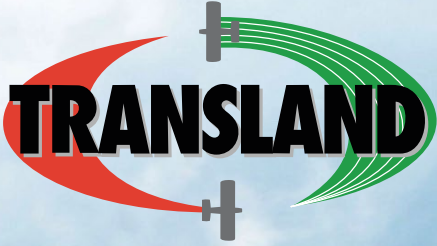


Transland Gate Box Guide



**Transland 10" Gate and
Spreader PN 23537**



**Transland 5" Gate and
Spreader PN 23502**

OVERVIEW

Evolution of Transland Gate Boxes

Since the 1960s, Transland has driven the evolution of ag airplane gate boxes, moving from manual to hydraulic and, most recently, to electric systems. In the early years, we relied on manual gate boxes, later advancing to hydraulic models as they offered greater control and efficiency. While an electric gate box was always an aspiration, the technology needed to catch up to the capability of hydraulic systems.

Advancements in Electric Technology

Our latest advancement is the Transland Electric Gate Box System, which integrates advanced electric technology for precise and reliable gate control. This system represents the culmination of decades of expertise and continuous improvement, transforming gate box technology into a streamlined, responsive solution for today's agricultural needs. This sophisticated, fully electric solution delivers the precision and responsiveness the industry demands.

Transland Quality with Satloc Technology

Combining Transland quality with Satloc technology, our electric and hydraulic gate boxes are the choice of many Applicators all around the world. Satloc and Transland engineers work together to produce products that enable precision application for precision farming. All Transland electric and hydraulic gate boxes work seamlessly with Satloc's Falcon Pro and G4 GPS Systems. The marriage of Transland's gate boxes to Satloc's GPS systems helps create more profits for the Applicator with fewer headaches.

Standard of Quality

Transland's gate boxes are not only a standard in quality but a global presence on ag aircraft worldwide. Unlike aluminum gates, Transland gates are stainless steel, which helps prevent corrosion. Transland manufactures the 5" and 7 1/2" manual gate boxes that are installed on all Air Tractor and Thrush Aircraft.

Conversion Kits and Gate Box Accessories

Conversion kits are available to enhance our original Transland manual gate boxes, allowing operators to easily upgrade their existing systems without a complete replacement. Transland also offers various gate box accessories.



DID YOU KNOW?

Transland gate boxes are trusted by pilots and operators around the globe, delivering reliable performance in a range of aircraft worldwide. Every type of gate box has its advantages and disadvantages. These pages will show the benefits of each gate box type.

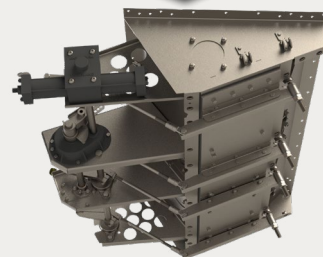
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Electric Gates



● 1.2

Hydraulic Gates



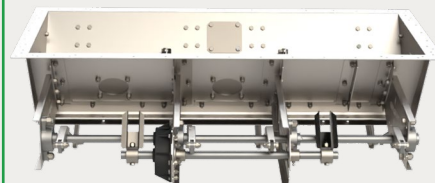
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Dry Application Info

Dry Product Selection
80/20 Urea/Sulfate [100,000 lb/ac 93.0 ft]
80/20 Urea/Sulfate [125,000 lb/ac 93.0 ft]
80/20 Urea/Sulfate [60,000 lb/ac 93.0 ft]
Dry Rice [70,000 lb/ac 48.0 ft]
Dry Rice [80,000 lb/ac 48.0 ft]

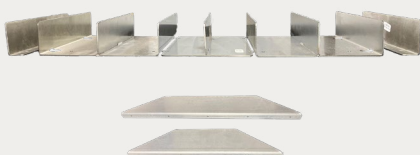
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Manual Gates



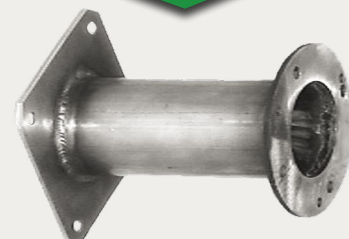
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Gate Vanes



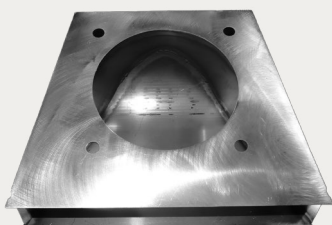
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Spacers



● 1.7

Sump Drains



● 1.8

Gate Plates



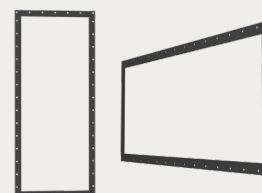
● 1.9

Demand Vents



● 1.10

Seals & Gaskets



1.1 ELECTRIC GATE BOXES

Designed for compatibility, our electric gate connects effortlessly with Satloc Falcon Pro & Satloc G4 systems. This integration simplifies the cockpit experience, requiring only one screen, enhancing pilot focus and operational safety. Transland Electric Gates are available in 5" and 7 1/2" Gate Boxes. Plus, we offer a seamless transition from manual to electric gates with our convenient conversion kits.

Total Electric - No Hydraulics.
Capable of 1/32" door accuracy.

Connects with
Satloc Falcon Pro &
Satloc G4,
requiring only one
screen in cockpit.

Capable of variable rate.
Plus, it has wet (latched)
and dry lock (soft-latched)
door position settings.

Comes with a manual
clean out. Also, the door
speed is adjustable.

Ability for jettison
over-ride, operate
manually with dump
handle, jam detection,
and arm switch.

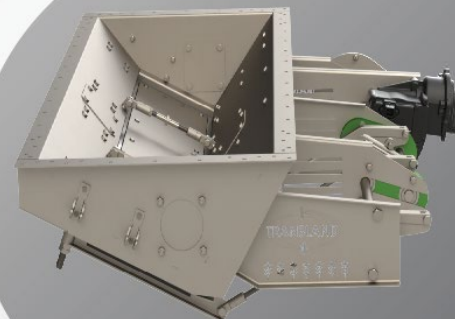
01

02

03

04

05



**ELECTRIC
GATES**

Air Tractor

602 and 802 Electric Gate Box Kits

All kits include necessary fittings for installation.

Kit PN	Product Name	Satloc Compatibility	Main Kit Components
55665	5" Electric Gate Box	Satloc Falcon Pro & IF3	- 25574 Electric Gate Box 5" Door - 21020 Manual Jettison Assembly - 52453 Electric Gate Box Wiring Kit
55653	5" Electric Gate Box	Satloc G4 & IF3	- 25574 Electric Gate Box 5" Door - 21020 Manual Jettison Assembly - 52452 Electric Gate Box Wiring Kit
55652	5" Electric Gate Box	Satloc G4 & IF2	- 25574 Electric Gate Box 5" Door - 21020 Manual Jettison Assembly - 52451 Electric Gate Box Wiring Kit
55666*	7.5" Electric Gate Box	Satloc Falcon Pro & IF3	- 28818 Electric Gate Box 7.5" Door - 21021 Manual Jettison Assembly - 22702 Demand Vent 4" Delrin - 57000 Fairing Assembly for AT-802 - 52453 Electric Gate Box Wiring Kit
55655*	7.5" Electric Gate Box	Satloc G4 & IF3	- 28818 Electric Gate Box 7.5" Door - 21021 Manual Jettison Assembly - 22702 Demand Vent 4" Delrin - 57000 Fairing Assembly for AT-802 - 52452 Electric Gate Box Wiring Kit
55654*	7.5" Electric Gate Box	Satloc G4 & IF2	- 28818 Electric Gate Box 7.5" Door - 21020 Manual Jettison Assembly - 22702 Demand Vent 4" Delrin - 57000 Fairing Assembly - 52451 Electric Gate Box Wiring Kit

*Must mention you need this conversion kit for an AT-602, 57002 Fairing Assembly for AT-602.

Air Tractor

602 and 802 Electric Conversion Kits

All kits include necessary parts for conversion from manual to electric.

Kit PN	Product Name	Satloc Compatibility
55660	5" Manual to Electric Gate Box with Satloc Connection	Satloc Falcon Pro & IF3
55648	5" Manual to Electric Gate Box with Satloc Connection	Satloc G4 & IF3
55644	5" Manual to Electric Gate Box with Satloc Connection	Satloc G4 & IF2
55662	7.5" Manual to Electric Gate Box with Satloc Connection	Satloc Falcon Pro & IF3
55650	7.5" Manual to Electric Gate Box with Satloc Connection	Satloc G4 & IF3
55646	7.5" Manual to Electric Gate Box with Satloc Connection	Satloc G4 & IF2

Thrush

510 Electric Gate Box Kits

All kits include necessary fittings for installation.

Kit PN	Product Name	Satloc Compatibility	Main Kit Components
55667	7.5" Electric Gate Box	Satloc Falcon Pro & IF3	- 28819 Electric Gate Box 7.5" Door - 21021 Manual Jettison Assembly - 22702 Demand Vent 4" Delrin - 18002 Fairing Assembly - 52453 Electric Gate Box Wiring Kit
55659	7.5" Electric Gate Box	Satloc G4 & IF3	- 28819 Electric Gate Box 7.5" Door - 21021 Manual Jettison Assembly - 18002 Fairing Assembly - 22702 Demand Vent 4" Delrin - 52452 Electric Gate Box Wiring Kit
55658	7.5" Electric Gate Box	Satloc G4 & IF2	- 28819 Electric Gate Box 7.5" Door - 21021 Manual Jettison Assembly - 18002 Fairing Assembly - 22702 Demand Vent 4" Delrin - 52451 Electric Gate Box Wiring Kit

Thrush

Electric Conversion Kits

All kits include necessary parts for conversion from manual to electric.

Kit PN	Product Name	Satloc Compatibility
55661	5" Manual to Electric Gate Box with Satloc Connection	Satloc Falcon Pro & IF3
55649	5" Manual to Electric Gate Box with Satloc Connection	Satloc G4 & IF3
55647	5" Manual to Electric Gate Box with Satloc Connection	Satloc G4 & IF2
55663	7.5" Manual to Electric Gate Box with Satloc Connection	Satloc Falcon Pro & IF3
55651	7.5" Manual to Electric Gate Box with Satloc Connection	Satloc G4 & IF3
55645	7.5" Manual to Electric Gate Box with Satloc Connection	Satloc G4 & IF2

Satloc Falcon Pro & G4

Electric Gate Box Features with Satloc

Term	Customer Benefit & Explanation
Manual Dump Torque & Manual Override Holdoff	Customer Benefit: Gain direct control over emergency material release with customizable torque settings, ensuring operations are both safe and precise. Both Manual Dump Torque & Manual Override Holdoff features offer direct control over emergency material release, emphasizing safety and precision. They are designed to work in tandem: 1. The torque setting (Manual Dump Torque) establishes the force needed for activation. 2. The holdoff time (Manual Override Holdoff) ensures this force is applied intentionally and not by unintentional contact. Manual Dump Torque Explanation: This is the threshold torque value that releases the electric actuator. The “Manual Dump Torque” is the result of the applied force to the jettison (emergency) handle inside the cockpit. This interacts with the electric motor and applies torque to the input shaft of the electric actuator. The range is 50 – 250 in-lb. Manual Override Holdoff Explanation: When you apply the force through the jettison handle, this is a time period called the “Manual Override Holdoff.” This prevents unintended jettison by requiring the manual dump torque to be applied consistently for this hold off time. The range is 50 to 2500 milliseconds.
Gate Timeout – Close	Customer Benefit: Avoid gate, motor or seal damage with intelligent gate timeout features, preventing gate closure beyond 1.0 to 2.5 seconds if the target position isn’t achieved. Explanation: The time at which the gate will stop trying to close if the target value has not been reached. The range is 1.0 to 2.5 seconds.  WARNING The gate will overheat if an obstruction is not resolved.
Jam Mode	Customer Benefit: Helps ensure continuous operation. Explanation: There are two jam modes: 1) automatic and 2) manual.
Jam Remain Open Time & Jam Open to Level	Customer Benefit: Facilitates quick resolution of jams and continuous operation. Explanation: For auto mode - When the gate jams, it will open to a pre-determined level and for a pre-determined time The range is 0.0 to 2.0 seconds. For manual mode - An alert will pop up on the screen when the gate jams. The user can touch an onscreen button, and the gate will open to the predetermined level.
No Jam Deadband before Soft-Position	Customer Benefit: This feature offers precise control from the selected opening to the gate latched level, minimizing the risk of jams and aiding in smooth operation. Explanation: This is a safety zone before the gate reaches the “Gate Soft Position.” It’s set to a precise tolerance (e.g., 1/32 inch) to prevent the gate from thinking it is jammed as it moves towards the soft position into the latched position. When latching the gate, the No Jam Deadband is a zone where a jam will not be detected so that the actuator can apply full torque to latch the gate. The width of this zone is adjustable in the settings.
Jammed Gate Torque	Customer Benefit: Helps to safeguard against equipment damage and loss of materials. Explanation: A precautionary measure that automatically enters into jam mode if closure torque exceeds the preset range of 200 to 530 in-lb.

1.2 HYDRAULIC GATE BOXES

Transland hydraulic ag gates, combined with Satloc technology, connect to the Satloc Falcon Pro and G4 systems for seamless wet or dry operations. These GPS systems streamline cockpit screens for ease of use and feature a closed-loop feedback with a position resolution of 0.18° of rotation, providing gate accuracy within $1/16$ of an inch for precision applications. Furthermore, the G4 and Falcon Pro adjust gate openings based on groundspeed, enhancing application precision across your fields.



HYDRAULIC
GATES

01

Connects with Satloc Falcon Pro & Satloc G4, requiring only one screen in cockpit.

02

Hydraulic system includes dual power unit, which can operate both gate box and Wingman system.

03

Kit options available with accumulator, giving time for pump to cool during variable rate operations.

04

Completely sealed stainless steel position sensor, making it more durable & longer lasting.

05

Capable of variable rate.

Air Tractor

402 and 502 Hydraulic Gate Box Kits

All kits include hoses, gaskets, and the necessary fittings for installation.

Kit PN	Product Name	Satloc Compatibility	Main Kit Components
55619	5" Hydraulic Gate Box	Satloc G4 & IF2	- 25562 Hydraulic Gate Box 5" Door - 22702 Demand Vent 4" Delrin - 25258 Power Unit Assembly - 58633 Cooling Ducts Kit - 900-0060-000 IF2, G4, Dry Connection Kit
55626	7.5" Hydraulic Gate Box	Satloc G4 & IF2	- 28773 Hydraulic Gate Box 7.5" Door - 22702 Demand Vent 4" Delrin - 25258 Power Unit Assembly - 58633 Cooling Ducts Kit - 900-0060-000 IF2, G4, Dry Connection Kit

Air Tractor

602 and 802 Hydraulic Gate Box Kits

All kits include hoses, gaskets, and the necessary fittings for installation.

Kit PN	Product Name	Satloc Compatibility	Main Kit Components
55635*	7.5" Hydraulic Gate Box	Satloc Falcon Pro & IF3	- 28817 Hydraulic Gate Box 7.5" Door - 22702 Demand Vent 4" Delrin - 25258 Power Unit Assembly - 58633 Cooling Ducts Kit - 57000 Fairing Assembly for AT-802 - 900-3512-01 IF3, Falcon Pro, Dry Connection Kit
55674*	7.5" Hydraulic Gate Box	Satloc G4 & IF3	- 28817 Hydraulic Gate Box 7.5" Door - 22702 Demand Vent 4" Delrin - 25258 Power Unit Assembly - 58633 Cooling Ducts Kit - 57000 Fairing Assembly for AT-802 - 900-3060-000 IF3, G4, Dry Connection Kit
55632*	7.5" Hydraulic Gate Box	Satloc G4 & IF2	- 28817 Hydraulic Gate Box 7.5" Door - 22702 Demand Vent 4" Delrin - 25258 Power Unit Assembly - 58633 Cooling Ducts Kit - 57000 Fairing Assembly for AT-802 - 900-0060-000 IF2, G4, Dry Connection Kit

*Must mention you need this gate box kit for an AT-602, 57002 Fairing Assembly for AT-602.

Air Tractor

Hydraulic Conversion Kits

All kits include necessary parts for conversion from manual to electric.

Kit PN	Product Name
25565	38" x 5" Manual to Hydraulic Gate Box
55367	38" x 7.5" Manual to Electric Gate Box

Thrush

510 Hydraulic Gate Box Kits

All kits include necessary fittings for installation.

Kit PN	Product Name	Satloc Compatibility	Main Kit Components
55623	5" Hydraulic Gate Box	Satloc G4 & IF2	- 25563 Hydraulic Gate Box 5" Door - 22702 Demand Vent 4" Delrin - 25258 Power Unit Assembly - 58633 Cooling Ducts Kit - 900-0060-000 IF2, G4, Dry Connection Kit

Thrush

Hydraulic Conversion Kits

Check in with your Transland Dealer for Conversion kits for Thrush Aircraft.

1.3 DRY APPLICATION INFO

Precision is critical in aerial application, and our electric gate delivers an impressive 1/32" door accuracy and our hydraulic gate boasts a 1/16" door accuracy with our Satloc Falcon Pro and G4 systems. Adaptable to various application needs, our electric gate supports variable rate, constant rate, and constant rate poly applications. It also offers wet (latched) and dry (soft-latched) door position settings. This versatility enables our gates to be adjusted to meet specific application requirements.

Factory Presets for Dry Application Profiles

The factory presets for dry application profiles encompass a variety of blends and pure substances tailored for different agricultural needs. The 26 preset profiles include different formulations of Urea and Sulfate mixtures, various Dry Rice applications, and specialized profiles for Wheat Seed.

Each profile is designed with specific application rates and swath widths to optimize the effectiveness of the application for different crops and field conditions. Pilots and agronomists can utilize these presets as a base to create customized profiles that best suit their unique crop and soil requirements.

Customizable Dry Profiles: Save Time

Our customers are thrilled with the ability to craft, save, and reuse dry profiles for different crops. Imagine setting up your application for a mix of 45 pounds of wheat and radish, fine-tuning the settings to perfection, and then... simply saving that profile for future use. This is not just a feature; it's advanced aerial application software.

Tailored Applications: Variable Rate & Constant Rate

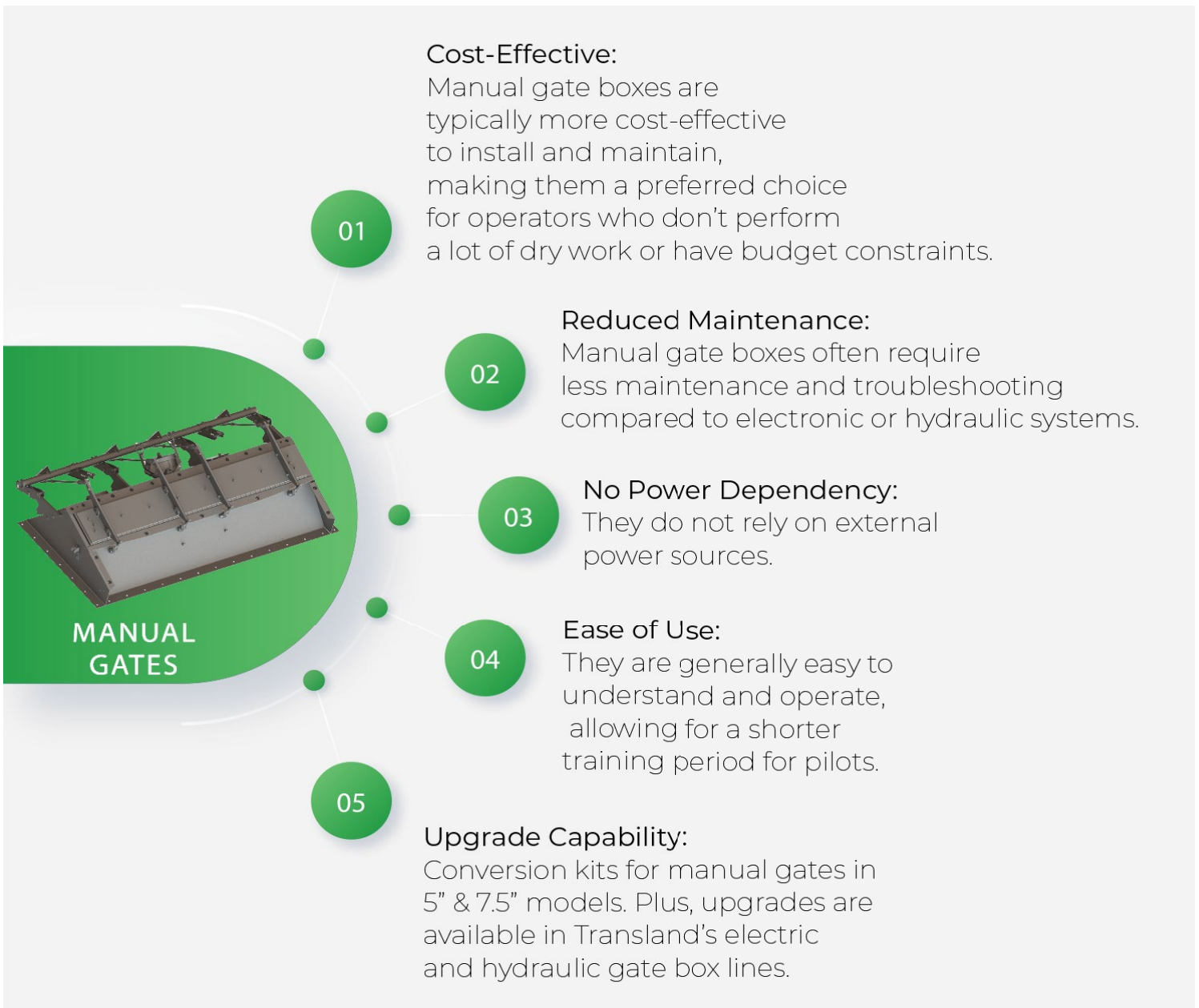
With the innovative Satloc Falcon Pro GPS systems, you're in control with the flexibility to handle variable rate and constant rate. This means you can adapt to varying field conditions, crop needs, and application requirements with ease and precision.

Effortless Operation: Set Once, Apply Anytime

The beauty of the Transland electric gate with Satloc Falcon Pro and Satloc G4 GPS systems rests in their simplicity and efficiency. "Once you name the profile, returning to it for another round of application is incredibly easy. I have all my settings for radishes saved, eliminating the need to reset them for each use. This not only saves time but also reduces the margin for error, ensuring consistent application across the board," explained another satisfied user.

1.4 MANUAL GATES BOXES

Transland's stainless steel manual gate boxes set the standard for durability and reliability in agricultural aviation. Designed to help prevent corrosion, these gate boxes are available in 5" and 7½" sizes and are standard equipment on Air Tractor and Thrush Aircraft. Cost-effective and easy to maintain, manual gate boxes are an excellent choice for operators who prioritize simplicity and affordability.



25" Manual Gate Boxes

Kit PN	Product Name	Main Kit Components
20281	5" Manual Gate Box	- Front Inlet Port - Spray Valve Port (Left Side)
20282	5" Manual Gate Box	- Front Inlet Port- With Cover Plate - Spray Valve Port (Left Side)- With Cover Plate
21966	5" Manual Gate Box	- Back Inlet Port with 3" Male Q.D. Butterfly Valve & Dust Cap - Back Sump Drain connected to Butterfly Valve - Back Flapper Port 3" Hose Barb

38" Manual Gate Boxes

Kit PN	Product Name	Main Kit Components
22558	5" Manual Gate Box	- Front Inlet Port with 2" Male Q.D. & Dust Cap - Spray Valve Port (Right Side)- With Cover Plate
28772	7.5" Manual Gate Box	- Front Inlet Port -With Cover Plate - Back Inlet Port (2ea) – With Cover Plate - Spray Valve Port (Left & Right Side)- With Cover Plate - Front Inlet Port Spacer (shipped loose with gate box) - 3" Male Q.D. Butterfly Valve with Dust Cap (shipped loose with gate box)
25559	5" Manual Gate Box for AT402/502	- Back Inlet Port with 3" Male Q.D. Butterfly Valve & Dust Cap - Back Sump Drain connected to Butterfly Valve - Back Flapper Port 3" Hose Barb
25581	5" Manual Gate Box for AT 602/802	- Back Inlet Port with 3" Male Q.D. Butterfly Valve & Dust Cap - Back Sump Drain connected to Butterfly Valve

41" Manual Gate Boxes

Kit PN	Product Name	Main Kit Components
21579	5" Manual Gate Box	- Front Inlet Port - Spray Valve Port (Left Side)
28784	7.5" Manual Gate Box	- 3" Male Q.D. Butterfly Valve with Dust Cap (shipped loose with gate box) - Front Inlet Port Spacer (shipped loose with gate box) - Spray Valve Port (Left & Right Side)- With Cover Plate
23565	5" Manual Gate Box for Thrush 510	- Front Inlet Port with 3" Male Q.D. Butterfly Valve - Spray Valve Port (Left Side) with Spacer
25664	5" Manual Gate Box for Thrush 710	- Front Inlet Port with 3" Spacer for Butterfly Valve - Spray Valve Port (Left Side) with Spacer

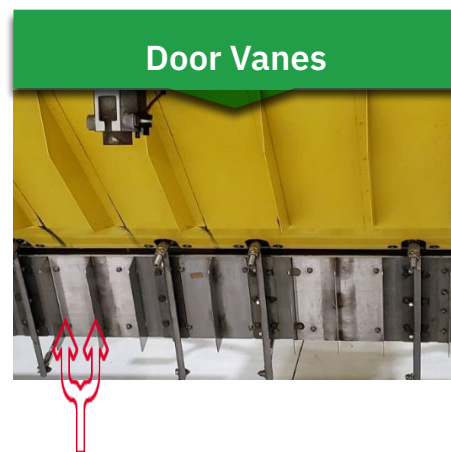
1.5 GATE VANES

Transland offers two types of gate vanes to improve consistency and efficiency in dry applications: door vanes and fairing straightening vanes. Door vanes, available in five-piece kits specific to gate box door sizes, enhance consistency by optimizing the airflow through the gate box door. Fairing straightening vanes are designed to smooth airflow around the gate box fairing, reducing turbulence and drag while increasing airflow through the spreader.

Door Vanes

To produce more consistency in dry work, adding door straightening vanes to the gate box door and the fairing located in front of the gate is recommended. It's important to note that most spreaders maintain a consistent pattern and swath width up to 250 lbs of material per acre. Beyond this point, an increase in pounds per acre may lead to a reduction in swath width. Another aspect of this is the more it is opened, the airflow is reduced. The vanes in the throat of the spreader are adjustable. Remember, the setting from the factory is based on testing, in conjunction with Dennis Gardisser and Mike Lee, for the optimal setting for the best overall performance of Transland Spreaders and SwathMasters.

Door Straightening Vanes PN	Fits Gate Box Type(s)
50025	25" Gate Box, 5" Gate Door
50038	38" Gate Box, 5" Gate Door
50041	41" Gate Box, 5" Gate Door
51036 (for older model)	38" Gate Box, 7 1/2" Gate Door with 3 holes on gate
51037 (for newer model)	38" Gate Box, 7 1/2" Gate Door with 4 holes on gate
51038	38" Gate Box, 10" Gate Door
51041	41" Gate Box, 10" Gate Door



Fairing Straightening Vanes for Fairings

The Straightening Vanes for fairings are designed to smooth the airflow around the plane's gate box, reducing turbulence and drag. This allows for more airflow through the spreader.

Straightening Vanes (PN 16999) for Fairings only work with the below listed Fairing Part Numbers:

- 57000 – for a 7 1/2" Gate Box on an AT-802
- 57002 – 7 1/2" Gate Box on an AT-602

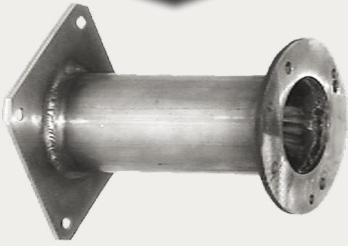


Straightening Fairing Vanes PN	Description
16999	14"
17004	18"

1.6 SPACERS (VALVE TO GATE)

Gate Box Spacers are components that maintain a consistent distance between the gate box and the spray valve, allowing a smooth, regulated flow. All valve-to-gate box spacers are 4" wide and available in various hole pattern attachments to meet the different gate box configurations.

Gate Box Spacer

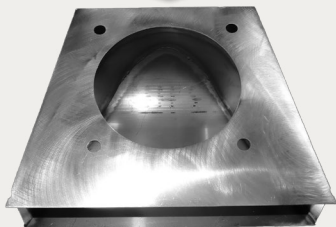


Spacer PN	Description	Fits Gate Box Type(s)
52486	Meets a combination of 4-hole or 3-hole patterns, stainless steel	25151 10" Fire gate box
52487	Meets a combination of 4-hole or 3-hole patterns, stainless steel	Older Thrush gate boxes
52490	Meets a 4-hole pattern, stainless steel	Thrush gate box PN 23565
52587	Meets a 3-hole pattern, stainless steel	Weatherly gate boxes
52488	Meets a combination of 4-hole or 3-hole patterns, with a 1.5" Q.D. for Spray Valve	Ag Cat gate boxes

1.7 SUMP DRAINS

A sump drain is designed to collect and remove excess liquid that accumulates in the gate box. Strategically positioned at the lowest point where the liquid will likely accumulate, the sump helps prevent liquid from standing in the gate box. Sump drains are available in both front and back configurations.

Sump Drains



Sump Drain PN	Description	Fits Gate Box Type(s)
53456	3" Inlet	25" Gate Box
54409	Back sump drain, 3" Inlet	38" Gate Box, for Gate Box PN 25589
22077	Front sump drain, 3" Inlet	38" Gate Box, for Gate Box PN 25581
58647	Front sump drain, 3" Inlet	38" Gate Box, 7.5" Door
58393	Side plumbing sump drain, 3" Inlet	38" Gate Box, 7.5" Door
53442	3" Inlet	41" Gate Box, 5" Door (Used with Thrush 510 aircraft gate boxes)
50905	4" Inlet	41" Gate Box, 5" Door (Used with Thrush 660 and 710 aircraft gate boxes)

1.8 GATE PLATES

The plates offered to work in conjunction with Transland gate boxes are metering plates, seeder plates, and dump plates. Each of these plates exists for specific reasons.

Metering Plate



Metering Plates

When applying small quantities of granular materials (50 lbs or less), metering plates can be inserted into the gate box to regulate and disperse the desired flow rate. These plates are designed to provide precision in applications requiring low distribution rates.

Metering Plate PN	Fits Gate Box Type(s)
22750	Piper Brave/Pawnee
22751	25" Gate Box, 5" Door
22754	38" Gate Box, 5" Door
28040	38" Gate Box, 10" Door
22752	41" Gate Box, 5" Door



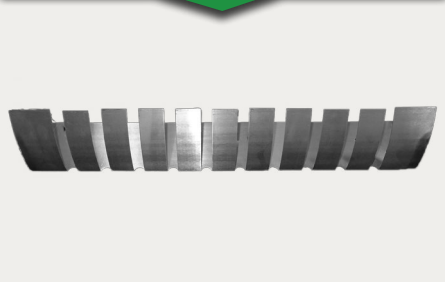
Be aware that using metering plates will restrict the pilot's ability to dump a load quickly in an emergency. This potential limitation should be considered in safety planning and operational procedures.

Seeder Plates

Seeder Plates bolt onto the inside of the gate box door. They work in tandem with the box's opening size to control the flow rate of material, such as seeds or granulated fertilizers. Seeder Plates give the pilot control over the desired amount of material distributed efficiently during the application process.

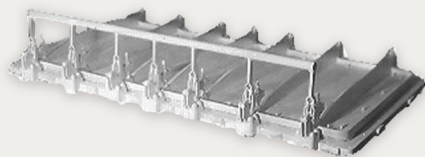
One of the key features of the seeder plates is their versatility and convenience. They are designed to remain attached to the door even when switching to liquid applications. This means operators don't need to remove the plates when transitioning between different types of materials, saving time and effort during the process.

Seeder Plate



Seeder Plate PN	Fits Gate Box Type(s)
21126	25" Gate Box, 5" Door
22127	38" Gate Box, 5" Door
21127	41" Gate Box, 5" Door

Dump Plate



Dump Plate

Transland offers a dump plate for 38" and 41" gate boxes. These are primarily used in aerial firefighting. Once this door is opened, it cannot be closed until the plane has landed.

There are optional quick-disconnect flanges, allowing rapid equipment change-over for granular dispersal and easy removal for inspection or repair. Once the quick-disconnect flanges are installed on both the hopper and gate box, transitioning between the gate box and the dump plate takes just minutes.

Dump Door & Frame Assembly	Fits Gate Box Type(s)	Optional Q.D. Kit for Hopper	Optional Q.D. Kit for Gate Box This option benefits applicators who switch to a standard gate box for dry work and add a spreader.
25013 (An applicator can bolt this onto the aircraft or buy optional Q.D. kits)	38" Gate Box	59326 Bolts onto hopper where gate box would connect to allow for quick removal with Q.D. on gate box (59325) or swap for Dump plate 25013.	59325 Bolts onto the gate box and is used with Q.D. flange (59326) to remove the gate box quickly.
21959 (An applicator can bolt this onto the aircraft or buy optional Q.D. kits)	41" Gate Box	59324 Bolts onto hopper where gate box would connect to allow for quick removal with Q.D. on gate box (59328) or swap for Dump plate 21959.	59328 Bolts onto the gate box are used with Q.D. flange (59328) to remove the gate box quickly.

NOTE:

Older systems might already have the Q.D. kit for the hopper or the Q.D. kit for the gate box. This is why the optional kits are sold separately. You will need both Q.D. kits if you want a quick disconnect system.

1.9 DEMAND VENTS

Demand Vents help equalize pressure within the hopper as materials are dispensed during flight. When material is released, the internal pressure inside the hopper can decrease, potentially creating a vacuum effect that disrupts the smooth flow of materials. By allowing air to enter the hopper, Demand Vents maintain consistent internal pressure, preventing the formation of a vacuum and allowing materials to flow smoothly and evenly.

Demand Vents



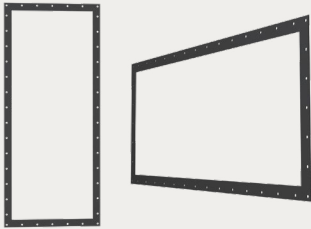
Regular maintenance and inspection of Demand Vents are essential to ensure optimal performance. Blockages, wear and tear, or damage to the vents can lead to operational disruptions and safety risks.

Demand Vent PN	Description
22711	4" Aluminum Demand Vent
22702	4" Delrin Demand Vent
22701	4" Stainless Steel Demand Vent
22706	8" Aluminum Demand Vent
22706	8" Delrin Demand Vent

1.10 SEALS & GASKETS

Gate seals and gaskets help seal the gate doors. Transland sells these separately or in kits.

Gate Seals & Gaskets



Gate Box Door Seals

Gate Box Door Seal PN	Description	Fits Gate Box Type(s)
60210	5" Door Seal, Buna-N Material	25" Gate Box
60712	5" Door Seal, Viton Material	38" Gate Box
60713	5" Door Seal, Buna-N Material	38" Gate Box
60205	5" Door Seal, Buna-N Material	41" Gate Box
60204	5" Door Seal, Viton Material	41" Gate Box

Hopper Seals to Gate Box Gasket

Hopper Seal to Gate Box Gasket PN	Hopper Size	Main Components
60160	25" Hopper	- Vellumoid Material - 1/8" Thick - 4 Piece Set (2 long & 2 short)
60728	38" Hopper	- Vellumoid Material - 1/8" Thick - 4 Piece Set (2 long & 2 short)
60729	38" Hopper	- Viton Material - 1/8" Thick - 4 Piece Set (2 long & 2 short)
60747	38" Hopper	- Vellumoid Material - 1/8" Thick - 1 Full Piece
60222	41" Hopper	- Vellumoid Material - 1/16" Thick - 4 Piece Set (2 long & 2 short)
60223	41" Hopper	- Vellumoid Material - 1/8" Thick - 4 Piece Set (2 long & 2 short)
60749	41" Hopper	- Vellumoid Material - 1/8" Thick - 1 Full Piece

Transland Gate Box Guide



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