# **Operating Instruction** and **Parts Manual** for

KUSHLAN

PR-ODUCTS.LLC

# **350/600 Gas**

Gas Model Series With Optional Tri-Pod Stand



DO NOT ATTEMPT TO START OR OPERATE THE MACHINE UNTIL ALL THE INSTRUCTIONS HAVE – BEEN READ AND UNDERSTOOD BY THE OPERATOR. FAILURE TO DO SO COULD RESULT IN SERIOUS BODILY INJURY AND/ OR PROPERTY DAMAGE!

10601 S. Sam Houston Pkwy STE 140 Houston, TX 77071 281-313-2506 • 800-469-4178

#### SHOULD YOU REQUIRE ANY SET-UP OR OPERATING ASSISTANCE WITH YOUR PRODUCT, DO NOT RETURN TO ORIGINAL PLACE OF PURCHASE

oAfter referring to the operation manual, if assistance is still needed, please consult our web Site at www.kushlanproducts.com

From our web site you may **e-mail us** directly If assistance is still required, please call our customer O service department at 1-800-469-4178

#### Safety Alert Symbol: This safety alert symbol is used to attract your attention!

- o Personal Safety is involved when you see this symbol, Pay extra attention, become alert-be sure to heed it's message. Failure to do so may lead to serious personal injury or damage may occur.
- o Warnings and safety instruction: If these warnings and safety instructions are not read and carefully followed, serious personal injury could occur.

#### WARNINGS

- 1. Do not use, start, or attempt to operate this machine until all of the instructions have been read and fully understood.
- 2. Never allow anyone to operate this machine unless the person is well acquainted with these rules of safe operation.
- 3. Never operate this machine without all guards in place and firmly attached to the machine.
- 4. Make certain that the mixing drum is clear of obstructions and stand clear of the machine with out all guards in place and firmly attached to the machine.
- 5. When cleaning, lubricating, or adjusting the mixer, disconnect the power plug.
- 6. Keep all people (except operator) a minimum of five (5) feet away from the machine during operation.
- 7. Always make certain that the mixer is connected to a properly grounded electric circuit to protect the operator from possible electric shock.
- 8. Do not start the engine if the drum is Fully loaded
- 9. Do not overload the mixer
- 10. Never attempt to move the mixer while the engine is on.

#### **SAFETY INSTRUCTIONS** For the safety of yourself and others around you, it is extremely important that you observe the following notes.

- 1. Keep hands and clothing away from moving parts at all times.
- 2. Do not operate this machine under the influence of alcohol or while taking medication that impairs the senses or reactions.
- 3. Make certain that the work area around the machine is clear of debris and obstructions.
- 4. Keep all unauthorized and untrained people away from the machine at all times.
- 5. Never let the mixer run unattended even for a brief moment.
- 6. Turn off the engine when you leave the machine.
- 7. Only use or operate the mixer on level ground to prevent the mixer from tipping over.
- 8. Do not overreach while working with the mixer. Keep proper Footing and balance at all times when loading or unloading the mixer.
- 9. Never allow children or inexperienced operators to operate or repair the mixer.
- 10. Use only factory authorized parts for replacement
- 11. Keep these operation instructions with the machine at all times
- 12. Always wear safety glasses and safety shoes when operating and moving equipment
- 13. Safety decals replace missing damaged safety decals.

#### Mixer Instructions

- A. LUBRICATION: There are grease fittings (item 29) on all models. Apply any type of EP grease. Apply grease until grease begins to come out of the bearings. LUBRICATE ALL FITTINGS BEFORE EACH USE
- B. GEAR ADJUSTMENT: If the gear on the jackshaft (item 13A) is not meshing properly with the ring gear and plate (17), adjustment can be made by loosening the hex flange screws at attaching the jackshaft housing (14A) and sliding the housing tube until proper alignment is obtained. If removal of pulley guard is necessary, make certain it is reattached to the machine before using.
- C. GENERAL: Check all screws for tightness before each use.
- D. ENGINE ADJUSTMENT/BELT TENSIONING: 1. To adjust belt tension. Loosen the 2 bolts that attach the engine to the frame. Make adjustments and retighten screws. 2. V-BELT TENSIONING: Retighten V-belts after the first 20 hour of use. The belt should be tightened until the belt deflects approximately 1/4" with regular thumb pressure. 3. Replace covers and guards before using the machine.
- E. CONCRETE MIXING: Do not insert sharp objects into the plastic mixing drum. Doing so will damage the drum.
- F. CLEANING: Do not spray water on or into the motor. Thorough cleaning of the mixer after each use is recommended and will add to the service life.





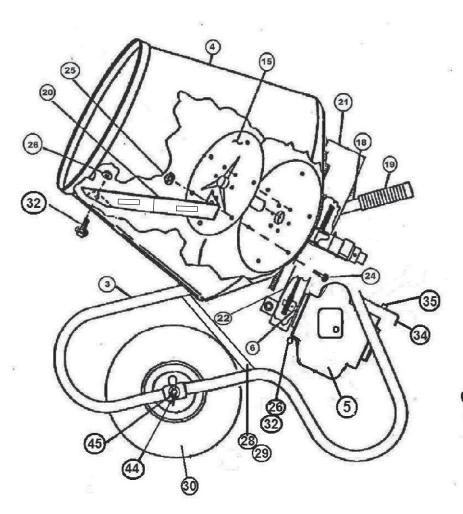


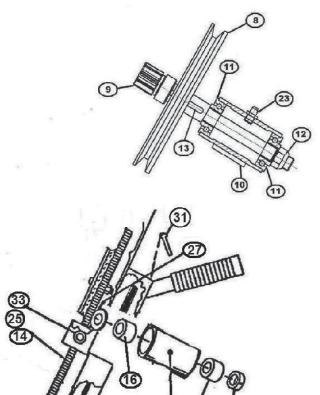


# Model 350GAS & 350GAS With Stand Parts List

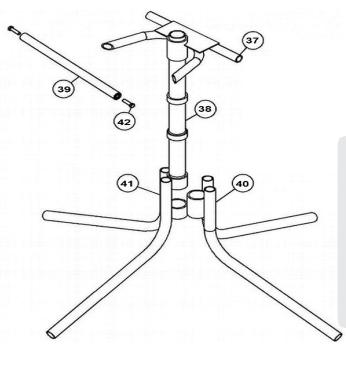
ITEM	PART NO DESCRIPTION		QTY
3	35-1	Frame assembly	1
4	35-2	Polyethylene 3.5 cf drum with side holes	1
5	35-3G	Gas Engine	
6	35-4	1 1/2" pulley	1
7	35-5	28" V-belt	
8	35-6	6" pulley	1
9	35-7	Jackshaft with pinion	1
10	35-8	Jackshaft housing	1
11	35-9	1/2 Ball Bearings	2
12	35-10	1/2" X 20 thread nut	1
13	35-10	3/16" square key	1
14	35-12	Ring gear & plate assembly	1
15	35-12	Drum plate & shaft assembly	1
16	35-14	Drum shaft bushing	2
17	35-15	1" locking collar	1
18	35-16	Wheelbarrow handle	2
19	35-17	Handle grip	2
20	35-18	350WSB mixing blades	2
20	35-18	Poly ring gear guard	
21	35-20	Guard for Pulley	1
22	35-20	Grease fitting	2
23 24	35-21	3/8" x 1-1/4" whizlock screw	12
24 25	35-22	Whiz lock nut 3/8"	12
25 26	35-23	Whiz lock nut 5/8 Whiz lock nut 5/16"	15
20	35-24	1" Metal thrust washer	1
27	35-25	Wheelbarrow axle	1
20	35-27	Axle spacer tube	1
30	35-28	300 x 8 Wheel	2
31	35-29	Locking pin/lanyard	2
32	35-30		11
33	35-30		
33 34	35-32G	Whizlock screw 3/8 x 3/4"	
35	35-33G	Gas Engine Cover	
36	35-34G	Power kill switch	
37	35-34G 35-35G	Whizlock Screw to install Gas Engine 6x35mmWhizlock Screw to install Gas Engine 6x70mm	5
37	35-36G	Spring Washer for Whizlock Screws	7
30 39	35-37	Support brace	1
<u> </u>	35-37	Vertical Pipe Support	1
40	35-38	Horizontal rest bracket	1
41	35-39		
42 43	35-40	Leg support 1 pipe Leg support 2 pipe	
43 44	35-41	Leg support 2 pipe   Whizlock screw	2
45	35-45G		
43 46	35-46	5/8" Washer	1 2
40	35-40		
	35-47	<u> </u>	
48 49	35-48 35-49G	Wheel Bearing for 300 x 8 Wheel 16 x 22 (mm)4Mounting Plate for Gas Engine1	
49 50	35-49G 35-50G		
	1		
51	35-60G	35-60GRatio 6:1 Gear box1	

# Model 350GAS With Stand Parts List





(7)



# **Stand for 350Gas Mixer**

(25)

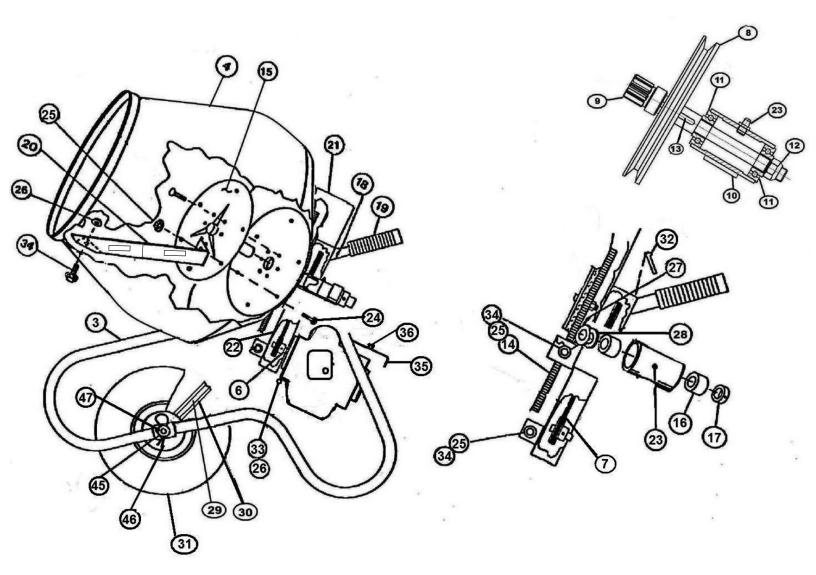
Item	Parts No	Description
37	35-37	Support Brace
38	35-38	Vertical Pipe Support
39	35-39	Horizontal Rest Bracket
40	35-40	Leg Support 1 Pipe
41	35-41	Leg Support 2 Pipe
44	35-42	Whizlock Screw

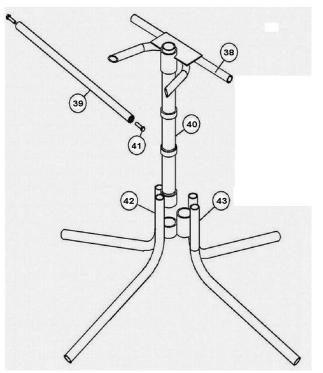
## Model 600GAS & 600GAS With Stand Parts List

5

ITEM	PART NO	DESCRIPTION	
3	60-1	Frame assembly	1
4	60-2	Polyethylene 6.0 cf drum	
5	60-3G	Gas Engine	
6	60-4	1 1/2" pulley	
7	60-5	30" V-belt	
8	60-6	6" pulley	1
9	60-7	Jackshaft with pinion	1
10	60-8	Jackshaft housing	1
11	60-9	9/16" Ball Bearings	2
12	60-10	1/2" X 20 thread nut	1
13	60-11	3/16" square key	1
14	60-12	Ring gear & plate assembly	1
15	60-13	Drum plate & shaft assembly	1
-16	60-14	Drum shaft bushing	2
17	60-15	1" locking collar	1
18	60-16	Wheelbarrow handle	2
19	60-17	Handle grip	2
20	60-18	600W mixing blades	3
21	60-19	Poly ring gear guard	1
22	60-20	Guard for Pulley	1
23	60-21	Grease fitting M8	2
24	60-22	3/8" x 1-1/4" whizlock screw	12
25	60-23	Whizlock lock nut 3/8"	3
26	60-24	Whizlock lock nut 5/16"	12
27	60-25	1" Metal thrust washer	1
28	60-26	1" Plastic thrust washer	1
29	60-27	Wheelbarrow axle	1
30	60-28	Axle spacer tube	1
31	60-29	400 x 8 Wheel	
32	60-30	Locking pin/Lanyard	2
33	60-31	Whizlock screw 5/16 x 3/4"	12
34	60-32	Whizlock screw 3/8 x 3/4"	
35	60-33G	Gas Engine cover	
36	60-34G	Power kill switch	1
37	60-35G	Whizlock Screw to install Gas Engine 6x35mm	
38	60-36G	Whizlock Screw to install Gas Engine 6x70mm	
39	60-37G	Spring Washer for Whizlock screw	
40	60-38	Support brace	
41	60-39	Horizontal rest bracket	
42	60-40	Vertical Pipe Support	
43	60-41	Whizlock screw	
44	60-42	Leg support 1 pipe	2 1
45	60-43	Leg support 2 pipe	
46	60-44G	Parts book	
47	60-45	5/8" Washer	
48	60-46	" R " Clip for washer	
49	60-47	5/8" Wheel Bearing	
50	60-48	Wheel Bearing for 400 x 8 Wheel 16 x 22 (mm)	
51	60-50G	Wheel Bearing for 400 x 8 Wheel 16 x 22 (mm)2Mounting Plate for Gas Engine1	
52	60-51G	Centrifugal clutch	1
53	60-52G	Ratio 6:1 Gear box	1

# Model 600GAS With Stand Parts List

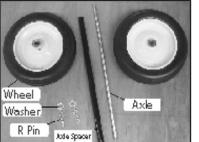




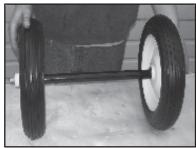
# Stand for 600Gas Mixer

Item Parts No		Description
40	60-38	Support Brace
42	60-40	Vertical Pipe Support
41	60-39	Horizontal Rest Bracket
44	60-41	Whizlock Screw
45	60-42	Leg Support 1 Pipe
43	60-43	Leg Support 2 Pipe

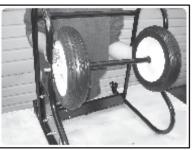
#### **Assembly Instruction**



**Step 1** Wheel Assembly



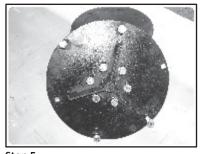
Step 2 With the long end of wheel hub facing out assemble.



**Step 3** Install Wheels as shown, pushing axle rod end out and the other end into the frame.



**Step 4** Put washers on the axle, then fix R clips into holes.



**Step 5** Take apart and remove all bolts from drum plate



Put the shaft through the hole in the drum. Turn drum until the holes line up. Put in  $3/8 \times 1-1/4''$  whizlock screw. Then install blade. Note: Do NOT tighten until all screw are in place.



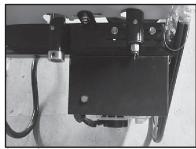
Slide drum on frame. Then install pinion housing.Line up front of pinion with front large gear (Note: Do not position pinion to far forward, so gear will dig into drum.)



**Step 8** Install Gas Engine with 2 5/16 \* 1" bolts as shown. Do not over tighten belt about 1/4" deflection.



**Step 9** Install ring gear guard with 3/4" hex screw.



Step 10 Install back engine cover with 5/16" x 3/4" whizlock screw



**Step 11** Slide handle in place lining up the hole in the handle and the housing. Slide the pin through the holes.



**Step 12** Slide the pin through the holes. Soak Grips in boiling water for 1 minute to soften the heavy duty rubber.



#### 350 Gas

#### **How to Mix Concrete**

- 1. You will need approx. 2 1/2 gallons of water.
- 2. 2-80 lb bags of premix concrete
- 3. Start Mixer in motion
- 4. Add 2 gallons of water
- 5. Add 1-80 lb bag of premix concrete
- NOTE: Mixture will be very sloppy
- 6. Slowly add 2nd bag of concrete.
- 7. Add 1/2 gallon of water slowly to obtain desired thickness.

## 600 Gas

#### **How to Mix Concrete**

- 1. You will need approx. 5 gallons of water.
- 2. 4-80 lb bags of pre-mix concrete
- 3. Start Mixer in motion
- 4. Add 4 gallons of water
- 5. Add 1-80 lb bag of pre-mix concrete, and then 2nd bag.
- NOTE: Mixture will be very sloppy
- 6. Slowly add 3rd bag of concrete.
- 7. Add 1 gallon of water slowly to obtain desired thickness.
- 8. Slowly add 4th bag of concrete.
- 9. Add 1/2-1 gallon of water slowly.

#### How to Mix Sand & Gravel

- 1. Use a 8 1/2 X 12" square shovel
- 2. Portland cement, gravel or round stone and masonry sand.
- 3. Start mixer in motion.
- 4. Put in 2 gallons of water.
- 5. Add 6 shovels full of gravel or round stone.
- 6. Add 2 shovels full of Portland cement.
- 7. Slowly add 4 shovels full masonry sand.

#### How to Mix Sand & Gravel

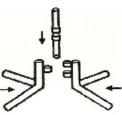
- 1. Use a 8 1/2 X 12" square shovel
- 2. Portland cement, gravel or round stone and masonry sand.
- 3. Start mixer in motion.
- 4. Put in 4 gallons of water.
- 5. Add 12 shovels full of gravel or round stone.
- 6. Add 4 shovels full of Portland cement.
- 7. Slowly add 8 shovels full masonry sand.



#### Maintenance

# **Final Assembly**

# o Pedestal Stand Assembly



1. Place two halves of the support legs together and insert pivot tube through the center of the legs to join together. (Figure 1)

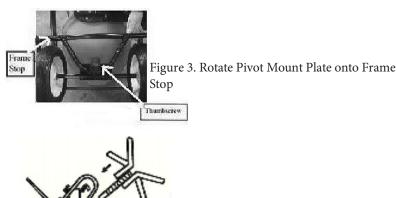
2. Insert locking pin through bottom of pivot tube.



-Tip mixer, as if dumping contents, and place squarely on opening of drum. The pivot mount plate will rotate freely about the wheel axle from its wheelbarrow stowed position. (Figure 2)

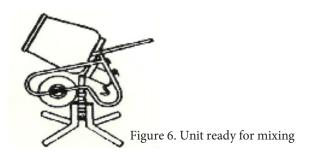
Figure 2. Tip mixer up, Pivot Mount Plate freely rotates down

Rotate pivot mount plate away from drum and onto frame stop. Back off thumbscrew to allow clearance for inserting pivot tube on stand through tube. (Figure 3)



3. Insert pivot tube of pedestal stand assembly through pivot mount and tighten thumbscrew. (Figure 4)

4. Once the stand has been attached, move to the opening side of the drum and begin tilting the mixer upright onto the stand. Always bend your knees and use correct posture for lifting. Always tilt from the front of the mixer. (Figure 5) 5. Once mixer has been tilted upright onto the stand, the mixer should be tipped back into mixing position before operating. (Figure 6)



#### Converting unit back to Wheelbarrow from Stand

To convert unit back to wheelbarrow operation follow the directions for assembling and attaching the pedestal stand to the unit in reverse. Make sure to tighten thumbscrew and rotate the pivot mount plate about the axle to its wheelbarrow stowed position before using the unit in its wheelbarrow function. (Figure 7)

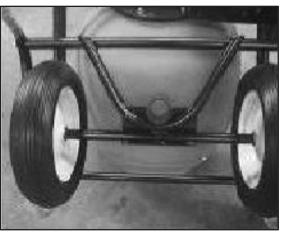
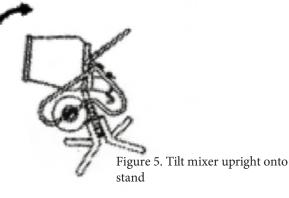


Figure 7 – Rotate Pivot Mount Plate to wheelbarrow stowed position





# Kushlan Products Limited Warranty Policy

Kushlan Products makes every effort to assure that its products meet high quality and durability standards and warrants to the original retail consumer purchaser of our products (you) that each such product be free from defects in materials and workmanship as follows:

ONE(1)YEAR limited warranty on motors. This warranty covers replacement of parts found to be defective in material or workmanship for a period of 90 days from the date of purchase. This warranty does not apply to typical replacement of parts or assemblies that fail as a consequence of normal wear and tear, for example bushings, tires, belts, and pinion gears.

This warranty does not apply to defects due, directly or indirectly. to misuse. abuse .negligence or accidents .repairs or alter actions outside our facilities or the lack of maintenance .WE LIMIT ALL IMPLIED WARRANTIES TO THE PERIOD SPECIFIED ABOVE FROM THE DATE OUR PRODUCT WAS PURCHASED AT RETAIL .EXCEPT AS STATED HEREIN. ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG THE IMPLED WARRANTY LASTS. SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. WE SHALL IN NO EVENT BE LIABLE FOR DEATH, INJU-RIES TO PERSONS OR PROPERTY OR FOR INCIDENTAL, CONTINGENT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLU-SION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

To take advantage of this warranty, the product or part must be returned for examination, postage prepaid. To Kushlan Products. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection discloses a defect, we will either repair or replace the product, at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with repair or replacement, if you are willing to accept such refund. We will return the repaired product or replacement at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of storing and returning this product. This warranty gives you specific legal rights, and you may also have other right which vary from state to state. For service. Contact Kushlan Products 12010 Dairy Ashford Road, Suite 160 Sugar Land, TX 77478 o Phone (281)313-2506 Fax (281)313-2509

