

# Kushlan Products, Inc.

## **!IMPORTANT! Read Me First!**

Thank you for purchasing this Kushlan Product. We hope you will enjoy using it for many years. Be sure to keep your box and all packing material in case you ever need to transport this product.

SHOULD YOU REQUIRE ANY SET-UP OR  
OPERATING ASSISTANCE WITH YOUR PRODUCT,

**DO NOT RETURN  
YOUR PRODUCT TO THE STORE.**

- After referring to the operation manual, if you still require assistance, please call our customer service department at 1-800-469-4178.
- You can also contact us through our web site at [www.kushlanproducts.com](http://www.kushlanproducts.com).

Kushlan Products, Inc.  
745 Railroad Avenue  
Goldendale WA 98620  
[www.kushlanproducts.com](http://www.kushlanproducts.com)

**Kushlan Poly Pro Mixers**  
OPERATING INSTRUCTIONS and  
PARTS MANUAL  
For

**Model 350P**

**!WARNING!**

**DO NOT ATTEMPT TO START OR OPERATE  
THIS 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**

**KUSHLAN PRODUCTS, INC.**  
745 Railroad Avenue  
Goldendale, WA 98620  
(509) 773-4800 \* fax (509) 773-4848

## **! SAFETY ALERT SYMBOL**

**This safety alert symbol is used to attract your attention**

**! PERSONAL SAFETY is involved when you see this symbol, PAY EXTRA ATTENTION, become alert – be sure to heed its message. Failure to do so may lead to serious personal injury or damage may occur.**

## **! 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 while making power cord connections
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 plug or unplug the motor while standing in or around damp or wet ground
9. DO NOT start the motor if the drum is fully loaded.
10. DO NOT OVERLOAD THE MIXER.
11. NEVER attempt to move the mixer while the motor 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 to prevent tripping and/or falling onto the machine.
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. Turn off the motor when you leave the machine.
6. Only use or operate the mixer on level ground to prevent the mixer from tipping over.
7. DO NOT abuse the power cord; i.e., NEVER yank on the cord to disconnect it. Keep the cord away from heat, oil and sharp edges.
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 operating 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 or damaged safety decals.

## II. OPERATING AND MAINTENANCE INSTRUCTIONS

To receive trouble-free service from your KUSHLAN POLY PRO MIXER, follow these instructions.

**!WARNING!** Whenever assembling, lubricating, or adjusting any part of the mixer, disconnect the power plug.

### A. Assembly

1. **Pedestal Model Only:** To attach motor (5) to frame assembly (3A), line up motor to match the four holes on the side motor mount. Attach the v-belt (11) to the motor pulley (10). Using the four 5/16 x 3/4" Hex Flange Screws (53) and four 5/16 Hex Flange Lock Nuts (37), secure the motor in place. The v-belt should be tightened until the belt deflects approximately 1/4" when 5-10 pounds of force is applied centrally between the pulleys. Assemble Yoke (2) to Stand (1). Using two people, lift and place Frame Assembly (3A) onto Yoke (2) pivot pins and insert pins (44). Slide dump handle Grip (22A) over the end of the Dump Handle (21A) and insert the Handle in the Frame Assembly (3A).
2. **GREASE:** Using a grease gun, apply grease to the Fitting (29) on the Jackshaft Tube if not already greased at factory. Plug in the Power Cord. Let the motor run for about 5 to 8 minutes, then turn off motor. This will "break in" the jackshaft bushings.

**!WARNING! KEEP HANDS AND CLOTHING AWAY FROM MOVING JACKSHAFT AND GEAR.**

3. Place Thrust Washer (39) onto Drum Shaft (18) and lightly grease the shaft. Using two people, carefully slide the Drum assembly with shaft into the tube located centrally on the Frame (3A). Check to see that the Jackshaft Gear (13A) is properly meshing with the Drum Main Gear (17). Place locking Collar (20) onto Shaft (18) and tighten setscrew.
4. Grease the Fitting (29) on the Drum Shaft tube until grease appears near the Locking Collar (20) and the Thrust Washer (39).
5. Check the clearance of Gear Guard (25A) and the Drum (4) to make sure there is no contact between the rotating Drum and the Guard.

- B. **Lubrication:** There are grease fittings (Item 29) on all models. **THESE GREASE FITTINGS REQUIRE AN APPLICATION OF ANY TYPE EP GREASE AFTER EACH USE.** Apply grease until grease begins to come out of the bushings.

**LUBRICATE BEFORE EACH USE OF THE MIXER.**

- C. **Extension Cord:** Use only outdoor approved grounded extension cords. The cords must be 14 gauge or larger (smaller gauge number = heavier cord) to protect the motor from a voltage

drop. Motors can burn out when the line voltage falls 10% below voltage rating on the motor (115V).

D. **Gear Adjustment:** If the Gear on the Jackshaft (13A) is not meshing properly with the Ring Gear and Plate (17), adjustment can be made by loosening the Hex Flange Screws attaching the Jackshaft Housing (14A) and sliding the housing tube until proper mesh is obtained. If removal of Pulley Guard was necessary, make certain it is reattached to the machine.

E. **MOTOR ADJUSTMENT/BELT TENSIONING:**

1. Loosen the four bolts that attach the motor to the frame. Make adjustments and securely reattach the motor to the frame.
2. V-BELT TENSIONING: Retighten the belts after the first 20 hours of use. The belt should be tightened until the belt deflects approximately ¼” when 5-10 pounds of force is applied centrally between the pulleys.
3. Replace covers and guards before using the machine.

F. **CONCRETE MIXING**

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**CAUTION: DO NOT insert sharp objects into the plastic mixing drum. Doing so will damage the drum.**

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**WARNING: KEEP HANDS AWAY FROM MOVING PARTS.**

**Loading: NOTE: Always start the mixer before loading.**

How To Mix Concrete

- \* You will need approximately 2-1/2 gal. water.
  - \* 2 – 80 pound bags pre-mix concrete.
  - \* Start mixer in motion.
  - \* Put in 2 gallons of water.
  - \* Add 1 – 80 pound bag of pre-mix concrete
- NOTE: MIXTURE WILL BE VERY SLOPPY
- \* Slowly add 2<sup>nd</sup> bag of 80 pound pre-mix concrete.
  - \* Add ½ gallon water slowly to obtain desired thickness

How to Mix Sand & Gravel

- \* Use an 8-1/2 x 12” square point shovel.
  - \* Portland cement, gravel or round stone and masonry sand.
  - \* Start mixer in motion.
  - \* Put in 2 gallons water.
  - \* Add 6 shovels full of gravel or round stone.
  - \* Add 2 shovels full of Portland cement.
  - \* Slowly add 4 shovels full masonry sand
- NOTE: Water will vary according to moisture content of sand & gravel.

**WILL YIELD 1-1/2 CUBIC FEET CONCRETE**

G. **Cleaning:**

! **WARNING: DO NOT** spray water over or into the motor.

**THOROUGH CLEANING OF THE MIXER AFTER EACH USE IS RECOMMENDED AND WILL ADD TO THE SERVICE LIFE OF THE MACHINE.**

H. **General:** Check all bolts for tightness before each use, especially those securing guards and drive mechanisms.

**KUSHLAN \_PRODUCTS, INC.**  
**MODEL 350P**  
**PARTS LIST**

**350P**

<u>ITEM</u>	<u>PART NO</u>	<u>DESCRIPTION</u>	<u>QTY</u>
	<b>28760-601</b>	<b>350P Pedestal</b>	<b>X</b>
1	28760-001	Base for pedestal	1
2	28760-002	Yoke for pedestal	1
3A	28760-003	Frame assembly	1
4	28760-004	Polyethylene drum	1
5	28872-001	Electric motor with cord	1
10	28760-007	2" pulley	1
11	07055-025	25" v-belt	1
12	28760-008	6" pulley	1
13A	28760-009	Jackshaft with pinion	1
14A	28760-010	Jackshaft housing	1
15	10057-005	3/16 square key	1
16	28760-011	Jackshaft plain bushing	1
17	28760-012	Ring gear & plate assembly	1
18	28760-013	Drum plate & shaft assembly	1
19	28760-014	Drum shaft bushing	2
20	23266-002	1" locking collar	1
21A	28760-015	Pedestal dump handle	1
22A	21380-002	Handle grip square	1
25A	28760-018	Poly ring gear guard	1
26A	28760-019	Guard for pulley	1
27	28760-020	Motor cover for pedestal	1
28	28760-021	hhcs 1/2 x 2 1/2"	2
29	07745-001	Grease fitting	2
31	17987-012	3/8 x 1" carriage screw	12
33	28760-030	Hex flange lock nut 3/8"	12
37	28760-026	Hex flange lock nut 5/16"	8
38	07033-008	Hex nut 1/2"	4
39	07030-016	Thrust washer	1
44	28873-013	locking pin	2
46	28760-022	Jackshaft flange bushing	1
47	28760-028	Tap screws 1/4 x 1/2	4
52	28873-014	3/4" locking collar	1
53	28760-029	Hex screw 5/16 x 3/4"	8
*NS		WARNING LABEL	1
*NS		GREASE LABEL	1
*NS		SERIAL # LABEL	1
		* NOT SHOWN	

## Kushlan Products, Inc. Limited Warranty Policy

Kushlan Products, Inc. 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 all Kushlan products.

This warranty does not apply to defects due, directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations 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 IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. WE SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES 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 EXCLUSION 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, Inc. 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 rights which vary from state to state. For service, contact Kushlan Products, Inc.

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Goldendale, WA 98620

Phone (509) 773-4800 Fax (509) 773-4848

Customer Service (800) 469-4178 [kushlan@gorge.net](mailto:kushlan@gorge.net)