

COMMAND LIGHT

TRAFFIC FLOW BOARD



Effective June 2024
This guide supersedes all previous versions

3842 Redman Drive
Fort Collins, CO 80524

MODEL COVERED:
TFB-V5

1-800-797-7974
www.CommandLight.com

THANK YOU

Please allow us to express a simple thank you for investing in a **COMMAND LIGHT** product. As a company, we are dedicated to producing the very best and most versatile flood lighting package available. We take great pride in the quality of our work and hope that you will find many years of satisfaction from the use of this equipment.

Should you have any problems with your product please do not hesitate to contact us.



3842 Redman Drive
Fort Collins, CO 80524

PHONE: 1-800-797-7974

FAX: 1-970-297-7099

WEB: www.CommandLight.com



DANGER

PERSONAL RESPONSIBILITY CODE

The member companies of FEMSA that provide emergency response equipment and services want responders to know and understand the following:

1. Firefighting and Emergency Response are inherently dangerous activities requiring proper training in their hazards and the use of extreme caution at all times.
2. It is your responsibility to read and understand any user's instructions, including purpose and limitations, provided with any piece of equipment you may be called upon to use.
3. It is your responsibility to know that you have been properly trained in Firefighting and/or Emergency Response and in the use, precautions, and care of any equipment you may be called upon to use.
4. It is your responsibility to be in proper physical condition and to maintain the personal skill level required to operate any equipment you may be called upon to use.
5. It is your responsibility to know that your equipment is in operable condition and has been maintained in accordance with the manufacturer's instructions.
6. Failure to follow these guidelines may result in death, burns or other severe injury.



Fire and Emergency Manufacturers and Services Association, Inc.
P.O. Box 147, Lynnfield, MA 01940 www.FEMSA.org

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⚠ WARNING Read this manual before installing or operating the
TRAFFIC FLOW BOARD.
Save this guide for future reference.

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COMMAND LIGHT 5 YEAR LIMITED WARRANTY

COMMAND LIGHT products* come with an industry leading 5-year warranty against any defects in materials and workmanship when used and operated for a period of five years. The responsibility of *COMMAND LIGHT* under this limited warranty is limited to the repair and replacement of parts found to be defective by *COMMAND LIGHT*.

Any parts damaged in shipping or by improper installation, overloading, abuse, or accident of any type or cause are not covered by this warranty. If equipment has been damaged in transit, a claim should be made against the carrier within three days, as we assume no responsibility for such damage.

If during this time period, you have any malfunctions not related to misuse, accident, neglect, or normal wear and tear, please take the following steps in order to have your light tower serviced under the *COMMAND LIGHT* warranty.

1. Contact us immediately for initial diagnosis at info@commandlight.com or **800-797-7974**; or if parts are needed contact parts@commandlight.com.
2. You will need to have immediate access to the light tower and the serial number. This process can be done by individuals with little mechanical ability. (Involves pushing buttons and telling us what the light tower is doing or not doing)
3. We then send parts (if needed) and have an authorized technician dispatched (if needed) with a written work authorization number and a base number of hours allotted to do repair. Hourly rates for service are to be determined at the time of authorization by *COMMAND LIGHT*, travel time is paid at a maximum of 50% of the authorized service rate.
4. We remain available for service support via phone, email, or video conference while the technician completes the repair, also to extend the original time allotted if additional issues arise. Immediate support cannot be guaranteed unless a time is scheduled prior to service.
5. Let us know when the repair is completed and reference the work authorization number. Email an invoice to info@commandlight.com or parts@commandlight.com. If you are unable to create an invoice email us for instructions for payment. Make sure any parts we have requested to be returned have been shipped back to the provided shipping address. If a return label is issued it must be used.

6. Finally, we will pay by mailing a check or crediting the account of the person, department, or company doing the repair. Payments will not be made until all requested parts have been returned.

Please contact us as soon as problems arise in order to execute our warranty. We must have knowledge of the issue and provide a work authorization in order to pay or reimburse labor or travel time.

Any unauthorized service voids this warranty. No work is authorized until written consent is provided by **COMMAND LIGHT**.

Contact Us Early — before any work is done — We'd love to help!

*Excludes light producing components (bulbs, lasers, LEDs) These components may come with their own manufacturer warranty. Contact us and we can help get it.

Breakage or Damage During Shipment

The transportation company is fully responsible for all shipping damage and will resolve problems promptly if you handle it correctly. Please read these instructions carefully.

Examine the contents of all shipping cases. If you find any damage, call your transportation agent at once and have them make a description on the freight or express bill describing the damage and the number of pieces. Then contact us and we will send you the original bill of lading. Also promptly contact the transportation company and follow their procedure for filing a claim. Each company will have a unique procedure to follow.

Please note, we cannot and will not enter claims for damages. If we filed a claim here, it would be sent to your local freight agent for verification and investigation. This time can be saved by you filing the claim directly. Every consignee is on the ground floor, in contact with the local agent who inspects the damaged goods, and thus, each claim can be given individual attention.

Since our goods are packed to comply with the regulations of all railroad, truck, and express companies, we cannot allow deduction from any invoice because of any damage, however, be sure to file your claim promptly. Our goods are sold F.O.B. factory. We take receipt from the transportation company certifying that the goods were delivered to them in good order and our responsibility ceases.

It is seldom that any breakage or damage occurs in any of our shipments and in no case will the customer be out any expense if they follow the above instructions.

Be sure to keep all damaged goods subject to examination of the truck or express company inspector, who may call on you sometime later. These damaged goods, of course, will belong to them, and they will inform you what to do with them. If you dispose of these damaged goods, your claim may not be paid.

General Description and Specifications

The **COMMAND LIGHT TRAFFIC FLOW BOARD LIFT** is designed to provide the means to elevate a high-intensity arrow board for emergency scene traffic direction with quick precision. As with any electromechanical device, take precautionary steps to assure safe operation

⚠️ WARNING Never operate the **TRAFFIC FLOW BOARD** near overhead power lines.

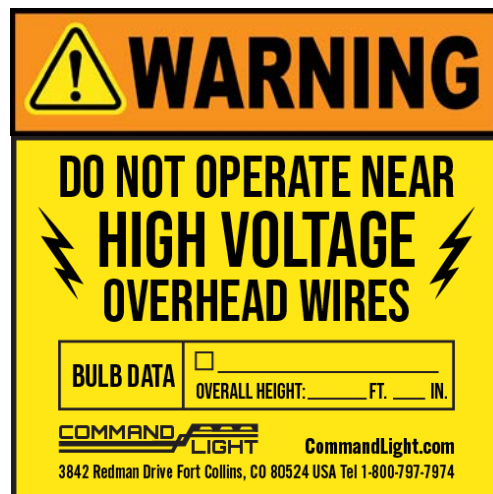
Power for the 12 VDC circuitry is provided by the emergency vehicle battery system. All mechanical actuation power is designed to be powered by the vehicles 12 VDC power supply. The umbilical corded control unit is powered via 12 VDC eliminating hazardous voltage levels within the hand held control box.

The **COMMAND LIGHT TRAFFIC FLOW BOARD** is manufactured to provide years of service with a minimum of maintenance.

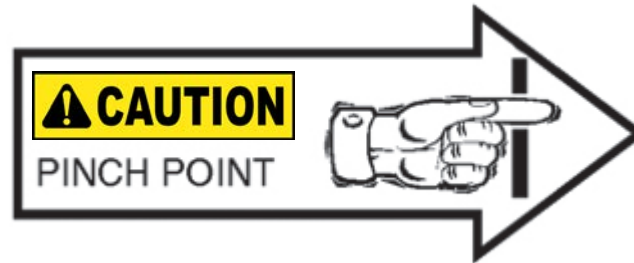
⚠️ WARNING

Product Safety Precautions

- ⊗ Never operate the **TRAFFIC FLOW BOARD** near overhead high voltage power lines. The **TRAFFIC FLOW BOARD** is manufactured from electrically conductive materials.
- ⊗ Do not use the **TRAFFIC FLOW BOARD** for uses other than its intended purpose.
- ⊗ Do not move emergency vehicle with the light extended. Visually verify that the light is completely nested before moving vehicle.
- ⊗ Do not change light position while people are located within its operating envelope. There are numerous pinch points that can cause serious bodily injury.
- ⊗ The **TRAFFIC FLOW BOARD** contains automatic reset circuit breakers. Disconnect power at the distribution panel before servicing the unit.
- ⊗ Do not use a high-pressure washer or subject the light to high volumes of water when cleaning.
- ⊗ Never use the **TRAFFIC FLOW BOARD** as a lifting device or mobile arm.



- ⊙ Do not use a **TRAFFIC FLOW BOARD** that has been damaged or is not fully functional, including non-working indicator lamps.
- ⊙ Never hold any part of the **TRAFFIC FLOW BOARD** with a hand or foot while it is in motion.
- ⊙ The **TRAFFIC FLOW BOARD** has numerous pinch points. Keep loose clothing, hands and feet clear of moving parts.



- ⊙ Operating **TRAFFIC FLOW BOARD** on an inclination of 11 degrees or more can cause a malfunction or no function at all. It can also cause damage to the **TRAFFIC FLOW BOARD** itself, to the vehicle and to personnel.



Operation

Raising the *TRAFFIC FLOW BOARD* from the nested position:

Use the control box to raise the *TRAFFIC FLOW BOARD* to the maximum height. Control unit switches are of momentary action style and must be held in the “ON” position to activate the unit. Once motion has started, the switch may be released. Motion will proceed until max height is reached, the down switch is activated or the emergency stop button is pressed.

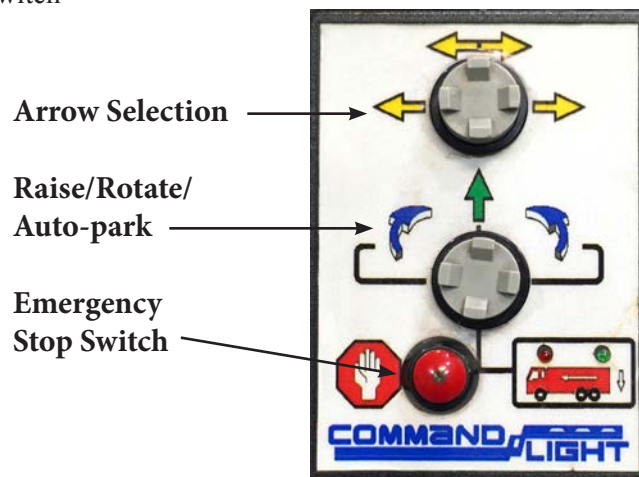
- The *TRAFFIC FLOW BOARD* has an override system that prevents rotation of the board until it is at the maximum height.

Returning the *TRAFFIC FLOW BOARD* to the nested position:


The *TRAFFIC FLOW BOARD* is equipped with an auto-park function as a standard feature. Holding the movement control switch in the down position for 1 second initiates auto-park. Once motion has started, the switch may be released and motion will proceed until nested. Auto-park can be initiated while the *TRAFFIC FLOW BOARD* is in any rotated position. The controller indicates a red light when the *TRAFFIC FLOW BOARD* is out of nest, and a green light when the *TRAFFIC FLOW BOARD* is fully nested. Auto-park sequence is as follows:

1. Arrow board rotates to the center position.
2. Once the board is centered, rotation stops and the carriage retracts.
3. Board is fully nested, red light on controller turns off, green light turns on.

At any point, the auto-park sequence can be cancelled by pressing the motion control switch up or Emergency Stop Switch



Lower Override

In the event of sensor, rotation motor, or auto-park failure, a backup override is programmed into the *TRAFFIC FLOW BOARD* to allow for nesting board. Rotate the board to center as best as able. This can be done by hand if rotation motor has failed, but take care to apply pressure slowly to prevent damage to components. While a helper holds the board to the center position, at the controller, hold the Motion Control Switch in the down position while also holding the Emergency Stop Switch . After 5 seconds of holding both switches, the board will retract. Motion can be stopped by releasing either switch. To re-initiate motion, hold both switches for 5 seconds again. Lower the board until it is nested enough for safe travel and able to be brought in for service.

Installation

The **TRAFFIC FLOW BOARD** must be installed by a designated installation facility by qualified personnel only. All safety precautions must be thoroughly understood before installation. Please consult the factory for additional installation information assistance.

Installation Kit


Included with the **TRAFFIC FLOW BOARD** is an installation kit. Verify that the contents of the kit include the following items:

- (1) Pre-wired control unit with pocket
- (1) Control box
- (2) Cables (Both are hardwired to the relay box)
- (1) 20 conductor 22 gauge wire 50ft. (gray)
- (1) 2 conductor 6 gauge wire, 50ft. (black/red)

Tools Required

Drill 15/64" drill bit
1/8" drill bit
#4mm hex wrench
10mm wrench
½ wrench

Installation Notes

 The **TRAFFIC FLOW BOARD** weighs approximately 150 pounds. Use mechanical assistance (such as crane or forklift) to position the **TRAFFIC FLOW BOARD** for installation. Use a sling to grasp the **TRAFFIC FLOW BOARD**. When routing the connecting electrical wires, take care to avoid sharp bends, hot components or other hazards to the wire.

The **TRAFFIC FLOW BOARD** is not designed to be operated in a raised position while the vehicle is in motion. The **TRAFFIC FLOW BOARD** includes warning circuit wiring to enable a warning device (located in the control holster).

Location Requirements

The **TRAFFIC FLOW BOARD** frame can be mounted on any location that is 12" x 43.5". The surface should be flat. A minimum depth of 43" is required.

(8) Eight mounting bolt holes are required.

The control box should be mounted in an area shielded from the weather. Allow a minimum of 10" clearance above the control box mounting location to permit easy removal of the hand controller

NOTE: Failure to provide access to at least one of the service panels on the side of the **TRAFFIC FLOW BOARD** may result in extended service time and may require removal of the unit. This additional time is not covered under the **COMMAND LIGHT 5** year limited warranty.

Mounting

The **TRAFFIC FLOW BOARD** is packaged with lift brackets mounted to each side. These are only used for installation and will be removed before after installation is complete.

Attach any necessary lifting attachments to the unit. Lift and place the **TRAFFIC FLOW BOARD** into position above the installation pocket. Make sure to feed all cables through the installation pocket and access hole before lowering the **TRAFFIC FLOW BOARD** into place.



Lower the **TRAFFIC FLOW BOARD** into place and confirm that the mounting brackets will sit flush on the exterior surface. Also confirm that all mounting bracket holes have a mounting surface beneath them. Remove any obstructions below the mounting surface such as headliners before drilling mounting holes. Drill 15/64" holes in the mounting surface using the mounting bracket holes as a template.

Use the foam insulating tape to surround the edge of the installation pocket to create a water-resistant seal. Remove any lifting straps and devices from the lift.

After the installation of the mounting brackets, remove the lifting brackets with a 1/2" wrench. Locate and drill wire feed holes as necessary.

Control Box Holster Mounting

Using the pocket as a template, mark hole locations.

Drill 1/8" mounting holes. Drill any holes required to route the control wire from the control box holster to the **TRAFFIC FLOW BOARD** unit.

Electrical Wiring

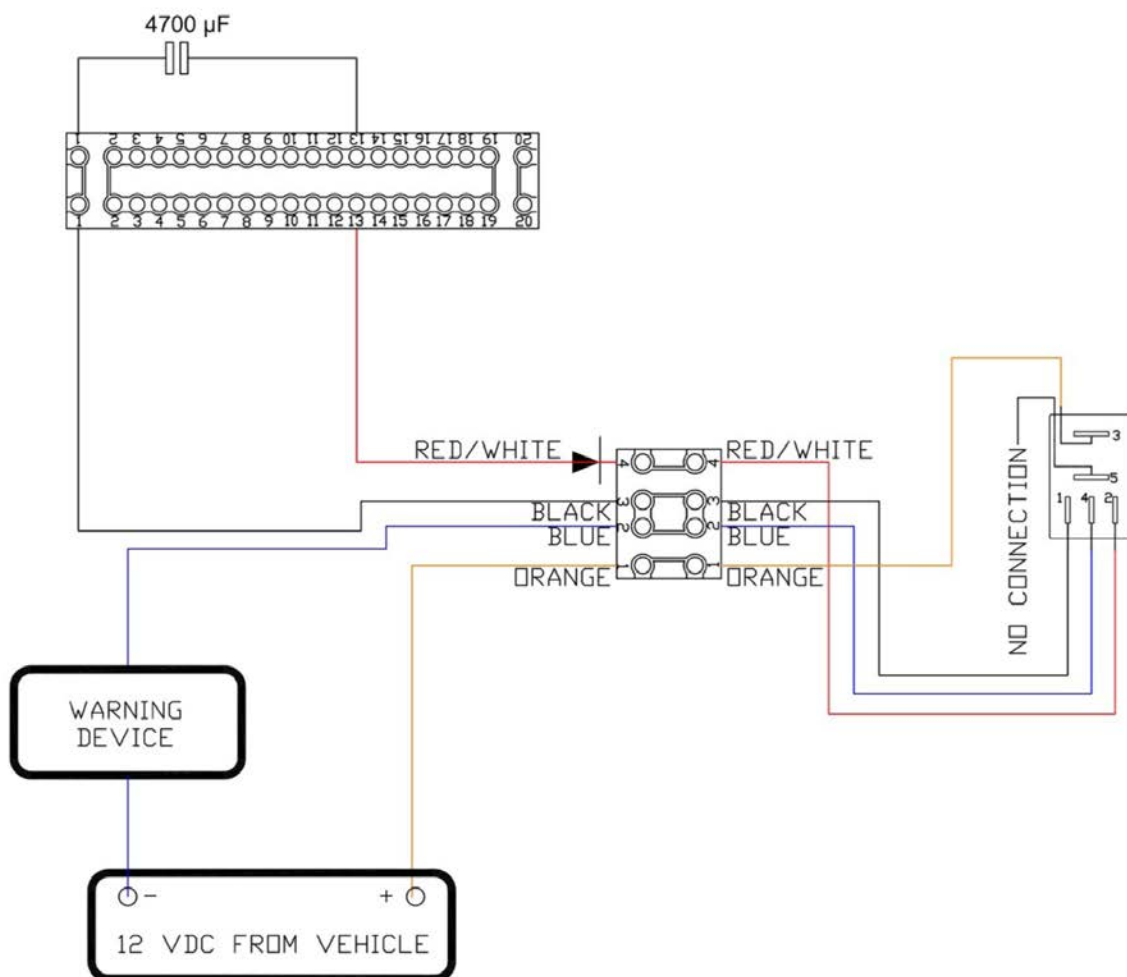
Run the control wire from the **TRAFFIC FLOW BOARD** to the Control Box Holster.

Run the power wire from the vehicle 12VDC power source or generator to the **TRAFFIC FLOW BOARD**. A 15 Amp breaker is recommended for the **TRAFFIC FLOW BOARD**.

Refer to wiring schematic to assist in identifying connections.

Warning Device Installation

The nest sensor can be used to activate a warning device when the light is extended. To connect such a device, determine whether it is activated when it receives 12 VDC or when it receives a path to ground. The connector for hooking up a warning device is located in the holster box that holds the control unit.



Technical Specifications – Standard AC Models (415A)

Dimensions (with strobe and ½" mounting spacers) – May vary by model:

	Height(Depth)	Length	Width
Retracted	26"	44"	12"
Extended	42"	44"	12"
Recessed installation	26"	42 ½ "	12" Minimum

Weight: 150 pounds

Wiring:

12 VDC 50 ft 6/2 cable
 Control wiring 50 ft 22/20 cable
 Command Light recommends using 6 gauge wire for input power.

Relay protection:

Electrical Cole-Hersee 3055 15 Amp

Current Draw / Power Requirements:

Full load current draw 15 amps at 12VDC

Motor Duty Cycle:

(All motors thermally protected, specifications are to thermal relay trip):

Lift motor 1:3 (90 seconds maximum per 5 minute)

Rotation motor 1:3 (90 seconds maximum per 5 minute)

Motor Speed:

Carriage	0.5 inches per minute	5 seconds to full extension
Rotation	1.6 1250 RPM	15 seconds
Auto Park	20 seconds from full extension and at 350 degree rotation position	

Operation:

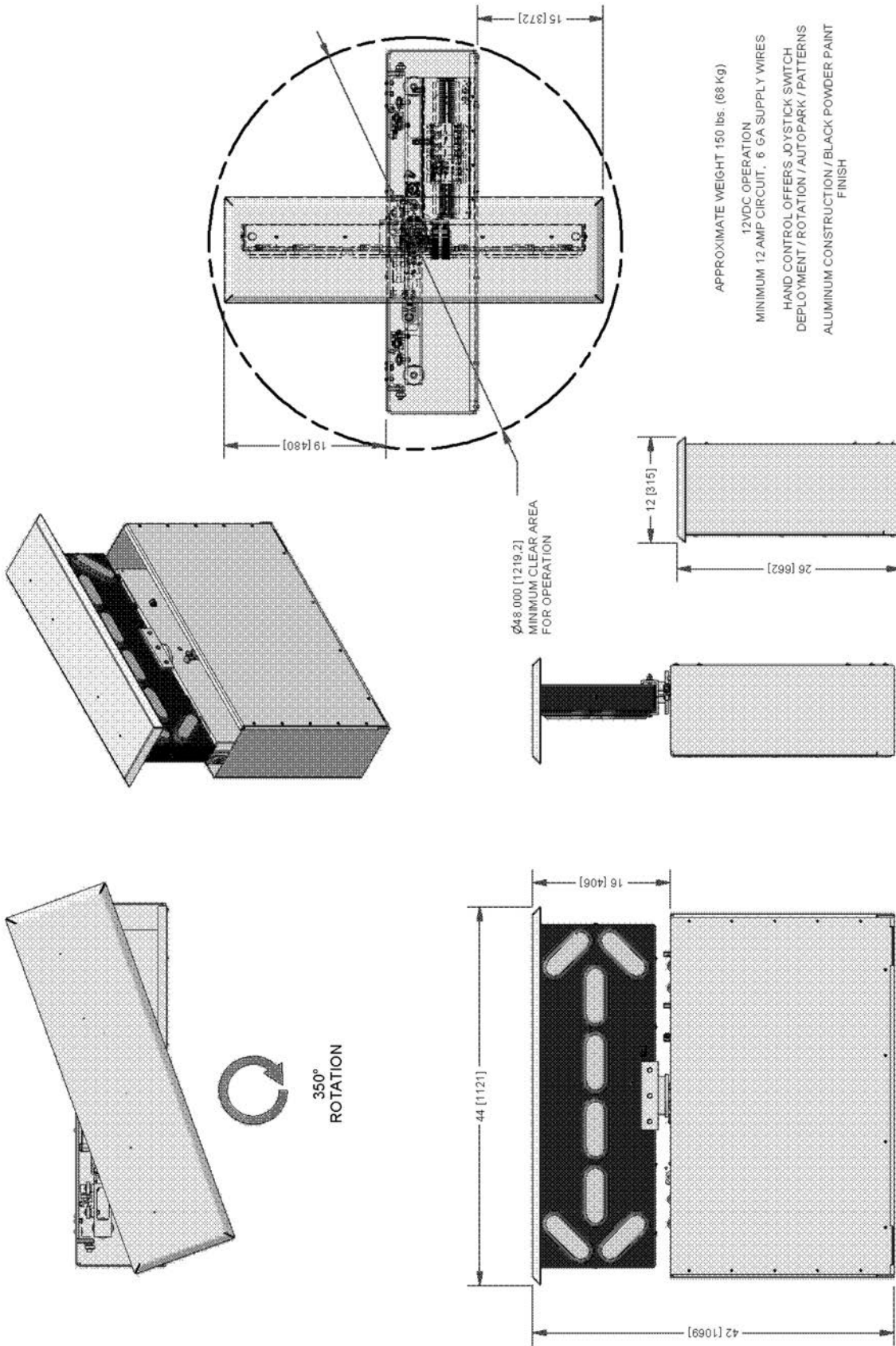
Angle of vehicle 10° maximum incline

Wind load:

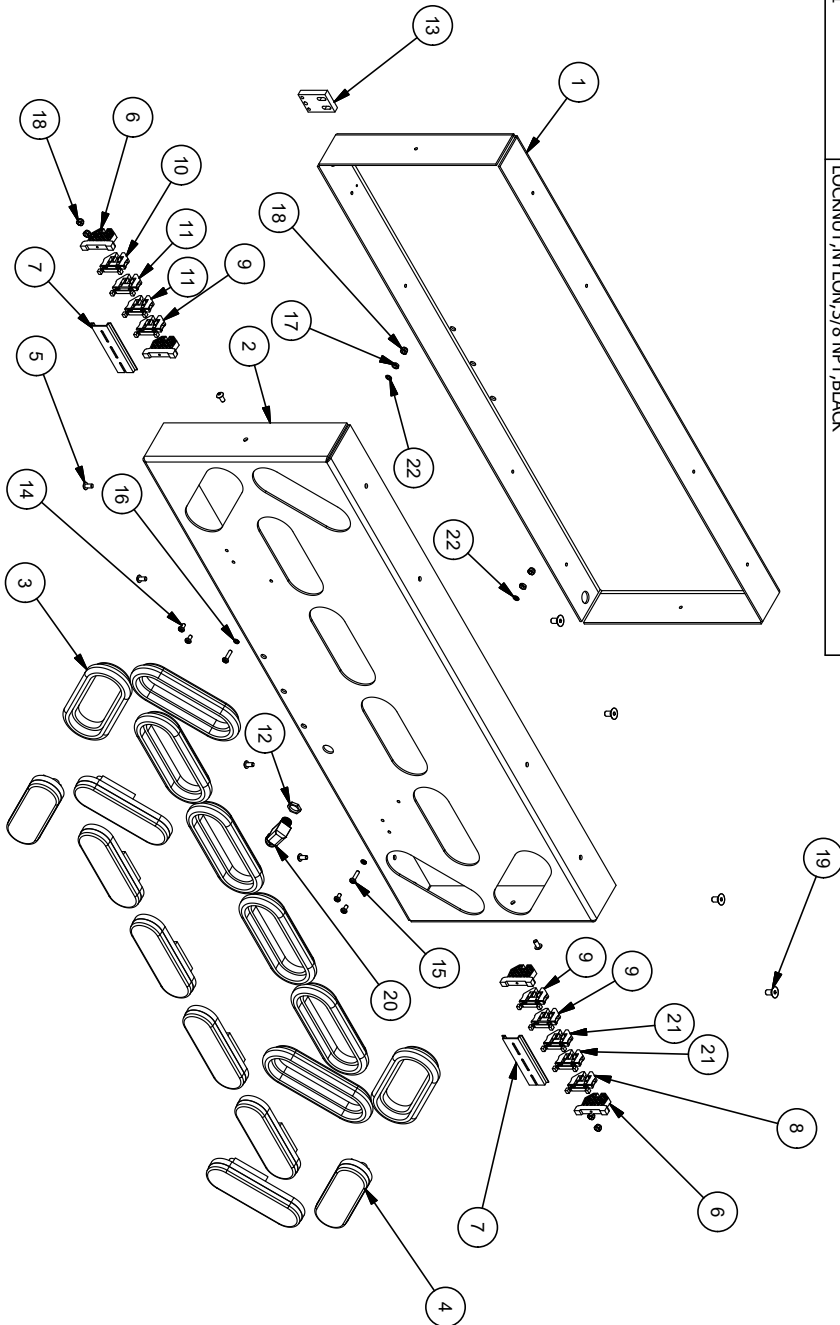
Design maximum 75 mph

Maximum tested 85 mph

Specifications subject to change without notice.



Exploded Views and Parts List: Arrow Board



ITEM	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	076-30045	BACK,LED BOARD,TFBV5	13	1	076-29986	BRACKET,SENSOR TRIGGER,TFBV
2	1	076-30046	ARRAY,ENCLOSURE,FRONT,TFBV	14	4	034-10961	SCREW,PHP,10-24 UNC,X0.375
3	8	069-01004	GROMMET,GR-65PT,MARKER LAMP	15	2	034-10966	SCREW,PHP,10-24 UNC,X0.75
4	8	069-01003	LAMP,MARKER,LED,PT-Y56A	16	2	034-10979	WASHER,LOCK,SPRING,REGULAR,#10,SS
5	6	069-01103	SCREW,BH,HEX,6x1x12,SS	17	2	034-13100	NUT,MS,HEX2,10-24UNC,SS
6	4	065-10075	BRACKET,END,DIN,DN-EB35	18	6	034-10981	NUT,NYLON,10-24 UNC,SS
7	2	069-01000	RAIL,DIN,SLOTTED,7.5MM X 35MM 4 in.	19	4	069-01116	SCREW,FHSH,M8x1.25x16
8	1	065-10073	BLOCK,TERMINAL,DIN,DN-T10-WHITE	20	1	065-12883	STRAIN RELIEF,DOMED 90,SCR,.16-.31,3/8 NPT,BLACK
9	3	065-10072	BLOCK,TERMINAL,DIN,DN-T10-RED	21	2	065-10074	BLOCK,TERMINAL,DIN,DN-T10-YELLOW
10	1	065-10068	BLOCK,TERMINAL,DIN,DN-T10-BLUE	22	2	034-10978	WASHER,LOCK,18-8SS,INTERNAL,#10
11	2	065-10071	BLOCK,TERMINAL,DIN,DN-T10-ORANGE				
12	1	065-12831	LOCKNUT,NYLON,3/8 NPT,BLACK				

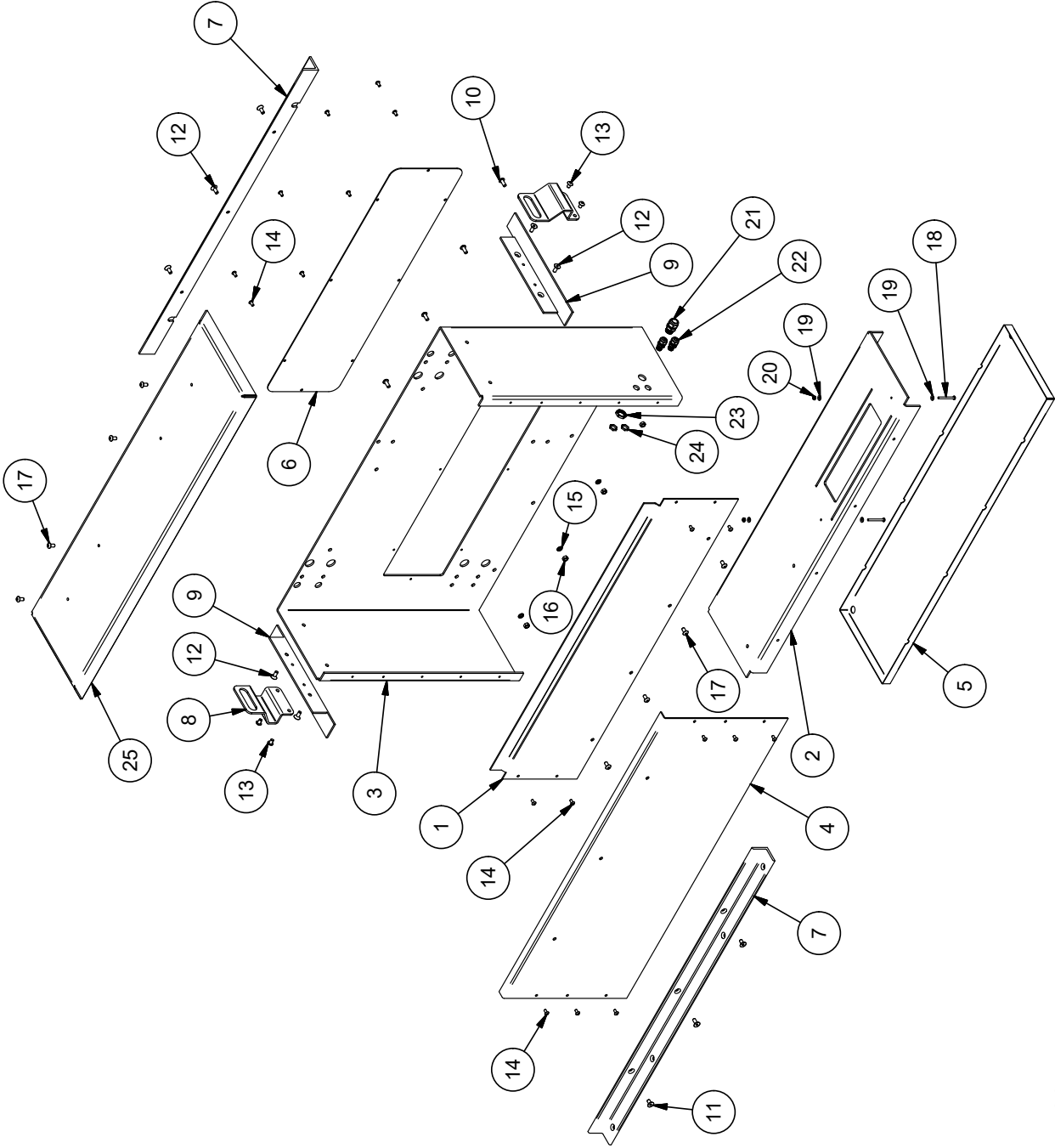
Control Array

PARTS LIST			PARTS LIST				
ITEM	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	076-30038	CARRIER, CONTROL ARRAY, TFBV	10	3	065-10069	BLOCK, TERMINAL, DIN, DN-T10-BLACK
2	1	069-01000	RAIL, DIN, SLOTTED, 7.5MM X 35MM 16.75 in.	11	1	065-10073	BLOCK, TERMINAL, DIN, DN-T10-WHITE
3	1	065-10055	RELAY, PROGRAMMABLE, 10A, 12-24VDC	12	2	065-10075	BRACKET, END, DIN, DN-EB35
4	3	065-10056	RELAY, MODULE, 5A, 12-24VDC	13	7	069-01102	SCREW, BH, HEX, 4x0.7x12, SS
5	13	065-10071	BLOCK, TERMINAL, DIN, DN-T10-ORANGE	14	1	065-10048	BREAKER, 12V 8A, SINGLE POLE
6	8	065-10068	BLOCK, TERMINAL, DIN, DN-T10-BLUE	15	13	034-10947	WASHER, FLAT, SAE, #8, SS
7	6	065-10070	BLOCK, TERMINAL, DIN, DN-T10-GREEN	16	2	065-13730	Socket, Single Pole, Relay
8	2	065-10072	BLOCK, TERMINAL, DIN, DN-T10-RED	17	2	065-13738	RELAY, 12V, SINGLE POLE
9	2	065-10074	BLOCK, TERMINAL, DIN, DN-T10-YELLOW	18	7	034-13672	NUT, NYLOCK, 4-40 UNC, SS
				19	1	034-10966	SCREW, PHP, 10-24 UNCx0.75
				20	1	034-13100	NUT, MS, HEX2, 10-24 UNC, SS
				21	1	034-10981	NUT, NYLOCK, 10-24 UNC, SS
				22	2	034-10978	WASHER, LOCK, 18-8SS, INTERNAL, #10
				23	1	069-01103	SCREW, BH, HEX, 6x1x12, SS
				24	2	065-10089	JUMPER, DIN RAIL TERM BLOCKS, 5 POSITION
				25	1	076-30039	COVER, CONTROL ARRAY, TFBV
				26	1	065-10089	JUMPER, DIN RAIL TERM BLOCKS, 4 POSITION
				27	1	065-10089	JUMPER, DIN RAIL TERM BLOCKS, 6 POSITION
				28	1	065-10089	JUMPER, DIN RAIL TERM BLOCKS, 3 POSITION
				29	2	065-10089	JUMPER, DIN RAIL TERM BLOCKS, 2 POSITION
				31	2	034-10977	WASHER, FLAT, SAE, #10, SS
				32	2	034-13678	WING NUT, 10-24, SS
				35	1	069-01012	CABLE TRACK, W/BRACKETS, 4 FT, TFBV2

Surround: Parts List

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	076-30043	COVER, FRONT, LOWER, TFBV5
2	1	076-30047	BASE, SURROUND, TFBV5
3	1	076-30048	SURROUND, FRAME, TFBV5
4	1	076-30049	COVER, FRONT, SURROUND, TFBV5
5	1	076-30075	PAN, INSTALLATION, LOWER, TFBV5
6	1	076-30044	COVER, ACCESS, CONTROL ARRAY, TFBV
7	2	076-30056	MOUNT, ANGLE, FRONT-REAR, TFBV5
8	2	076-30059	HANDLE, LIFT, DISPOSABLE, TFBV5
9	2	076-30079	MOUNT, ANGLE, 2, STD, TFBV5-7
10	4	069-01120	SCREW, BH, HEX, 8x1.25x20, SS
11	2	069-01116	SCREW, FSH, M8x1.25x16
12	8	069-01115	SCREW, FSH, M8x1.25x20
13	4	069-01106	SCREW, BH, HEX, 8x1.25x12, SS
14	18	069-01103	SCREW, BH, HEX, 6x1x12, SS
15	4	069-01119	WASHER, LOCK, SPRING, REGULAR, M8, SS
16	4	069-01113	Nut, MS, MM8x1.25
17	8	069-01107	SCREW, BH, HEX, 8x1.25x16, SS
18	2	STD HARDWARE-80	SCREW, PHP, 10-24 UNCx2.5
19	4	034-10977	WASHER, FLAT, SAE, #10, SS
20	2	034-13100	NUT, MS, HEX2, 10-24UNC, SS
21	1	065-12852	STRAIN RELIEF, DOMED, SCR .24-.47, 1/2 NPT, BLACK
22	2	065-12875	STRAIN RELIEF, DOMED, RCR .08-.24, 3/8 NPT, BLACK
23	1	065-12856	LOCKNUT, NYLON, 1/2 NPT, BLACK
24	2	065-12831	LOCKNUT, NYLON, 3/8 NPT, BLACK
25	1	076-30050	COVER, TOP, SURROUND, TFBV5

Surround: Exploded View



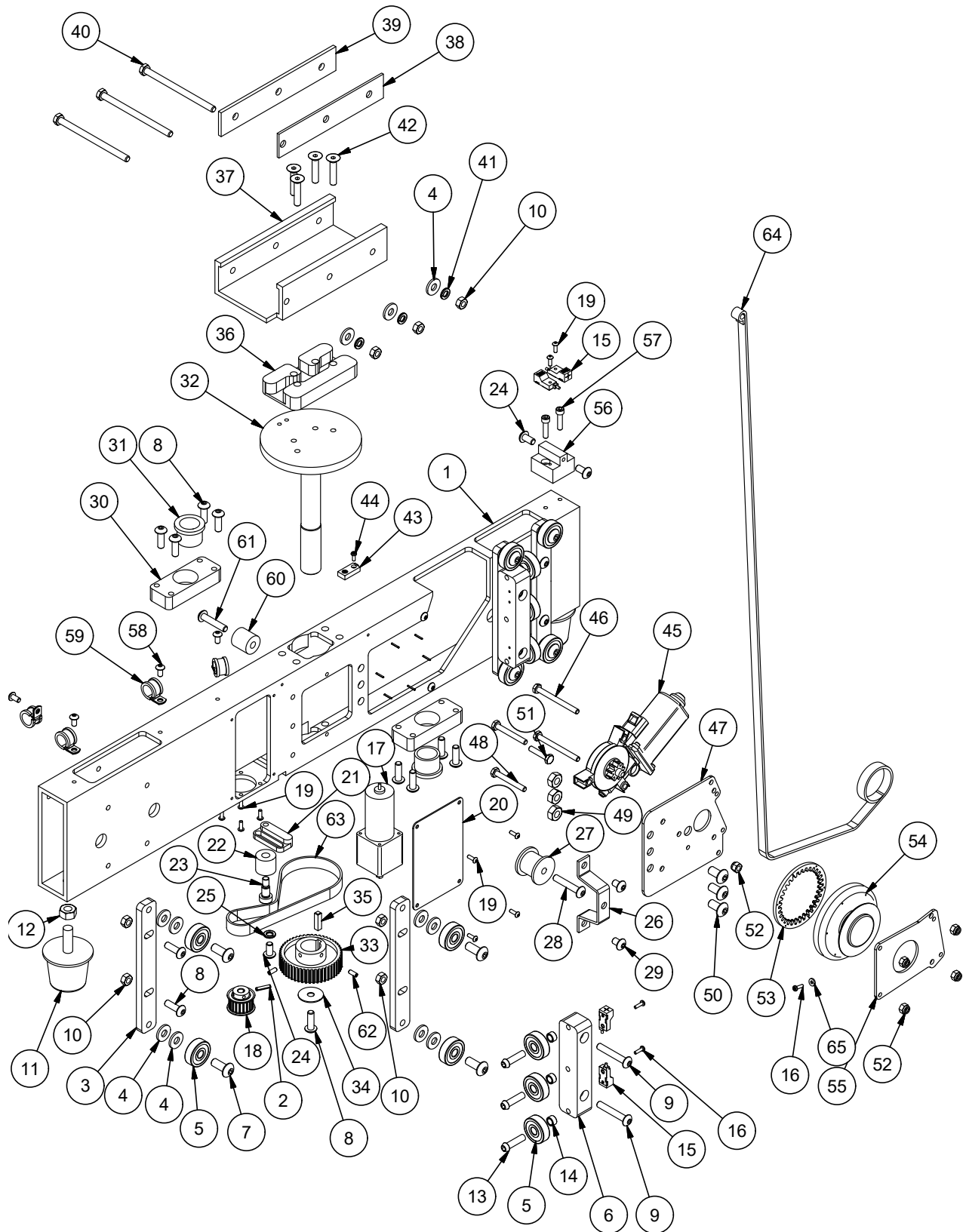
NOTE: ITEM 5 IS OPTIONAL, NOT INCLUDED WITH ALL UNITS

SURROUND ASSEMBLY, TFBV5

Carriage Assembly : Parts List

ITEM	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	076-30012	CARRIAGE,MAIN LIFT,TFBV2	34	1	034-11052	WASHER,FLAT,FENDER, 5/16 , SS
2	1	034-13079	ROLL PIN,5/32 x 3/4, SS	35	1	076-30040	KEY,SPINDLE,TFBV
3	4	076-30011	PLATE,SUPPORT BEARING,TFBV2	36	1	076-29998	CHANNEL,WIRE,TFBV2
4	19	034-13695	WASHER,FLAT,SS, 5/16 , SS	37	1	076-29997	CRADLE,SIGNAL BOARD,TFBV2
5	14	069-01006	BEARING,6300 Sealed	38	1	076-29989	SPACER, CRADLE, REAR, TFBV
6	2	076-30010	BLOCK,TRAVERSE RAIL,TFBV2	39	1	076-29990	SPACER, CRADLE, FRONT, TFBV
7	8	069-01101	SCREW,BH,HEX,10x1.5x25,SS	40	3	069-01122	SCREW,HH,M8x1.25x120,SS
8	13	069-01120	SCREW,BH,HEX,8x1.25x25,SS	41	3	034-11053	WASHER,LOCK,SPRING,REGULAR, 5/16 , SS
9	4	069-01111	SCREW,BH,HEX,8x1.25x50,SS	42	4	069-01117	SCREW,FHSH,M8x1.25x40
10	11	069-01113	Nut, MS, MM8x1.25	43	1	065-10081	SENSOR, PROXIMITY, STRAIGHT, APS4-12S-E2
11	2	069-01013	FOOT,LARGE,M12	44	1	034-13696	SCREW,PHP,6-32 UNCx0.375
12	2	069-01124	Nut, MS, MM12x1.75	45	1	069-01002	MOTOR, WINDOW LIFT MOTOR 742-119,TFBV2
13	6	076-29985	SCREW,SHCS,SHCS M8x1.25x30	46	2	034-13692	SCREW,HH,1/4-20x2-3/4,SS
14	6	076-30007	SPACER,BEARING,INNER,TFBV2	47	1	076-29980	PLATE,MOTOR,WINCH,TFBV
15	4	065-10057	SENSOR, PROXIMITY, 90 DEGREE, APS4-12M-E2	48	2	034-11021	SCREW,HH,1/4-20x2,SS
16	3	034-11147	SCREW,PHP,6-32 UNCx0.5	49	3	069-01112	Nut, MS, MM10x1.50
17	1	069-01015	MOTOR,TRANSMOTEC,PDS4265-12-864-BF	50	3	069-01100	SCREW,BH,HEX,10x1.5x20,SS
18	1	069-01010	PULLEY,DRIVE,TFBV2	51	1	034-11018	SCREW,HH,1/4-20x1-1/4,SS
19	10	069-01102	SCREW,BH,HEX,4x0.7x12,SS	52	5	034-11033	NUT,NYLOCK, 1/4-20 UNC,SS
20	1	076-30037	COVER,ROTATION MOTOR,TFBV	53	1	076-29978	GEAR,INTERNAL,SPOOL,TFBV
21	1	076-30031	SLIDE,ADJUSTER,DRIVE BELT,TFBV2	54	1	076-29981	SPOOL,LIFT WINCH,TFBV7,R2
22	1	076-30033	ROLLER,BELT TENSION,TFBV2	55	1	076-29979	PLATE,OUTER,WINCH,TFBV
23	1	069-01129	BOLT,SHOULDER,M8x1.25x12mm	56	1	076-29987	BLOCK,SENSOR STOP,TFB V SERIES
24	3	069-01107	SCREW,BH,HEX,8x1.25x16,SS	57	2	069-01137	SCREW,SHCS,SHCS M6x1x25
25	1	069-01119	WASHER,LOCK,SPRING,REGULAR, M8, SS	58	6	069-01103	SCREW,BH,HEX,6x1x12,SS
26	1	076-30004	MOUNT,ROLLER,WINCH,TFBV2	59	4	065-12365	CLAMP,LOOM,#6,SS
27	1	076-30003	ROLLER,WINCH, IDLER,TFBV2	60	1	076-29996	SPACER,WIRE TRACK,TFB_V2
28	1	069-01110	SCREW,BH,HEX,8x1.25x45,SS	61	1	069-01109	SCREW,BH,HEX,8x1.25x40,SS
29	2	069-01106	SCREW,BH,HEX,8x1.25x12,SS	62	2	076-30027A	10-32 UNF x 1/2 SH Set Screw SS
30	2	076-30018	BLOCK,BEARING,SPINDLE,TFBV2	63	1	069-01008	BELT,HTD 4505M15,ROTATION,TFBV
31	2	069-01009	Bushing, Flanged, Bronze, FB1620-8, 1 ID	64	1	069-01011	STRAP,WINCH,LIFT,TFBV
32	1	076-30019	SPINDLE,ROTATION,CARRIAGE,TFBV2	65	1	034-13681	WASHER,FLAT,SAE.#6, SS
33	1	076-30027	PULLEY,DRIVEN,ROTATION,TFBV2	66	6	034-11198	SPRING PIN,SLOTTED,1/16 x 1/2,SS

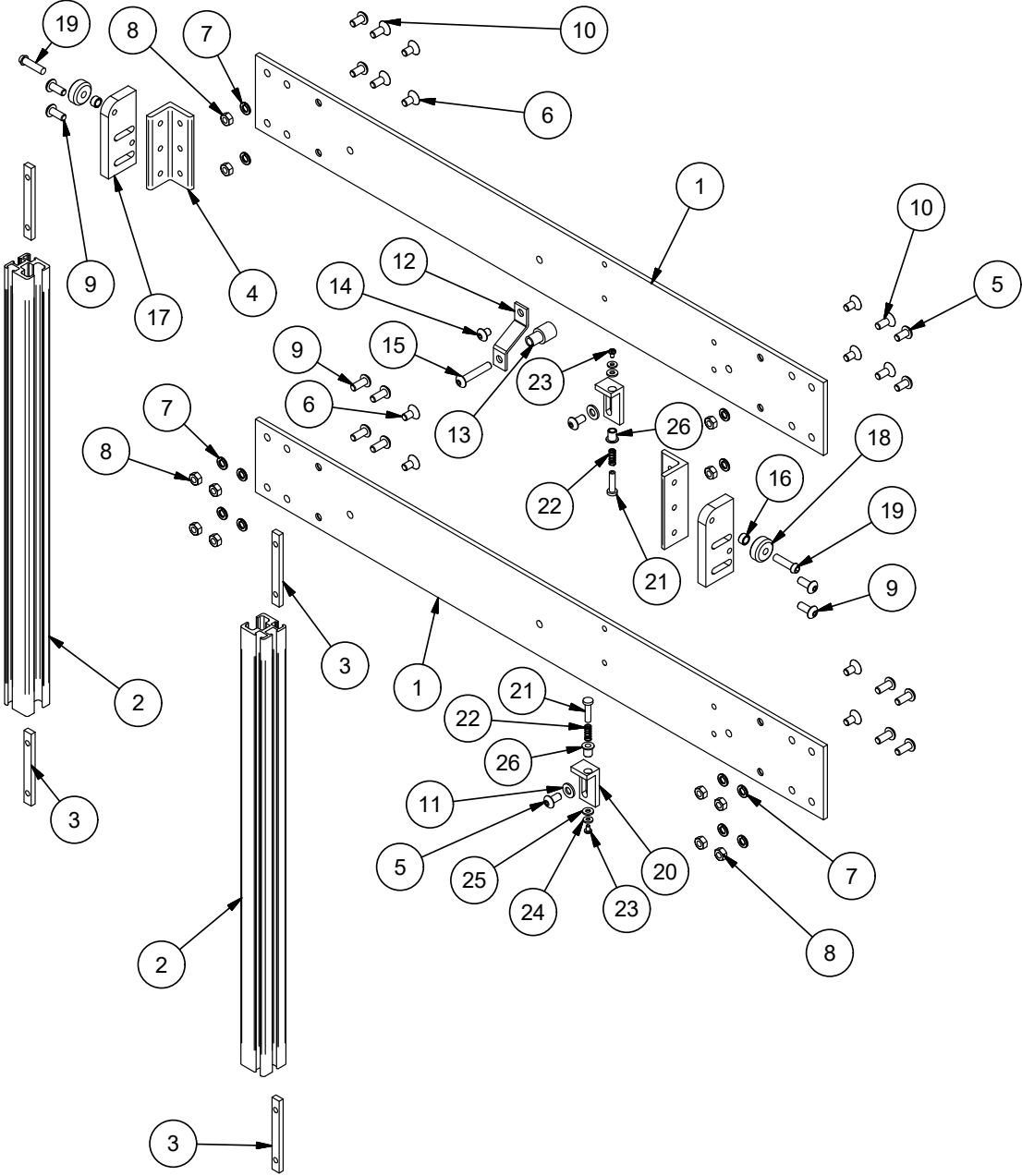
Carriage Assembly : Exploded View



Carriage Frame: Parts List

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	076-30009	BRACE, SIDE RAIL, TFBV2
2	2	076-30008	EXTRUSION, MAIN RAIL, TFBV5
3	4	076-30021	NUT, DOUBLE HOLE, RAIL, TFBV2
4	2	076-30036	BRACKET, CENTERING BLOCK, TFBV
5	6	069-01107	SCREW, BH, HEX, 8x1.25x16, SS
6	8	069-01116	SCREW, FSH, M8x1.25x16
7	12	069-01119	WASHER, LOCK, SPRING, REGULAR, M8, SS
8	12	069-01113	Nut, MS, MM8x1.25
9	12	069-01120	SCREW, BH, HEX, 8x1.25x20, SS
10	4	069-01115	SCREW, FSH, M8x1.25x20
11	2	034-13695	WASHER, FLAT, SAE, 5/16 , SS
12	1	076-30001	SUPPORT, ROLLER, INTERMEDIATE, TFBV
13	1	076-30000	ROLLER, LIFT STRAP, TFBV2
14	1	069-01104	SCREW, BH, HEX, 8x1.25x10, SS
15	1	069-01110	SCREW, BH, HEX, 8x1.25x45, SS
16	2	076-30007	SPACER, BEARING, INNER, TFBV2
17	2	076-29999	MOUNT, BEARING, CENTERING, TFBV2
18	2	069-01044	BEARING, ROLLER, CENTERING, TFBV
19	2	076-29985	SCREW, SHCS, SHCS M8x1.25x30
20	2	076-30081	BRACKET, SENSOR BOLT, TFBV2
21	2	076-30080	PLUNGER, DOWN LIMIT, TFB V5/V7
22	2	SS_Plunger_Spring	SPRING, PLUNGER, UP/DOWN LIMIT
23	2	034-11165	SCREW, PHP, 8-32 UNCx0.25
24	2	034-10947	WASHER, FLAT, SAE, #8, SS
25	2	034-10977	WASHER, FLAT, SAE, #10, SS

Carriage Frame: Exploded View



Wiring

