Repair, Parts

Integrated PowerStation™

3A6486F

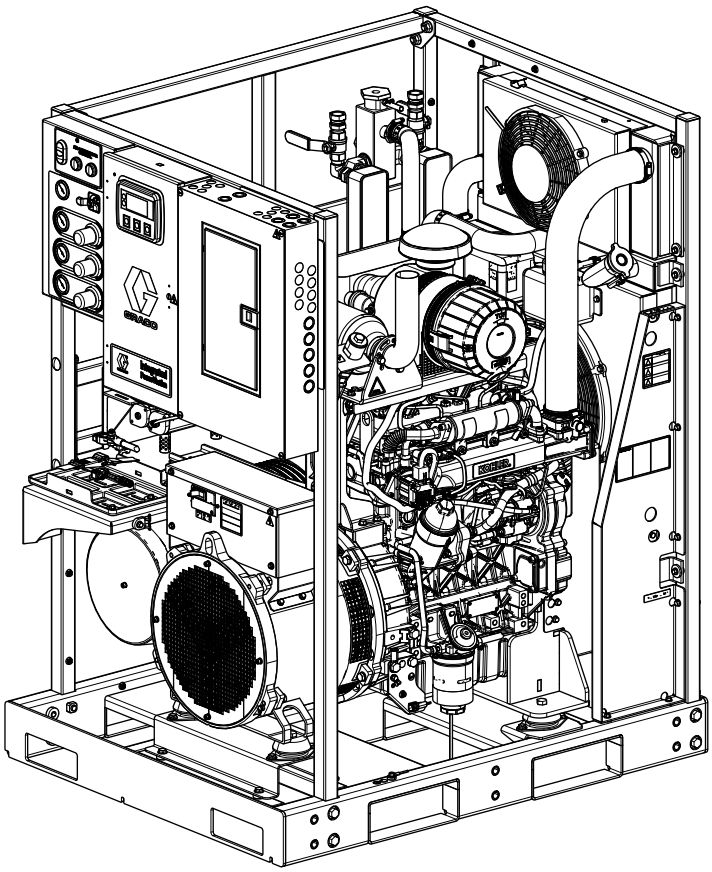
EN

For modular generation of electrical power, fluid heat transfer, and compressed air. For use with Reactor 2™ E-30, E-XP2, H-30, and H-XP2 proportioners only. For professional use only.

See page 3 for model and package information.

Important Safety Instructions

Read all warnings and instructions in this manual and in the Reactor 2 manual before using this equipment. Save these instructions.



PROVEN QUALITY. LEADING TECHNOLOGY.

Contents

Related Manuals

Manual in English	Description
3A6335	Integrated PowerStation (Operation Manual)
3A8714	Integrated PowerStation (Schematics Reference Manual)
333023	Reactor 2 E-30 and E-XP2 Proportioning Systems (Operation Manual)
334945	Reactor 2 Hydraulic Proportioning Systems (Operation Manual)
3A1932	Control Valve Kits (Instruction Manual)
309550	Fusion AP Spray Gun (Operation Manual)

Supplied Manuals

NOTE: See company websites for replacement component manuals.

Manual Description	Compatible with IPS Model
Kohler® Diesel KDI Owner Manual	All models
Mecc Alte® Self-Regulating Alternators Series NPE	All models
Hydrovane® Compressor HV04 (20 cfm)	979201
Hydrovane® Compressor HR07 (35 cfm)	979202
Hankison® Air Dryer HIT20	979201
Hankison® Air Dryer HIT35	979202

Models

Integrated PowerStation (IPS)

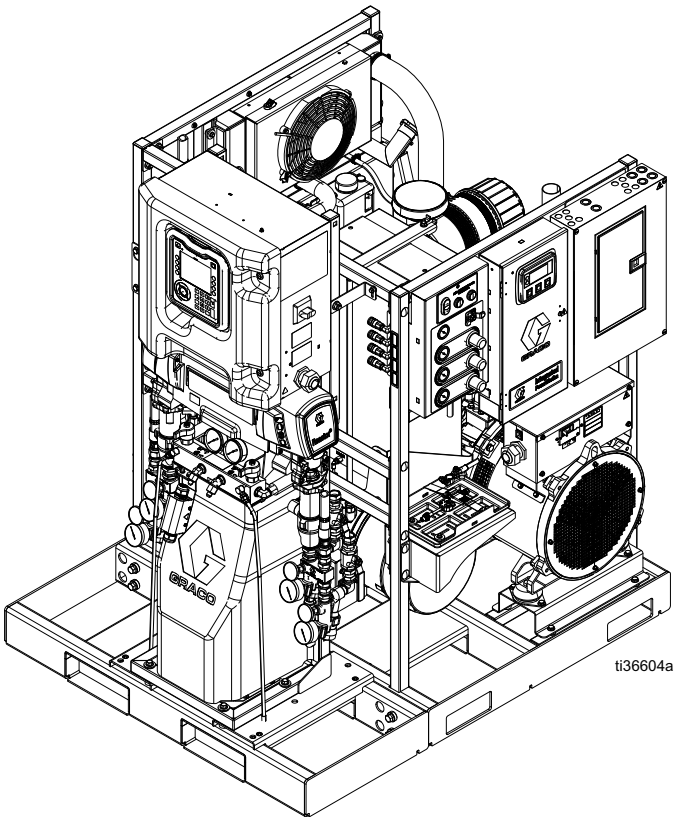
Model	979200	979201	979202
Description	Integrated PowerStation, Tier 4 Final, no air	Integrated PowerStation, Tier 4 Final, 20 cfm	Integrated PowerStation, Tier 4 Final, 35 cfm
Engine	Kohler, KDI1903TCR, 33.6 kWm (continuous)		
Alternator	Mecc Alte, 240 Vac, 1-phase, 60 Hz, 22 kVA		
Auxiliary Power (at 60 Hz)	9.1 kVA (38 A at 240 Vac)*	8.6 kVA (36 A at 240 Vac)*	
Compressor	Not included	Hydrovane, HV04, 20 cfm	Hydrovane, HR07, 35 cfm
Air Dryer	Not included	Hankison, HIT20, 22 cfm	Hankison, HIT35, 35 cfm
Air Controls	Not included	✓	✓

* *Additional power is available with some configurations. See* ***Technical Specifications*** *(page 63) for details.*

Packages

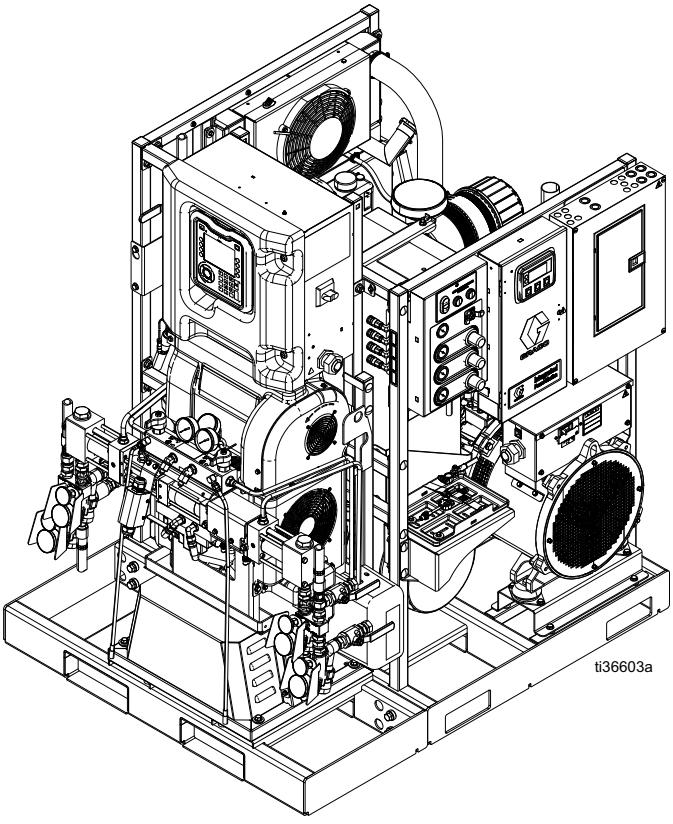
NOTE: Packages do not include a fuel tank or fuel tank pallet extension. Refer to **Accessory Kits**, page 5.

Package	998010	998020	AH8010	AH8020
Integrated PowerStation	979202			
Proportioning System	Reactor 2 E-30 (272010)	Reactor 2 H-30 (17H031)	Reactor 2 E-30 (272010)	Reactor 2 H-30 (17H031)
Reactor 2 Pallet Extension	Included			
Fusion® AP Spray Gun	Not included	Not included	246102	246102
Heated Hose	Not included	Not included	(5)24Y240	(5)24Y240
Heated Whip Hose	Not included	Not included	246050	246050



998010 / AH8010

Integrated PowerStation with Reactor 2 E-30



998020 / AH8020

Integrated PowerStation with Reactor 2 H-30

FIG. 1: Electric and Hydraulic Integrated PowerStation Packages

Accessory Kits

Kit	Part	Description
Fuel Tank Kit	24K390	20 gal. (75.7 L) fuel tank
Fuel Tank Pallet Extension Kit	25E307	Pallet extension to connect the fuel tank to the Integrated PowerStation
Reactor 2 Pallet Extension Kit	25E306	Pallet extension to connect the Reactor 2 proportioner to the Integrated PowerStation
Heat Exchanger Relocation Kit	25B067	Bracket and harness to relocate the heat exchanger assembly

Warnings

The following warnings are for the setup, use, grounding, maintenance, and repair of this equipment. The exclamation point symbol alerts you to a general warning and the hazard symbols refer to procedure-specific risks. When these symbols appear in the body of this manual or on warning labels, refer back to these Warnings. Product-specific hazard symbols and warnings not covered in this section may appear throughout the body of this manual where applicable.

⚠ WARNING


ELECTRIC SHOCK HAZARD

This equipment must be grounded. Improper grounding, setup, or usage of the system can cause electric shock.

- Turn off and disconnect power at main switch before disconnecting any cables and before servicing or installing equipment.
- Connect only to grounded power source.
- All electrical wiring must be done by a qualified electrician and comply with all local codes and regulations.
- Do not expose to rain. Store indoors.


ENTANGLEMENT HAZARD

Rotating parts can cause serious injury.

- Keep clear of moving parts.
- Do not operate equipment with protective guards or covers removed.
- Do not wear loose clothing, jewelry or long hair while operating equipment.
- Equipment can start without warning. Before checking, moving, or servicing equipment, follow the **Pressure Relief Procedure** and disconnect all power sources.

BURN HAZARD

Equipment surfaces and fluid that is heated can become very hot during operation. To avoid severe burns:

- Do not touch hot fluid or equipment.

TOXIC FLUID OR FUMES HAZARD

Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled or swallowed.

- Read Safety Data Sheets (SDSs) for handling instructions and to know the specific hazards of the fluids you are using, including the effects of long-term exposure.
- When spraying, servicing equipment, or when in the work area, always keep work area well-ventilated and always wear appropriate personal protective equipment. See **Personal Protective Equipment** warnings in this manual.
- Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines.

PERSONAL PROTECTIVE EQUIPMENT

Always wear appropriate personal protective equipment and cover all skin when spraying, servicing equipment, or when in the work area. Protective equipment helps prevent serious injury, including long-term exposure; inhalation of toxic fumes, mists or vapors; allergic reaction; burns; eye injury and hearing loss. This protective equipment includes but is not limited to:

- A properly fitting respirator, which may include a supplied-air respirator, chemically impermeable gloves, protective clothing and foot coverings as recommended by the fluid manufacturer and local regulatory authority.
- Protective eyewear and hearing protection.

⚠ WARNING

FIRE AND EXPLOSION HAZARD

Flammable fumes, such as solvent and paint fumes, in **work area** can ignite or explode. Paint or solvent flowing through the equipment can cause static sparking. To help prevent fire and explosion:

- Use equipment only in well-ventilated area.
- Do not fill fuel tank while engine is running or hot; shut off engine and let it cool. Fuel is flammable and can ignite or explode if spilled on hot surface.
- Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static sparking).
- Ground all equipment in the work area. See **Grounding** instructions.
- Never spray or flush solvent at high pressure.
- Keep work area free of debris, including solvent, rags and gasoline.
- Do not plug or unplug power cords, or turn power or light switches on or off when flammable fumes are present.
- Use only grounded hoses.
- Hold gun firmly to side of grounded pail when triggering into pail. Do not use pail liners unless they are anti-static or conductive.
- **Stop operation immediately** if static sparking occurs or you feel a shock**.** Do not use equipment until you identify and correct the problem.
- Keep a working fire extinguisher in the work area.

BATTERY HAZARD

Lead-acid batteries produce explosive gases and contain sulfuric acid that can cause severe burns. To avoid sparks and injury when handling or working with a lead-acid battery:

- Read and follow the battery manufacturer's warnings.
- Exercise caution when working with metallic tools or conductors to prevent short circuits and sparks.
- Keep all sparks, flames, and cigarettes away from batteries.
- Always wear protective eyewear and protective equipment for face, hands, and body.
- If you have direct contact with battery fluid, flush with water and consult a physician immediately.
- Installation and maintenance must be performed by knowledgeable personnel only.

THERMAL EXPANSION HAZARD

Fluids subjected to heat in confined spaces, including hoses, can create a rapid rise in pressure due to the thermal expansion. Over-pressurization can result in equipment rupture and serious injury.

- Open a valve to relieve the fluid expansion during heating.
- Replace hoses proactively at regular intervals based on your operating conditions.

⚠ WARNING

EQUIPMENT MISUSE HAZARD

Misuse can cause death or serious injury.

- Do not operate the unit when fatigued or under the influence of drugs or alcohol.
- Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See **Technical Specifications** in all equipment manuals.
- Use fluids and solvents that are compatible with equipment wetted parts. See **Technical Specifications** in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request Safety Data Sheets (SDSs) from distributor or retailer.
- Do not leave the work area while equipment is energized or under pressure.
- Turn off all equipment and follow the **Pressure Relief Procedure** when equipment is not in use.
- Check equipment daily. Repair or replace worn or damaged parts immediately with genuine manufacturer's replacement parts only.
- Do not alter or modify equipment. Alterations or modifications may void agency approvals and create safety hazards.
- Make sure all equipment is rated and approved for the environment in which you are using it.
- Use equipment only for its intended purpose. Call your distributor for information.
- Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces.
- Do not kink or over bend hoses or use hoses to pull equipment.
- Keep children and animals away from work area.
- Comply with all applicable safety regulations.

PRESSURIZED EQUIPMENT HAZARD

Fluid from the equipment, leaks, or ruptured components can splash in the eyes or on skin and cause serious injury.

- Follow the **Pressure Relief Procedure** when you stop spraying/dispensing and before cleaning, checking, or servicing equipment.
- Tighten all fluid connections before operating the equipment.
- Check hoses, tubes, and couplings daily. Replace worn or damaged parts immediately.

PRESSURIZED ALUMINUM PARTS HAZARD

Use of fluids that are incompatible with aluminum in pressurized equipment can cause serious chemical reaction and equipment rupture. Failure to follow this warning can result in death, serious injury, or property damage.

- Do not use 1, 1, 1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents.
- Do not use chlorine bleach.
- Many other fluids may contain chemicals that can react with aluminum. Contact your material supplier for compatibility.

CARBON MONOXIDE HAZARD

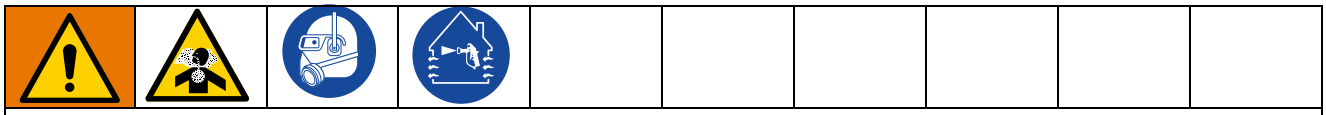
Exhaust contains poisonous carbon monoxide, which is colorless and odorless. Breathing carbon monoxide can cause death.

- Do not operate in an enclosed area.

Important Isocyanate Information

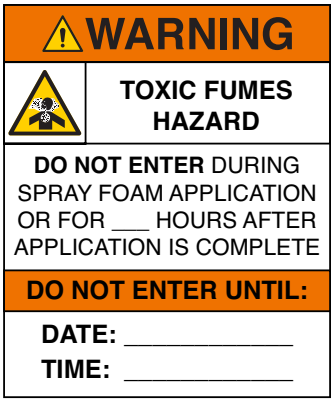
Isocyanates (ISO) are catalysts used in two component materials.

Isocyanate Conditions



Spraying or dispensing fluids that contain isocyanates creates potentially harmful mists, vapors, and atomized particulates.

- Read and understand the fluid manufacturer's warnings and Safety Data Sheets (SDSs) to know specific hazards and precautions related to isocyanates.
- Use of isocyanates involves potentially hazardous procedures. Do not spray with this equipment unless you are trained, qualified, and have read and understood the information in this manual and in the fluid manufacturer's application instructions and SDSs.
- Use of incorrectly maintained or mis-adjusted equipment may result in improperly cured material, which could cause off gassing and offensive odors. Equipment must be carefully maintained and adjusted according to instructions in the manual.
- To prevent inhalation of isocyanate mists, vapors and atomized particulates, everyone in the work area must wear appropriate respiratory protection. Always wear a properly fitting respirator, which may include a supplied-air respirator. Ventilate the work area according to instructions in the fluid manufacturer's SDSs.
- Avoid all skin contact with isocyanates. Everyone in the work area must wear chemically impermeable gloves, protective clothing and foot coverings as recommended by the fluid manufacturer and local regulatory authority. Follow all fluid manufacturer recommendations, including those regarding handling of contaminated clothing. After spraying, wash hands and face before eating or drinking.
- Hazard from exposure to isocyanates continues after spraying. Anyone without appropriate personal protective equipment must stay out of the work area during application and after application for the time period specified by the fluid manufacturer. Generally this time period is at least 24 hours.
- Warn others who may enter work area of hazard from exposure to isocyanates. Follow the recommendations of the fluid manufacturer and local regulatory authority. Posting a placard such as the following outside the work area is recommended:



Material Self-ignition

Some materials may become self-igniting if applied too thick. Read material manufacturer's warnings and Safety Data Sheets (SDSs).

Keep Components A and B Separate

Cross-contamination can result in cured material in fluid lines which could cause serious injury or damage equipment. To prevent cross-contamination:

- **Never** interchange component A and component B wetted parts.
- Never use solvent on one side if it has been contaminated from the other side.

Changing Materials

NOTICE

Changing the material types used in your equipment requires special attention to avoid equipment damage and downtime.

- When changing materials, flush the equipment multiple times to ensure it is thoroughly clean.
- Always clean the fluid inlet strainers after flushing.
- Check with your material manufacturer for chemical compatibility.
- When changing between epoxies and urethanes or polyureas, disassemble and clean all fluid components and change hoses. Epoxies often have amines on the B (hardener) side. Polyureas often have amines on the B (resin) side.

Moisture Sensitivity of Isocyanates

Exposure to moisture (such as humidity) will cause ISO to partially cure, forming small, hard, abrasive crystal that become suspended in the fluid. Eventually a film will form on the surface and the ISO will begin to gel, increasing in viscosity.

NOTICE

Partially cured ISO will reduce performance and the life of all wetted parts.

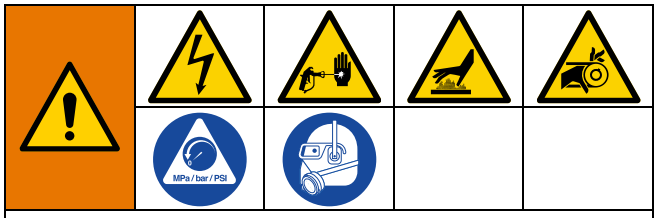
- Always use a sealed container with a desiccant dryer in the vent, or a nitrogen atmosphere. **Never** store ISO in an open container.
- Keep the ISO pump wet cup or reservoir (if installed) filled with appropriate lubricant. The lubricant creates a barrier between the ISO and the atmosphere.
- Use only moisture-proof hoses compatible with ISO.
- Never use reclaimed solvents, which may contain moisture. Always keep solvent containers closed when not in use.
- Always lubricate threaded parts with an appropriate lubricant when reassembling.

NOTE: The amount of film formation and rate of crystallization varies depending on the blend of ISO, the humidity, and the temperature.

Foam Resins with 245 fa Blowing Agents

Some foam blowing agents will froth at temperatures above 90°F (33°C) when not under pressure, especially if agitated. To reduce frothing, minimize preheating in a circulation system.

Repair



Repairing this equipment requires access to parts that may cause electric shock or other serious injury if work is not performed properly. Be sure to shut off all power to the equipment before repairing.

Before Beginning Repair

NOTICE

Proper system setup, startup, and shutdown procedures are critical to electrical equipment reliability. The following procedures ensure steady voltage. Failure to follow these procedures will cause voltage fluctuations that can damage electrical equipment and void the warranty.

1. Flush the system. Perform **Flushing** in your Reactor 2 manual.

NOTE: Completing the **Flushing** procedure in your Reactor 2 manual will flush A (ISO) and B (resin) from the Integrated PowerStation secondary heat exchangers.

2. Shut down the system. Follow the **Daily Shutdown** procedure in the Integrated PowerStation Operation manual.

Drain Coolant

To avoid injury from hot surfaces or splashing coolant, do not perform maintenance on the coolant system until the coolant system has reached ambient temperature.

Drain coolant from the engine and heat exchanger coolant loops once a year. Drain coolant from the heat exchanger coolant loop if the coolant lines need to be disconnected to install the heat exchanger relocation kit (25B067).

Drain the Secondary Heat Exchanger Coolant Loop

1. Shut down the system. Follow the **Daily Shutdown** procedure in the Integrated PowerStation Operation manual.

2. Open the engine controls enclosure.

3. Turn on the manual coolant valve switches (VA, VB, VC) to manually open the A, B, and bypass coolant valves.

NOTE: The battery must be connected to operate the coolant valves. The load center (502) LEDs will stay on when the manual valve control switches are in the on position.

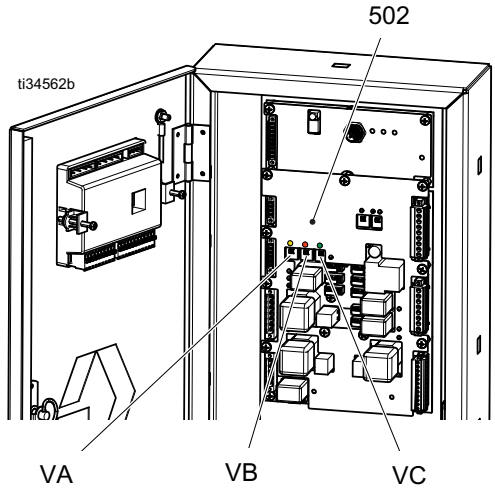


FIG. 2

LED Component	LED Color
A-side Control Valve	Red
B-side Control Valve	Blue
Bypass Valve	Green

4. Remove the cap (40b) of the heat exchanger coolant manifold bottle (40a).

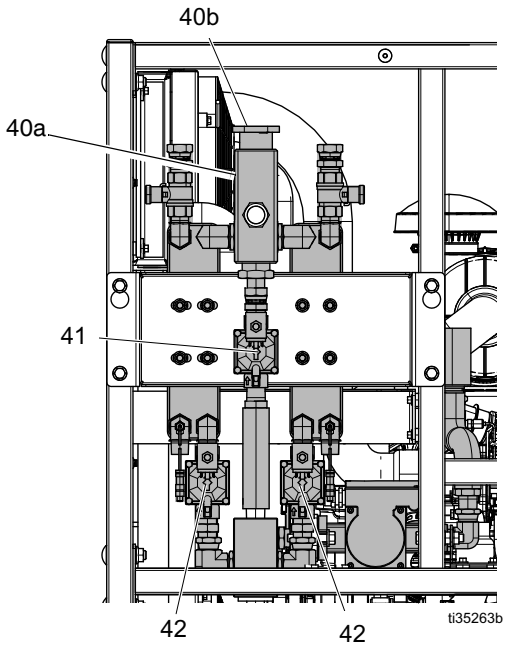


FIG. 3

5. Place a waste container under the drip tray. Secure the handle of the container using the raised edges on the drip tray.

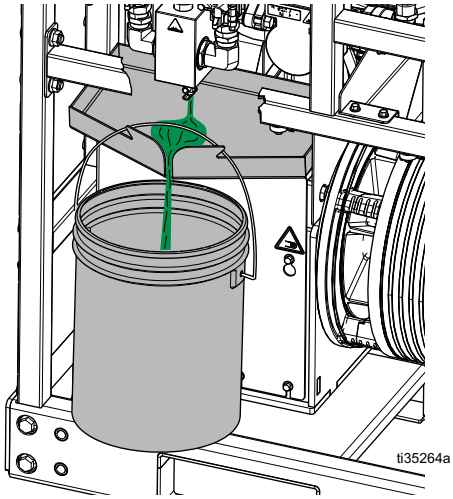


FIG. 4

6. Open the heat exchanger coolant drain (43g).

NOTE: The heat exchanger coolant drain is reverse thread.

7. Remove the heat exchanger coolant loop filter (43d) from the heat exchanger lower manifold (43a). No more than 25% of the filter can be blocked. If more than 25% of the filter is blocked and cannot be cleaned, replace the filter (43d).

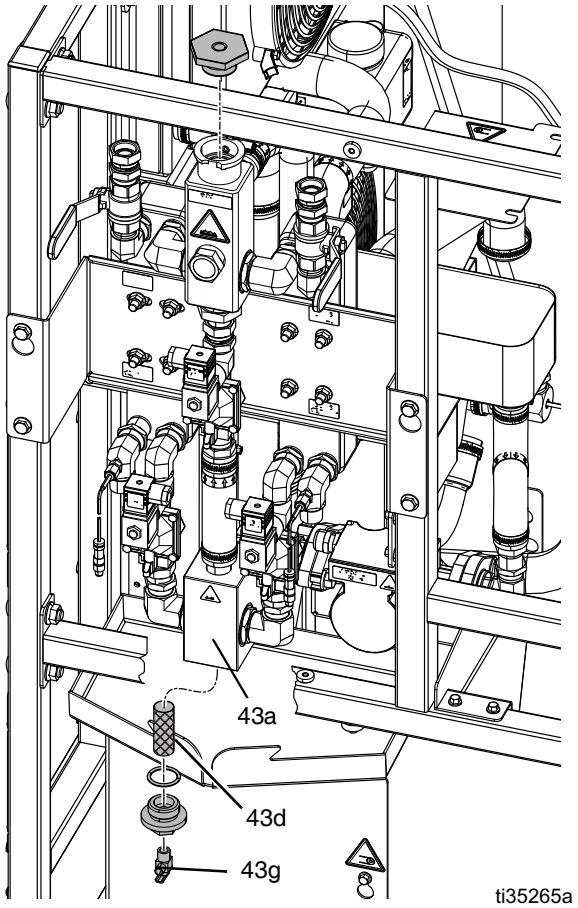


FIG. 5

8. Reassemble filter (43d) into the lower manifold (43a) and close heat exchanger coolant drain (43g).

9. Refill the coolant loop. See **Refill Heat Exchanger Coolant Loop**, page 14.

10. Turn off the manual coolant valve switches (VA, VB, VC) to close the A, B, and bypass coolant valves.

11. Close the engine controls enclosure.

Drain the Engine Coolant Loop

1. Shut down the system. Follow the **Daily Shutdown** procedure in the Integrated PowerStation Operation manual.

2. Remove the protective cover from the negative battery terminal. Disconnect the black battery cable with the negative lug from the negative (-) terminal of the battery. See **Replace Battery**, page 25.

3. Remove the engine coolant loop radiator cap (57).

4. Remove the engine guard.

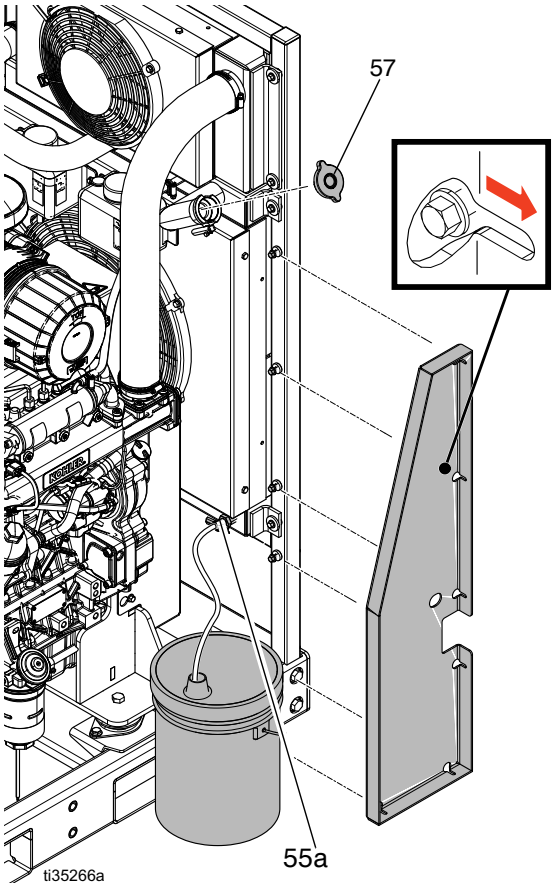


FIG. 6

5. Place a waste container under the radiator drain valve (55a).

6. Open the radiator drain valve (55a) and drain the coolant. Close valve (55a) when complete.

NOTE: The radiator drain valve (55a) is reverse thread.

NOTE: To direct flow into the waste container, insert a 1/4 in. OD push-to-connect tube into the drain valve.

7. Refill the coolant loop. See **Refill Engine Coolant Loop**, page 15.

8. Fasten the engine shroud (64) securely.

9. Connect the black battery cable with the negative lug to the negative (-) terminal of the battery. Cover the battery terminal with the protective cover attached to the supplied battery cable. See **Replace Battery**, page 25.

Refill Heat Exchanger Coolant Loop

Purge air from the heat exchanger coolant loop when it is filled with new coolant or when air enters the coolant system.

NOTE: It takes one full warm-up and cool-down cycle to purge air from the coolant.

To avoid burns, or injury from splashing coolant, do not perform maintenance on the coolant system until the coolant system has reached ambient temperature.

Only use coolant solutions that are compatible with the system. See **Coolant Specifications**, page 16.

NOTICE

Do not refill with drained coolant. Use only fresh, new coolant to avoid contaminants.

NOTICE

Do not use any “stop leak” additives, to prevent plugged filters and small orifices.

1. Before refilling the coolant, perform steps 1-3 in **Drain Coolant**, page 11.

NOTICE

To prevent leaks, do not interchange the two caps between the radiator and coolant bottle. The caps have different pressure ratings that affect the flow.

2. Remove the caps from the heat exchanger coolant manifold bottle (40a) and heat exchanger coolant expansion bottle (70).

3. Fill the heat exchanger coolant manifold bottle (40a) to the top.

4. Fill the heat exchanger coolant expansion bottle (70) so the coolant is at the cold fill line. See **Coolant Specifications**, page 16.

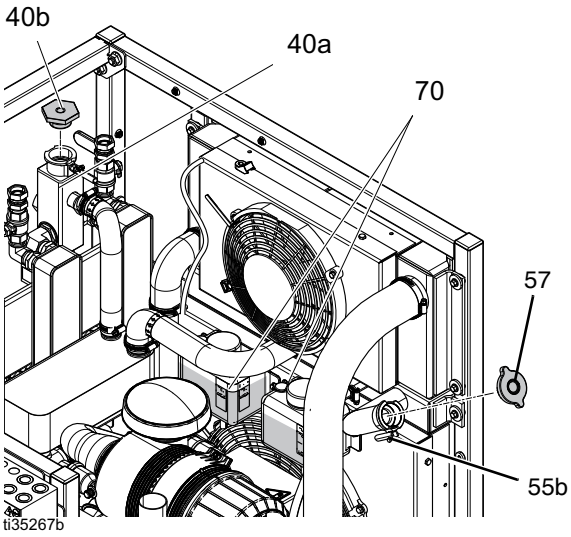


FIG. 7

5. Replace the caps for the heat exchanger coolant manifold and heat exchanger coolant expansion bottles.

6. Press the start button on the engine control module twice.

7. Turn the main 90 A circuit breaker (229) to on.

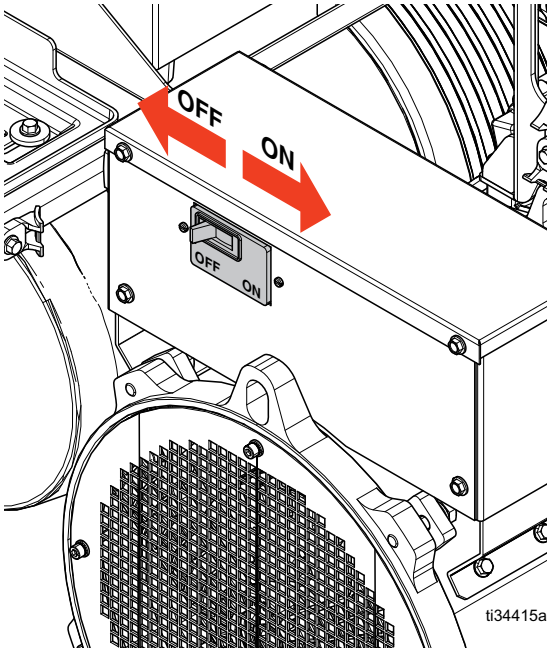


FIG. 8: Main 90 A Circuit Breaker Power Switch

8. Inspect the coolant flow in the heat exchanger coolant fill sight glass. Verify that the coolant is flowing and no bubbles are visible.

9. Inspect the coolant loops for leaking fittings or valves.

10. When the coolant reaches an operating temperature of 185 °F (85 °C) or higher, turn the main 90 A circuit breaker (229) to off. See FIG. 8.

11. Press the stop button  to stop the generator.

12. Once the coolant system temperature cools to ambient temperature, fill the heat exchanger expansion bottle to the cold level indicator line.

13. Turn off the manual coolant valve switches (VA, VB, VC) to close the A, B, and bypass coolant valves.

NOTE: When the manual coolant valve switches are in the off position, the load center (502) LEDs only turn on when the system opens the valves during normal operation.

Refill Engine Coolant Loop

To avoid burns, or injury from splashing coolant, do not perform maintenance on the coolant system until the coolant system has reached ambient temperature.

Refill the engine coolant loop when the coolant is below the cold level line at ambient temperature.

Only use coolant solutions that are compatible with the system. See **Coolant Specifications**, page 16.

NOTICE

Do not refill with drained coolant. Use only fresh, new coolant to avoid contaminants.

NOTICE

Do not use any “stop leak” additives, to prevent plugging of filters and small orifices.

1. Shut down the system. Refer to the **Daily Shutdown** procedure in the Integrated PowerStation Operation manual.

NOTICE

To prevent leaks, do not interchange the engine coolant fill cap (57) and the heat exchanger coolant manifold bottle cap (40b). The caps have different pressure ratings that affect the overflow.

2. Remove the engine coolant fill cap (57).

3. Fill the engine coolant fill port with coolant. Fill to the engine coolant expansion port barb fitting (55b). See FIG. 7, page 14.

4. Replace the engine coolant fill cap (57).

5. Remove the cap (40b) from the heat exchanger coolant manifold bottle (40a).

6. Fill the heat exchanger coolant manifold bottle (40a) until the coolant is at the hot level.

7. Reinstall the heat exchanger coolant manifold bottle cap (40b).

8. Press the start button  on the engine control module twice.

9. Turn the main 90 A circuit breaker (229) to on. See FIG. 8, page 14.

10. Inspect the coolant loops for leaking fittings or valves.

11. When the coolant reaches an operating temperature of 185 °F (85 °C) or higher, turn the main 90 A circuit breaker to off. See FIG. 8, page 14.

12. Press the stop button  to stop the generator.

13. After the engine coolant lowers to ambient temperature, fill heat exchanger coolant manifold bottle (40a) until the coolant reaches the cold level.

14. Repeat steps 1-13 until the coolant level stays at the cold level when at ambient temperature. It make take a few engine cycles to remove all of the air from the coolant system.

Coolant Specifications

Heat Exchanger Coolant Loop

NOTICE

Do not refill with straight water or tap water. Changing the 50% mix ratio will allow fittings to rust.

Refill the heat exchanger coolant loop with a solution of 50% distilled or soft water and 50% green ethylene glycol antifreeze with a corrosion inhibitor.

NOTICE

Do not use common tap water. Tap water contains chlorides and minerals which will form scale on the coolant system walls.

NOTICE

Do not use any stop leak products. The additives in stop leak products will clog the heat exchanger and fluid valves, decreasing system performance.

Engine Coolant

Refer to your Kohler manual for approved engine coolant. See **Related Manuals**, page 3.

Replace Load Center

1. Shut down the system. Follow the **Daily Shutdown** procedure in the Integrated PowerStation Operation manual.
2. Remove the protective cover from the negative battery terminal. Disconnect the black battery cable with the negative lug from the negative (-) terminal of the battery. See **Replace Battery**, page 25.
3. Open the engine controls enclosure door and disconnect all load center connectors.
4. Remove four nuts (506) and the existing Load Center (502).
5. Install the new Load Center (502). Reconnect all connectors. Tighten any retaining screws on the connectors
6. Connect the black battery cable with the negative lug to the negative (-) terminal of the battery. Cover the battery terminal with the protective cover attached to the supplied battery cable. See **Replace Battery**, page 25.

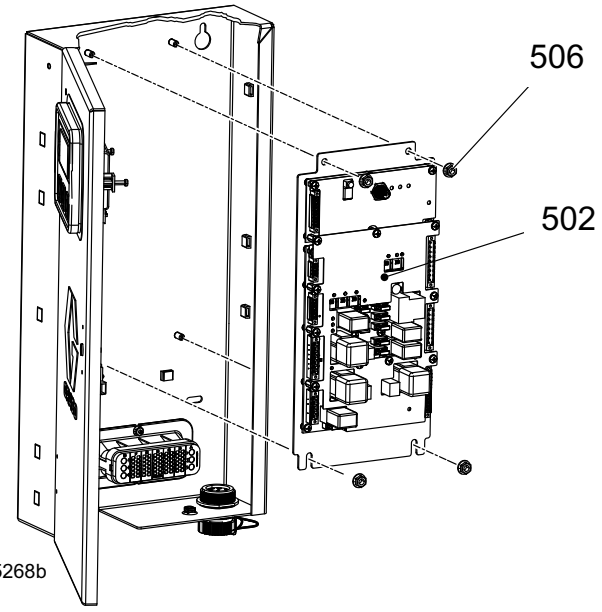
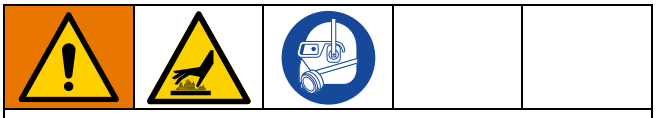


FIG. 9

Replace Fans



To avoid burns, do not perform maintenance on the fan until the system has reached ambient temperature.

Replace Radiator Fan

1. Shut down the system. Follow the **Daily Shutdown** procedure in the Integrated PowerStation Operation manual.
2. Disconnect the fan power cable.
3. Remove four screws (71) and the existing radiator fan (56).
4. Install the new fan (56) to the radiator bracket with four screws (71).
5. Connect the fan power cable.

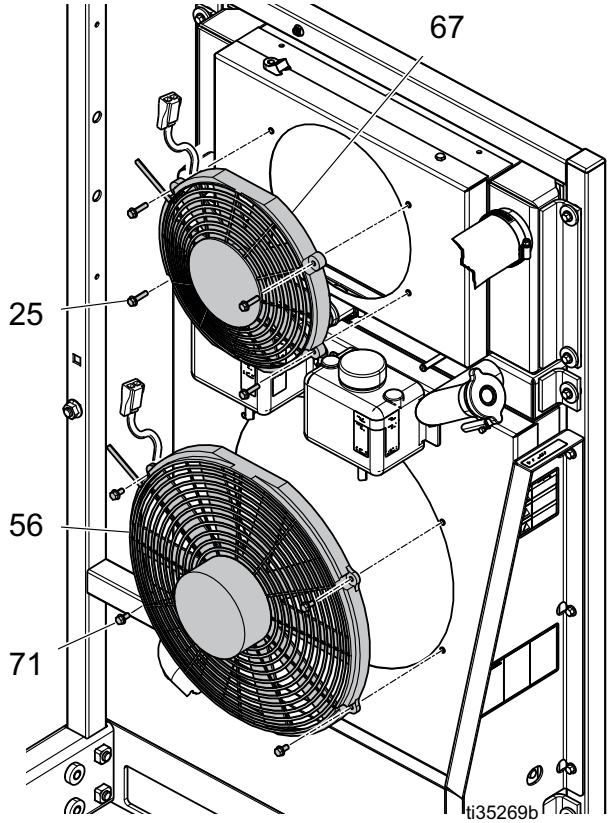


FIG. 10: Replace Fans

Replace Charge Air Cooler (CAC) Fan

1. Shut down the system. Follow the **Daily Shutdown** procedure in the Integrated PowerStation Operation manual.
2. Disconnect the fan power cable.
3. Remove four screws (25) and the existing CAC fan (67).
4. Install the new fan (67) to the CAC bracket with four screws (25).
5. Connect the fan power cable.

Replace HX-A and HX-B Single-Sided Heat Exchangers

NOTE: Refer to FIG. 11 to replace the HX-A and HX-B single-sided heat exchangers (35).

1. Shut down the system. Follow the **Daily Shutdown** procedure in the Integrated PowerStation Operation manual.

1. Drain the coolant. Follow **Drain Coolant**, page 11.

2. Close the HX-A and HX-B inlet ball valves (81).

3. Place a waste container under the drip tray (77). Secure the handle of the container using the raised edges on the tray. See FIG. 4, page 12.

4. Remove the HX-A and HX-B outlet elbow fitting (37) from the heat exchangers (35).

NOTE: Drain the heat exchanger chemicals into separate waste containers to avoid chemical reaction.

5. Remove the HX-A and HX-B inlet elbow fitting (83) from the heat exchangers (35).

6. Remove the eight nuts (115) holding HX-A and HX-B (35) to the mounting bracket.

7. Remove the coolant elbow fittings (40c, 42c) from the HX-A and HX-B (35) coolant inlet and outlet ports.

8. Remove the HX-A and HX-B single-sided heated exchangers (35) and eight washers (34).

9. Install the replacement HX-A and HX-B single-sided heat exchangers (35). Use one washer (34) for each stud to hold the heat exchangers off of the mounting bracket (33).

10. Install the coolant elbow fittings (40c) to the HX-A and HX-B coolant outlet ports.

11. Install the coolant heat exchanger valves (42c) to the HX-A and HX-B coolant inlet ports.

12. Install the eight nuts (115) to secure the heat exchangers (35) to the mounting bracket (33).

13. Install the HX-A and HX-B inlet elbow fittings (83) and outlet elbow fittings (37) to the heat exchangers (35).

14. Open the HX-A and HX-B inlet ball valves (81).

15. Refill the heat exchanger coolant loop. Follow **Refill Heat Exchanger Coolant Loop**, page 14.

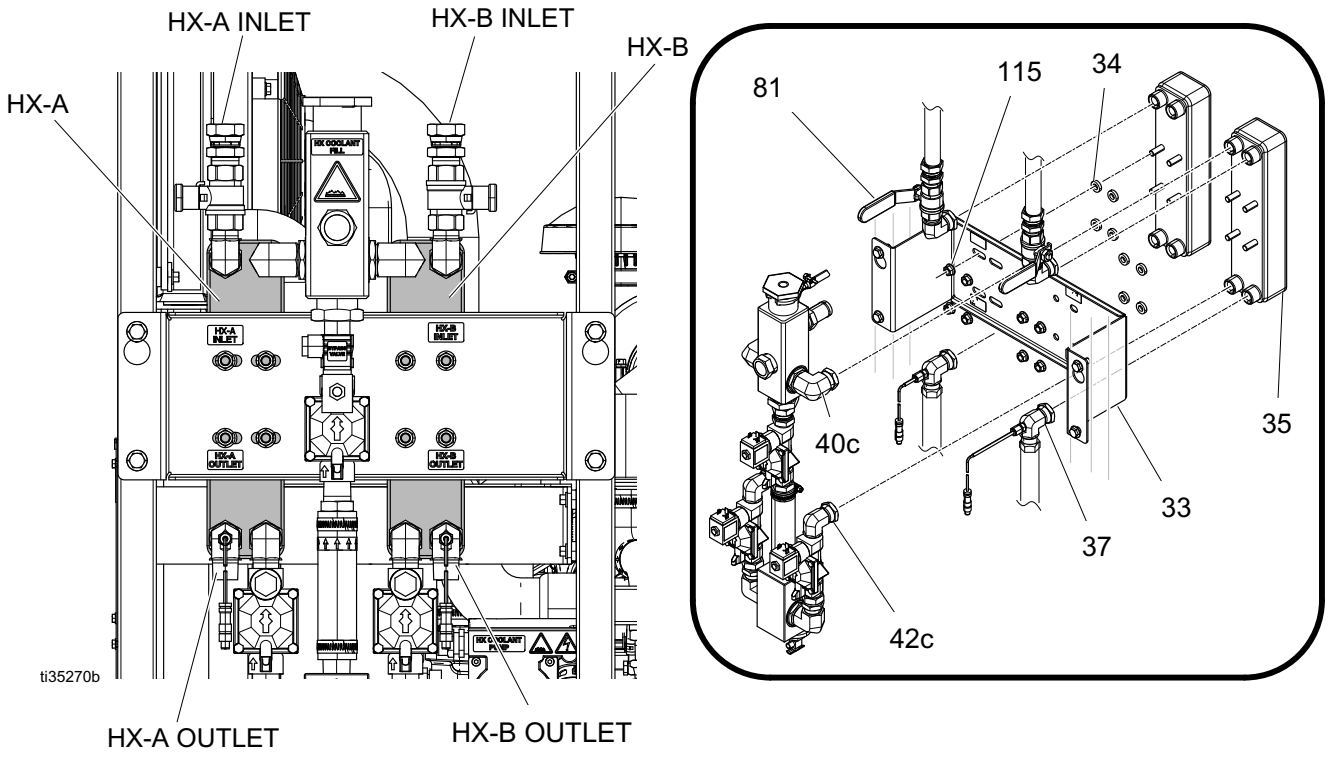


FIG. 11: Replace Single-Sided Heat Exchangers

Replace Primary Heat Exchanger

NOTE: Refer to FIG. 12 to replace the primary heat exchanger (50).

1. Shut down the system. Follow the **Daily Shutdown** procedure in the Integrated PowerStation Operation manual.
2. Drain the coolant. Follow **Drain Coolant**, page 11.
3. Disconnect three coolant hoses (52, 54, 59) and the elbow fitting (51) from the heat exchanger.
4. Remove four nuts (115), four washers (34), and the primary heat exchanger (50) from the primary heat exchanger bracket (49).
5. Install the new primary heat exchanger (50) onto the bracket (49). Use four washers (34) and four nuts (115).
6. Connect three coolant hoses (52, 54, 59) and the elbow fitting to the new heat exchanger.
7. Refill the heat exchanger coolant loop and the engine coolant loop. Follow **Refill Heat Exchanger Coolant Loop**, page 14, and **Refill Engine Coolant Loop**, page 15.

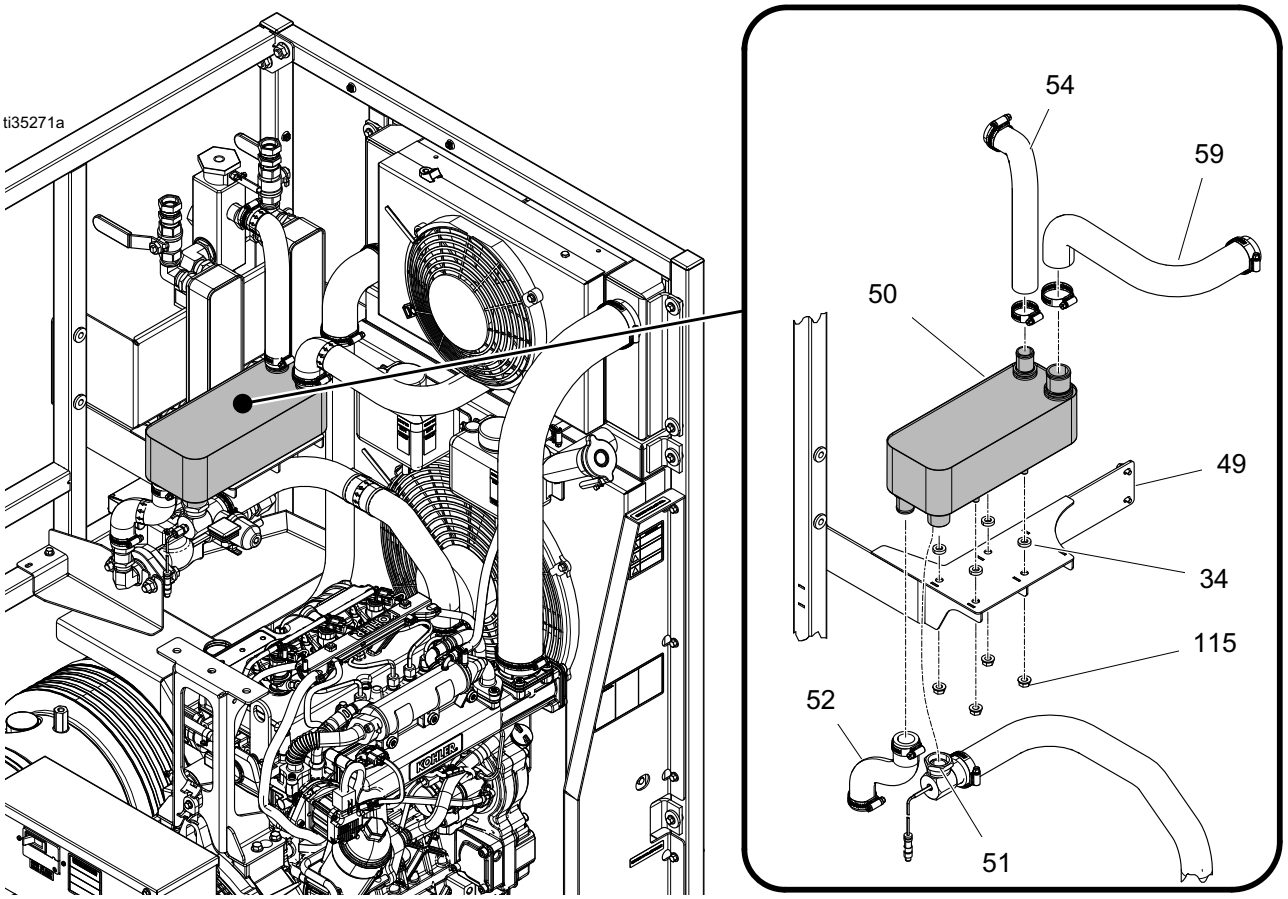
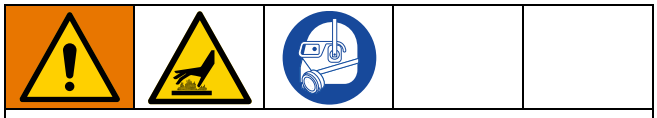


FIG. 12: Replace Primary Heat Exchanger

Replace Heat Exchanger RTD



To prevent burns, do not perform maintenance on the coolant system until the coolant system has reached ambient temperature.

1. Shut down the system. Follow the **Daily Shutdown** procedure in the Integrated PowerStation Operation manual.

1. Wait until the coolant temperature has cooled to room temperature before proceeding to step 3.

2. Close the HX-A and HX-B inlet ball valves (81).

3. Disconnect the RTD from the extension cable.

4. Place a waste container under the drip tray (77). Secure the handle of the container using the raised edges on the tray. See FIG. 4, page 12.

5. Remove the compression nut fitting (38) and the engine coolant RTD (39).

NOTE: The RTD probe cannot be removed from the compression nut.

NOTICE

To prevent property damage due to improper application of materials, ensure accurate temperature readings by using RTD Kit 24L972.

6. Tighten the new compression fitting (38) onto the engine coolant RTD (39). To prevent the compression fitting from clamping on the RTD wires, leave 1/8 in. (3 mm) of sheath exposed.

7. Apply thread sealant to the compression fitting (38) pipe threads.

8. Install the compression fitting (38) into the heat exchanger elbow fitting (37).

9. Connect the new RTD to the extension cable.

10. Open the HX-A and HX-B inlet ball valves (81).

11. To remove air trapped in the heat exchangers, use the **Circulate** procedure in your Reactor 2 proportioner manual to push A (ISO) and B (Resin) through the system. See **Related Manuals**, page 3.

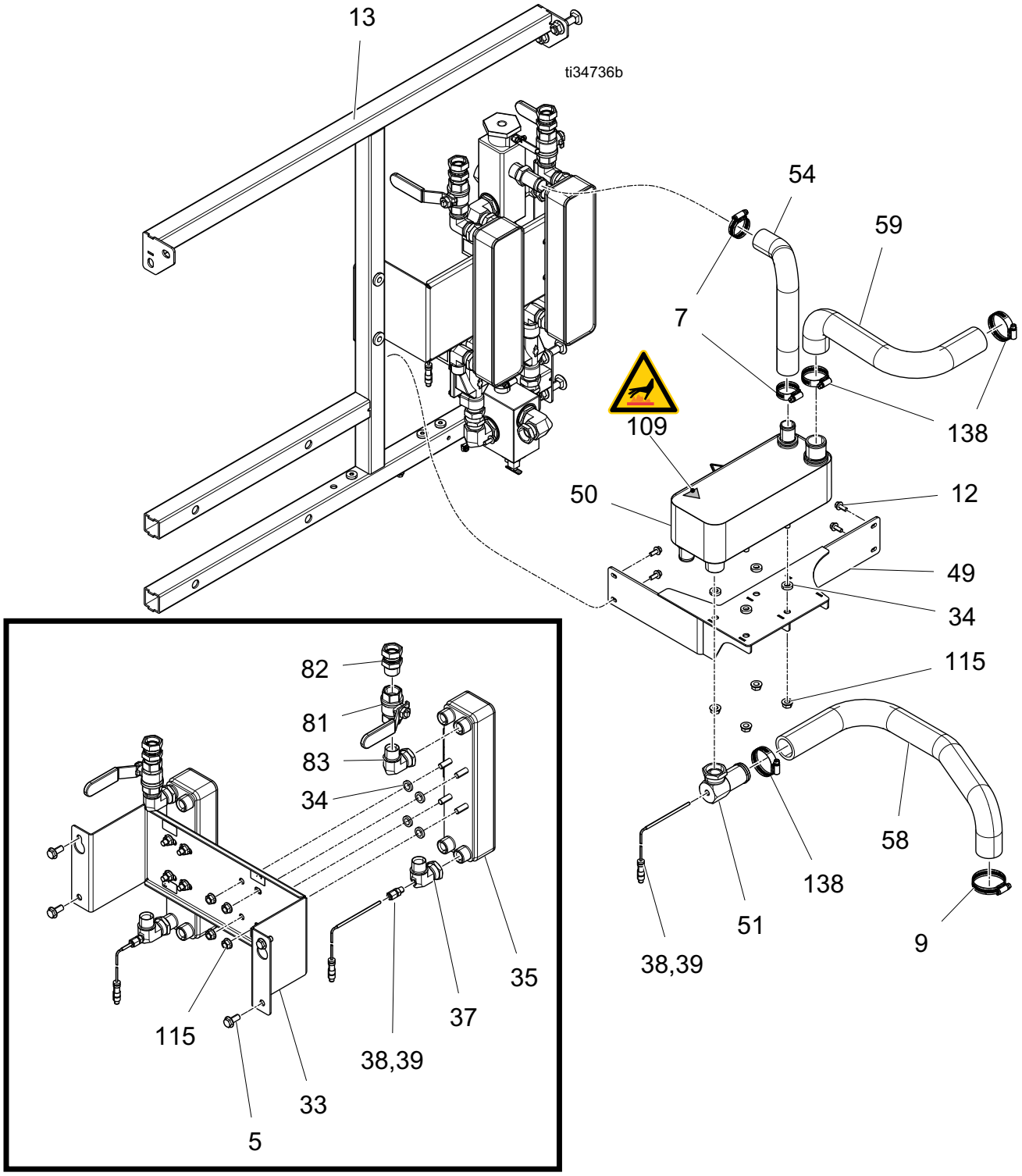

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FIG. 13

Repair or Replace Solenoid Valve

To prevent burns, do not perform maintenance on the coolant system until the coolant system has reached ambient temperature.

Follow these instructions to replace a control valve solenoid coil or repair the component A, component B, coolant bypass, or air relief control valve.

Replace Control Valve Solenoid Coil

1. Shut down the system. Follow the **Daily Shutdown** procedure in the Integrated PowerStation Operation manual.
2. **If replacing the solenoid coil on a coolant control valve:** allow heat exchanger coolant to cool to room temperature before proceeding to next step.
3. Repair the solenoid coil (42f):
   a. Loosen the connector screw from valve harness (42a).
   b. Disconnect the control valve harness (42a) from the coil (42f).
   c. Remove and save the nut (42g) and washer (42h) from the coil (42f).
   d. Install Valve Repair Kit 125774. For complete installation instructions, refer to the control valve kits manual. See **Related Manuals**, page 3.

Repair Coolant Control Valve

1. Shut down the system. Follow the **Daily Shutdown** procedure in the Integrated PowerStation Operation manual.
2. Allow heat exchanger coolant to cool to room temperature before proceeding to next step.
3. Drain the coolant from the heat exchanger coolant loop. Follow **Drain Coolant**, page 11.
4. Repair the control valve.
   a. Remove and save the four nuts (42d) and washers (42e) to separate the solenoid valve body (42a).
   b. Install Valve Coil Replacement Kit 125787. For complete installation instructions, refer to the control valve kits manual. See **Related Manuals**, page 3.

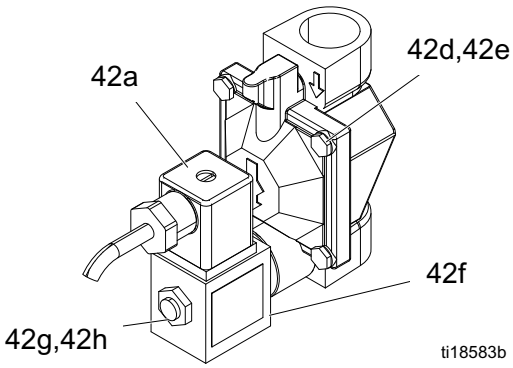


FIG. 14: Control Valve

Repair Air Relief Control Valve

To repair the air relief control valve (90):

1. Remove hose (93) from inlet fitting (91).
2. Loosen the connector screw and disconnect the air valve harness from the air Relief control valve (90).
3. Remove the tee fitting (92) from the air dryer (75).
4. Remove the existing air relief control valve (90) from the tee fitting (92).
5. Install the new air control relief valve (90) onto the tee fitting (92).
6. Install the tee fitting (92) onto the air dryer (75).
7. Connect the harness to the air solenoid coil (90) and tighten connector screw.
8. Install hose (93) to inlet fitting (91).

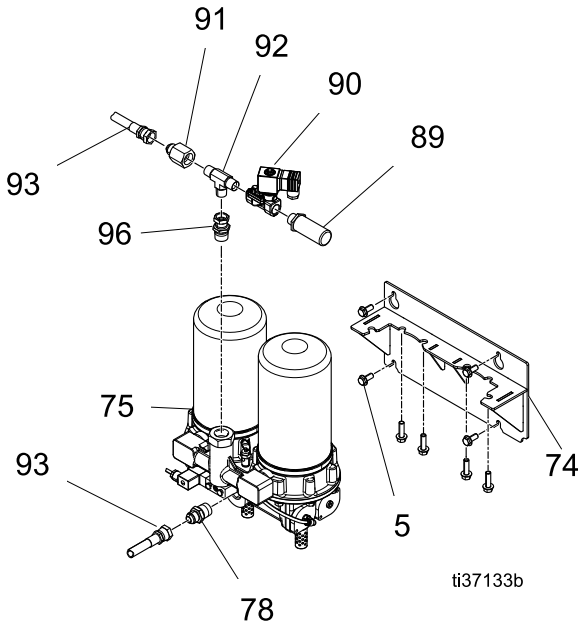
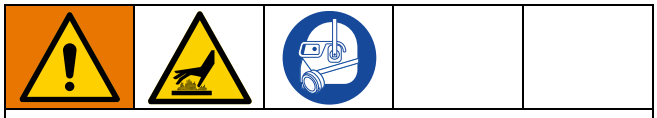


FIG. 15: Air Dryer

Replace Circulation Pump



To prevent burns, do not perform maintenance on the coolant system until the coolant system has reached ambient temperature.

1. Shut down the system. Follow the **Daily Shutdown** procedure in the Integrated PowerStation Operation manual.
2. Drain the coolant. Follow **Drain Coolant**, page 11.
3. Remove the two bolts (12) that connect the pump bracket (45) to the frame.
4. Remove the drip tray (77).
5. Remove the two nuts (46) between the pump bracket (45) and the circulation pump assembly (44).
6. Remove the black cover (44a) from the pump to expose the electrical connections.
7. Press in the spring tabs located under the cover (44a) to disconnect the power wires from the pump. Loosen the strain relief (44h) to remove the wires from the pump housing.
8. Disconnect the swivel fitting connections from fittings (44c, 44e) at each end of the pump assembly (44).
9. Remove the existing circulation pump assembly (44) from the Integrated PowerStation.
10. Install the new circulation pump assembly (44). Remount the pump assembly with new gaskets (44k) between the pump and flanges (43b).
11. Connect the swivel fitting connections to the fittings (44c, 44e) at each end of the pump assembly (44).
12. Install the pump bracket (45) with two nuts (46) and two bolts (12).
13. Connect the power wires and install the black cover (44a) on the pump. Connect the green wire to the ground terminal, the black wire to “N,” and the red wire to “L.”

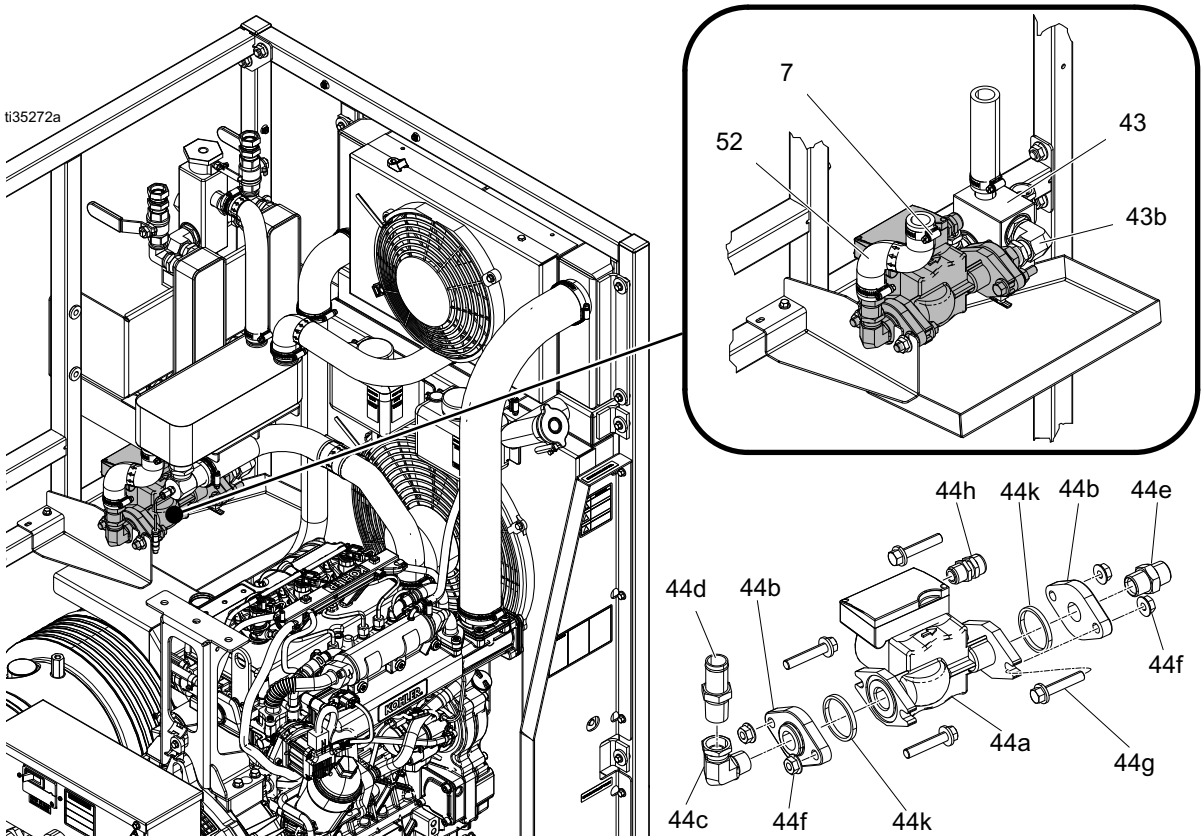
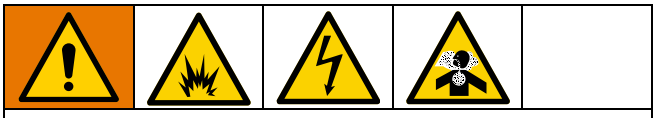


FIG. 16

Replace Battery



Improper battery installation or maintenance may result in electric shock, chemical burns, or explosion. Battery maintenance must only be performed or supervised by personnel knowledgeable of batteries and the required precautions. Keep unauthorized personnel away from batteries.

Battery Requirements	
Voltage	12 Vdc
Minimum Cold Cranking Amps (CCA)	800 CCA
Connection Type	Post

1. Remove the protective covers from the battery terminals.
2. Disconnect the black battery cable with the negative lug from the negative (-) terminal of the battery.
3. Disconnect the red battery cable with the positive lug from the positive (+) terminal of the battery.
4. Disconnect the strap.
5. Remove the battery from the tray. Dispose of the battery according to local codes and regulations.
6. Install the new battery onto the tray. Position the red, positive (+) battery terminal near the outer edge of the system.
7. Secure the battery with the strap.
8. Connect the red battery cable with the positive lug to the positive (+) terminal of the battery.
9. Connect the black battery cable with the negative lug to the negative (-) terminal of the battery.

NOTE: When the black battery cable is connected, the system is energized.

NOTICE

Always connect the red battery cable to the positive (+) battery terminal and the black battery cable to the negative (-) battery terminal. Failure to properly connect the battery cable to the battery will damage the fusible link harness. Do not bypass the fusible link when damaged. The fusible link prevents damage to other system components.

10. Cover the battery terminals with the protective cover attached to the supplied battery cable.

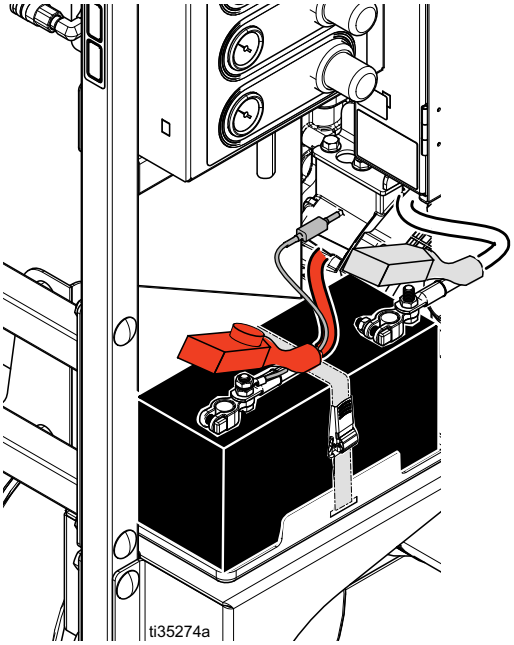
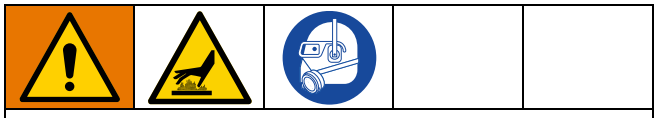


FIG. 17

Remove Radiator



To prevent burns, do not perform maintenance on the coolant system until the coolant system has reached ambient temperature.

NOTICE

Do not damage the fins on the radiator. Damaged radiator fins may result in poor radiator performance or cause a coolant leak.

1. Drain the engine coolant loop. Follow **Drain Coolant**, page 11.
2. Remove the protective cover from the negative battery terminal. Disconnect the black battery cable with the negative lug from the negative (-) terminal of the battery. See **Replace Battery**, page 25.
3. Remove three coolant hose connections.
4. Remove the guard (64).
5. Remove two bolts (71) and the heat exchanger coolant loop overflow bottle (70) from the radiator assembly (55).
6. Remove the four serrated bolts that secure the radiator to the frame.
7. Carefully swing the bottom of the radiator towards the engine and lower the radiator towards the pallet/floor.
8. Remove the radiator by sliding the radiator towards the exterior of the pallet,
9. Inspect the radiator for any obstructions. Replace or service the radiator as necessary.
10. Install the new radiator assembly.
11. Refill the engine coolant loop. Follow **Refill Engine Coolant Loop**, page 15.
12. Connect the black battery cable with the negative lug to the negative (-) terminal of the battery. Cover the battery terminal with the protective cover attached to the supplied battery cable. See **Replace Battery**, page 25.

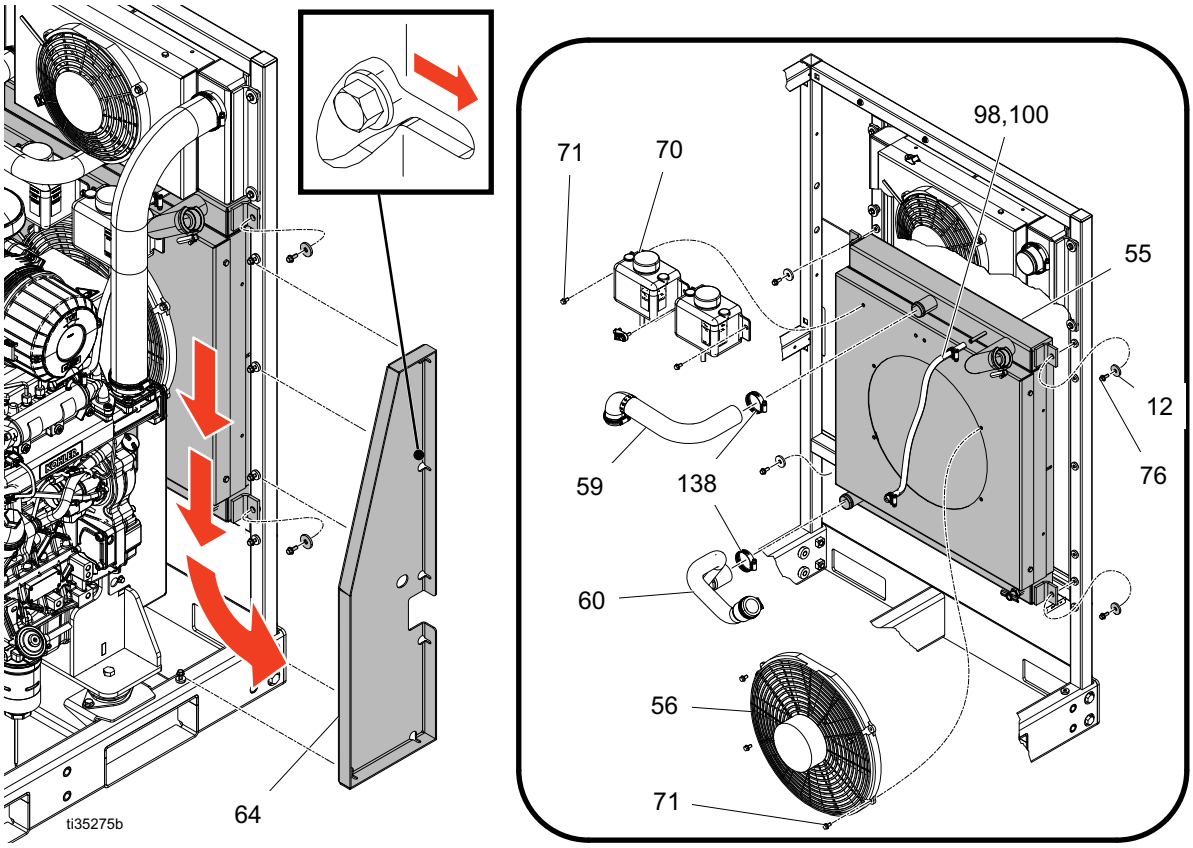


FIG. 18

Replace Engine Display Module

1. Shut down the system. Follow the **Daily Shutdown** procedure in the Integrated PowerStation Operation manual.
2. Remove the protective cover from the negative battery terminal. Disconnect the black battery cable with the negative lug from the negative (-) terminal of the battery. See **Replace Battery**, page 25.
3. Open the engine enclosure.
4. Disconnect the harness connectors (J141, J326, J327) from the back of the engine display module (515).
5. Loosen the engine display module mounting screws (515c).
6. Slide the mounting screw slips towards the door to release the clips. Remove the engine display module.
7. Mount the provided gasket (515b) to the back of the new engine display module.
8. Install the new engine display module in the engine control enclosure. Secure the clips in place and tighten the mounting screws.
9. Connect all wire harnesses and close the engine controls enclosure.
10. Connect the black battery cable with the negative lug to the negative (-) terminal of the battery. Cover the battery terminal with the protective cover attached to the supplied battery cable. See **Replace Battery**, page 25.

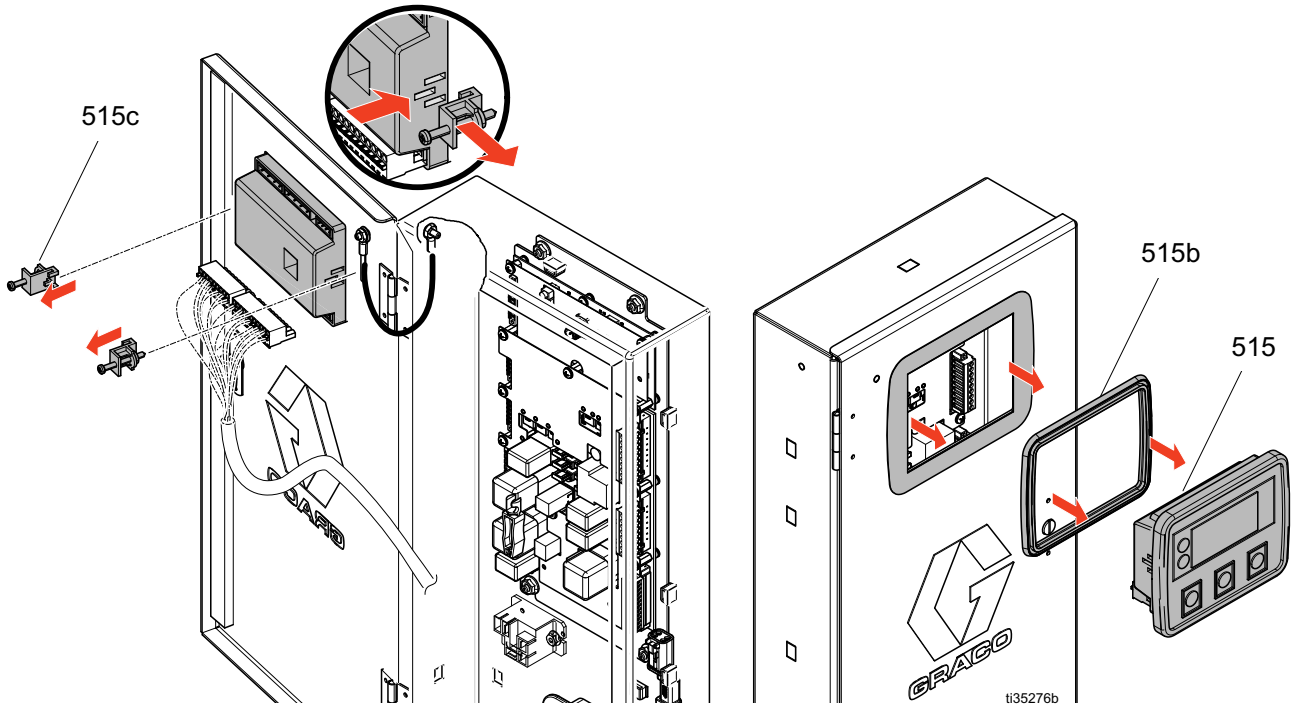


FIG. 19

Repair Engine

Contact your nearest Kohler distributor for repair and maintenance.

Replace Engine Coolant RTD

1. Shut down the system. Follow the **Daily Shutdown** procedure in the Integrated PowerStation Operation manual.
2. Drain the engine coolant. Follow **Drain Coolant**, page 11.

NOTE: Do not refill the engine coolant loop at this time.

3. Disconnect the RTD from the extension cable. See FIG. 20, page 28.
4. Remove the compression nut fitting (38) and the engine coolant RTD (39).

NOTE: The RTD probe cannot be removed from the compression nut.

NOTICE

To prevent property damage due to improper application of materials, ensure accurate temperature readings by using RTD Kit 24L972.

5. Tighten the new compression fitting (38) onto the engine coolant RTD (39). To prevent the compression fitting from clamping on the RTD wires and to keep the RTD in the fluid path, leave 1/8 in. (3 mm) of sheath exposed.
6. Apply thread sealant to the compression fitting (38) pipe threads.
7. Install the compression fitting (38) into the heat exchanger elbow fitting (37).
8. Connect the new RTD to the extension cable.

Fill the engine coolant. Follow **Refill Engine Coolant Loop**, page 15.

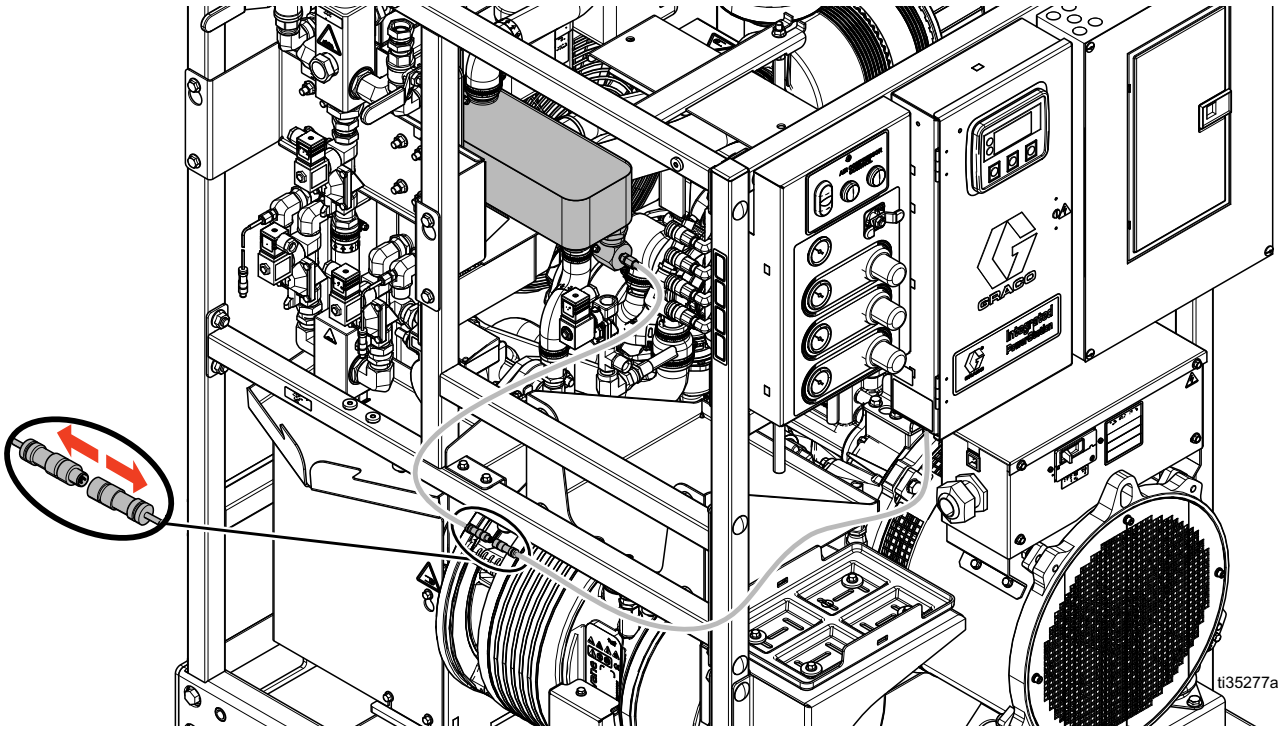


FIG. 20

Replace Air Compressor

1. Remove the drip tray shroud (77) and belt guard.
2. Remove the protective cover from the negative battery terminal. Disconnect the black battery cable with the negative lug from the negative (-) terminal of the battery. See **Replace Battery**, page 25.

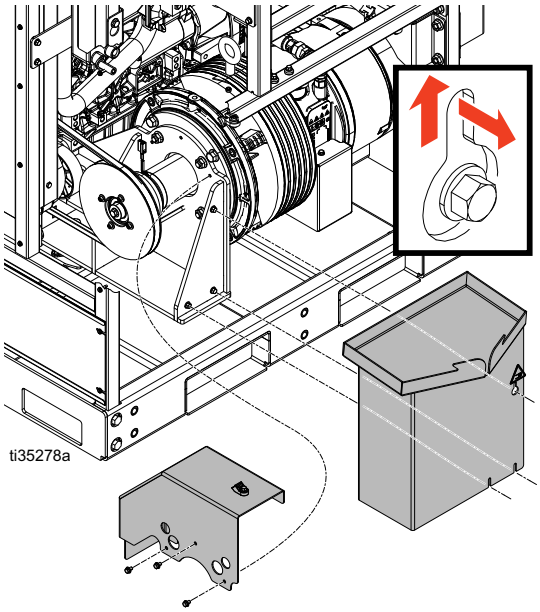


FIG. 21

3. Place wooden timbers beneath the compressor. The timbers will keep the compressor in place when the fasteners are removed.

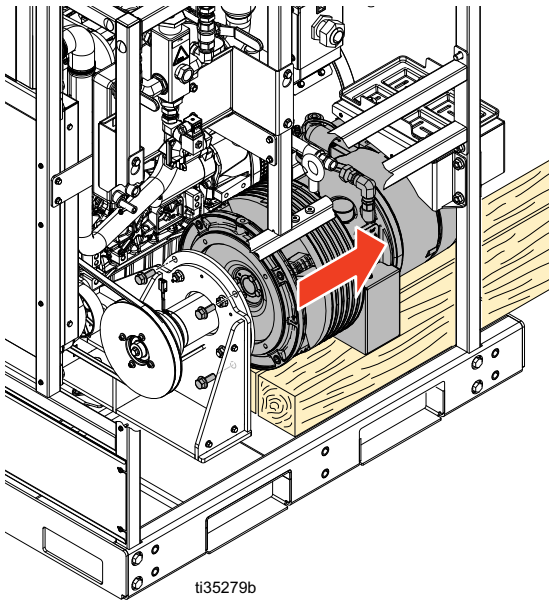


FIG. 22

4. Remove four nuts (256),
5. Slide the compressor on the timbers, away from the clutch assembly. See FIG. 22.

Use a lifting device to prevent personal injury when lifting the compressor. Do not overlap the lifting straps over tubing or other fragile components.

6. Use the lift ring on top of the compressor to lift the compressor.

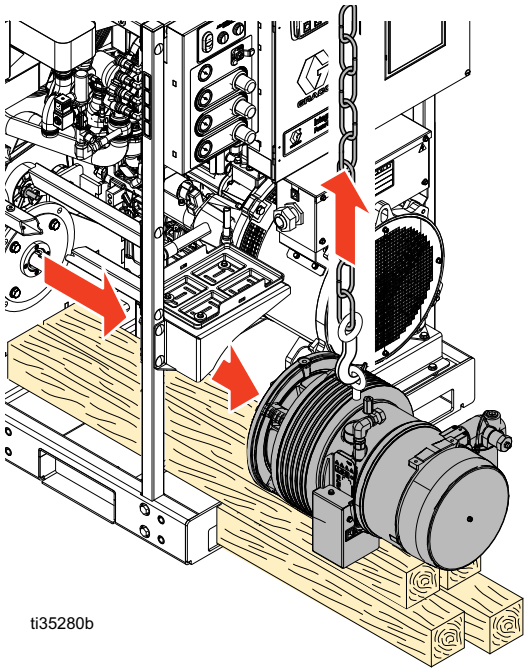


FIG. 23

7. Place replacement compressor on timbers and slide into position to connect to clutch assembly.
8. Install four nuts (256).
9. Remove wooden timbers.
10. Install belt guard and drip tray shroud (77).
11. Connect the black battery cable with the negative lug to the negative (-) terminal of the battery. Cover the battery terminal with the protective cover attached to the supplied battery cable. See **Replace Battery**, page 25.

Remove Air Dryer*

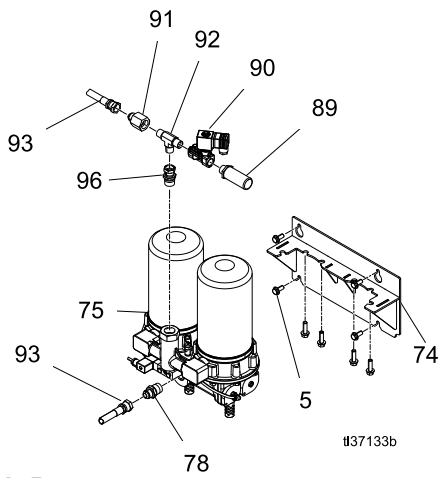


FIG. 24: Air Dryer

1. Shut down the system. Follow the **Daily Shutdown** procedure in the Integrated PowerStation Operation manual.
2. Remove the protective cover from the negative battery terminal. Disconnect the black battery cable with the negative lug from the negative (-) terminal of the battery. See **Replace Battery**, page 25.
3. Remove two nuts (115) and the top of the air dryer bracket (79).
4. Remove the tie down rods (80).
5. Remove two hoses (93) from adapter fittings (78, 91).
6. Loosen the connector screw.
7. Disconnect the air valve harness from the air relief control valve (90).
8. Disconnect the air dryer power cord from the locking plug-in by sliding the locking sleeve away from the connection point, located behind the engine controls enclosure (31) and above the 240 Vac alternator (204).

Use a lifting device or two-person lift to prevent personal injury when lifting the air dryer. Do not overlap the lifting straps over tubing or other fragile components.

9. Remove the existing air dryer (75) from the tray (74), then remove the existing tray.

* In mid-2020 the manufacturer changed the overall size of both 20 and 35 cfm air dryers. These no longer fit in the current footprint. As a result, a replacement 40 cfm, dual cartridge air dryer was implemented as Series B. If a series A air dryer needs to be replaced, Retrofit Kit 25N805 is available.

Install Dual Cartridge Air Dryer

1. Install the new air dryer assembly.
2. Secure the bracket and tighten fasteners (115).
3. Connect the power cord.

NOTICE

To avoid damage to the power cord from hot surfaces, route the power cord between the tie-down rod (80) and the air dryer (75).

4. Connect two hoses (93) to adapter fittings (78, 91).

NOTE: One hose connects the air dryer IN port to the compressor. The other hose connects the air dryer OUT port to the air controls enclosure.

NOTICE

To avoid damage to the air dryer hoses from hot surfaces, route the hoses between the tie-down rod (80) and the air dryer (75).

5. Connect the black battery cable with the negative lug to the negative (-) terminal of the battery. Cover the battery terminal with the protective cover attached to the supplied battery cable. See **Replace Battery**, page 25.

Update Reactor 2 Software

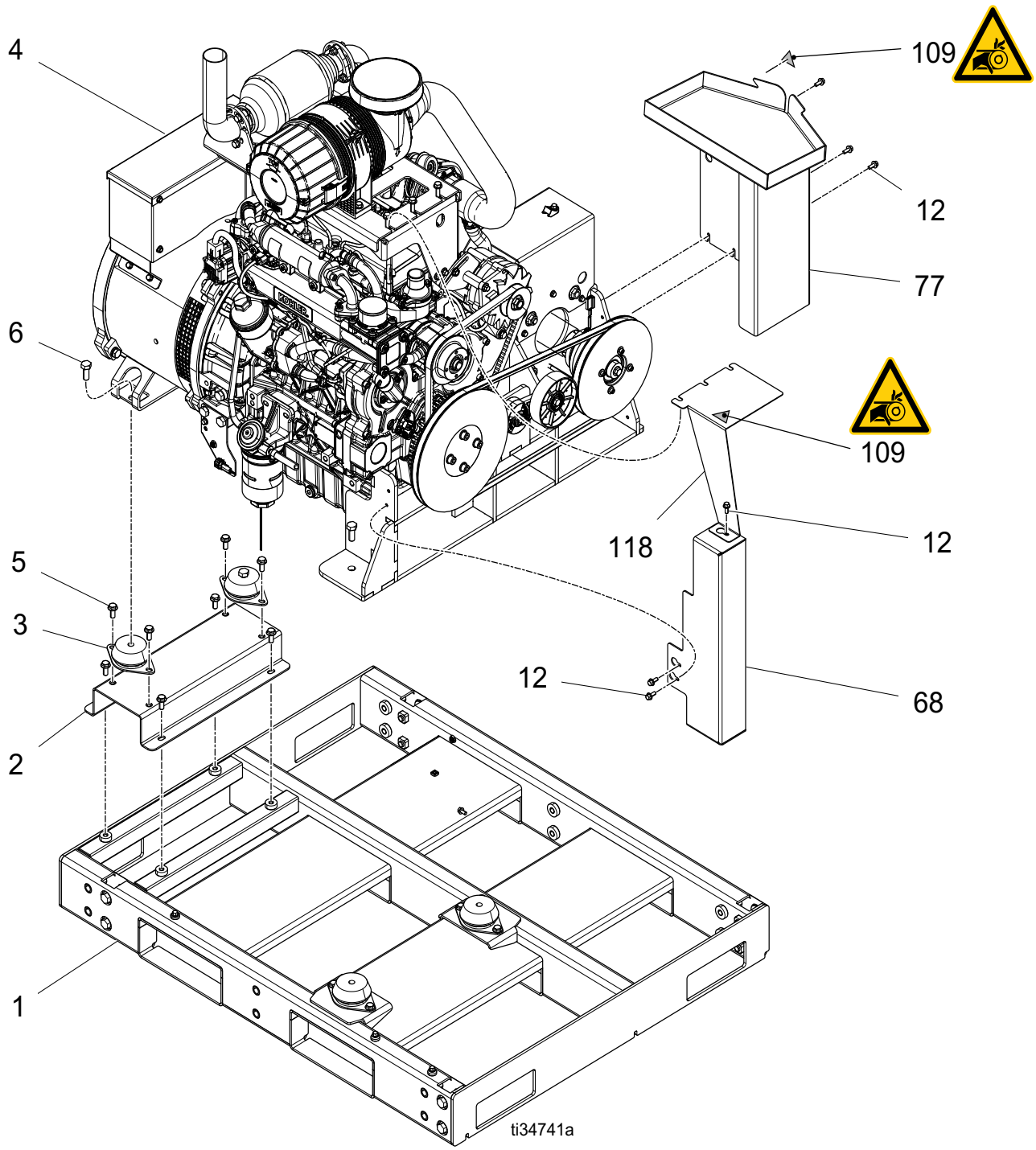
Refer to **Update Reactor 2 Software** in your Integrated PowerStation operation manual.

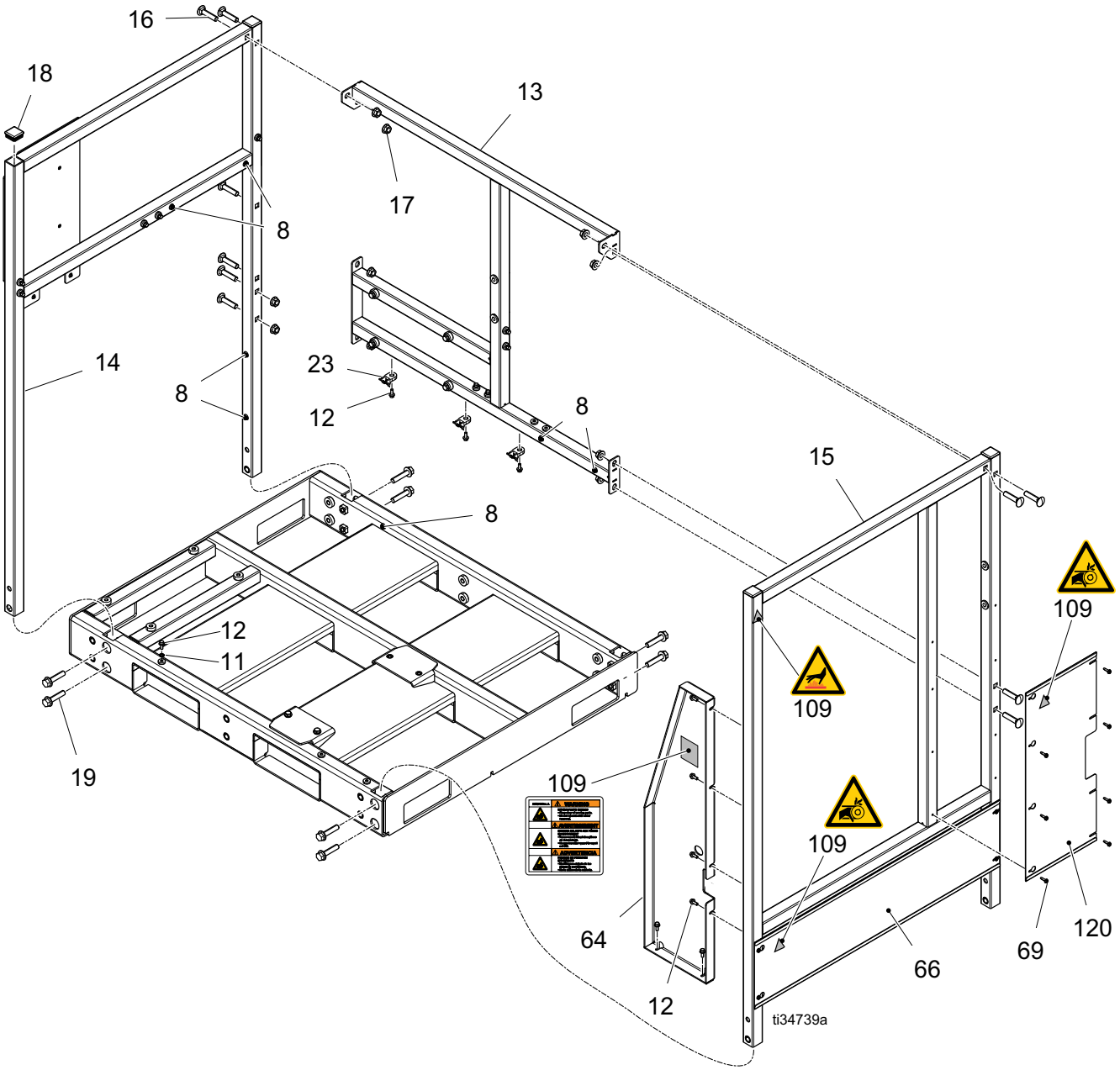
240 V Charge Alternator

See the Mecc Alte website (www.meccalte.com) to search for a service network affiliate.

Parts

Integrated PowerStation

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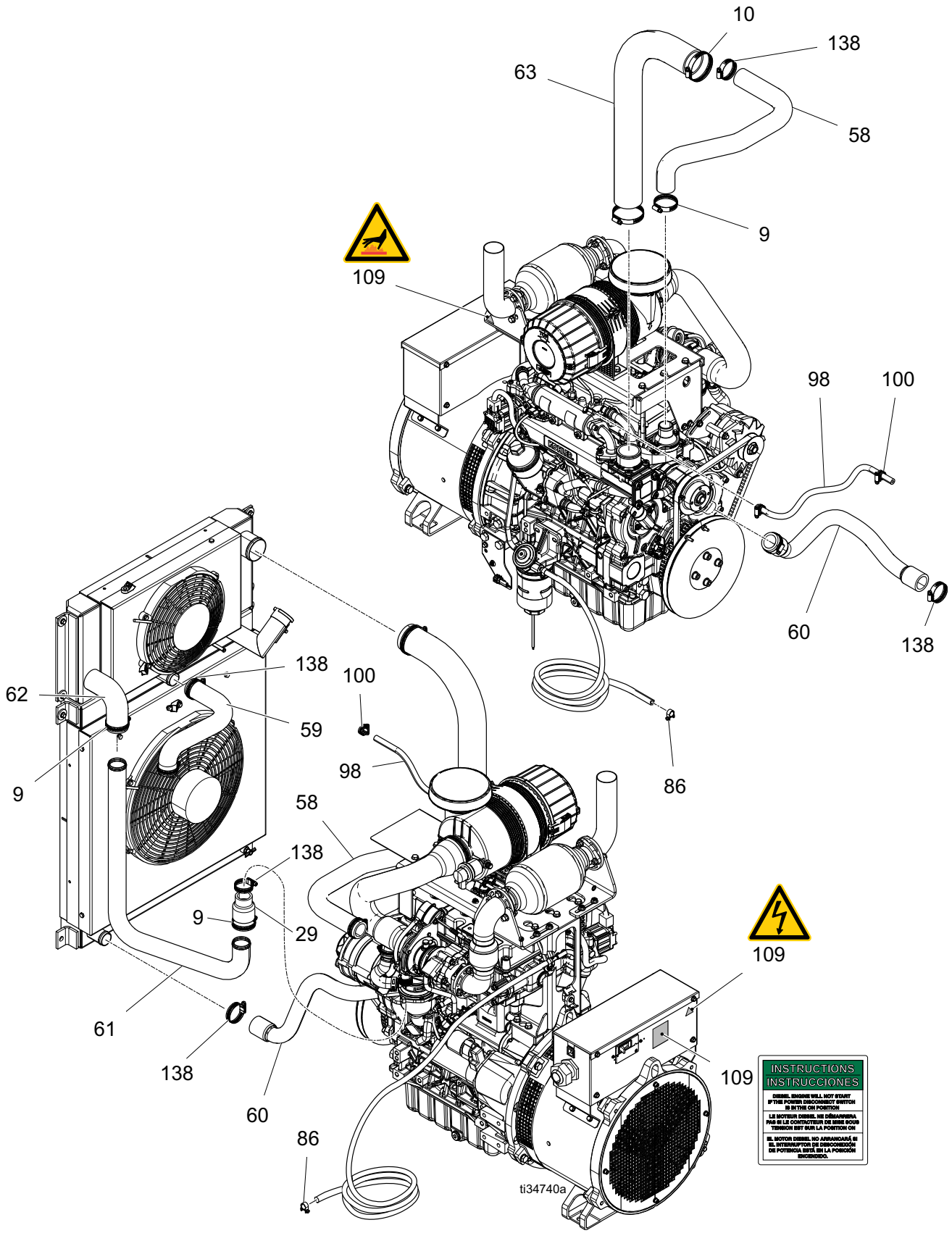
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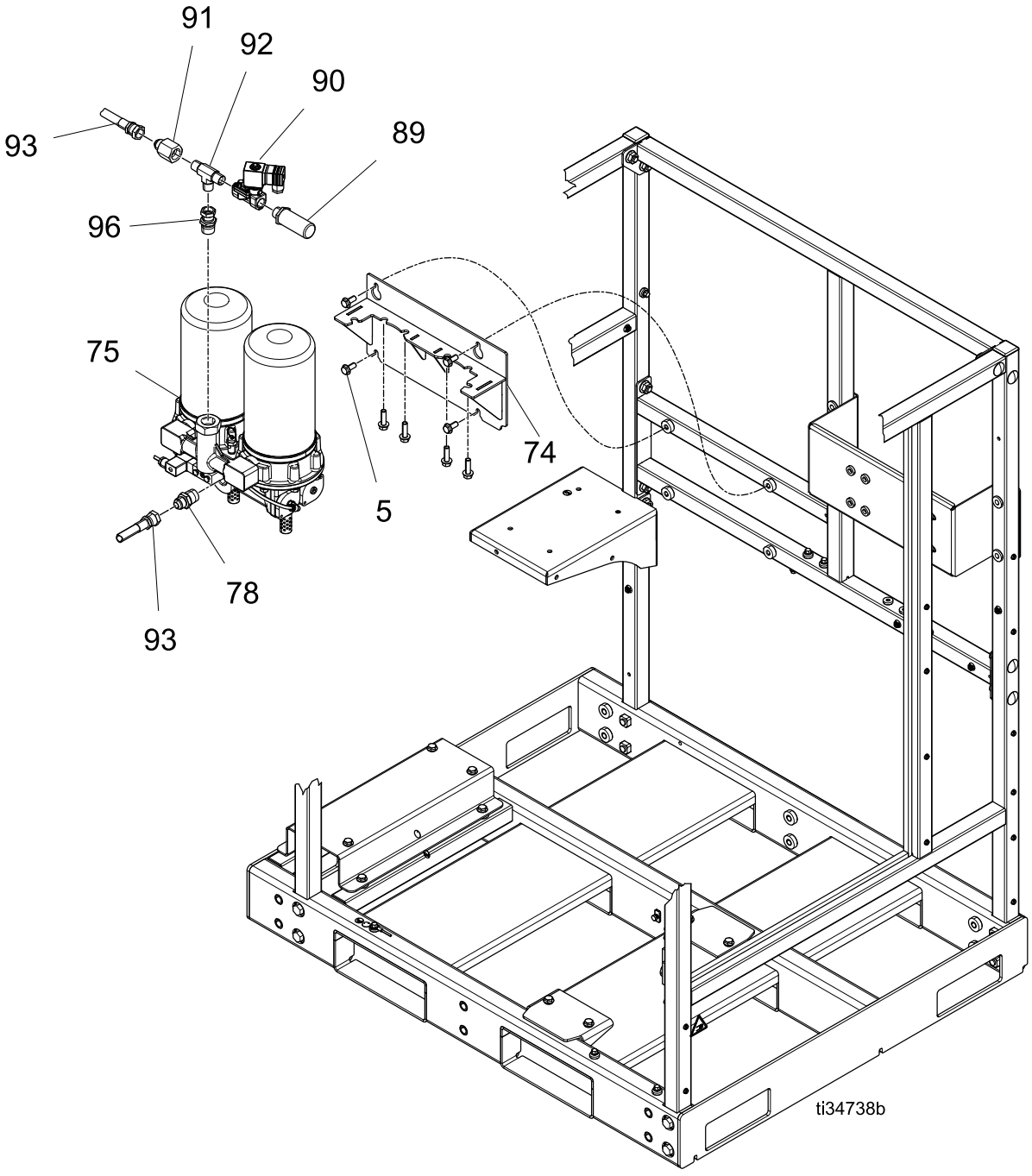
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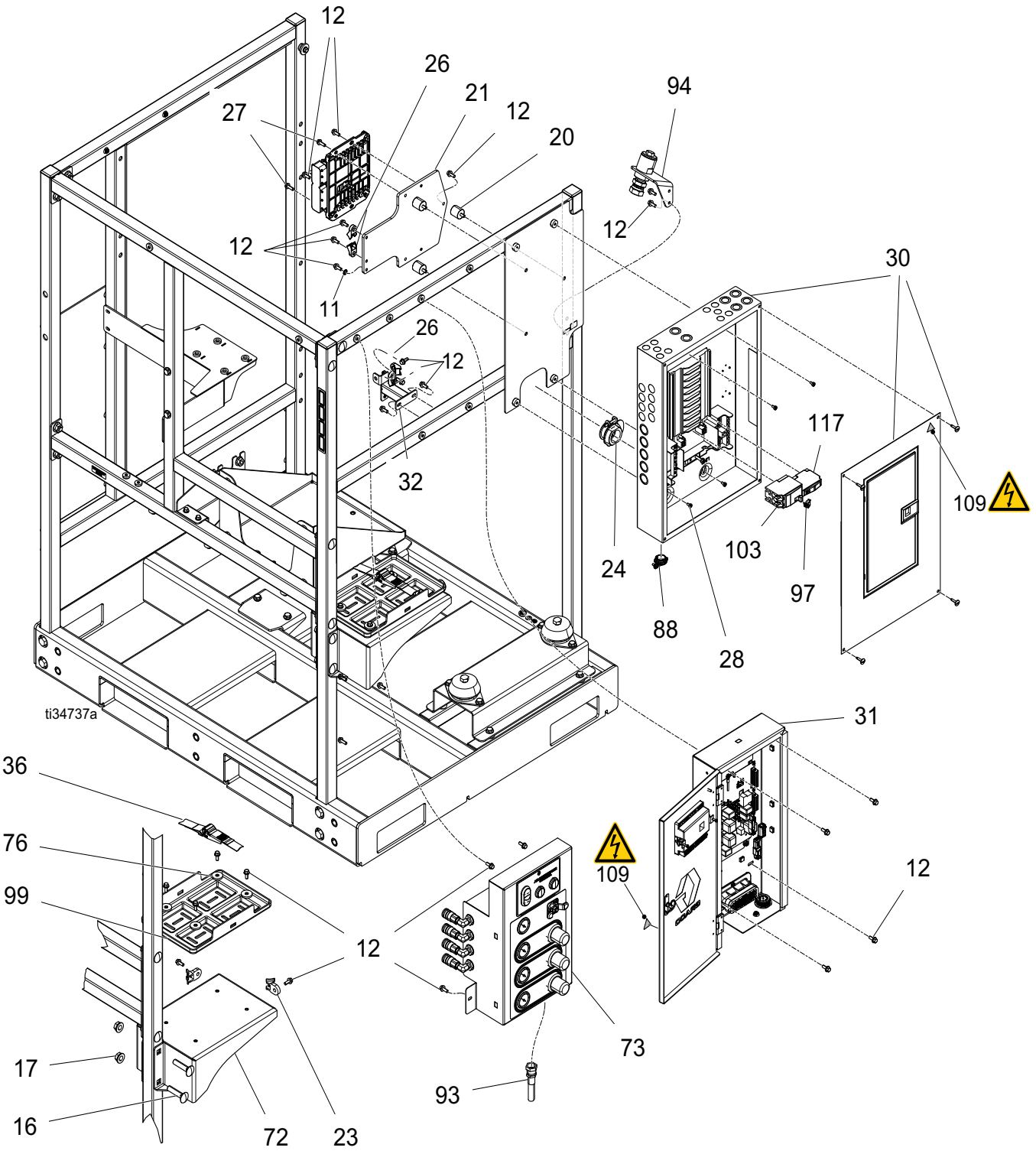
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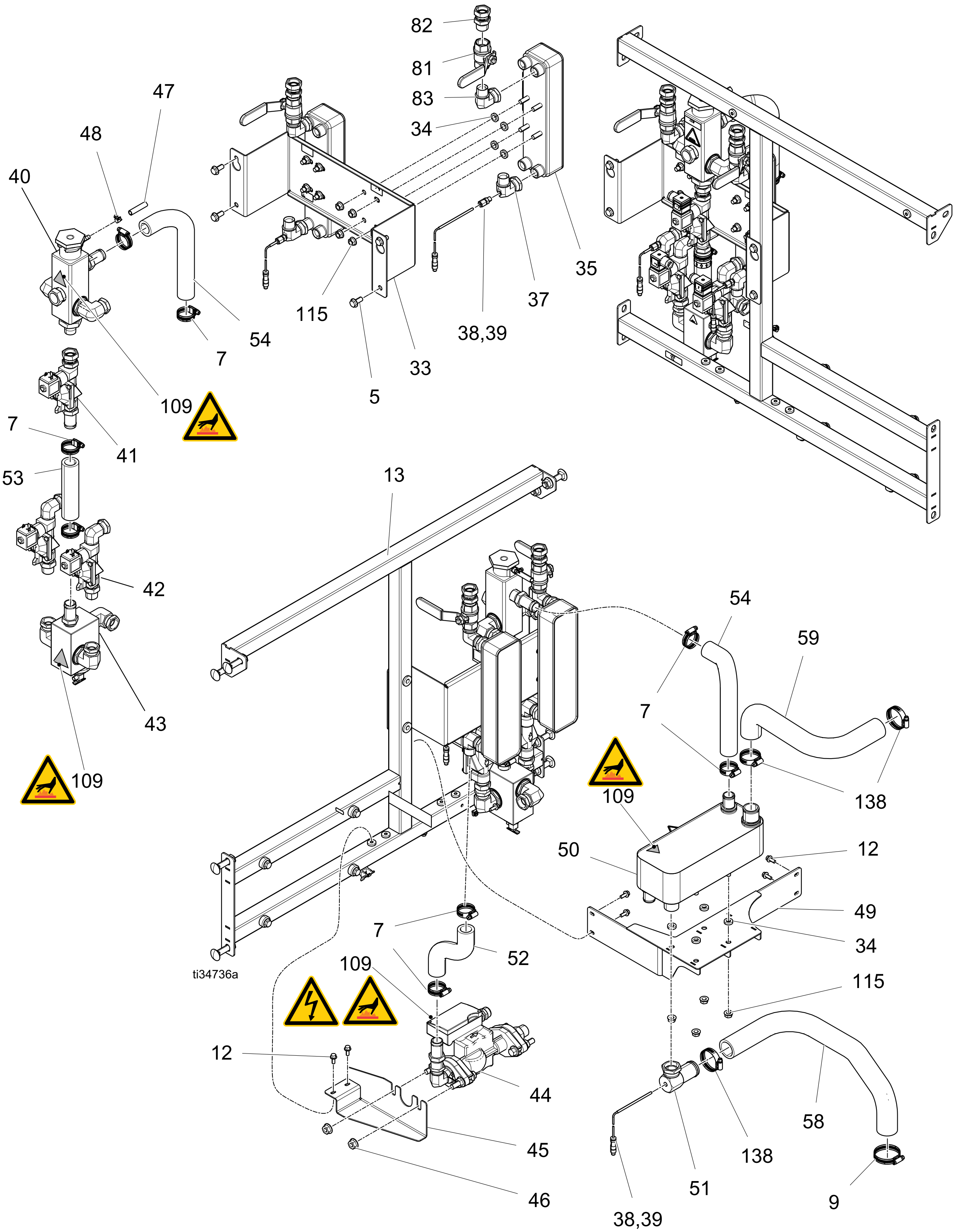
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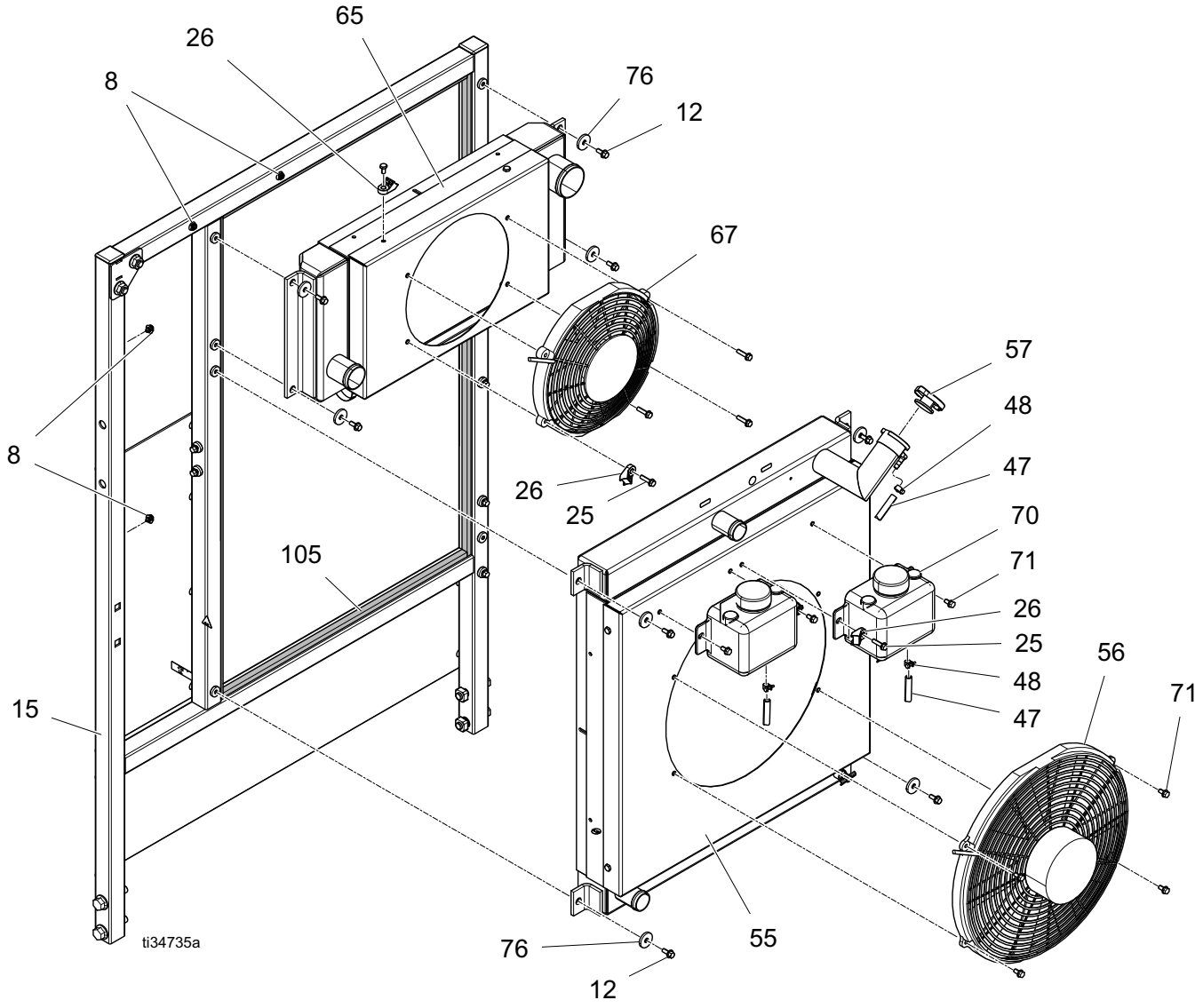
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Ref.	Part	Description	Qty.		
			979200	979201	979202
1	25D375	BASE, pallet, generator, painted	1	1	1
2	-----	BRACKET, alternator mount, painted	1	1	1
3	125165	ENGINE, isolator	4	4	4
4	-----	GENERATOR, diesel, Tier 4 Final, 35 cfm (see page 45)			1
	-----	GENERATOR, diesel, Tier 4 Final, 20 cfm (see page 45)		1	
	-----	GENERATOR, diesel, Tier 4 Final, no air (see page 45)	1		
5	111192	SCREW, cap flange hd	16	20	20
6	105324	SCREW, cap, hex hd	4	4	4
7	125370	CLAMP, hose, diameter 11/16-1-1/2	6	6	6
8	125625	TIE, cable, fir tree	11	11	11
9	131837	CLAMP, hose, worm-drive, sae #28	4	4	4
10	131838	CLAMP, hose, worm-drive, sae #52	2	2	2
11	100985	WASHER, lock ext	2	2	2
12	131327	BOLT, flange hd, serrated, 1/4, cs	51	56	56
13	25D392	FRAME, heat exchangers, painted	1	1	1
14	25D394	FRAME, electrical, painted	1	1	1
15	25D396	FRAME, coolant, painted	1	1	1
16	131352	BOLT, carriage, 1/2-13 x 2.25	10	10	10
17	112731	NUT, hex, flanged, 1/2-13	10	10	10
18	111218	CAP, tube, square	4	4	4
19	131345	BOLT, flange hd, serrated, 1/2	8	8	8
20	131325	ISOLATOR, sandwich mount, 1/4-20	3	3	3
21	-----	BRACKET, plate, engine control unit	1	1	1
22*	17E418	CABLE, splitter, bulkhead, m12	1	1	1
23	131704	HOLDER, cable, tie mount, screw mount	6	6	6
24	131601	GRIP, cord, 1-1/2, metal clamp	1	1	1
25‡	15R472	FASTENER, hex hd, flanged, 1/4 x 1	5	5	5
26	16K214	HOLDER, cable, tie	7	7	7
27	113796	SCREW, flanged, hex hd	2	2	2
28	110637	SCREW, pan head	4	4	4
29	131696	BOOT, hose, silicone	1	1	1
30	-----	ENCLOSURE, circuit breaker, painted	1	1	1
31	-----	ENCLOSURE, load center, assembly (see page 55)	1	1	1
32	-----	BRACKET, strain relief, painted	1	1	1
33	-----	BRACKET, heat exchangers, painted	1	1	1
34†	16J741	WASHER, nylon, 30% glass 0.750 od	12	12	12
35	25N695	EXCHANGER, heat, single sided, universal	2	2	2
36	131782	STRAP, battery, sst buckle	1	1	1
37	17U424	FITTING, elbow, modified	2	2	2
38✚	123325	FITTING, compression, 1/8npt, ss	3	3	3
39	24L972	SENSOR, RTD, 1 kilohm, 4 pin, 4.25 in.	3	3	3
40	-----	MANIFOLD, heat exchanger, top (see page 43)	1	1	1
41	-----	VALVE, heat exchanger, top (see page 42)	1	1	1
42	-----	VALVE, heat exchanger, bottom (see page 42)	2	2	2
43	-----	MANIFOLD, heat exchanger, bottom (see page 43)	1	1	1

Ref.	Part	Description	Qty.		
			979200	979201	979202
44	-----	PUMP, heat exchanger (see page 41)	1	1	1
45	-----	BRACKET, feeder pump, painted	1	1	1
46	125943	NUT, serrated flange, 7/16-14	2	2	2
47	079094	HOSE, rubber, 5/16, 2 ft.	2	2	2
48	125163	CLAMP, hose, 3/8 in.-29/64	4	4	4
49	-----	BRACKET, primary heat exchanger, painted	1	1	1
50	25N696	EXCHANGER, heat, primary	1	1	1
51	17U537	FITTING, elbow, 1-3/8 barb x 1 npsm	1	1	1
52	17U516	HOSE, formed, 2nd loop, in	1	1	1
53	17U517	HOSE, formed, 2nd loop, mid	1	1	1
54	17U518	HOSE, formed, 2nd loop, out	1	1	1
55	17U519	RADIATOR, main, with shrouding	1	1	1
56	25N691	FAN, blowing, 16 in., 12 vdc	1	1	1
57	24L940	CAP, engine coolant fill	1	1	1
58	17U510	HOSE, formed, engine, outlet	1	1	1
59	17U511	HOSE, formed, radiator, upper	1	1	1
60	17U512	HOSE, formed, radiator, lower	1	1	1
61	17U513	HOSE, steel, CAC, turbo, out	1	1	1
62	17U514	HOSE, formed, CAC, hot side	1	1	1
63	17U515	HOSE, formed, CAC, cold side	1	1	1
64	-----	GUARD, belt, frame gusset, painted	1	1	1
65	17U520	RADIATOR, CAC, with shrouding	1	1	1
66	-----	GUARD, belt, lower, painted	1	1	1
67	25N692	FAN, blowing, 10 in., 12 vdc	1	1	1
68	-----	GUARD, belt, engine, painted	1	1	1
69	131602	SCREW, thread forming, f, #10	12	12	12
70	125204	BOTTLE, overflow	2	2	2
71X	113161	SCREW, flange, hex hd	7	7	7
72	-----	BRACKET, battery tray, painted	1	1	1
73	-----	PANEL, air control, assembly (see page 53)		1	1
74	-----	BRACKET, air dryer, painted		1	1
75	25N700	DRYER, air, refrigerated, 40 cfm		1	1
76	176692	WASHER, flat	12	12	12
77	-----	GUARD, drip tray, painted	1	1	1
78	15Y934	FITTING, 5/8 JIC 1/2 npt		1	1
79	-----	BRACKET, air dryer, hold down, paint		1	1
80	17U507	ROD, tie down, air dryer		2	2
81	109077	VALVE, ball 3/4 npt	2	2	2
82	118459	FITTING, union, swivel, 3/4	2	2	2
83	160327	FITTING, union adapter, 90 deg	2	2	2
86	129875	CLAMP	2	2	2
87*	125871	TIE, cable, 7.50 inch	20	20	20
88	17C994	CONNECTOR, strap type, 3/4	1	1	1
89	107189	MUFFLER,		1	1
90	25N694	VALVE, solenoid, n.o., 2way, 1/2npt		1	1

Ref.	Part	Description	Qty.		
			979200	979201	979202
91	126976	FITTING		1	1
92	131778	FITTING, tee, 1/2 npt		1	1
93	17H101	HOSE, 0.50 id, ptfe, sst braid		2	2
94	- - - - -	ADAPTER, fill port (see page 44)		1	1
95	C12509	TUBE, nylon		3	3
96	121282	FITTING		1	1
97	17X601	LOCK, handle, circuit breaker	1	1	1
98	057251	TUBE, round, epdm, black, 1.5 ft	1	1	1
99	131626	TRAY, battery, plastic, size 24	1	1	1
100	131836	CLAMP, hose, worm-drive, sae #6	2	2	2
101*	125839	CLIP, ferrite bead	3	3	3
102*	17E206	TOKEN, update, GCA, Reactor 2	1	1	1
103	131553	CIRCUIT, breaker, 2p, 10a	1	1	1
104*	17X579	HARNESS, Tier 4 Final, root, valve and rtd	1	1	1
105	- - - - -	TAPE, foam, single sided, 11 ft	1	1	1
106*	17X580	HARNESS, Tier 4 Final, heat exchanger valve fanout	1	1	1
107*	17X132	KIT, adapter, manifold	1	1	1
108*	- - - - -	LABEL, Integrated PowerStation	1	1	1
109*▲	25E074	LABEL, safety, system, multi	1	1	1
110*	25E076	LABEL, identification, multi	1	1	1
111*	25E112	LABEL, hose wrap	1	1	1
112*	- - - - -	LABEL, cable, self-lam, Integrated PowerStation, top	1	1	1
113*	17X599	CABLE, can, fem/90 fem, 8.0m	1	1	1
114*	17X571	CABLE, assembly, Tier 4 Final, circulation pump	1	1	1
115†	112958	NUT, hex, flanged, 3/8-16	12	14	14
116*	17X593	COVER, circuit breaker panel, 1 pole filler	1		
117	131546	CIRCUIT, breaker, 1p, 15a		1	1
118	- - - - -	GUARD, belt, painted	1	1	1
119*	25E356	LABEL, proposition 65	1	1	1
120	- - - - -	GUARD, belt, upper, painted	1	1	1
121*	17X572	CABLE, assembly, Tier 4 Final, air dryer power		1	1
122*	17X605	TERMINAL, lug, 1 position	1	1	1
131*	260188	NUT, hex	1	1	1
138	125371	CLAMP, hose	6	6	6
139*	- - - - -	TIE, cable, 14 in.	2	2	2
141*	295731	NUT, wire	4	4	4

* *Not shown.*

† *Parts included in Replacement Kit 25N695 (for Ref. 35) and Replacement Kit 25N696 (for Ref. 50).*

‡ *Part included in Replacement Kit 25N692 (for Ref. 67).*

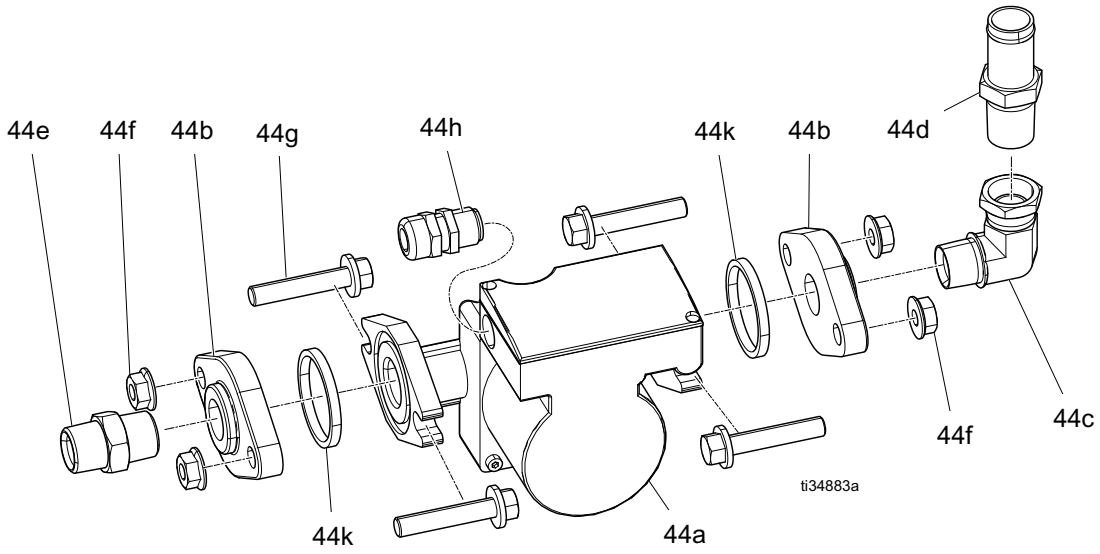
✕ *Part included in Replacement Kit 25N691 (for Ref. 56).*

✚ *Part included in Replacement Kit 24L972 (for Ref. 38).*

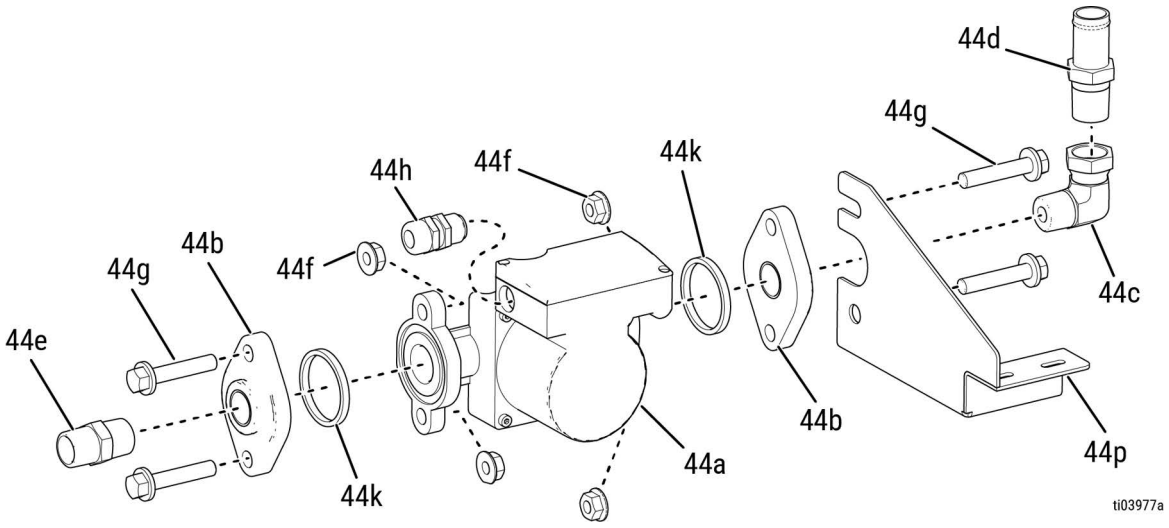
▲ *Replacement safety labels, tags, and cards are available at no cost.*

Heat Exchanger Pump

Series A



Series B

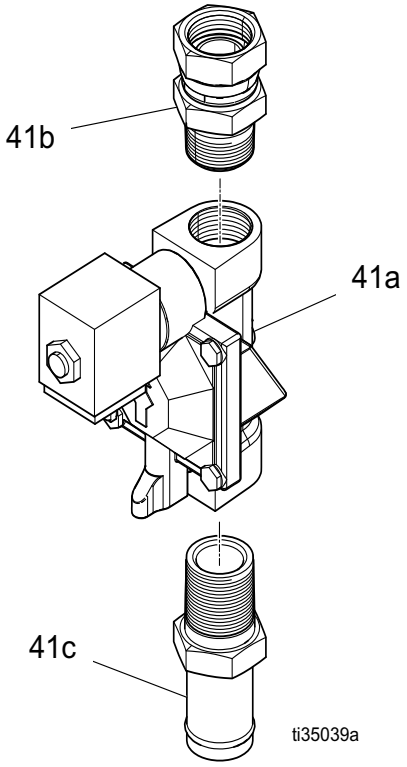


Ref.	Part	Description	Qty.
44a	24L915	PUMP, centrifugal, circulation	1
44b	125378	FLANGE, 3/4 npt set	1
44c	160327	FITTING, union adapter, 90 deg	1
44d	125596	FITTING, 3/4npt male, 1 in. barbed hose	1
44e	C20487	FITTING, nipple, hex	1
44f	125943	NUT, serrated flange, 7/16-14	4
44g	125944	SCREW, serrated flange	4
44h	260067	FITTING, strain relief, 1/2 npt	1
44k†	131323	GASKET, flange, centrifugal pump	1
44p*	18D804	Bracket	1

† *Part included in Replacement Kit 24L915 (Ref. 44a).*

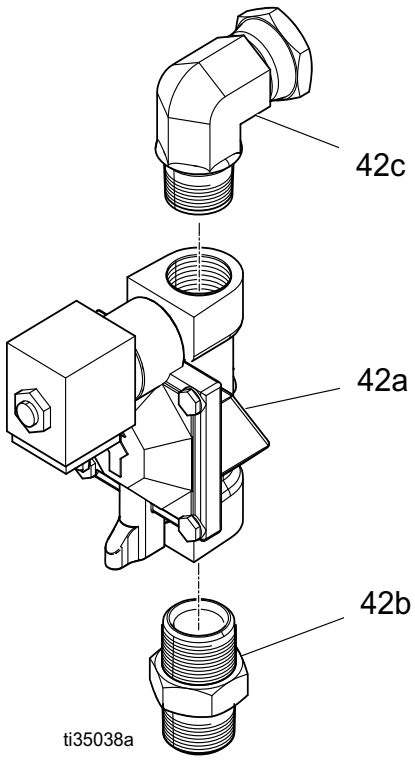
* *Used in Series B only*

Heat Exchanger Valve (Top)



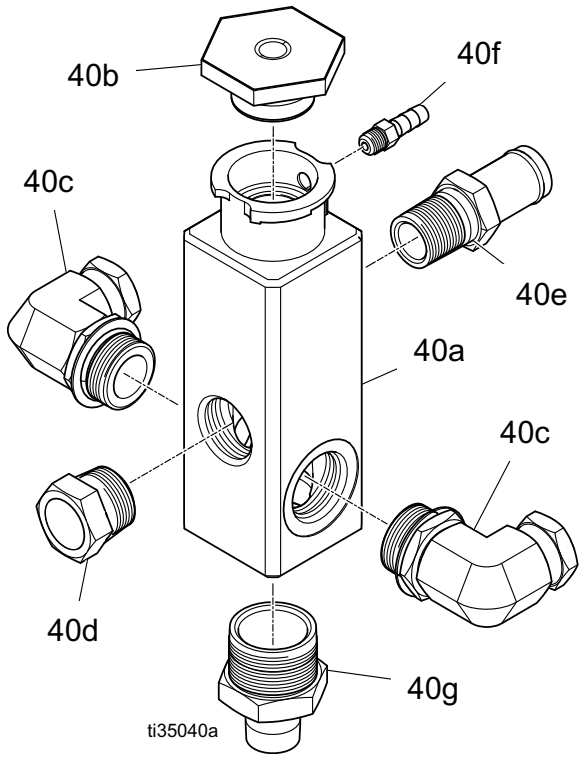
Ref.	Part	Description	Qty.
41a	24L916	VALVE, solenoid, 3/4 npt, 12 vdc	1
41b	118459	FITTING, union, swivel, 3/4 in.	1
41c	125596	FITTING, 3/4npt male, 1 in. barbed hose	1

Heat Exchanger Valve (Bottom)



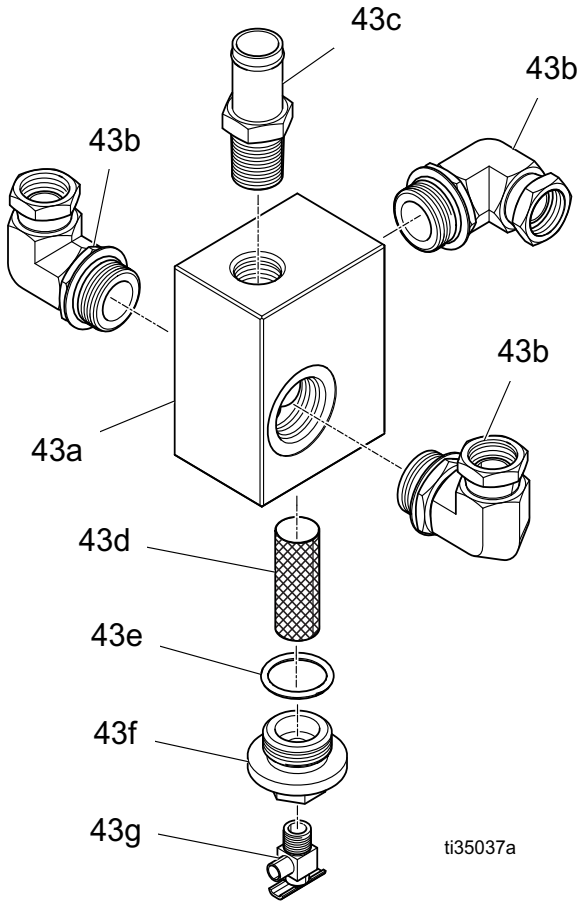
Ref.	Part	Description	Qty.
42a	24L916	VALVE, solenoid, 3/4 npt, 12 vdc	1
42b	C20487	FITTING, nipple, hex	1
42c	160327	FITTING, union adapter, 90 deg	1

Heat Exchanger Manifold (Top)



Ref.	Part	Description	Qty.
40a	17U423	BOTTLE, manifold, heat exchanger coolant	1
40b	24L967	CAP, press., coolant, 8-10 psi	1
40c	131347	FITTING, elbow, orb-16 x 3/4 npsm	2
40d	131324	SIGHT GLASS, 1 npt	1
40e	125596	FITTING, 3/4 npt male, 1 in. barbed hose	1
40f	127108	FITTING, barbed, 5/16 id x 1/8 npt	1
40g	124508	FITTING, adapter, 1-1/4 x 3/4, npt, m, s	1

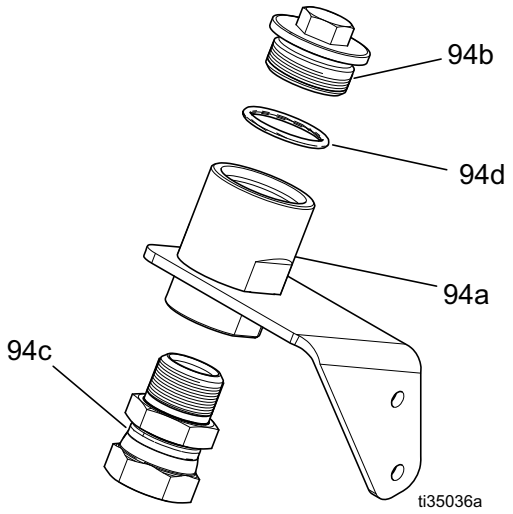
Heat Exchanger Manifold (Bottom)



Ref.	Part	Description	Qty.
43a	17U508	MANIFOLD, heat exchangers, bottom	1
43b	131347	FITTING, elbow, orb-16 x 3/4 npsm	3
43c	125596	FITTING, 3/4npt male, 1 in. barbed hose	1
43d*	16V920	STRAINER, 40 mesh	1
43e*	C20203	PACKING, o-ring, 1.17, fluoroelastomer	1
43f*	16V879	CAP, filter	1
43g*	125518	VALVE, drain, 90 deg	1

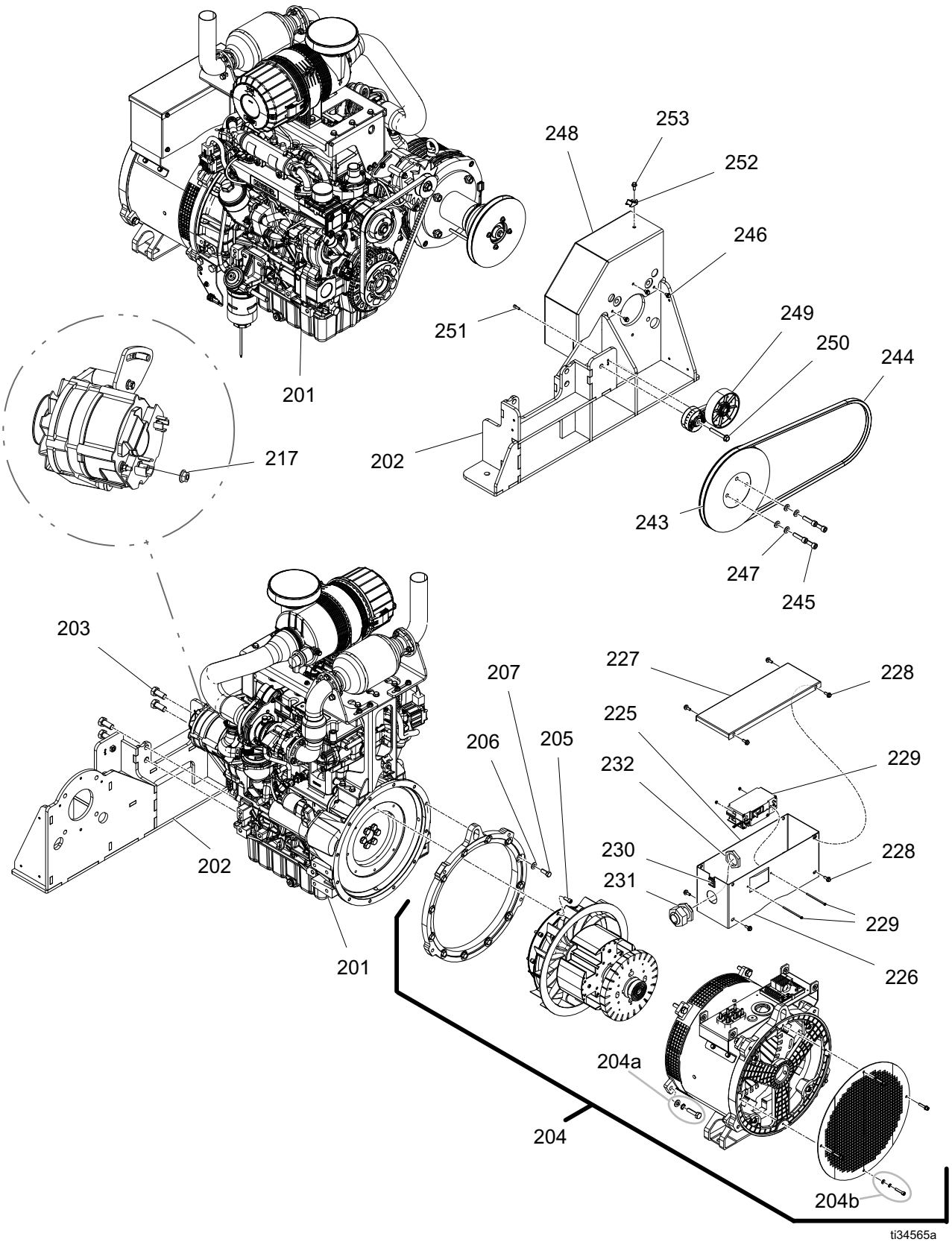
* *Part included in Replacement Kit 25N699 (purchase separately).*

Fill Port Adapter



Ref.	Part	Description	Qty.
94a	25D389	ADAPTER, fill port, weldment	1
94b	17Y072	PLUG, fill port	1
94c	118459	FITTING, union, swivel, 3/4 in.	1
94d	110927	PACKING, o-ring	1

Generator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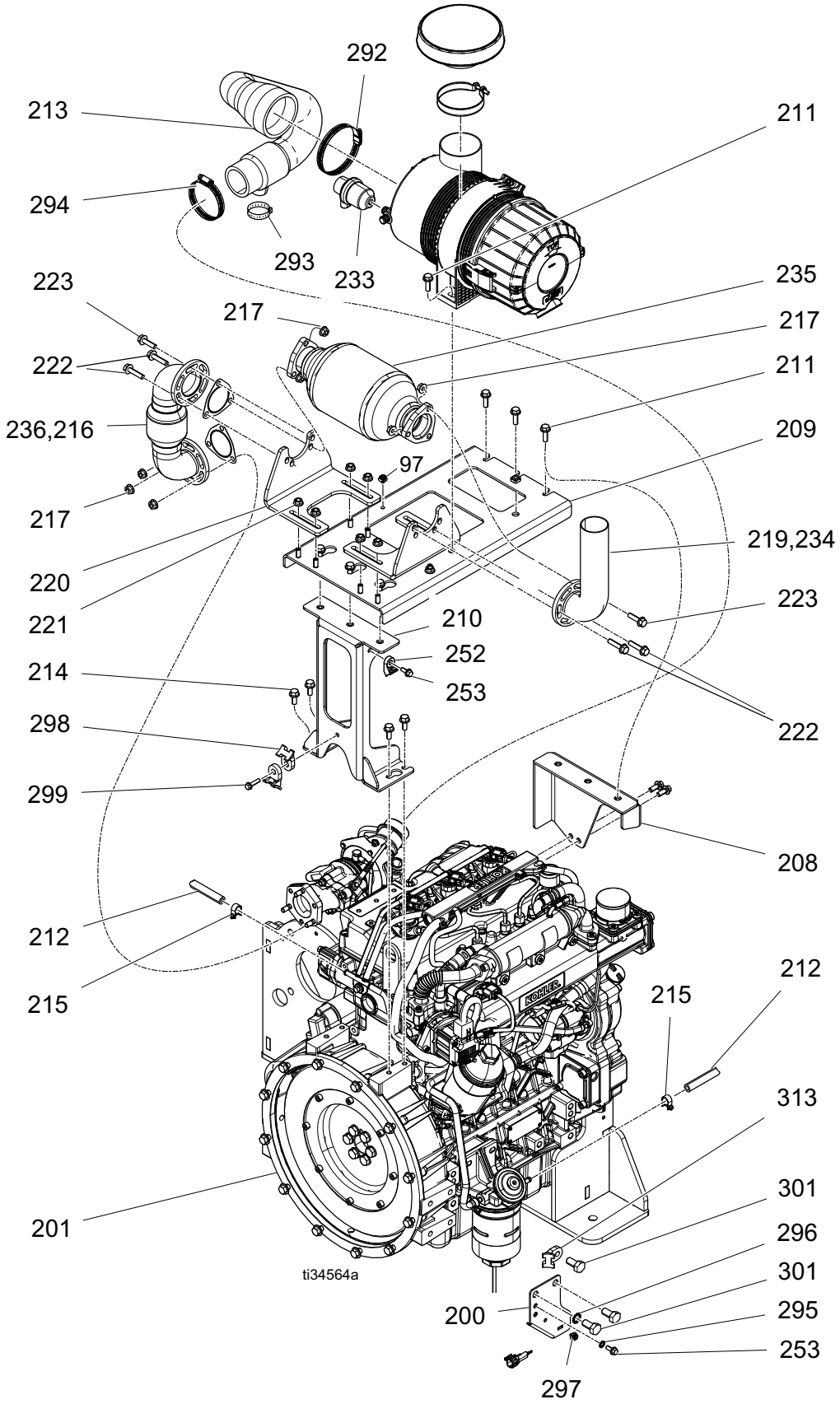
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Ref.	Part	Description	Qty.		
			979200	979201	979202
201	-----	ENGINE, Kohler, diesel, Tier 4 Final	1	1	1
202	-----	BRACKET, foot, engine & comp, paint	1	1	1
203	131354	BOLT, hex, m16-1.5 x 35 mm	4	4	4
204	-----	ALTERNATOR, 22 kw, diesel engine	1	1	1
205	558673	SCREW, shcs 5/16-18 x 0.75	8	8	8
206	100731	WASHER	12	12	12
207	123942	FASTENER, screw, cap, hex hd	12	12	12
208	-----	BRACKET, engine backbone, painted	1	1	1
209	-----	BRACKET, engine bracket, top, paint	1	1	1
210	-----	BRACKET, engine backbone, alt, paint	1	1	1
211	112586	SCREW, cap, hex hd	8	8	8
212	073068	HOSE, fuel, 5/16 (10 ft)	2	2	2
213	131356	HOSE, molded, air intake	1	1	1
214	131357	BOLT, flange hd, serrated, m8x20	4	4	4
215	129875	CLAMP	2	2	2
216	17X396	PIPE, exhaust, turbo, weldment	1	1	1
217	16A390	NUT, hex, flanged	10	10	10
218*	17X602	CABLE, alternator, circuit breaker, blk	1	1	1
219	17X395	PIPE, exhaust stack, weldment	1	1	1
220	-----	BRACKET, doc holder, painted	2	2	2
221	110996	NUT, hex, flange head	8	8	8
222	131359	BOLT, flange hd, serrated, m8x35	4	4	4
223	131360	BOLT, flange hd, serrated, m8x30	2	2	2
224*	17X603	CABLE, alternator, circuit breaker red	1	1	1
225	-----	ENCLOSURE, alternator, front, painted	1	1	1
226	-----	ENCLOSURE, alternator, front, painted	1	1	1
227	-----	COVER, generator, box, painted	1	1	1
228	114182	SCREW, hex flange	8	8	8
229	25N697	CIRCUIT BREAKER, with switch	1	1	1
230	125631	BUSHING, cable, lay-in strain relief	1	1	1
231	120858	BUSHING, strain relief, m40 thread	1	1	1
232	120859	NUT, strain relief, m40 thread	1	1	1
233	131746	SWITCH, indicator, air filter	1	1	1
234*	19A480	GUARD, wrap, exhaust outlet	1	1	1
235*	19A481	GUARD, wrap, diesel catalyst	1	1	1
236*	19A482	GUARD, wrap, flex pipe	1	1	1
237*	17X570	CABLE, assembly, Tier 4 Final, 240v feed	1	1	1
238*	25N802	HARNESS, Tier 4 Final, engine overlay	1	1	1
239*	17X597	HARNESS, assembly, volt sense	1	1	1
243	-----	PULLEY, engine, b groove		1	1
244	131343	BELT, v, standard, bx67		1	1
245	117033	SCREW, shcs m10x40		4	4
246	119865	SCREW, hex serrated		3	3
247	16Y267	WASHER, plat, m10		4	4
248	-----	GUARD, air deflector, painted		1	1
249	25N693	PULLEY, idler, belt tensioner		1	1

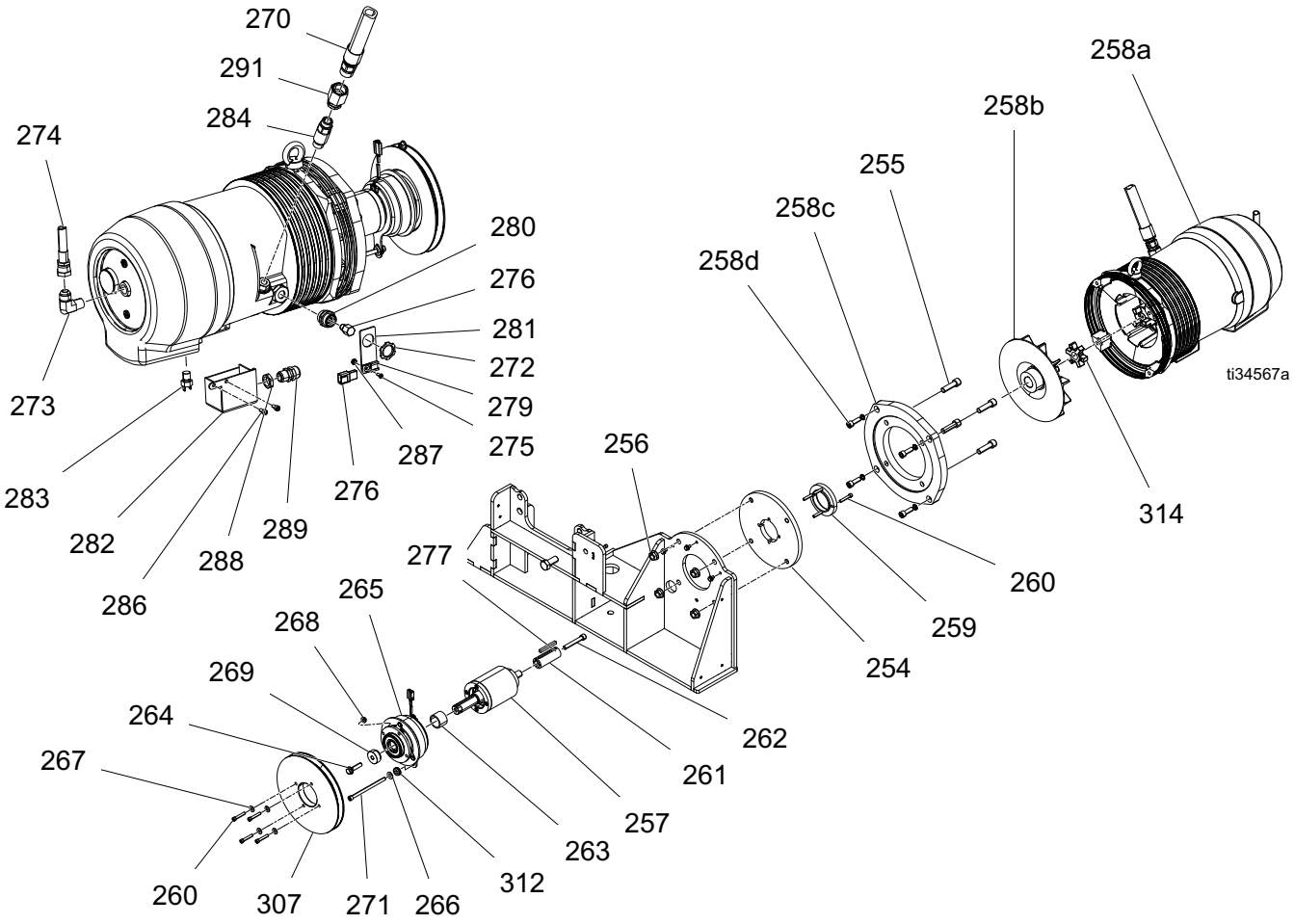
Ref.	Part	Description	Qty.		
			979200	979201	979202
250†	123443	SCREW, cap, flange head		1	1
251†	131749	SCREW, shcs, #12-24 x 5/8		1	1
252	16K214	HOLDER, cable, tie	1	2	2
253	131327	BOLT, flange hd, serrated, 1/4, cs	2	3	3
292	17J898	CLAMP, 2-9/16 - 3-1/2 hose	1	1	1
293	125370	CLAMP, hose, diameter 11/16-1-1/2	1	1	1
294	131837	CLAMP, hose, worm-drive, sae #28	1	1	1
295	100985	WASHER, lock ext	1	1	1
296	116287	WASHER, sst, external, star washer	1	1	1
297	125625	TIE, cable, fir tree	2	2	2
298	131704	HOLDER, cable tie mount, 5/16	2	2	2
299	15R472	FASTENER, hex hd, flanged, 1/4 x 1	1	1	1
300	17U549	BRACKET, engine bonding	1	1	1
301	17B268	SCREW, hex hd, m12 x 25 lg	3	3	3
303*	17X574	CABLE, assembly, Tier 4 Final, battery positive	1	1	1
304*	17X575	CABLE, assembly, Tier 4 Final, battery negative	1	1	1
308*	125835	CLIP, ferrite bead	2	2	2
309*	16Y509	CORE, ferrite, snap-on, 0.76 id	1	1	1
310*	125871	TIE, cable, 7.50 inch	5	5	5
311*	131839	CABLE, charge, alternator to starter, Kohler	1	1	1
313	131842	HOLDER, cable tie mount, 1/2	1	1	1

** Not shown.*

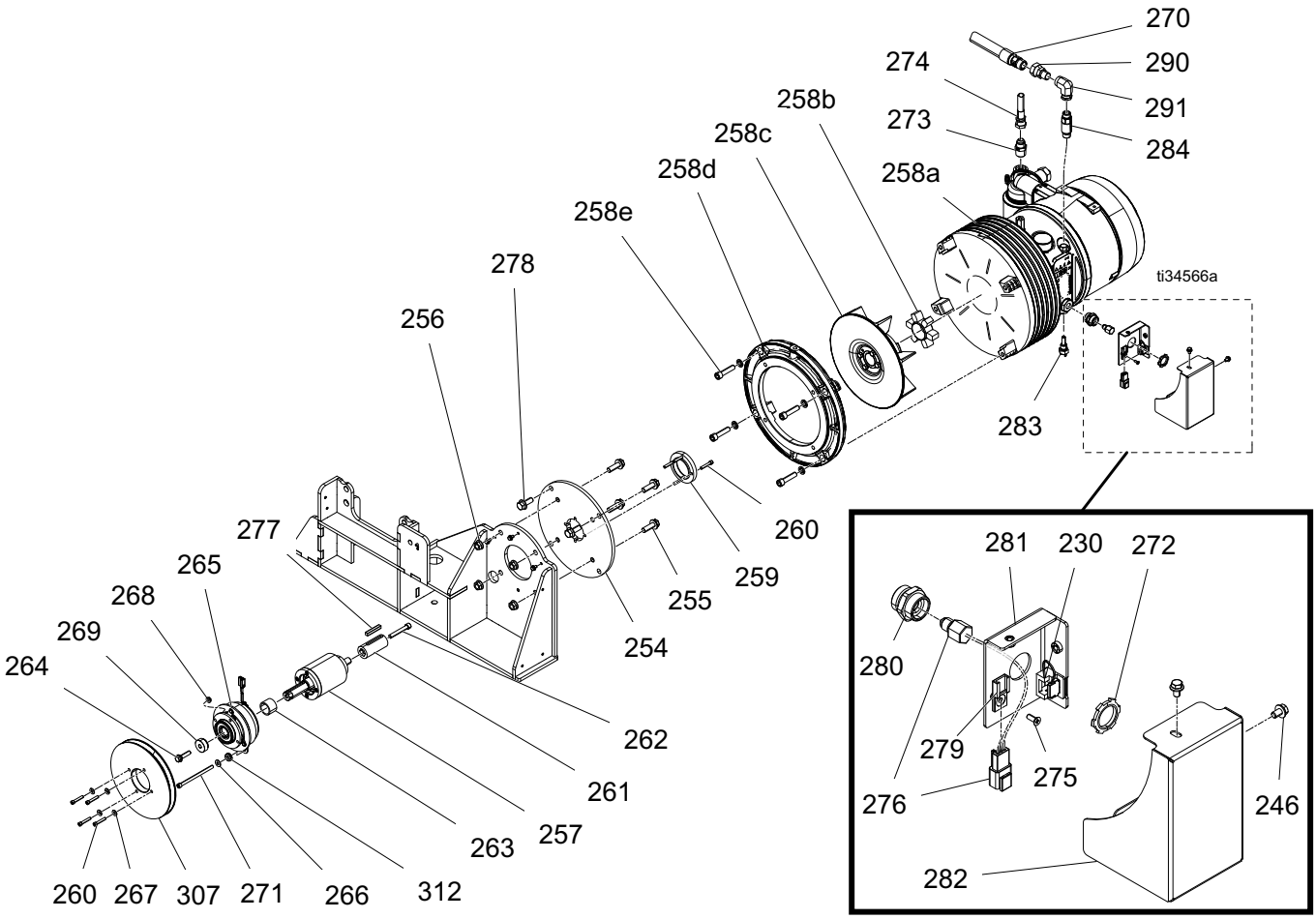
† Part included in Replacement Kit 25N693 (for Ref. 49).

Air Compressor

979201 (20 cfm)



979202 (35 cfm)



Ref.	Part	Description	Qty.	
			979201	979202
230	125631	BUSHING, cable, strain relief		1
246	119865	SCREW, hex serrated		2
254	-----	ADAPTER, plate, compressor, 5 hp	1	
	-----	ADAPTER, plate, compressor, 10 hp		1
255	131321	SCREW, shcs, 1/2-13 x 1.75	4	
	16J674	SCREW, cap, flnghd		4
256	112731	NUT, hex, flanged, 1/2-13	4	4
257	-----	SHAFT, compressor	1	1
258	25N804	COMPRESSOR, tankless, 7 hp	1	
	131320	COMPRESSOR, tankless, 10 hp		1
259	-----	RETAINER, cap, bearing, compressor	1	1
260†	131316	SCREW, shcs, 1/4-20 x 1.375	8	8
261	-----	ADAPTER, shaft, compressor, hv04	1	
	-----	ADAPTER, shaft, compressor, hr07		1
262	131317	SCREW, shcs, 3/8-16 x 2.50	1	1
263	17U391	SPACER, shaft, compressor	1	1
264	112785	SCREW, hex hd, flanged	1	1
265	25N690	CLUTCH, compressor, electric, shaft mounted	1	1
266†	100527	WASHER, plain	1	1
267†	110755	WASHER, plain	4	4
268†	115942	NUT, hex, flange head	4	4
269	-----	RETAINER, clutch, compressor	1	1
270	241694	HOSE, coupled		1
	280631	HOSE, coupled	1	
271†	040954	SCREW, shc, 5/16-18 x 4.75, gr 8	1	1
272	106216	NUT, lock	1	1
273	C20679	FITTING, elbow	1	
	131748	FITTING, jic-10 x 3/4 bspt		1
274	17H101	HOSE, 0.50 ID, ptfe, sst braid	1	1
275	131747	SCREW, FH, undercut, #10-24	1	1
276	18H099	SENSOR, assembly, oil level, air comp	1	1
277	131807	KEY, square, 5/16 x 2.00		1
	16C282	KEY, square, 0.25	1	
278	131336	BOLT, flange, 1/2-20 x 1.25		4
279	17Y065	CONNECTOR, attachment, clip	1	1
280*	-----	ADAPTER, port, sensor	1	1
281	-----	BRACKET, base, sensor cover, painted		1
	-----	BRACKET, compressor, harness	1	
282	-----	BRACKET, sensor cover, painted		1
	16X024	COVER, overload switch, paint	1	
283	16Y809	SWITCH, thermal overload	1	
	17X967	SWITCH, thermal overload		1
284	17Y544	FITTING, adapter, bspp x npsm, long	1	1
286	107530	SCREW, cap, sch, hex	2	
287	113505	NUT, hex head	1	
288	117625	NUT, locking	1	

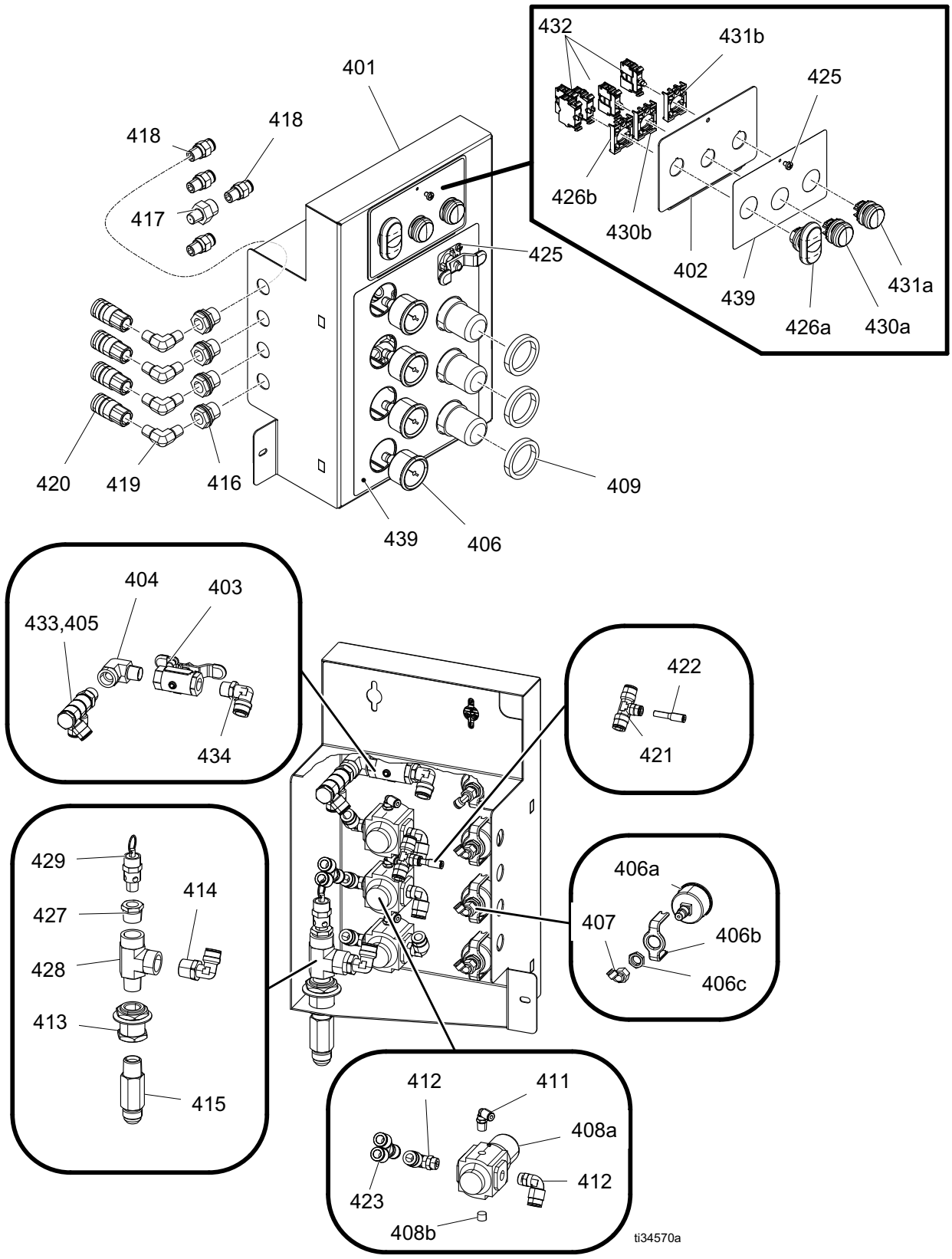
Ref.	Part	Description	Qty.	
			979201	979202
289	260067	FITTING, strain relief, 1/2 npt	1	
290	113344	SWIVEL, union assembly		1
291	131911	FITTING, adapter, npsm(f) x npt(f)	1	
	157416	FITTING, swivel, union, 90 deg		1
312†	131841	GROMMET, rubber, 5/16 id x 13/16 od	1	1
314‡	131906	SPIDER, TPE, L009/L100 hub		1
307	-----	PULLEY, compressor, b groove	1	1

† Part included in Replacement Kit 25N690 (Ref. 65).

‡ Part included in Replacement Kit 25N804 (Ref. 58).

** Part included in Replacement Kit 18H099 (Ref. 276)*

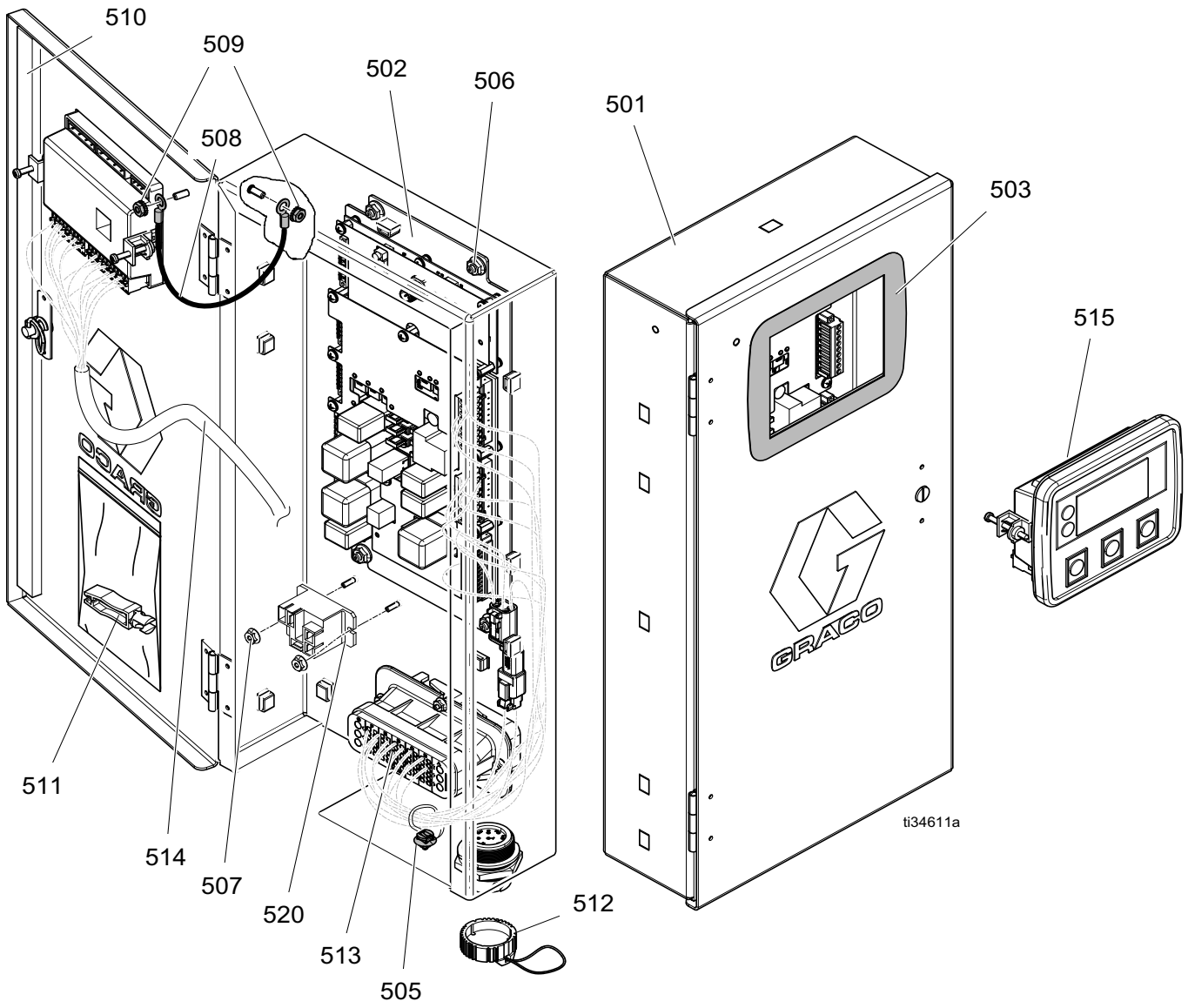
Air Control Panel (979201 and 979202)



Ref.	Part	Description	Qty.
401	-----	PANEL, air control, painted	1
402	-----	DOOR, air control panel, painted	1
403	17F850	VALVE, ball, air, panel mount bleed	1
404	111856	FITTING, elbow, street	1
405	131740	FITTING, triple banjo manifold	1
406	116257	GAUGE, pressure	4
407	111502	FITTING, tube	4
408	116513	REGULATOR, air	3
409	116514	NUT, regulator mount	3
411	131977	FITTING, ptc, elbow, 5/32 od x 1/8 npt	3
412	115841	FITTING, elbow	6
413	512905	FITTING, bulkhead	1
414	127846	FITTING, elbow, push-to-connect, 1/2	1
415	17X969	FITTING, long, 1/2 npt x jic-10	1
416	104641	FITTING, bulkhead	4
417	16H531	FITTING, flow control	1
418	128636	FITTING, ptc, 3/8 tube, 1/4 npt	4
419	111763	FITTING, elbow, 1/4 npt	4
420	114558	COUPLER, line, air	4
421	131745	FITTING, ptc, tee, reducing, 1/2x1/4	1
422	131744	FITTING, ptc, stem reducer, 1/4x5/32	1
423	125539	FITTING, union, y, 3/8 od tubing	1
425	116807	SCREW, pan hd, cross	3
426	131598	SWITCH, indicating, start/stop	1
427	100206	BUSHING, pipe	1
428	107128	FITTING, tee, service	1
429	114717	VALVE, safety, 180 psi	1
430	131599	LIGHT, indicating, yellow lens	1
431	130297	LIGHT, indicating, red lens	1
432	17X582	HARNESS, Tier 4 Final, air controls	1
433	131741	FITTING, banjo, 3/8 ptc	3
434	131743	FITTING, ptc, elbow, 1/2od x 3/8npt	1
435*	054741	HOSE, nylon, wpr 250psi, 83.5 ft	1
436*	054753	TUBE, nylon, rd, black, 20 ft	1
437*	061513	TUBE, nylon, 1/2 od x 3/8 id, 7.5 ft	1
439	25E075	LABEL, control, display, front	1
440*	125871	TIE, cable, 7.50 inch	2

** Not shown.*

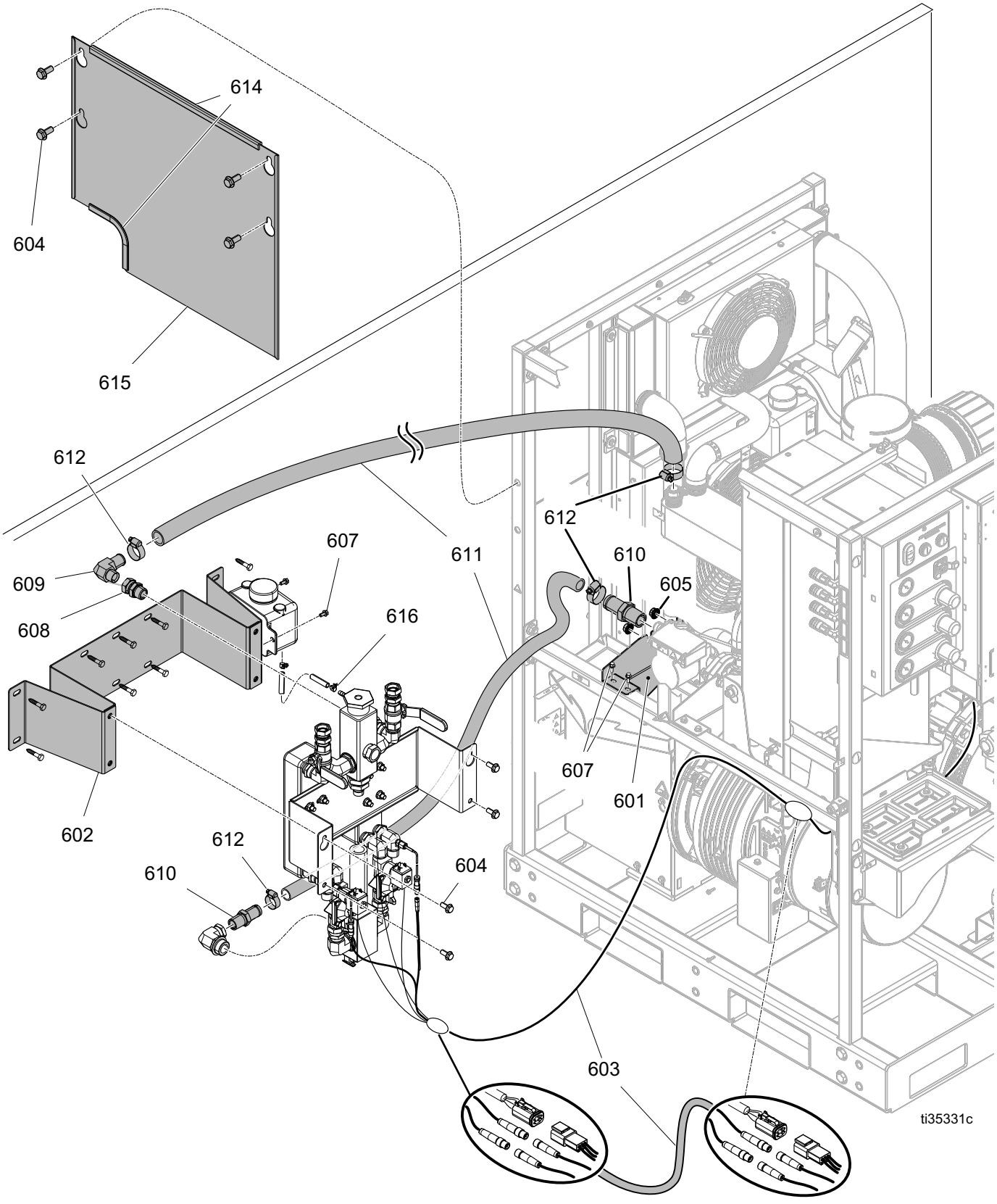
Engine Controls Enclosure



Ref.	Part	Description	Qty.
501	-----	ENCLOSURE, load center, painted	1
502	25N686	MODULE, GCA, LC2	1
503	16K940	LABEL, engine display module	1
505	125625	TIE, cable, fir tree	1
506	115942	NUT, hex, flange head	4
507	131685	NUT, flange, serrated, #6-32, cs	6
508	194337	WIRE, grounding, door	1
509	113505	NUT, keps, hex hd	3
510	-----	GASKET, foam, load center	1

Ref.	Part	Description	Qty.
511	129189	TOOL, puller, fuse	1
512	17X591	CAP, connector, w lanyard	1
513	25N801	HARNESS, Tier 4 Final, engine interface	1
514	17X578	HARNESS, Integrated PowerStation, engine display	1
515	25N698	MODULE, engine display	1
520	131697	RELAY, panel, mount	1

Heat Exchanger Relocation Kit (25B067)

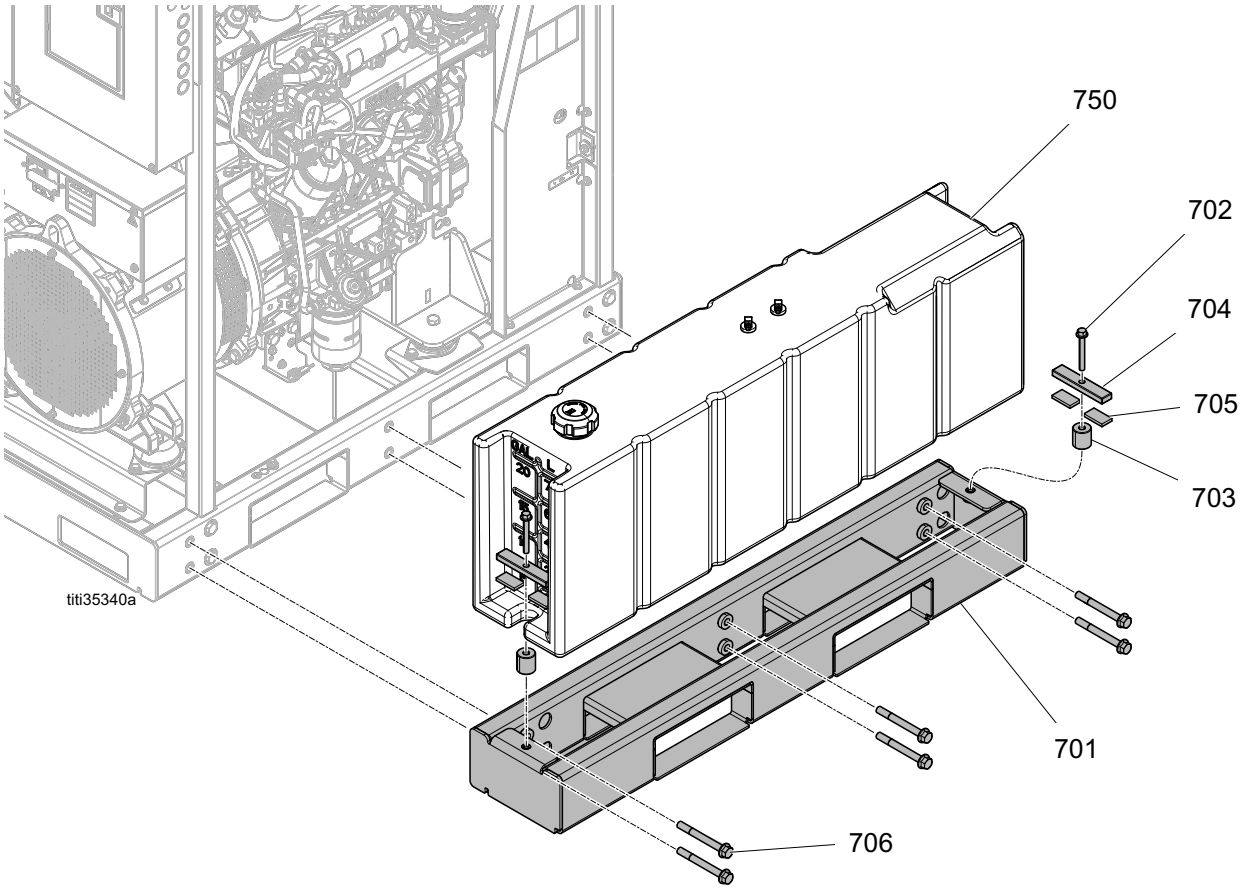


Ref.	Part	Description	Qty.
601	-----	BRACKET, feeder pump, painted	1
602	-----	BRACKET, heat exchanger relocation, painted	1
603	17X598	HARNESS, Integrated PowerStation, heat exchanger valve, extend	1
604	111192	SCREW, cap flange hd	8
605	125943	NUT, serrated flange,7/16-14	2
607	131327	BOLT, flange hd, serrated,1/4, cs	4
608	118459	FITTING, union, swivel, 3/4	1
609	125477	FITTING, 1 in. beaded barb x 3/4 nptm	1
610	125596	FITTING, 3/4 npt male, 1 in. barbed hose	2
611	079093	HOSE, coolant, 1 in. id, bulk, 20 ft	1
612	125370	CLAMP, hose, diameter 11/16-1-1/2	4
613*	110110	SEALANT, pipe, sst	1
614	-----	TRIM, edge, funnel	2
615	-----	GUARD, heat exchanger relocation	1
616	125163	CLAMP, hose, 3/8 in.-29/64	2

** Not shown.*

Fuel Pallet Extension Kit (25E307)

Fuel Tank Kit (24K390)



Fuel Pallet Extension Kit (25E307)

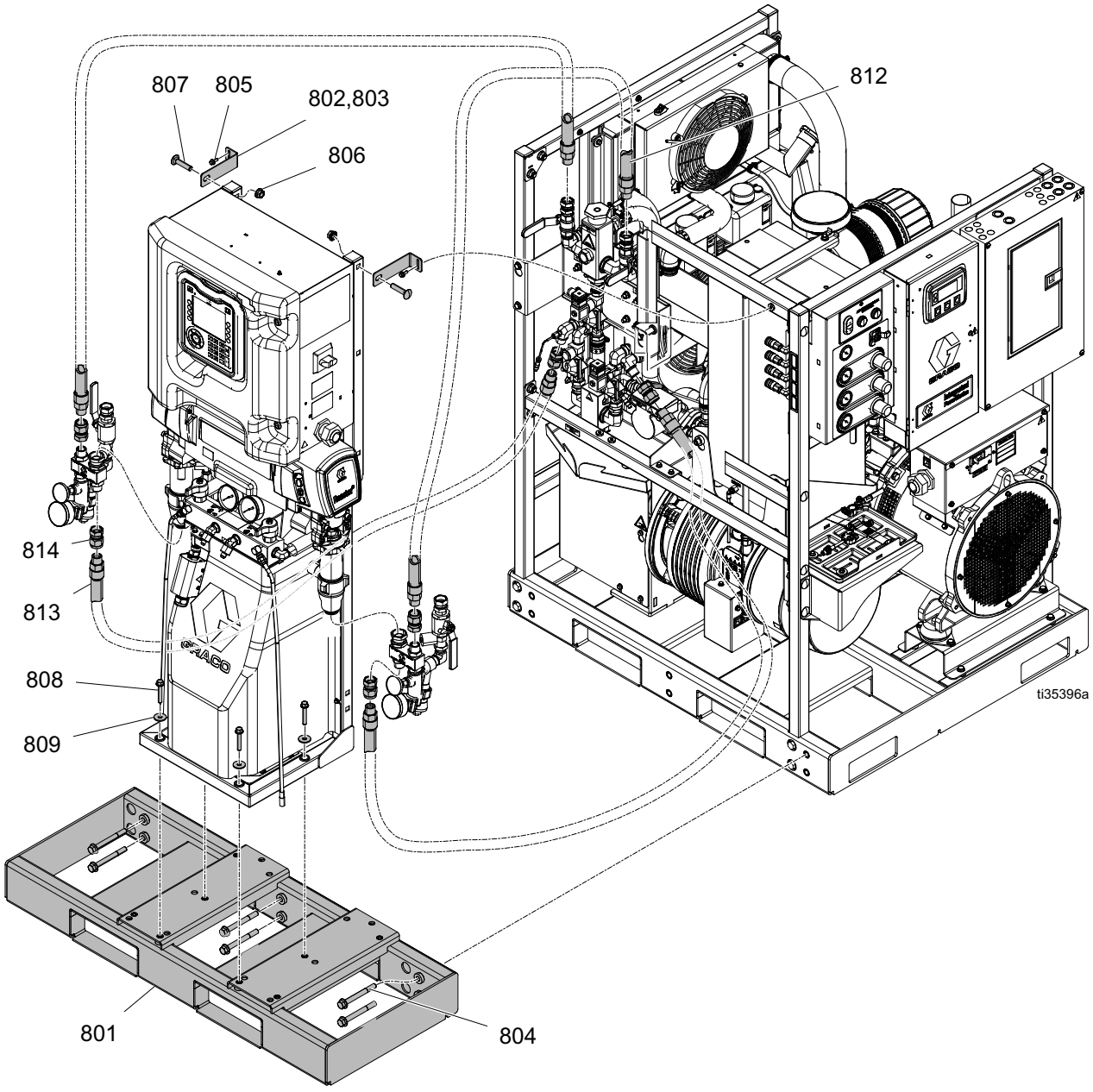
Ref.	Part	Description	Qty.
701	25D381	BASE, pallet, fuel tank, painted	1
702	125626	SCREW, hex hd, flanged	2
703	16K363	SPACER, fuel tank	2
704	16J889	BRACKET, support, fuel tank	2
705	17Y364	GASKET, sheet, fuel tank hold down	1
706	131816	BOLT, flange hd, grade 8, 1/2	6
707*	113500	ADHESIVE, anaerobic	2

** Not shown.*

Fuel Tank Kit (24K390)

Ref.	Part	Description	Qty.
750	24K390	TANK, fuel	1

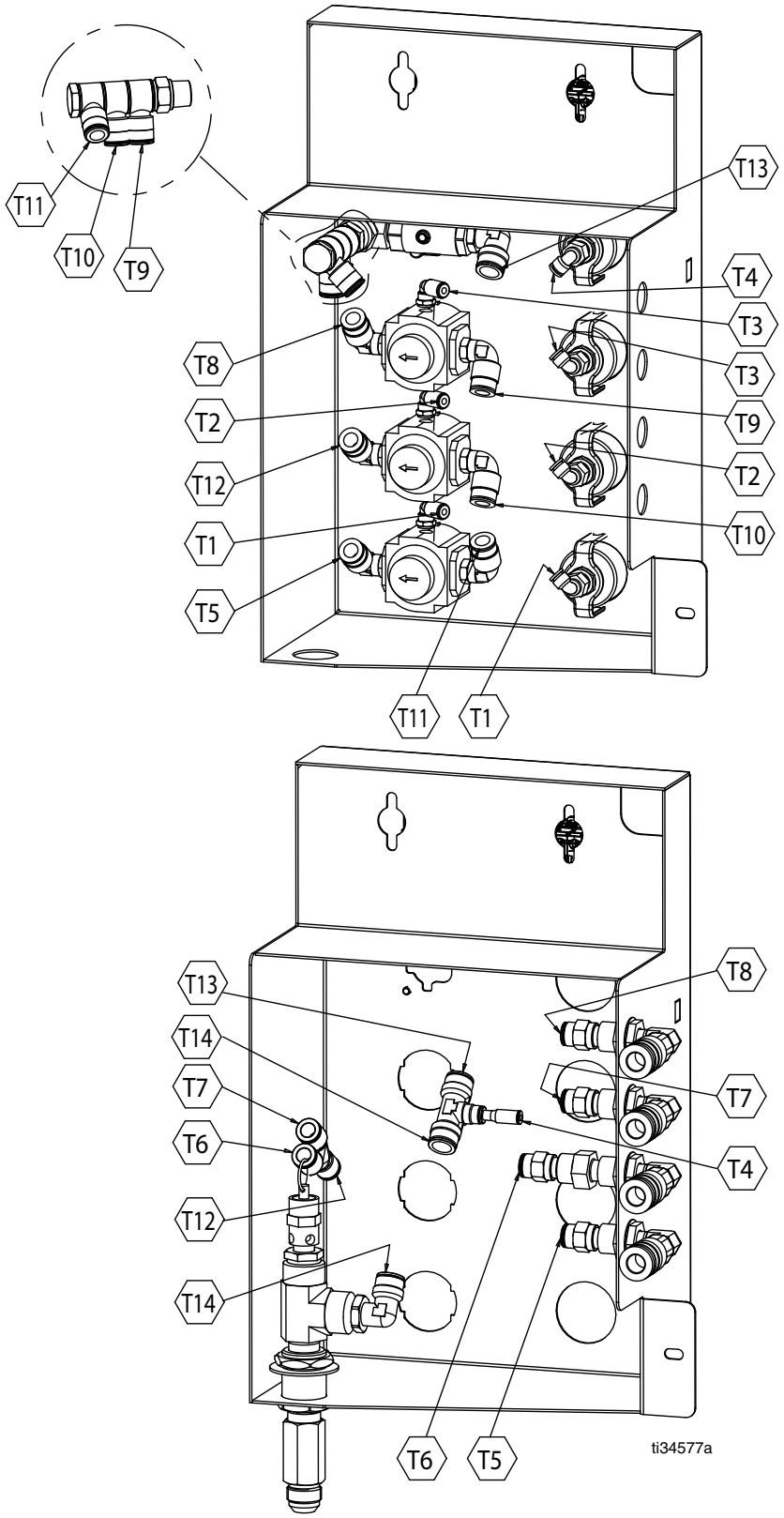
Reactor 2 Pallet Extension Kit (25E306)



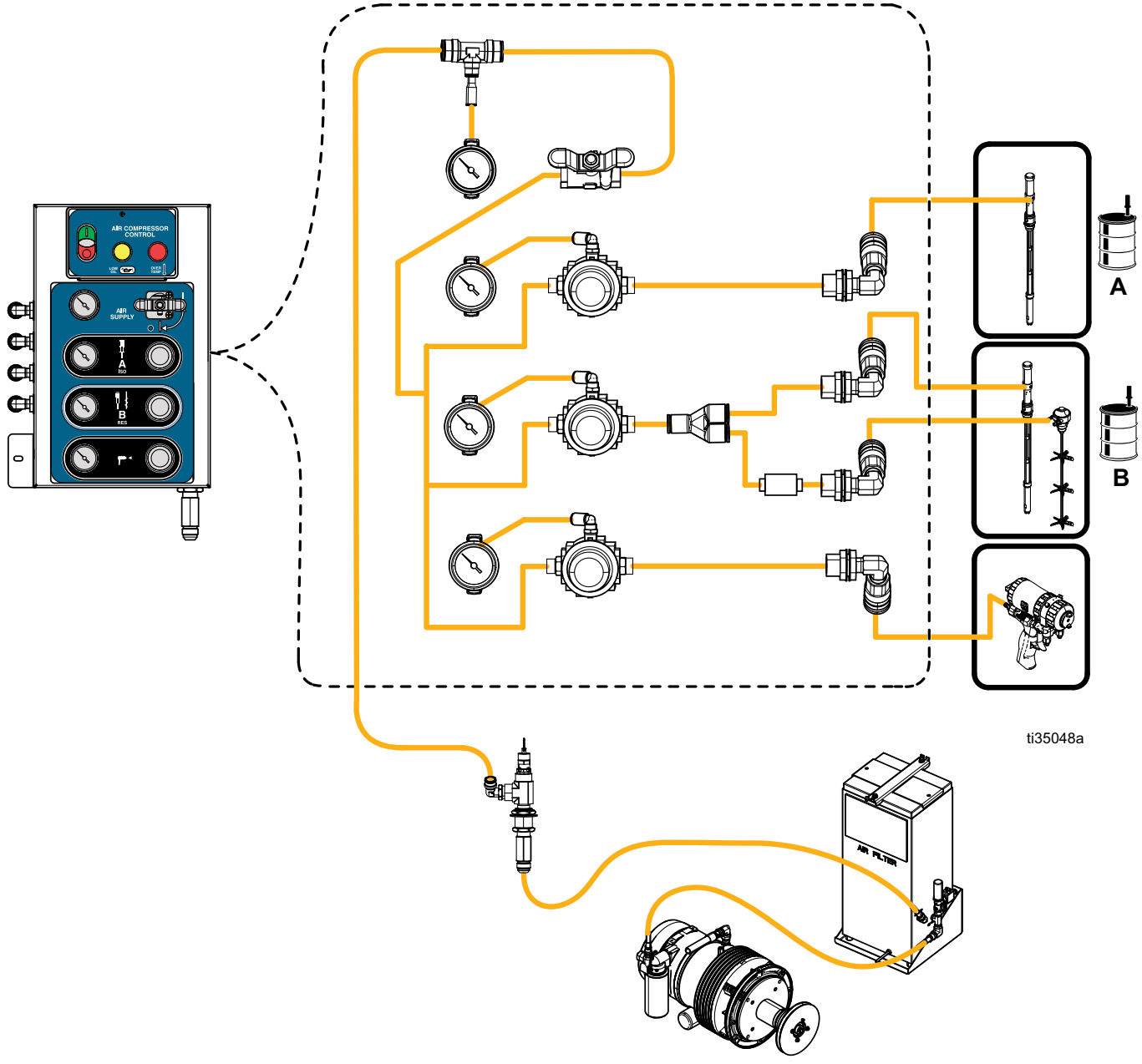
Ref.	Part	Description	Qty.
801	25D377	BASE, pallet, reactor, painted	1
802	17U419	BRACKET, Reactor 2 hydraulic, painted	2
803	17U421	BRACKET, Reactor 2 electric, painted	2
804	131816	BOLT, flange hd, gr8,1/2	6
805	131327	BOLT, flange hd, serrated,1/4, cs	2
806	112731	NUT, hex, flanged, 1/2-13	2
807	131352	BOLT, carriage, 1/2-13 x 2.25	2
808	132001	BOLT, flange hd, serrated, 3/8	4
809	108851	WASHER, plain	4
810*	113500	ADHESIVE, anaerobic	2
812	214961	HOSE, coupled, 6 ft	3
813	214960	HOSE, coupled, 3.5 ft	1
814	156172	FITTING, union, swivel	6
815*	110110	SEALANT, pipe, sst	2

** Not shown.*

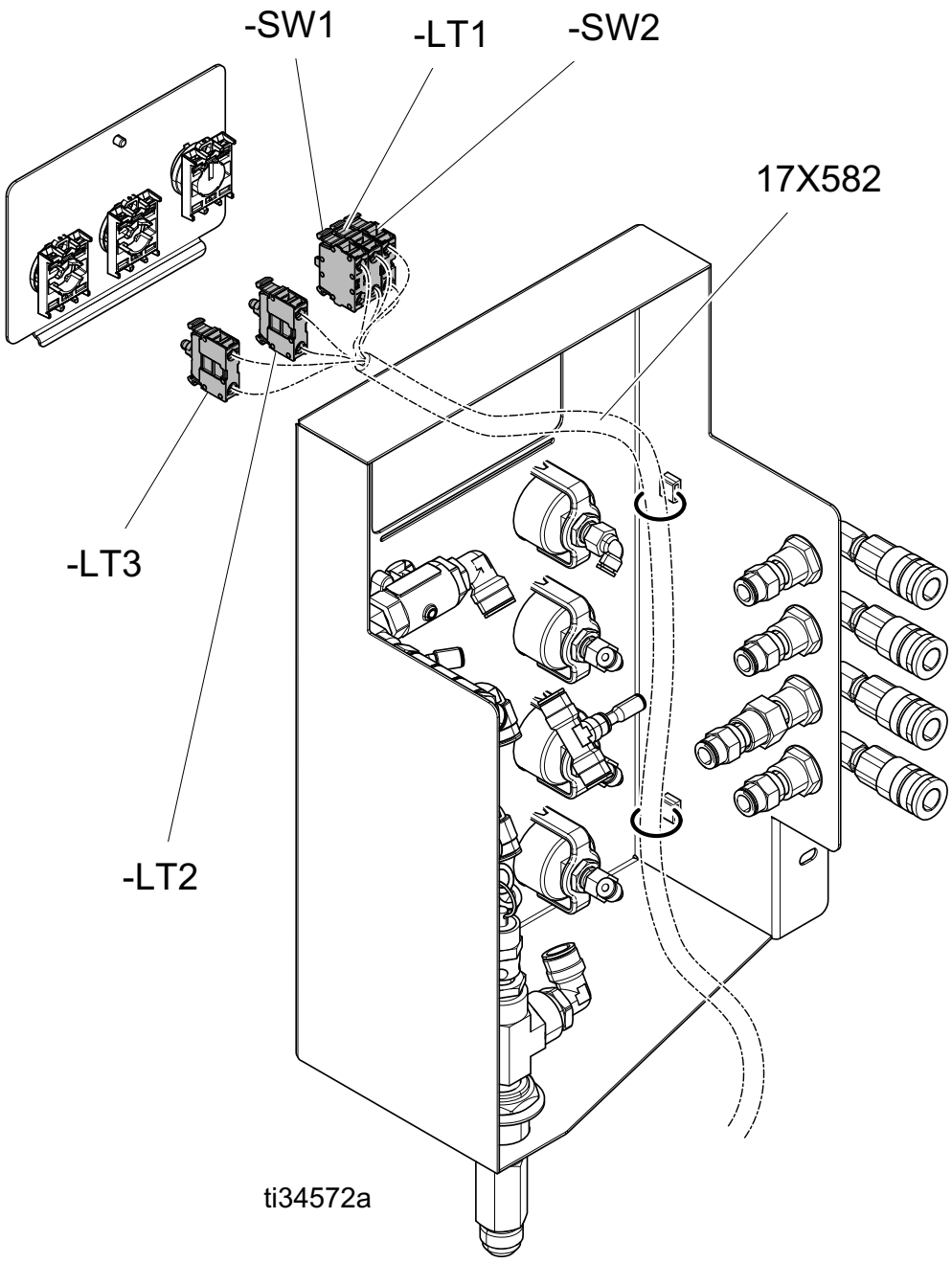
Air Tube Connections



Air Flow Path



Air Control Panel Wiring



Ref.	Description
17X582	Harness, Tier 4 Final, air controls
-SW1	Green switch
-SW2	Red switch
-LT1	White lamp
-LT2	White lamp, white text
-LT3	Red lamp, red text

NOTE: The rear panel is not shown, in order to reveal the harness routing.

Technical Specifications

Integrated PowerStation		
	US	**Metric**
Maximum fluid inlet working pressure	300 psi	2.07 MPa, 20.7 bar
Maximum air outlet pressure	150 psi	1.03 MPa, 10.3 bar
Maximum ambient temperature	120°F	49°C
Minimum ambient temperature	20°F	-7°C
Maximum Air Outlet Pressure		
979201	140 psi	0.96 MPa, 9.6 bar
979202	160 psi	1.10 MPa, 11.0 bar
Auxiliary Power Availability*		
979200 Maintenance heat (2 kW)†	10.6 kVA (10.6 kW at 1.0 pf) 44 A at 240 Vac 88 A at 120 Vac	
979200 Default heat setting (4 kW)	9.1 kVA (9.1 kW at 1.0 pf) 38 A at 240 Vac 76 A at 120 Vac	
979201, 979202 Maintenance heat (2 kW)†	10.1 kVA (10.1 kW at 1.0 pf) 42 A at 240 Vac 82 A at 120 Vac	
979201, 979202 Default heat setting (4 kW)	8.6 kVA (8.6 kW at 1.0 pf) 36 A at 240 Vac 72 A at 120 Vac	
Inlet/Outlet Sizes		
Fluid inlet size	3/4 in. npt(m)	
Fluid outlet size	3/4 in. npt(m)	
Noise (dBa)		
Sound pressure (operator level)	91 dBa @ 70 psi (0.48 MPa, 4.8 bar)	
Sound power	109 dBa @ 70 psi (0.48 MPa, 4.8 bar)	
Sound pressure measured 3.28 feet (1.0 meter) from equipment. *Sound power measured per ISO-3744.*		
Weight		
979200 (no air compressor model)	1690 lb	767 kg
979201 (20 cfm compressor model)	1820 lb	826 kg
979202 (35 cfm compressor model)	1900 lb	862 kg
Wetted Parts		
Material	Nickel, stainless steel, zinc-plated carbon steel, brass, PTFE	

Integrated PowerStation
Notes
* The amount of auxiliary power available is based on an Integrated PowerStation system: - Installed with a compatible Reactor 2 proportioner, operating at maximum capabilities and with unneeded heater rods disconnected (see **Reactor 2 Heater Rod Wiring** in the Integrated PowerStation Operation manual) - Connected to 310 ft (94 m) of heated hose The auxiliary power availability assumes the system is in operation at an altitude below 3300 ft (1 km) and at a maximum ambient temperature of 104°F (40°C). The auxiliary power of models 979201 and 979202 includes the air dryer power draw. Additional auxiliary power can be reclaimed by reducing the length of heated hose. For every 50 ft (15 m) of hose length removed, an additional 2-3 Amps (at 240 Vac) are available. Available auxiliary power may be reduced by: - Operating the system at altitudes higher than 3300 ft (1 km). Refer to 240 Vac alternator documentation (**Supplied Manuals**, page 3) for derating information. - Operating the system at system ambient temperatures higher than 104°F (40°C). Refer to 240 Vac alternator documentation for derating information. - Operating auxiliary loads with a power factor less than 1.0 on the system. Motors and other inductive loads inherently present a power factor less than 1.0. † Maintenance heat is the minimum Reactor 2 primary heater setting required for standard operation. Only disable the primary heaters as a temporary measure or for troubleshooting.

Integrated PowerStation Packages

Integrated PowerStation Packages†		
	US	**Metric**
Maximum Fluid Working Pressure		
Integrated PowerStation (979202) maximum fluid inlet working pressure	300 psi	2.07 MPa, 20.7 bar
Reactor 2 E-30 (272010) maximum fluid working pressure	2000 psi	13.8 MPa, 138 bar
Reactor 2 H-30 (17H031) maximum fluid working pressure	2000 psi	13.8 MPa, 138 bar
Weight		
979001 (Integrated PowerStation package, E-30)	2440 lb	1107 kg
979002 (Integrated PowerStation package, H-30)	2670 lb	1211 kg
Notes		
† *Refer to your Reactor 2 proportioning system manual for additional technical specifications. See **Related Manuals**, page 3.*		

California Proposition 65

⚠ **WARNING:** This product can expose you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65warnings.ca.gov.

⚠ **WARNING:** Breathing diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

- Always start and operate the engine in a well-ventilated area.
- If in an enclosed area, vent the exhaust to the outside.
- Do not modify or tamper with the exhaust system.
- Do not idle the engine except as necessary.

For more information, go to www.P65warnings.ca.gov/diesel.

Graco Extended Warranty

Graco warrants all equipment referenced in this document which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

Part	Description	Warranty Period
25N686	Load Center 2	36 Months (3 Years)
All Other Parts		12 Months

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

GRACO MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN CONNECTION WITH ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY GRACO. These items sold, but not manufactured by Graco (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco, or otherwise.

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Original instructions. This manual contains English. MM 3A6486
Graco Headquarters: Minneapolis
International Offices: Belgium, China, Japan, Korea

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