

OWNER'S MANUAL

FleetPlow[™] FOR Trucks



Model 440T & 440S Portable

Model 110T & 110S Base-Mount

OneTAP™ Full Automation or AutoUP™ Standard Automation

For your records, please record this serial number, found on the side of the main control panel:

Control System Serial Number:

WARNING: This machinery should not be operated or maintained by any person who has not read and understood all the contents of this manual. Installation and service should be performed by an authorized dealer. Failure to read and comply with the contents of this manual can result in serious bodily injury or death, and/or property damage.

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North American Warranty

Scraper Systems FleetPlows[™] are warranted, from the date of shipment, to be free from defects in material and workmanship for a period of two (2) years on all mechanical and electrical parts and one (1) year for labor, based on approved travel and labor repair times. The FleetPlow must be used in accordance with manufacturer's recommendations and must not have been subject to abuse, lack of maintenance, misuse, negligence, or unauthorized repairs or alterations. The FleetPlow must have been installed by certified dealer installers or by factory installers, with training on the safe and proper operation provided by same.

NDTICE: FleetPlows are designed for safe and effective snow clearing in controlled commercial applications. Like with all large machines, care must be taken by all personnel in the vicinity to uphold common sense safety practices and operate the machine only as it is intended. Failure to do so may result in damage to this or other equipment and/or personal injury or death.

Key Tips for Optimal FleetPlow™ Performance

- 1. LEVEL TRAILER. Minimize any slope, front to back or back to front.
- 2. CENTER THE TRAILER by aligning vehicle with the V-point of the plow.
- 3. MINIMIZE CHAIN SLACK to 2 links or less when plow is resting on roof. (OneTAP automation is pre-programmed.)
- 4. ACCELERATE TO 8-10 MPH while passing under the plow, clearing the snow off the vehicle roof.
- 5. **REMOVE GROUND SNOW** as necessary. Avoid snow build-up beneath the FleetPlow.

Important Information

Electrical Service Required: 120 volt, single phase, 15 amps.

Electric Sources: Suitable extension cord; small portable generator, minimum 1400 Watt continuous run; or hard wiring for stationary applications.

Snow Depth Capacity: Up to 24" of wet snow; deeper amounts may require a second pass.

Storage of Plow Assembly When Not In Use: Store the plow in the full up position with the front bottom plow assembly guide wheels above the reflective tape strips.

<u>Off Season Storage</u>: The plow assembly should be bolted to the columns in the full up position using the provided summer storage bolts (see figure 1, pg.16). Once secured, relieve tension in the hoist's load chain by leaving approximately 2 links of slack in the chain.

Basic Operating Requirements (All Models)

- Refer to the provided hoist Owner's Manual for maintenance and safe operation of the hoist.
- Safety Stops (#01580) on columns must remain in place at all times.
- Always ensure no people are underneath the plow, or anywhere in the drive-thru area. People must stay clear of discharging snow and ice.
- CAUTION
 Plow assembly must always be in the maximum up position with bottom plow assembly guide wheels above the reflective tape strips located on the columns, before entering the scraper area.
- Always enter the FleetPlow at a slow, safe speed 5 MPH maximum.
- Always align the vehicle center with the V-point of the plow and stop the vehicle once the point of plow is extending over the leading edge of the trailer a minimum of 12".
- CAUTION
 Before driving forward, always ensure that the plow assembly is on top of the trailer and not hanging in front of the leading edge of the trailer.
- Once plow assembly has been lowered, as specified in the Operating Procedures, always remove any excessive slack in the chain before driving forward.
- **CAUTION** Never back the trailer up while the plow assembly is on the trailer.
- Drive vehicle forward at a steady speed, accelerating to 8-10 MPH.
- Never allow a mound of snow to build up in the drive-thru. Remove built up snow as necessary, <u>only when the plow assembly is in the full up position.</u>
- **EXWARNING** Do not use the FleetPlow for anything other than removing snow and ice from vehicle roof tops. The machine is not designed for and must not be used for lifting, supporting, transporting people or for lifting or supporting loads over people.
- Do not operate a damaged or malfunctioning FleetPlow. Call Scraper Systems or your dealer for service.
- Always turn off power to unit when not in use.
- Do not use the OneTAP automated feature of your FleetPlow to clear snow off roofs when pulling a set of multiple trailers. See Multi-Trailer Operation instructions.

Conversion Between Operating and Rolling Modes (Portable FleetPlows™ Only)

- To prepare for rolling, fasten the provided tow bar angles (P/N 4158D) to the front and back of the unit in the holes provided at each wheel set frame.
- 2) Remove concrete ballasts with forklift.
- 3) Using the screw jacks, lower each wheel set so the FleetPlow frame is raised approximately 2 inches off the ground.
- 4) Attach suitable towing chain or strap to the hole provided on the front tow angle at the swivel wheel front end.
- 5) Tow slowly to the desired location on your lot and position.
- 6) To prepare for operation, use jacks to raise each wheel set so the frame is lowered onto the ground.
- 7) Place the concrete ballasts on the integrated steel pads on each side.
- 8) Remove the tow bar angles and store on the provided storage hooks.

Operating Procedures for Models Equipped with Full Automation - OneTAPM

- 1) Turn Selector Switch to Auto, if plow is not in full up position, press the OneTAP button to raise plow to up position.
- 2) Green Blinking LED Traffic Light Indicates: Plow assembly is in the full up position, so driver may enter the FleetPlow. Plow is stationary. Driver should always check that the bottom wheels of the plow assembly are above the reflective tape strips on the columns.
- 3) Driver enters FleetPlow. Vehicle must be centered in the drive-thru, aligned with the v-point of the plow.
- 4) Blue LED Spot Light (Always ON): Driver stops when Trailer Locator Blue Beam shines on front left corner of trailer, as viewed in side-view mirror.
- 5) Driver exits the cab and taps the lit green **OneTAP start button**, conveniently located at the Start Station.
- 6) Red Blinking LED Traffic Light (and now red OneTAP button) Indicates: Plow assembly is now automatically lowering to the trailer top. Do not move vehicle.
- 7) Driver waits and observes plow assembly lowering onto trailer top to confirm correct positioning of trailer with the Blue Spot Light. Plow point will be approximately 12" onto the trailer.
- 8) Green Blinking LED Traffic Light (and now green OneTAP button) Indicates: Plow has stopped and is in proper position for snow clearing operation.
- 9) Driver returns to cab and drives forward, accelerating to a speed of 8-10 MPH, to clear the snow from the roof.
- Red Blinking LED Traffic Light (and now red OneTAP button) Indicates: Plow assembly is rising to full up starting position for next vehicle. Plow is in motion.
- Green Blinking LED Traffic Light (and now green OneTAP button) Indicates: Full up sensor has detected the plow assembly, stopping its rise. The next driver may now enter the FleetPlow.



Operating Procedures for Models Equipped with Standard Automation - AutoUPM



- Driver should always check that bottom wheels of the plow assembly are above the reflective tape strips located on the columns before entering the FleetPlow.
- 3) Driver enters FleetPlow area, centering on the v-point of the plow assembly and stops the truck so that plow assembly extends over the top of the trailer a minimum of 14". Trailer is now blocking the signal between the opposed photoelectric sensors mounted on each column.

Turn selector switch on main control box to Auto.

1)

- 4) Using the pendant control down button, lower the plow assembly to the surface of the roof top with the weight of plow lightly resting on the trailer. Release the down button on the pendant to stop the hoist after approximately 2 links or less of slack has gathered. Jog the up button on the pendant to reduce any excessive slack before proceeding.
- 5) Driver drives forward, **accelerating to a speed of 8 to 10** MPH, to clear the snow off the roof.



- 6) As trailer exits the FleetPlow, the sensor signal is no longer blocked and the plow assembly will automatically rise to the full up position, stopping when detected by the plow full-up sensor.
- 7) The next driver may enter the FleetPlow once the plow assembly has risen above the reflective tape strips and has stopped moving.

Operating Procedures for Manual Operation: (using 2-button pendant control)

- 1) When necessary, turn selector switch to Manual.
- Driver should always check that the bottom wheels of the plow assembly are above the reflective tape strips located on the columns before entering the FleetPlow.
- Driver enters FleetPlow area, centering on the v-point of the plow assembly and stops the truck so that plow assembly extends over the top
 of the trailer a minimum of 12".
- 4) Using the pendant control down button. Lower the plow assembly to the surface of the roof top with weight of plow lightly resting on the trailer. Release the down button on the pendant to stop the hoist after approximately 2 links or less of slack has gathered. Jog the up button on the pendant to reduce any excessive slack before proceeding.
- 5) Driver drives forward, accelerating to a speed of 8 to 10 MPH, to clear the snow off the roof. CAUTION: Before leaving the FleetPlow area, the driver or operator must raise the plow assembly to full up position for the next driver.

- 6) Using the pendant control up button, raise the plow assembly until the full up sensor detects the plow assembly, automatically stopping it. Release up button.
- 7) The next driver may now enter the FleetPlow.

Multi-Trailer Operation (Doubles or Triples): ALWAYS DECOUPLE

<u>Maintenance</u>

Please contact one of our North American network of dealers to provide an efficient preventative maintenance program for your FleetPlow[™].

All Models	Criteria	Action
Test the Operation of the Unit	Verify electrical system is functioning properly.	Test run unit several times in the fall before the first snow.
8" Plow Guide Wheels and Bearings	Guide wheels should be free of cracks or breaks and rubber tires should not have excessive wear or flat spots. Wheels should turn freely on axle.	Clean and grease once a year or replace as neccessary.
8" Plow Guide Wheel Axles and Pins	Axles to be visually straight.	Replace pins, shafts or brackets if bent.
Rubber Plow Squeegee	Visually check that rubber plow squeegee is free of tearing or excessive wear.	Replace as neccessary.
Electrical Components	Visually inspect electrical boxes, cordsets, cables and connectors for loose connections or damage.	Tighten or replace as neccessary.
Bolts, nuts, and other fasteners	Bolts, nuts, and other fasteners should not be loose.	Tighten or replace as neccessary.
Lifting hook and eye	Visually check that hoist's lifting hook is securely hooked to the plow's lifting eye.	Secure if neccessary.
Pendant - Housing	Pendant housing should be free of cracks and mating surfaces of parts should seal without gaps.	Replace.
Pendant - Wiring	Wire connections to contacts in pendant should not be loose or damaged.	Tighen or repair.

Portable Model (Only)	Criteria	Action
12" Base Wheels and Bearings	Base wheels should be free of cracks and breaks. Wheel	Grease once a year or replace as
	should turn freely on axles.	neccessary.
Jacks	Jacks should crank up and down easily.	Grease once a year or replace as
	Only try to lift unit when ballasts are removed.	neccessary.

** Criteria and Actions listed below are brief excerpts from the hoist manual. Always refer to the full hoist Owners Manual (provided) for full explanation and requirements of hoist inspection procedures, frequency, criteria, and action. **

Electric Chain Hoist	Criteria	Action
Hoist Load Chain Lubrication	Entire surface of each chain link should be coated with lubricant and should be free of dirt and grime. <i>An auditory</i> <i>indication that lubrication is neccessary is when chain</i> <i>emits a cracking noise when hoisting a load</i> .	Clean and Lubricate. (see Section 6.0 in Hoist Manual) (see Figure 6.2 in Hoist Manual)
Load Chain Surface Conditions	Should be free of rust, nicks, gouges, dent and weld splatter. Links should not be deformed and show no sign of significant wear. Surfaces where links bear against one another should show no sign of significant wear.	Replace.

Electric Chain Hoist	Criteria	Action
Hook – Hook Latches	Latch should not be deformed. Attachment of latch to	Replace.
	hook should not be loose and Latch spring should not be	
	missing or weak. Latch, when depressed and released	
	should snap smartly into closed position	
Hook – Swivel Bearing	Hooks swivel bearing should rotate freely with no	Clean/lubricate or replace as required.
	roughness. Bearing parts and surface should show no	
	signs of significant wear.	
Contactors	Visually check if contacts have burnt marks which may	Good - Spray with Corrosion X.
(see hoist manual)	cause intermittent movement.	Intermittent - Replace contacts.
		(requires removal of hoist cover)
Gear Box Dil Level	Oil level can be checked using the check hole on the side	Refer to hoist manual for warnings and criteria for
(see hoist manual)	of the hoist body.	checking hoist gear oil levels.
		(requires removal of hoist cover)

<u>Troubleshooting</u>

Always check that cable and cordset connectors are properly connected and tightened at junction and control boxes. Connectors should only be hand tight for a proper seal. Over tightening using pliers or vise grips may damage seals.

Situation – All Models	Action(s)
No power	Turn disconnect switch on.
	Check that circuit breakers are not turned off or tripped. (Breaker that show Red are on, Breakers tripped if
	green)
	Check for required electrical service at main control enclosure is 120V.
	If using an extension cord, check that the cord is plugged into the receptacle.
	Ensure extension cord is functioning properly and providing 110V to control box.
Breaker tripping	Check if using GFCI outlet. Those are meant to trip breakers when spikes of lesser draws happen.
General Malfunction	First raise the plow to full up position using the pendant controller. Then reset system by turning
	power off and back on. If the malfunction continues, use of the manual pendant control may be
	necessary until service can be arranged by your dealer.
Pushing pendant buttons does not raise or	Check that pendant connection is properly plugged/tightened to receptacle.
lawer plaw.	Check that Ice has not formed around buttons.
	With pendant removed from all power sources, remove back cover of pendant and check that wires
	are tightened properly, not loose, broken or corroded.
	Check for loose wire(s) in main enclosure and junction box.
	Refer to Hoist Manual for trouble shooting hoist.
LED Flood light doesn't come on	Check that connection is properly plugged and/or tightened into the receptacle on the junction box.
	Check for loose wire connection in light and/or junction box.
(No photo control supplied on LED floodlight	
November 2017 to present)	
Light stays on all the time. (for unit prior to	Check that the photo cell is not covered by debris or another object.
November 2017)	Check photo cell for loose and/or corroded connections.
Plow does not clear snow towards back of	Level trailer to reduce slope if front higher than back.
the trailer. Plow not in contact with roof's	Ensure drive-thru is clear of built-up mounds of snow, particularly where the back wheels of the
entire length.	tractor will come to rest when properly locating the plow assembly over the trailer.
5	Slope of the exiting path is excessively inclined. Manually increasing the amount of slack with
	another link of chain may resolve this. Or relocate the FleetPlow to a more level location.
Plow seems to drop hard off back of	Level trailer to reduce slope if back higher than front.
trailer.	Ensure drive-thru is clear of built-up mounds of snow.
	Slope of the exiting path is excessively declined. Manually decreasing the amount of slack by
	another link may resolve this. Or relocate the FleetPlow to a level location.
	Excessive solid snow or ice build-up on the roof can create a ramp effect at the back of the trailer.

Situation - Standard Automation, AutoUP	Action(s)
Plow doesn't raise automatically.	Selector Switch is in the manual position.
	Emitter and Receiver sensors not lined up.
	(LED on top of Receiver should be off when lined up correctly.)
	Emitter and Receiver sensors are installed on the wrong sides.
	Plow Full Up sensor cable switched with Emitter cable on junction box.
Plow doesn't stay down in Auto mode.	No Truck in sensor area.
	Emitter and Receiver sensors are installed on the wrong sides.
	Cables for the Emitter and Plow Full Up sensor are switched at junction box.
Plow doesn't stop at full up sensor while	Cable not tightened properly on back of sensor or junction box.
raising.	Plow Full Up and Emitter cables switched at junction box.
	Plow Full Up Sensor and/or cable broken.
Plow does not clear snow towards back of	The front of the trailer is higher than the back. Level trailer to reduce slope.
the trailer. Plow not in contact with roof's	Ensure drive-thru is clear of built-up mounds of snow.
entire length.	If slope of the exiting path is excessively inclined, manually increasing the amount of slack with
	another link may resolve this. Or relocate the FleetPlow to a more level location.
Plow drops hard off back of trailer.	Level trailer to reduce slope, back higher than front.
	Ensure drive-thru is clear of built up mounds of snow.
	Slope of the exiting path is excessively declined. Manually decreasing the amount of slack by
	another link may resolve this.
	Or relocate the FleetPlow to a level location.
	Excessive solid snow or ice build-up on the roof can create a ramp effect at the back of the trailer.

Situation - OneTAP Full Automation	Action(s)
Plow doesn't lower.	Check breakers and power cords.
	Check power to OneTAP button, which should be lit green. Check button contacts.
	Check for operation with 2 button manual pendant.
Hoist continues to pay out chain once plow lands on trailer	Plow Full Up and Load Spring Piston Assembly (P/N 92690 see figure 2, pg. 12)
top.	proximity sensor cables switched at junction box.
(After approximately I ½ links of slack, the hoist is programmed to	* Load Spring Piston Assembly proximity sensor not adjusted properly per
shut aff.)	specification.
Plow doesn't automatically raise.	Proximity sensor in Load Spring Piston Assembly malfunctioned, broken, not in
	range.
	Check that FullUP Sensor is functioning properly and is stuck in the on position.
	Check "up" operation with manual pendant.
Plow doesn't go up in auto or using manual buttons, but	Plow Full Up cable switched with proximity cable at junction box.
lowers in both modes.	lce buildup on sensor.
(Full up sensor is indicating the plow is already up.)	Plow Full Up sensor cable not tight.
Plow doesn't return to full up position.	Model prior to November 2017 Reset by turning disconnect off and back on.
	Model after November 2017. Tap the OneTAP button to reset.
Plow does not clear snow towards back of the trailer. Plow	Level trailer to reduce slope, front higher than back.
not in contact with roof's entire length.	Ensure drive-thru is clear of built up mounds of snow, particularly where the back
	wheels of the tractor will come to rest when properly locating the plow over the
	trailer.
	** If slope of the exiting path is too steep (up) due to the installation site, your
	dealer may be able to increase the amount of slack to solve this.
Plow seems to drop hard off back of trailer.	Level trailer to reduce slope, back higher than front.
	Ensure drive-thru is clear of built up mounds of snow.
	Ensure the vehicle is exiting at the required speed of 8-10 MPH.
	Excessive snow or ice has frozen solid, creating a ramp effect at the back of the
	trailer.
	** If slope of the exiting path is too steep (down) due to the installation site, your
	dealer may be able to decrease the amount of slack to solve this.

Troubleshooting Sensor Functionality Using Input Lights on the Turck FEN for OneTAP Full Automation

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When Pre Inputs-	essing Dov	vn But 1	ton on	Penda 2 (ant an) 3	l plow l	begir 4	ns trav	eling 5	g dawn	? 6 (C	7	0	Outputs-	8	0	9	\bigcirc	10 🔵	11	0
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Troubleshooting Sensor Functionality Using Input Lights on Siemens PLC for OneTAP Full Automation

Model Year November 2017 and Before

3456

A DANGER PLC in Main Control Box, Only Qualified Person(s) Should Access.

Input 3 = Plow Up sensor. It is ON when the plow is up.

Input 4 = Plow Proximity. It is ON when the plow has no weight on it (i.e. it is down, sitting on trailer top or safety stops).

What numbers should be on and off when plow is in Full Up position, pressing OneTAP button? Input 3 = ON, Input 4 = OFF, Input 2 = ON while traffic light green OFF when traffic light turns Red

When plow is traveling down? Input 3 = OFF, Input 4 = OFF

234567 0

When plow comes to rest on top of trailer? Input 3 = OFF, Input 4 = ON

When plow raising? Input 3 = OFF, Input 4 = OFF

For your reference, the other inputs are as follows. Input O = Manual Up. This turns ON when you press the manual UP button.

Input 1 = Manual Down. This turns ON when you press the manual DOWN button.

Input 2 = Start Auto. This turns ON when you press the OneTAP button. It stays ON while the One-Tap light is green. It turns OFF when the OneTAP light is red.

Input 5 = Trailer Present. This is hardwired ON.

Input 6 = Trailer 1. This is hardwired ON. This is a spare

Input 7 = Trailer 3. This may or may not be wired, depending on Revision Level it is a spare

OneTAP™ Load Spring Piston Proximity Sensor Installation

* When replacing or adjusting the Load Spring Piston (LSP) proximity sensor, the plow assembly must be lowered to rest on the safety stops, so no tension is on the hoist's load chain. Thread the sensor in, by hand, the entire way until it bottoms out. Mark the Load Spring Piston Assembly top cap and sensor body with a permanent marker. Turn out, counter clockwise, one (1) full turn and line up the marks on the top cap and sensor body. Tighten nuts down, assuring that marks remain lined up. *

When setting the proximity sensor with no weight hanging, so the piston is within the range of the sensor, should the light on the proximity sensor be on or off? Light ON.

When the weight of the plaw is pulling the piston out of range of the sensor, should the light be on or off on the proximity sensors? Light OFF.



























Figure 2: Load Spring Piston Assembly P/N 92690



	For Parts. Please contact dealer for pricing.							
	X = Comes with Unit at Ins	stallati	on					
Part	Description							
Number		ntity	144					
01070	Replacement Plow Assembly (includes P/N 01080, 01081, 01082, 01083, 02090, 02190 and all accessory bacdware)	Gua	Made	W	leries 20			
	Plow Assembly	1	X	X	X			
01081	Outside Wheel Bracket w/ 3/4" Axle	Z	X	X	X			
01082	Inside Wheel Brackets	4	Х	Х	X			
01083	3/4" Inside Wheel Shafts	2	Х	Х	Х			
01084	Squeegee Clamping Strap	2	Х	Х	Х			
01180	Top Tube Beam Assembly	1	X	Х	Х			
01181	Hoist Plate	1	Х	Х	Х			
01182	Eye Bolt Plate	1	Х	Х	Х			
01280	Column LH	1	Х	Х	Х			
01380	Column RH	1	Х	Х	Х			
01480	Corner Braces	2	Х	Х	Х			
01580	Safety Stop	2	Х	Х	Х			
01680	Hoist Cover	1	Х	Х	X			
01681	Hoist Cover Back Plate	1	Х	Х	Х			
01780	Light Mounting Bracket	1	Х	Х	Х			
02090	168" x 6" x 1" Rubber Squeegee w/ 1/2"Holes	1	X	Х	Х			
02071	Replacement Squeegee (parts orders only)							
02194	8" Plow Guide Wheels	8	Х	Х	Х			
05880	Plow Balance Hardware Bag	1	Х	Х	Х			
02191	Spanner Bushing, 8" Wheel (units prior to Oct. 2015)							
02290	1/2 Ton Hoist w/QD, (includes P/N 02297)	1	X	X				
02291	1/2 Ton Hoist w/ Chain Bag (Only)							
02299	Harrington Manual 1/2 Ton	1	X	X				
02297	2 Button NEMA 4 Pendant w/8' Drop & QD							
U2294	Flood Light Field Wireable UU Connector							
02295	Hoist Control & Pendant Field Wireable UU Connector							
02296	Hoist Power Field Wireable UU Connector				v			
02590	1 Ion Hoist w/UU, (includes P/N U2297) (must specify unit width)	1			X			
02390	Flood Light, Halide w/ Photo Cell & UU							
02392	Flood Light, Halide, (Unly)							
UZ391	Photo Lell Control, (Unly, Halide)							
UZ393 09400	Halide Keplacement Buid <i>(for P/N U2390)</i>							
UZ49U 09409	LED LIGHT W/ PHOTO GEIL & GUU	4	v	v	v			
UZ433 07/07	LED Light, nu phulu cen (Slandaru) LED Dista Pall (Asia)		Λ	Λ	Λ			
02432	LED FNULU GEN, (UNIY) Serial # Labol	1	v	v	v			
02031	1.2001 abol	1	A Y	A Y	A Y			
02032	r-uuu Lauti Senanan Svetam Loon Lahal (staskad)	1	A Y	A Y	A Y			
02034	uu apar uysiani Lugu Lavai (sidukeu) Summor Storano Hardwaro Ran	1	A Y	A Y	A Y			
00700	1/7 Ton Kito Hoist w/DD Pondent w/8' Dron & DD <i>(faculas in</i>		Λ	Λ	Λ			
02700	Canada, Includes P/N 02297) 1/2 Top Kito Hoist w/ Chain Rag (oply) (for use in Canada, Includes P/N 02297)	1	Х	Х				
02799	1/2 Ton Kito Manual (for use in Canada)	1	Х	Х				

Part Number	Description	ıtity	1440	1110	s 200 iner	
	Portable 440 and 880 Models	Quar	Mode	Mode	Serie: Spar	
41280	PRT Base LH (includes 2 - P/N 41690, 1 each - P/N 42790 and 42890 and 4 ea 42990)	1	X			
41380	PRT Base RH (includes 2 - P/N 41690, 1 each - P/N 42790 and 42890 and 4 ea 42990)	1	X			
41480	PRT Long Knee Brace	2	Х			
41481	PRT Short Knee Braces	2	Х			
41580	PRT Tow Angles	2	Х			
41680	Jack w/ Mounting Plate	4				
42080	Concrete Ballast 1800 lbs. ea. 2'x2'x3'	2	Х			
42790	Caster, Swivel	2				
42890	Caster, Rigid	2				
42992	12" Phenolic Wheel	8				
42991	Spanner Bushing, 12" Wheel	8				
	Base Mount Machine Model 110, 200 series units					
11280	BMT Mount Angles	4		X	X	

Part Number	Description	ıtity	sic	미미	TAP	panner	ur ner
	Electrical Control Systems and Components	Quar	Ba	Autr	Due	asic S	Autr Spar
92390	Basic Controls System (for buses)	1	X			ä	
92590	Standard AutoUP Controls System	1		Х			
91381-1	AUP Sensor Mounting Bracket LH for Receiver	1		Х			Х
91286-1	AUP Sensor Mounting Bracket RH for Emitter	1		Х			Х
92490	OneTAP Controls System	1			Х		
91380	Start Station	1			Х		
92295	Trailer Locator Light LED, Blue	1			Х		
91382	Trailer Locator Light Positioning Stop	1			Х		
92690	Load Spring Piston (LSP)	1			Х		
92091	Spring 2.50 x 3.00-Green (LSP internal springs)						
92190	2-Color Flashing Traffic Light, Assembly (includes P/N 92191, 92192, 92193, and 92196)	1			X		
92191	Beacon Tower Light 2-Color Blinking						
92192	Stand Off Pipe Cover/Adapter						
92193	6" Pipe 1/2" NPT, Both Ends						
92196	Right Angle Traffic Light Mount 1/2" NPT w/Hardware						
92890	1 Ton Basic Controls System Bus (extra-wide spanner units only)	1				X	
92790	1 Ton AUP Controls System Truck (extra-wide spanner units only)	1					X

Part Number	Description	ıtity		TAP	
	Electrical Control Systems and Components	Quar	V T		Auti
92491	OneTAP Operating Instruction Label, (start station)	1		Х	
92492	OneTAP Automation Label, (control box)	1		Х	
92493	Pendant Storage Enclosure	1		Х	
92475	4MM Cold Weather Plow Proximity Sensor (used in P/N 92690)	1		Х	
92472	Proximity Sensor Cable	1		Х	
92476	30mm Plow Full Up Sensor	1	Х	X	Х
92474	Plow Full Up Cable	1	Х	X	Х
91383	Full Up Sensor Bracket	1	Х	X	Х
92197	2 Color LED Traffic Light Cable	1		Х	
92294	Trailer Locator Light Cable	1		Х	
92575	Banner AutoUP CSA Sensor, Emitter	1	Х		Х
92572	Standard Width AutoUP Emitter Cable, <i>(for extra-wide spanner</i>	1	Y	,	Y
	replacement, please contact us)		^		Λ
92576	Banner AutoUP CSA Sensor, Receiver	1	Х		Х
92574	AutoUP Receiver Cable	1	Х		Х

For maintenance and service, contact your authorized dealer:



www.scrapersystems.com

This product is covered by one or more of the following U.S. Patents: 8,584,295; 9,168,898; 9,321,432; 9,834,181; 10,351,108; and U.S. and International Patents Pending.

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