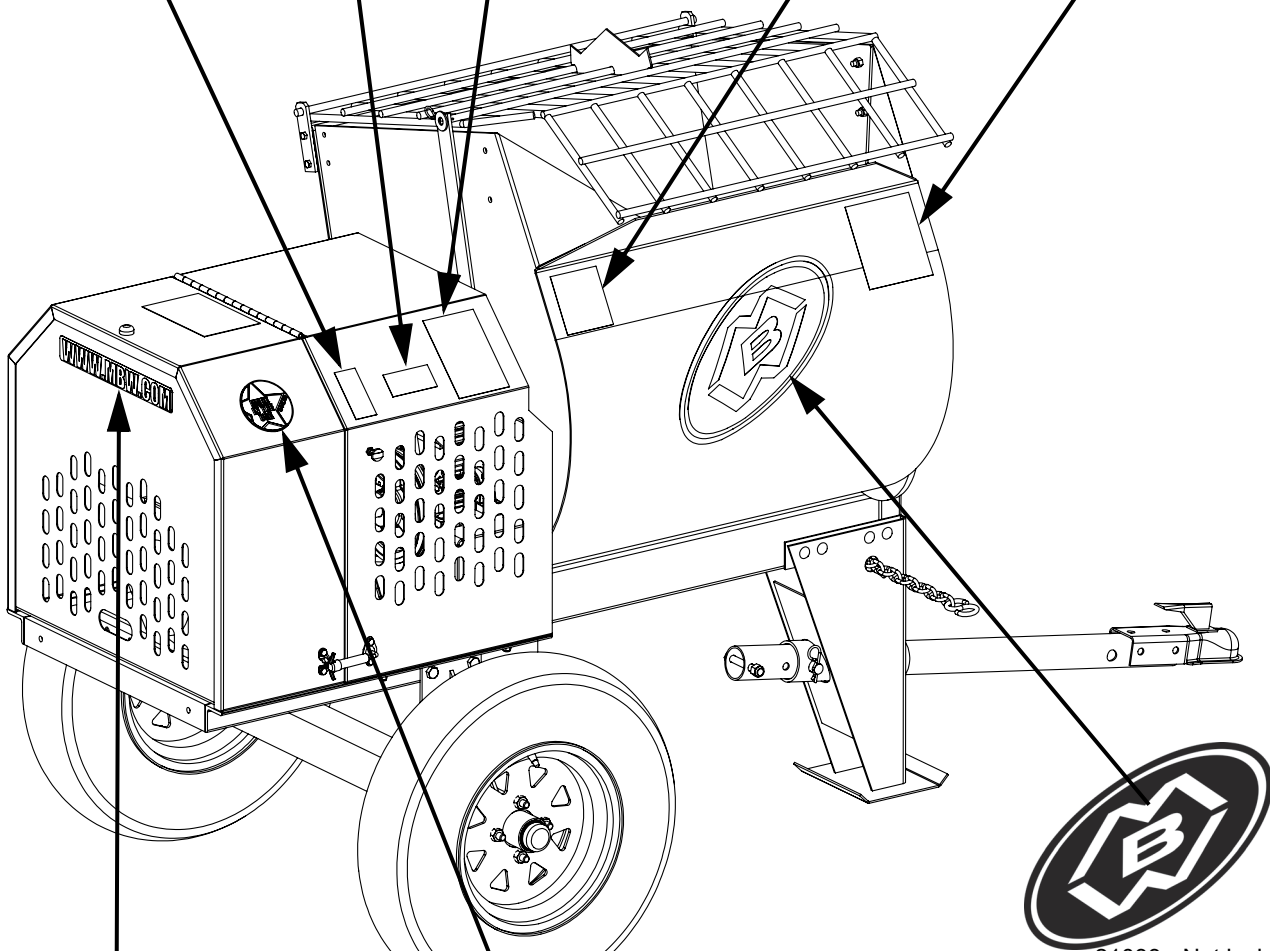


MOVING PARTS CAN CRUSH AND CUT
KEEP HANDS CLEAR!
SHUT OFF ENGINE OR MOTOR BEFORE SERVICING.
LAS PIEZAS MÓVILES PUEDEN IMPACTAR Y CORTAR
¡MANTENGA ALEJADAS SUS MANOS!
APAGUE EL MOTOR ANTES DEL SERVICIO.

15069

15069

16546



21033 - Not included with decal set

WWW.MBW.COM

21035

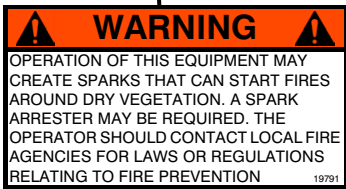
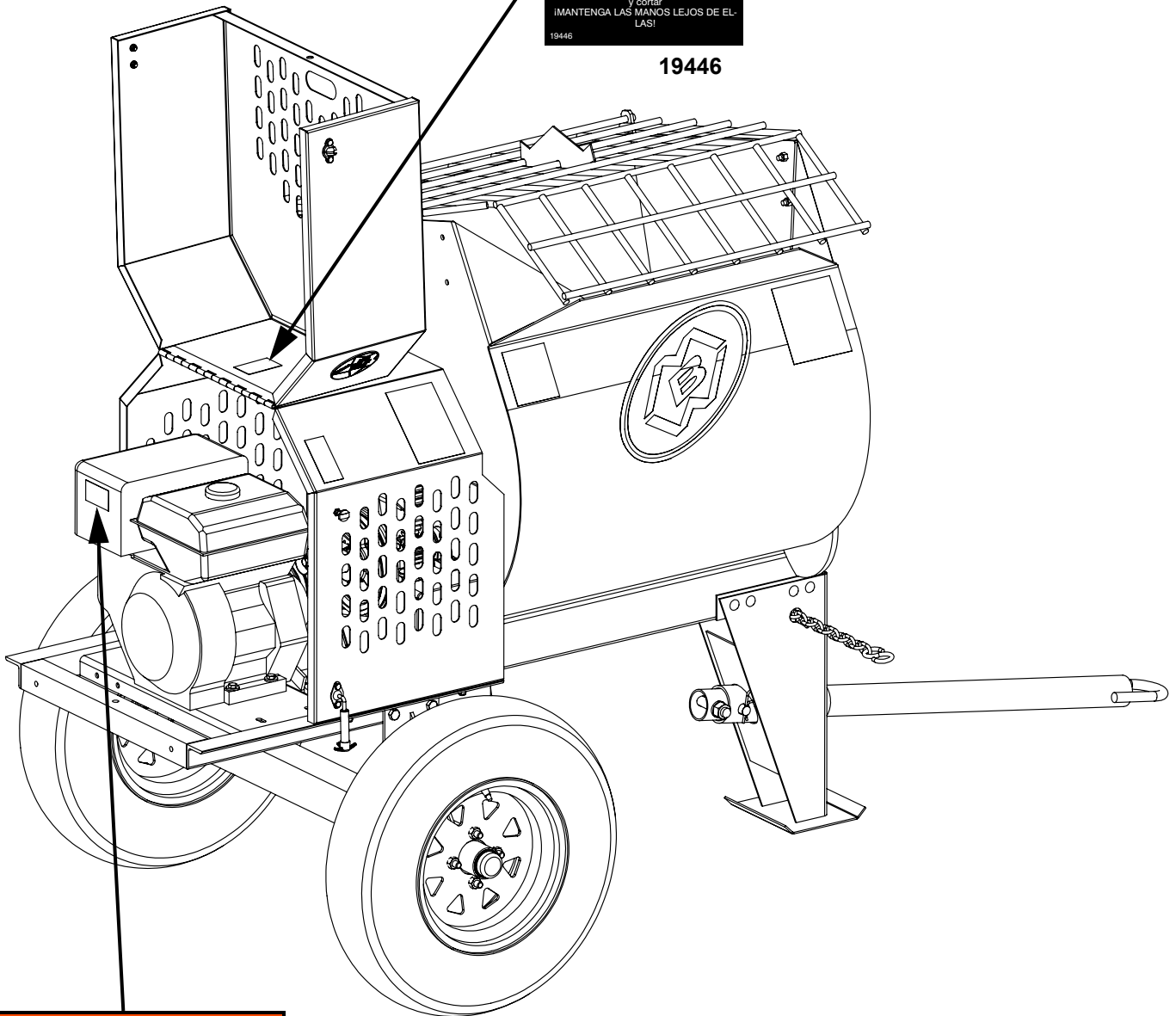


21038

Safety Decals (Decal Set)



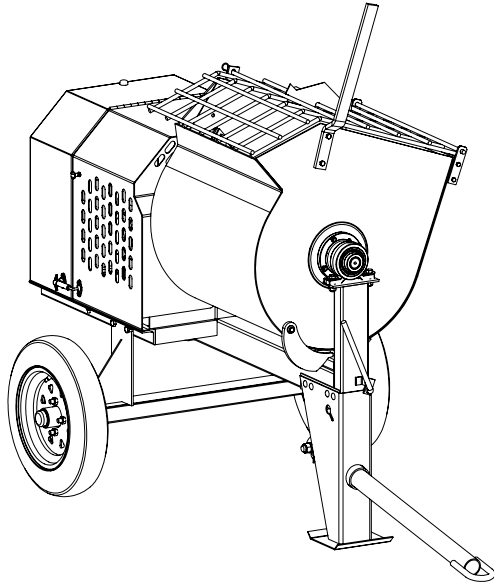
19446



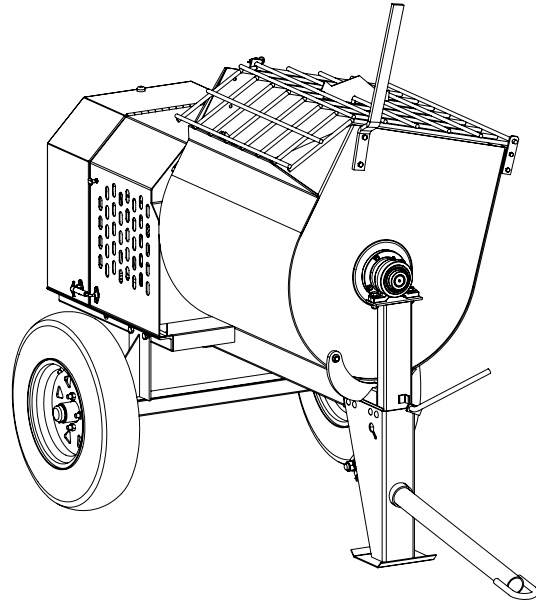
19791

Safety Decals (Decal Set #15074)

SPECIFICATIONS



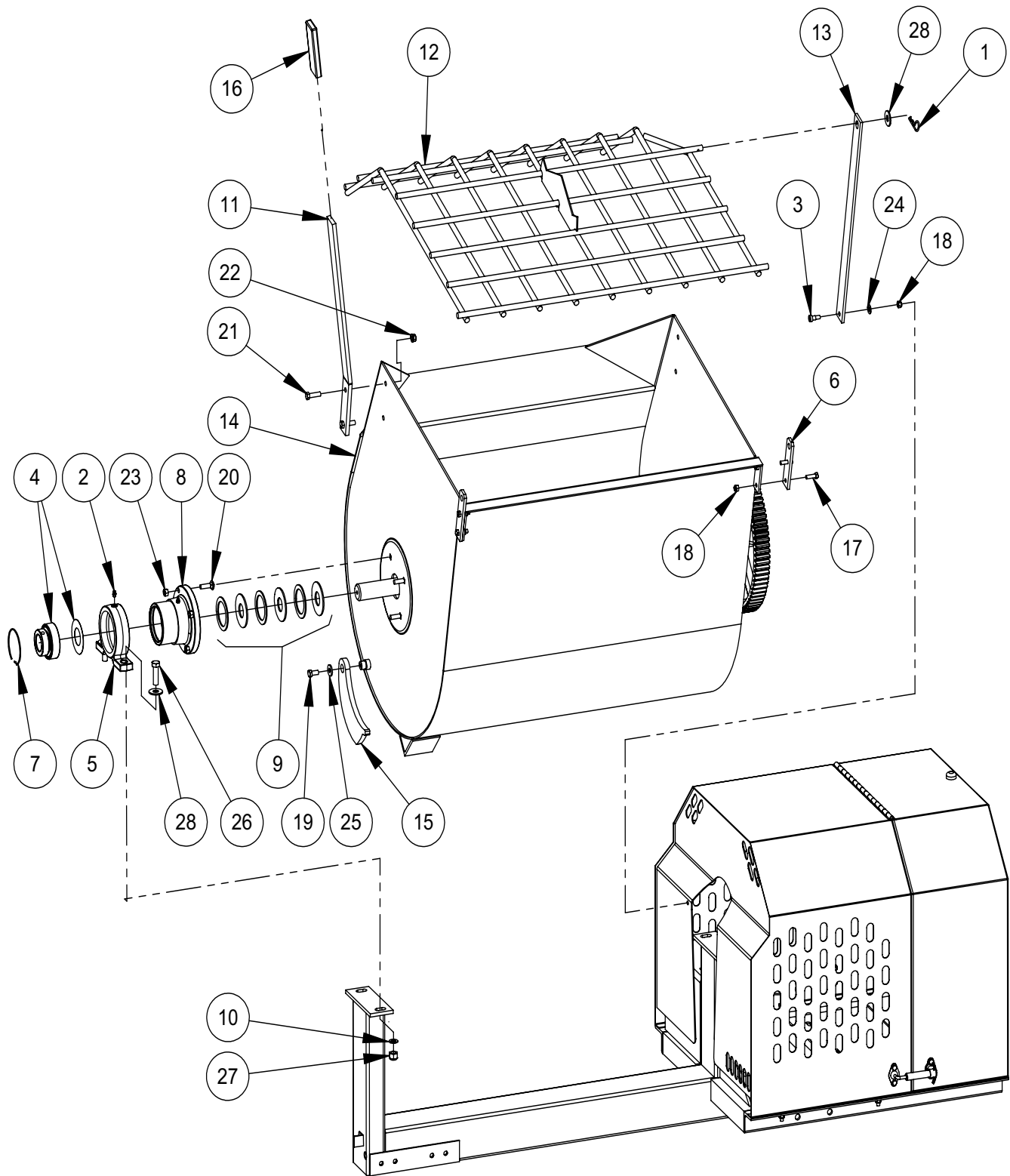
MM60



MM90

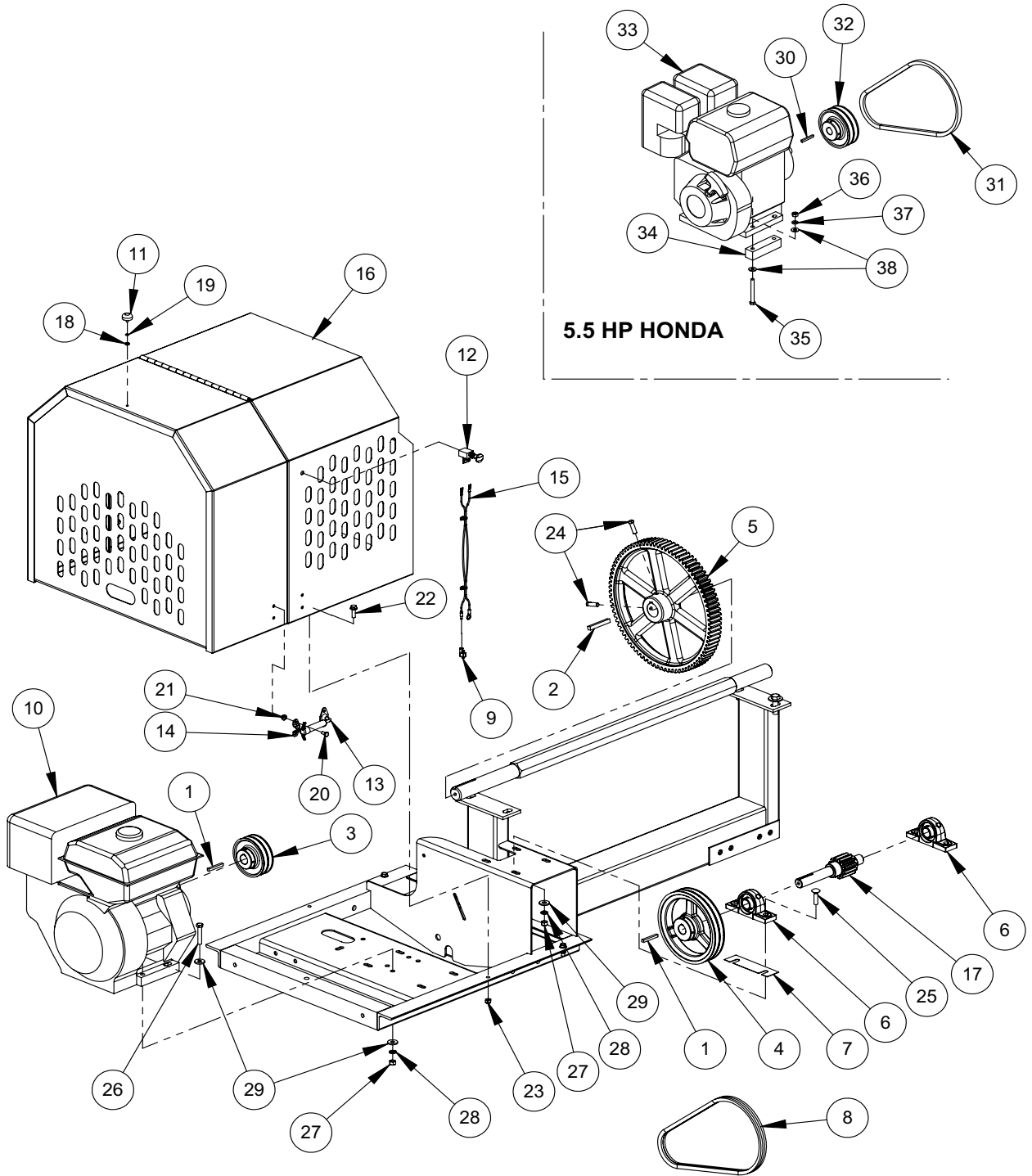
	MM60	MM80	MM90
Batch Capacity	6 cu. ft (.17 cu. m)	8 cu. ft (0.23 cu. m)	9 cu. ft (0.26 cu. m)
Batch Size	2 bags	2.5 - 3 bags	3 - 3.5 bags
Gas Engines	Honda GX160 Kohler CH255 Honda GX240 Kohler CH395	Honda GX240 Kohler CH395	Honda GX240 Kohler CH395
Engine Speed	3500 rpm	3300 rpm	3300 rpm
Drivetrain	V-belts to Gears	V-belts to Gears	V-belts to Gears
Electric Motors	Baldor 1.5 hp (1-phase)	Baldor 2 hp (1-phase)	Baldor 3 hp (1-phase)
Motor Draw	115V - 18A 230V - 9A	230V - 14A	230V - 15.5A
Motor Speed	1725 rpm	1725 rpm	1725 rpm
Drivetrain	Chain to V-belts to Gears	Chain to V-belts to Gears	Chain to V-belts to Gears
Axle	46" Solid Axle	46" Solid Axle	46" Solid Axle
Wheels	4.80 x 12 High-Speed	ST175/80D13 High-Speed	ST175/80D13 High-Speed
Size - W x L x H	46 x 64 x 56 in (117 x 163 x 142 cm)	46 x 67 x 57 in (117 x 170 x 145 cm)	46 x 71 x 57 in (117 x 180 x 145 cm)
Weight	650 lbs (295 kg)	715 lbs (324 kg)	730 lbs (331 kg)
Charging Height	47 in (119 cm)	49 in (124 cm)	49 in (124 cm)

Specifications subject to change without notice



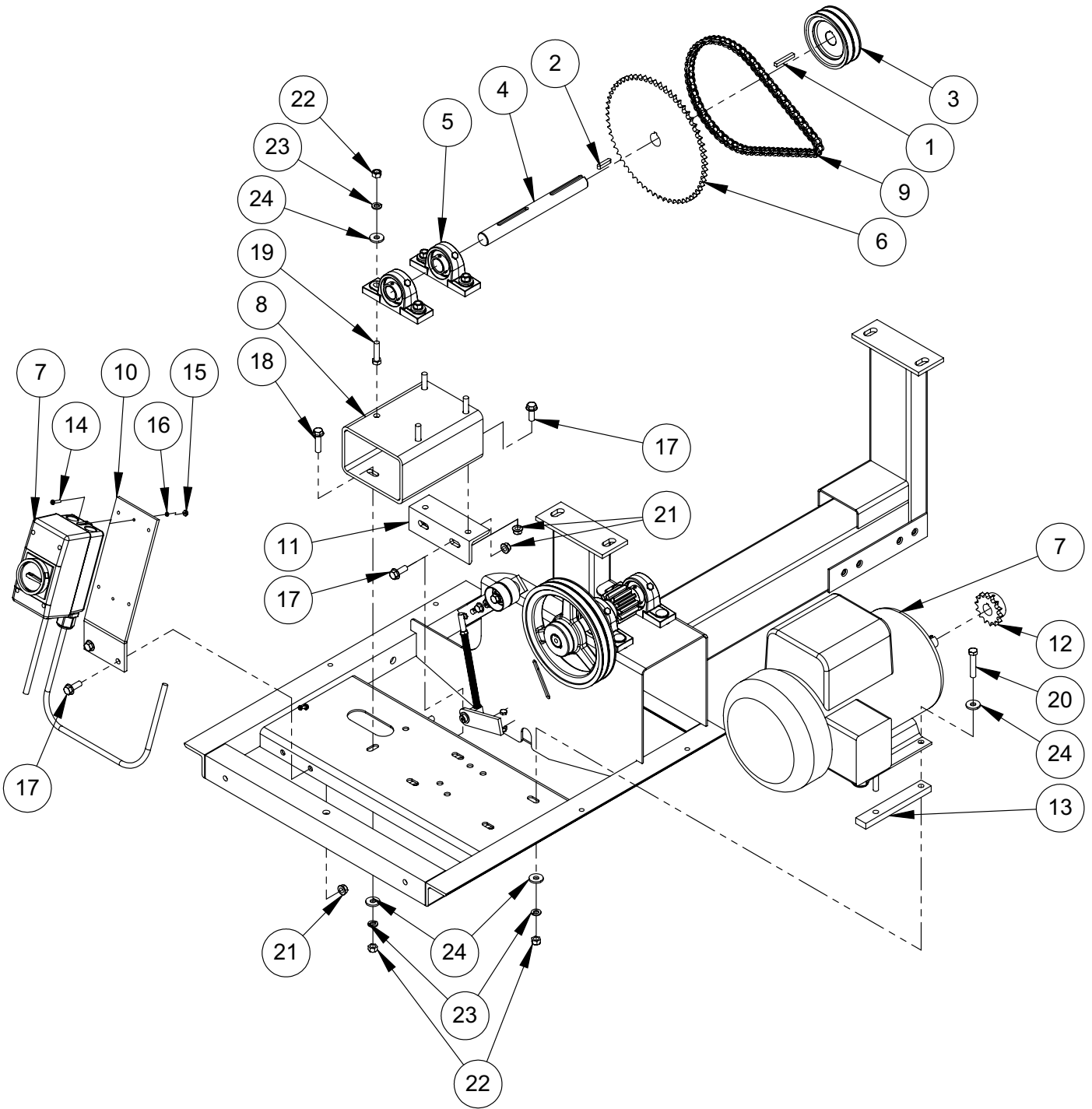
Drum Assembly

ITEM	PART NO.	DESCRIPTION	MM60	MM80	MM90
1.	01056	HAIRPIN, 1/8" x 2-3/8" LONG	1	1	1
2.	01177	GREASE FITTING, 45	4	4	4
3.	01280	SOCKET HEAD SHOULDER SCREW, 3/8" x 3/8"	1	1	1
4.	01550	BALL BEARING (Includes seal & locking collar)	2	2	2
5.	05002	PILLOW BLOCK	2	2	2
6.	05082	BRACKET, GRID SUPPORT	2	2	2
7.	05475	RING, RETAINING	2	2	2
8.	05665	TRUNNION	2	2	2
9.	05918	SEAL KIT	2	2	2
10.	06327	WASHER	4	4	4
11.	16737	HANDLE, DUMP	1	1	1
12.	16806	GRID, MM60	1		
	16807	GRID, MM80		1	
	16781	GRID, MM90			1
13.	16832	OPENER, GRID, MM60	1		
	16782	OPENER, GRID		1	1
14.	17076	DRUM, MM60	1		
	17077	DRUM, MM80		1	
	17078	DRUM, MM90			1
15.	17079	LOCKING BAR	1	1	1
16.	18903	GRIP, DUMP HANDLE	1	1	1
17.	F051808HCS	HEX HEAD CAP SCREW, 5/16-18 x 1"	4	4	4
18.	F0518ELN	ELASTIC LOCKNUT, 5/16-18	5	5	5
19.	F061606HCS	HEX HEAD CAP SCREW, 3/8-16 x 3/4"	1	1	1
20.	F061610CB	CARRIAGE BOLT, 3/8-16 x 1-1/4"	8	8	8
21.	F061610HCS	HEX HEAD CAP SCREW, 3/8-16 x 1-1/4"	2	2	2
22.	F0616ELN	ELASTIC LOCKNUT, 3/8-16	2	2	2
23.	F0616FN	FLANGE WHIZ-LOCK NUT, 3/8-16	8	8	8
24.	F06PW	WASHER, 3/8" SAE	1	1	1
25.	F06SW	WASHER, 3/8"	1	1	1
26.	F081314HCS	HEX HEAD CAP SCREW, 1/2-13 x 1-3/4"	4	4	4
27.	F0813ELN	LOCKNUT, 1/2-13 NYLOC ZP	4	4	4
28.	F08SW	WASHER, 1/2"	5	5	5
		REPLACEMENT KITS			
	01427	GREASE FITTING CAPS (Set of 12)	1	1	1
	06090	TRUNNION ASSEMBLY (Includes 2,4,7-9)	2	2	2
	17230*	DRUM ASSEMBLY, MM60	1		
	17231*	DRUM ASSEMBLY, MM80		1	
	17232*	DRUM ASSEMBLY, MM90			1
		* Includes trunnions, pillow blocks, shaft, paddles, & grid			



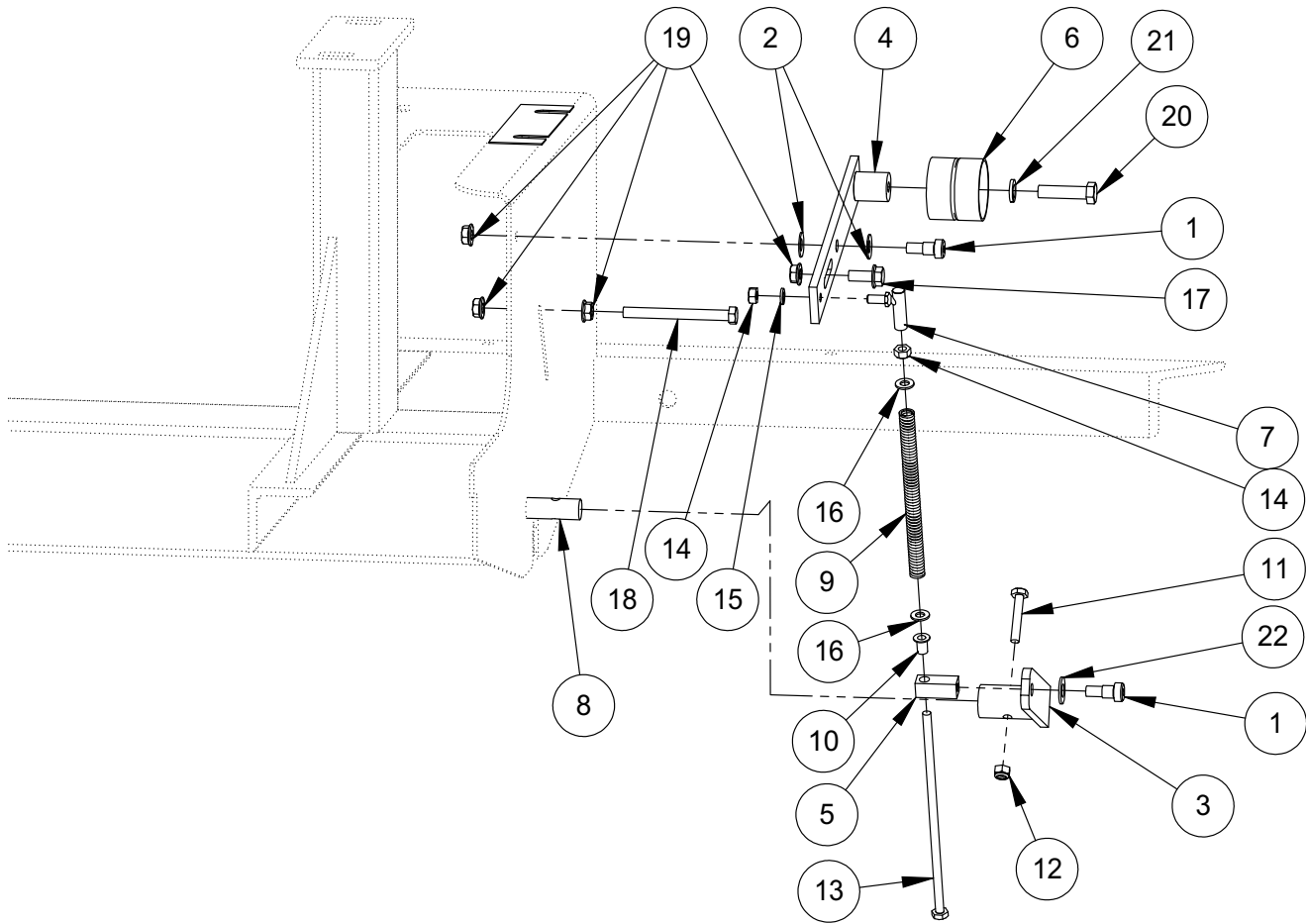
Drivetrain Assembly

ITEM	PART NO.	DESCRIPTION	MM60	MM80	MM90
1.	00808	KEY, 1/4" SQUARE x 1-3/4" LONG	2	2	2
2.	01159	KEY, 3/8" SQUARE x 2-3/4" LONG	1	1	1
3.	01561	SHEAVE, 2A - 4" (8 hp Honda)	1	1	1
4.	01562	SHEAVE, 2A - 8"	1	1	1
5.	01563	SPUR GEAR, 84 TOOTH	1	1	1
6.	05586	BEARING, PILLOW BLOCK	2	2	2
7.	05692	SHIM, MIXER (AS REQUIRED)	1	1	1
8.	05741	V-BELT, AX-38	2	2	2
9.	07592	TERMINAL, SPLICE	1	1	1
10.	07755	ENGINE, HONDA 8 HP	1	1	1
11.	21675	ENGINE, KOHLER CH395	1	1	1
	16750	BUMPER, RUBBER	1	1	1
12.	16783	SWITCH	1	1	1
13.	16813	LATCH, METAL	2	2	2
14.	16816	CATCH PLATE, METAL LATCH	2	2	2
15.	16820	HARNESS, WIRING	1	1	1
16.	17135	SHROUD ASSEMBLY (Includes 11,13,14 & 18-21)	1	1	1
17.	17404	PINION GEAR SHAFT, 12 TOOTH	1	1	1
18.	F0324HN	HEX NUT, #10-24	1	1	1
19.	F03LW	LOCKWASHER, #10	1	1	1
20.	F042004HCS	HEX HEAD CAP SCREW, 1/4-20 x 1/2"	8	8	8
21.	F0420FN	FLANGE NUT, 1/4-20	8	8	8
22.	F051808FWS	FLANGE BOLT, 5/16-18 x 1"	4	4	4
23.	F0518ELN	HEX HEAD CAP SCREW, 5/16-18	4	4	4
24.	F061610SHS	SQUARE HEAD SET SCREW, 3/8-16 x 1-1/4"	2	2	2
25.	F061612CB	CARRIAGE BOLT, 3/8-16 x 1-1/2"	4	4	4
26.	F061616HCS	HEX HEAD CAP SCREW, 3/8-16 x 2"	4	4	4
27.	F0616HN	HEX NUT, 3/8-16	8	8	8
28.	F06LW	LOCKWASHER, 3/8"	8	8	8
29.	F06SW	WASHER, 3/8"	12	12	12
		5.5 HP HONDA ENGINE OPTION			
30.	00032	KEY, 3/16" SQUARE x 1-5/8" LONG	1		
31.	05606	V-BELT, COGGED (AX-37) - S/N 7010432 and above	2		
	05741	V-BELT, COGGED (AX-38) - S/N 7010431 and below	2		
32.	15223	SHEAVE, 2A - 4"	1		
33.	15224	ENGINE, HONDA 5.5 HP	1		
34.	17703	SPACER, 5.5 HP ENGINE - S/N 7010432 and above	2		
35.	F051822HCS	HEX HEAD CAP SCREW, 5/16-18 x 2-3/4"	4		
36.	F0518HN	HEX NUT, 5/16-18	4		
37.	F05LW	LOCKWASHER, 5/16"	4		
38.	F05SW	WASHER, 5/16"	8		
		SERVICE PARTS			
	06028	SHAFT ASSEMBLY, INTERMEDIATE (Includes 6 & 17)			

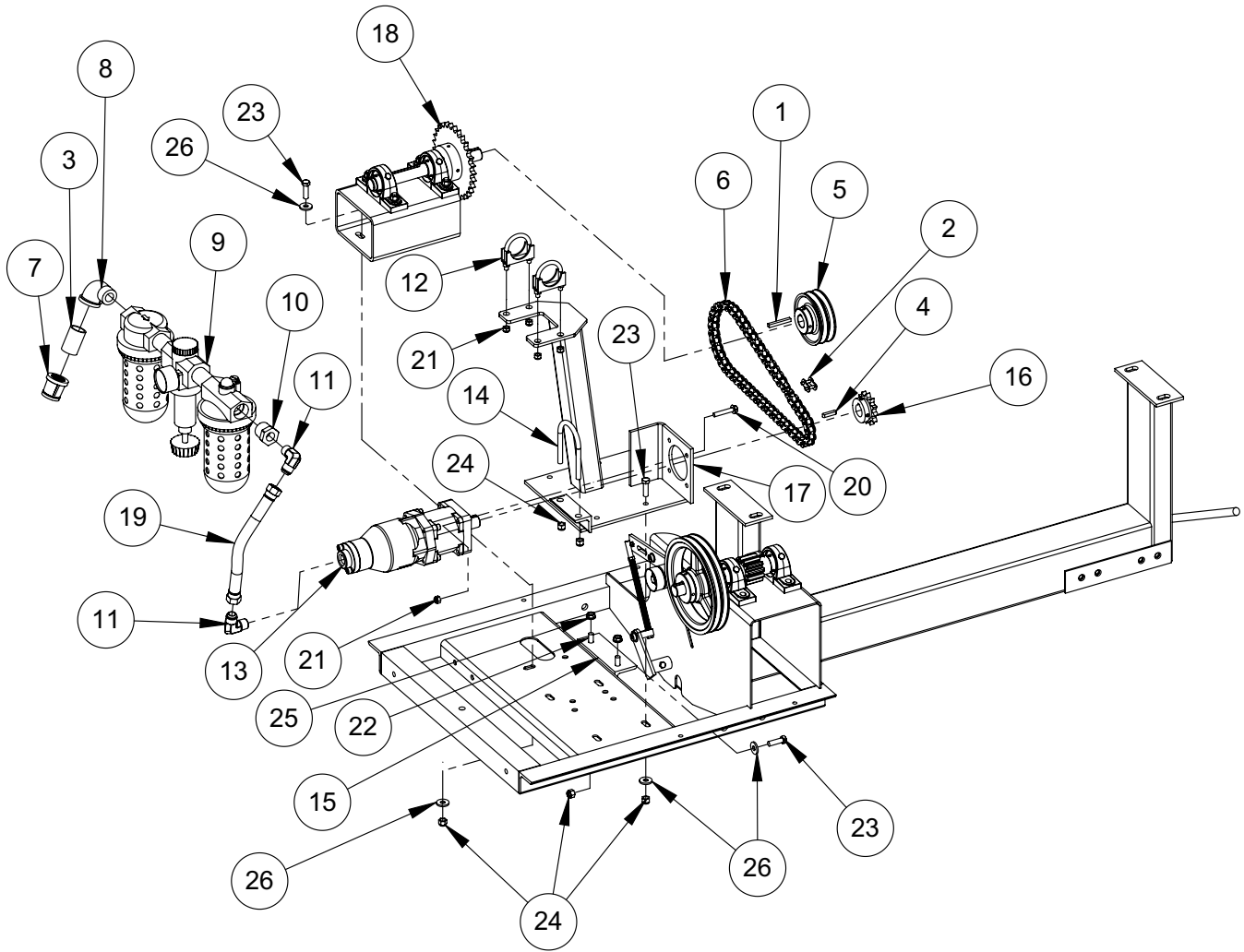


Electric Motor Drivetrain Assembly

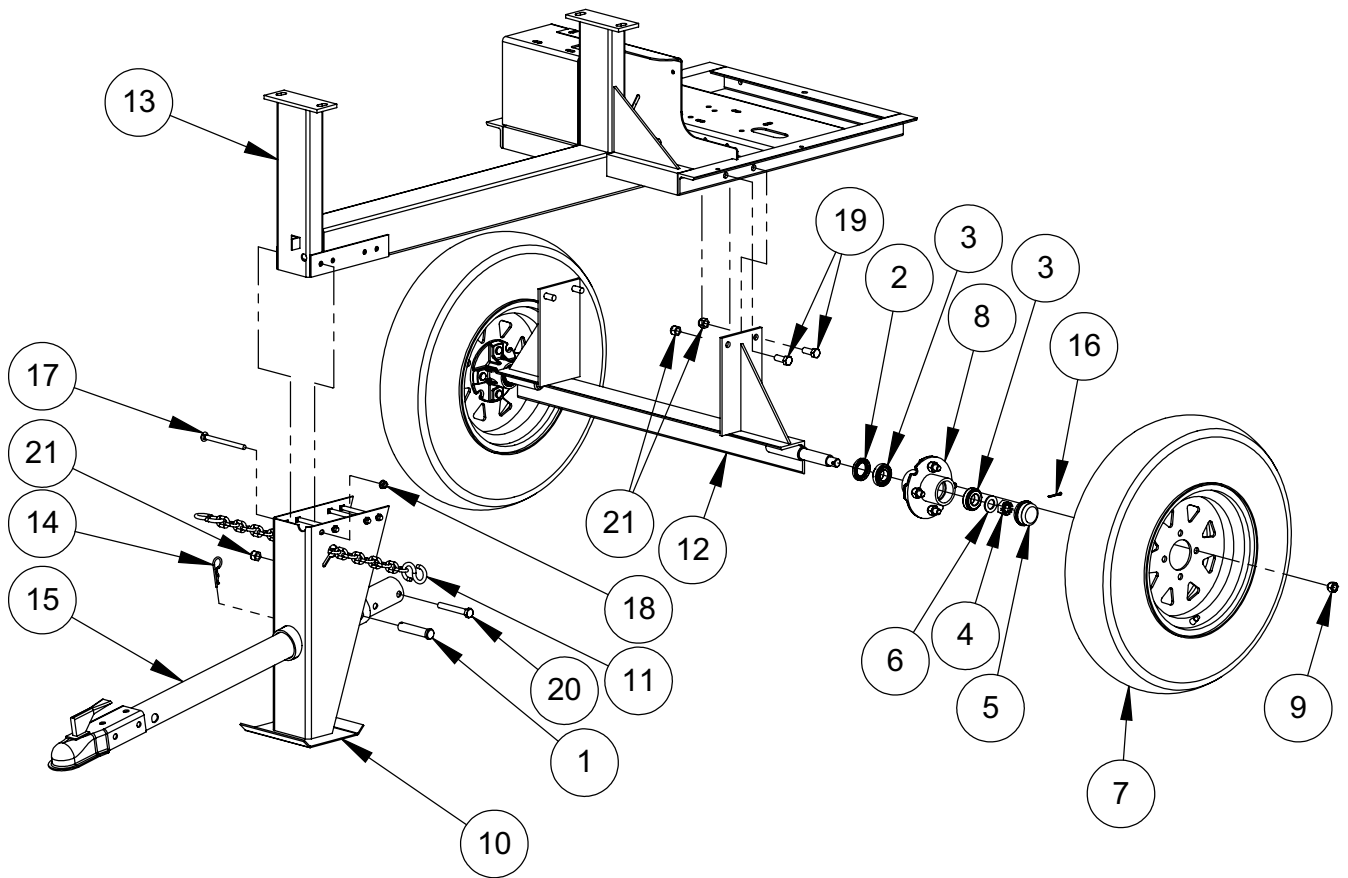
ITEM	PART NO.	DESCRIPTION	1.5HP	2HP	3 HP
1.	00808	KEY, 1/4" SQUARE x 1-3/4" LONG	2	2	2
2.	01283	KEY, 1/4" SQUARE x 1-1/4" LONG	1	1	1
3.	01561	SHEAVE, 2A - 4"	1	1	1
4.	19876	SHAFT, INTERMEDIATE	1	1	1
5.	05586	BEARING, PILLOW BLOCK	2	2	2
6.	16585	SPROCKET, 60 TOOTH	1	1	1
7.	06067	MOTOR, ELECTRIC 1.5 HP, 1-PHASE, 230 VOLT	1		
	19918	MOTOR, ELECTRIC 1.5 HP, 1-PHASE, 115 VOLT			
	06025	MOTOR, ELECTRIC 2 HP, 1-PHASE, 230 VOLT		1	
	16729	MOTOR, ELECTRIC 3 HP, 1-PHASE, 230 VOLT			1
8.	16936	STAND, PILLOW BLOCK	1	1	1
9.	16939	CHAIN, #40 ROLLER, 35"	1	1	1
10.	16940	BRACKET, MOUNTING			1
11.	16941	ANGLE	1	1	1
12.	16942	SPROCKET, 14 TOOTH	1	1	1
13.	16943	BAR	2	2	2
14.	F023206PMS	PAN HEAD MACHINE SCREW, #8-32 x 3/4"	2	2	2
15.	F0232HN	HEX NUT, #8-32			4
16.	F02LW	LOCK WASHER, #10			4
17.	F061608FWS	FLANGE LOCKING SCREW, 3/8-16 x 1"	6	6	8
18.	F061610HCS	HEX HEAD CAP SCREW, 3/8-16 x 1-1/4"	1	1	1
19.	F061612HCS	HEX HEAD CAP SCREW, 3/8-16 x 1-1/2"	4	4	4
20.	F061616HCS	HEX HEAD CAP SCREW, 3/8-16 x 2"	4	4	4
21.	F0616FN	FLANGE LOCK NUT, 3/8-16	6	6	8
22.	F0616HN	HEX NUT, 3/8-16	7	7	7
23.	F06LW	LOCK WASHER, 3/8"	9	9	9
24.	F06SW	WASHER, 3/8"	12	12	12
		REPLACEMENT KITS			
	06068	ADAPTER, 145T TO 182-184T FRAME (Included with 1.5hp motor)			
	19916	MOTOR CONTROLLER, 115V 20 AMP (ENCLOSURE & STARTER)			
	19917	MOTOR CONTROLLER, 230V 16 AMP (ENCLOSURE & STARTER)			
	19919	SWITCH ENCLOSURE			
	19920	MOTOR STARTER, 115V 20 AMP			
	19921	MOTOR STARTER, 230V 16 AMP			



Idler Assembly

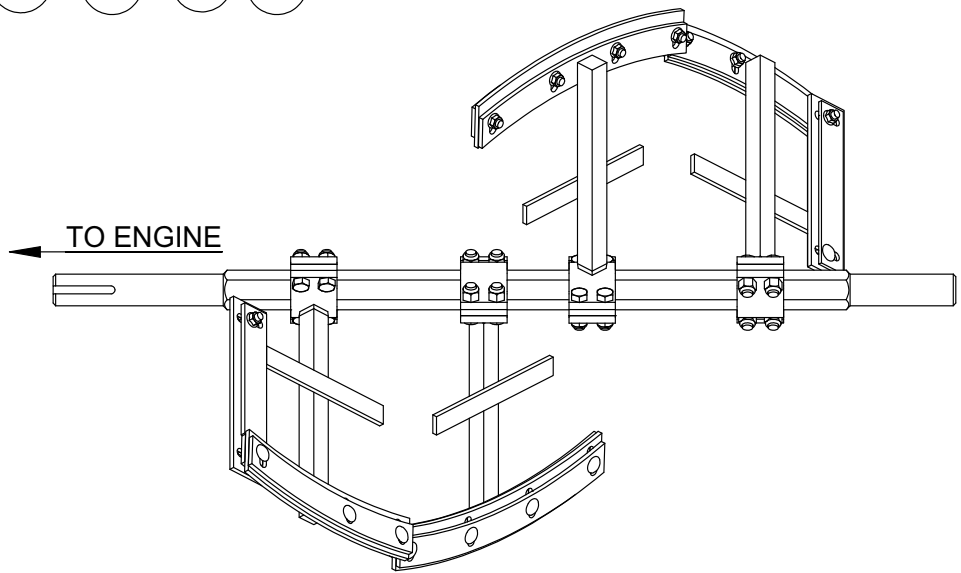
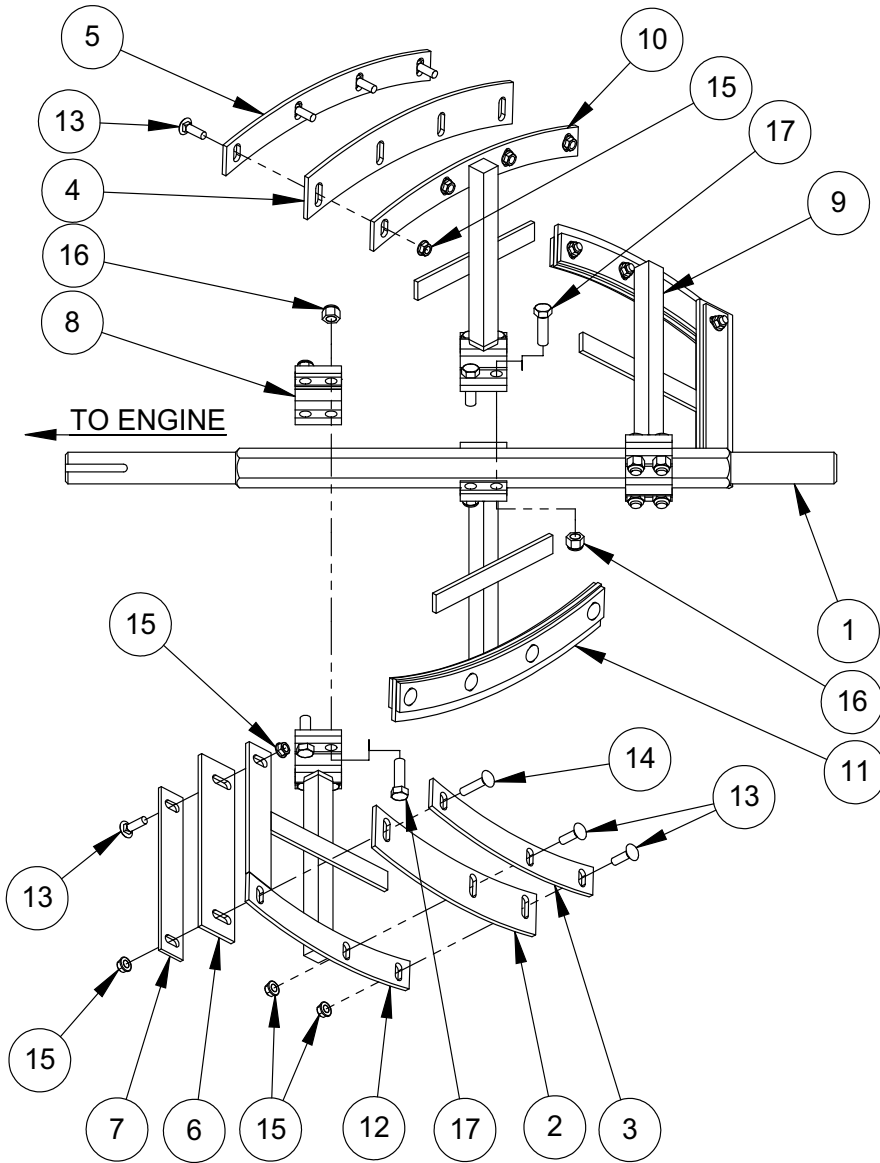


Air Mixer Assembly



Frame & Axle Assembly

ITEM	PART NO.	DESCRIPTION	MM60	MM80	MM90
1.	01150	PIN, CLEVIS	1	1	1
2.	01170	SEAL, GREASE	2	2	2
3.	01171	BEARING, 1" (Cup & cone)	4	4	4
4.	01174	CASTLE NUT, 3/4-16	2	2	2
5.	01175	COVER, DUST	2	2	2
6.	01235	WASHER	2	2	2
7.	01557	WHEEL, 4.80" x 12"	2		
	06442	WHEEL, ST175/80D13		2	2
8.	01558	HUB ASSEMBLY 4-BOLT, 1" (Includes 2-6, 9,16)	2	2	2
9.	05844	WHEEL NUT, 1/2-20	8	8	8
10.	16743	LEG, FRONT	1	1	1
11.	16771	CHAIN, SAFETY (10 ft.)	1	1	1
12.	16817	AXLE, 12" WHEELS (Includes hubs)	1		
	16818	AXLE, 13" WHEELS (Includes hubs)		1	1
13.	17073	FRAME, MM60	1		
	17074	FRAME, MM80		1	
	17075	FRAME, MM90			1
14.	17158	HAIRPIN, 5/32" x 2-11/16" LONG	1	1	1
15.	21400	TOW POLE, BALL HITCH (Includes items #1, 14, 20 & 21)	1	1	1
16.	F0210CP	COTTER PIN, 1/8" x 1-1/4"	2	2	2
17.	F061640CB	CARRIAGE BOLT, 3/8-16 x 5"	4	4	4
18.	F0616FN	FLANGE NUT, 3/8-16	4	4	4
19.	F081310HCS	HEX HEAD CAP SCREW, 1/2-13 x 1-1/4"	4	4	4
20.	F081328HCS	HEX HEAD CAP SCREW, 1/2-13 x 3-1/2" LG.	1	1	1
21.	F0813ELN	HEX NYLOC NUT, 1/2-13	5	5	5
		REPLACEMENT KITS			
	07334	WHEEL STUD (Round serrated shank - Cast iron hub)	8	8	8
		ACCESSORIES			
	17957	3" MIXER LIFT KIT			
	19866	KIT, TORSION AXLE			



MM90 PADDLE ORIENTATION

Paddle Assembly

