

PREVOST

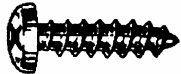
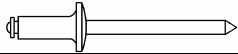


Instruction Sheet


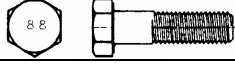






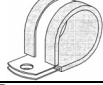



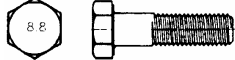
IS-04083


INSTALLATION OF THE AUTOMATIC FIRE DETECTION AND SUPPRESSION SYSTEM (AFSS)

MATERIAL: ORDER EITHER KIT# 060903 OR #060904 DEPENDING ON TYPE OF VEHICLE

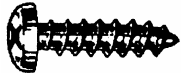
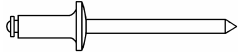






Kit #060903 for H3 MULTIPLEX vehicles includes the following parts:









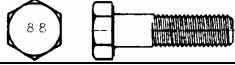

Part No.	Description	Identification	Qty
066581	Cable, Interface (Only for H3 MULTIPLEX vehicles up to 5-0229)		1
066582	Cable, Interface (Only for H3 MULTIPLEX vehicles up to 5-0229)		1
563332	Relay, Volvo Mini with resistor (Only for H3 MULTIPLEX vehicles up to 5-0229)		1
066463	Cable, Fire Suppression Engine Compartment		1
563458	Wire, Thermal Detection		1
563587	Device, End-of-line		1
409129	Bracket, Mounting 25 lb Fire Extinguisher		1
563455	Panel, Protection		1
563456	Switch, Manual Activation		1
901126	Clamps, Mounting assembly		1
500814	Screw, Tapping Binding Head Phillips Black #6 X ¾		6
901125	Extinguisher, 25 lb Fire		1
405724	Decal, Driver's Area (English)		1
405725	Decal, Driver's Area (bilingual)		1
405729	Decal, Engine Compartment (English)		1
405730	Decal, Engine Compartment (bilingual)		1
460630P	Panel, Wheelhouse Fire Protection		1
460494	Seal, Rear Fender H3		1
504339	Rivet, Pop Domed head, SS open-end 1/8 X 3/8		2
500526	Screw, Tapping, Hexagonal Washer Head # 12 X ¾		4
502848	Screw, Thread-cutting, Hexagonal Washer Head ¼-20 X ¾		18

955920	Washer, Split-Lock .262 X .489 X .062		18
955297	Screw, Cap Hexagonal Head M8 X 25 G8.8		6
5001161	Washer, Split-Lock SS 304, 8.1 X 14.8 X 2		6
5001448	Washer, Flat SS 18-8, 11/32 X .875 X .062		6
500411	Washer, Flat SS .260 X .697 X .05		2
500157	Washer, Flat SS .125 X .375 X .032		2
408110	Support Assembly, Nozzle for Webasto preheater		1
408111	Support Assembly, Nozzle and Detector		1
408112	Support Assembly, Nozzle for starter		1
408109	Nozzle assembly		2
409133	Hose, Assembly 2750 mm # 12		1
409134	Hose, Assembly 1525 mm # 8		2
409135	Hose, Assembly 1220 mm # 8		1
409136	Hose, Assembly 2750 mm # 8		1
409137	Hose, Assembly 915 mm #8		1
409139	Hose, Assembly 1220 mm # 8		1
409140	Hose, Assembly 915 mm # 8		1
408113	Block, Distribution		1
408114	Connector, "T"		2
409138	Bracket		2
504021	Clamp, Hose SS/CS 0.6875 - 1.50		4
952631	Clamp, Wire ZP 19 X 12.7		14
952637	Clamp, Wire ZP 28.6 X 12.7		4
500623	Screw, Thread-cutting, Pan Head Phillips 10-24 X 3/4		18
500470	Washer, Split-Lock ZP .193 X .334 X .047		18
5001137	Washer, Flat SS .203 X .438 X .05		18
502862	Screw, Cap Hexagonal Head M8 X20 G8.8		4

502847	Nut, Lock Nylon Insert M8-1.25		4
IS-04083	Instruction Sheet		1
FI-04083	Feuille d'instructions		1

Kit #060904 for H3 STANDARD vehicles (Not multiplex) includes the following parts:

Part No.	Description	Identification	Qty
066397	Cable, Fire Suppression Engine Compartment		1
563458	Wire, Thermal Detection		1
563587	Device, End-of-line		1
563615	Relay, Time Delay OFF – 2 hours		1
563332	Relay, Volvo Mini with resistor		5
561183	Base, Relay		1
409129	Bracket, Mounting 25 lb Fire Extinguisher		1
563455	Panel, Protection		1
563456	Switch, Manual Activation		1
901126	Clamps, Mounting assembly		1
500814	Screw, Tapping Binding Head Phillips Black #6 X ¾		6
901125	Extinguisher, 25 lb Fire		1
405724	Decal, Driver's Area (English)		1
405725	Decal, Driver's Area (bilingual)		1
405729	Decal, Engine Compartment (English)		1
405730	Decal, Engine Compartment (bilingual)		1
460630P	Panel, Wheelhouse Fire Protection		1
460494	Seal, Rear Fender H3		1
504339	Rivet, Pop Domed head, SS open-end 1/8 X 3/8		2
500526	Screw, Tapping, Hexagonal Washer Head # 12 X ¾		4
502848	Screw, Thread-cutting, Hexagonal Washer Head ¼-20 X ¾		18
955920	Washer, Split-Lock .262 X .489 X .062		18
955297	Screw, Cap Hexagonal Head M8 X 25 G8.8		6
5001161	Washer, Split-Lock SS 304, 8.1 X 14.8 X 2		6
5001448	Washer, Flat SS 18-8, 11/32 X .875 X .062		6

500411	Washer, Flat SS .260 X .697 X .05		2
500157	Washer, Flat SS .125 X .375 X .032		2
408110	Support Assembly, Nozzle for Webasto preheater		1
408111	Support Assembly, Nozzle and Detector		1
408112	Support Assembly, Nozzle for starter		1
408109	Nozzle assembly		2
409133	Hose, Assembly 2750 mm # 12		1
409134	Hose, Assembly 1525 mm # 8		2
409135	Hose, Assembly 1220 mm # 8		1
409136	Hose, Assembly 2750 mm # 8		1
409137	Hose, Assembly 915 mm #8		1
409139	Hose, Assembly 1220 mm # 8		1
409140	Hose, Assembly 915 mm # 8		1
408113	Block, Distribution		1
408114	Connector, "T"		2
409138	Bracket		2
504021	Clamp, Hose SS/CS 0.6875 - 1.50		4
952631	Clamp, Wire ZP 19 X 12.7		14
952637	Clamp, Wire ZP 28.6 X 12.7		4
500623	Screw, Thread-cutting, Pan Head Phillips 10-24 X 3/4		18
500470	Washer, Split-Lock ZP .193 X .334 X .047		18
5001137	Washer, Flat SS .203 X .438 X .05		18
502862	Screw, Cap Hexagonal Head M8 X20 G8.8		4
502847	Nut, Lock Nylon Insert M8-1.25		4
IS-04083	Instruction Sheet		1
FI-04083	Feuille d'instructions		1

PART A

PROCEDURE



DANGER

Park vehicle safely, apply parking brake, stop engine and set battery master switch(es) to the OFF position prior to working on the vehicle.

1. Lift and dismount L.H. removable rear fender.
2. Unfasten fixing screws in order to remove protective panel located above drive axle L.H. wheels.
3. Install 25 lb fire extinguisher mounting bracket (409129) as per diagram 1. Fix lower part of bracket using two cap screws (955297), two split-lock washers (5001161) and two flat washers (5001448) and fix upper part using two thread-cutting screws (502848), two split-lock washers (955920) and two flat washers (500411). Install two mounting clamps ((901126) onto mounting bracket and secure using four cap screws (955297), four split-lock washers (5001161) and four flat washers (5001448).
4. Install 25 lb fire extinguisher (901125) into the mounting clamps as per diagram 1, adjust then tighten clamps.
5. Slide in place wheelhouse fire protection panel (460630P). Fix panel using four tapping screws (500526).
6. Install L.H. rear fender seal (460494). Fix seal using two rivets (504339) and two flat washers (500157).
7. Install nozzle support (408110) for Webasto preheater as per diagram 2. Fix support using two thread-cutting screws (502848) and two split-lock washers (955920).
8. Install inside engine compartment the nozzle support and detector (408111) as per diagram 2. Fix support using two thread-cutting screws (502848) and two split-lock washers (955920).
9. Install above sump tank on the engine compartment R.H. side, the nozzle support for starter (408112) as per diagram 2. Fix support using two thread-cutting screws (502848) and two split-lock washers (955920).
10. Install on each side of the transmission and aiming towards the rear of the coach, the two nozzle assemblies (408109) as per diagram 2. Fix two assemblies using thread-cutting screws (502848) and split-lock washers (955920).
11. Install distribution block (408113) and two T-connectors (408114) as per diagrams 3 and 4. Temporarily fix distribution block onto the cross member using cap screws (502862) and lock nuts (502847).
12. Temporarily fix the two T-connectors (408114) onto the side rail and cross sill using two brackets (409138), hose clamps (504021), thread-cutting screws (502848) and split-lock washers (955920).
13. Connect 2750-mm long hose #12 (409133) between extinguisher and distribution block as per diagrams 3 and 4.
14. Connect each of the two 1525-mm long hoses #8 (409134) between distribution block and each T-connector (front and rear) as per diagrams 3 and 4.
15. Connect 1220-mm long hose #8 (409135) between front T-connector and nozzle for Webasto preheater as per diagrams 3 and 4.
16. Connect 2750-mm long hose #8 (409136) between distribution block and nozzle support and detector as per diagrams 3 and 4.

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17. Connect 915-mm long hose #8 (409137) between rear T-connector and nozzle assembly located on the transmission R.H. side as per diagrams 3 and 4.
 18. Connect 1220-mm long hose #8 (409139) between front T-connector and nozzle assembly located on the transmission L.H. side as per diagrams 3 and 4.
 19. Connect 915-mm long hose #8 (409140) between rear T-connector and nozzle for starter as per diagrams 3 and 4.
 20. Support and fix 2750-mm long hose #12 (409133) between extinguisher and distribution block using four wire clamps (952637), thread-cutting screws (500623), split-lock washers (500470) and flat washers (5001137).
 21. Support and fix various hoses #8 using 14 wire clamps (952631), thread-cutting screws (500623), split-lock washers (500470) and flat washers (5001137).
 22. Referring to figure 1, cut protection panel (563455) and manual activation switch (563456) mounting holes. Fix protection panel and manual activation switch using tapping screws (500814).
 23. Referring to figure 1, affix driver's area decal (405724 or 405725). Also affix engine compartment decal (405729 or 405730) referring to figure 2.

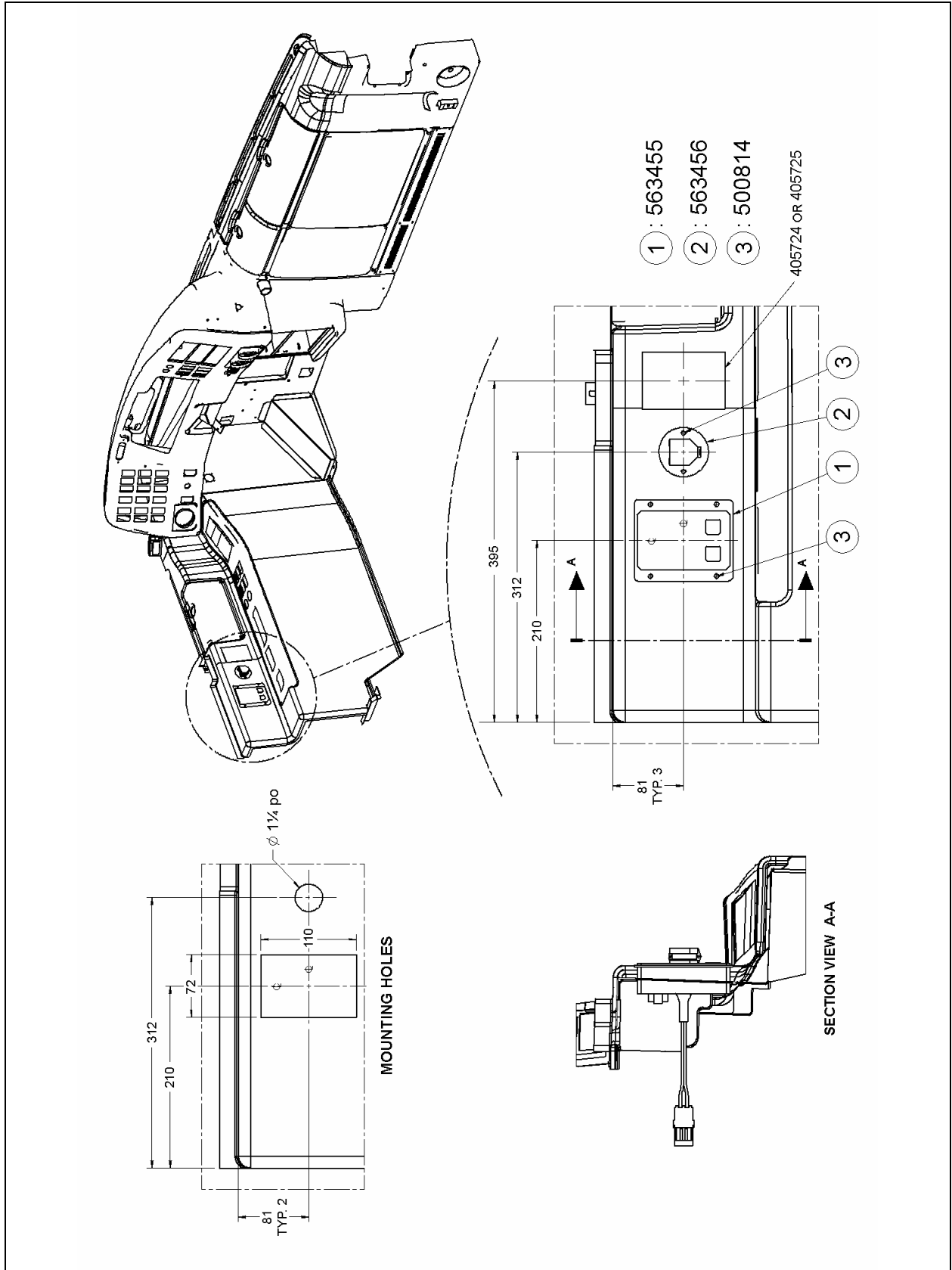


FIGURE 1

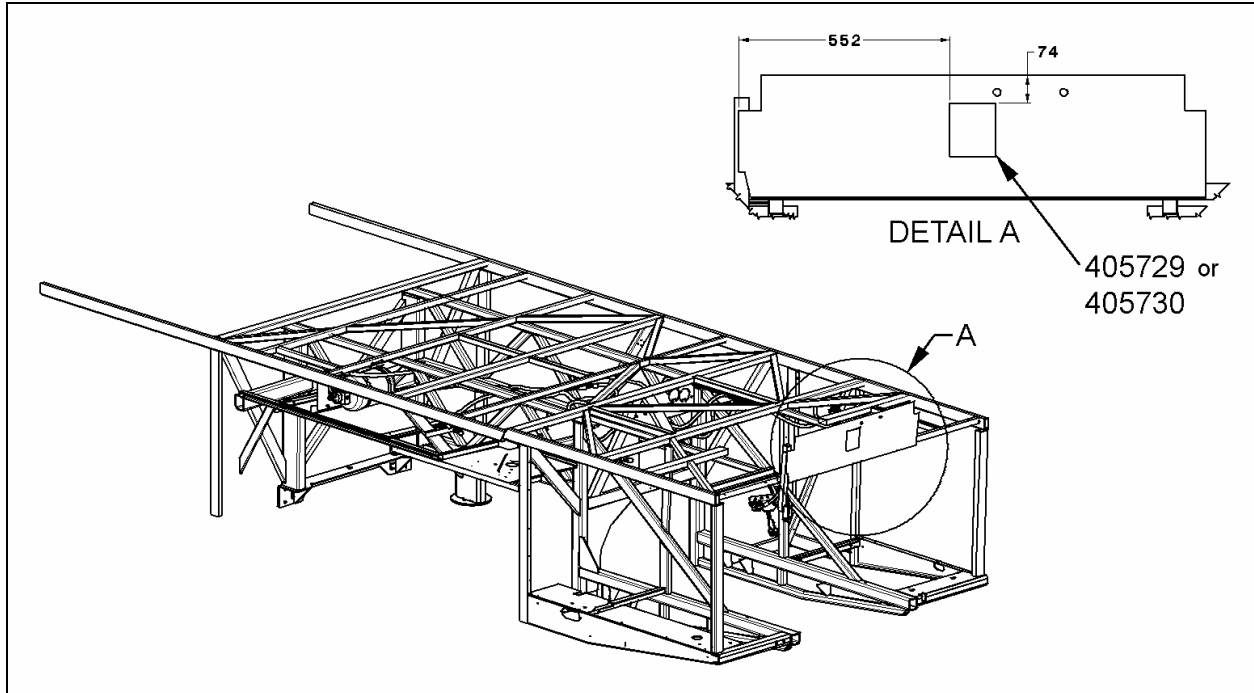


FIGURE 2

PART B: INSTALLATION OF KIT #060903 ELECTRICAL PARTS FOR H3 MULTIPLEX VEHICLES

PROCEDURE

1. Route thermal detection wire (563458) inside engine compartment (Refer to diagram 5).

NOTE

The linear thermal detection wire must follow the engine compartment cables in order to detect heat over the engine. From the optical fire detector it runs to the preheater (Webasto) then comes back in the engine compartment, runs alongside the alternators and near the starter and ends in the main power compartment (battery) at the end-of-line device.

2. Connect inside main power compartment, end-of-line device (563587) at thermal detection wire extremity.
3. Route engine compartment fire suppression cable (066463) between optical fire detector (408111) and front junction box (Refer to figure 3 and diagrams 5 and 6 as well).
4. Perform connections as indicated in diagram 6.

NOTE

H3 MULTIPLEX vehicles up to 5-0229 must also use interface cables (066581 and 066582) as well as Volvo relay (563332) to connect cable 066463 to the VECF, vehicles 5-0230 and following do not require these parts. Refer to figure 3 and also diagrams 5 and 7.

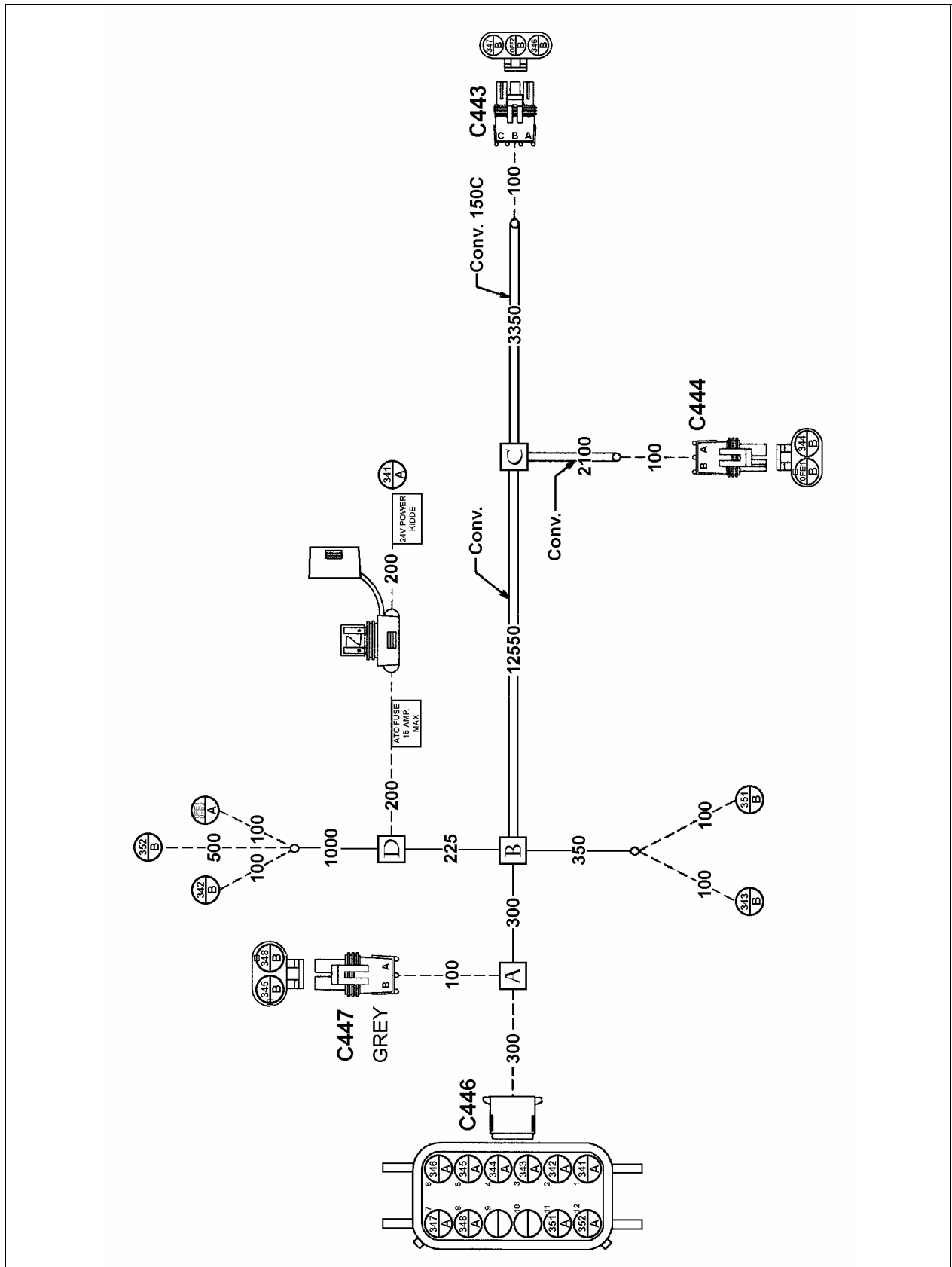


FIGURE 3: CABLE 066463

PART C: INSTALLATION OF KIT #060904 ELECTRICAL PARTS FOR H3 STANDARD VEHICLES (NOT MULTIPLEX)

PROCEDURE

1. Route thermal detection wire (563458) inside engine compartment (Refer to diagram 8).

<i>NOTE</i>

<i>The linear thermal detection wire must follow the engine compartment cables in order to detect heat over the engine. From the optical fire detector it runs to the preheater (Webasto) then comes back in the engine compartment, runs alongside the alternators and near the starter and ends in the main power compartment (battery) at the end-of-line device.</i>
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2. Inside main power compartment, install relay base (561183) and one 24V Volvo mini relay (563332) then connect the end-of-line device (563587) at thermal detection wire extremity.
3. Route engine compartment fire suppression cable (066397) between optical fire detector (408111) and front junction box (Refer to figure 4 and diagrams 8 and 9 as well).
4. Install in front junction box the four remaining 24V Volvo mini relay (563332) as well as 2-hours time delay relay (563615). Perform connections as indicated in diagram 9.

WARRANTY

This modification is covered by Prevost Car's normal warranty. You must return the installation checklist in order to validate the warranty.

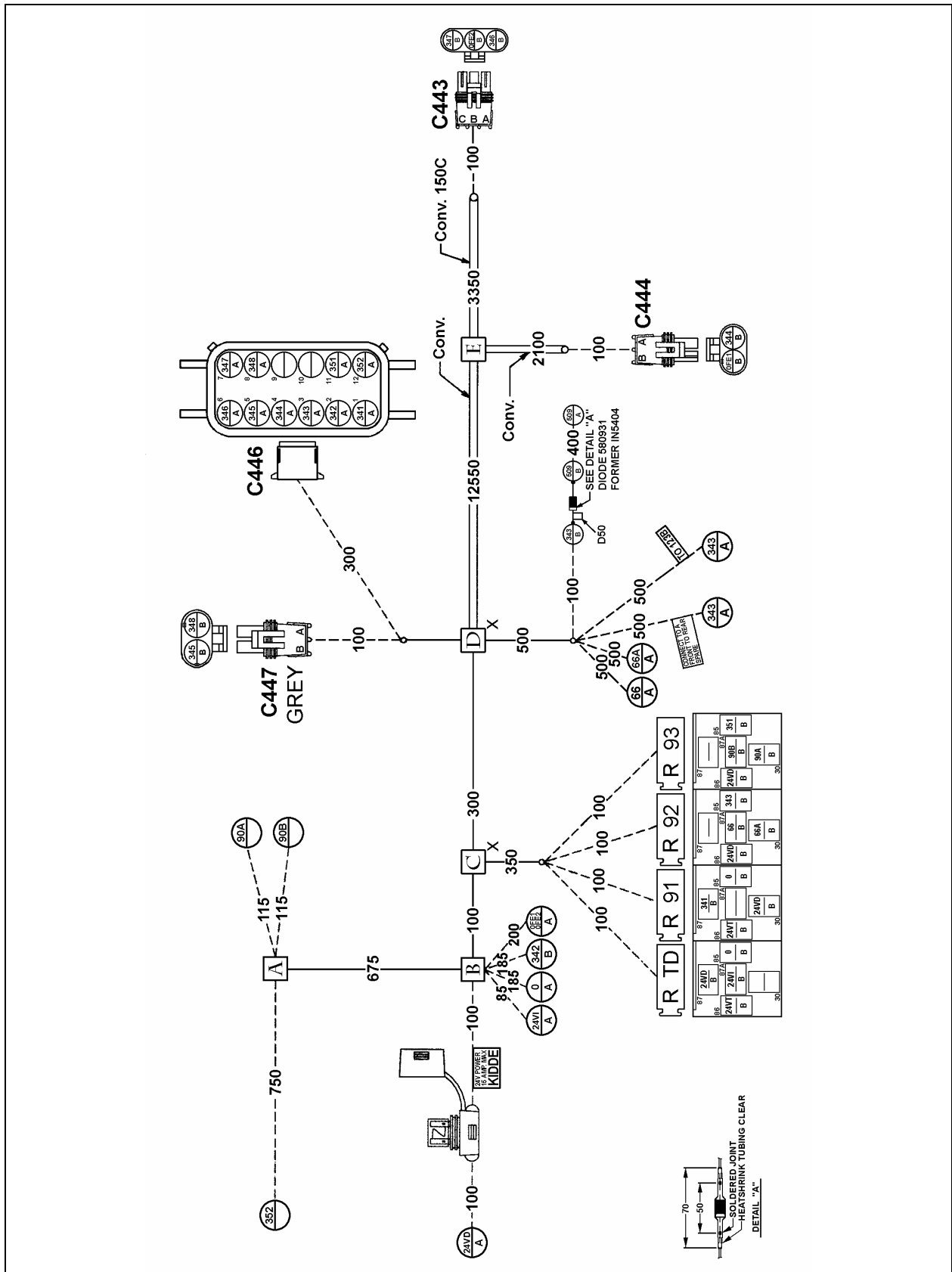


FIGURE 4: CABLE 066397





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INSTALLATION CHECKLIST

AUTOMATIC FIRE DETECTION AND SUPPRESSION SYSTEM (AFSS)

ITEM	SPEC.	TOOL	READING
Nozzle aiming check <ul style="list-style-type: none"> - Nozzle near radiator - Nozzle near preheater (Webasto) - Nozzles (2) for transmission - Nozzle for starter, located above sump tank 	<p>Aims at the turbo or air outlet volute casing</p> <p>Aims at the preheater or the wall close by</p> <p>Each nozzle aims at the area on the side of the engine. Must not hit the front of the engine.</p> <p>Aims at the area behind the alternators. May hit A/C hose.</p>	<p>Pointer</p> <p>Pointer</p> <p>Pointer</p> <p>Pointer</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>Note: Disconnect C444 (extinguisher) and connect light indicator in place.</p> <ul style="list-style-type: none"> - Engine running: - Simulate a fire by shorting the linear thermal detection wire. Disconnect the end-of-line device located in the main power compartment (battery) and connect the short-circuiting simulator in place. 1st alarm check <ul style="list-style-type: none"> - Telltale lights and in telltale panel - Dashboard alarm - Evaporator compartment and condenser compartment motors as well as radiator fan clutch - 2nd alarm check (15 sec. later) <ul style="list-style-type: none"> - Engine - Horn with ignition switch ON or OFF - Verification with ignition switch in the "OFF" position - Dashboard alarm <ul style="list-style-type: none"> - Telltale light in telltale panel - Check if the engine starts - Check if the engine starts when turning the ignition key twice between ON and OFF within 2 seconds. - Turn the ignition key in the OFF position then return in the "ON" position <ul style="list-style-type: none"> - Telltale lights and dashboard alarm 	<p>Illuminate</p> <p>Sounds</p> <p>Stop</p> <p>Stops</p> <p>Does not work</p> <p>Stops</p> <p>Remains illuminated</p> <p>Does not start</p> <p>The protection panel does not activate the audio alarm and the engine starts</p> <p>Engine does not start</p> <p>In operating condition</p>	<p>Visual</p> <p>Hearing</p> <p>Hearing</p> <p>Hearing</p> <p>Hearing</p> <p>Hearing</p> <p>Visual</p> <p>Manual</p> <p>Manual</p> <p>Manual</p> <p>Visual-hearing</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>Note: The "ALARM SILENCE ENGAGED" mode is not a permanent state and must be enabled by turning the ignition key twice between ON and OFF each time the engine is started.</p>			

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ITEM	SPEC.	TOOL	READING
<p>- Use the protection panel "TEST/RESET" switch to reset the system.</p> <p>- Engine running, simulate a fire by installing an IR simulator in front of the optical fire detector in order to generate the 1st alarm. Press the protection panel "ALARM SILENCE" switch.</p> <p>- Check if telltale light  and dashboard alarm even in "ALARM SILENCE ENGAGED" mode</p> <p>- Engine running, simulate an alarm</p> <p></p> <p>- Press , check the engine</p> <p>- Perform a manual activation switch test</p> <p>- Press  button when the engine is running</p>	<p>Engine may be started</p> <p>are activated</p> <p>Delays discharge of the fire extinguisher for 15 seconds</p> <p>Immediate engine shutdown and discharge of the fire extinguisher</p>	<p>Manual</p> <p>Visual-hearing</p> <p>Hearing</p> <p>Manual</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>- Vehicle parked for less than 2 hours in "WAKE-UP" mode. Ignition switch in OFF, simulate a fire by shorting the linear thermal detection wire.</p> <p>- Check the horn</p> <p>- - Check "Kidde" AFSS system</p> <p>Note: Horn may be deactivated by turning the ignition key twice between ON and OFF within 2 seconds.</p> <p>- Vehicle parked for less than 2 hours in "sleep" mode. To cancel "WAKE-UP" mode, toggle the safety switch located in the main power compartment (battery) between OFF and ON. Simulate a fire by shorting one of Prévost fire detectors.</p> <p>- Check the horn</p> <p>- - Check "Kidde" AFSS system</p> <p>Note: Horn may be deactivated by turning the ignition key twice between ON and OFF within 2 seconds.</p>	<p>is activated for 2 minutes 2 alarms then fire extinguisher discharge (with simulator)</p> <p>is activated for 2 minutes 2 alarms then fire extinguisher discharge (with simulator)</p>	<p>Hearing</p> <p>Hearing</p> <p>Hearing</p> <p>Hearing</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>



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MANUFACTURIER D'AUTOCARS • HIGHWAY COACH MANUFACTURER

AFTER-SALES SERVICE DEPARTMENT / DIVISION DU SERVICE APRÈS-VENTE

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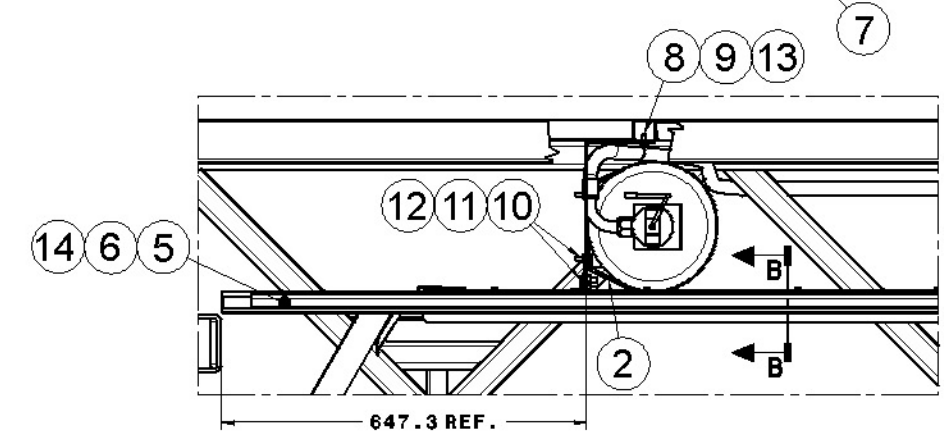
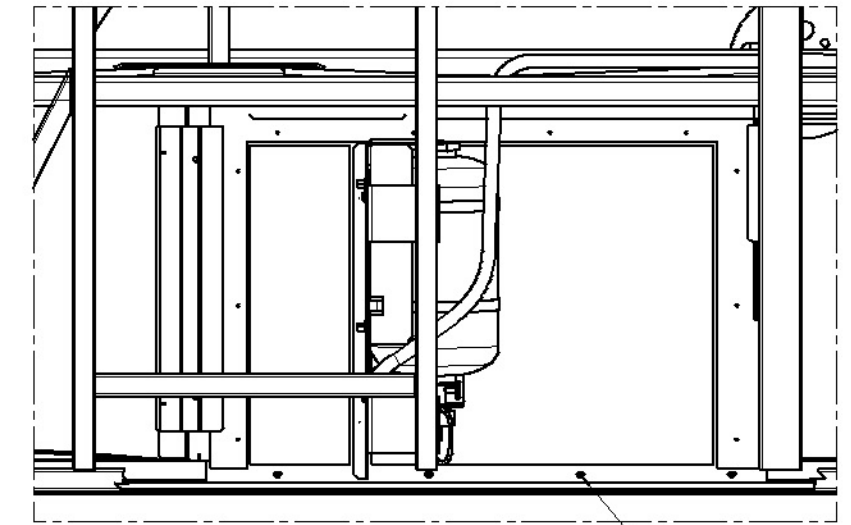
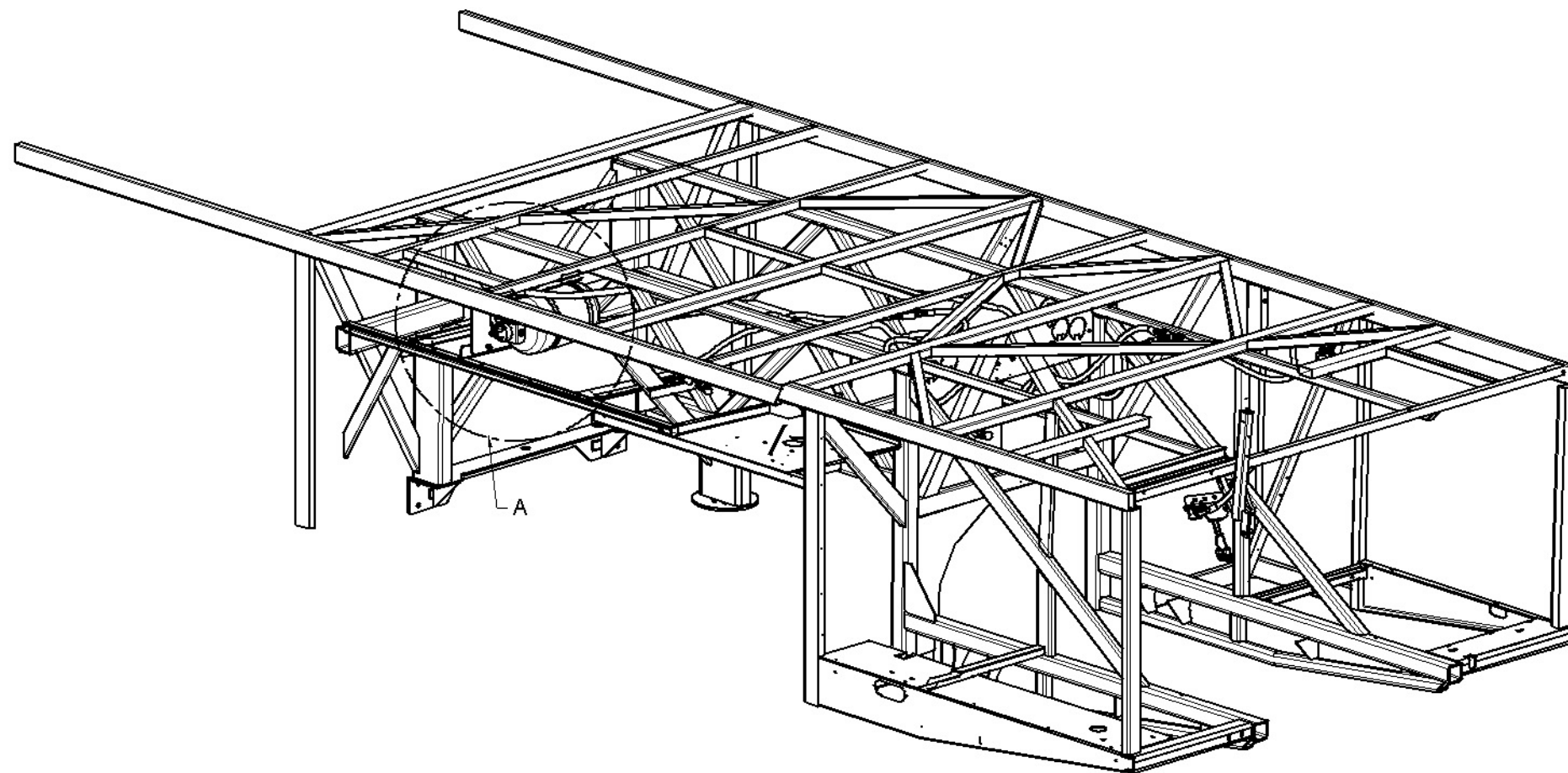
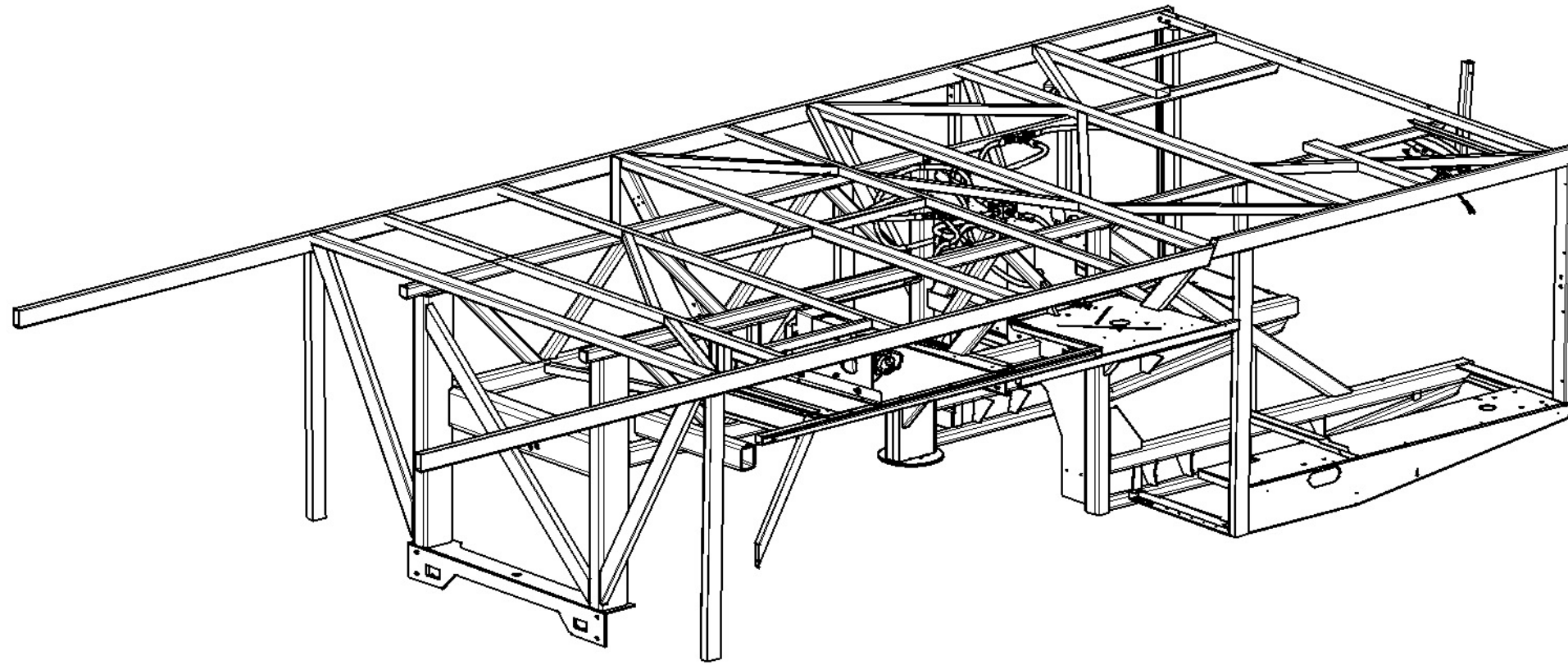
INSTALLATION CHECKLIST

ITEM	SPEC.	TOOL	READING
<p>- Vehicle parked with ignition switch in the ON position. Simulate a fire.</p> <ul style="list-style-type: none"> - Telltale light  and dashboard alarm - Telltale light  and horn - "Kidde" AFSS system - Horn with the ignition switch in the OFF position - Start the engine without pressing the protection panel (TEST/RESET) switch or without turning the ignition key twice between ON and OFF within 2 seconds to activate the "ALARM SILENCE ENGAGED" mode - Simulate a fire by shorting one of Prévost fire detectors without dealing with "Kidde" system fire detectors - Check dashboard alarm and horn 	<p>Are activated</p> <p>Are deactivated</p> <p>Carry out its cycle then discharge the fire extinguisher (with simulator)</p> <p>Does not work</p> <p>Does not start</p> <p>System is not activated if "Kidde" system fire detectors have not detected the fire</p> <p>Are not activated and the vehicle switches to "WAKE-UP" mode</p>	<p>Visual-hearing</p> <p>Visual-hearing</p> <p>Manual</p> <p>Hearing</p> <p>Manual</p> <p>Manual</p> <p>Visual-hearing</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>FINAL CHECKS</p> <ul style="list-style-type: none"> - C444 connector located near the extinguisher - Protection panel "SYSTEM OK" lamp - Make sure the tamper seal is installed on the manual activation switch. 	<p>Connected</p> <p>Illuminated green</p> <p>Present</p>	<p>Visual</p> <p>Visual</p> <p>Visual</p>	<p>_____</p> <p>_____</p> <p>_____</p>

Verified by: _____ Date: _____

Approved by: _____ Date: _____

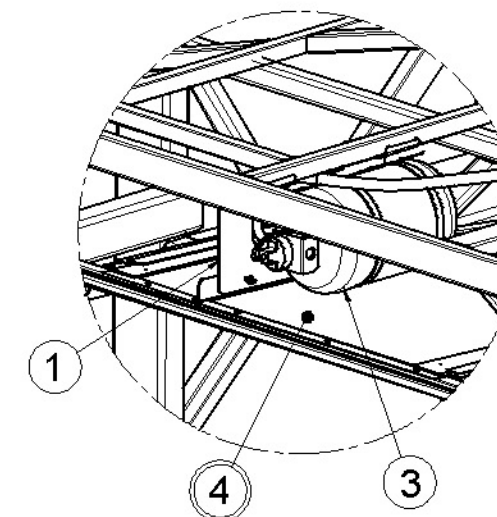
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EVEN SURFACES



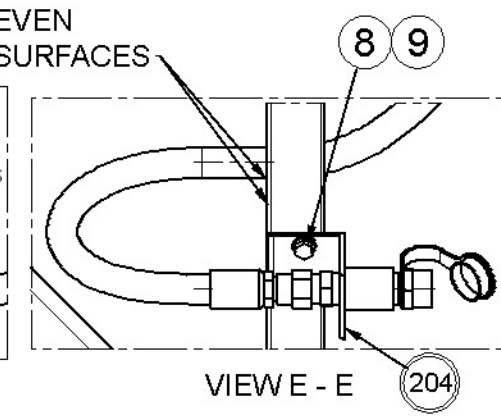
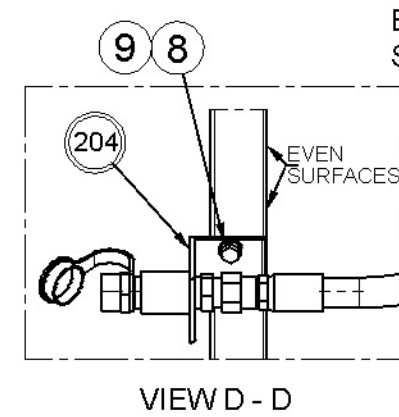
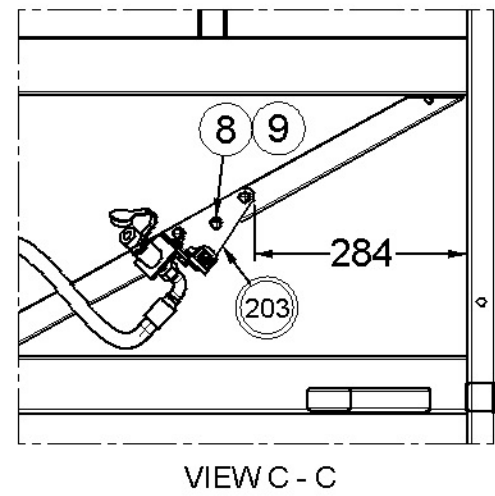
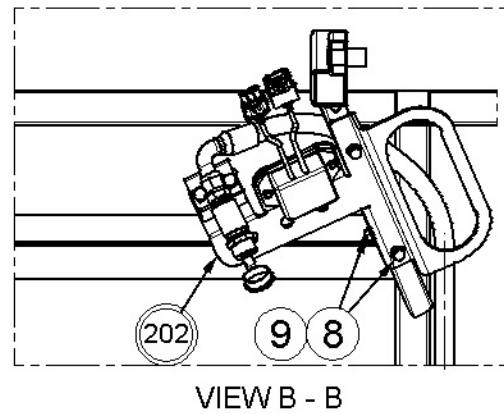
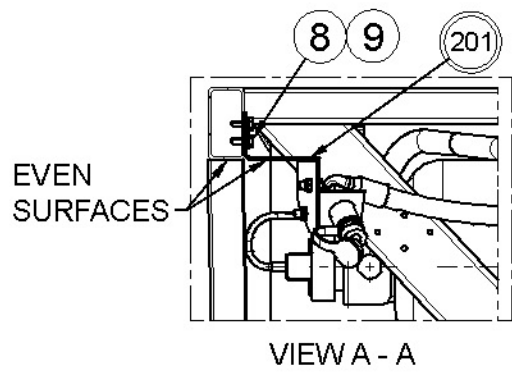
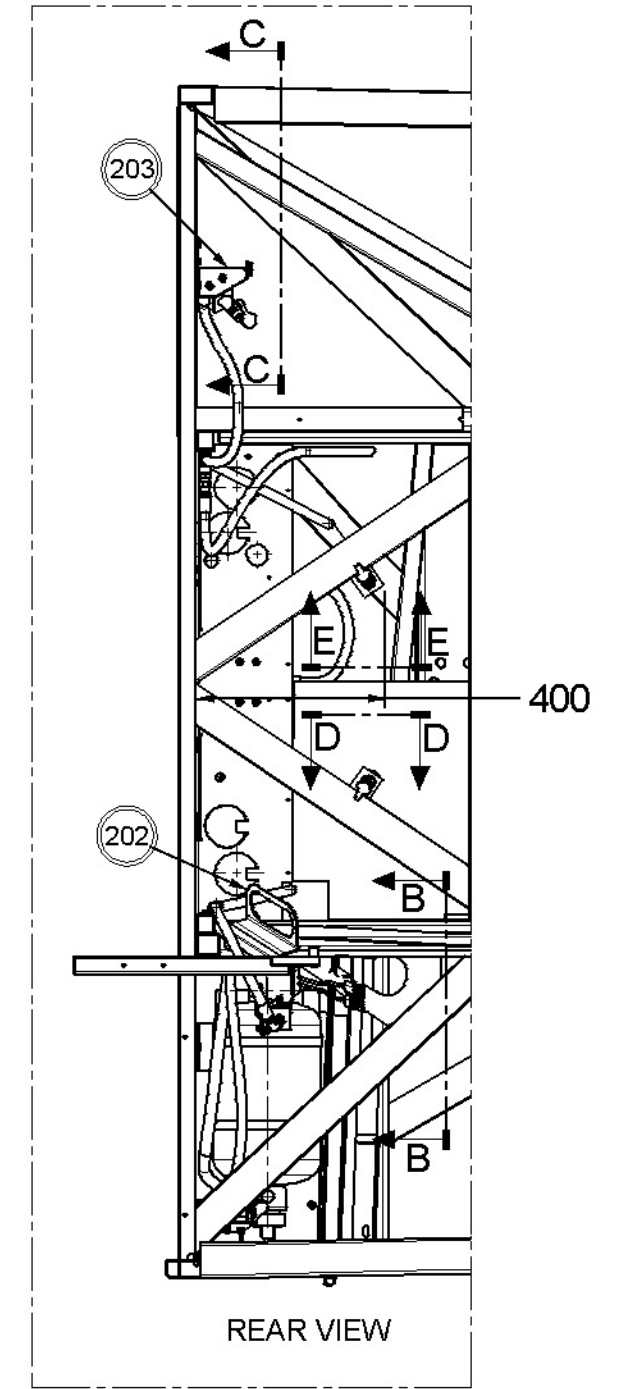
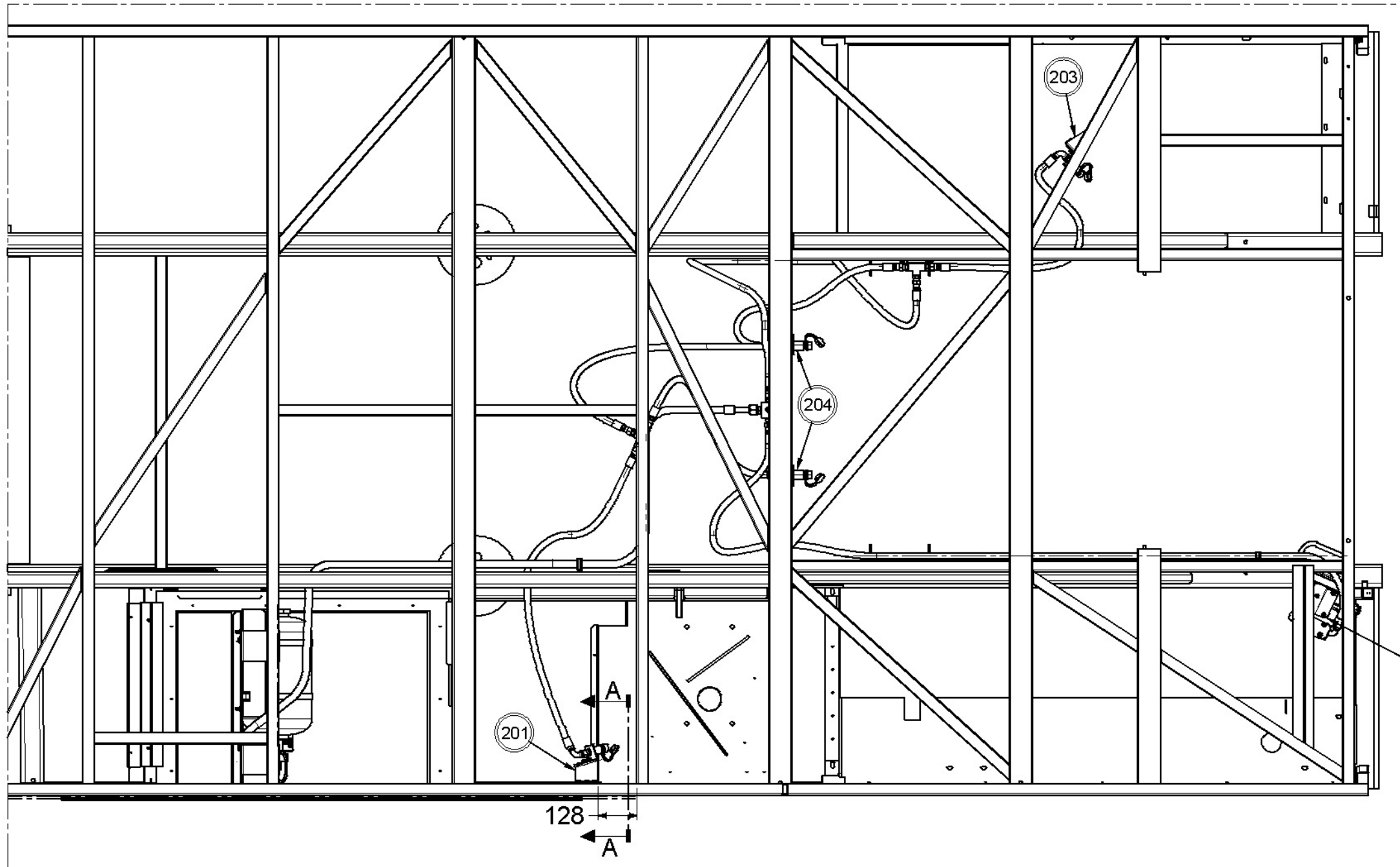
SECTION VIEW B-B



DETAIL A

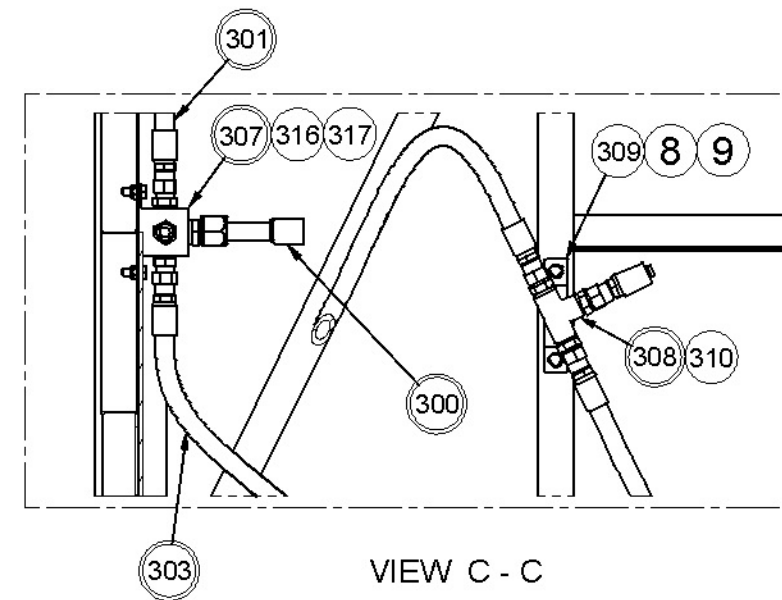
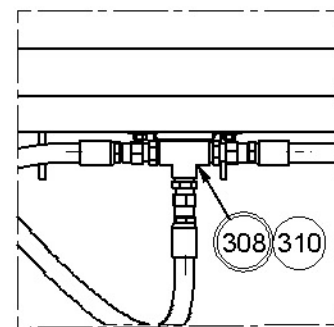
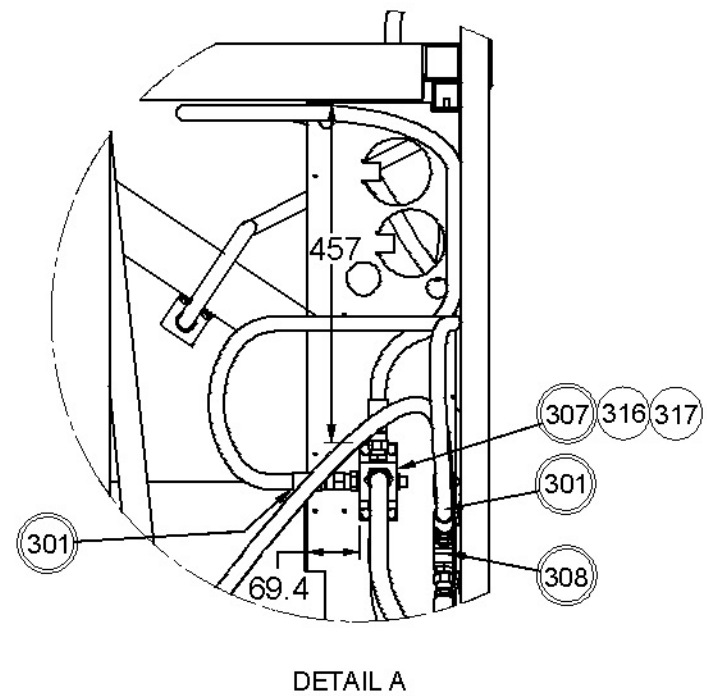
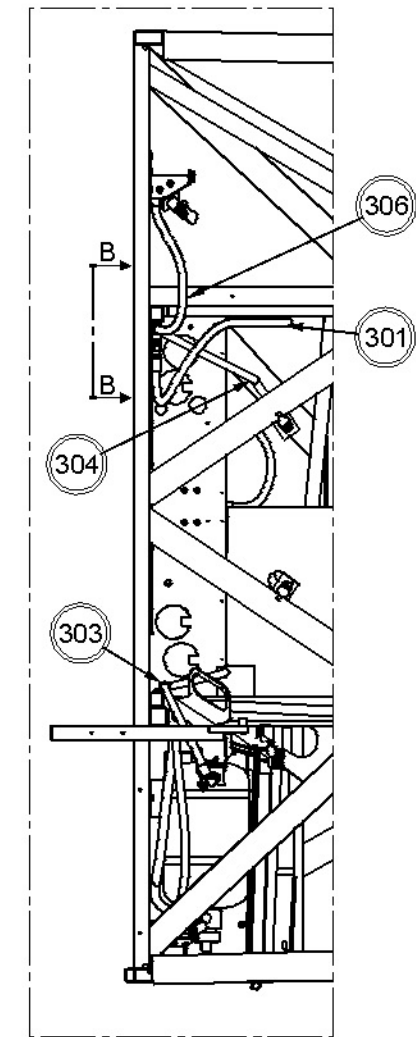
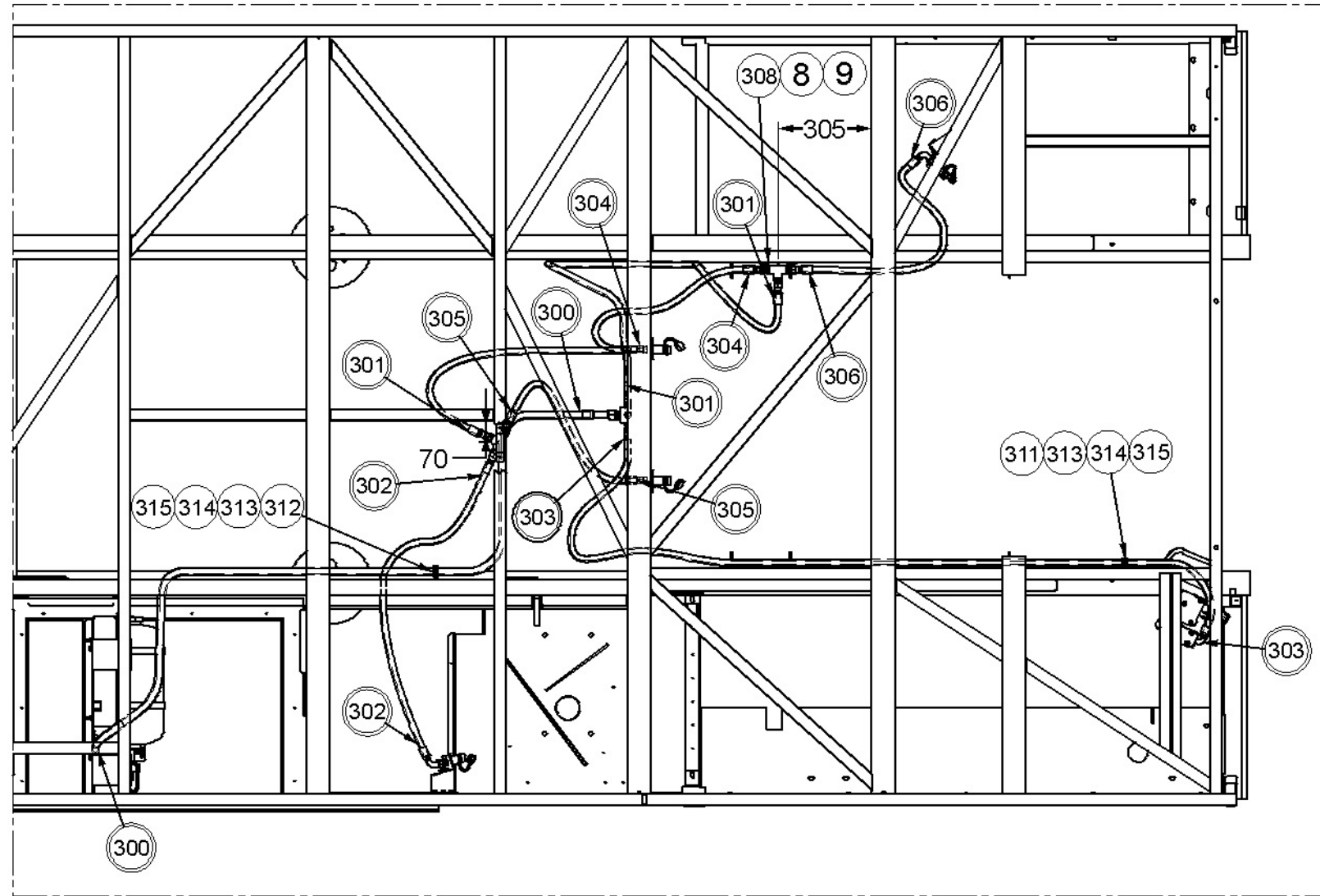
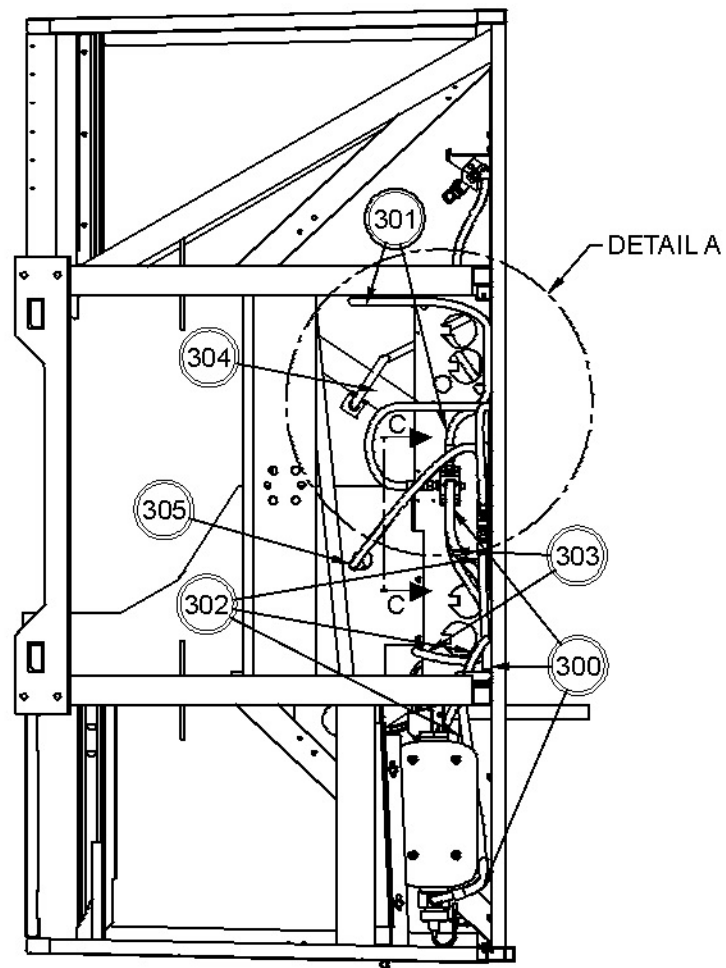
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|-------------|-------------|
| ① : 409129 | ⑧ : 502848 |
| ② : 901126 | ⑨ : 955920 |
| ③ : 901125 | ⑩ : 955297 |
| ④ : 460630P | ⑪ : 5001161 |
| ⑤ : 460494 | ⑫ : 5001448 |
| ⑥ : 504339 | ⑬ : 500411 |
| ⑦ : 500526 | ⑭ : 500157 |

DIAGRAM 1



- 8 : 502848
- 9 : 955920
- 201 : 408110
- 202 : 408111
- 203 : 408112
- 204 : 408109

DIAGRAM 2



- | | |
|--------------|---------------|
| 8 : 502848 | 308 : 409114 |
| 9 : 955920 | 309 : 409138 |
| 300 : 409133 | 310 : 504021 |
| 301 : 409134 | 311 : 952631 |
| 302 : 409135 | 312 : 952637 |
| 303 : 409136 | 313 : 500623 |
| 304 : 409137 | 314 : 500470 |
| 305 : 409139 | 315 : 5001137 |
| 306 : 409140 | 316 : 502862 |
| 307 : 409113 | 317 : 502847 |

DIAGRAM 3

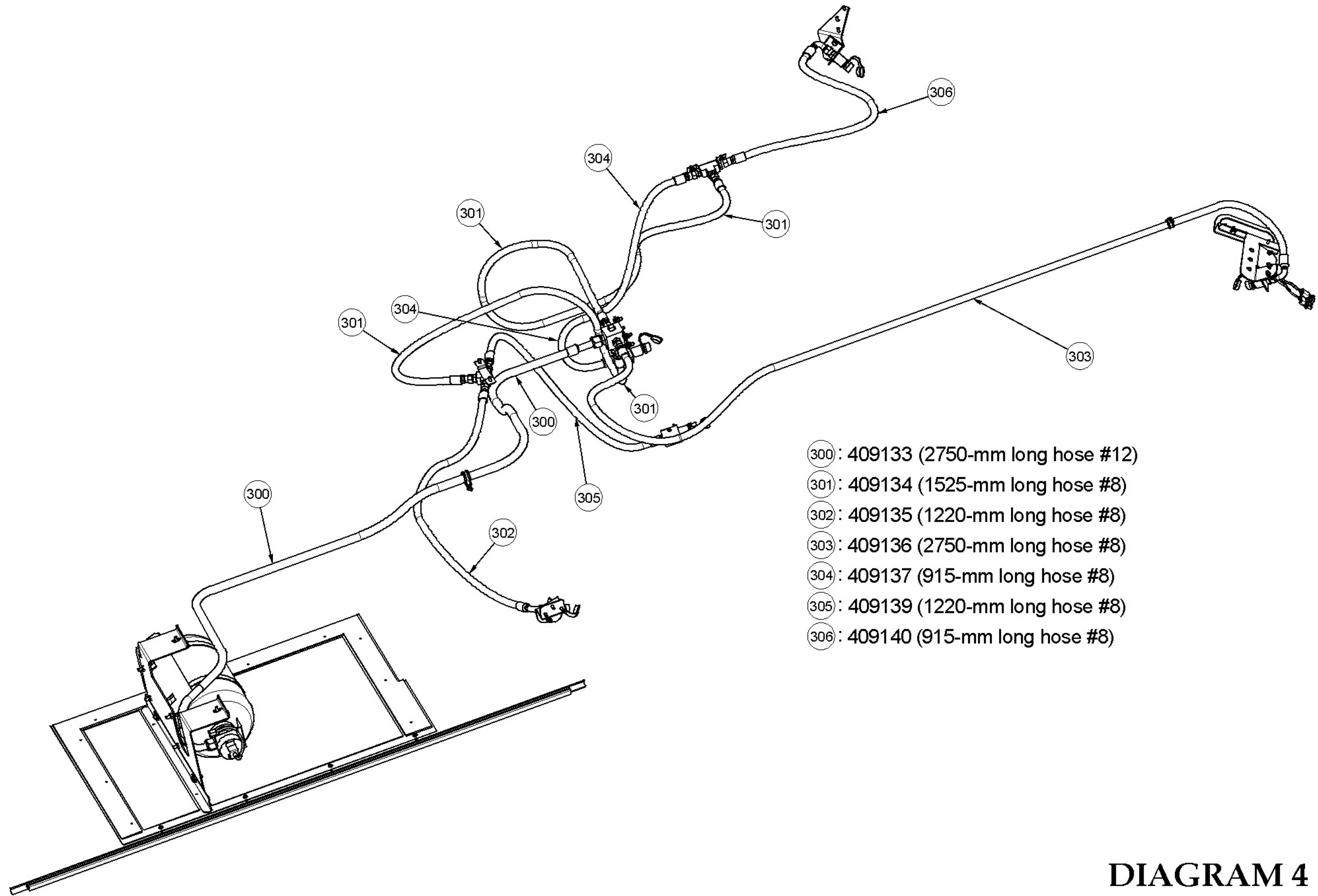
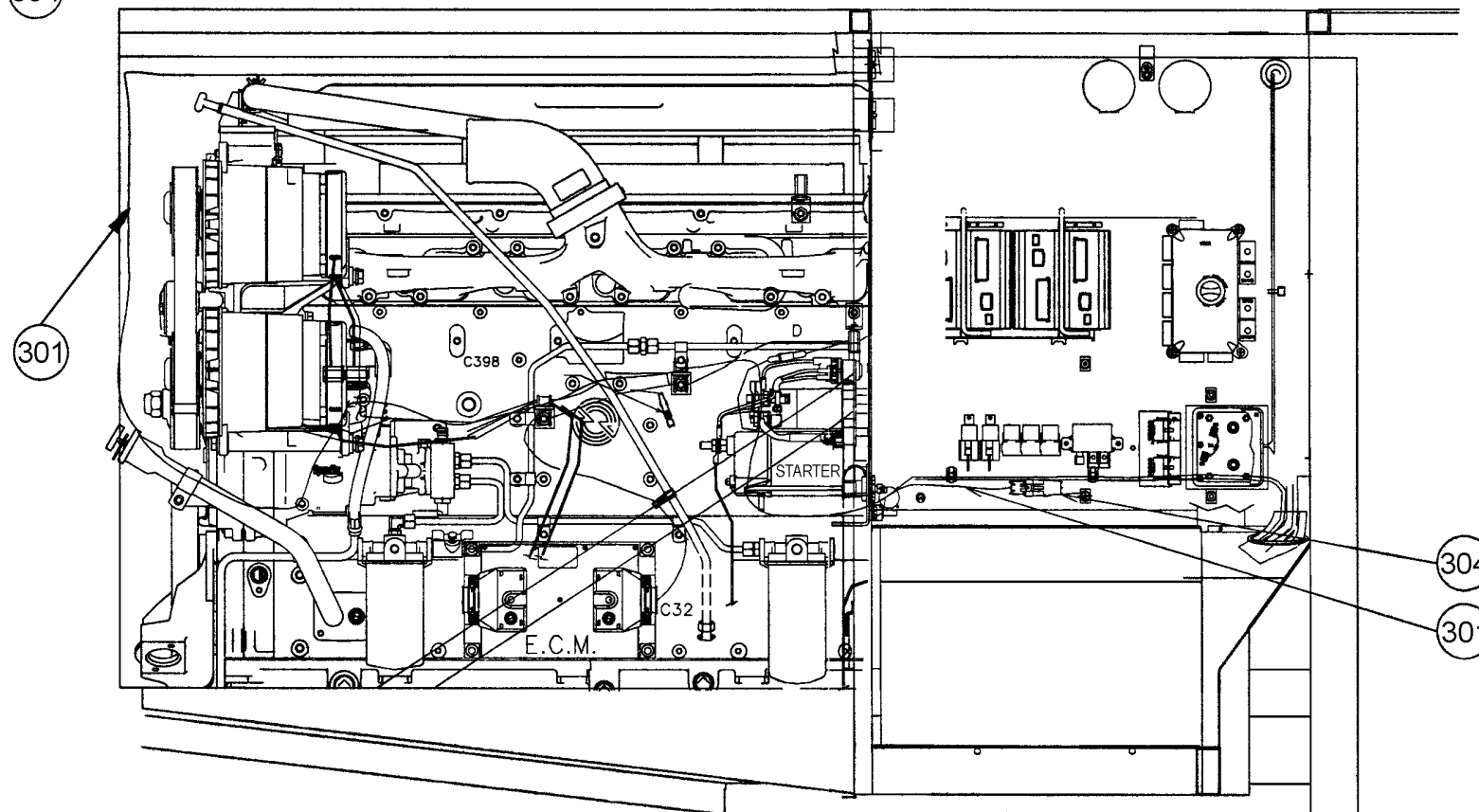
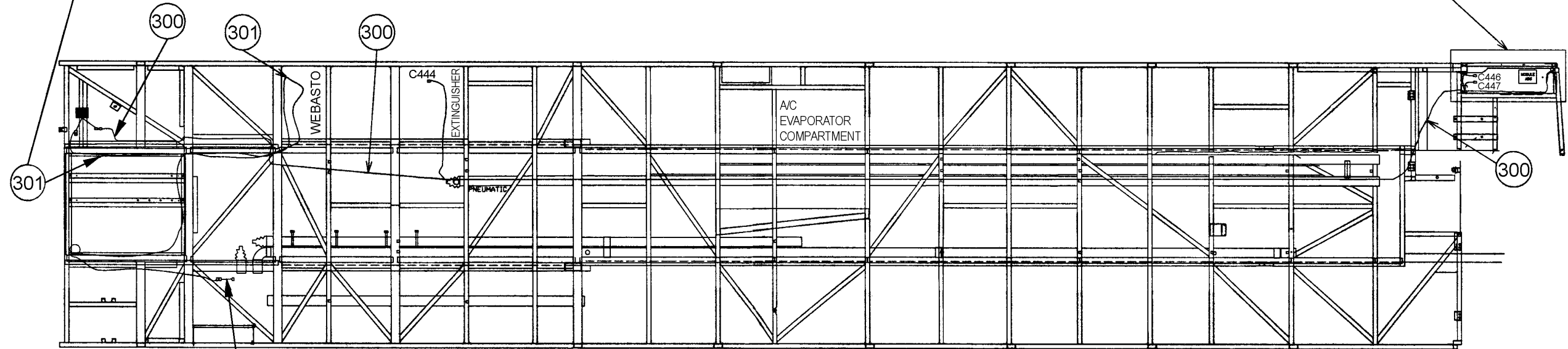


DIAGRAM 4

NOTE: THE LINEAR THERMAL DETECTOR MUST FOLLOW THE ENGINE COMPARTMENT CABLES IN ORDER TO DETECT HEAT OVER THE ENGINE. FROM THE OPTICAL FIRE DETECTOR IT RUNS TO THE PREHEATER (WEBASTO) THEN COMES BACK IN THE ENGINE COMPARTMENT, RUNS ALONGSIDE THE ALTERNATORS, NEAR THE STARTER AND ENDS IN THE MAIN POWER COMPARTMENT (BATTERY) AT THE END-OF-LINE DEVICE.

SEE DIAGRAMS 6 & 7 FOR CONNECTIONS

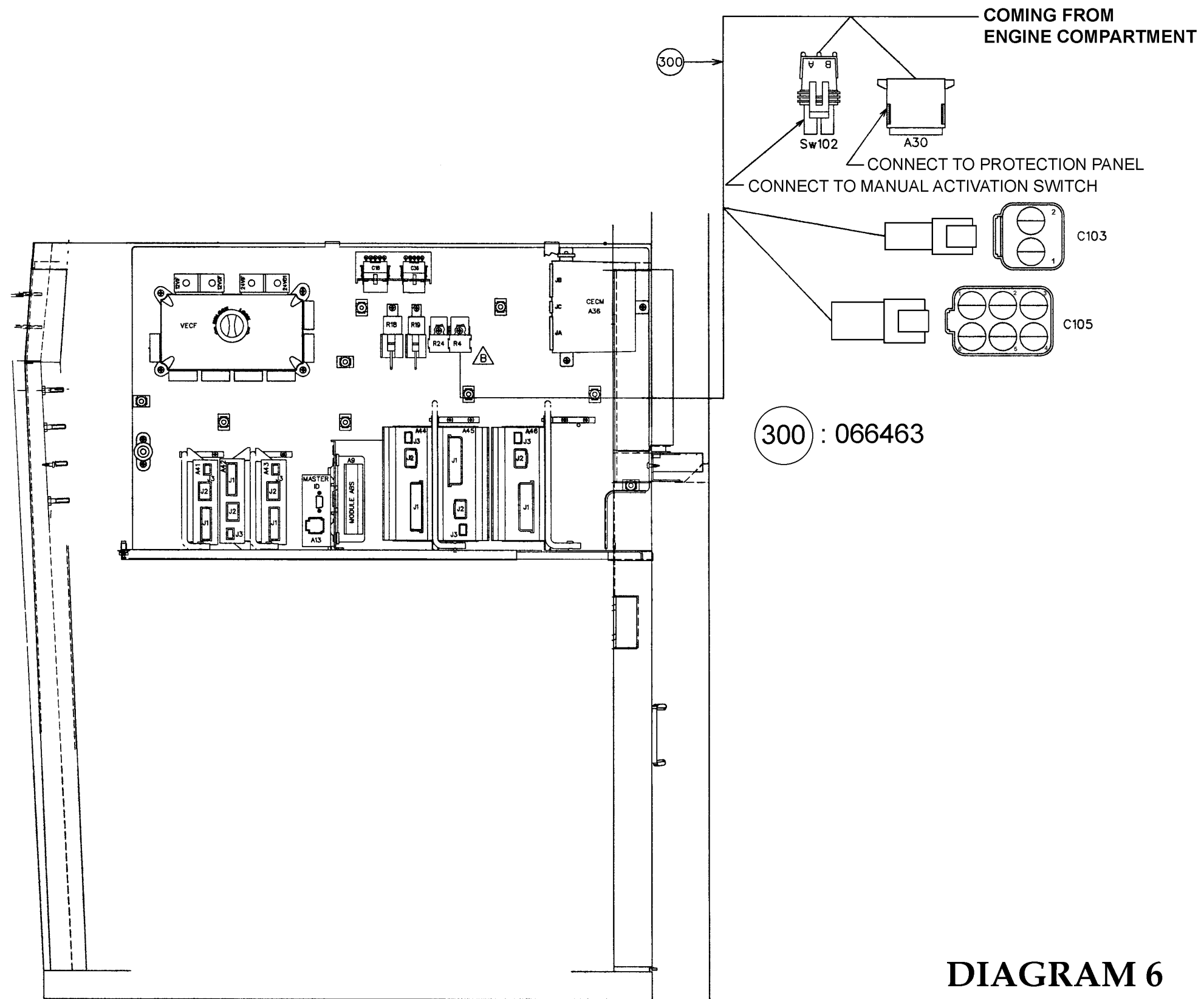


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301 : 563458

304 : 563587

DIAGRAM 5



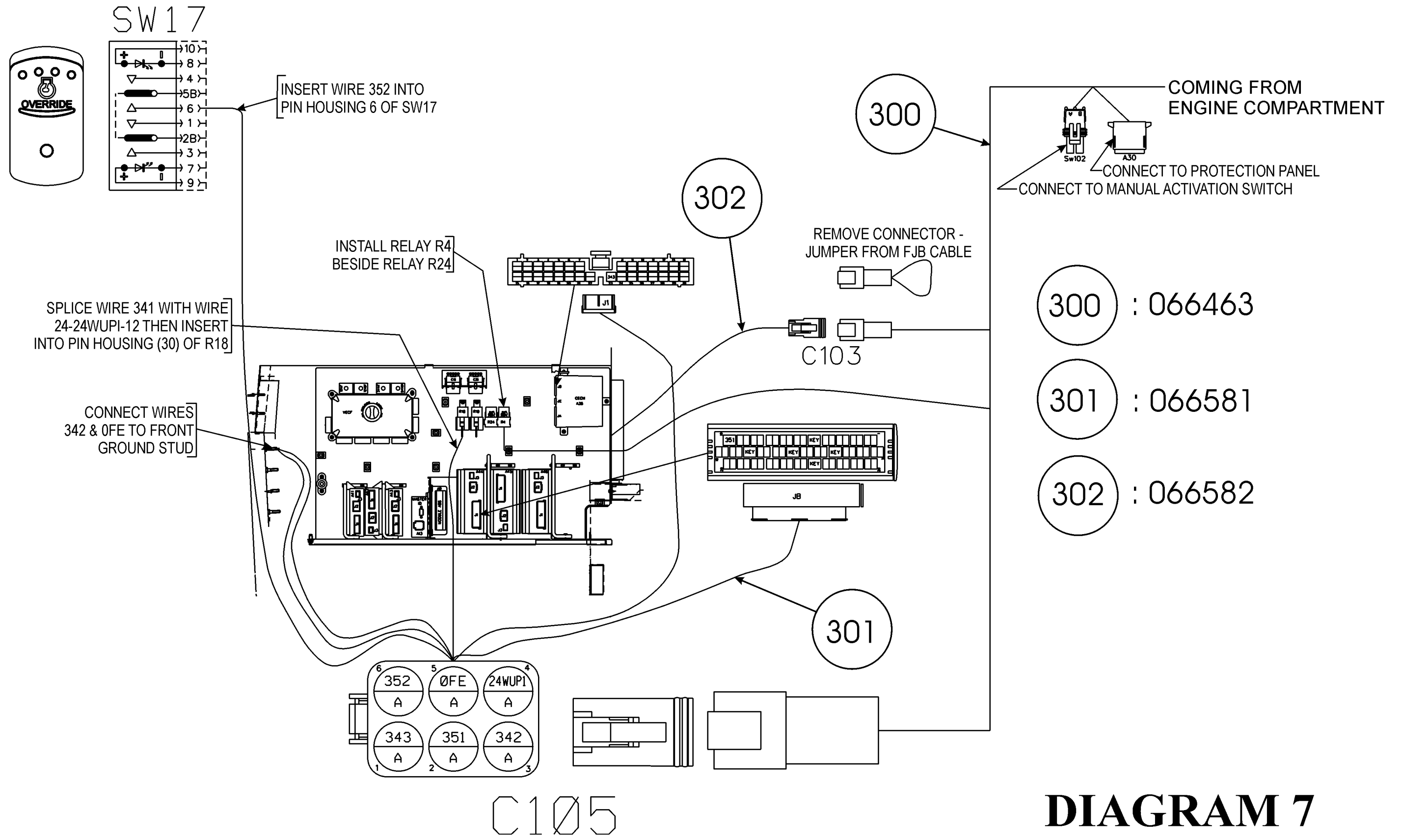
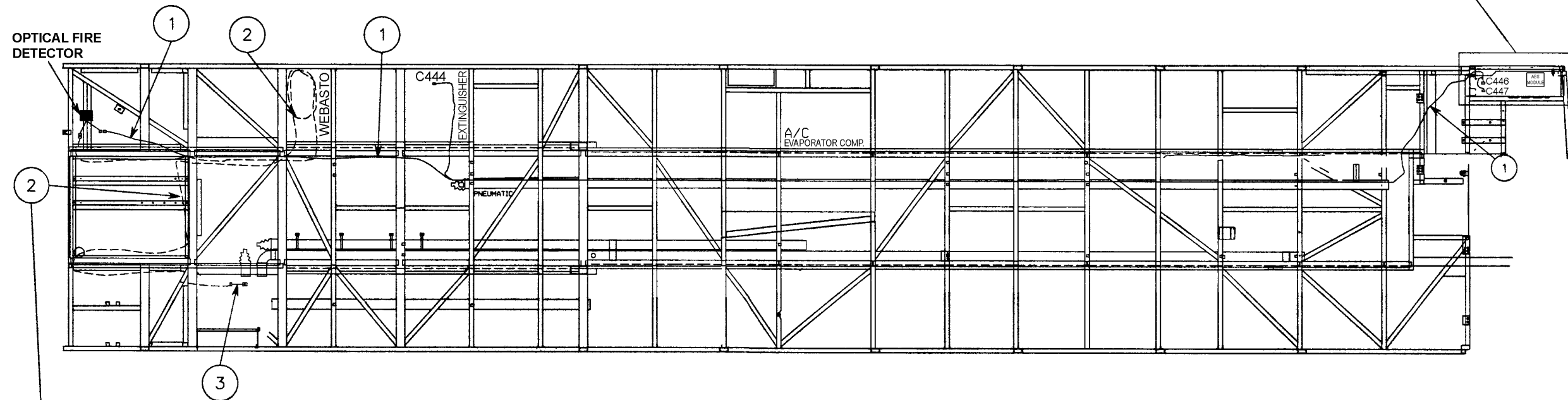
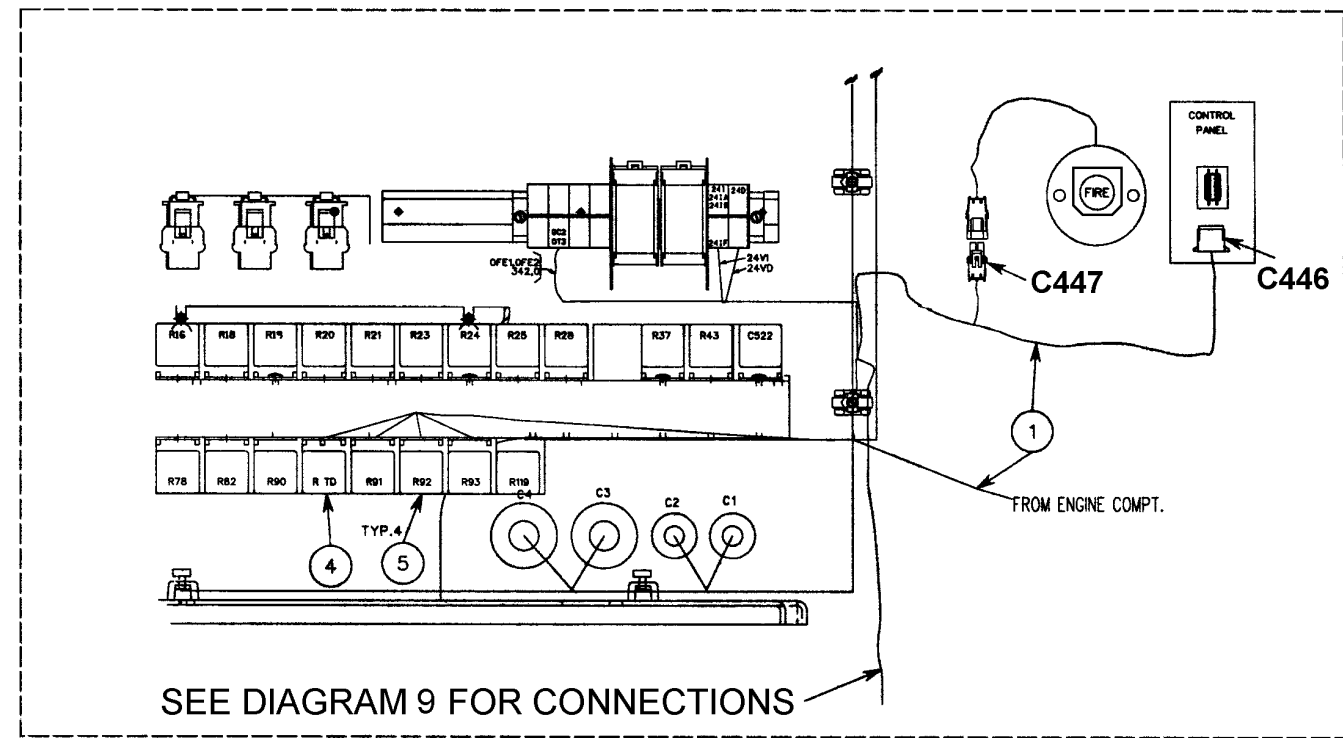
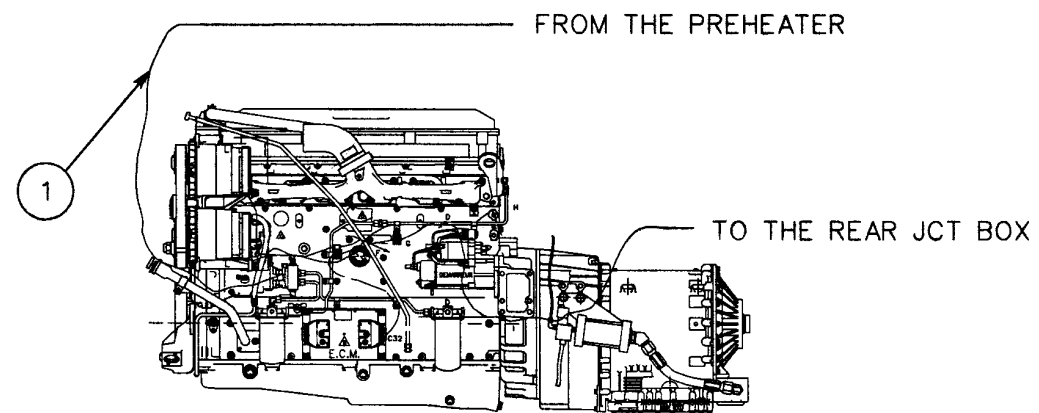


DIAGRAM 7



NOTE: THE LINEAR THERMAL DETECTOR MUST FOLLOW THE ENGINE COMPARTMENT CABLES IN ORDER TO DETECT HEAT OVER THE ENGINE. FROM THE OPTICAL FIRE DETECTOR IT RUNS TO THE PREHEATER (WEBASTO) THEN COMES BACK IN THE ENGINE COMPARTMENT, RUNS ALONGSIDE THE ALTERNATORS, NEAR THE STARTER AND ENDS IN THE MAIN POWER COMPARTMENT (BATTERY) AT THE END-OF-LINE DEVICE.

DIAGRAM 8

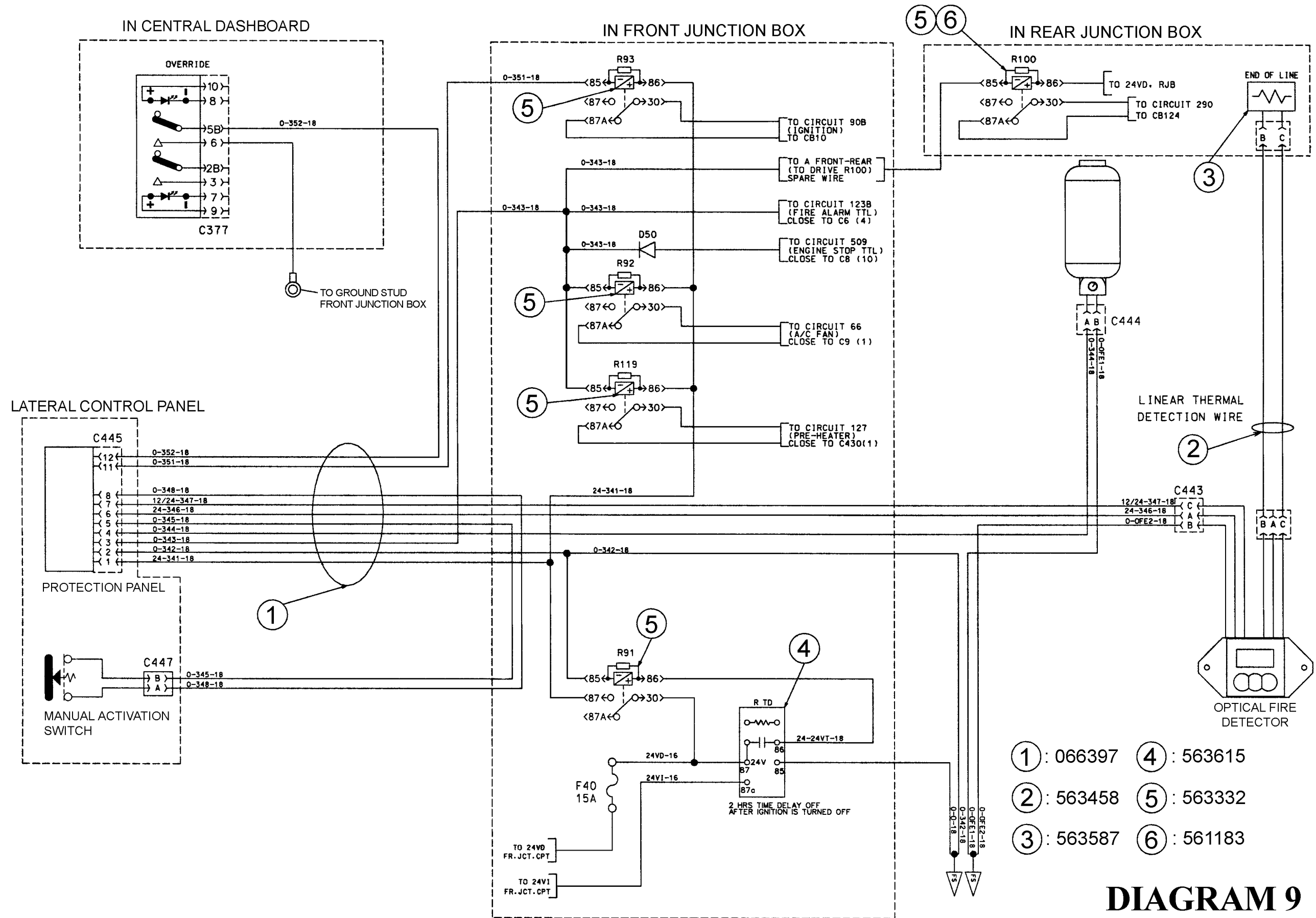


DIAGRAM 9