

Silver Line Mfg.

GRAIN CLEANERS
Simplifying the World of Grain Processing

AS10T



Versatility and **Flexibility** are the key words when we refer to the AS10T Classic. The AS10T Classic primary use is removal of foreign materials, and sizing of agricultural grains with aspiration and selected screen sizing.

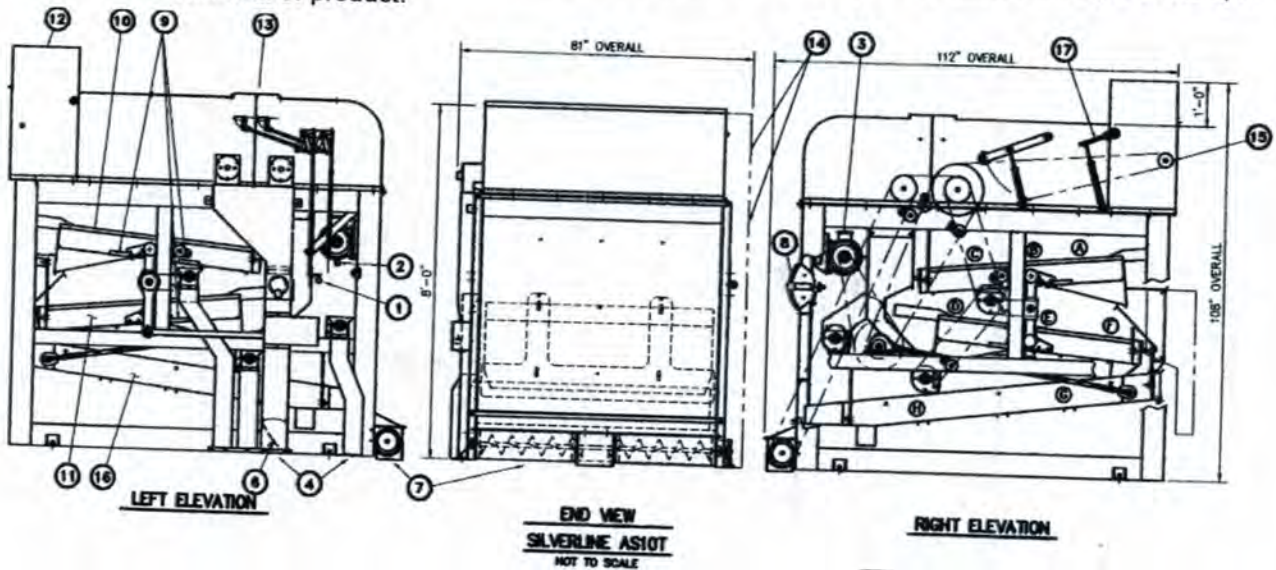
AS10T START UP

Make sure that motor rotation of the unit is right. Look at the flying travel in one of the augers.

1. Ensure that you have the panel just under the hopper at the hopper end removed. Once removed you will see the eccentric drives for the vibratory feeder pan. This is where the first air chamber receives it's air from. The panel is approx. 8 inches wide and the width of the unit, attached by 5/16 head screws.
2. **Have the vibratory feeder pan adjustment in the most off position so not to flood the unit with grain upon start up.** If the decks become flooded with grain and the grain is not flowing off the decks, the extra weight may cause the deck or shoe to structural fail.
3. Once you have grain in the receiving hopper of the unit, with the unit running, begin opening the Flow adjustment handle that is positioned on the left hand side of the unit at the hopper end. Once material begins to flow onto the shoes check that the ball response and the sieve selection is correct for the product that is being cleaned. If the ball response is too aggressive, reduce the speed of the unit by opening up the adjustable variable speed pulley on the motor. **Never increase the speed of the unit (closing up the motor drive pulley) from it's factory preset position or speed.** If kernels of grain are traveling over the scalping sieves you have one of three problems. One, the scalping sieve is too small to allow enough time for the accept product to drop through. Secondly, you may want to decrease the number of balls in the ball trays. This is done to keep a more aggressive cleaning action on the sieving screens. Thirdly, the unit's shoe speed maybe set too fast for the product that you are cleaning. Reduce the speed of the unit by opening up the adjustable variable speed pulley on the motor.
4. Once you have a good steady flow of product running through the unit, open up your pre- air (first chamber) with the adjustment handle on the right hand side of the unit. It will take a minute or so for reject material to settle into the air discharge collection chambers. The discharge of the first and second collection chambers are on the right hand side of the unit, just in front of the adjustment handles for the air flows. Once you have reject product coming out of the first air collections discharge, begin to open the final air adjustment handle. If you are using one remote fan for both air chambers the amount that you open the final air will directly effect the lifting of the first chamber. Once you have the final air set, you will have to readjust the first air system. This will normally be an increase of air flow.
5. Once the air is set on the unit, you can increase or decrease the velocity of the air on the final air by moving the slide on the back wall of the final air chamber. The adjustment is located on the back left hand side of the unit. By having the slide in the most lower position it will give the final air the most velocity. By raising the slide it will give the final air less velocity, but more volume.

SilverLine AS10T Air Screen Grain Cleaner

- *Capacity Rating** - Bph 400. *Based on cereal grains (HRSW) with properly sized processing components @ 6 percent dockage. Due to product conditions, cleaning applications and crop kinds, capacities will vary.
- Screens:**
 - 6 interchangeable - 18 inch x 60 inch screens for multi-combinations on top two shoes.
 - 2 interchangeable - 36 inch x 60 inch screens in bottom shoe for multi-combinations.
 - Total of 10,800 square inches of screen area.
 - HD Quick clamp system on screens for quick change overs.
- Feeding system:** - Vibratory feeding system or metering roll system available.
- Air system:** - Separate pre-air chamber and final air chamber. Each can have a separate remote fan or both chambers can use one single remote fan @ 5000 - 7500 cfm.
- Ball racks:** - Wood ball trays providing optimum ball action. Total of 288 balls.
- Others:**
 - Minimal moving parts = Low maintenance.
 - Grain flow diverter and gates on screen decks for scalping, grading, sizing or removal of secondary crops or a combination there of.
 - Multiple grain and/or screening take offs for various separations.
 - Screening outlets are all located at the same collection point to allow for single or multiple removal of product.



SPECIFICATIONS:

SIZE: 81" X 112" X 108" (WxDxH)
WEIGHT: APPROX. 3600 lbs
CAPACITY: 400+BPH

FEATURES:

1. PRE-AIR CONTROL
2. FINAL AIR CONTROL
3. DRIVE MOTOR, 3HP
4. SCREENINGS/GRADING DISCHARGE
5. OPTIONAL COLLECTION CHUTE
6. AIR SCREENING GATE
7. CLEAN GRAIN DISCHARGE
8. FINAL AIR AIR-BLEED CONTROL
9. PAN DOWN GATES
10. UPPER SHAKER SHOES
11. RETURN SHOE
12. 8 BUSHEL LOADING HOPPER
13. PRE AND FINAL AIR PICK-UP POINTS
14. UPPER AND LOWER DRIVE GUARDS
15. VARIABLE SPEED PULLEY ON VIBRATORY FEEDER
16. SIFT DECK
17. SPRING LOADED, FULLY ADJUSTABLE FEEDER

SCREEN POSITION	SCREEN SET-UP OPTIONS:		
	SCALP	GRADE	SIFT
A	✓	✓	✓
B	✓	✓	✓
C	✓	✓	✓
D	✓	✓	✓
E	✓	✓	✓
F	✓	✓	✓
G	✓	✓	✓
H	✓	✓	✓

NOTE: SEIVE POSITIONS A, B, C, D, E & F ARE 18" X 60"
SEIVE POSITIONS G & H ARE 36" X 60"

Parts and accessories are only a phone call away. We carry, in stock, most parts required for your unit with few having to be ordered. Most, if not all, drive parts can be purchased at any agriculture machine dealership which include bearings, pulleys, belts and gears. This prevents you having unnecessary downtime which means money out of your pocket. At **SilverLine Mfg. Ltd.** we take pride in our workmanship. The grain cleaners are built and assembled on site near Outlook, in central Saskatchewan. Every unit goes through line testing and a run test to ensure that each unit meets our quality standards before leaving our shop. It's our reputation on the line and if you are not satisfied, we are not satisfied. Parts and accessories are only a phone call away.



OUTLOOK, SASK. CDN.
Tel (306) 856-4445
Fax (306) 856-4457

SilverLine

For more information contact your Grain Cleaning Specialist

INTRODUCTION

- ◆ This Model ASI0T SilverLine Air and Screen Grain Cleaner is a compact on farm machine capable of scalping and sifting grain to a high quality standard.
- ◆ This machine has a unique Sieve system which will allow you to separate small seed such as Canola from larger grains and while doing so you can keep this valuable seed separate from the screenings.
- ◆ The belts, bearings, pulleys etc. are of a machinery standard and can be purchased locally from any supplier. This will prevent 'down time' waiting for repairs.
- ◆ A wide variety of sieves and Sieve material is available from the manufacturer for processing various crops.

Specification:

- Dimensions** - (WxLxH) 80" x 112" x 108"
 Dimensions subject to change. May not be exactly as illustrated.
- Approx. Weight** - 3990 lbs.
- Capacity** - *400+ Bph.

Features

- Drive:** - 3 HP motor.
- Shoe speed:** - 350 Rpm to 385 Rpm.
- Shoes:** - 3 Shoes, 3 screen decks.
- Screens:** - 6 interchangeable - 18 inch x 60 inch screens for multi-combinations on top two shoes
 - 2 interchangeable - 36 inch x 60 inch screens in bottom shoe for multi - combinations.
 - Total of 10,800 square inches of screen area.
 - HD Quick clamp system on screens for quick change overs.
- Feeding system:** - Vibratory feeding system or metering roll system available.
- Air system:** - Separate pre-air chamber and final air chamber. Each can have a separate remote fan or both chambers can use one single remote fan @ 5000 - 7500 cfm.
- Ball racks:** - Wood ball trays providing optimum ball action. Total of 288 balls.
- Others**
- Minimal moving parts = Low maintenance.
 - Grain flow diverter and gates on screen decks for scalping, grading, sizing or removal of secondary crops or a combination there of.
 - Multiple grain and/or screening take offs for various separations.
 - Screening outlets are all located at the same collection point to allow for single or multiple removal of product.

Parts and accessories are only a phone call away. We carry, in stock, most parts required for your unit with few having to be ordered. Most, if not all, drive parts can be purchased at any agriculture machine dealership which include bearings, pulleys, belts and gears. This prevents you having unnecessary downtime which means money out of your pocket.

At SilverLine Mfg. Ltd. we take pride in our workmanship. The grain cleaners are built and assembled on site near Outlook, in central Saskatchewan. Every unit goes through line testing and a run test to ensure that each unit meets our quality standards before leaving our shop. It's our reputation on the line and if you are not satisfied, we are not satisfied. Parts and accessories are only a phone call away.

SILVERLINE MFG. LTD.

PH. 1-306-856-4445 or 1-306-856-2032

Fax. 1-306-856-4457

Box 1207 Outlook, Saskatchewan.

Canada. SOL 2NO

NOTICE TO BUYERS

SilverLine Mfg. Ltd. shall limit the warrant of items sold to the amount of the purchase price. SilverLine Mfg. Ltd., our employees or representatives, make no other warranties; guarantees or conditions; expressed or implied with respect to this machine or it's performance.

By acceptance of this machine the original Purchaser acknowledges that this warranty and disclaimer herein before described are conditions of sale and that they constitute the entire agreement between the Vendor; SilverLine Mfg. Ltd. and the original Purchaser regarding warranty and/or any other liability or conditions.

The original Purchaser shall have 10 days after purchase date to accept this machine or advise SilverLine Mfg. Ltd., in writing, of any disagreement. No warranty will cover misuse or damage in any way and any machine may not be accepted for return which is not returned in factory original condition. Storing or using the machine while exposed to the outdoor environment IE; Rain, snow etc, will void all warranty.

VIBRATORY IN-FEED HOPPER

The AS10T has a vibratory tray grain metering system. From the picture below you can see the eccentric drive shaft that drives the tray. The Panel that is directly below the hopper on the front end of the unit that encloses the vibratory tray eccentric drive components must be removed to allow air flow to the pre-air chamber. By loosening out the 5/16 self-tapping screws you will be able to slide the panel out as shown in the picture below. It is your choice whether to put the panel back in when the unit is not in use.

In the second picture it shows the grain volume flow adjustment handle. When starting the unit with product flow have the flow adjustment level in the most off position (Clockwise). Once product enters the hopper begin opening (counterclockwise) the flow adjustment handle to allow product to enter on to the top shoe deck.



TOP TWO SHOE DECKS

The top two shoe decks have three 18" x 60" sieves. The third (bottom) shoe has two sieves 36" x 60". The sieves can be interchanged for any size of screen material that may be required for cleaning different kinds or varieties of crops. On the top two shoes the sieves are held down with three wing nuts. Simple loosen off the wing nuts on the hold downs and remove the sieves. Due to different humidity, the sieve frames may take on moisture causing them to be tighten when removing them. Under the sieves we use a ball tray with a number of balls for keeping the sieves clean. The ball response is directly effected by the speed of the stroke of the unit. Rpm settings are on page 10. On the top two shoes there are slide pull outs to allow different sifting materials to be directed off to different location. This allows you to sift or scalp on three of the 18" x 60" sieves. See pictures below.



BOTTOM SHOE DECK

The bottom shoe deck has two 36" x 60" sieves. The cleaning system is the same as the top two shoes using a ball and rack system. The sieve and ball rack hold down system is much different than the top two shoes. On the bottom shoe you will open up the hinged door on the bottom front of the unit. Here you will see a flat pan with two over-center handles, one on each side of the pan. These handles are connected to two compression spring cylinders. Simply turn the handles to release the spring pressure. Once the spring pressure is released disconnect the handles from the spring cylinder and pull the pan out towards your evenly. You now can pull the first sieve and ball rack out. The second sieve and ball rack you can either make a rod and a hook to put it out from the front of the unit (pulling on the bottom of the ball rack only) or go to the right hand side of the unit and push the sieve and ball rack back to the front of the unit for removal. The second ball rack does not have to come out of the unit all the way. Re install the ball racks with your new selection of sieves. Be sure that the side of the sieve with the screen material over lapping the sieve frame goes in first. The first sieve into the unit must have the screen material overlap lip over top of the grain transport pan (page 7) that goes to the clean grain auger. Once the first sieve and ball rack are in place, place the second sieve and ball rack in and repeat the above procedure. Remember that the overlapped sieve material from the frame must go in first. Insert the hold down pan evenly, making sure that the sieve is under the hold down pan's top plate, so the top plate overlaps the sieve. Hook the spring cylinders on the handles and lock in place by making sure the over-center handles are over-center.



Shown here are the Danger labels that are installed on the unit for your protection. Please take the time to locate all Danger areas and labels that are on the unit before use. Do not run or have power supplied to the unit without guards in place from the factory. Do not wear loose clothing around machinery and keep children and all other non authorized personnel out of the work area. **Always disconnect power supply to the unit before working on moving components.** The following are sample of the Danger labels that are on the unit.



PRE AND FINAL AIR SYSTEMS

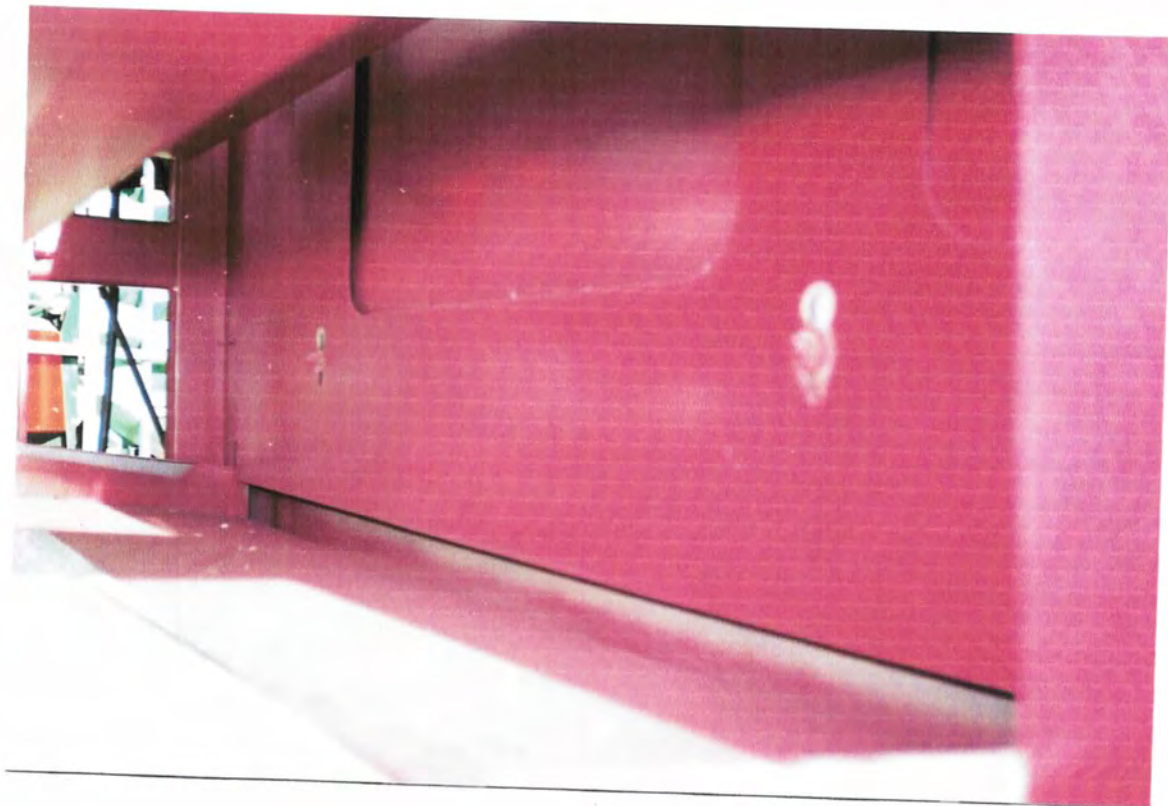
From the picture below you will see the two air adjustment handles on the right hand side of the unit. The adjustment handle closes to the back of the unit controls the volume of the final air. The adjustment handle next to it more towards right center of the unit controls the air volume for the pre-air from the metering chamber. Once you have a good steady flow of product running through the unit, open up your pre- air (first chamber) with the adjustment handle on the right hand side of the unit. It will take a minute or so for reject material to settle into the air discharge collection chambers. The discharge of the first and second collection chambers are on the right hand side of the unit, just in front of the adjustment handles for the air flows. Once you have reject product coming out of the first air collections discharge, begin to open the final air adjustment handle. If you are using one remote fan for both air chambers the amount that you open the final air will directly effect the lifting of the first chamber. Once you have the final air set, you will have to readjust the first air system. This will normally be an increase of air flow.

Once the air is set on the unit, you can increase or decrease the velocity of the air on the final air by moving the slide on the back wall of the final air chamber, just above and behind the bottom shoe grain transport pan. The adjustment is located on the back left hand side of the unit. By having the slide in the most lower position it will give the final air the most velocity. By raising the slide it will give the final air less velocity , but more volume.



Pictures of the final air velocity gate, grain transport pan and adjustment handle, on page 8.

FINAL AIR VELOCITY GATE
AND ADJUSTMENT



OPTIONAL GRADER CHUTE AND SIDE DELIVERIES

In the first picture it shows the optional grader grain chute. This chute collects all the product that comes off the scalping sieves of the second shoe. Remove the grain chute on the front of the unit (the hopper end) that directs the product from the second shoe's scalping sieves to screening, by remove four bolts. Place in the optional grader grain chute with the four bolts. This will direct all product that goes over the second deck scalper sieves out the front end of the unit.

In the second picture you will see five discharge spouts. Starting from the front center on the right hand side and working to the back of the unit;

- 1) Discharge from the first and second or second only top siftings.
- 2) Discharge of the heavy materials from the pre-air and final air chambers.
- 3) Discharge of the siftings from the back screen on the second deck.
- 4) Discharge of the scalpings from the top deck.
- 5) Siftings from the bottom deck and the scalpings from the second deck. (If optional grader grain chute is not in place).



SPEED SETTINGS

The following chart is a Rpm reference for the speed of the eccentric drive shaft that creates to stroke movement for the shoes(Picture 2). **Never exceed the maximum or the factory pre-set speed, as it could cause structural damage to the components.** If product flow does not seem to be fast enough at slower rpm speeds, remove some balls from the ball chambers in the ball racks and increase shoe speed to get good product flow. The following chart is a reference only. Daily conditions and grain characteristics will greatly affect product flows and separations.

RPM	# of turns on motor variable from factory preset (Picture 1)	Product
395	0 this is preset factory position	Cereal grains , Desi chick peas
380	½ turn open from preset	Cereal grains, Kabuli chick peas
365	1 turn open from preset	Canola, Flax, Mustards, Peas

