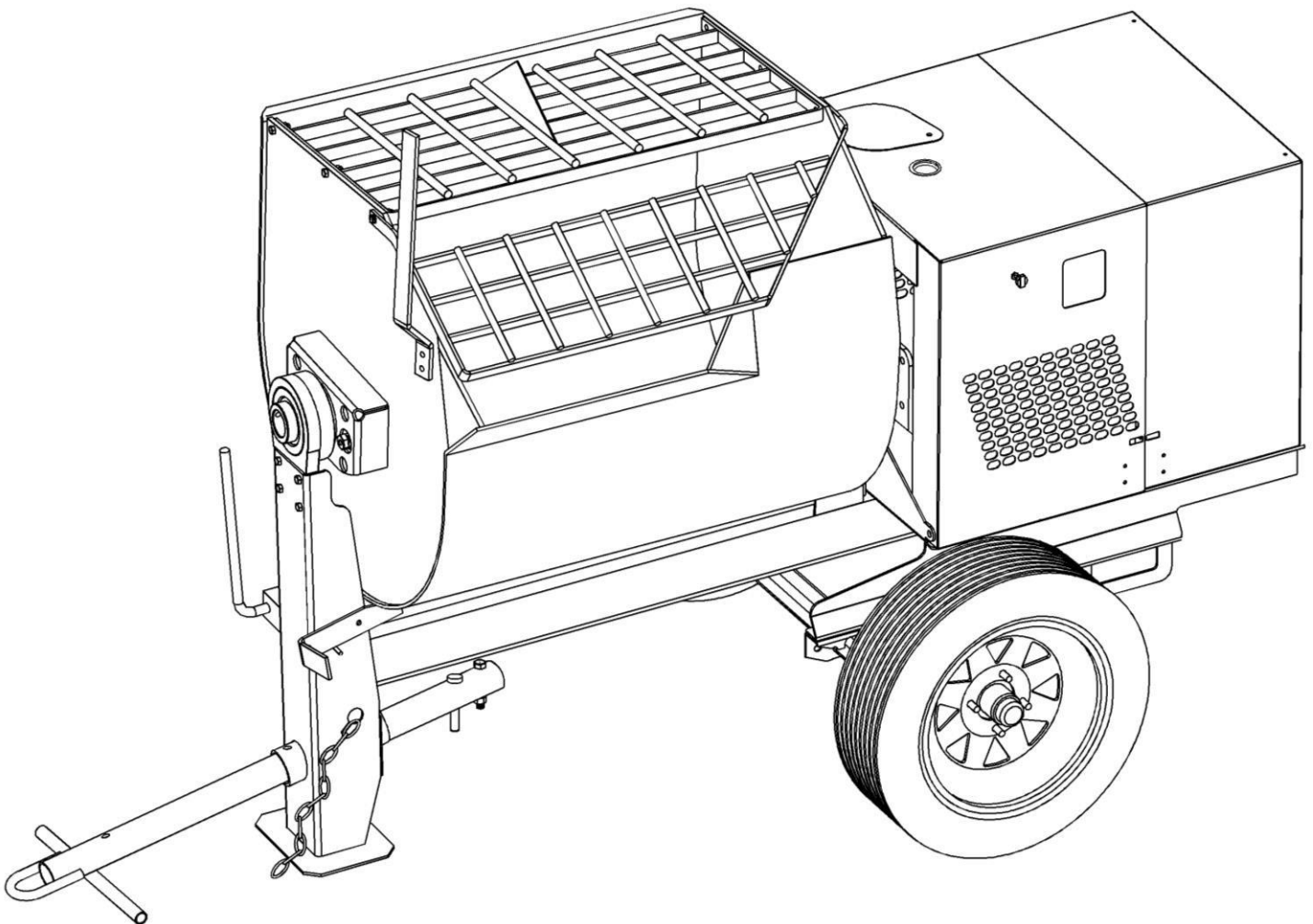


REPAIR PARTS MANUAL

SERIES	MM-Mech
BULLETIN No.	200089R6
SUPERSEDES	200089R5
DATE	Oct 2007

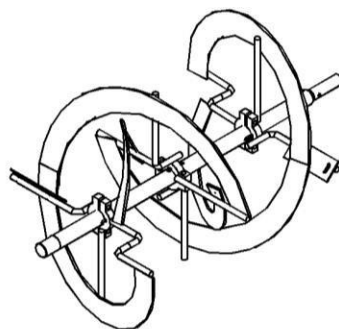
Last Rev: Dec 2019

MORTAR MIXERS 12S - S12S

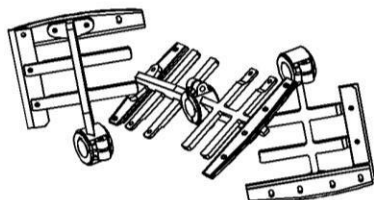


MORTAR MIXERS

12-S - S12S

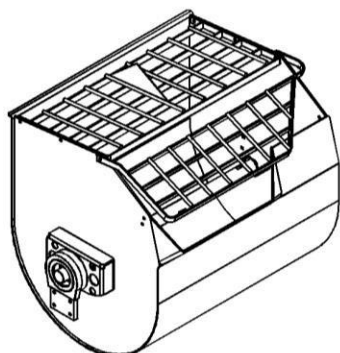
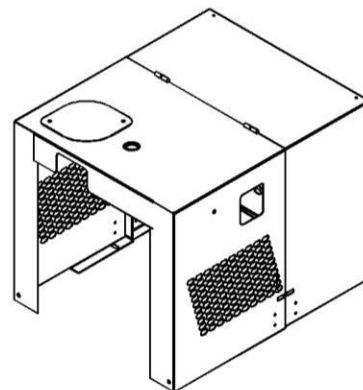


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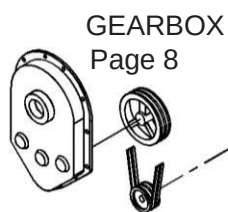


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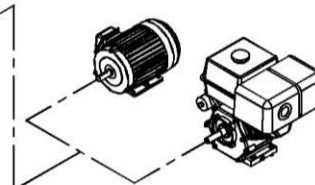
HOOD
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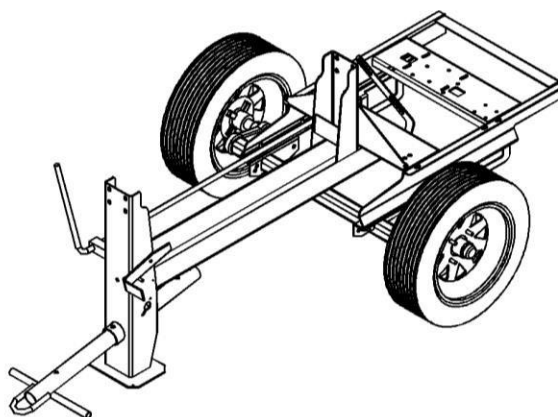
DRUM
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GEARBOX
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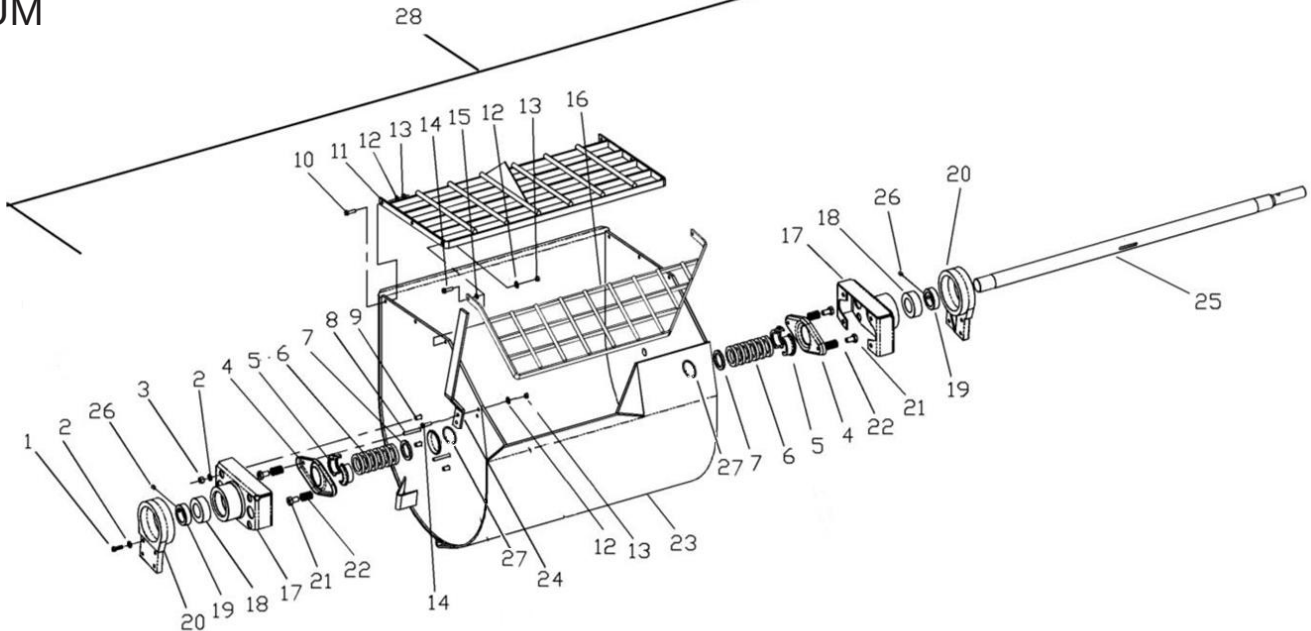


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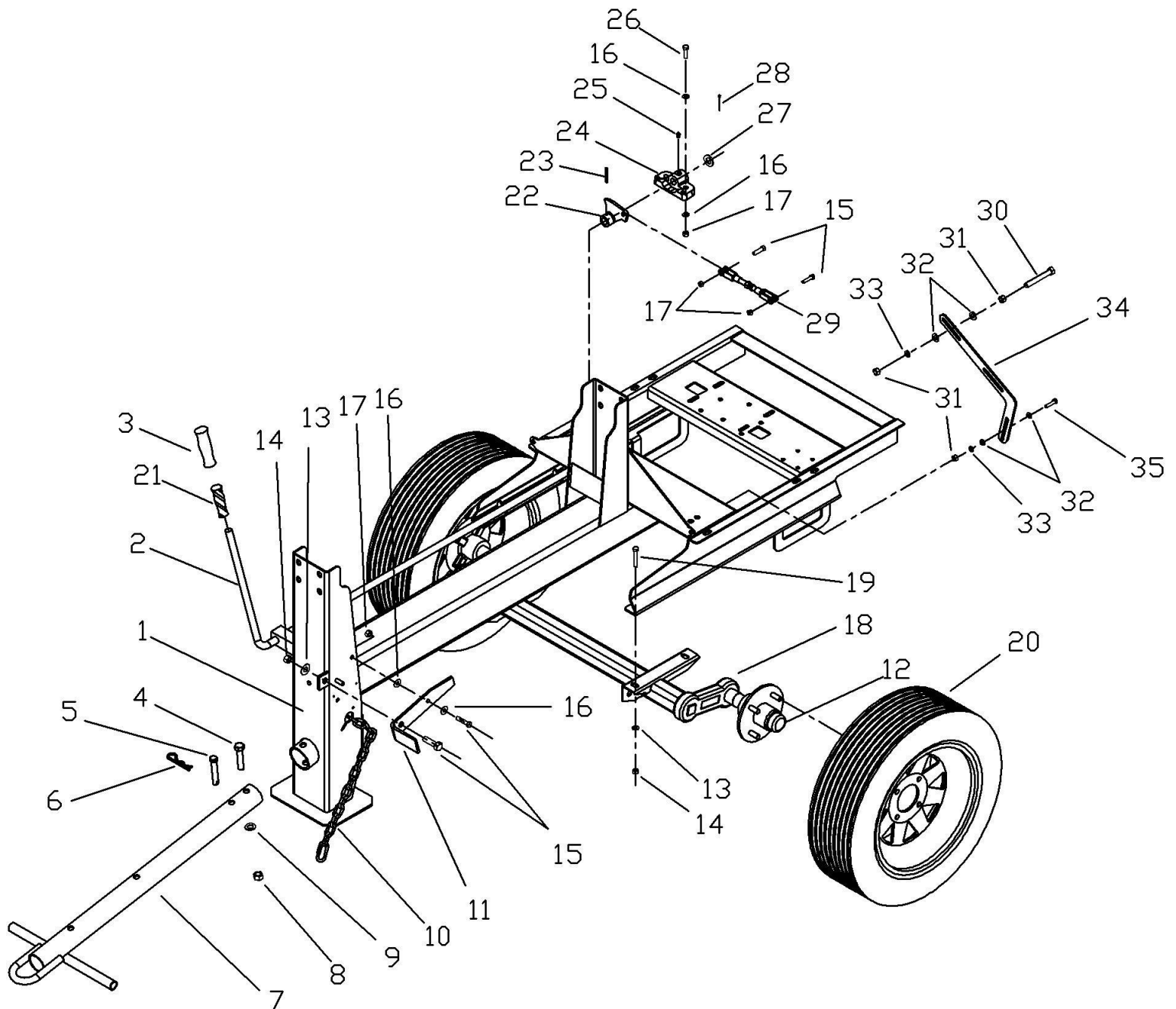
FRAME
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DRUM



Ref	SKU #	Part #	Description	12S	S12S
1	TOCD012112	226650	Bolt, Hex HD, 1/2 x 1-1/2 (TOCD012112)	8	8
2	RNRX012GAL	176250	Washer, Spring, 1/2 (RNRX012GAL)	8	8
3	TCCS012GAL	227854	Nut, Hex, 1/2, Top Lock, Gr5 (TCCS012GAL)	8	8
4		496855	Spring Plate	2	2
5		465925	Gland, Half Packing	4	4
6		465920	Packing, Alb# 176 3/8 x 3/8 x 7.25L	12	12
7		465915	Packing Seal Ring	2	2
8	TOCL038300	117831	Bolt, Carriage, 3/8 x 3 (TOCL038300)	4	4
9	TOCL038300	118331	Bolt, Carriage 1/2 x 1.5 (TOCL038300)	8	8
10	TOCD038114	226220	Bolt, Hex HD, 3/8 x 1-1/4 (TOCD038114)	4	4
11		496490	Grill, Fixed	1	1
12	RNPX038GAL	174986	Washer, Plain, 3/8 (RNPX038GAL)	8	8
13	TCCS038GAL	227830	Nut, Hex, Lock 3/8 (TCCS038GAL)	8	8
14	TOCD038112	226230	Bolt, Hex HD, 3/8 x 1-1/2 (TOCD038112)	3	3
15	RNPX012GAL	174470	Washer, 1/2 (RNPX012GAL)	2	2
16		496395	Grill, Hinged	1	1
17		496850	Trunnion	2	2
18		110452	Ball Bearing, 3210 - 2RS	2	2
19	OPCR012012	410453	Bearing Lock Collar, (c/w set screw # OPCR012012)	2	2
20		496071	Pivot	2	2
21		496860	T-Nut 3/8-16	4	4
22		496861	Spring, Packing Compressed	4	4
23		496852	Drum	1	1
24		496224	Drum Lever	1	1
25		496763	Old Main Shaft S12S (Includes Keys)	*	1
		496762	Main Shaft 12S - S12S since August 13, 2010 (Includes keys)	1	1
26	OPCR012012	701002	Set Screw 1/2 x 1/2 OPCR012012	2	2
27	SM02034INT	N/A	2-3/4" Drum Pipe Retaining ring 12s-s12-12sh-s16sh	2	2
28		609986	Drum Kit (includes Paddles)	1	*
		609994	Drum Kit (includes Spiral)	*	1

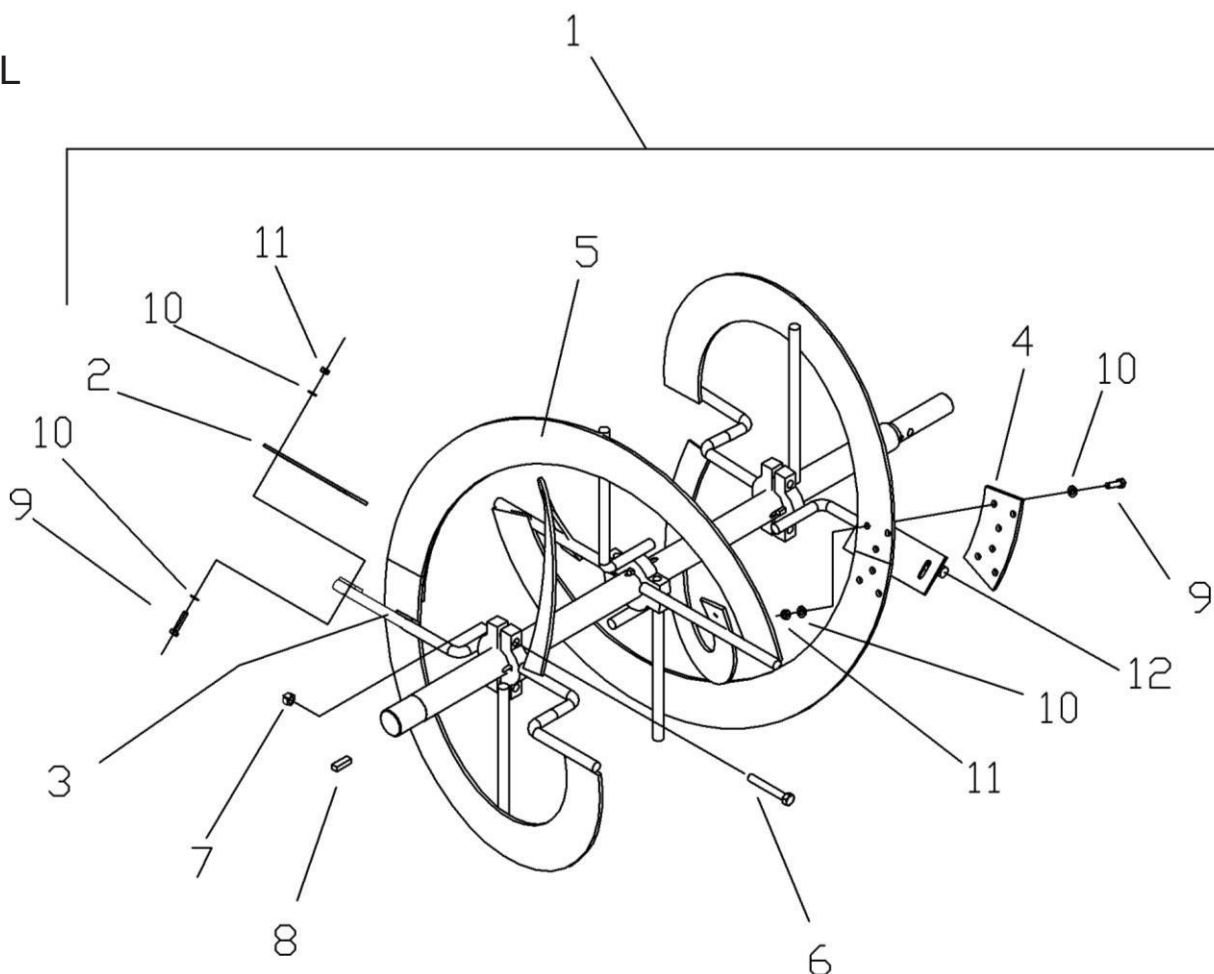
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FRAME

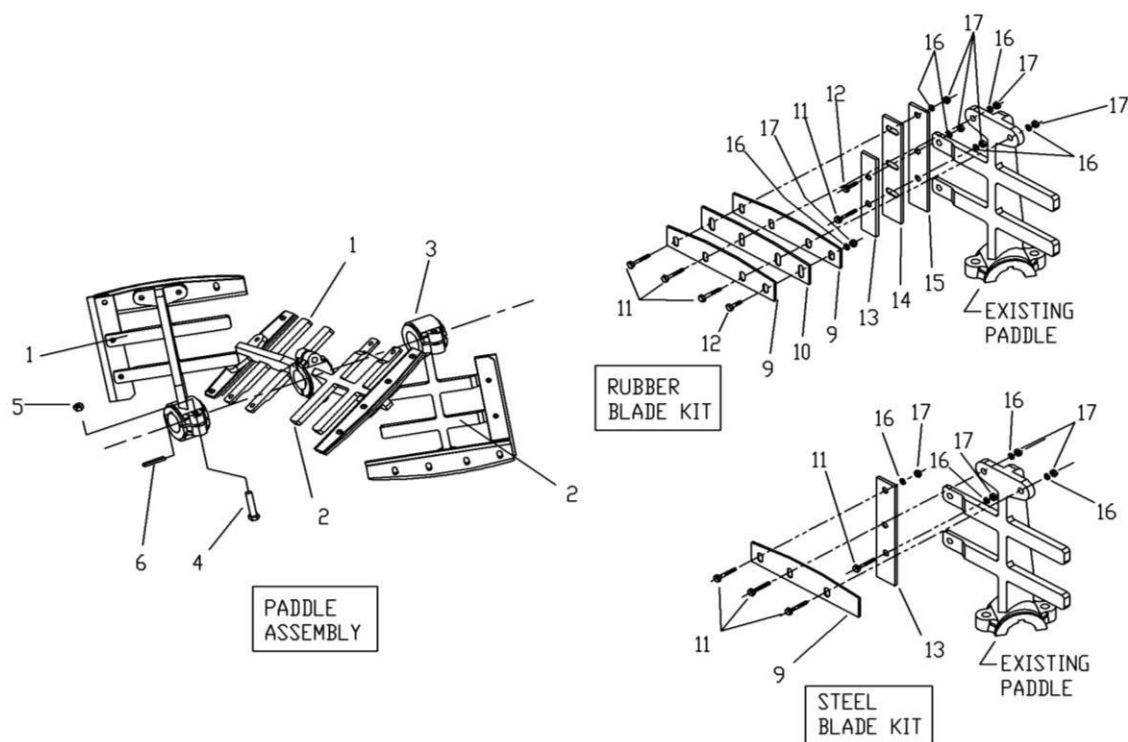
Ref	Part #	Description	12S	S12S
1	465140	Frame, 12S Assy.	1	1
2	496079	Lever	1	1
3	139350	Handgrip (0000RF01RJ)	1	1
4	226272	Bolt, Hex Hd, 3/4 x 3-1/2 NF (TOFD034312)	1	1
5	702078	Pin, Lock (0000CR01LZ)	1	1
6	134955	Hitch Pin Clip (SR00036EXT)	1	1
7	702076	Drawbar, Pintle (1000HY02LZ) since November 15, 2013	1	1
	702077	Drawbar, 2" Ball Hitch (optional) (1000HY01LZ) since November 15, 2013 Nut, 3/4	1	1
8	701028	NF (TCFN034GAL)	1	1
9	174510	Washer, Spring 3/4 (RNRX034GAL)	1	1
10	701012	Safety Chain	1	1
11	496248	Latch Plate	1	1
12	702087	Dust Cap (0000RF06RD)	2	2
13	174470	Washer, Plain 1/2 (RNPX012GAL) Nut,	5	5
14	227854	Hex, Lock 1/2 (TCCS012GAL)	5	5
15	226230	Bolt, Hex Hd, 3/8 x 1-1/2 (TOCD038112)	4	4
16	174986	Washer, 3/8 (RNPX038GAL)	6	6
17	227830	Nut, Hex, Lock 3/8 (TCCS038GAL)	5	5
18	607916	Torsion Axle	1	1
19	226660	Bolt, Hex Hd, 1/2 x 1-3/4 (TOCD012134)	4	4
20	431081	Wheel & Tire Assy. 5.5 x 13 (0000CO01RD)	2	2
21	701023	Child Hand Grip Lever	1	1
22	496049	Arm	1	1
23	135282	Pin, Spring, 5/16 x 1-1/2 (00PE056112)	1	1
24	496048	Lever Bracket	1	1
25	110680	Grease Fitting Straight 1/8 NPT	1	1
26	226250	Bolt, Hex Hd, 3/8 x 2 (TOCD038200)	2	2
27	174996	Washer, Plain 3/4 (RNPX034GAL) Cotter	1	1
28	135810	Pin, 1/8 x 1-1/2 (SC018112NOR)	1	1
29	497203	Connecting Rod Includes Yokes	1	1
30	701009	Bolt, Hex Hd, 5/16 x 3 (TOCD056300) Nut,	2	2
31	227820	Hex, 5/16 (TCCN056GAL)	6	6
32	174990	Washer, Plain 5/16 (RNPX056GAL)	8	8
33	176220	Washer, Spring, 5/16 (RNPX056GAL) Belt	4	4
34	464933	Guide	1	1
35	225980	Bolt, Hex Hd, 5/16 x 1 (TOCD056100)	2	2

SPIRAL



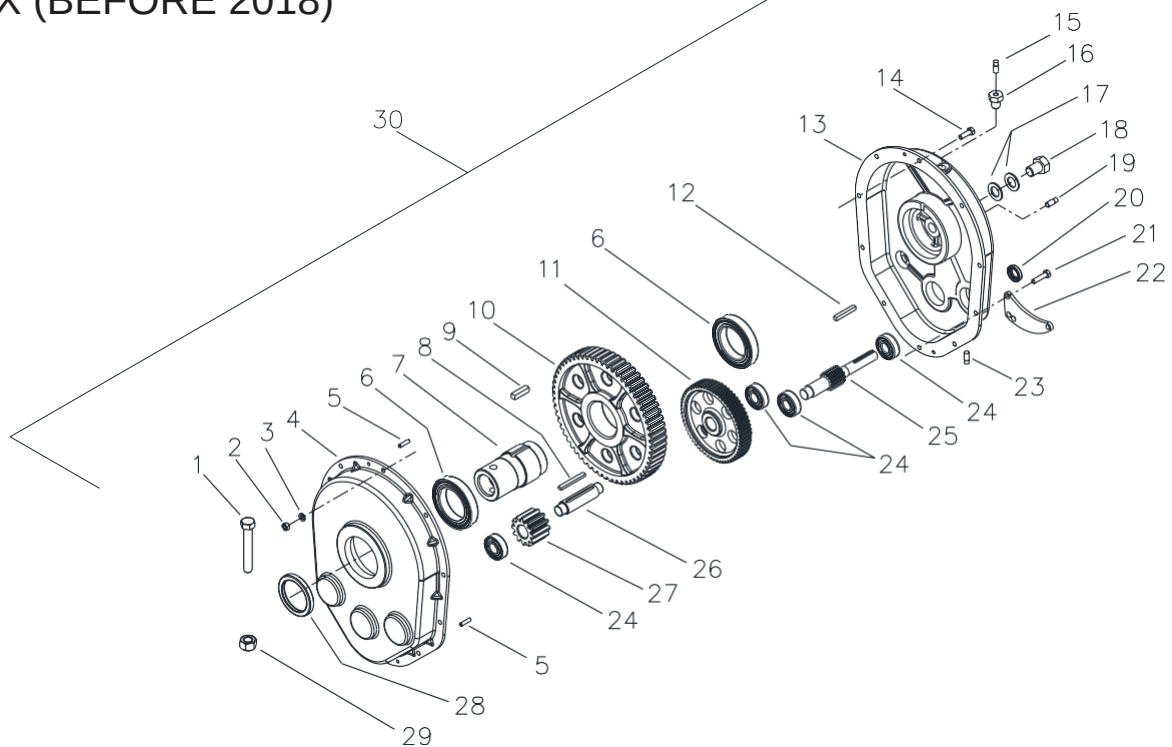
Ref	Part #	Description	12S	S12S
1	702001	Spiral Kit, S12S with Main Shaft (if your machine is before February 12, 2013)	*	1
2	496242	Scraper S12S - S16S	*	2
3	702003	Bracket, Arm Left S12SH	*	1
4	702005	Spiral Link Plate	*	2
5	465004	Spiral Assembly S12S without Main Shaft (if your machine is after February 12, 2013)	*	1
6	120520	Bolt, Hex Hd, 1/2 x 3-1/2 (TOCD012312)	*	6
7	227854	Lock Nut, 1/2 (TCCS012GAL)	*	6
8	702098	Key, 3/8 x 2-3/4	*	4
9	226220	Bolt, Hex Hd, 3/8 x 1-1/4 (TOCD038114)	*	18
10	174986	Flat Washer, 3/8 (RNPX038GAL)	*	36
11	227830	Lock Nut, 3/8 (TCCS038GAL)	*	18
12	702004	Bracket, Arm Right S12SH	*	1

PADDLE KIT - 610560



Ref	Part #	Description	12S	S12S
Paddle Assembly - 610560				
1	96125	Paddle LH	2	*
2	96124	Paddle RH	2	*
3	96126	Cap, Paddle	2	*
4	120520	Bolt, Hex Hd G5 PI 1/2 UNC x 3-1/2 (TOCD012312)	6	*
5	227854	Lock Nut, 1/2 (TCCS012GAL)	6	*
6	432160	Key 3/8 x 3	4	*
Rubber Blade Kit - 609804				
9	496097	Blade, Top	8	*
10	190973	Wiper, Top	4	*
11	226250	Bolt, Hex Hd, 3/8 x 2 (TOCD038200)	14	*
12	226230	Bolt, Hex Hd, 3/8 x 1-1/2 (TOCD038112)	6	*
13	496098	Blade, Side	2	*
14	190974	Wiper, Side	2	*
15	496099	Blade, Side	2	*
16	174986	Flat Washer, 3/8 (RNPX038GAL)	40	*
17	227830	Lock Nut, 3/8 (TCCS038GAL)	20	*
Steel Blade Kit - 609814				
9	496075	Blade, Top	4	*
11	226230	Bolt, Hex Hd, 3/8 x 1-1/2 (TOCD038112)	14	*
13	496098	Blade, Side	2	*
16	174986	Flat Washer, 3/8 (RNPX038GAL)	28	*
17	227830	Lock Nut, 3/8 (TCCS038GAL)	14	*

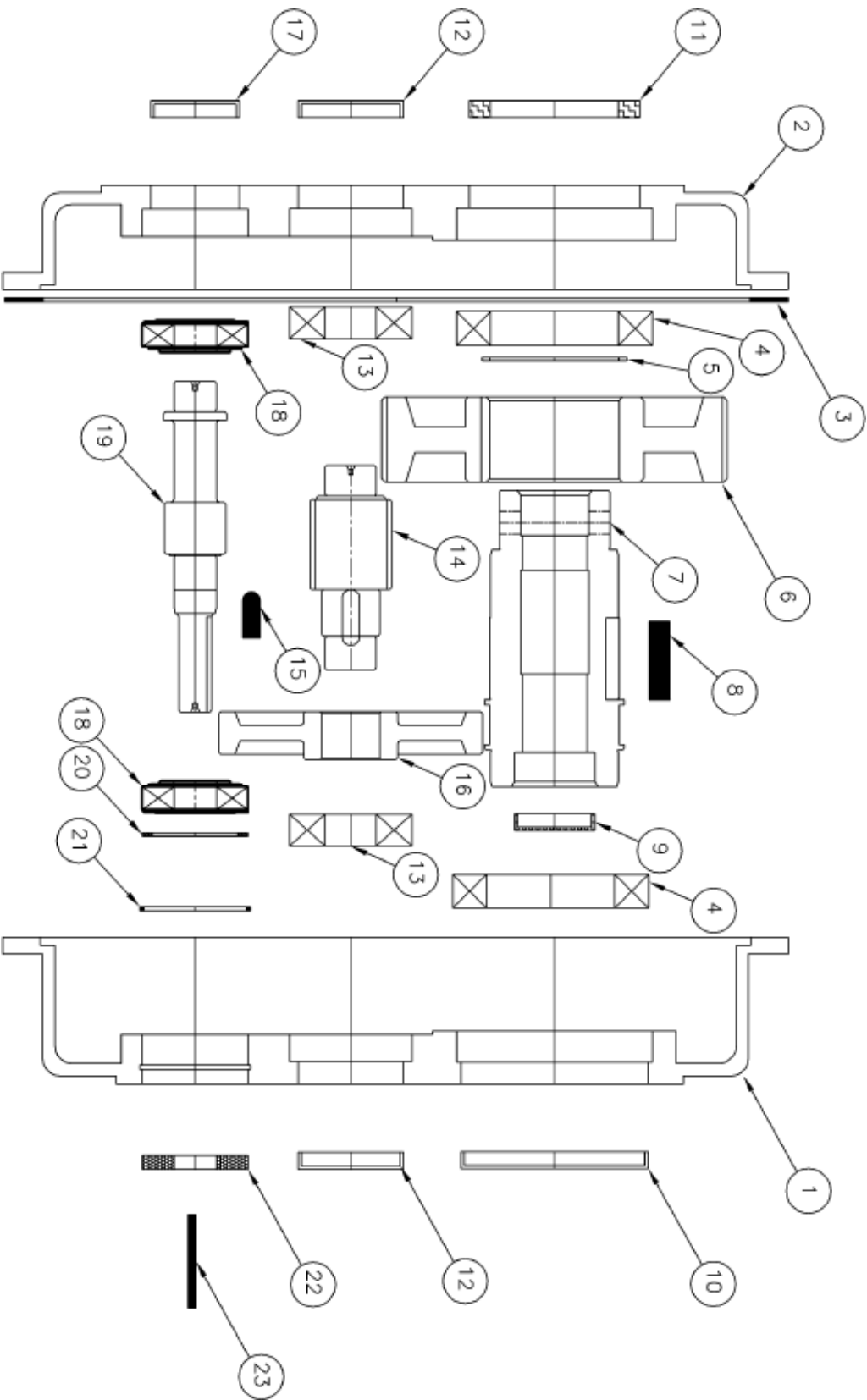
GEARBOX (BEFORE 2018)



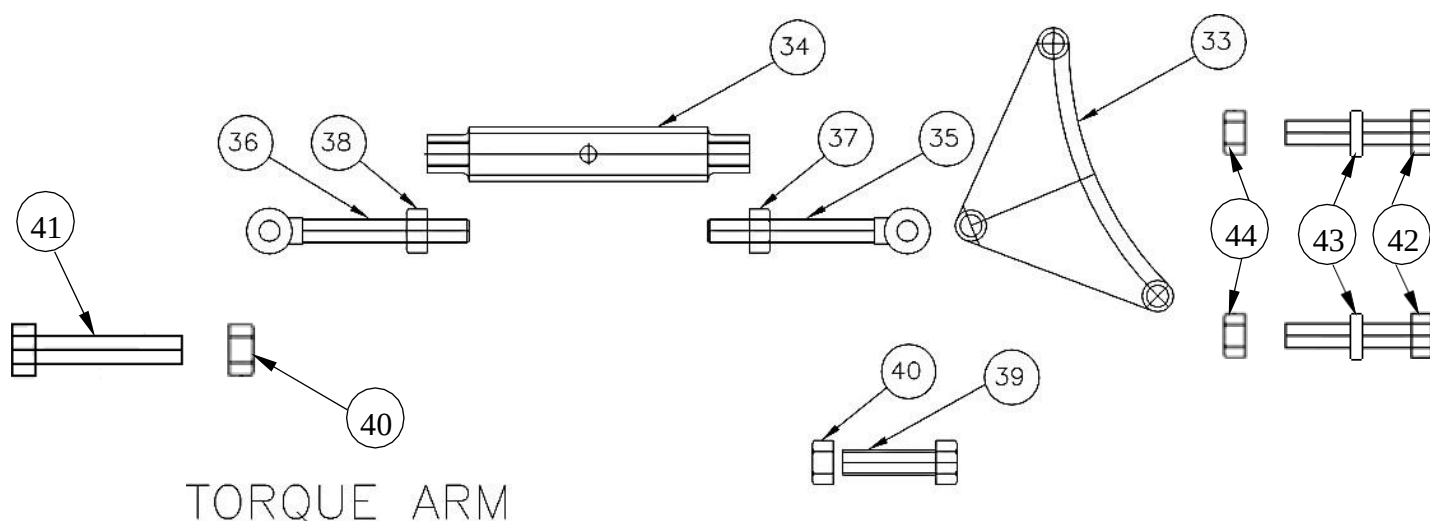
Ref	Part #	Description	Qty.
1	226711	Bolt, Hex Hd, Shear, 1/2 x 3 (TOCD012300)	1
2	227820	Nut, Hex, 5/16 (TCCN056GAL)	10
3	176220	Washer, Spring 5/16 (RNRX056GAL)	10
4	496320	Case, Front Half	1
5	135470	Spring Pin, 1/4 x 5/8	2
6	110105	Ball Bearing, 6013-2RS	2
7	496642	Sleeve	1
8	432290	Key 1/4 x 2-1/2	1
9	432150	Key 3/8 x 1-3/8	1
10	496641	Gear, 60T, 6DP, (10" diam)	1
11	496322	Gear, 60T, 10DP (6" diam)	1
12	432050	Key 3/16 x 1-5/8	1
13	496640	Case, Rear Half	1
14	225980	Bolt, Hex Hd, 5/16 x 1 (TOCD056100)	8
15	110550	Breather	1
16	187411	Bushing, Reducer 3/8 x 1/8 NPT	1
17	174996	Washer, 3/4 (RNPX034GAL)	2
18	227236	Bolt, Hex Hd, 3/4 x 1	1
19	185630	Plug, Pipe 3/8 NPT	1
20	199380	Oil Seal, C/R 7440	1
21	225990	Bolt, Hex Hd, 5/16 x 1-1/4	2
22	496045	Link, Lever	1
23	185632	Pipe Plug, Magnetic 3/8 NPT	1
24	110410	Ball Bearing, 6204	4
25	496324	Pinion/Shaft, 12T, 6DP /2" diam)	1
26	496131	Shaft, Pinion	1
27	496333	Pinion, 12T, 6DP (2" diam)	1
28	199491	Oil Seal, C/R 24897	1
29	227854	Nut, Hex, Lock, 1/2	1
30	496645	Gear Box (complete) Before 2018	1

*When ordering parts please always specify the model and serial number of the mixers as a reference.

GEARBOX (AFTER 2019)



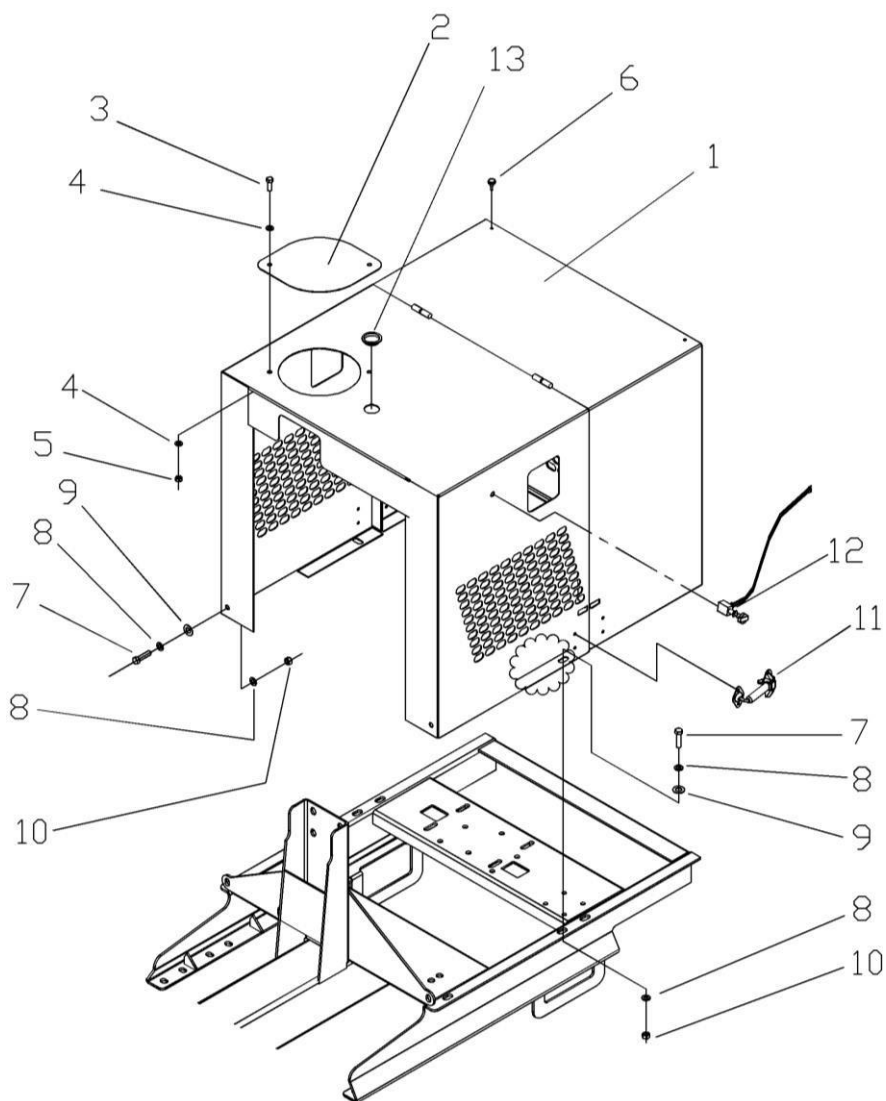
GEARBOX (AFTER 2019)



Item	Part #	Description	Qty.
45	496645-A	Gear Box (complete) w/ connecting rod & link lever assembly *For mixers After 2018	1

Item	Part #	Description	Qty.	Item	Part #	Description	Qty.
1	702128	Casing - Front	1	23	702150	Input Pinion Key - 3/16 x 3/16 x L55	1
2	702129	Casing - Back	1	24	702151	Hex Bolts - M8x35	6
3	702130	Gasket	1	25	702152	Studs - M8 x 57	2
4	702131	Output Bearing	2	26	702153	Hex Nuts - M8 x 35	10
5	702132	Output Spacer	1	27	702154	Spring Washers - M8	8
6	702133	Output Gear - Z65	1	28	702155	Allen Head Drain Plug 3/8 BSP	1
7	702134	Output Hub	1	29	702156	Hex Head Plug 3/8 BSP	1
8	702135	Output Key	1	30	702157	Sight Glass 3/8 BSP	1
9	702136	Output Hub end Cover DAI. 47	1	31	702158	Breather Plug 3/8 BSP	1
10	702137	Front Casing end Cover DAI. 110	1	32	702159	Sticker - Fill oil	1
11	702138	Output Oil seal 75X100X10	1	33	702160	Bracket Plates for Torque Arm	2
12	702139	Intermediate end Cover DAI. 62	2	34	702161	Turnbuckle	1
13	702140	Intermediate Bearing - 6306	2	35	702162	Torque Arm - Right Hand - M12	1
14	702141	Intermediate Pinion - Z13	1	36	702163	Torque Arm - Left Hand - M13	1
15	702142	Intermediate Key - W 10 X L 27	1	37	702164	Hex Nut- Right Hand - M12	1
16	702143	Intermediate Gear - Z70	1	38	702165	Hex Nut- Left Hand - M12	1
17	702144	Input end Cover DAI. 52	1	39	226230	Bolt, Hex Hd, 3/8 x 1-1/2 (TOCD038112)	1
18	702145	Input Bearings - 30305	2	40	227830	Nut, Hex, Lock 3/8 (TCCS038GAL)	2
19	702146	Input Pinion - Z14	1	41	226250	Bolt, Hex Hd, 3/8 x 2 (TOCD038200)	1
20	702147	Input Bearings Loading Spacer	1	42	701022	Bolt, Hex Hd 5/16 x 2 (TOCD056200)	2
21	702148	Circlip B62 Heavy	1	43	176220	Washer, Spring 5/16 (RNRX056GAL)	2
22	702149	Input Oil seal - 25 x 62 x 10	1	44	227820	Nut, Hex 5/16 (TCCN056GAL)	2

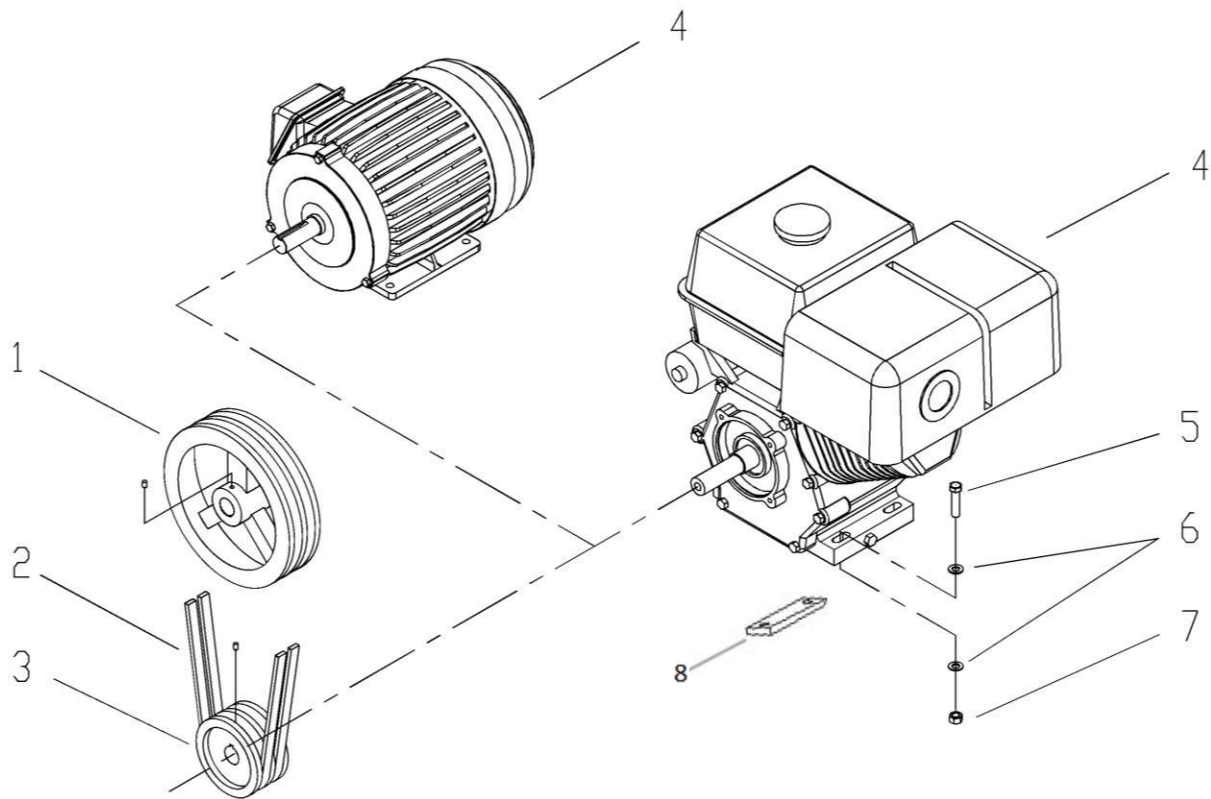
HOOD



Ref	Part #	Description	12S	S12S
1	702006	Hyd Hood (1013CO01GA) * (3A9S22M1XE1168001) Since 27-11-14	1	1
	464625	Old Hood	1	1
2	412825	Access Cover	1	1
3	225980	Bolt, Hex Hd, 5/16 x 1 (TOCD056100)	2	2
4	174990	Flat Washer, 5/16 (RNRX056GAL)	4	4
5	227821	Lock Nut, 5/16 (TCCS056GAL)	2	2
6	201544	Rubber Bumper	2	2
7	226230	Bolt, Hex Hd, 3/8 x 1-1/2 (TOCD038112)	4	4
8	174986	Flat Washer, 3/8 (RNRX038GAL)	8	8
9	174470	Flat Washer, 1/2 (RNRX012GAL)	4	4
10	227830	Lock Nut, 3/8 (TCCS038GAL)	4	4
11	701004	Hook (0000RF02GA)	2	2
12	701007	Complete, Push Stop (1000KI04GA)	1	1
13	701008	Snap (317333) (1000RF01GA)	1	1

*When ordering parts please always specify the model and serial number of the mixers as a reference.

DRIVE



Ref	Part #	Description	12S	S12S
13 HP GAS DRIVE ~ OPTIONAL				
1	496160	Pulley, 10" x 3/4" 2BK, include 2 set screws, 3/8 – 2 nuts, 3/8 NC	1	1
2	702024-A	V-Belt, A-37C (0000BNA37C) for 496645-A gearbox	2	2
3	702010	Pulley, 3-3/4" x 1" 2BK, include 2 set screws - 3/8 - nuts, 3/8 NC (POFG3341002R)	1	1
4	202012M	Engine Honda 13HP O/A GX390UQAE6	1	1
5	226240	Bolt, Hex Hd, 3/8 x 1-3/4 (TOCD038134)	4	4
6	174986	Washer, Plain 3/8 (RNPX038GAL)	8	8
7	227830	Nut, Hex, Lock, 3/8 (TCCS038GAL)	4	4
ELECTRIC DRIVE ~ 3HP/5HP ~ OPTIONAL				
1	496160	Pulley, 10" x 3/4" 2BK, include 2 set screws, 3/8 – 2 nuts, 3/8 NC	1	1
2	702012	Belt, A 4L-42 (0000BN4L42) for 496645-A gearbox	2	2
3	702011	Pulley, 4-1/4" x 1-1/8" 2BK, include 2 set screws - 3/8 nuts, 3/8 NC (POFG4141182R)	1	1
4	219840	Motor 3HP 3/60/230-460 V	A/R	A/R
	219989	Motor 5HP 3/60/230 V	A/R	A/R
5	226240	Bolt, Hex Hd, 3/8 x 1-3/4 (TOCD038134)	4	4
6	174986	Washer, Plain 3/8 (RNPX038GAL)	8	8
7	227830	Nut, Hex, Lock, 3/8 (TCCS038GAL)	4	4
8	702187	Engine Spacer 3/8 x 1 x 5" for 496645-A gearbox	2	2

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