

SABANTO AUTONOMY SYSTEM

**INSTALLATION GUIDE for JOHN DEERE
5085M, 5095M, 5105M, 5120M, and 5130M Cab Tractor
Model Years 2023 and Newer
Publish Date: 9/17/26**



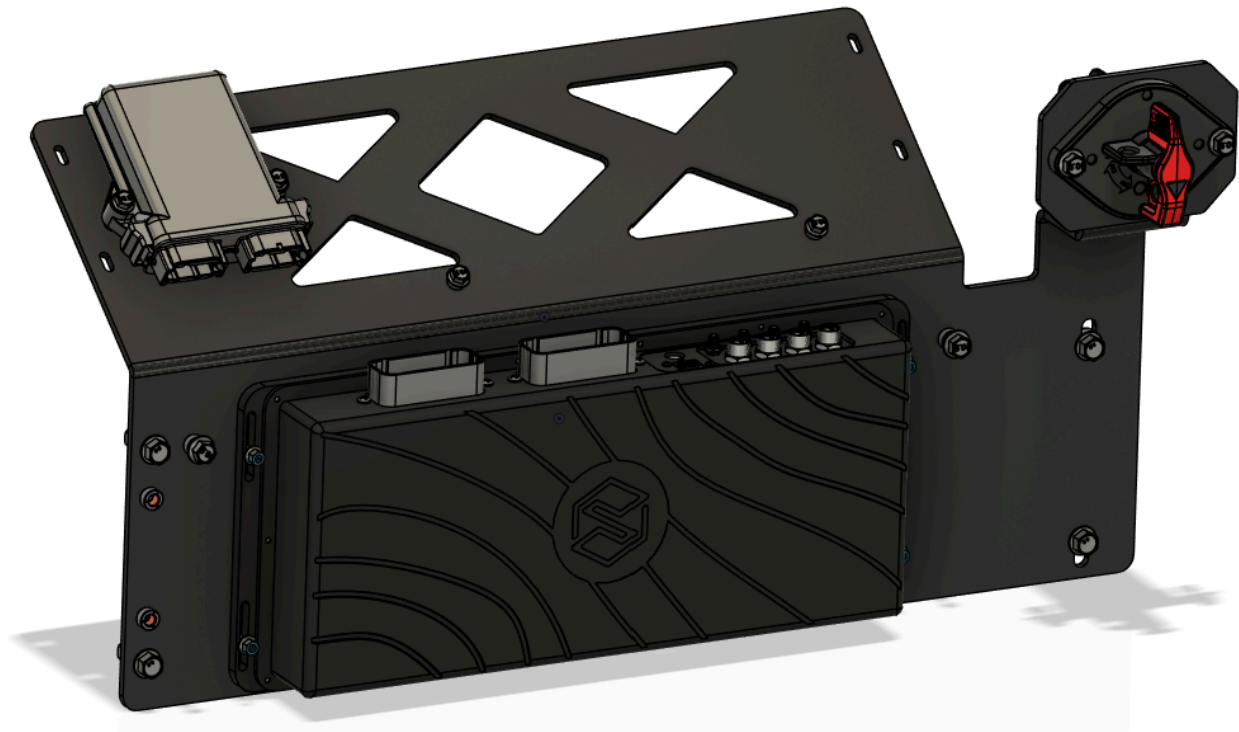
SABANTO

Table of Contents

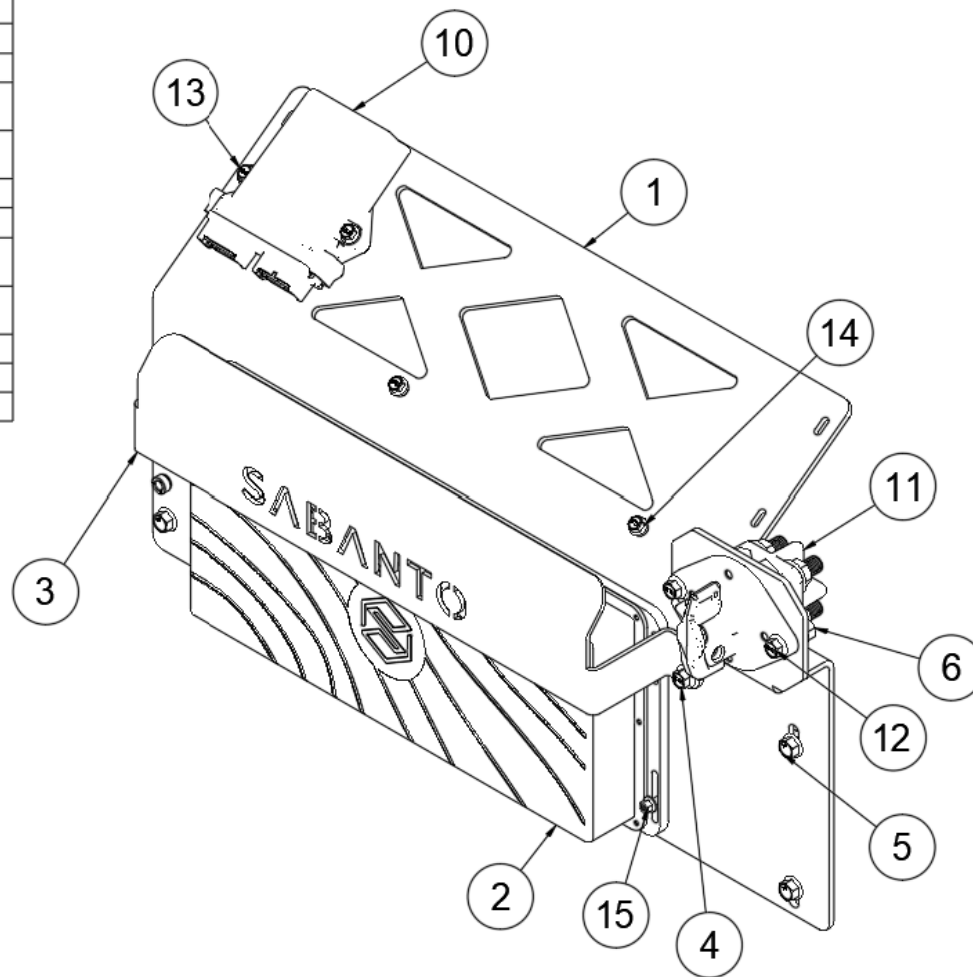
PFM & Battery Disconnect Installation	4
Tractor Control and Remote Valve Switch Box Installation	9
Front Cab Cross Bar Installation	11
O3M Infrared Sensor Mounting	16
O3M Angle Adjustment	16
Radar and Front Camera Mounting	18
Radar & Camera Angle Adjustment	19
Front Camera Angle	19
Radar Angle	20
Rear Roof Installation	21
Wheel Angle Sensor Installation	31
Adjusting the sensor	35
Brake Installation	36
Rear Remote Valve Installation	40
Remote Valve Hydraulic Installation - Tractor with Mid-mount Hydraulic Valve:	43
OEM Plumbing Diagram	43
Force America Remote Valve Integration Diagram	44
Remote Valve Hydraulic Installation - Tractor with No Mid-mount Hydraulic Valve:	47
OEM Plumbing Diagram - Non Mid Mount	47
Force America Remote Valve Integration Diagram	47
Remote Valve Hydraulic Installation - Tractor with John Deere ATC (AutoTrac Controller) 300 Steering valve:	48
Dealer Installed ATC300 Plumbing Diagram	49
Force America Valve Integration Plumbing Diagram w/ ATC300	50
Steering Valve	53
Mounting with Loader Bracket	53
Mounting without Loader Bracket	54
Steering Valve Hydraulic Installation	57
Non AutoTrac Ready Steering Installation Diagram	58
AutoTrac Ready Steering Installation Diagram	64
SIG Bulkhead Mounting	72
AVL Marlin/Relay Mount	73
Harnessing	74
CAN Harness:	74
Tractor Control & Valve Switch Box Harness:	75
Controls and PTO Harness:	76
Column Harness:	78
Main Harness:	81
Battery Disconnect Diagram	83

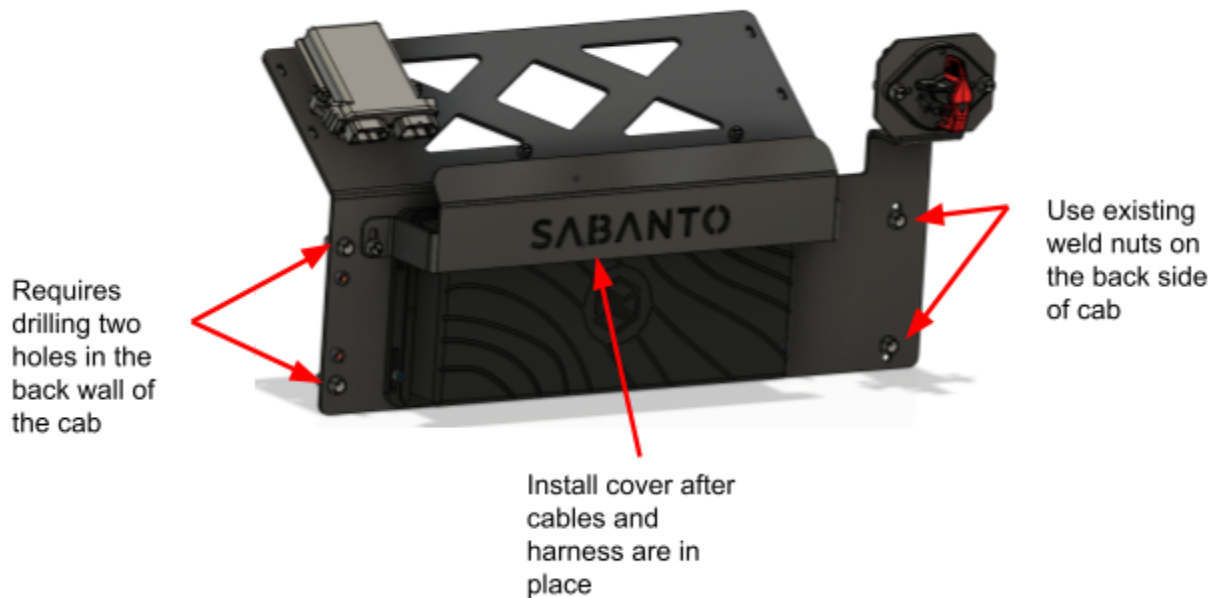
Seat Switch Harness	84
Wheel Angle Sensor Harness (WAS)	84
O3M Infrared & Radar Sensor Harnesses	87
Steering Harness	90
Force America Valve Harness	91
SIG Harness	92
BFE Harness	93
Electric Shift Control Harness & Device	93
PFM Connection Diagram	95
AVL Harness Overview	95
AVL Harness Overview Diagram	96
Vehicle Harness Overview	97
Vehicle Harness Overview Diagram	98
Cabling Routing	99
Antenna Cables	100
Antenna Cable Diagram	101
Camera/Ethernet Cables	101
Camera/Ethernet Cable Diagram	103

PFM & Battery Disconnect Installation



PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	0805-MP-2001	PFM MOUNT WLDMT
2	1	9999-DD-3001	PFM Assembly
3	1	0805-MP-1002	PLATE, FORMED, STRAP, BOLT ON
4	2	9999-HA-1156	SCREW, M8-1.25 X 12MM, FHHCS, ZP
5	4	9999-HA-1007	SCREW, M8-1.25 X 25MM, FHHCS, ZP
6	6	9999-HA-1128	NUT, M8-1.25, NYLOC, FH, ZP
10	1	9999-DD-3007	DEVICE, CAN SHARK
11	1	9999-EP-1701	Dual Pole Master Disconnect Switch with Yellow Handle
12	2	9999-HA-1289	SCREW, M8-1.25 X 30MM, FHHCS, ZP
13	2	9999-HA-1144	SCREW, M6-1 X 25MM, FHHCS, ZP
14	2	9999-HA-1217	SCREW, M6-1 X 10MM, FHHCS, ZP
15	4	9999-HA-1135	NUT, M5-0.8, NYLOC, FH, ZP



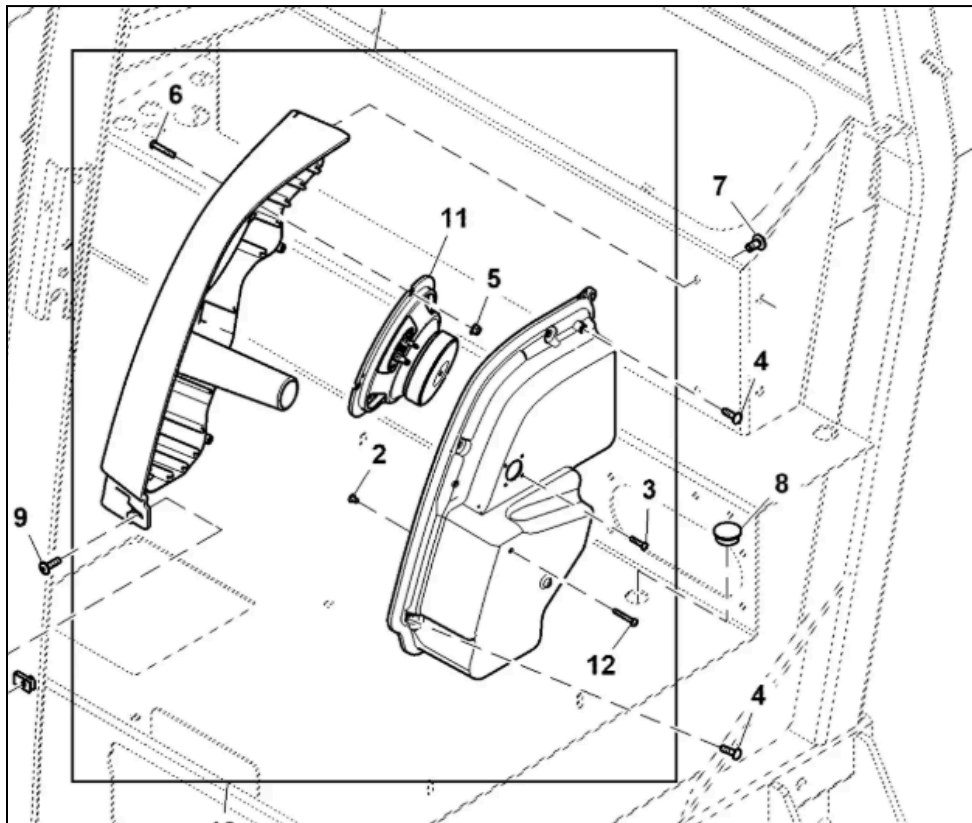


- Some models may have a subwoofer built into the cover. For models with no subwoofer the cover on the LH side can be easily removed to mount the vPFM plate bolts running them from the inside out. For models with the subwoofer, it can either be removed or pulled out just enough to slide the plate behind it. To slide it out, remove the top cover on

the LH side console. The bolts mounting the vPFM should be run in from the outside of the cab through the weld nut and use M8 nyloc nuts on the inside to secure the plate.

- Secure the plate to the back wall with the bolts on the right side. Using the $\frac{3}{8}$ " through holes on the left side of the plate as a guide drill two holes through the back wall of the cab.

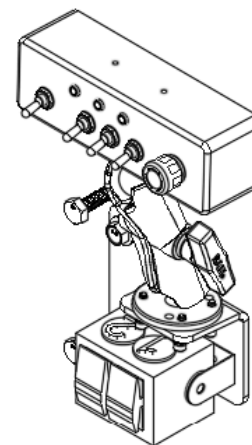
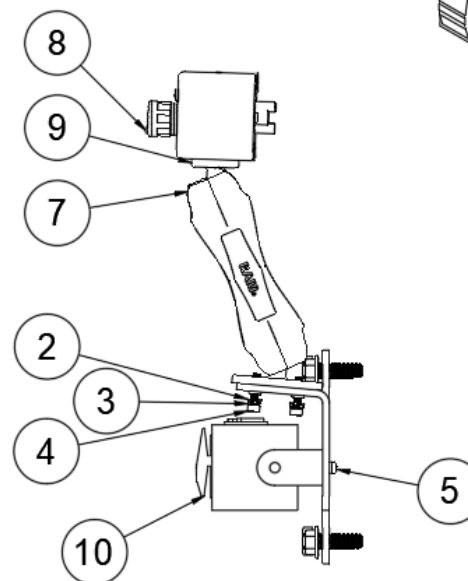
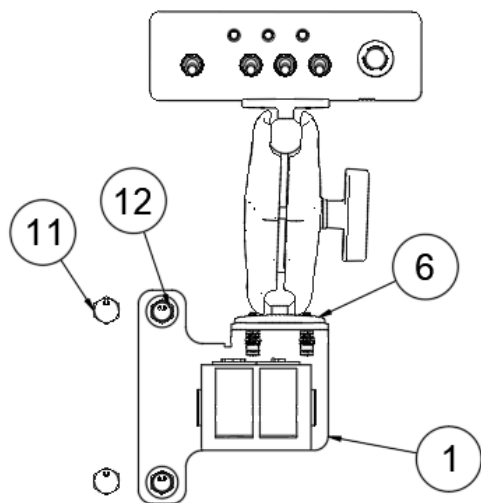




Tractor Control and Remote Valve Switch Box Installation

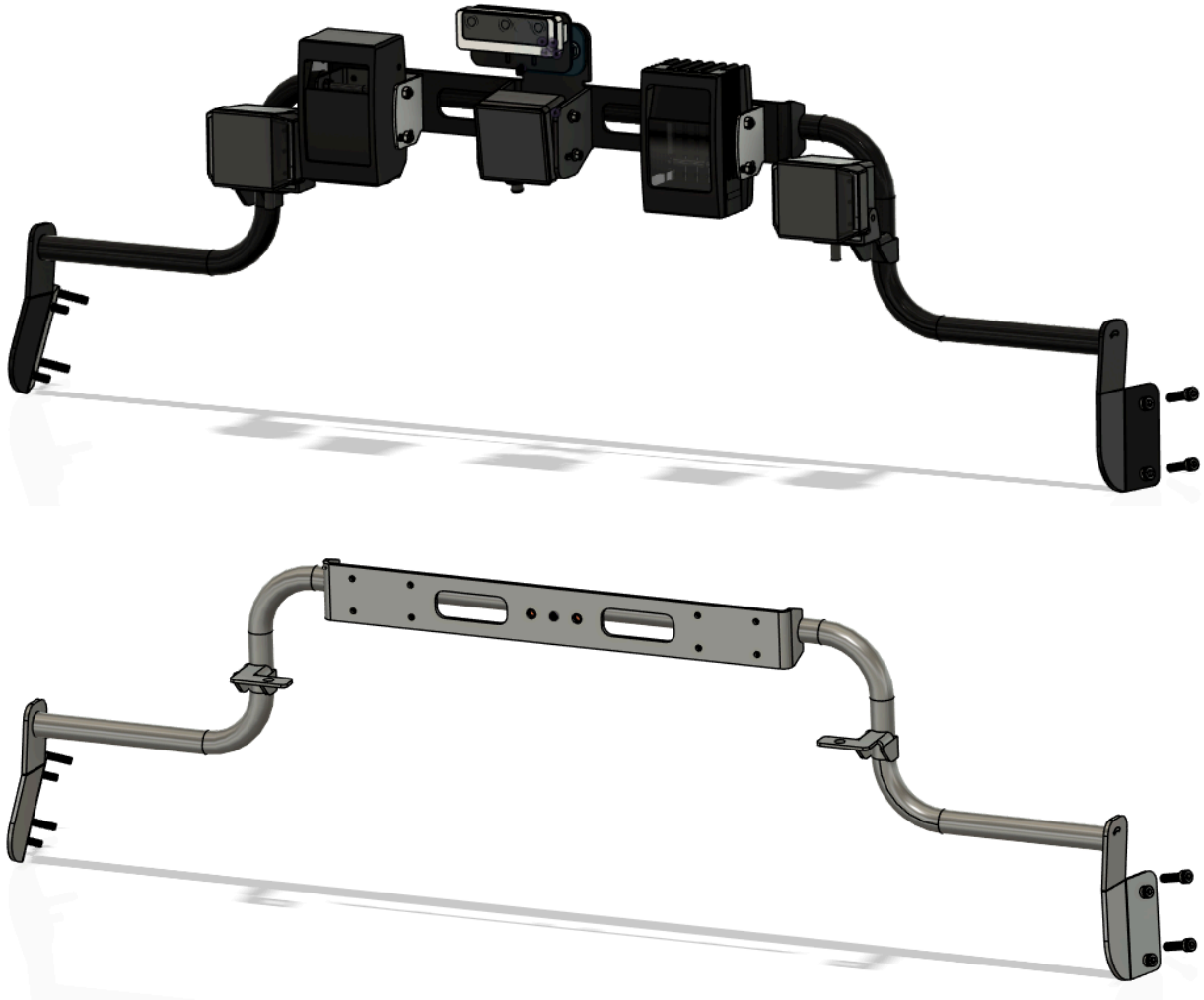


PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	0805-MP-2010	SWITCH BOX MOUNT W/DMT REVERSED
2	4	9999-HA-1010	WASHER, M5, FLAT, ZP
3	4	9999-HA-1004	WASHER, M5, LOCK, ZP
4	4	9999-HA-1002	SCREW, M5-0.8 X 22MM, SHCS, SS
5	2	9999-HA-1074	SCREW, M4-0.7 X 10MM, PHCS, WITH SPLIT LOCK WASHER, ZP
6	1	9999-HA-1062	RAM ROUND PLATE WITH BALL
7	1	9999-HA-1061	RAM DOUBLE SOCKET ARM
8	1	9999-DD-3002	TRACTOR CONTROL SWITCH BOX
9	1	9999-HA-1063	RAM DIAMOND BALL BASE
10	1	9999-EH-2001	SWITCH BOX, MOMENTARY ON/OFF CONTROL FOR 2-SPOOL MONOBLOCK VALVE
11	2	9999-HA-1168	SCREW, M10-1.5 X 35MM HHCS, ZP
12	2	9999-HA-1227	SCREW, M10-1.50 X 25MM, SFHHCS, ZP

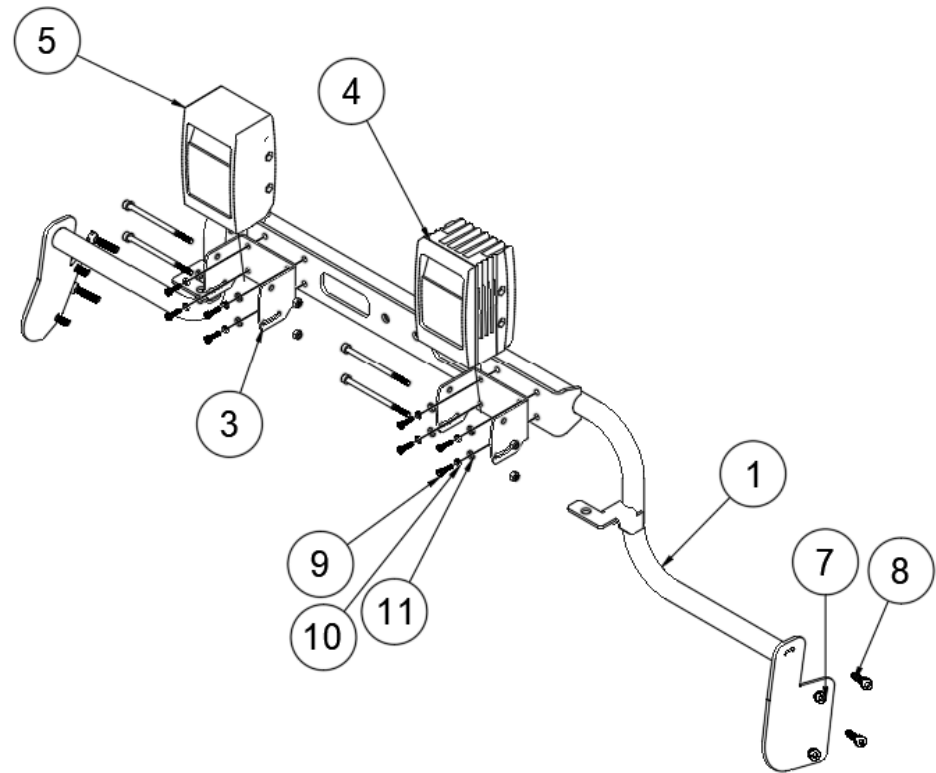




Front Cab Cross Bar Installation



PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	0805-MP-2007	WLDMT, FRONT CAB CROSS BAR
2	2	9999-DD-1024	LIGHT, POD, SIDE SHOOTER W/ AMBER STROBE
3	2	9999-HA-3002A	BRACKET, U-SHAPE, FOR O3M SENSORS AND ILLUMINATION UNITS
4	1	O3M960	IR ILLUMINATION UNIT
5	1	O3M161	3D SENSOR FOR MOBILE APPLICATIONS
7	4	9999-HA-1294	SCREW, M8-1.25 X 20MM, SHCS, ZP
8	4	9999-HA-1295	SCREW, M8-1.25 X 30MM, SHCS, ZP
9	8	9999-HA-1137	ZINC-PLATED ALLOY STEEL SOCKET HEAD SCREW, M5 X 0.8 MM THREAD, 16 MM LONG
10	8	9999-HA-1004	WASHER, M5, LOCK, ZP
11	8	9999-HA-1010	WASHER, M5, FLAT, ZP

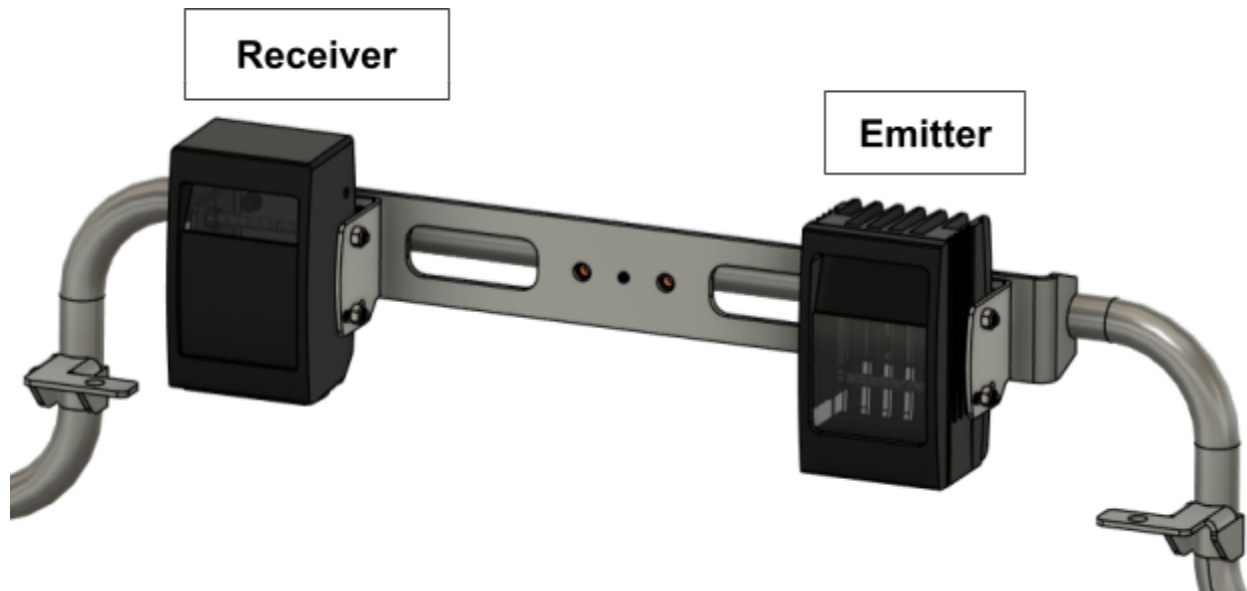




Works with and without the mirrors. The kit includes different length bolts depending on the situation to replace the factory length bolts.



O3M Infrared Sensor Mounting



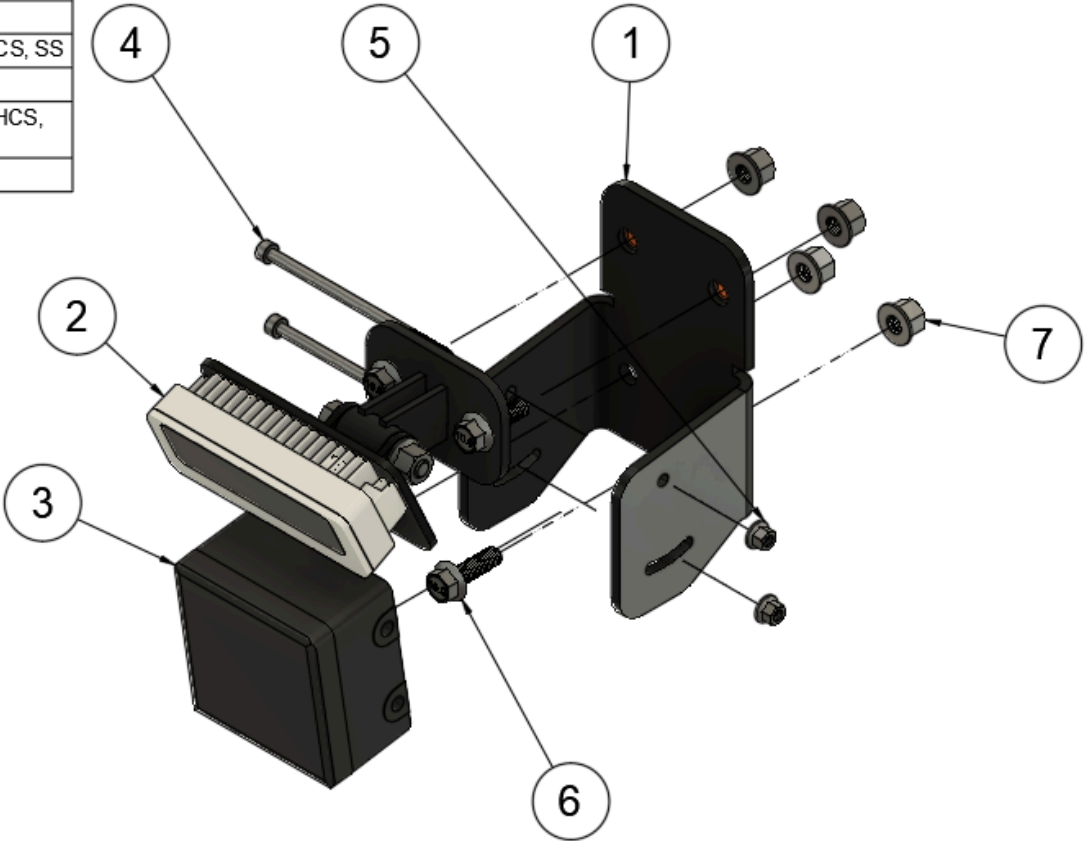
O3M Angle Adjustment

- Park the tractor on a flat surface while setting the angles of the front sensors
- Mount O3Ms @ 13 degrees relative to ground



Radar and Front Camera Mounting

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	9999-MP-1050	PLATE, FORMED, CAB/ROPS IFM RADAR MOUNT
2	1	9999 OAK 1-AXIS	----
3	1	9999-DD-1022	IFM RADAR AREA SENSOR
4	2	9999-HA-1274	SCREW, M5-0.8 X 100MM, SHCS, SS
5	2	9999-HA-1135	NUT, M5-0.8, NYLOC, FH, ZP
6	2	9999-HA-1132	SCREW, M8-1.25 X 25MM, FHHCS, ZP
7	2	9999-HA-1128	NUT, M8-1.25, NYLOC, FH, ZP



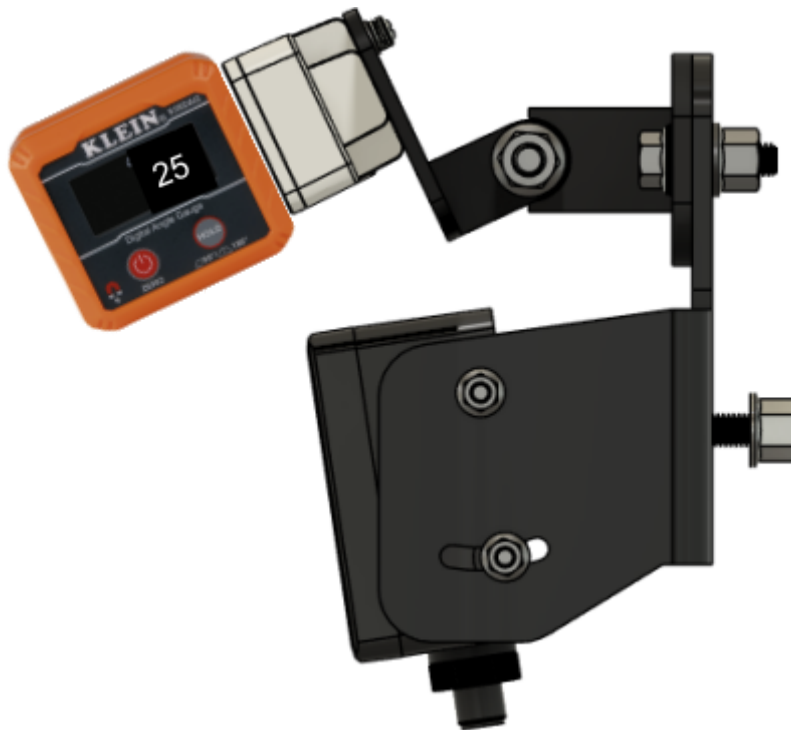
Radar & Camera Angle Adjustment

- Park the tractor on a flat surface while setting the angles of the front sensors
- Mount Radar @ 8.5 degrees relative to ground
- Mount Camera @ 35 degrees relative to ground

For additional radar mounting instructions see:

<https://support.sabantoag.com/radar-install>

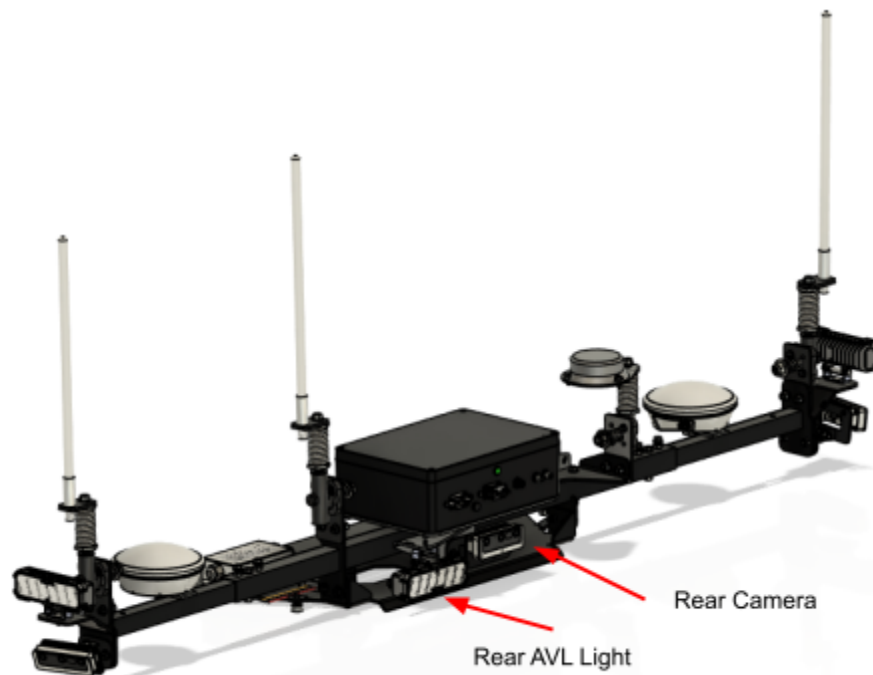
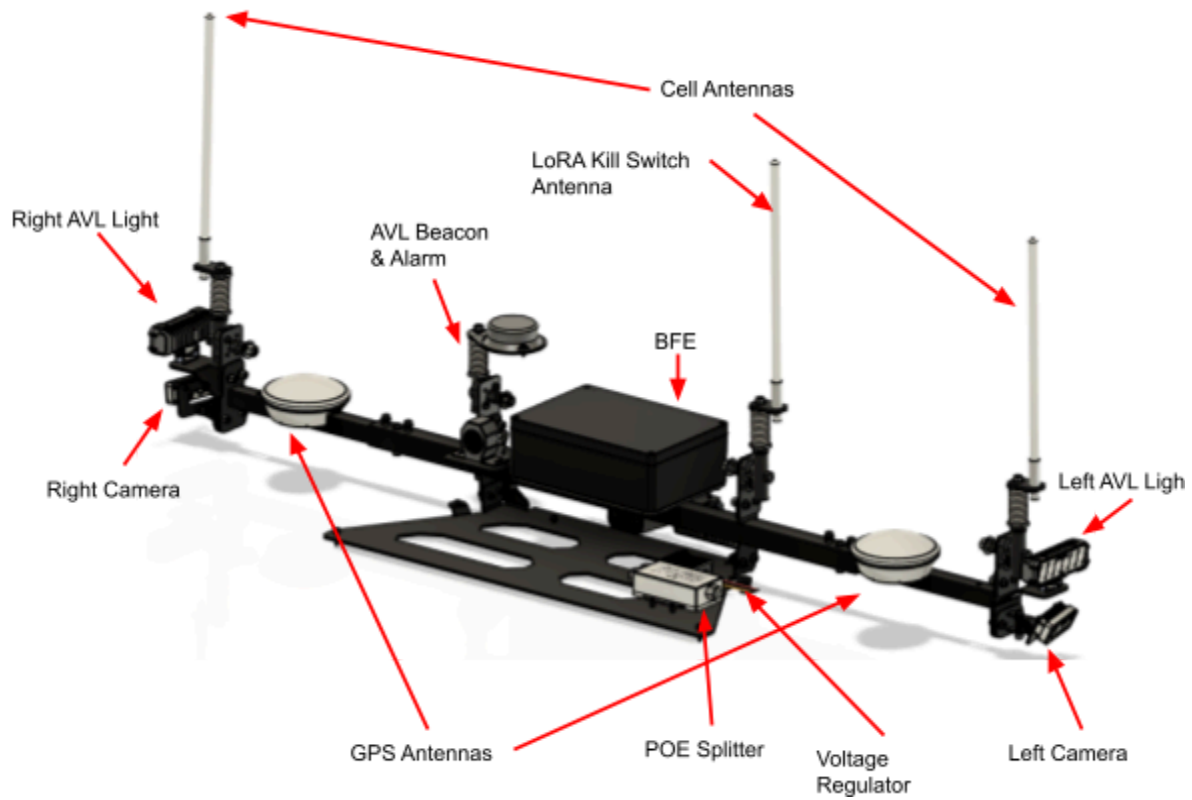
Front Camera Angle

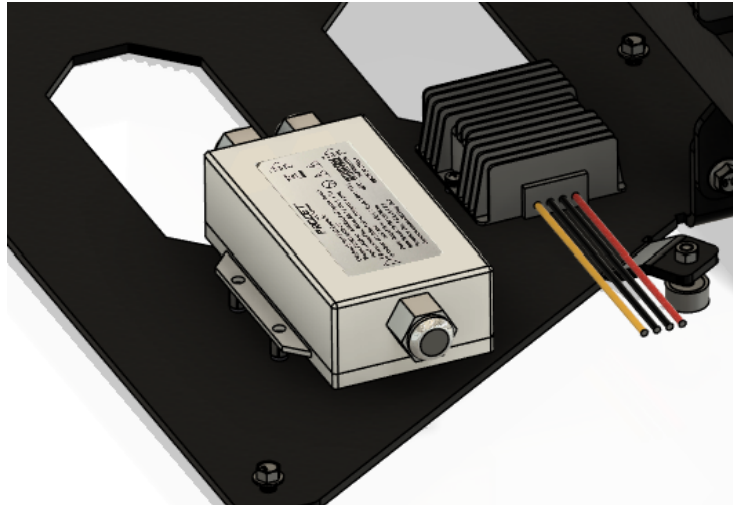


Radar Angle

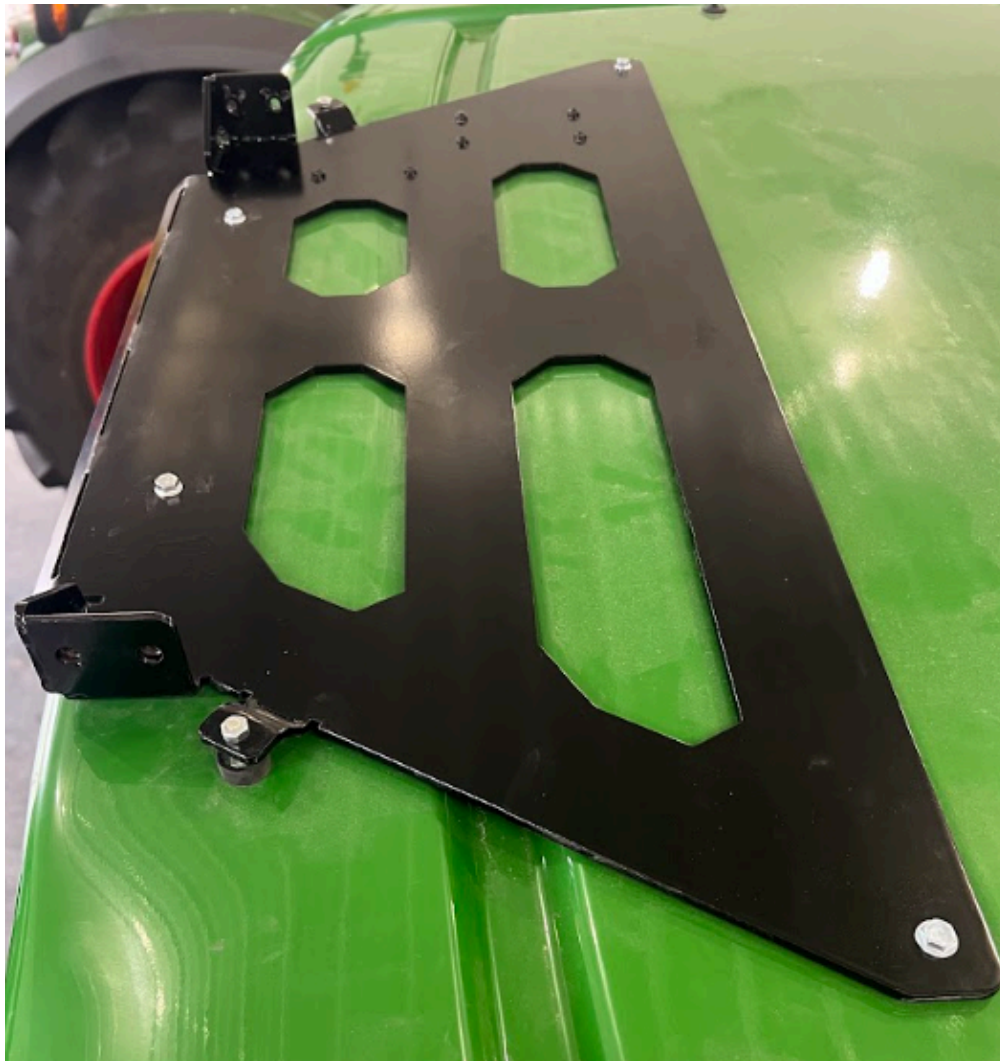


Rear Roof Installation

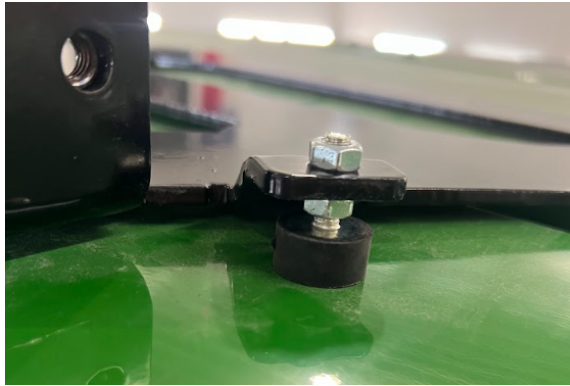




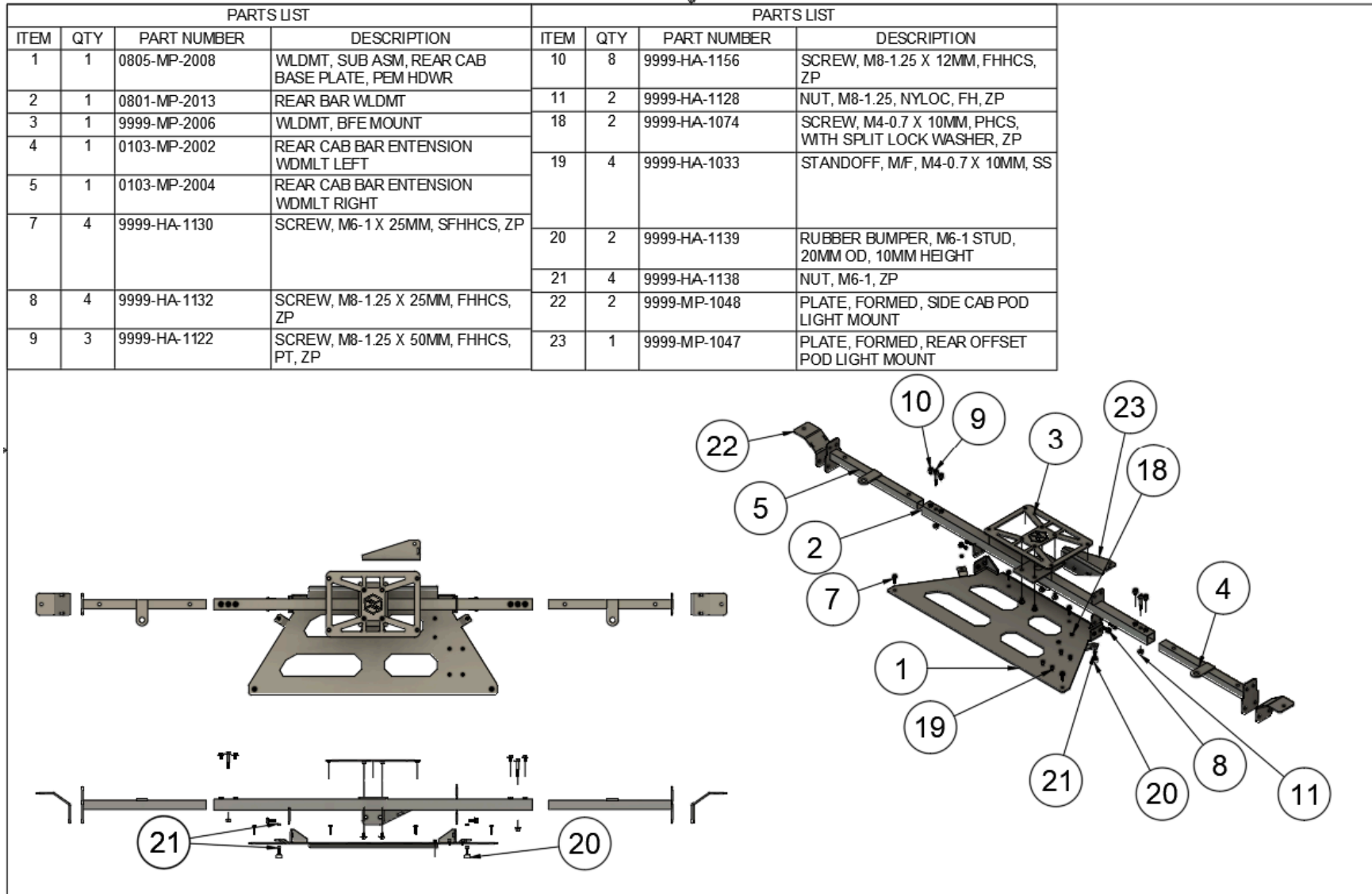
- Start with mounting the base plate to the roof. Remove the four factory bolts, align the plate and secure using provided hardware.



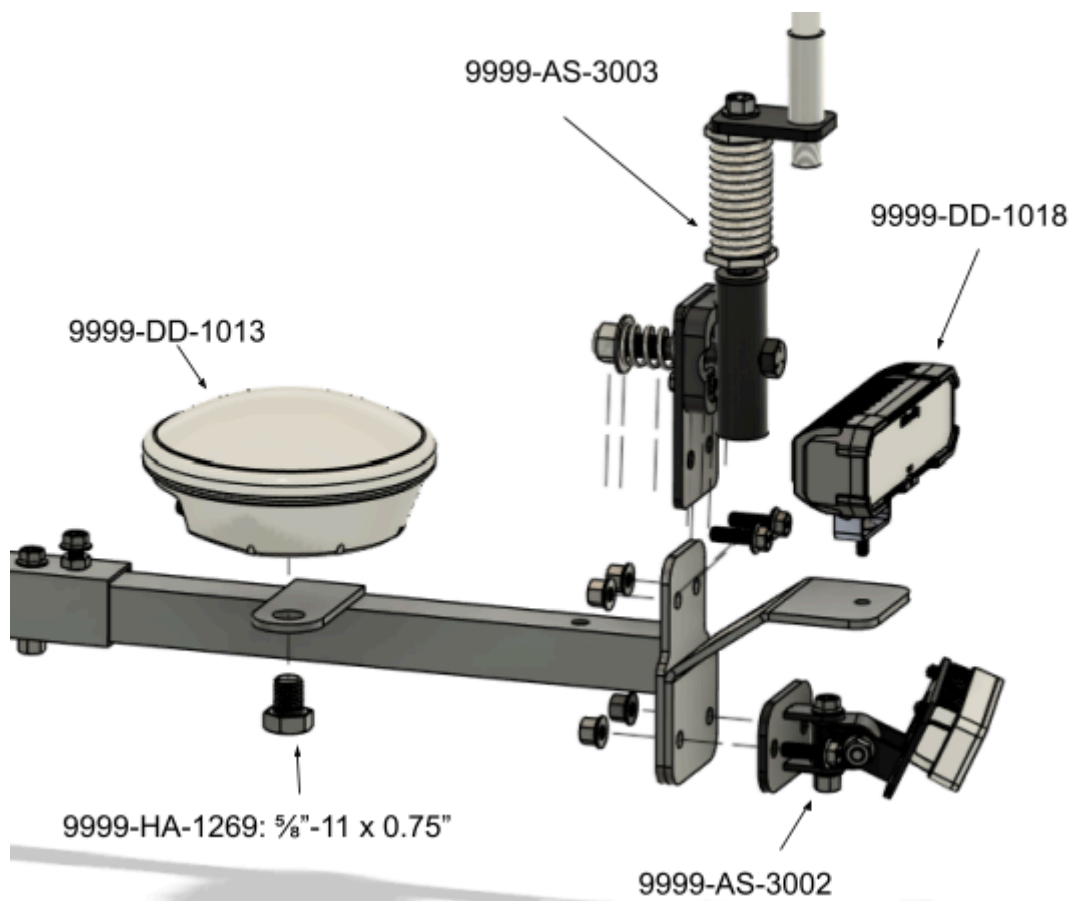
- Adjust the rubber stabilizing feet to have contact and slight pressure down to the roof

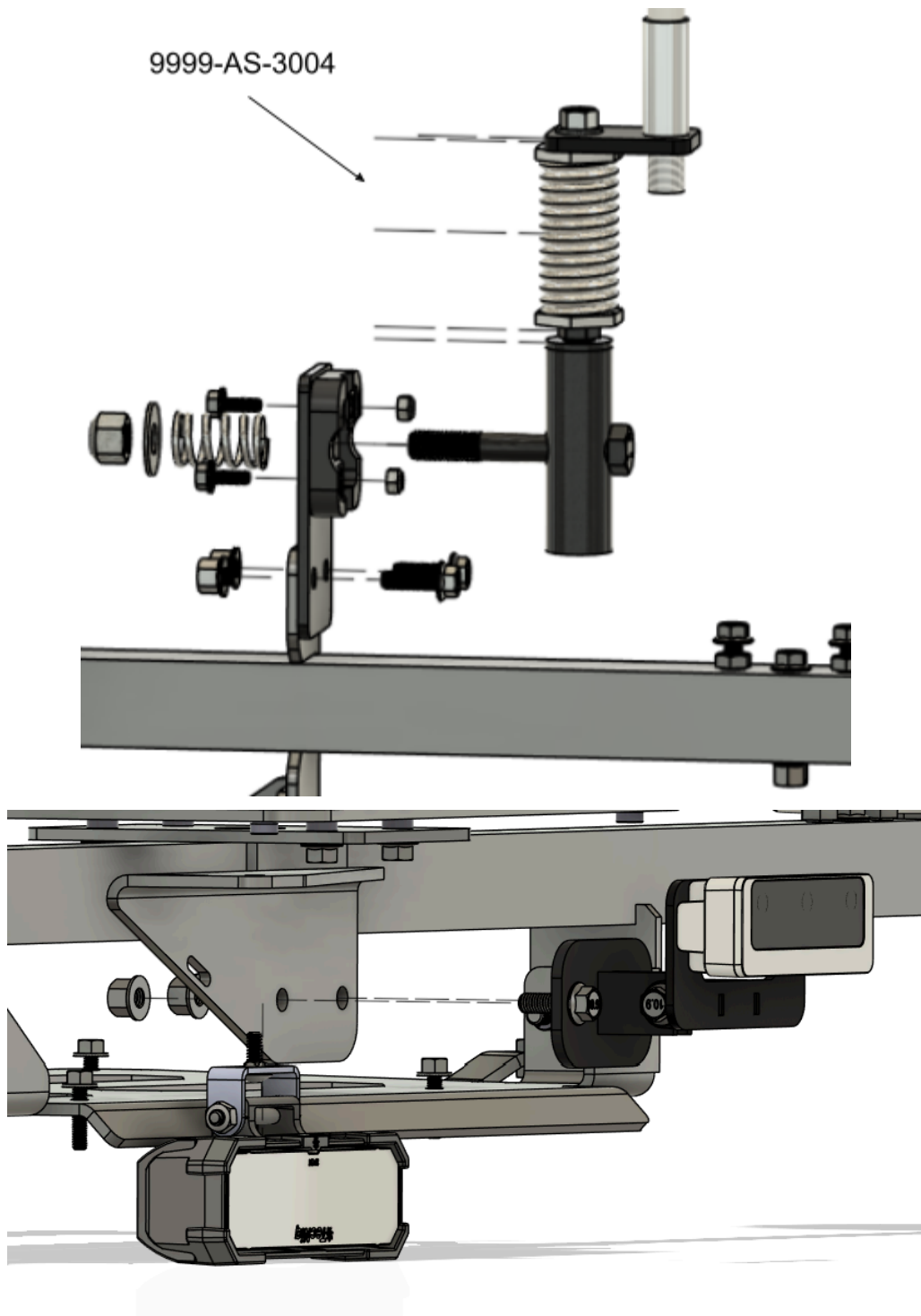


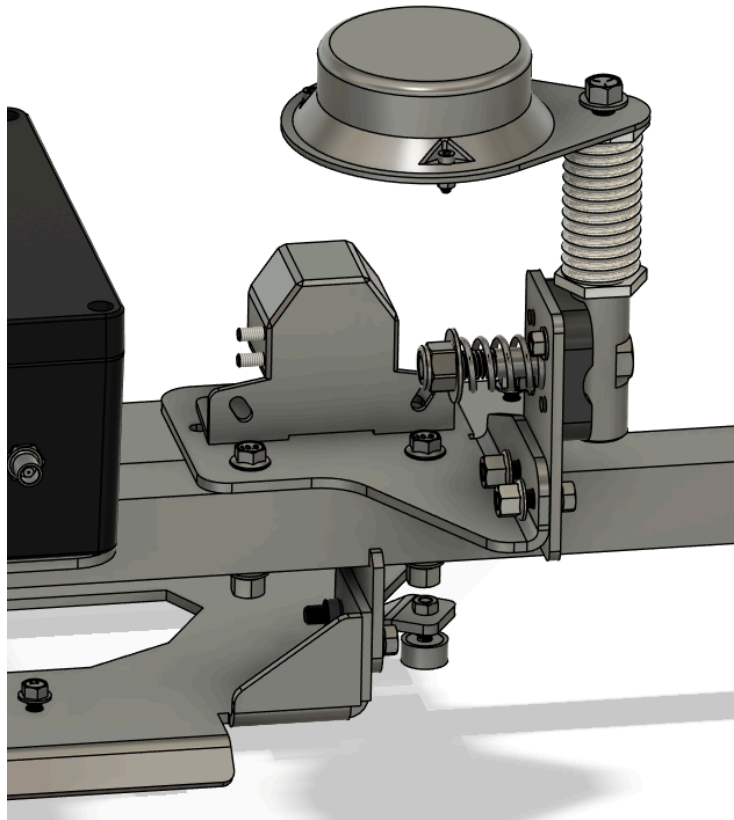
*Note: Assembly of the cross bar with its various parts can be either fully and partially assembled on the ground and lifted into position.



- For additional information about mounting AVL components see the following guide
<https://support.sabantoag.com/audio-visual-and-light-kit-installation-guide>





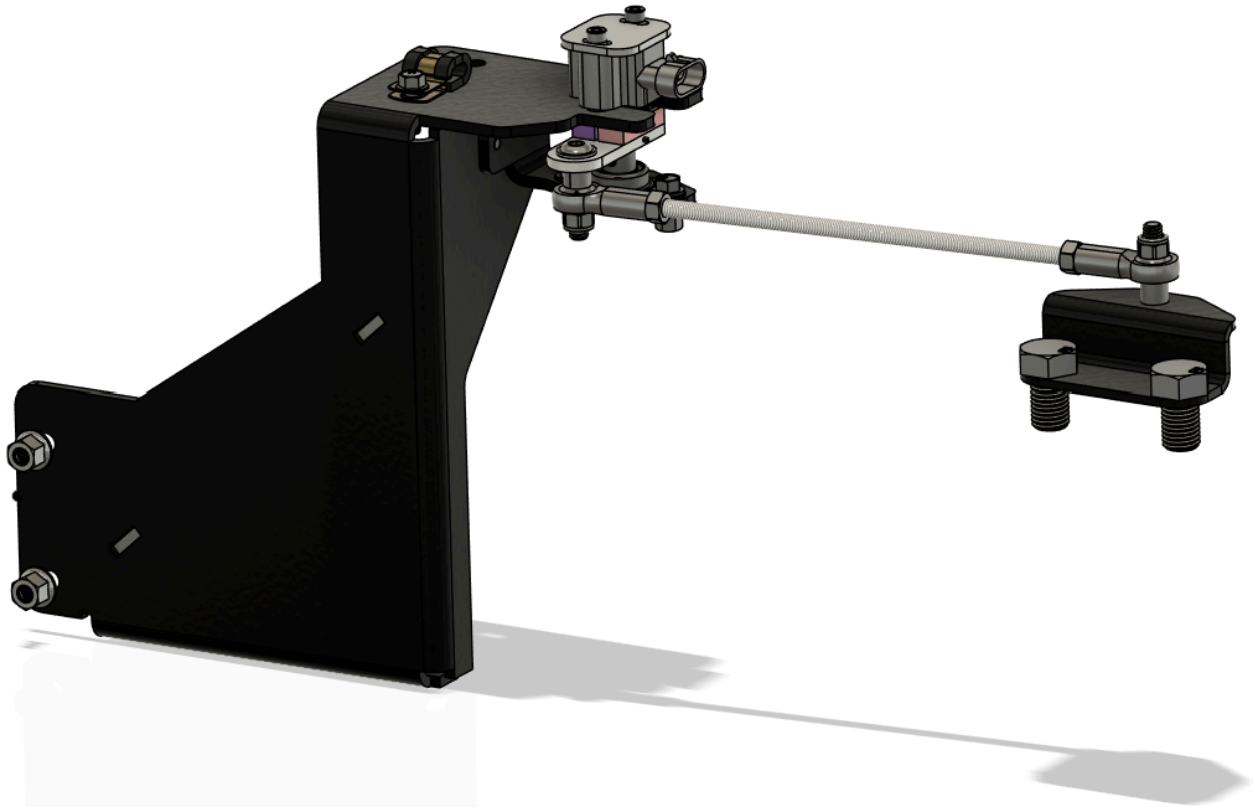






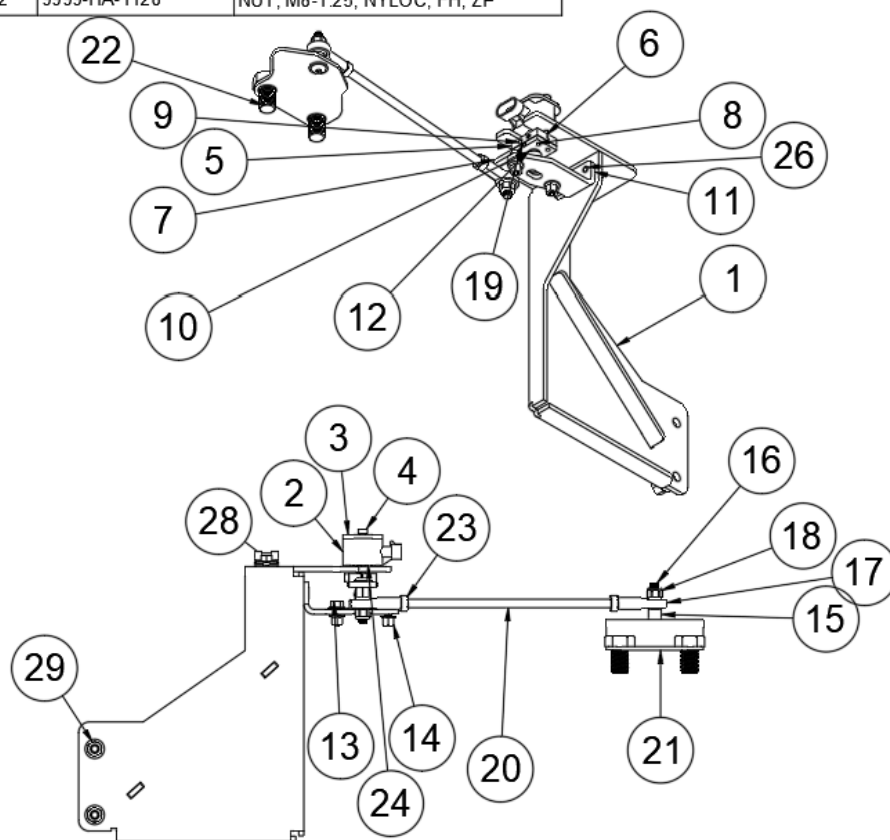


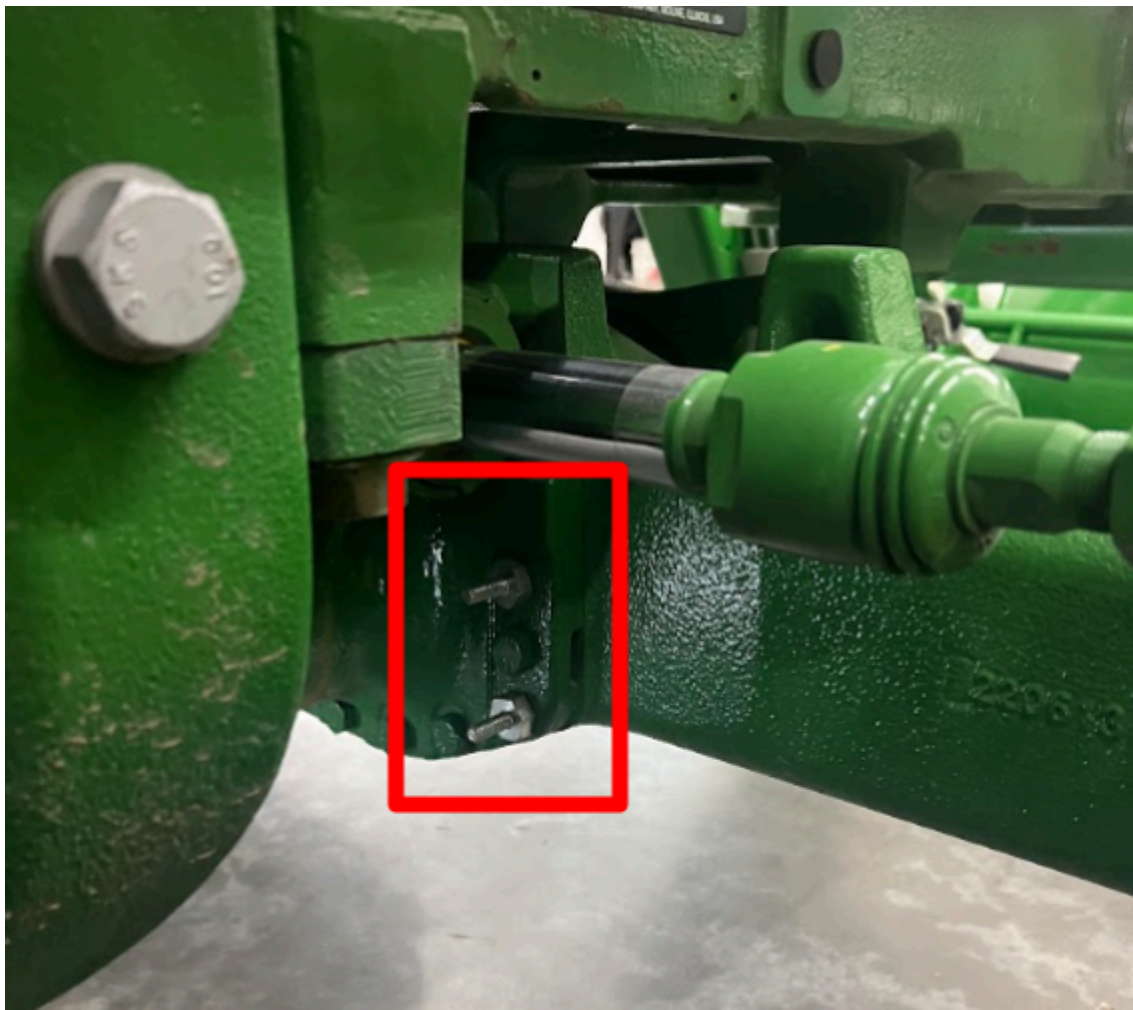
Wheel Angle Sensor Installation



PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	0807-MP-2007	WDLMT, STEERING ANGLE SENSOR POT MNT
2	1	9999-DD-1002	RTY SERIES HALL-EFFECT ROTARY POSITION SENSOR, 120° (±60°) SENSING RANGE ANGLE, 5 VDC
3	1	9999-MP-1028	SPACER, POT, TOP BOLTS, STAINLESS
4	2	9999-HA-1032	SCREW, M5-0.8 X 35MM, SHCS, PT, SS
5	1	9999-MP-1030	CLAMP, RADIUS SIDE, POT, WHEEL ANGLE SENSOR
6	1	9999-MP-1031	CLAMP, FLAT SIDE, POT, WHEEL ANGLE SENSOR
7	1	0801-MP-1041	MACHINED, LINKAGE, STEERING SENSOR FLANGE
8	2	9999-HA-1187	SCREW, M4-0.70 X 10MM, SHCS, LOW PROFILE HEAD, SS
9	2	9999-HA-1186	SCREW, M4-0.70 X 25MM, SHCS, SS
10	1	9999-MP-1029	ROD, CONNECTING, WHEEL ANGLE SENSOR
11	1	0805-MP-1008	PLATE, FORMED, STEERING SENSOR BEARING MOUNT
12	1	9999-HA-1184	BEARING, WHEEL ANGLE SENSOR, LOWER
13	2	9999-HA-1134	SCREW, M6-1 X 16MM, SFHHCS, ZP
14	3	9999-HA-1131	Medium-Strength Steel Nylon-Insert Flange Locknut, Class 8, Zinc-Plated, M6 x 1 mm Thread
15	2	9999-HA-1189	SPACER, 0.47X0.32X0.38L, UNTHREADED, ZP
16	2	9999-HA-1188	SCREW, 5/16-18 X 1.50, BHCS, FLANGED HEAD, SS
17	2	9999-HA-1190	BALL JOINT, ROD END, 5/16-24, RIGHT HAND
18	2	9999-HA-1044	NUT, 5/16-18, SFLN, ZP
19	1	9999-HA-1185	PIN, ROLL, 0.094OD X 1.13L, SS
20	1	0807-MP-1013	ALL THREAD, LINKAGE, STEERING SENSOR RH
21	1	0801-MP-1038	PLATE, FORMED, STEERING SENSOR OUTER MOUNT
22	2	9999-HA-1192	SCREW, M16-2 X 25MM, HHCS, ZP

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
23	2	9999-HA-1208	NUT, 5/16-24, ZP
24	2	9999-HA-1003	WASHER, M5, FLAT, SS
25	2	9999-HA-1028	WASHER, M6, LOCK, ZP
26	2	9999-HA-1223	SCREW, M6-1 X 12MM, FHHCS, ZP
27	1	9999-HA-1209	SCREW, M6-1 X 20MM, FHHCS, ZP
28	1	9999-HA-1023	CLAMP, LOOP, 0.25, MULTILINE, EPDM CUSHION
29	2	9999-HA-1128	NUT, M8-1.25, NYLOC, FH, ZP







Adjusting the sensor

Upon installation of the wheel angle sensor, some adjustments may need to be made to the length of the all-thread between the sensor flange and the outer mounting bracket. The ideal position is shown in image 1, the centerline of the sensor shown in image 2 should be parallel to the centerline of the axle. This should be relatively close since it comes preassembled. With the wheels pointed straight forward, the centerline of the aluminum flange below the sensor should be parallel to the centerline of the wheel. If it is not parallel, undo one of the tie rod ends from its mounting bolts and loosen the jam nuts. Spin the all-thread/tie rod ends to either lengthen or shorten to overall distance.

Image 1

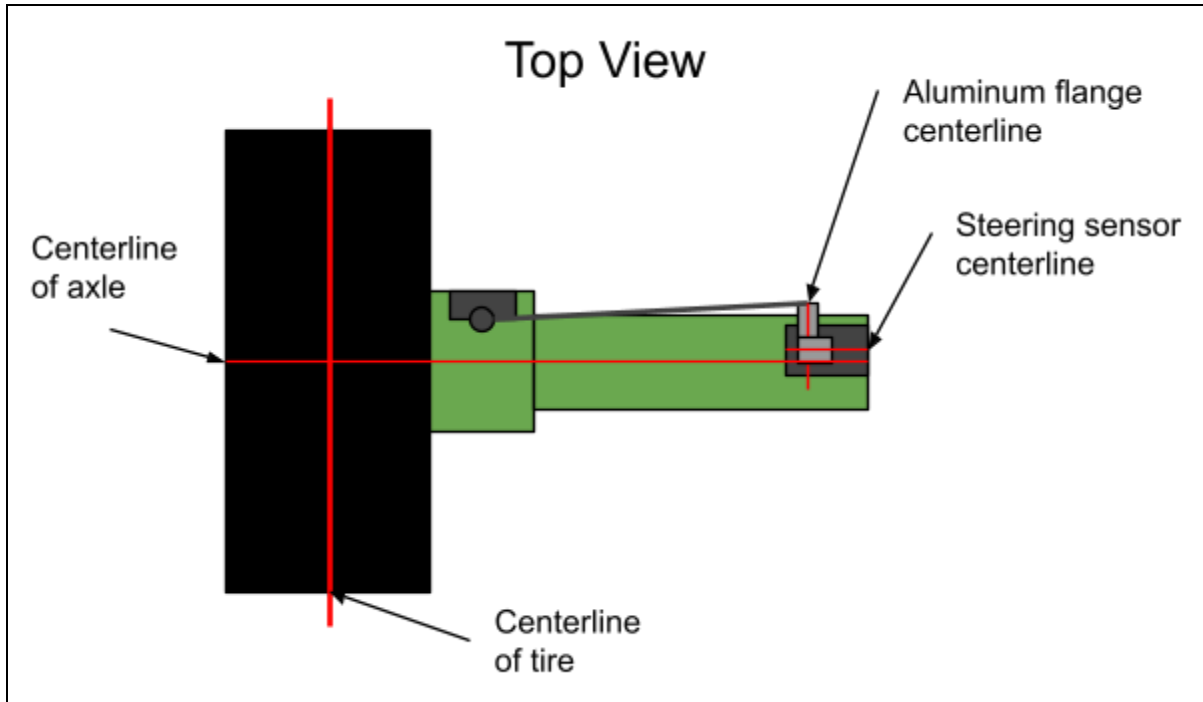
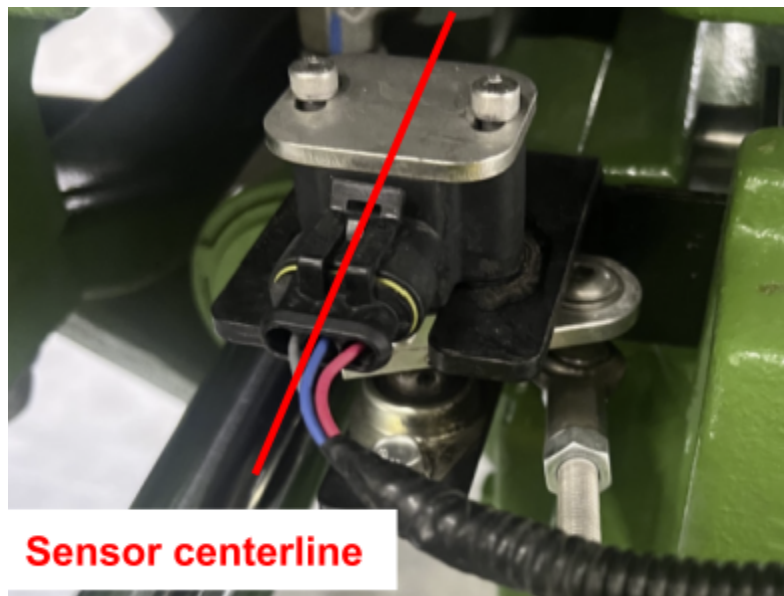


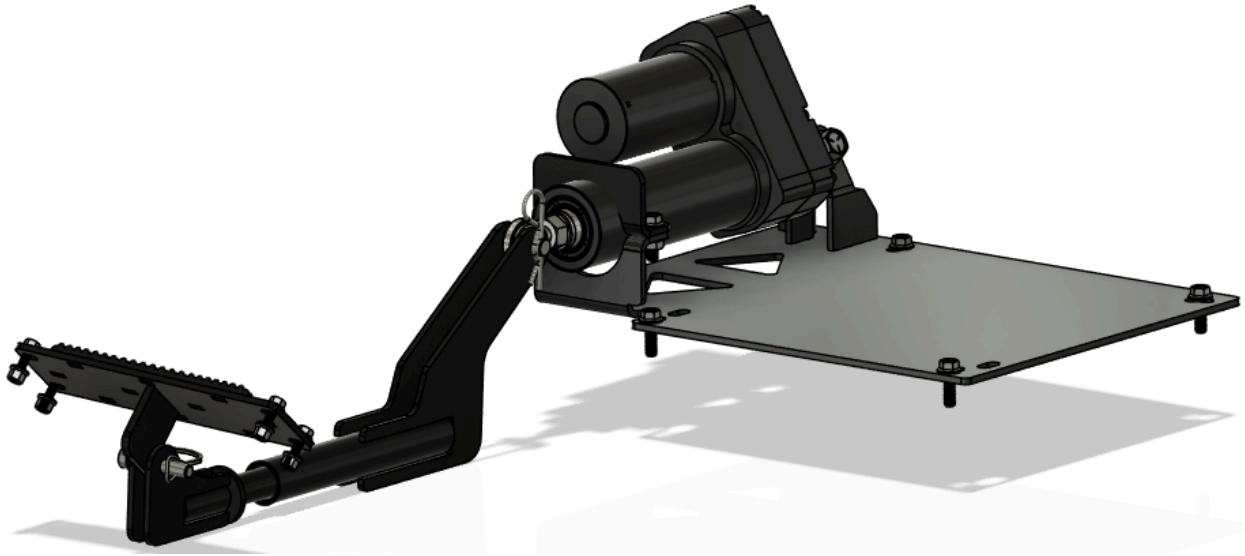
Image 2



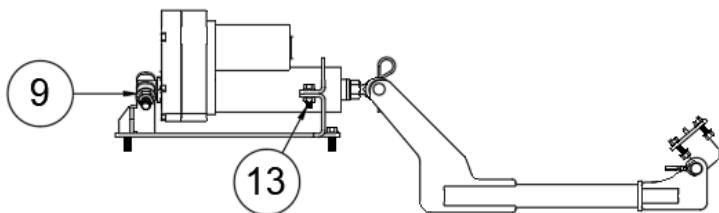
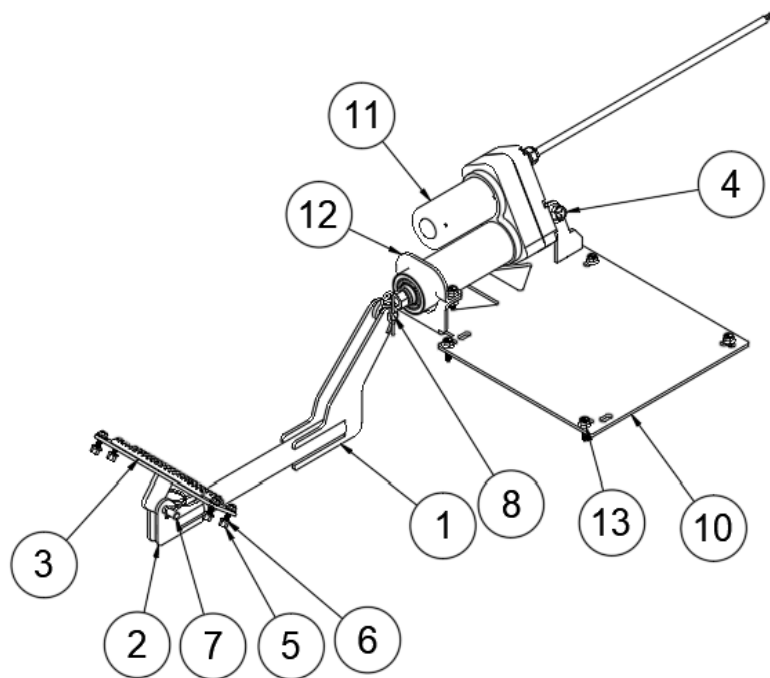
Brake Installation

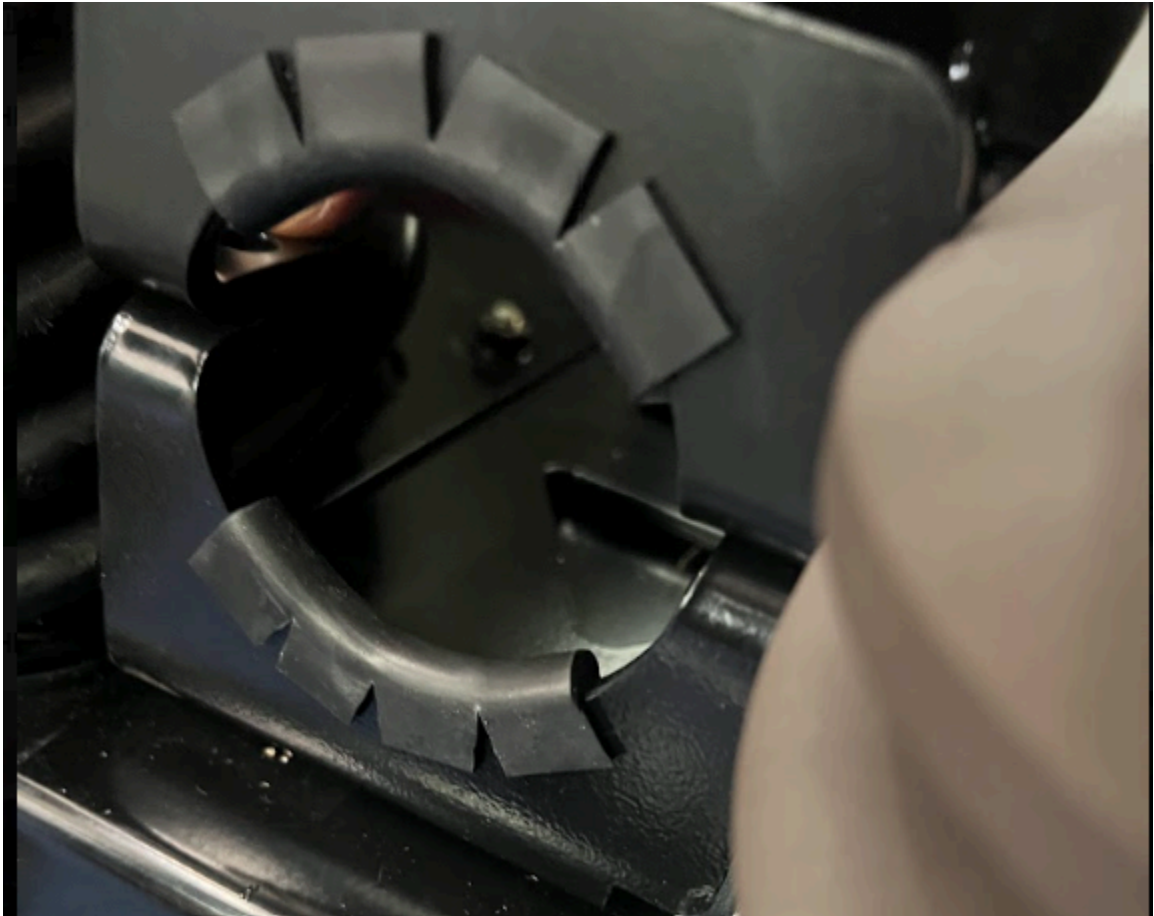
Note: Easiest installation tip - remove 4 bolts holding the seat down. Leave the seat in the cab, tip it back and slide the bracket under, insert the new included bolts and set the seat back down over the bolt heads using the slot cutouts in the seat base.

MAKE SURE RUBBER EDGE TRIM IS INSTALLED ON TOP AND BOTTOM OF ACTUATOR CLAMP. The provided rubber may be trimmed down, at a minimum use ~1in on the top and bottom.



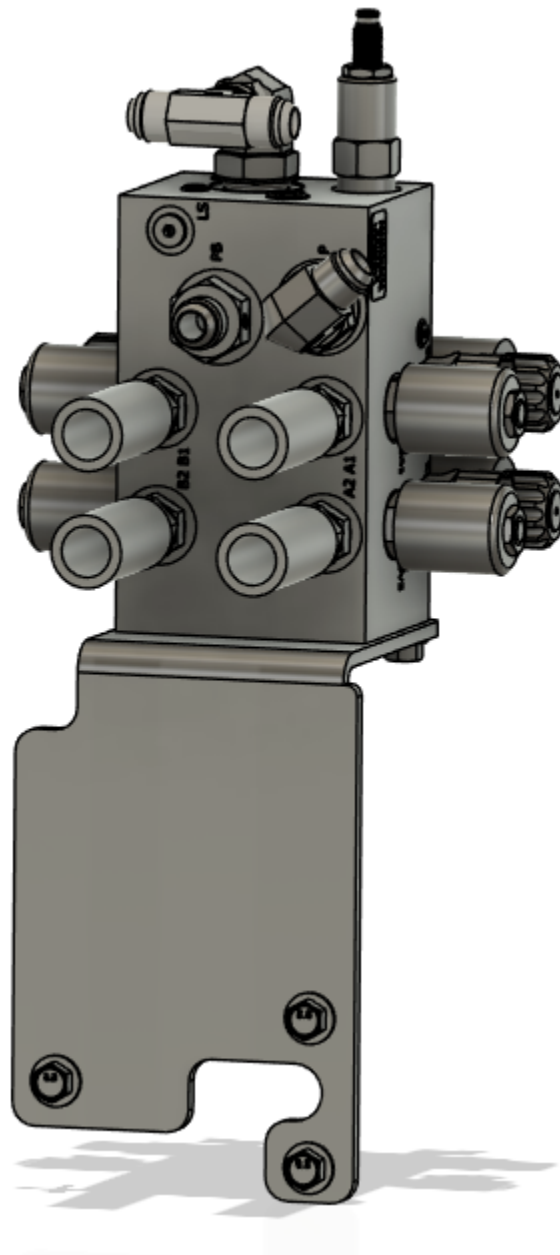
PARTS LIST			
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1	1	0801-MP-2002	WLDMT, BRAKE LINKAGE, ACTUATOR SIDE
2	1	0801-MP-2003	WLDMT, BRAKE LINKAGE, PEDAL SIDE
3	1	0801-MP-2004	BRAKE ACTUATOR PEDAL MOUNT WLDMT
4	1	9999-HA-1202	SCREW, 1/2-13 X 2.50, FHHCS, PT, ZP
5	4	9999-HA-1131	Medium-Strength Steel Nylon-Insert Flange Locknut, Class 8, Zinc-Plated, M6 x 1 mm Thread
6	4	9999-HA-1130	SCREW, M6-1 X 25MM, SFHHCS, ZP
7	1	9999-HA-1203	PIN, CLEVIS, WIRE LOCK, 0.38DIA, 1.38 USABLE LENGTH, ZP
8	1	9999-HA-1204	PIN, CLEVIS, WITH HAIRPIN, 0.50DIA, 1.27 USABLE LENGTH, ZP
9	1	9999-HA-1195	NUT, 1/2-13, NYLOC, FH, ZP
10	1	0801-MP-2001	BRAKE ACTUATOR MOUNT WLDMT
11	1	9999-DD-1015	EWELLIX 4IN-300LB-F LINEAR CAN ACTUATOR
12	1	0801-MP-1005	PLATE, FORMED, TOP CLAMP, BRAKE ACTUATOR
13	6	9999-HA-1132	SCREW, M8-1.25 X 25MM, FHHCS, ZP



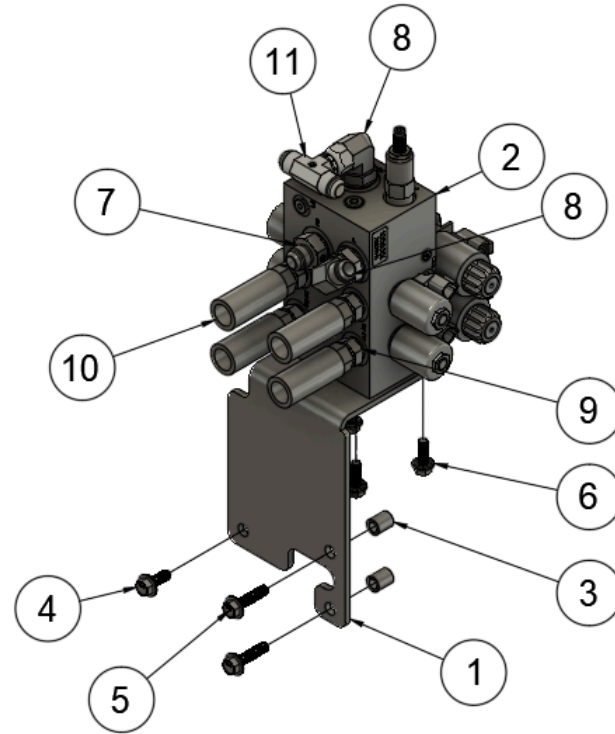


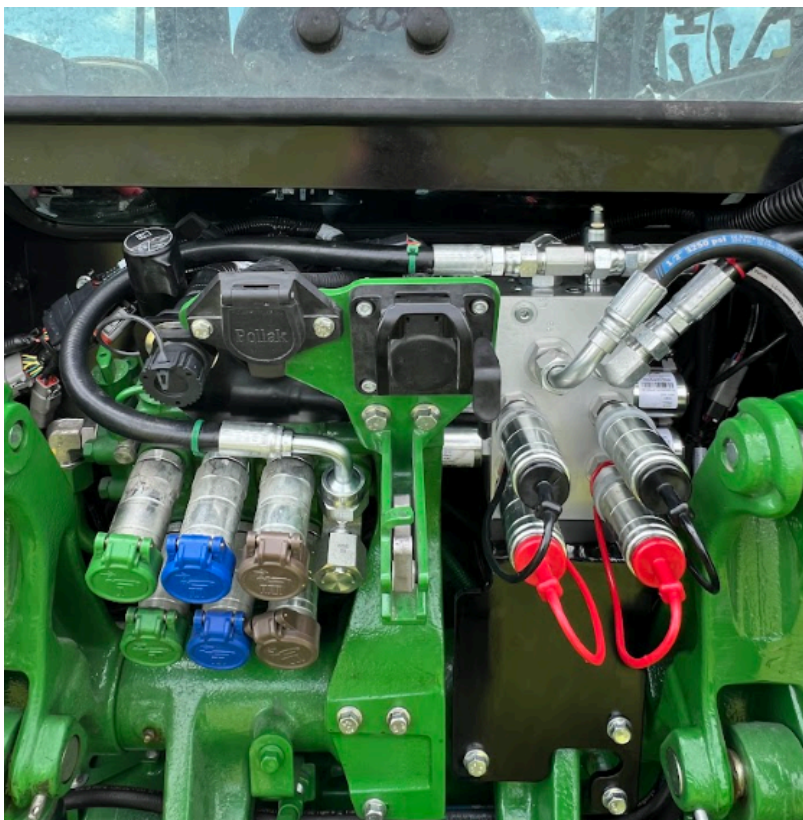


Rear Remote Valve Installation



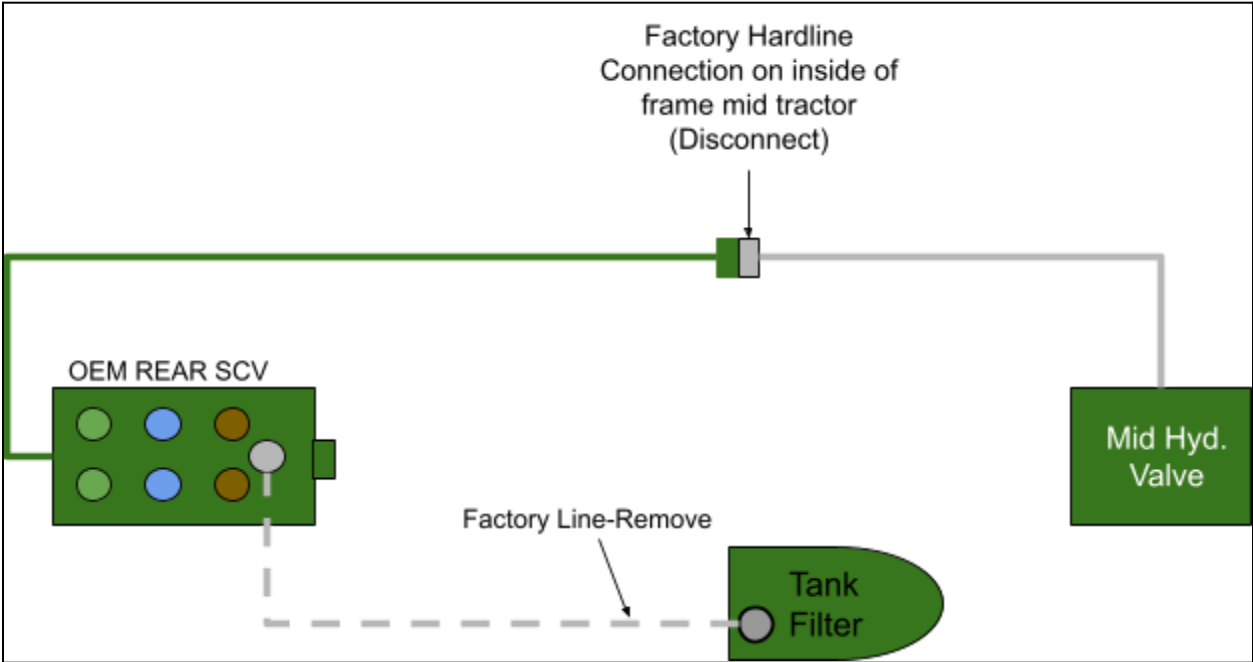
PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	0805-MP-2005	WLDMT, FA REAR RR MOUNT
2	1	9999-FP-3009	VALVE, HYD, 2-SECT, LOCKING, W/ FLOAT
3	2	9999-HA-1293	SPACER, 16MM X 10MM X 20 L, UNTHEADED, AL
4	1	9999-HA-1227	SCREW, M10-1.50 X 25MM, SFHHCS, ZP
5	2	9999-HA-1226	SCREW, M10-1.50 X 40MM, SFHHCS, ZP
6	4	9999-HA-1206	SCREW, 3/8-16 X 1.00, SFHHCS, ZP
7	1	9999-HF-1012	FITTING, ADAPT, -10MJIC X -12MORB
8	2	9999-HF-1050	FITTING, ELBOW, -10MJIC X -12MAORB
9	4	9999-HF-1059	FITTING, ADAPT, -10MORB X -8MORB
10	4	9999-HF-1061	FITTING, 1/2 ISO AG COUPLER X -8 FORB, UNDER PRESSURE
11	1	9999-HF-1065	FITTING, BRANCH TEE, -10MJIC X -10MJIC X -10FJICS



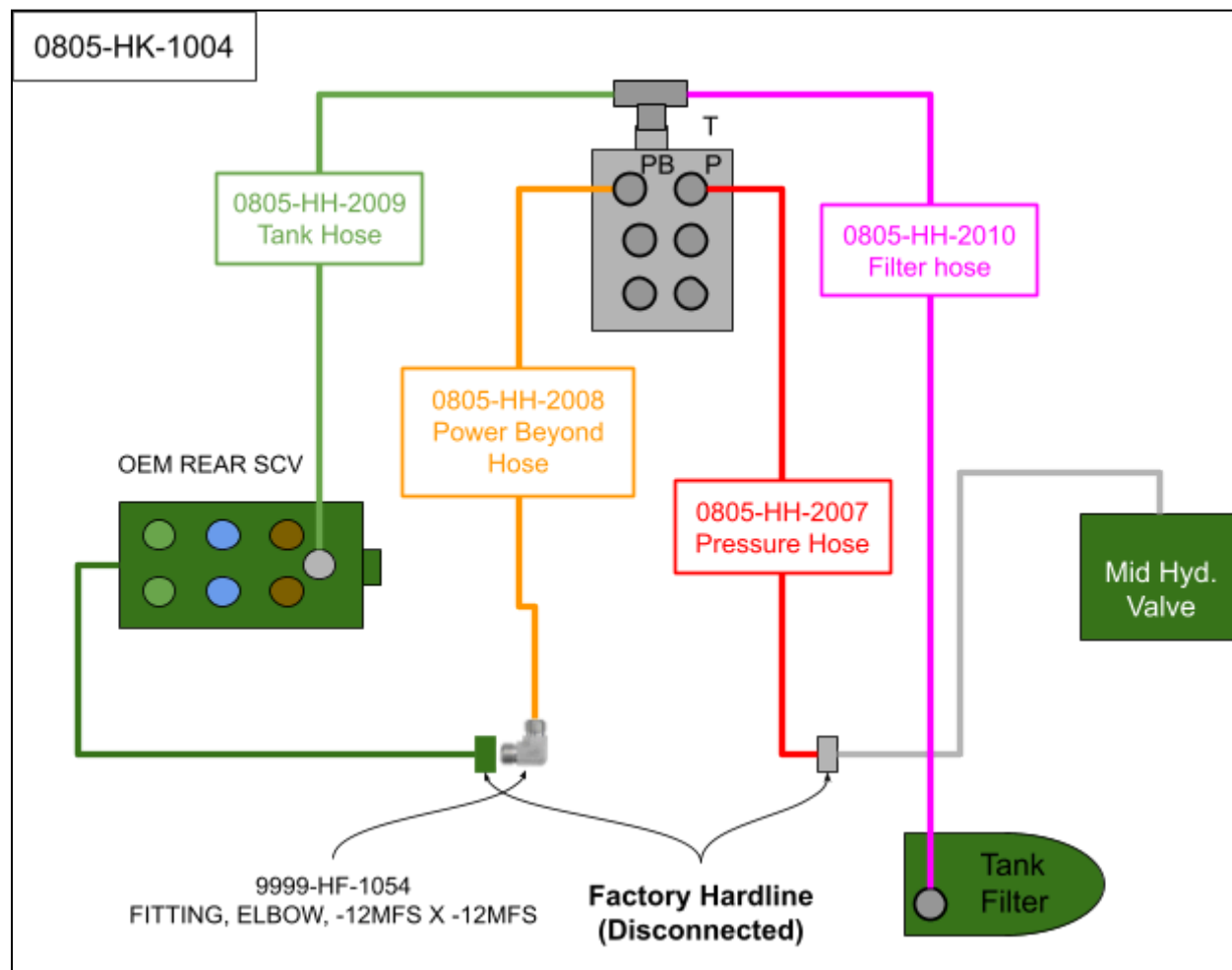


Remote Valve Hydraulic Installation - Tractor with Mid-mount Hydraulic Valve:

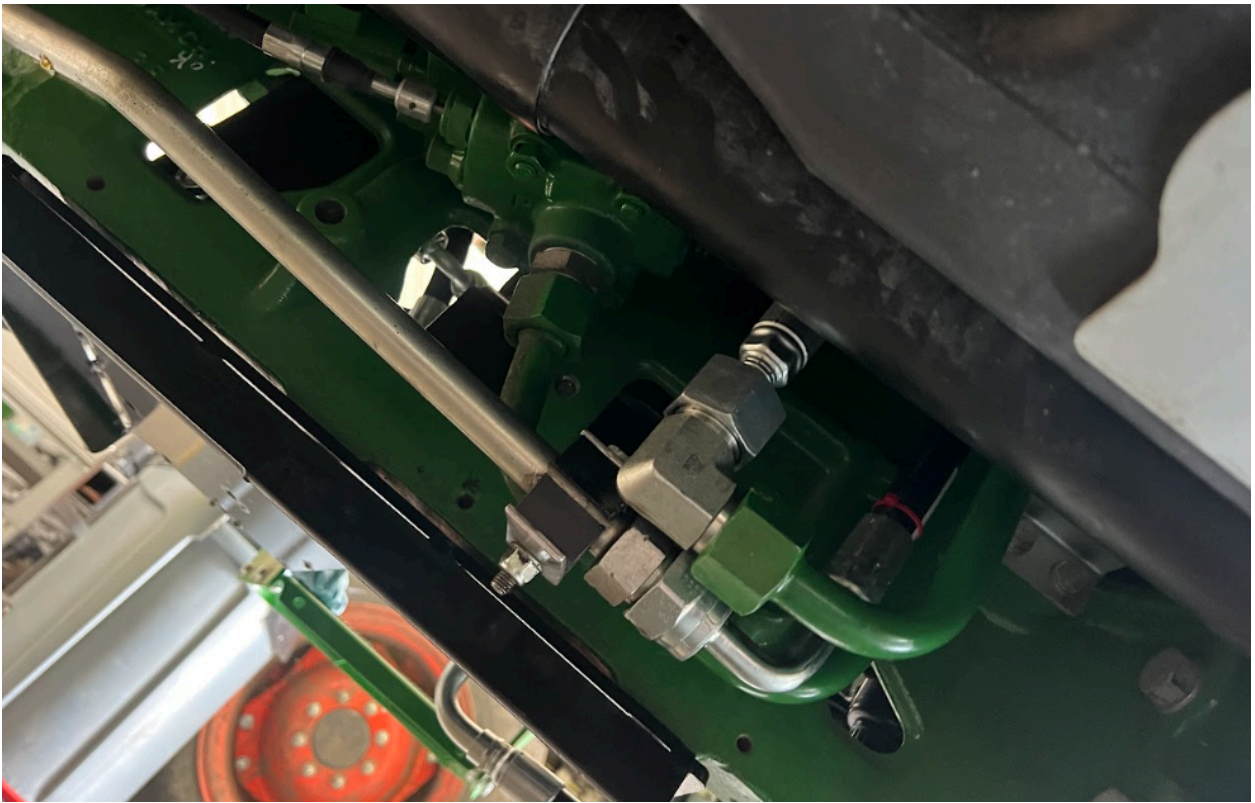
OEM Plumbing Diagram



Remote Valve Integration Diagram

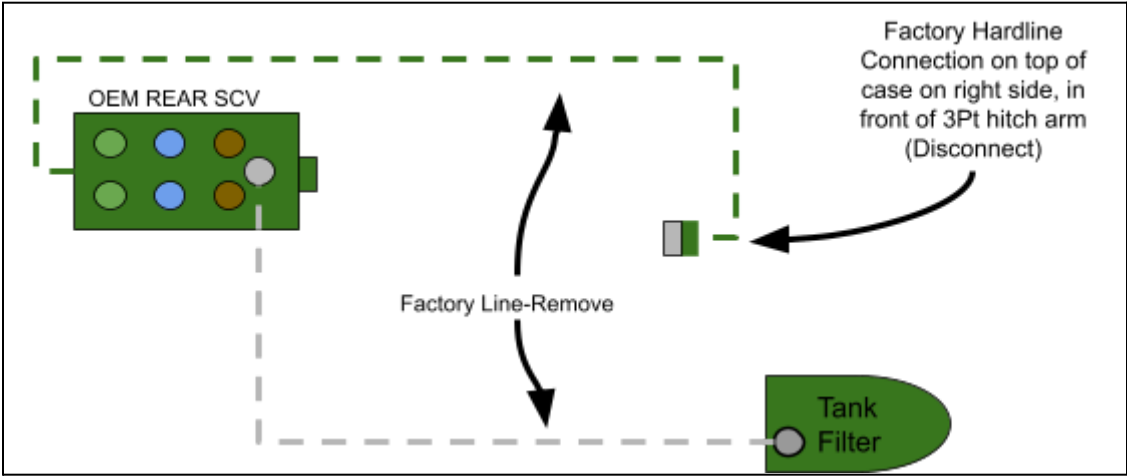




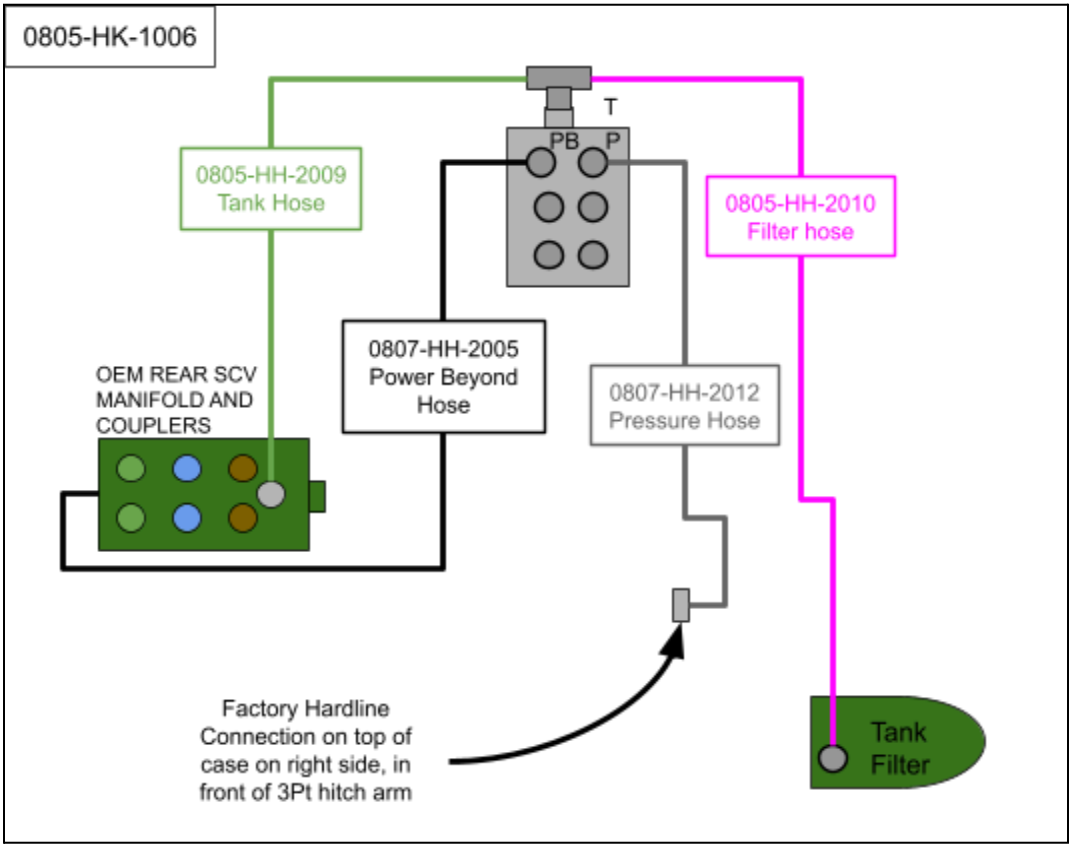


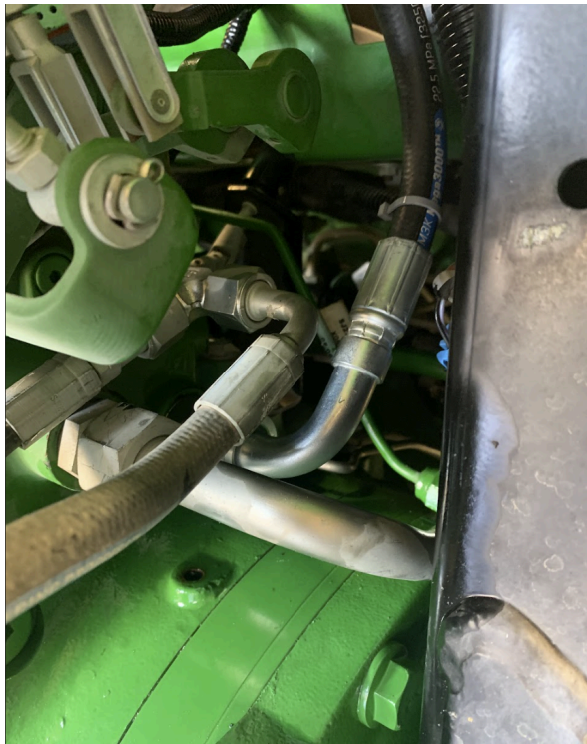
Remote Valve Hydraulic Installation - Tractor with No Mid-mount Hydraulic Valve:

OEM Plumbing Diagram - Non Mid Mount



Remote Valve Integration Diagram



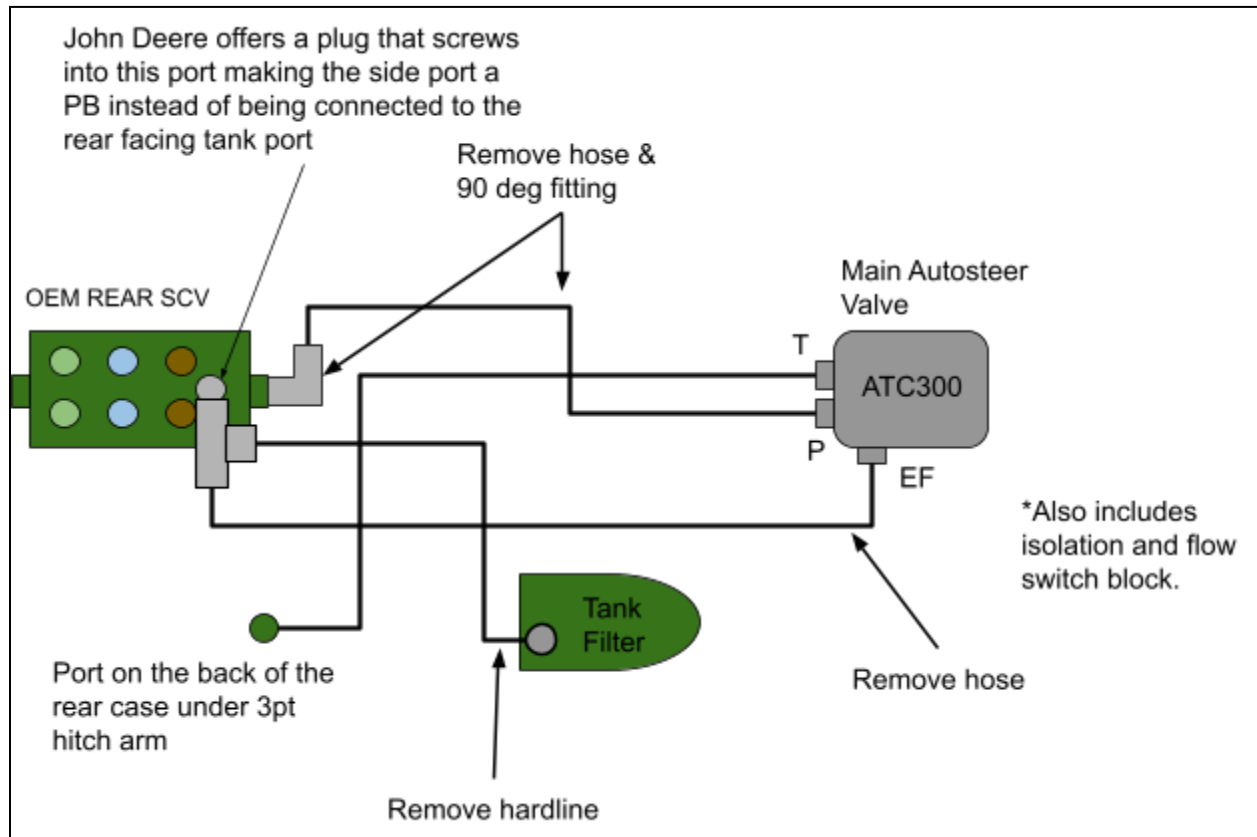


Remote Valve Hydraulic Installation - Tractor with John Deere ATC (AutoTrac Controller) 300 Steering valve:

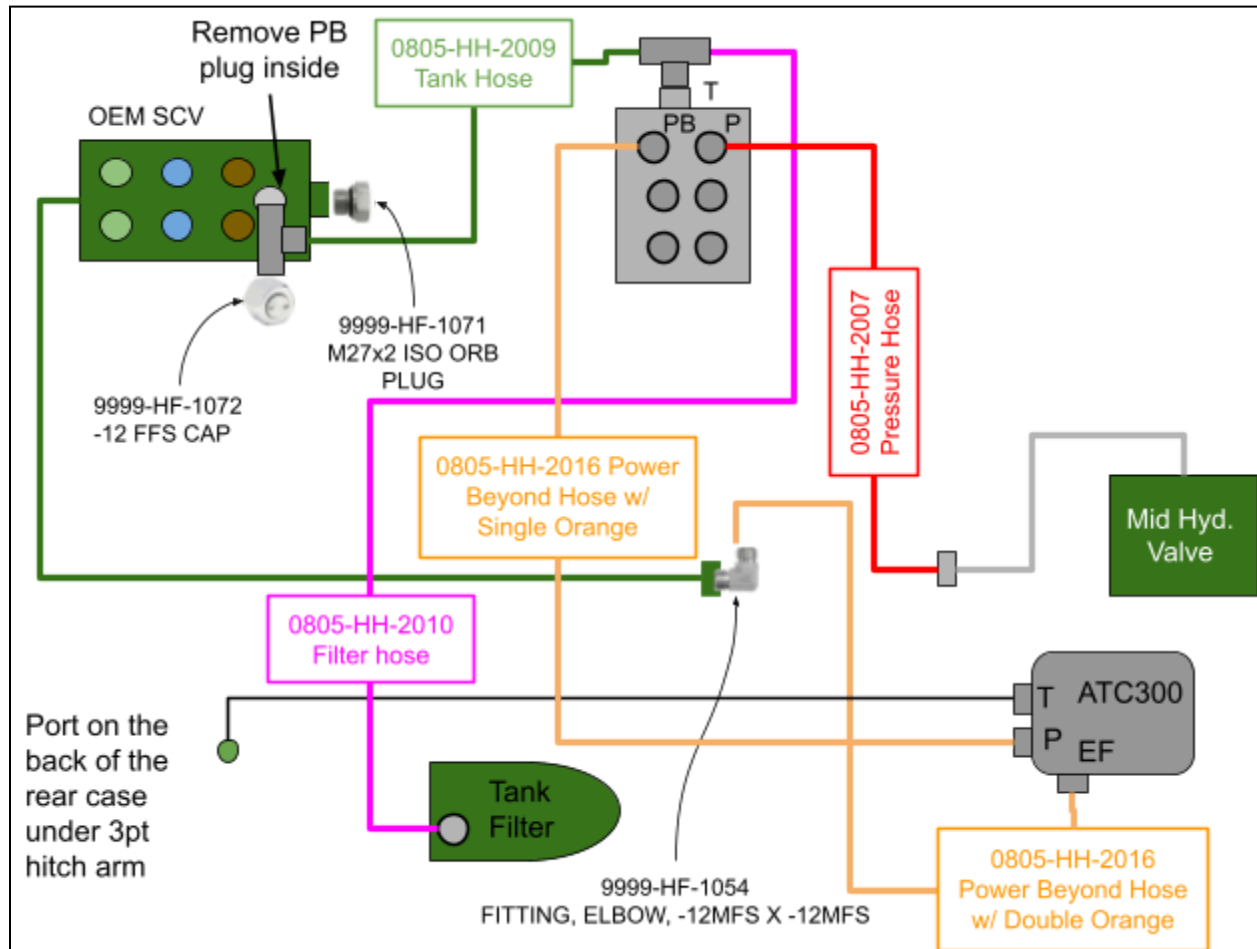
Replumbing of Sabanto Rear Remote Valve

- Due to the plumbing of the JD autosteer kit, it interferes with the mounting location of the FA RR valve
- The auto steer kit was last in line on the implement hydraulics, receiving pressure out of the factory SCV remote stack. The -12 fitting coming out of the stack did not allow enough room to fit the FA RR valve there without obstructing the 3pt hitch arms.
- Hose routing and component order in series was changed to allow the FA RR valve to fit and be mounted on the rear as intended

Dealer Installed ATC300 Plumbing Diagram



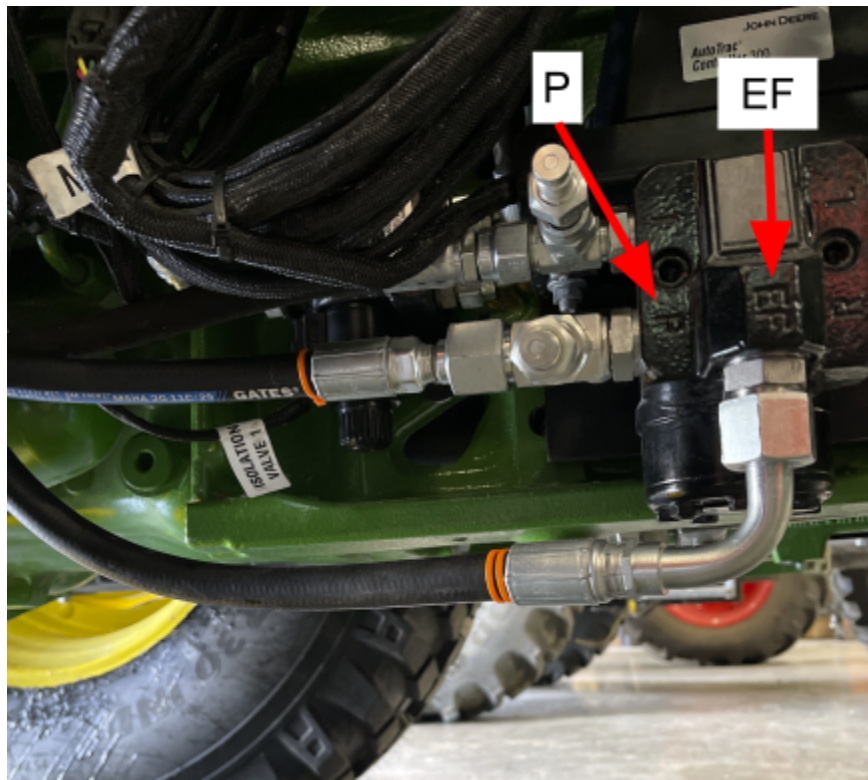
Remote Valve Integration Plumbing Diagram w/ ATC300



****REMOVE THE PB PLUG FROM THE FACTORY SCV STACK****

- Remove the -12 tee fitting on the rear of the stack
- Using an allen head, remove the plug from inside the stack







Steering Valve

Mounting with Loader Bracket

- Use the factory bolts to mount the bracket

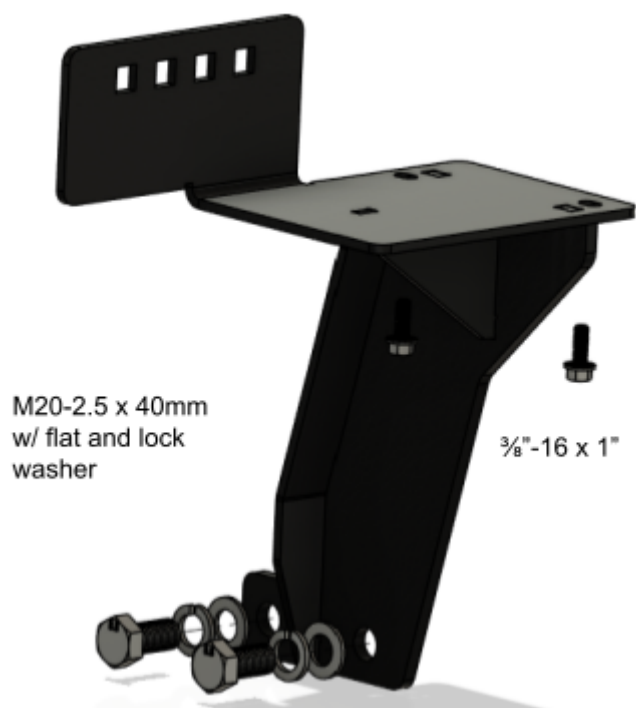




Factory mounting bolts

Mounting without Loader Bracket

- On tractors with a factory mounted toolbox, you will be replacing the mount
- Remove the toolbox from the factory mount and mount it using the four square holes on the back tab of the Sabanto bracket

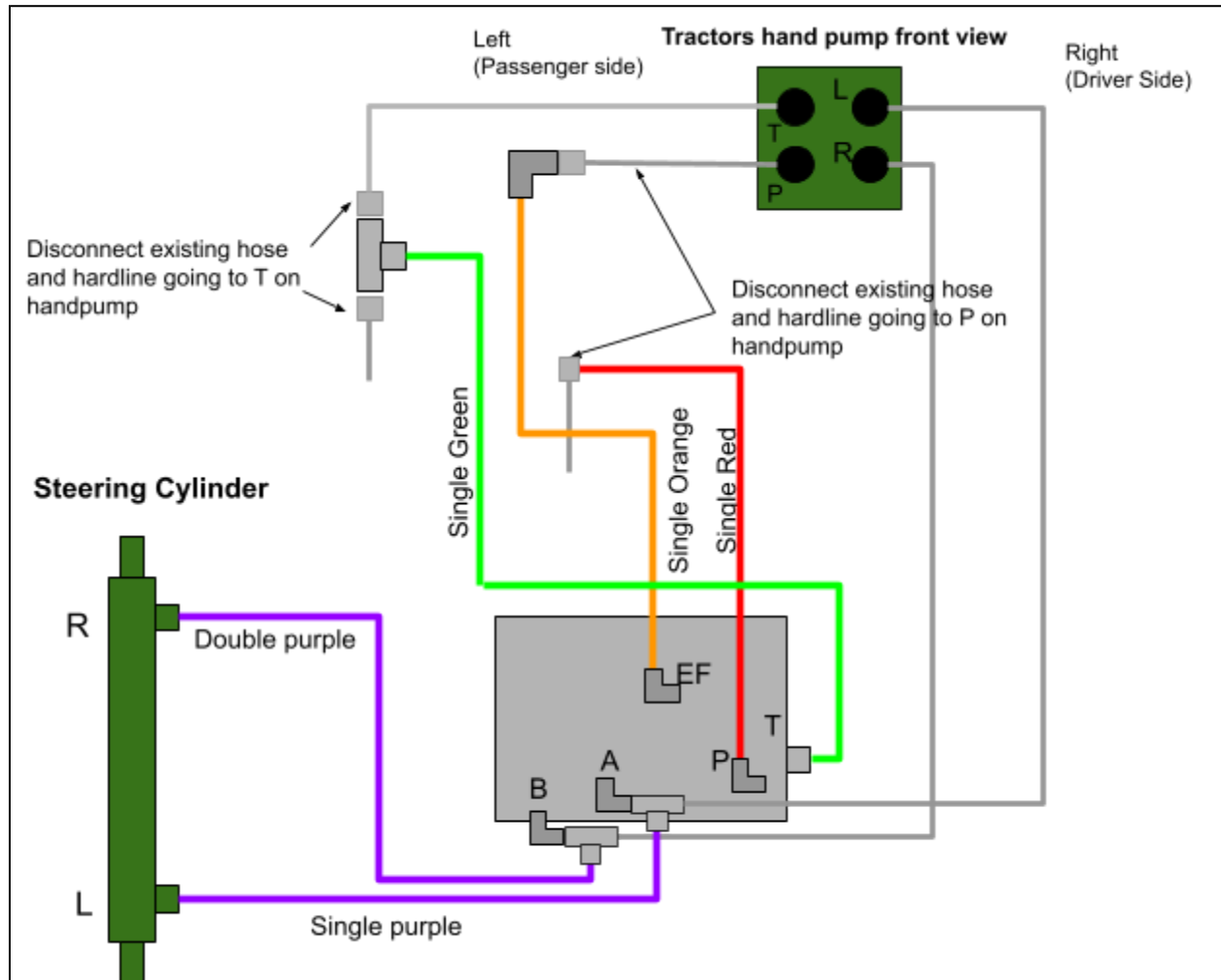




Steering Valve Hydraulic Installation

- Sabanto supplies two different installation kits depending on what your tractor is configured with
- Confirm you have the proper kit before beginning installation
- Option 1: Open center steering orbital
 - Not factory AutoTrac ready, possible to have ATC300 installed
- Option 2: Open center steering orbital with load sense.
 - Generally the tractor is AutoTrac ready from the factory with the factory installed FEMA valve
- Pre-existing steering valves will be mounted on the right hand side frame below the cab

Non AutoTrac Ready Steering Installation Diagram

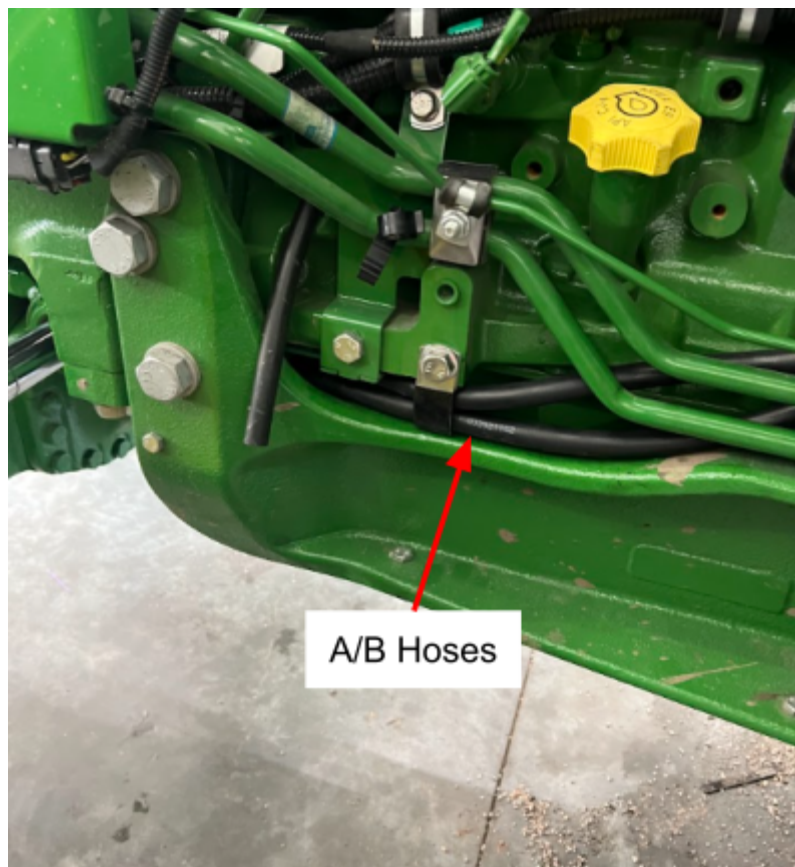


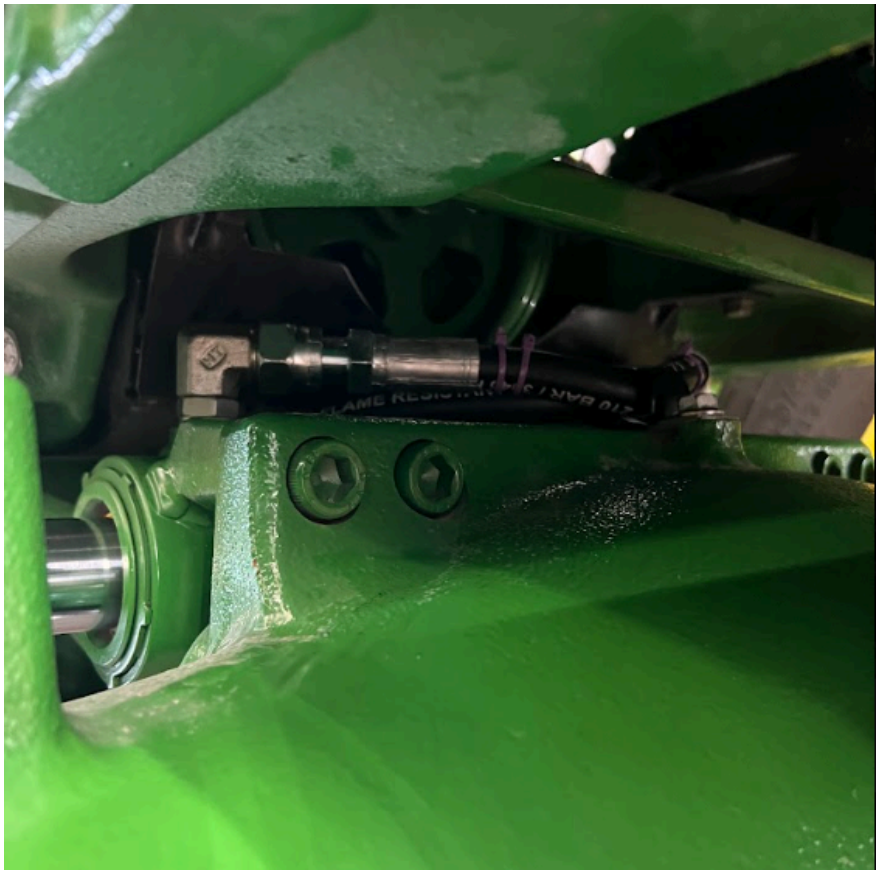




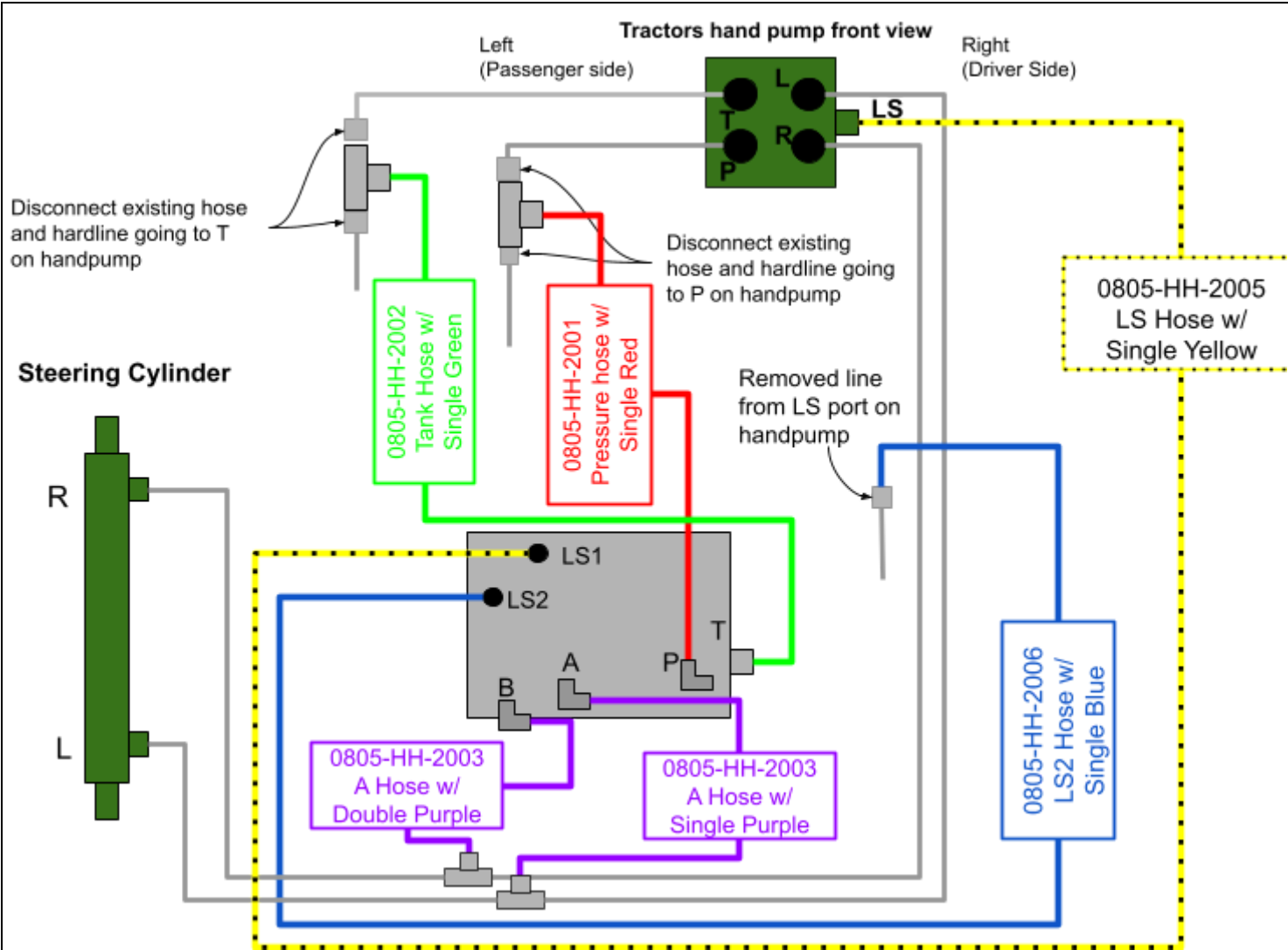


Favotry A/B hoses
from steering hand
pump



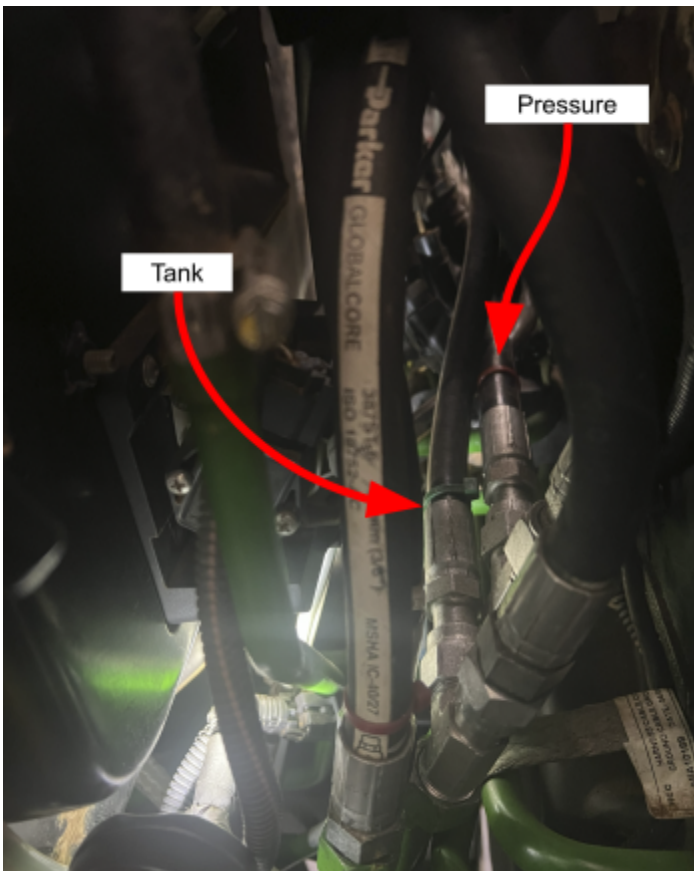


AutoTrac Ready Steering Installation Diagram

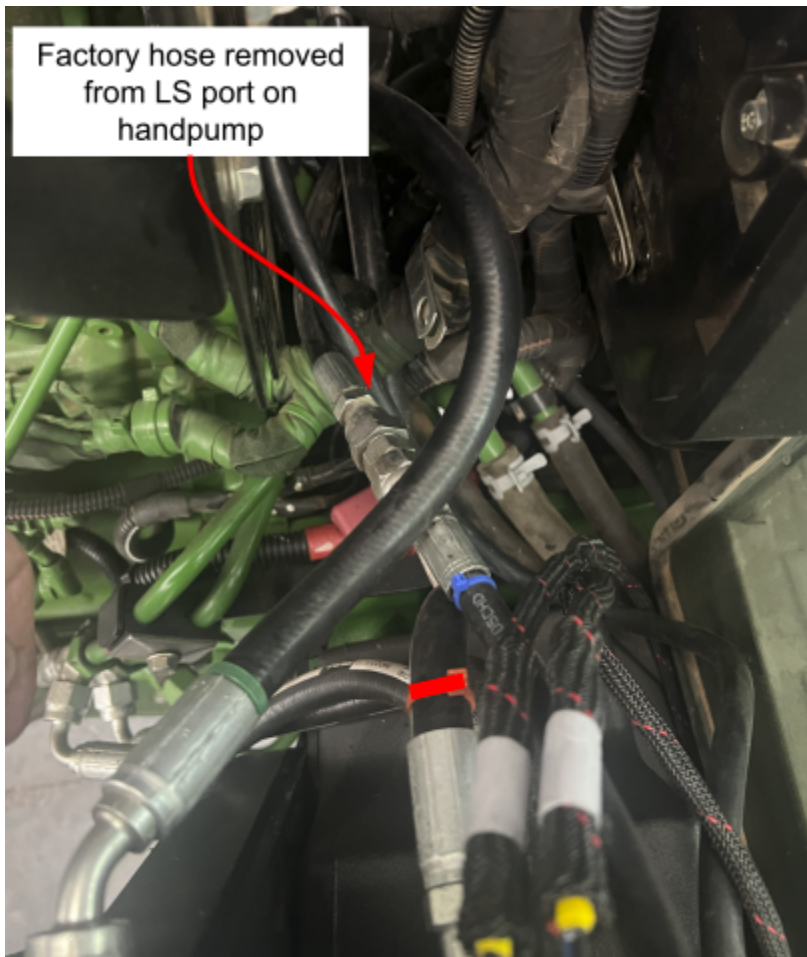


Factory Installed FEMA Steering Valve











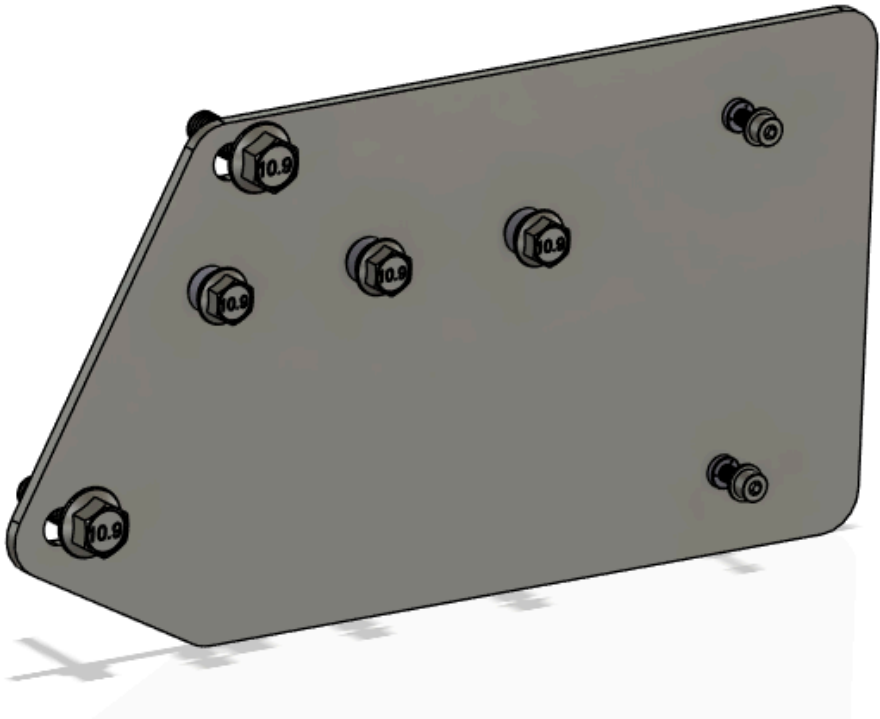
SIG Bulkhead Mounting



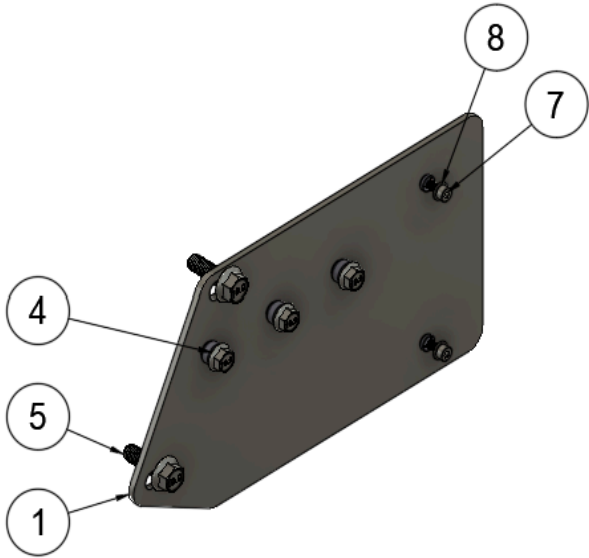
M10-1.25 x20mm



AVL Marlin/Relay Mount



PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	0805-MP-2013	AV&L MARLIN 4IO RELAY MNT
4	3	9999-HA-1217	SCREW, M6-1 X 10MM, FHHCS, ZP
5	2	9999-HA-1132	SCREW, M8-1.25 X 25MM, FHHCS, ZP
7	2	9999-HA-1290	SCREW, M4-0.7 X 14MM, SHCS, SS
8	2	9999-HA-1013	WASHER, M4, FLAT, ZP

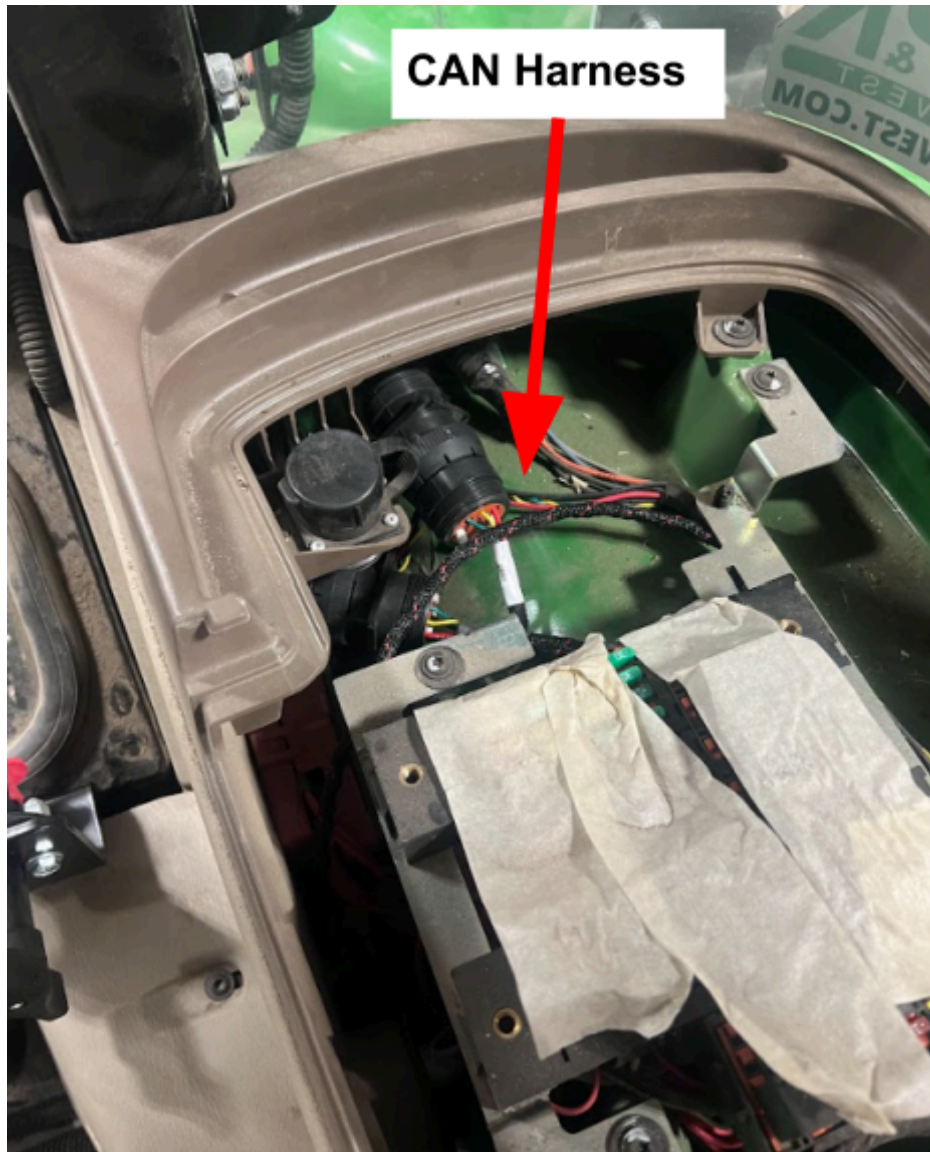




Harnessing

CAN Harness:

- PN: 0801-EH-3010
- If the tractor is ISO Bus ready, use PN: (coming soon)
- Access the OBDII port under the plastic cover on the LH side of the cab
- Harness is T'd into tractors OBDII port
- Route harness straight down and out of the cover along the ledge on the back of the cab



Tractor Control & Valve Switch Box Harness:

- The tractor control harness 9999-EH-3001 plugs into the back of the tractor control switch box and runs to the main harness
- The switch box for the valve comes with fly wires for power/ground
 - You will need install the 2 pin connector
 - Route wires to find length where it meets connector labeled “RR_Box” off the main harness
- Connect the 6 pin connector from valve SW box to “RR_MAN” on the main harness
- Route all harness down the B column and along the window



Controls and PTO Harness:

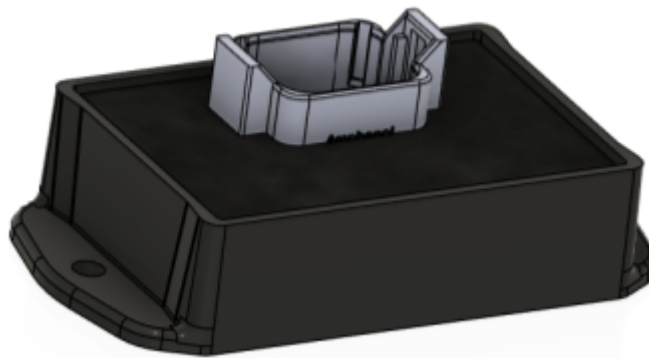
- Controls Harness PN: 0805-EH-3002
 - T's into throttle and hitch connectors, connects to PTO harness and main harness
 - Has a pigtail to plug into SWAG module (PN: 9999-DD-2004) to add in control of the electric hitch
- PTO Harness PN: 0805-EH-3003
 - T's into PTO and connects to controls harness
- PTO switch and throttle under the plastic cover on the RH side of the cab
- To gain access
 - Remove plastic cover around the 3-PT hitch lever
 - Remove plastic cover around the SCV control levers
- Route controls harness down on the inside of the plastic and bring out at bottom of plastic panel near the ledge at back of cab



Controls Harness



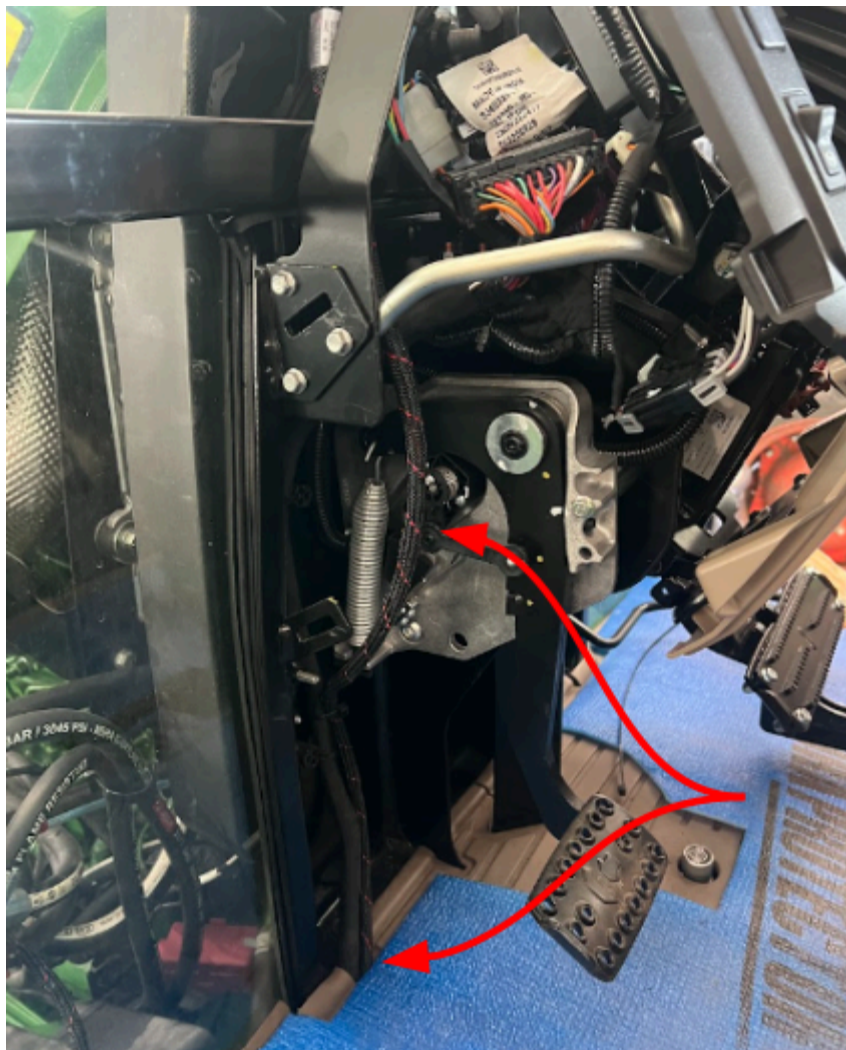
SWAG Module
PN 9999-DD-2004

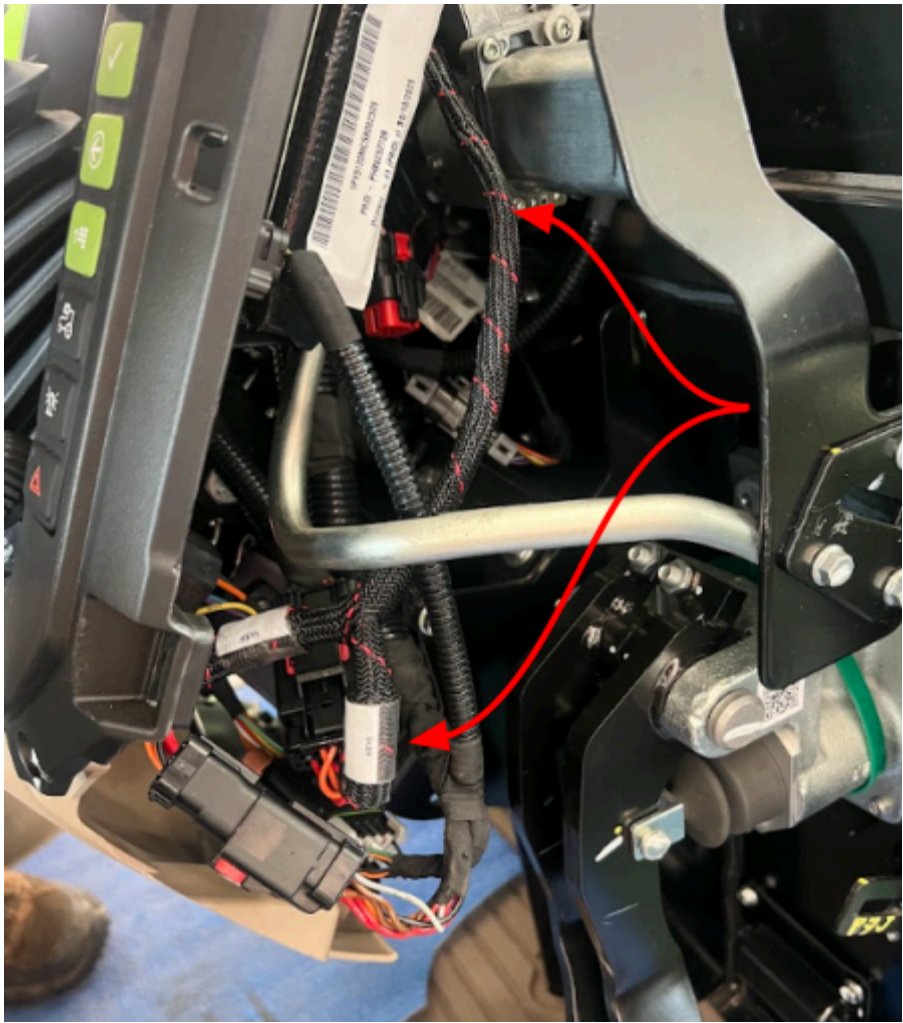


Column Harness:

- PN: 0801-EH-3005
- Connects to main harness at rear of cab and routed along the LH side panel, under the floor mat and up into the steering column
- Inside the steering column route it up the LH side, find the matching connector and T into the shuttle connector
- Route branch for key across the back of the column and T into the key harness
- Secure harness with zip ties, make sure it is clear of interference from clutch pedal
- Secure harness with zip ties to base of buddy seat (if present)
- Zip tie relays back against the harness

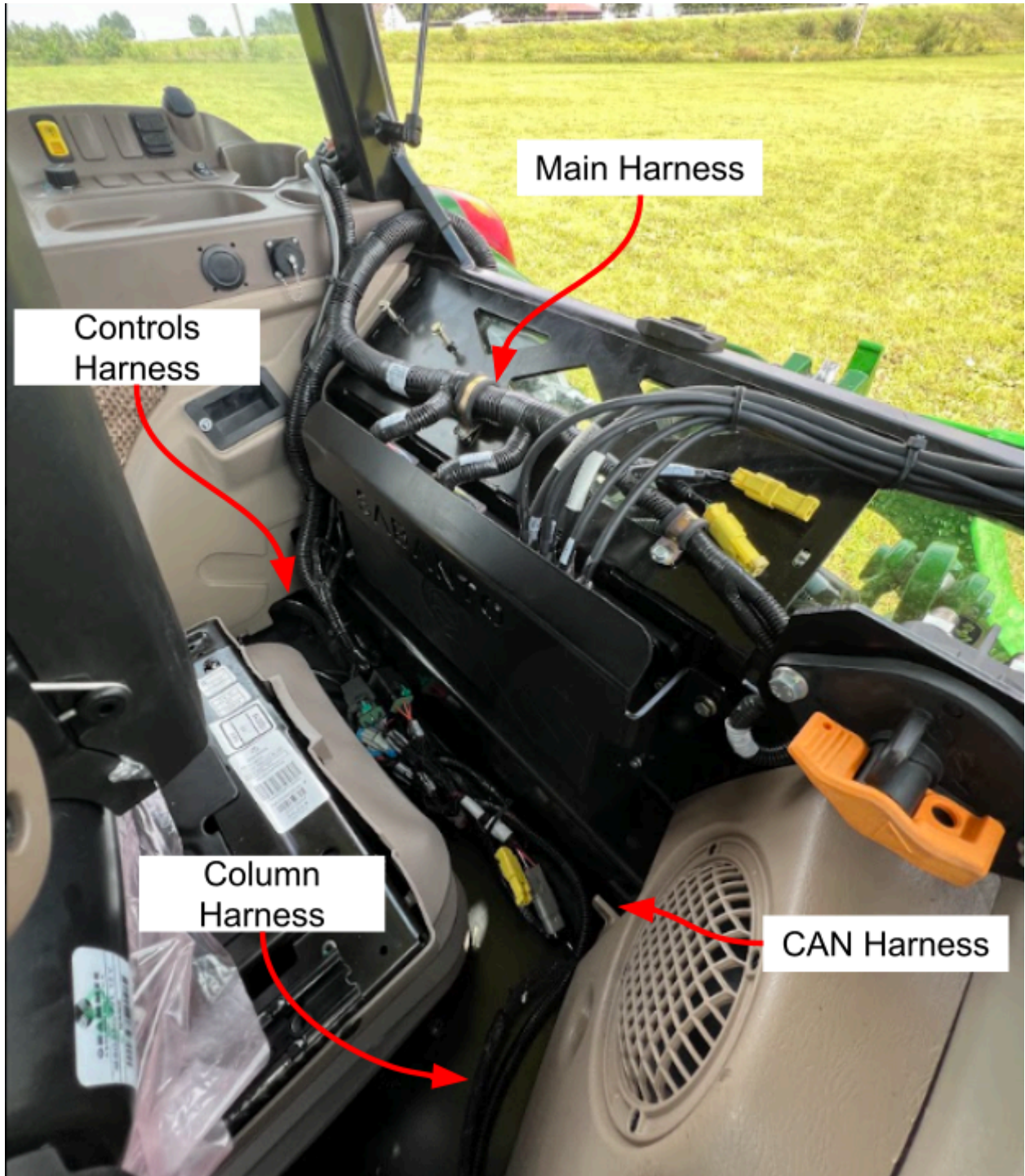






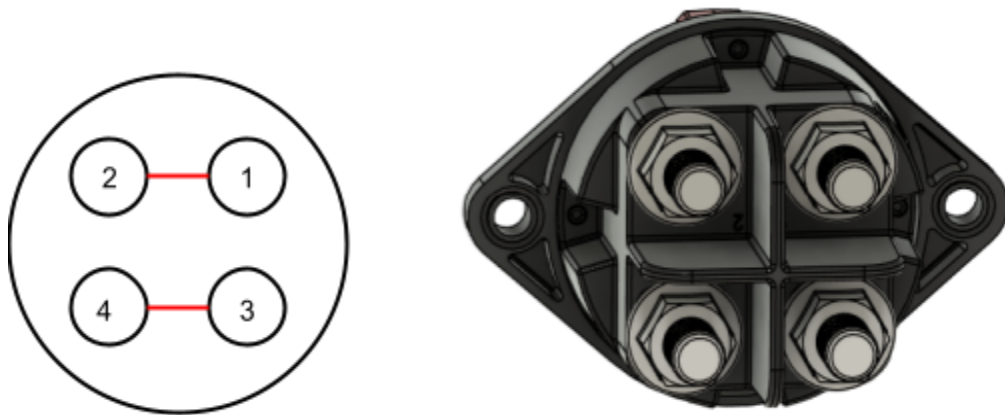
Main Harness:

- Connects the vPFM to all peripherals of the autonomy kit
- The main power for the system is switched with a large battery disconnect switch to avoid draining the battery during extended periods without operation
- The ring terminals on the main harness must be connected to the large disconnect switch shown below
 - Ring terminals must be placed on lugs 1 & 2 OR 3 & 4
- Once all connections are made, zip tie harnesses into bundle





Battery Disconnect Diagram



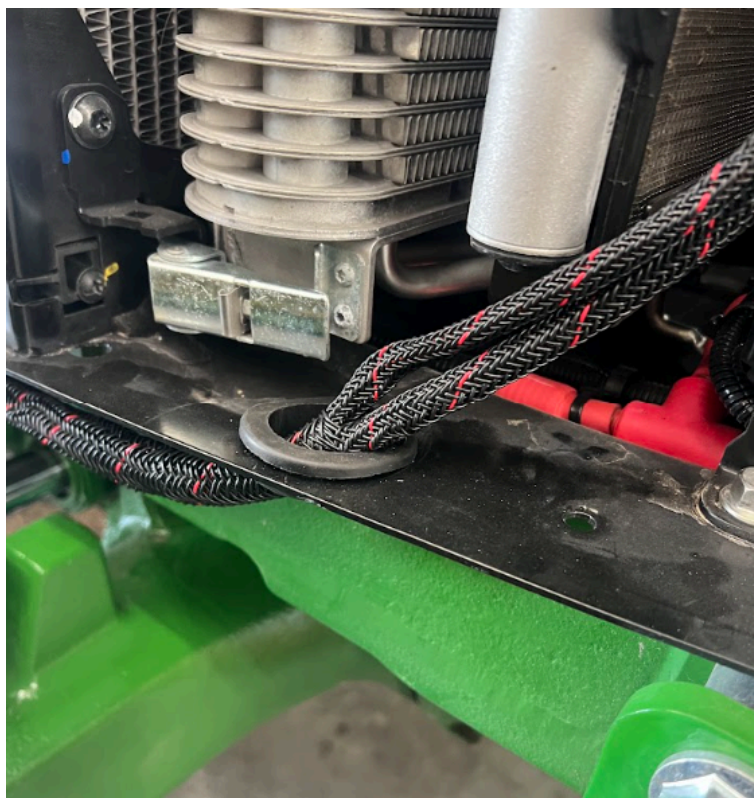
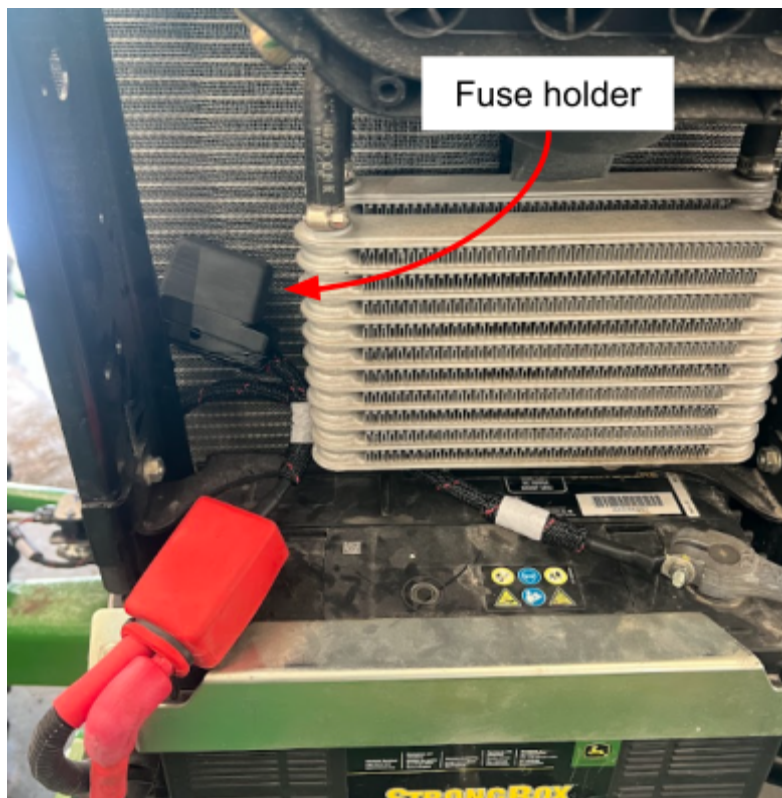
Seat Switch Harness

- PN: 0801-EH-3007
- T'ed into the seat switch connector at the back of the seat
- Plugs into main harness

Wheel Angle Sensor Harness (WAS)

- PN: 0806-EH-3002
- Routed down the RH side of the tractor from the battery at front of tractor under the hood to the main harness behind the cab
- Wheel angle sensor is plugged
- Connect ring terminals to battery posts
- Position the harness so the pig tail reaches the wheel angle sensor. Make sure pigtail is not pulled tight when plugged in
- Drill 1.75" hole in base plate for grommet to pass harness through



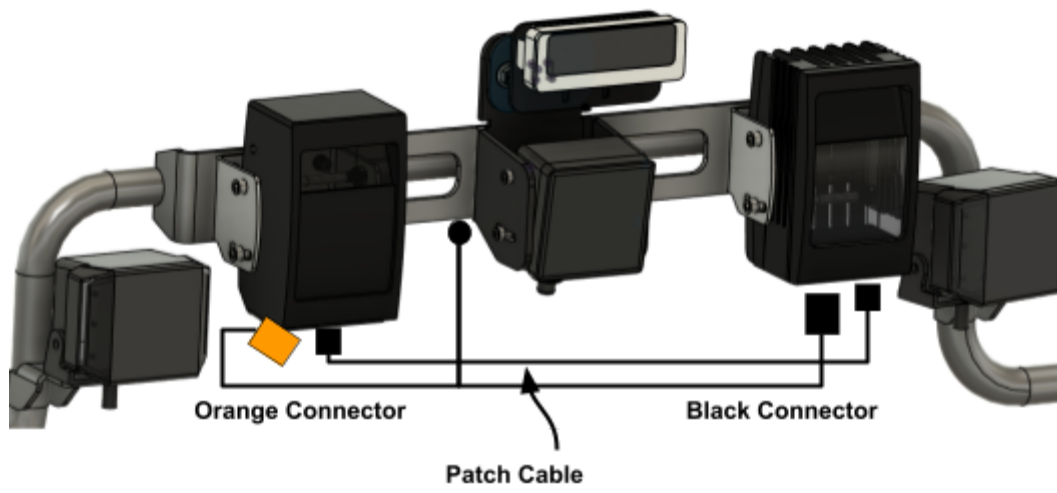


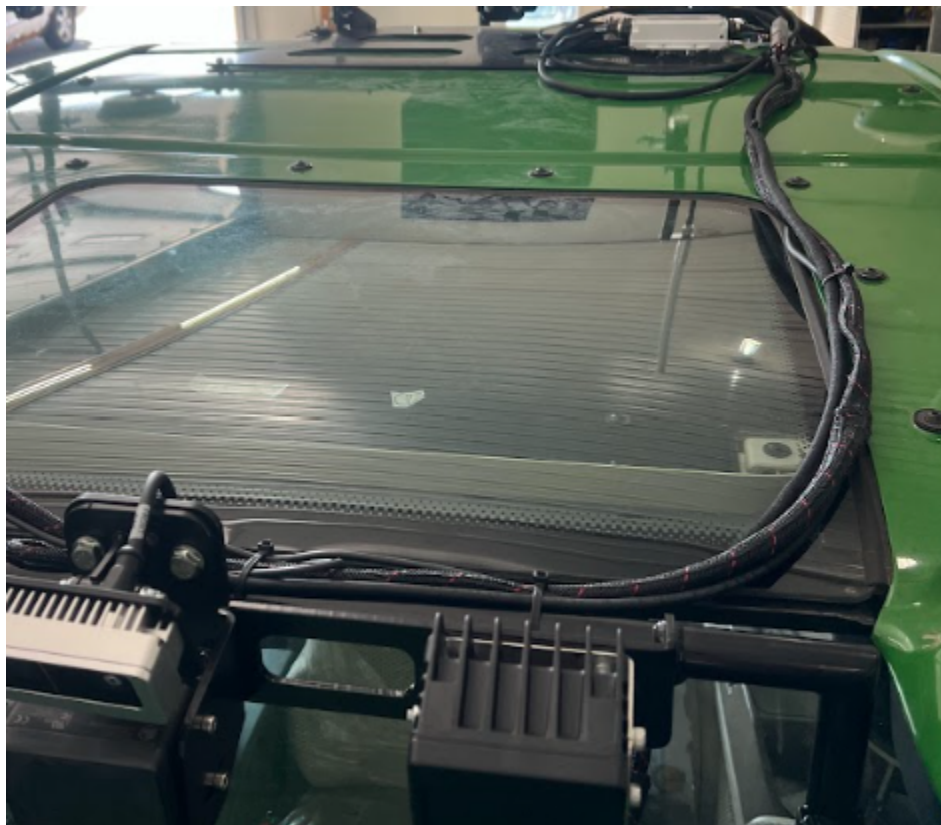




O3M Infrared & Radar Sensor Harnesses

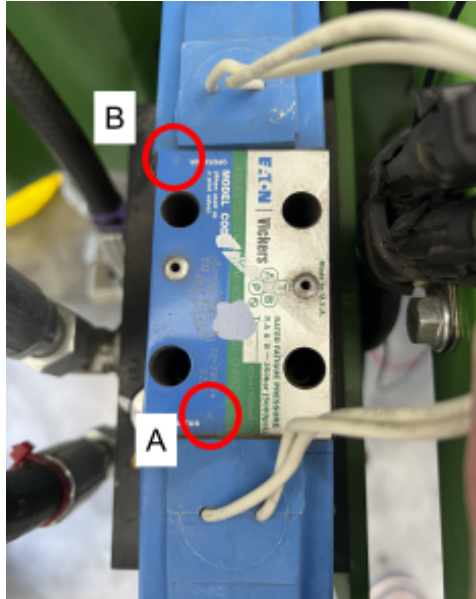
- PN: 9999-EH-3003 HARNESS, IFM, EVC939 AND E3M131 MERGED
 - Connects to both the O3M infrared sensors mounted on the front of cab roof
 - Take note of the labels on the cable ends, they are specific match label on sensor (O3M161/O3M960)
 - Route the harness along mounting bar
 - Will plug into the grey voltage regulator secured near the battery
- PN: 9999-EH-2002 goes between the two infrared sensors
- PN: 9999-EH-3015 RADAR HARNESS
 - Plugs into the radar device and "RADAR" connector on on 9999-EH-3003





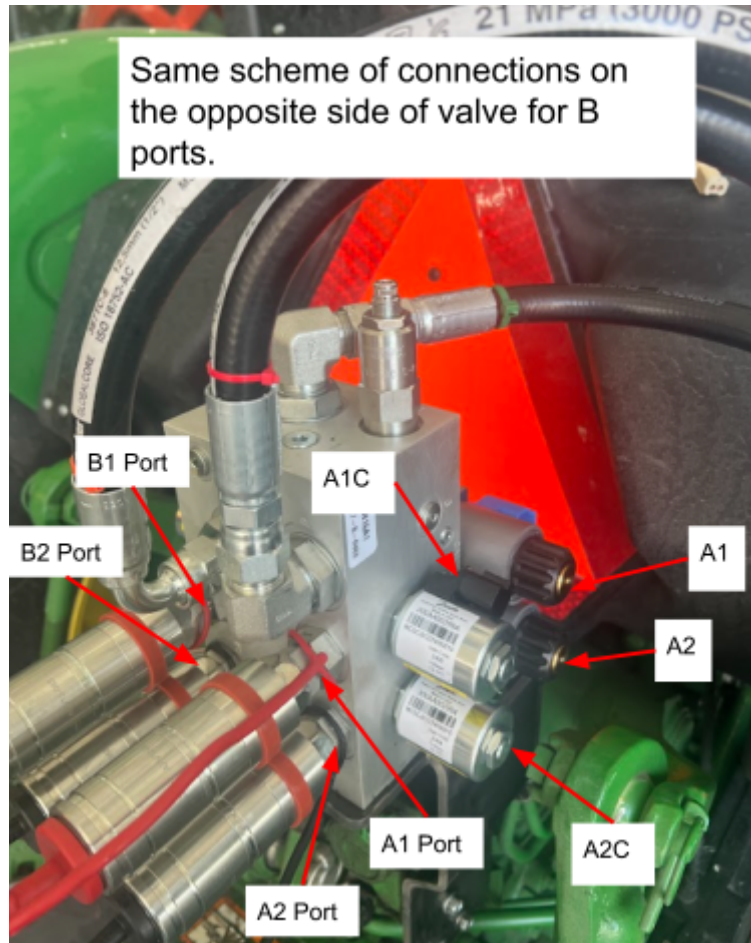
Steering Harness

- PN: 0801-EH-3002
- Connects the hydraulic steering valve to the main harness at the rear of the tractor
- Plug harness connectors into their corresponding labeled connectors on top of the hydraulic valve
- The top of the valve is labeled A/B
- Route the harness underneath the LH side of the cab on top of the fuel tank
 - Plug into corresponding connector on main harness behind the cab



Remote Valve Harness

- PN: 1499-EH-3003
- Harness plugs directly into the valve and connects to the main harness
- The hydraulic ports are labeled on the face of the valve block
- Connectors on the harness are labeled to correspond with the port they are controlling



(Signal Integration Gateway) SIG Harness

- PN: 9999-EH-3009
- The bulkhead is secured through a metal bracket at the rear of tractor
- Plugs into the main harness
- Used for implement integration
- NOTE: If your tractor is ISOBus ready. There is no need for the SIG harness. The Factory ISO connection can be used for implement integration



BFE Harness

- PN: 9999-EH-3007
- Connects the BFE enclosure (large black box housing GPS unit) on the roof to the main harness behind the cab
- Has a pig tail that plugs into the voltage regulator on the rear base plate.
- Route down the LH side of the rear cab and bundle with other cables

Electric Shift Control Harness & Device

- PN: 0805-EH-3012 Electric Shift Harness
- PN: 9999-DD-3007 CAN Shark Module
- Used on tractors with the PowrQuad Plus & Powr8 transmissions
- CAN Shark module mounted on the PFM plate
- Harness plugs into the CAN Shark module, T'ed into the shift toggle switch on the side console and main harness

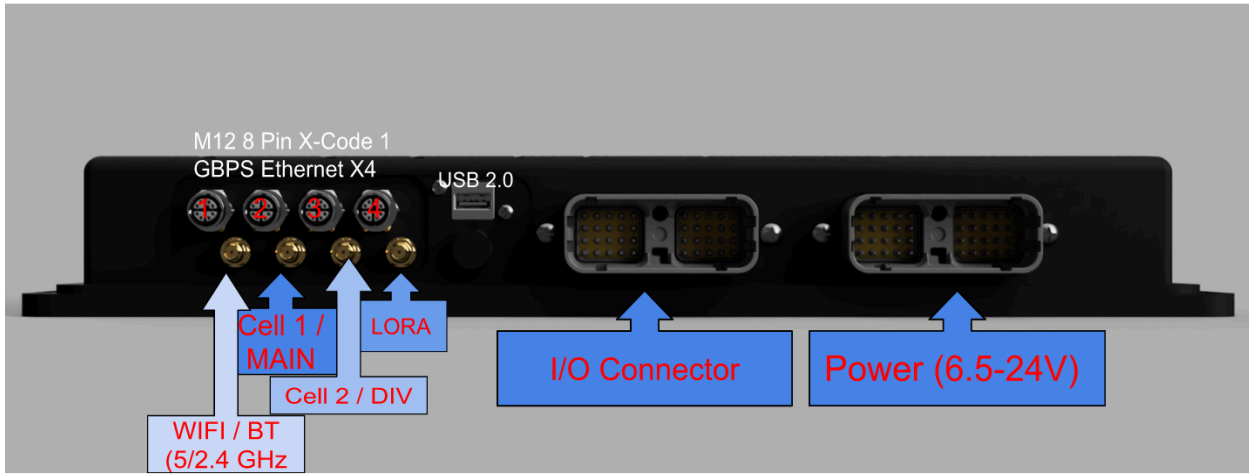


Shift toggle switch



CAN Shark Module

PFM Connection Diagram

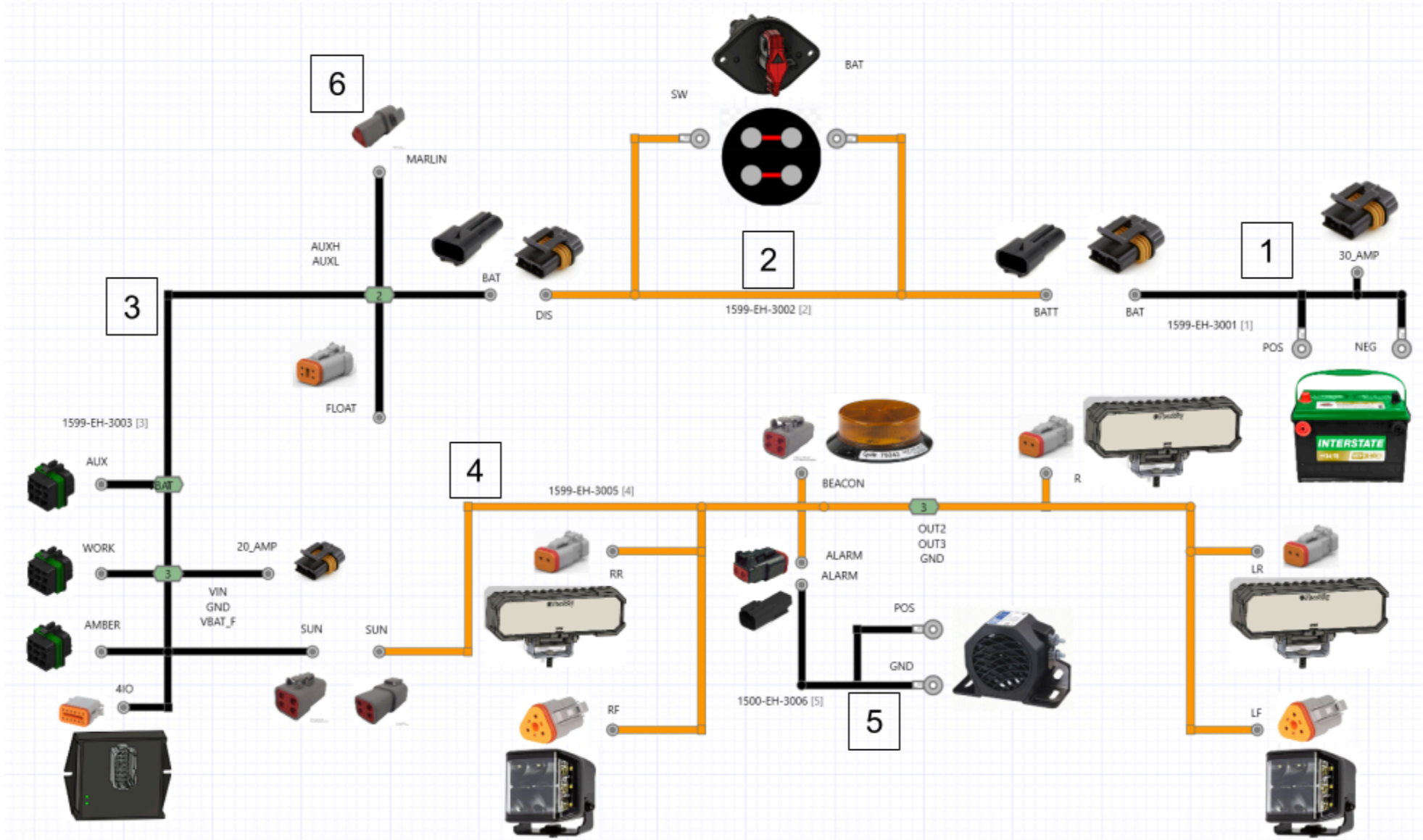


AVL Harness Overview

*For additional information see AVL instructions

Item	Part Number	Description
1	1599-EH-3001	Auxiliary Power
2	1599-EH-3002	DPST Disconnect
3	1599-EH-3003	AVL Marlin Interface
4	1599-EH-3005	Roof Harness
5	1599-EH-3006	Alarm
6	NA	Marlin Connector (Connects to Main Harness)

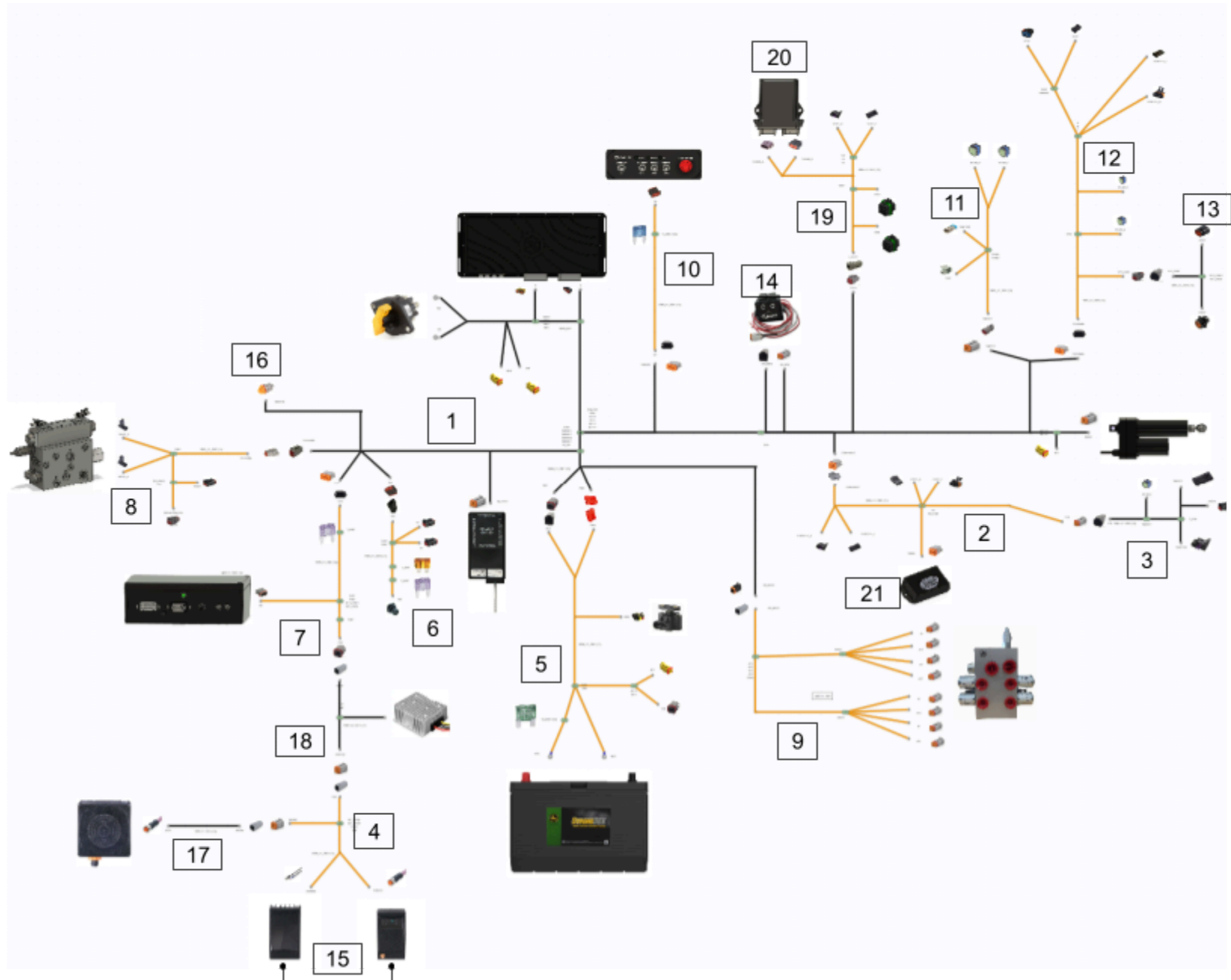
AVL Harness Overview Diagram



Vehicle Harness Overview

Item	Part Number	Description
1	0806-EH-3001	Main Harness
2	0805-EH-3002	Vehicle Controls
3	0805-EH-3003	PTO Harness
4	9999-EH-3003	O3M Infrared Sensor Harness
5	0806-EH-3002	RSH/Wheel Angle Sensor
6	9999-EH-3009	SIG - System Integration Gateway
7	9999-EH-3007	BX992 Interface w/ IFM 6 pin
8	0801-EH-3002	Steering Interface
9	1499-EH-3003	Force America Valve Interface (Non-Float)
10	9999-EH-3001	Tractor Control Switch Box
11	0801-EH-3007	Seat Switch
12	0801-EH-3005	Steering Column
13	0801-EH-3010	CAN Interface
14	9999-EH-2001	Remote Valve Switch Box, Momentary ON/OFF
15	9999-EH-2002	O3M Patch Cable
16	NA	“Marlin” Connector
17	9999-EH-3015	Radar Harness
18	9999-DD-3013	Voltage Regulator
19	0805-EH-3012	Electric Shift
20	9999-DD-3007	CAN Shark Module
21	9999-DD-2004	SWAG Module

Vehicle Harness Overview Diagram



Cabling Routing

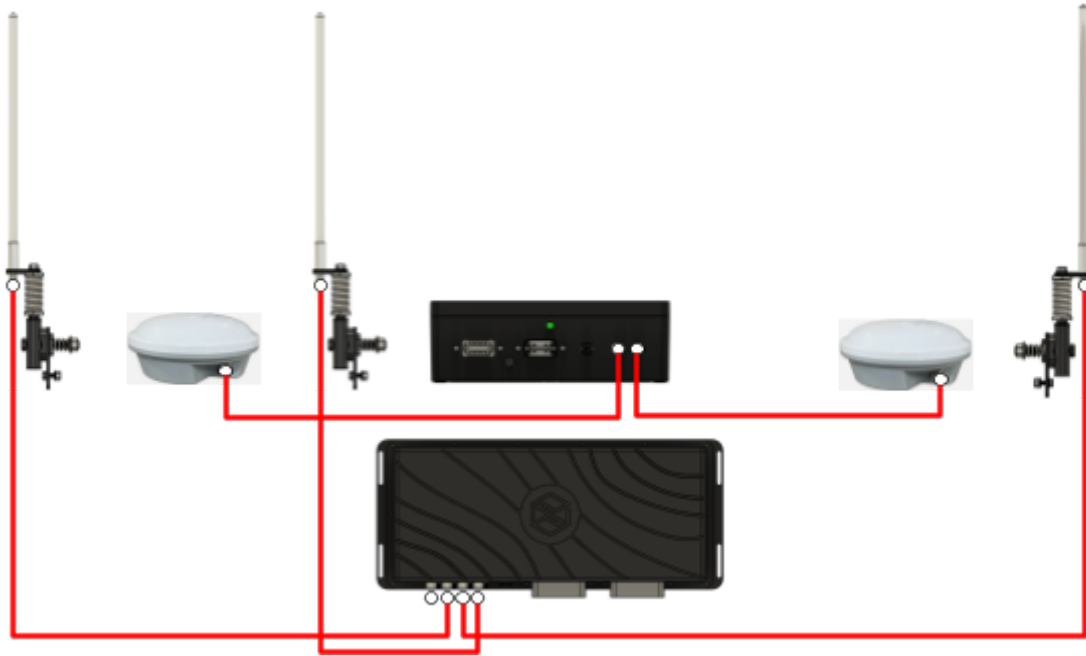




Antenna Cables

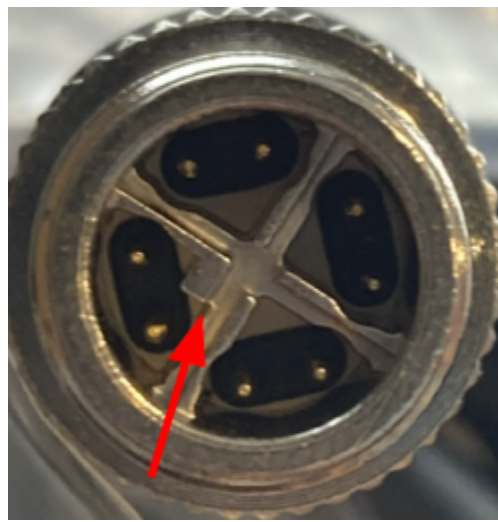
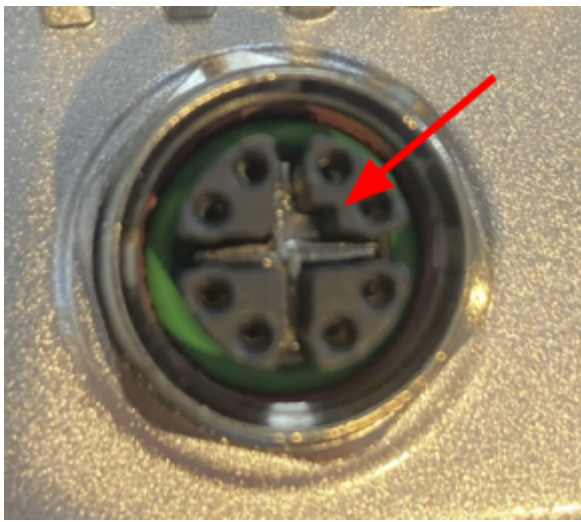
- Cellular and LORA antennas (tall white antennas)
 - Two different lengths will come with the kit
 - Two shorter 10ft and one longer 15 ft
 - Connect the two shorter 10ft cables to the LEFT cell antenna (far left) and the LORA antenna (middle/left)
 - Connect the longer 15ft cable to the far right cell antenna
 - Route along the rear cross bar
 - Cables will be route down the LH side of the rear window of the cab and connected to the PFM
 - Use the provided labels within the BA kit box to label both ends of the cables
- GPS antenna cables
 - Connect the GPS antennas (white dishes) to the BFE enclosure

Antenna Cable Diagram



Camera/Ethernet Cables

- A preassembled ethernet splitter and loose ethernet cables will be provided to connect the 4 cameras to the pfm
- Loose cables
 - The 5m cables will be routed from the PFM to the front and right side camera
 - The 3m cable will be routed from the PFM to the left side camera
- Ethernet splitter
 - IN port of splitter connected to PFM
 - Two cables from OUT port of splitter connect to rear camera and BFE GPS enclosure
- Add a supplied label to both end of cables for easier routing and diagnosing
- Route and secure cables along the rear mounting bar
- Ethernet ports on PFM are internally connected, no specific port necessary for a given cable
- Secure cables to PFM **AFTER** antenna cables have been connected
- **CAUTION** as you connect cable ends, take note of the keying, they must be clocked in a certain direction to properly be connected. See images below of keying



Camera/Ethernet Cable Diagram

