

## 678 OTL Satellite Installation Instructions

678.001  
678.002

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## Recommended Tools



CUT-OFF WHEEL



WRENCHES:  
(QTY 2) 7/16"  
(QTY 2) 9/16"



#2 FLAT BLADE SCREW-  
DRIVER



TAPE MEASURE

## Recommended PPE



SAFETY  
GLASSES



SAFETY  
HELMET



EAR  
PROTECTION



SAFETY  
BOOT



SAFETY  
GLOVES



WELDING  
MASK



SAFETY  
HARNESS

## Working Precautions



LOCK OUT  
CONVEYOR LINE



BARRICADE  
AREA BELOW

## Before You Start!

Ensure the beam is clean and the Chain Changeover Process has occurred (12.001.00).

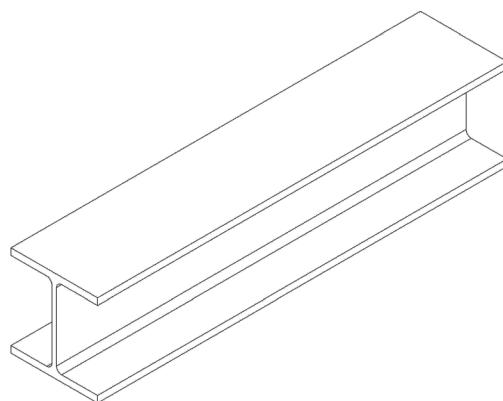
Locate a 24" section of overhead beam where installation of the unit will be convenient.

This section will preferably be located where no product or personnel will be below the beam.

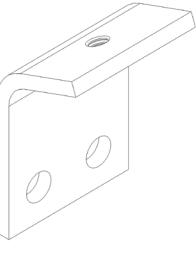
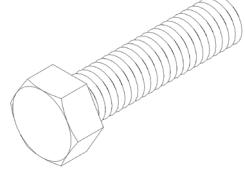
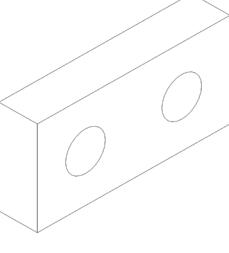
This section will also need to be 20' from a convenient wall mounting location for the Control Cabinet.

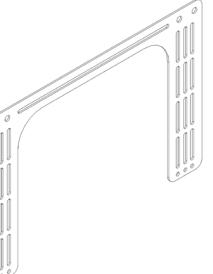
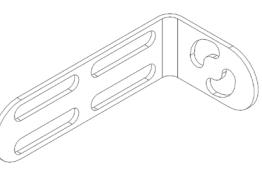
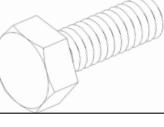
### KEEP IN MIND

Control Cabinet requires 120VAC and 60psi of compressed air.



# Hardware Needed

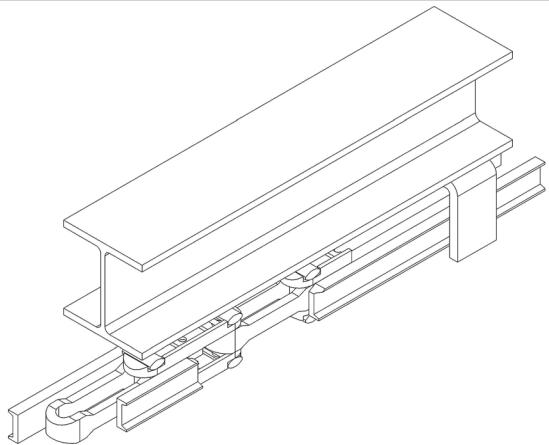
	Qty		Description
A.	4		3/8-16 Threaded Rods
B.	28		3/8-16 Flange Nuts
C.	16		3/8 Flat Washers
D.	8		3/8 Split Washers
E.	4		Beam Clamp Brackets
F.	4		3/8-16 Beam Clamp Bolts
G.	4		Beam Block Brackets

	Qty		Description
H.	2		Nozzle Configuration Brackets
I.	12		Slide Brackets
J.	2		Laser Adapter Brackets
K.	50		1/4-20 Hex Bolts
L.	50		1/4-20 Hex Nuts
M.	50		1/4" Flat Washers
N.	50		1/4" Split Washers

1

Remove an 8" section of the slide rail to allow the included laser eye(s) to sense the chain.

(This will allow for targeting of the nozzles.)



2

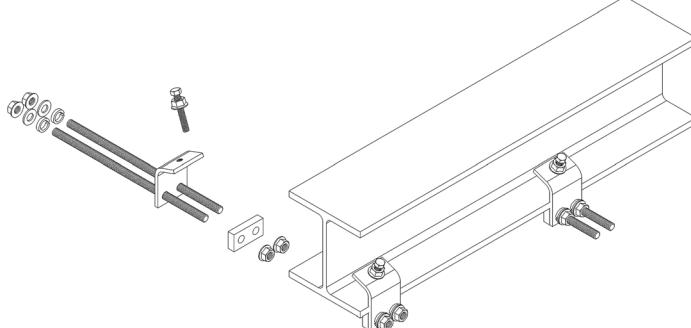
Begin by threading a 3/8-16 Flange Nut onto the 3/8-16 Threaded Rod(s).

Slide a 3/8 Flat Washer up to the Flange Nut.

Slide a 3/8 Split Washer up to the Flat Washer.

Slide the Threaded Rod(s) through the 3/8 clearance hole in the Beam Clamp Bracket.

Slide a Beam Block Bracket onto the Threaded Rod(s) and install a 3/8-16 Flange bolt on each Threaded Rod.



This assembly will span across the beam to the other side. Install a 3/8-16 Flange Nut opposite the current installed Flange Nut (head to head). Install the second Beam Block Bracket onto the Threaded Rod(s) and then the second Beam Clamp. Install additional 3/8 Split Washer on each Threaded Rod and then a 3/8 Flat Washer. Contain the assembly installing a 3/8-16 Flange Nut on each Threaded Rod. Use the sandwiched 3/8-16 Flange Nut(s) to adjust width to match the Beam width and ensure the Beam Block Brackets are flush up against the Beam bottom surface and parallel to each other.

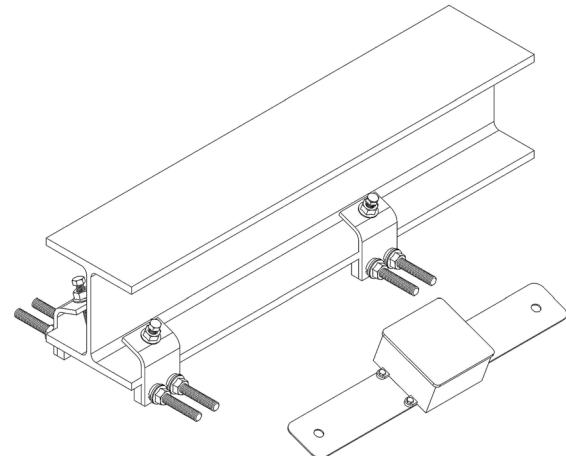
Install the 3/8-16 Flange Nut(s) onto the Beam Clamp Bolts. Install the Beam Clamp Bolts into the 3.8-16 threaded hole in the Beam Clamp Brackets. DO NOT fully tighten and draw the Threaded Rod assembly up to the Beam securely. You will need to adjust the center line distance for mounting of additional brackets.

### 3

Use the Electrical Box Bracket as a basis for center line distance of the two Beam Clamp Assemblies currently installed.

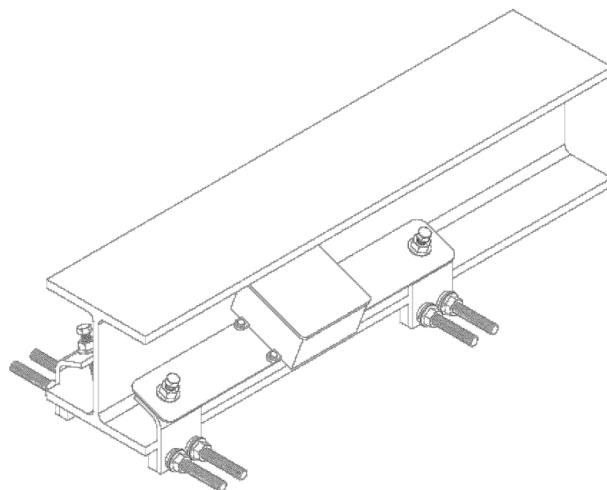
Install the Electrical Box Assembly. It is easier to remove ONE Beam Clamp Bolt at a time and install the Electrical Box Bracket one hole at a time.

Remove one Beam Clamp Bolt, install through the Electrical Box Bracket, swing the Electrical Box Bracket up to the next Beam Clamp Bolt.



Remove second Beam Clamp Bolt and install into the second hole of the Electrical Box Assembly.

Again, tighten bolts hand tight or lightly with a 9/16" wrench.

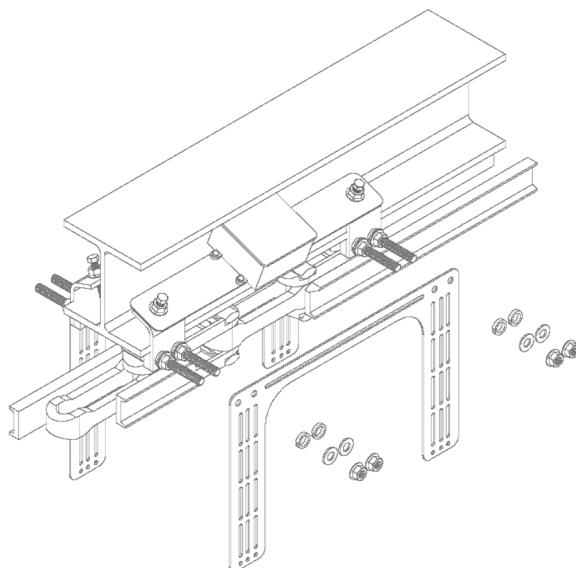


### 4

Install the Nozzle Configuration Bracket(s) onto the extended 3/8-16 Threaded Rods. Follow with a 3/8 Split Washer, a Flat Washer and a 3/8-16 Flange Nut.

Once both Nozzle Configuration brackets and all associated hardware in this step are installed, **FIRMLY** tighten all hardware.

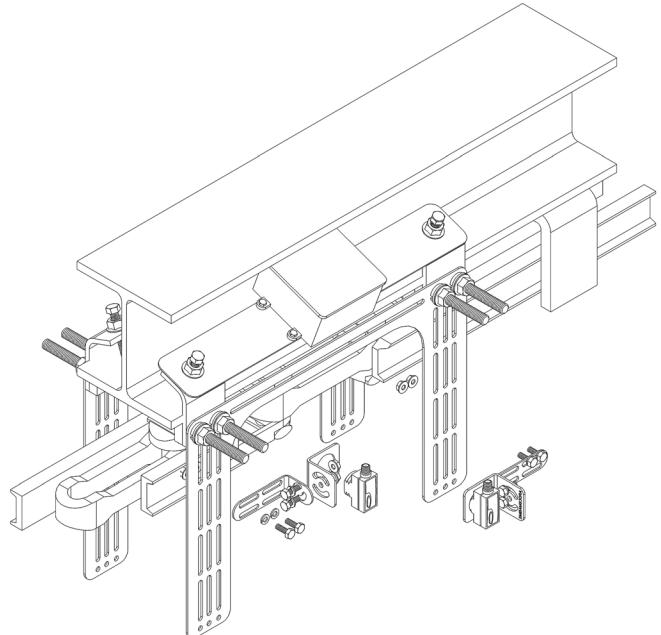
This installed assembly will be the basis for all additional attachment of Laser Sensors and Precision Dispense Nozzles.



## 5

Install the Laser Sensors onto the Laser Adapter Brackets with included plastic M30X1.5 nut.

Attach a Slide Bracket to the Laser Adapter Bracket using two: 1/4-20 Hex bolts, 1/4" Flat Washers, 1/4" Split Washers, and 1/4-20 Hex Nuts.



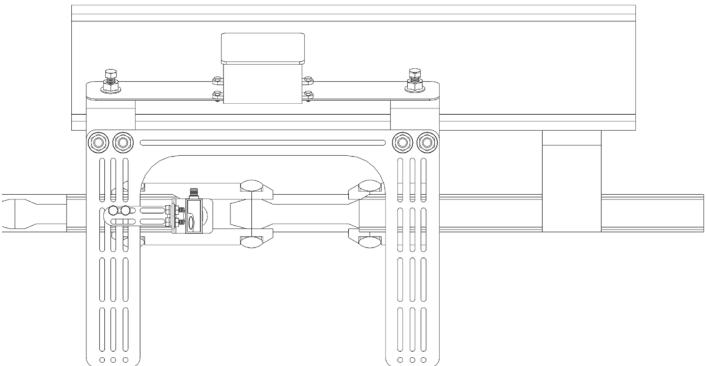
## 6

Using the slots in both the Slide Bracket and the Nozzle Configuration Bracket, align ONE laser such that it is aimed in line with the link of the chain between the top and bottom plates.

You will need to mount the laser using two: 1/4-20 Hex bolts, 1/4" Flat Washers, 1/4" Split Washers, and 1/4-20 Hex Nuts.

Ensure the laser will only detect the chain link and that it is positioned in the 8" opening you created in the slide rails in STEP 2.

This laser will be LASER 1, and will be the input for the logic controlling the PIN Lubrication and the CHAIN Lubrication circuits.

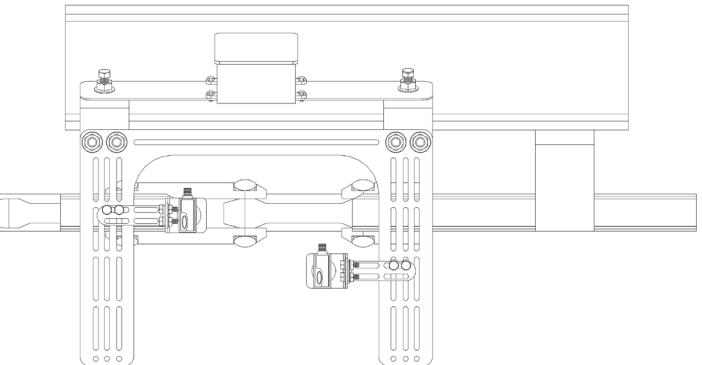


## 7

Using the slots in both the Slide Bracket and the Nozzle Configuration Bracket, align the SECOND laser such that it is aimed at the pusher dog center line.

You will need to mount the laser using two: 1/4-20 Hex bolts, 1/4" Flat Washers, 1/4" Split Washers, and 1/4-20 Hex Nuts. Ensure the laser will only detect the pusher dog as it passes by during chain motion.

This laser will be LASER 2, and will be the input for the logic controlling the SLIDER Lubrication and the DOG Lubrication circuits.

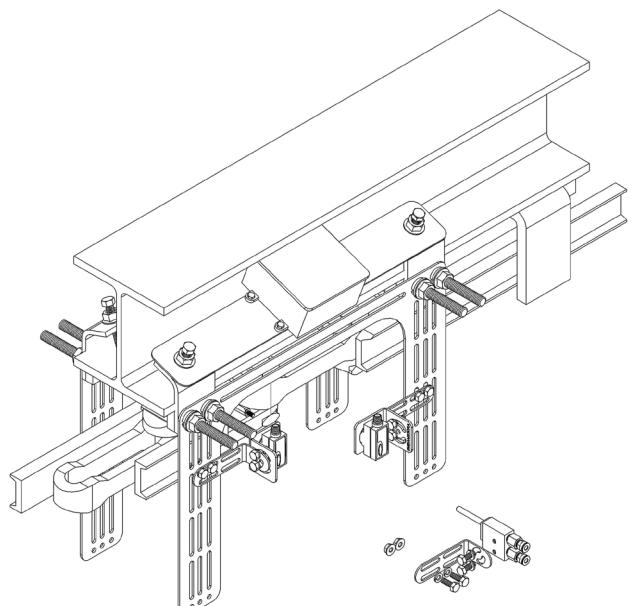


## 8

Using the slots in both the Slide Bracket and the Nozzle Configuration Bracket, install the PIN NOZZLES such that it is aimed at the PIN shooting down and above the center line of the chain.

You will need to mount a TPN-SS-LP-XX-45-2 using two: 1/4-20 Hex bolts, 1/4" Flat Washers, 1/4" Split Washers, and 1/4-20 Hex Nuts. Ensure the nozzle will only spray the pin as it passes by during chain motion.

You will install the opposing TPN-SS-LP-XX-45-2 at the PITCH DISTANCE since these two nozzles fire at the same time and you want to lubricate both pins as they pass when the laser triggers the output.

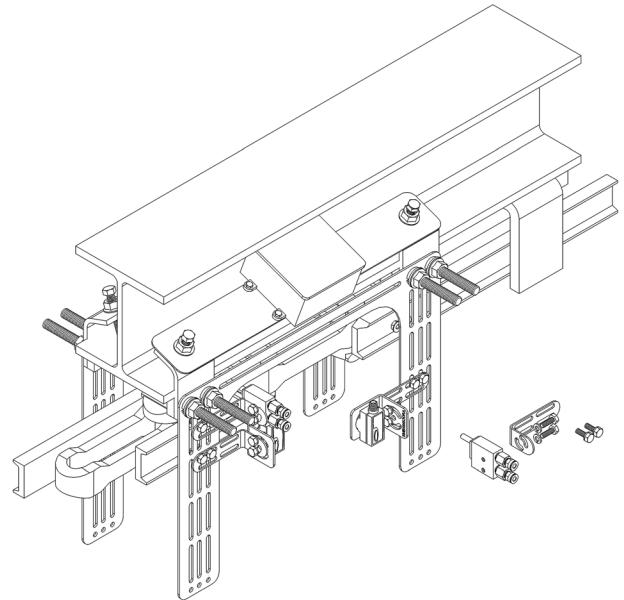


## 9

Using the slots in both the Slide Bracket and the Nozzle Configuration Bracket, install the CHAIN NOZZLE such that it is aimed at the CHAIN shooting at the chain above the center line of the chain link.

You will need to mount a TPN-SS-LP-XX-45-1 using two: 1/4-20 Hex bolts, 1/4" Flat Washers, 1/4" Split Washers, and 1/4-20 Hex Nuts. Ensure the nozzle will only spray the chain as it passes by during chain motion.

You will install the Right side TPN-SS-LP-XX-45-1 directly across from and opposing the Left side TPN-SS-LP-XX-45-1 nozzle. These act as a fine mist spray coat for the chain to assist the pin nozzles with reducing friction on the pins, but primarily to evenly coat the chain to ensure protection from

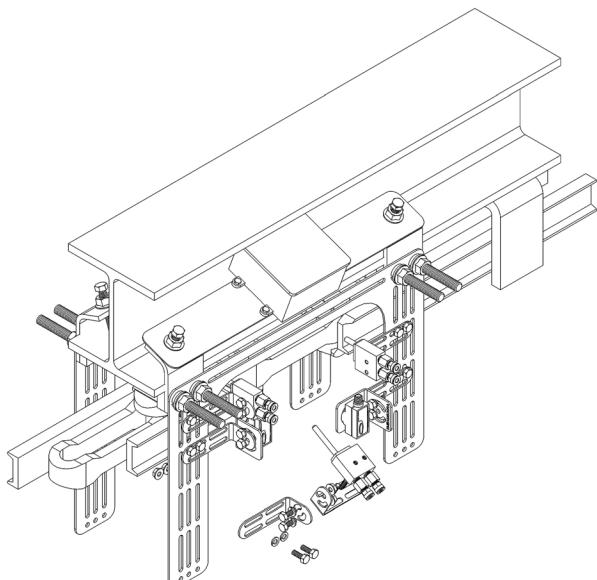


## 10

The SLIDER NOZZLE will require TWO Slide Brackets to achieve the desired "upward" angle. Using the slots in both the Slide Bracket and the Nozzle Configuration Bracket, install the SLIDER NOZZLES such that it is mounted below the slide rail and pointed up toward the lower surface of the slider.

You will need to mount the TFN-SS-IL-X-120-2 using two: 1/4-20 Hex bolts, 1/4" Flat Washers, 1/4" Split Washers, and 1/4-20 Hex Nuts. You will use the same 1/4-20 hardware to lock the two Slide Brackets together as well.

You will install the Right side TFN-SS-IL-X-120-2 directly across from and opposing the Left side TFN-SS-IL-X-120-2 nozzle. Both nozzles fire at the same time and alignment is critical to coating the underside of the slider as it passes. These act as a fan spray coat for the underside of the slider reducing friction on the rail. Continued use will allow for migration of the oil to the rail and additional corrosion protection for the rail as well.

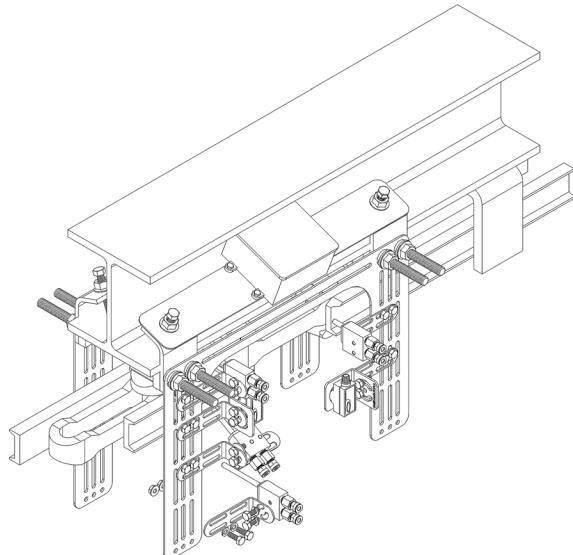


## 11

Using the slots in both the Slide Bracket and the Nozzle Configuration Bracket, install the DOG NOZZLE such that it is mounted below the dog and shooting up toward the outside edge of the dog.

You will need to mount the TPN-SS-LP-XX-45-2 using two: 1/4-20 Hex bolts, 1/4" Flat Washers, 1/4" Split Washers, and 1/4-20 Hex Nuts.

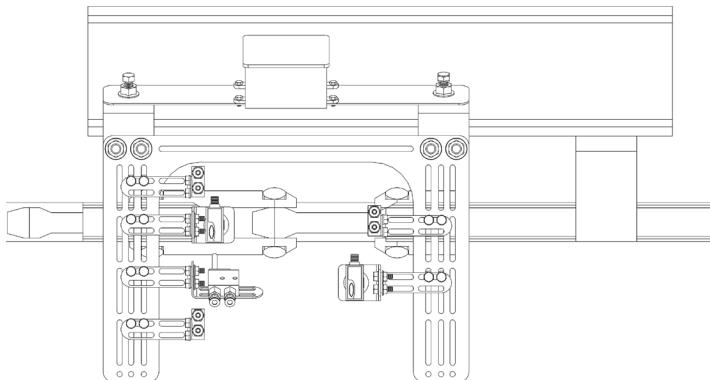
You will install the Right side TPN-SS-LP-XX-45-12 directly across from and opposing the Left side TPN-SS-LP-XX-45-2 nozzle. These act as a cone spray coat for the underside of the dog and chain reducing corrosion and lubricating the dog pins for friction reduction and smooth action of the



## 12

Confirm you have followed STEPS 5-11 correctly and your assembly appears similar to the diagram (Right). You will ensure your nozzles are spraying correctly by visual inspection once the entire system is installed and operational.

You may want to make adjustments once the system is installed and plumbed and you have a visual on the spray patterns and have adjusted your shot volume settings and atomization pressures.





GOLD Solutions Limited will provide technical assistance via e-mail: [sbeauchamp@golddispensing.com](mailto:sbeauchamp@golddispensing.com) or you may contact via phone during working hours (M-F / 9AM to 4PM Mountain): (719) 367-1465.

GOLD offers installation assistance and installation packages for each of the products we ship. In the event you purchased a system without an installation package and now choose to have GOLD upgrade your system or install your system, please contact: [sbeauchamp@golddispensing.com](mailto:sbeauchamp@golddispensing.com) to arrange for a formal quotation and scheduling.

#### TERMS & SERVICE OF WARRANTY:

All items are guaranteed free of mechanical defect for 90 days. All electrical components will be covered for the manufacturers warranty, or one year, whichever is the shorter term. All items will be replaced under warranty upon issue of an RGA and upon receipt of returned product will be inspected and at time GOLD will make the judgement as to cause of failure. If any item is deemed failed due to abuse or misuse by the client, GOLD will issue a bill for items replaced under the RGA that were damaged by the client. All shipping to GOLD is the responsibility of the client and all shipping of RGA items from GOLD is the responsibility of GOLD, unless the item was damaged by the client of which shipping costs will be included in billing.

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