

Air Compressor and Dryer Kit

332733B
EN

Air compressor and air dryer for Reactor® 2 E-30i and E-XP2i integrated plural component proportioning systems. For professional outdoor use only. Not approved for use in explosive atmospheres or hazardous locations.

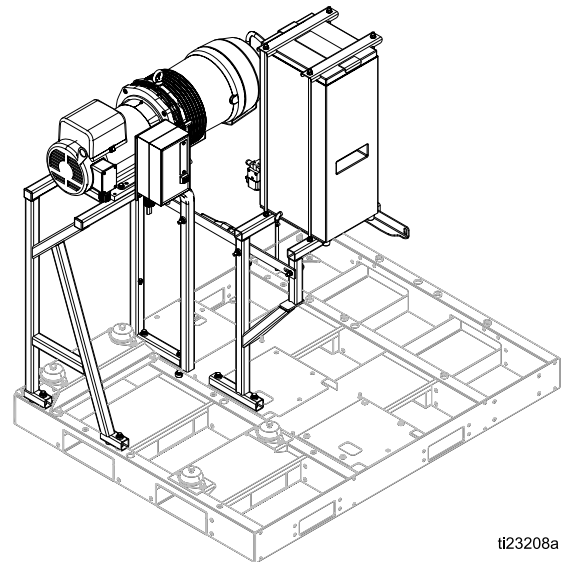


Important Safety Instructions

Read all warnings and instructions in this manual and in the Reactor® 2 Integrated Elite Systems Manual.

Save these instructions.

24U176




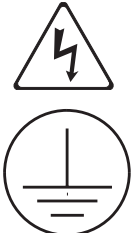

ti23208a

Contents

Warnings	2	Electrical Schematics.....	6
Install Air Compressor.....	3	Parts.....	9
Install Air Dryer.....	3	Technical Specifications.....	17
Connect Air Lines	3	Graco Standard Warranty.....	18
Connect Cables.....	4		

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	
	<p>ELECTRIC SHOCK HAZARD</p> <p>This equipment must be grounded. Improper grounding, setup, or usage of the system can cause electric shock.</p> <ul style="list-style-type: none"> • Turn off and disconnect power at main switch before disconnecting any cables and before servicing 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.
	<p>BURN HAZARD</p> <p>Equipment surfaces and fluid that is heated can become very hot during operation. To avoid severe burns:</p> <ul style="list-style-type: none"> • Do not touch hot fluid or equipment.

Install Air Compressor

Reference parts illustration, [Parts, page 9](#) .

1. Install air compressor frame (1) and air dryer frames (2) on pallet with screws (723). Leave nuts and bolts loose.

Note

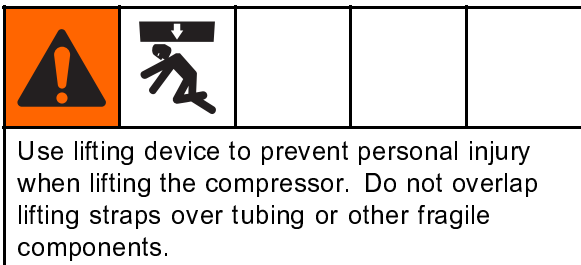
The fuel tank may need to be removed to gain access to the frame mounting screws.

2. Remove two existing nuts (N) from system and secure frame (2) to system with nuts (N). Torque to 40 ft-lbs (54 N•m).

Note

Shift or tilt the proportioner forward to gain alignment.

3. Connect air compressor frame (1) and air dryer frame (2) with frame (3).
4. Tighten all bolts and nuts.
5. Install end caps (37).
6. Install two motor brackets (29) with screws (31) on top of frame (1).



7. Lift air compressor on top of brackets (29) and secure to brackets with screws (30).
8. Install motor starter (10) to bracket (12) with screws (14) and nuts (15). Attach to air compressor frame (1) with screws (31).
9. Install switch box enclosure (17) on air control panel with screws (18).

Install Air Dryer

Reference parts illustration, [Parts, page 9](#) .

1. Connect air dryer outlet fittings and dump valve (16), (24–268), and (40) and install on dryer as shown.
2. Lift air dryer onto frame (2) and align with fan facing the engine. Install a nut (5) on the bottom of each threaded rod to the end of the thread. Thread rods (9) through nuts in bracket (2) and secure with nuts pre-installed on rod.
3. Connect clamp bracket (8) to rods (9) with nuts (5).
4. Connect elbow fitting (32), barbed fitting (33) and rubber hose (34) to fitting. Secure hose (34) with clamp (38) and route hose to drain pail.

Connect Air Lines

1. Apply thread sealant to elbow fitting (11) threads and install in air compressor outlet.
2. Connect tube (13) and fittings (11) to air dryer inlet and air compressor outlet.
3. Connect hose (20) to system air inlet fitting and fitting (40).

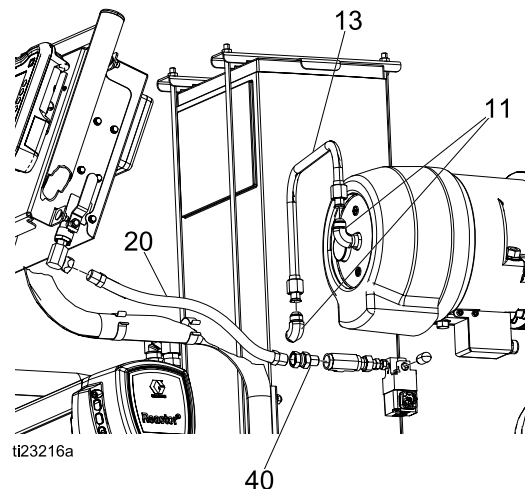
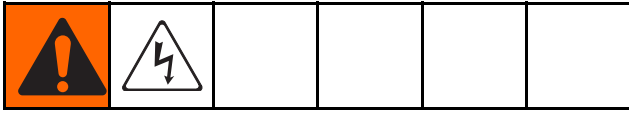


Figure 1 Air Lines

Connect Cables



1. Turn off the 120/240 VAC alternator circuit breaker (CB10).

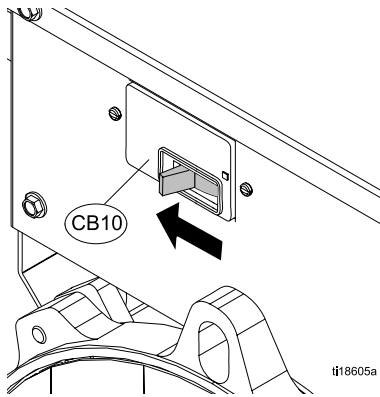


Figure 2

2. Connect motor starter compressor power cable to air compressor power junction box. Remove junction box cover from air compressor. Insert wires in cable end marked "AIR-CMP MTR-STR" from starter box (12) through strain relief and connect with wire nuts (39). See [Electrical Schematics, page 6](#). Reassemble cover.

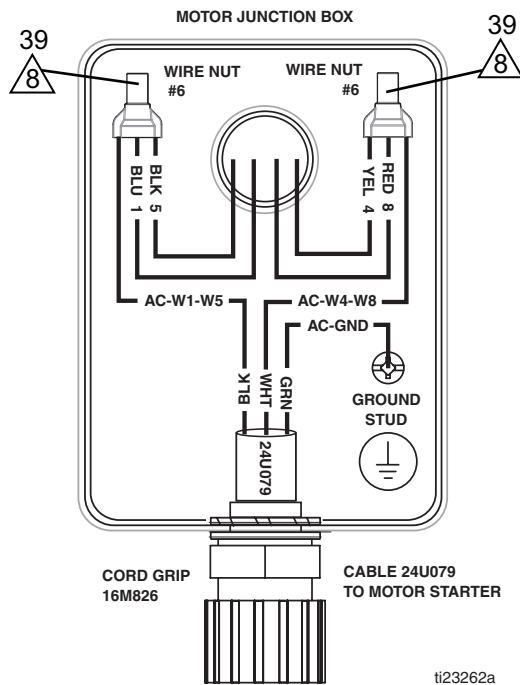


Figure 3 Motor Starter Compressor Power

3. Connect motor starter compressor overtemperature cable to compressor over-temperature switch in enclosure (31).

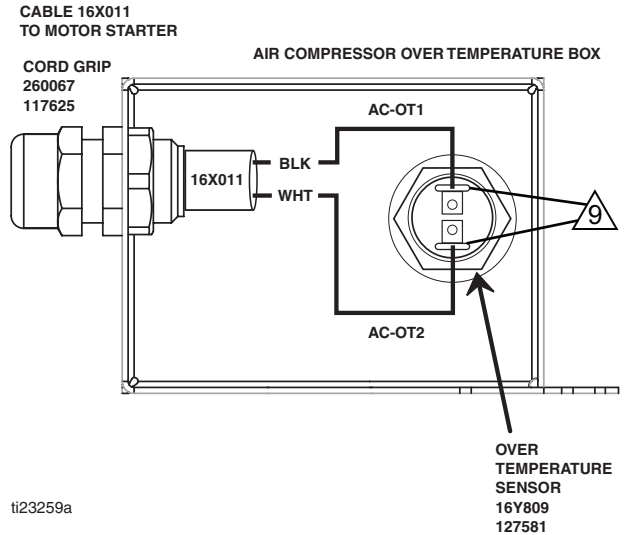


Figure 4 Motor Starter Overtemperature Switch

4. Connect motor starter cable to the start/stop switch enclosure.

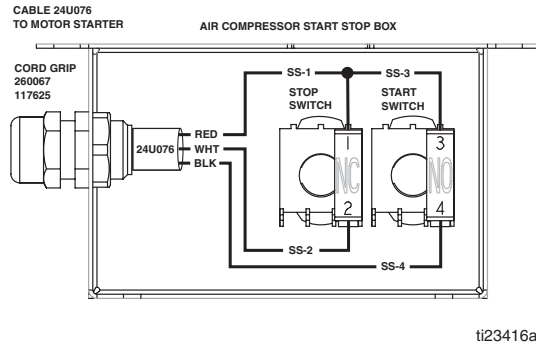


Figure 5 Start/Stop Switch Enclosure

5. Connect motor starter cable to air dryer connector. See [Electrical Schematics, page 6](#).
6. Route power cables from motor starter and air compressor towards the electrical enclosure. See [Cable Routing, page 11](#).

- Use a screw driver to punch out two 3/4 in. knockouts. Install cord grips (23) at bottom hole and (43) in upper hole.

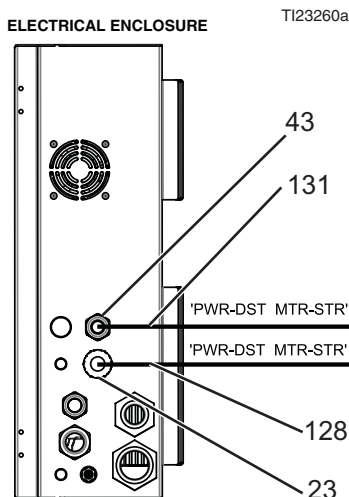


Figure 6

- Loosen the nut on the cord grips (23, 43). Insert power cable (128) through lower cord grip (23) and cable (131) through upper cord grip (43).
- Connect the black and white wire from cable (128) to CB06 and the green wire to the ground bus bar GB02 inside the electrical enclosure.

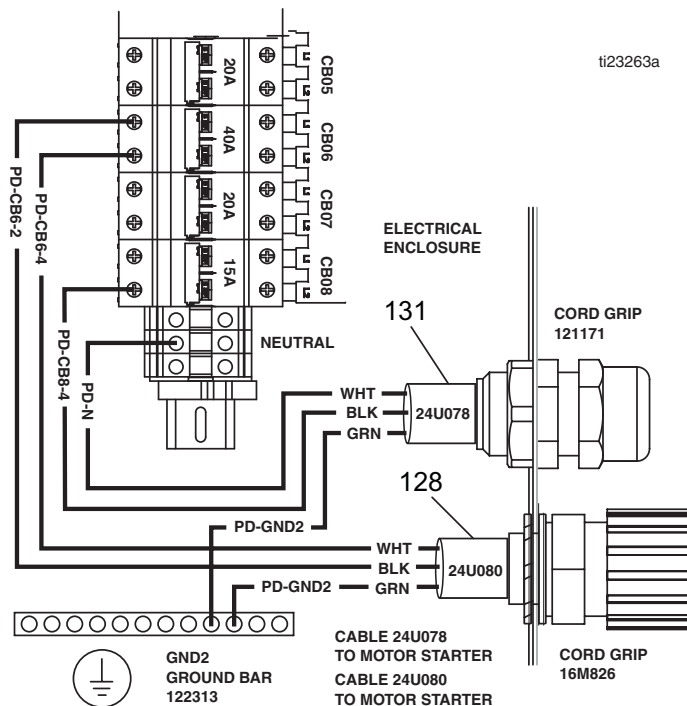


Figure 7 Electrical Enclosure

- Connect cable (131) black wire to CB08 and white wire to Neutral. Connect the green wire to the ground bus bar, GB02 inside the electrical enclosure. See Fig. 7.
- Tighten nut on the cord grips (23, 43).
- Route all cables along proper routes. See [Cable Routing, page 11](#). Use wire ties (42) to hold against frames.
- Turn CB06 and CB08 on.
- Turn on the 120/240 VAC alternator circuit breaker (CB10).

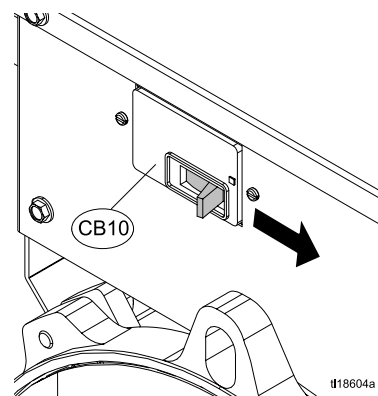
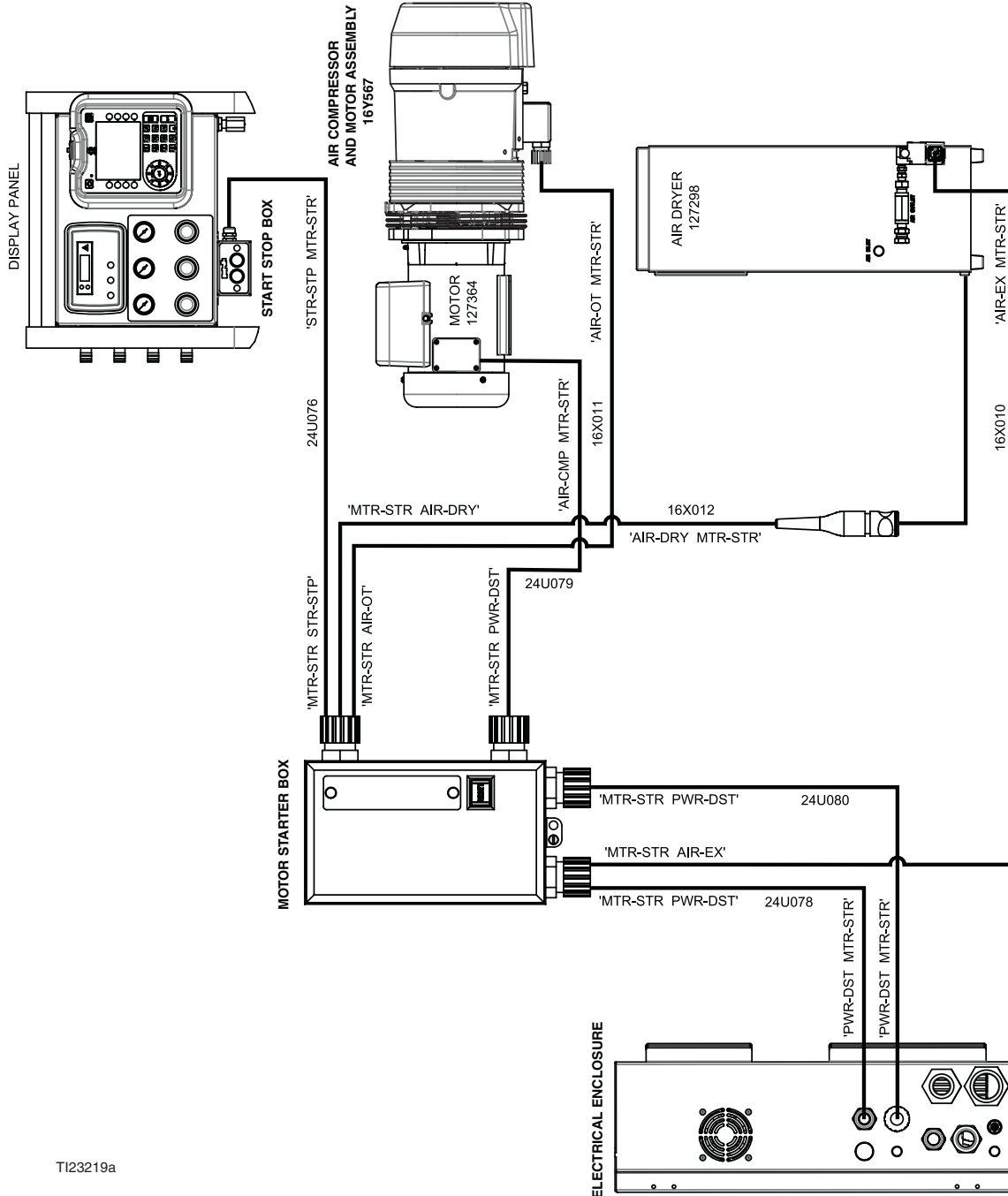


Figure 8

Electrical Schematics

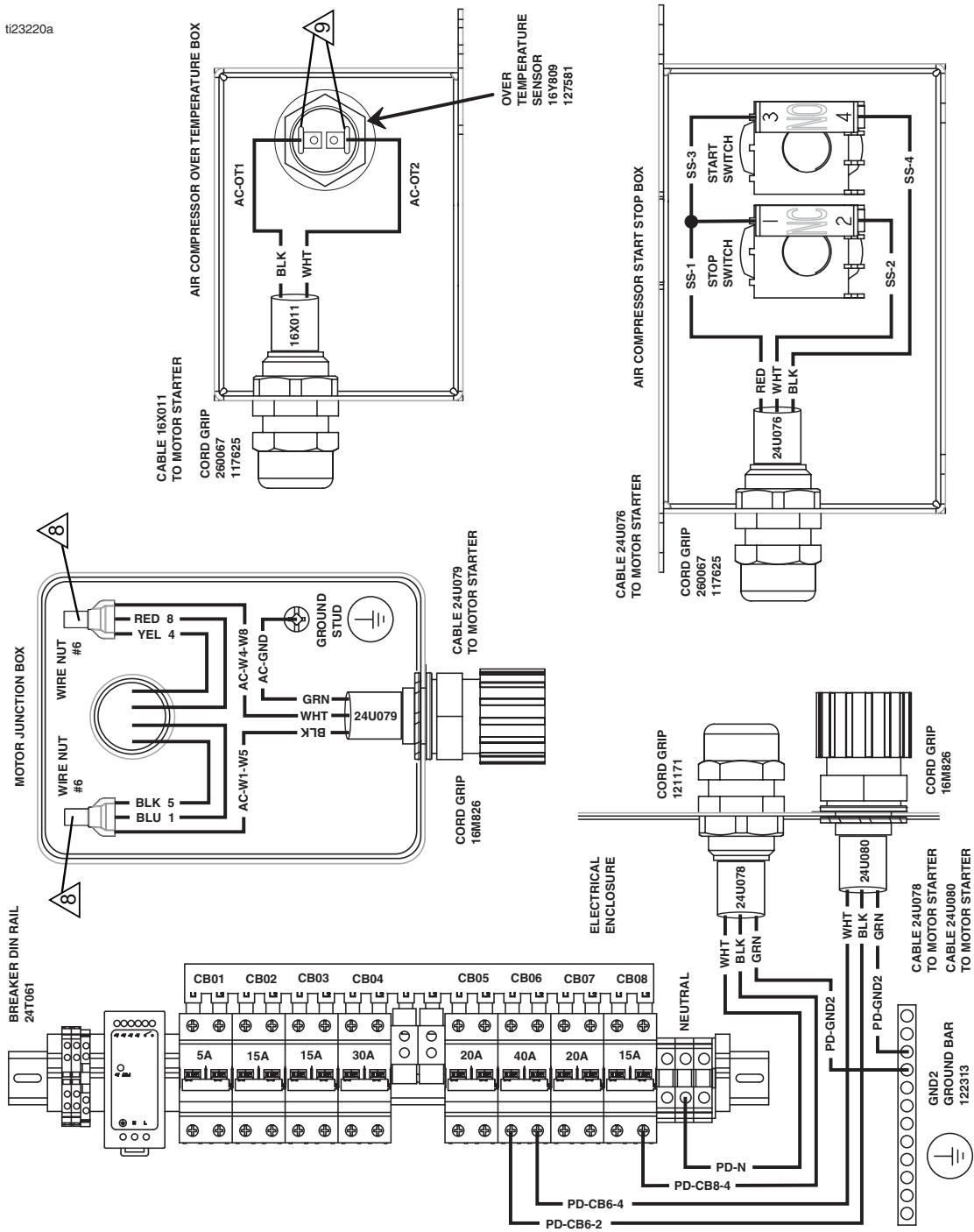
Air Compressor Wiring Diagram



TI23219a

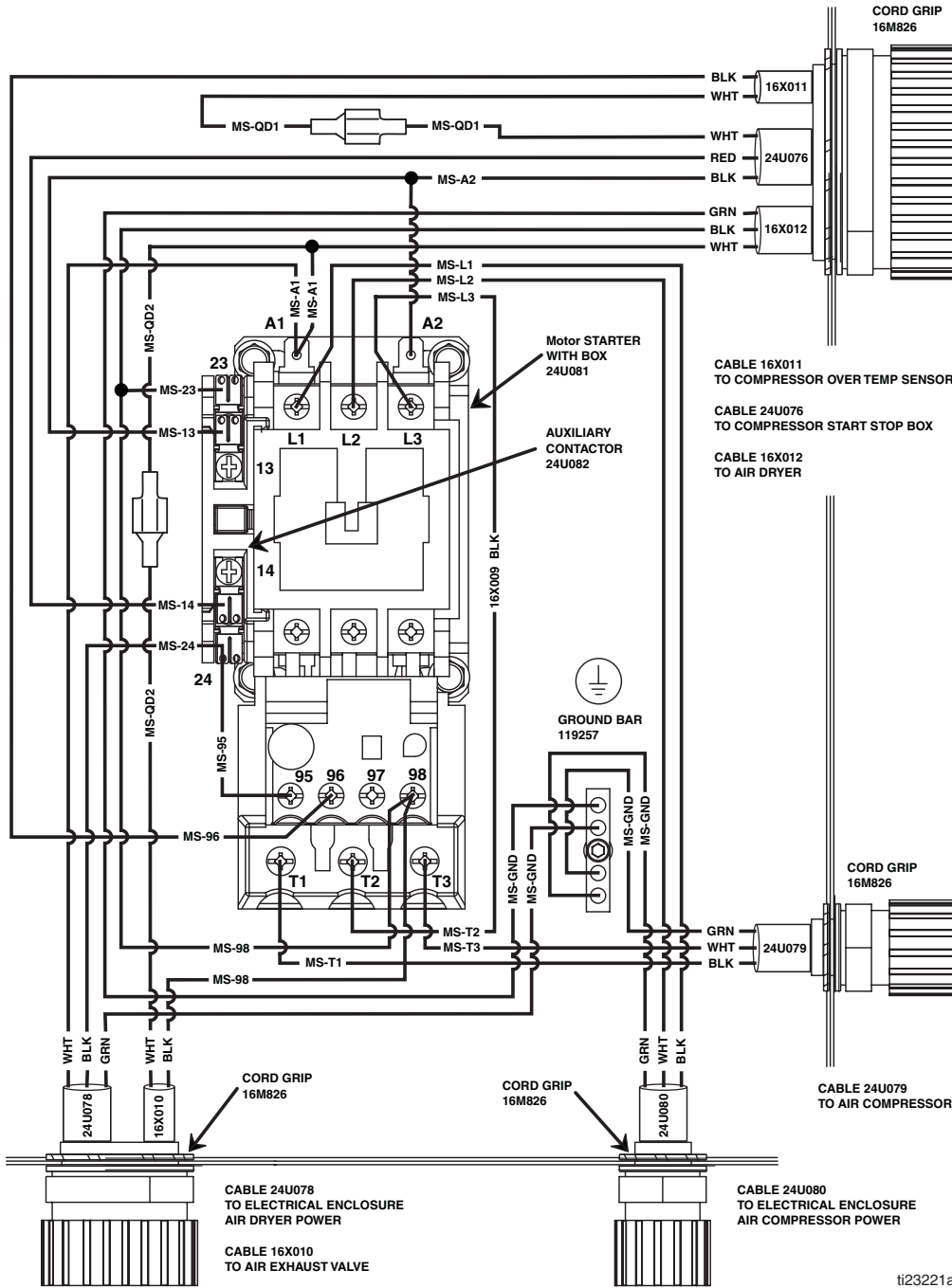
Air Compressor Junction Boxes

ti23220a



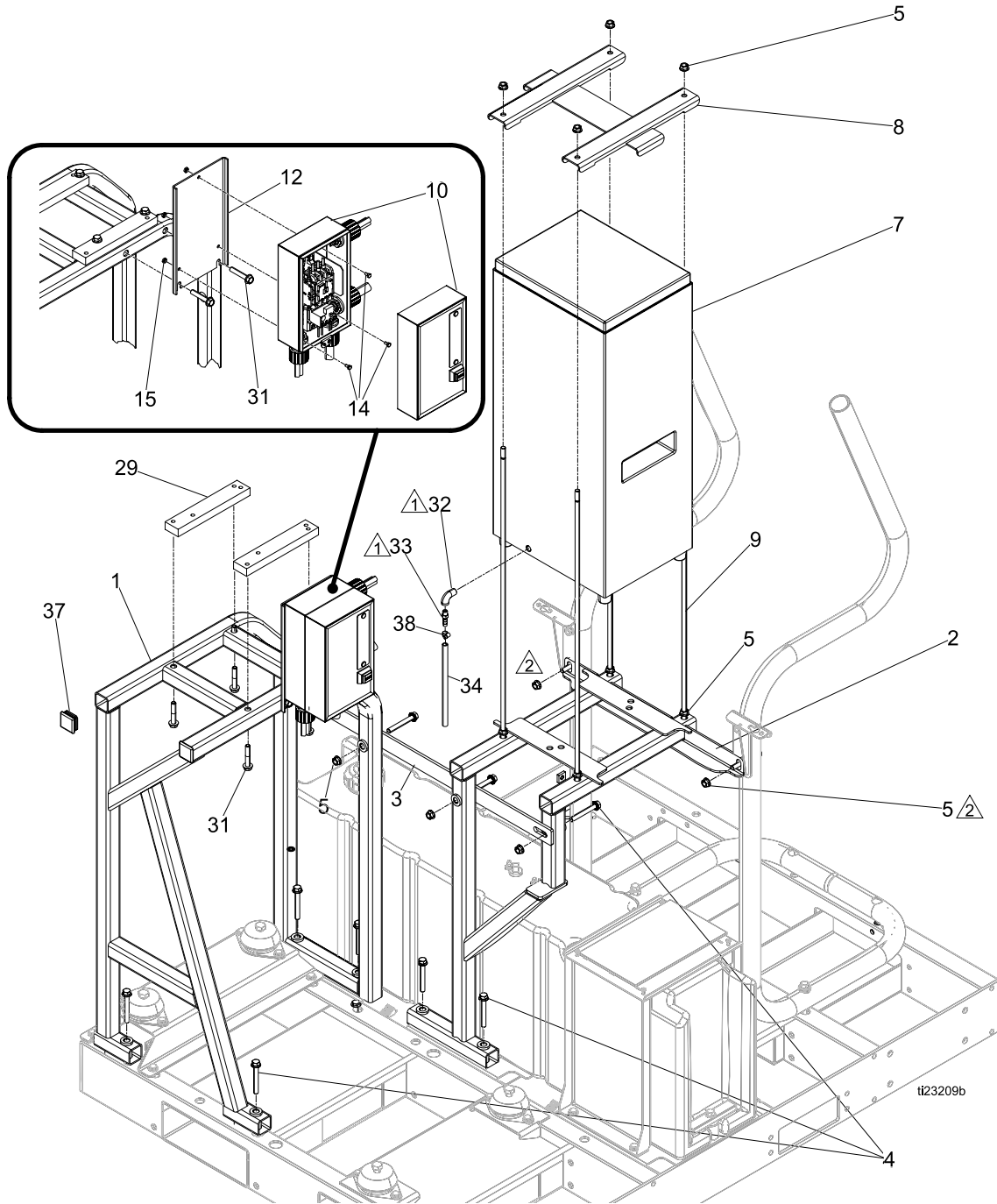
- 8 Strip all wires to 3/4 in. (x mm). Twist wires together. Attach wire nuts (40) and wrap wire nut with electrical tape so that the wire nut will not come loose.
- 9 Remove cover from compressor. Insert wires from starter box through strain relief. Connect as shown and reassemble cover.


Motor Starter




Parts

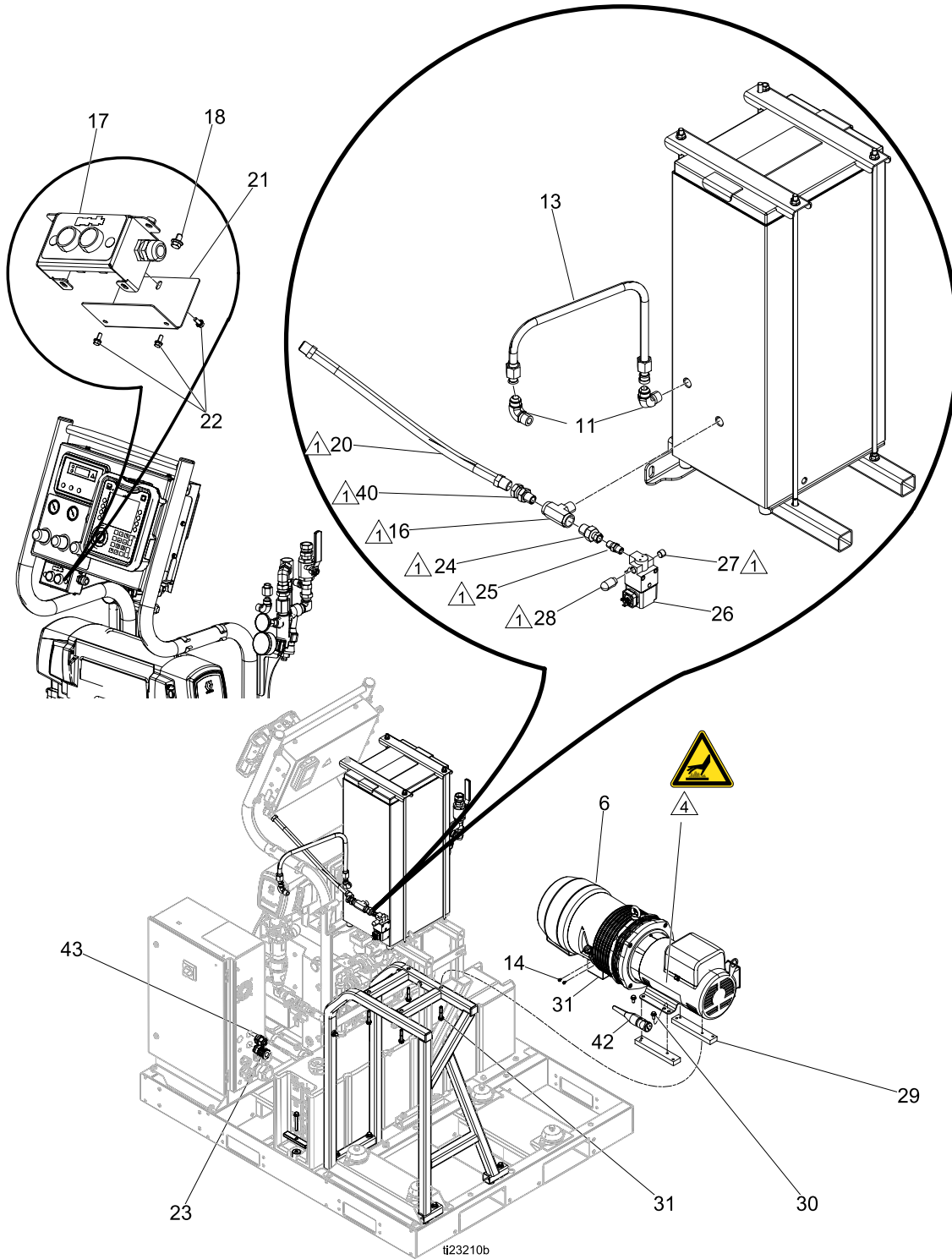
24U176, Complete Air Compressor Kit



 Apply anaerobic sealant to all non-swivel pipe threads.

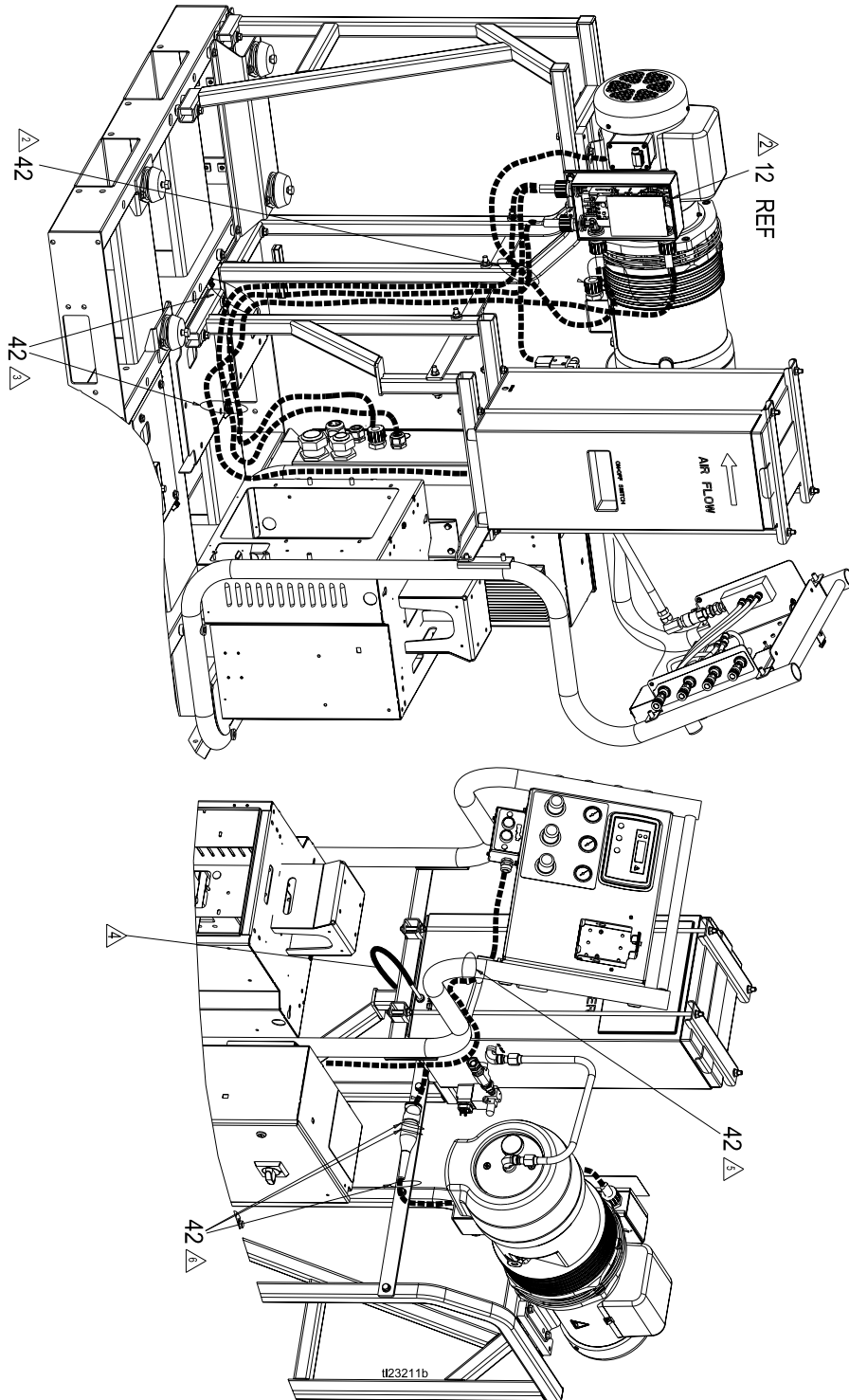
 Torque to 40 ft-lbs (54 N•m).

Parts



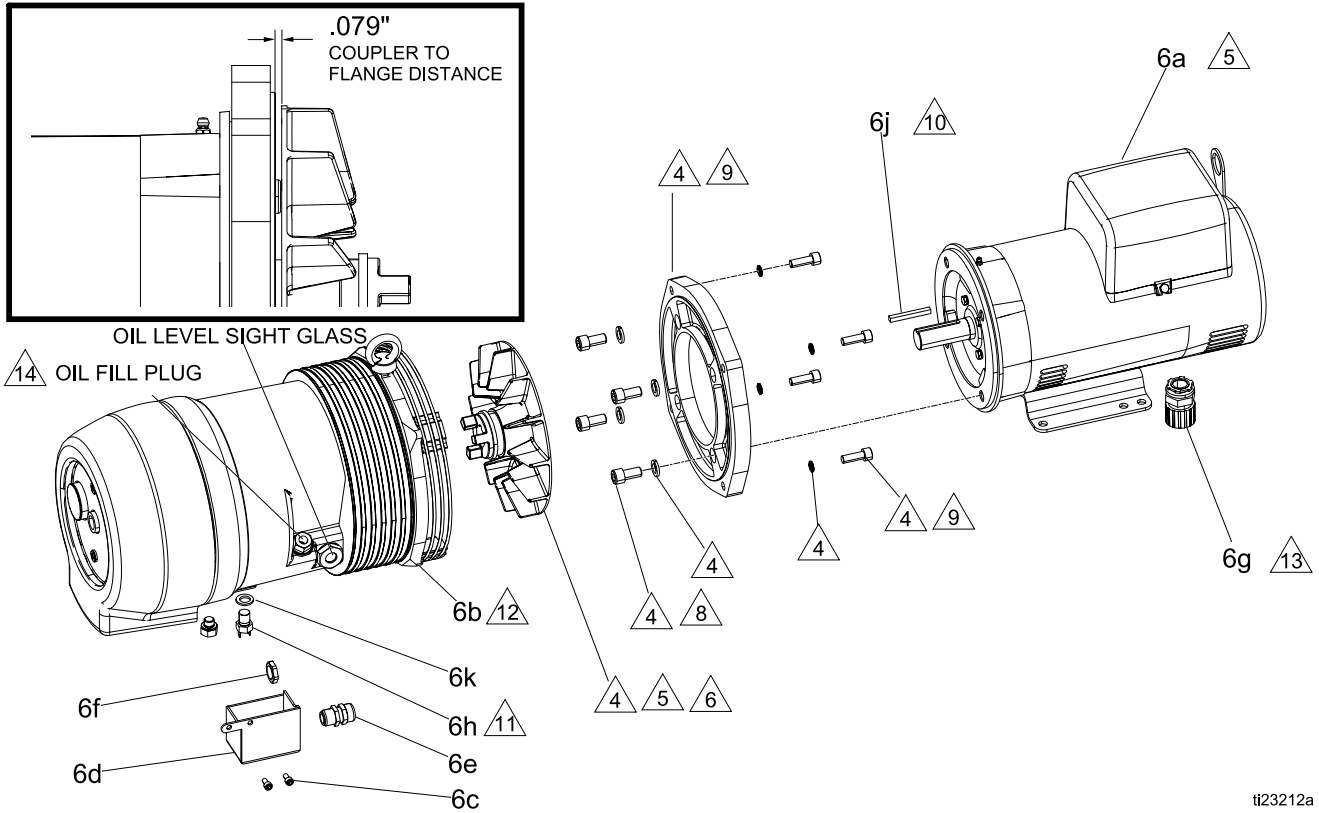
- 1 Apply anaerobic sealant to all non-swivel pipe threads.
- 4 Use from safety label (135) left inside starter box (10).

Cable Routing



- 2 Do not allow cables from starter box to touch engine. Secure all cables with cable ties (42) to frame approximately where shown every 6–12 in. as needed.
- 3 Secure with cable ties (42) to pallet tie downs where shown.

Parts



ti23212a

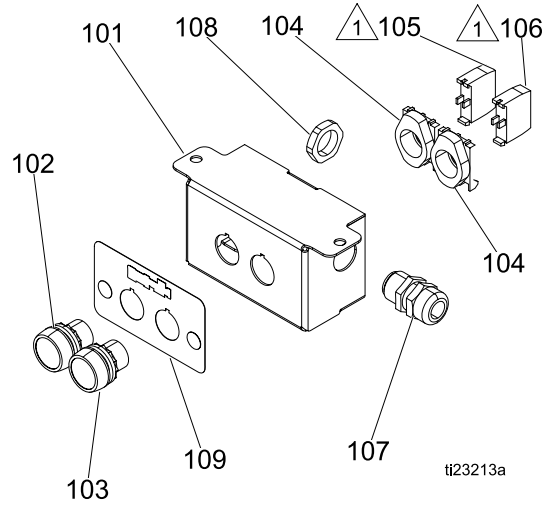
- 4 Parts included with compressor (6b)
- 5 Coupler supplied with compressor (6b) needs to be pressed on to motor (6a) as shown in detail view.
- 6 Torque to 20 ft.-lbs (27 N•m).
- 8 Torque to 34 ft.-lbs (46 N•m).
- 9 Torque to 36 ft.-lbs (43 N•m).
- 10 Discard key supplied with motor and replace with key (6j).


- 11 Discard plug supplied on compressor and install thermal switch (6h).
- 12 Discard lift ring to install flange.
- 13 Discard steel washer on (6g) before assembly.
- 14 Use only Hydrovane Fluid Force Red 2000 or CompAir CS-300 compressor oil. Fill to top of fill plug opening. One gallon container, Part No. 17A101, is available as an accessory.

Parts

Ref	Part	Description	Qty.	Ref	Part	Description	Qty.
1	16W780	FRAME, air compressor	1	18	119865	SCREW, mach, hex serrated	2
2	16W685	FRAME, air dryer	1	20	218093	HOSE, coupled	1
3	16W713	STRAP, frame connector	1	21	16W577	ENCLOSURE, rear	1
4	121488	SCREW, hex hd, flanged; 2.75 in. (70 mm), 3/8-16	10	22	125856	SCREW, 8-32, serrated flange	3
5	112958	NUT, hex, flanged; 3/8-16	12	23	16M826	CORD, grip, 3/4 in.	1
6	16Y567	COMPRESSOR, 5 hp (includes 6a-6k)	1	24	15E511	FITTING, union, swivel 1/2 x 1/4	1
6a	127364	MOTOR, 5 hp	1	25	156971	FITTING, nipple, short	1
6b	- - -	COMPRESSOR, tankless	1	26	16X520	VALVE, air, 3-way, din	1
6c	107530	SCREW, cap, sch, hex	2	27	C19264	PLUG, pipe plug 1/4 in.	1
6d	16X024	COVER overload switch	1	28	512910	MUFFLER, polyethylene 1/4 in. npt	1
6e	260067	FITTING, strain relief, 1/2 npt	1	29	16X808	BRACKET, motor mount	2
6f	117625	NUT, locking	1	30	112395	SCREW, cap, flng hd	4
6g	16M826	CORD, grip, 3/4 in.	1	31	111194	SCREW, cap flang hd	6
6h	16Y809	SWITCH, thermal overload	1	32	112538	FITTING, elbow, street, 90 deg	1
6j	16C282	KEY, square, 1/4	1	33	127108	FITTING, barbed, 5/16 id x 1/8 npt	1
6k	127581	WASHER, bonded seal	1	34	17A346	HOSE, rubber, 5/16 in.; 6 ft (1.8 m)	1
7	127298	DRYER, air	1	35	125871	TIE, cable, 7.50 in.	3
8	16W689	BRACKET, clamp	1	37	111218	CAP, tube, square	2
9	16W843	ROD, threaded, 3/8-16	4	38	125163	CLAMP, hose, 7/32 in. - 5/8 in.	1
10	24U083	STARTER, motor, reactor, integrated; see Motor Starter, page 15	1	39	16Y488	NUT, wire, #14-#6 awg	2
11	C20679	FITTING, elbow	2	40	190451	UNION, adapter	1
12	16W565	BRACKET, electrical box	1	41	106569	TAPE, electrical	1
13	16X402	TUBE, compressor - air dryer	1	42	261105	TIE, cable, 14 in.	10
14	101577	SCREW, cap, hex hd	3	43	121171	FITTING, cable strain relief	1
15	113505	NUT, keps, hex hd	3				
16	125644	FITTING, branch tee, 1/2 npt	1				
17	24T849	ENCLOSURE, switch box; see Switch Box Enclosure, page 14	1				

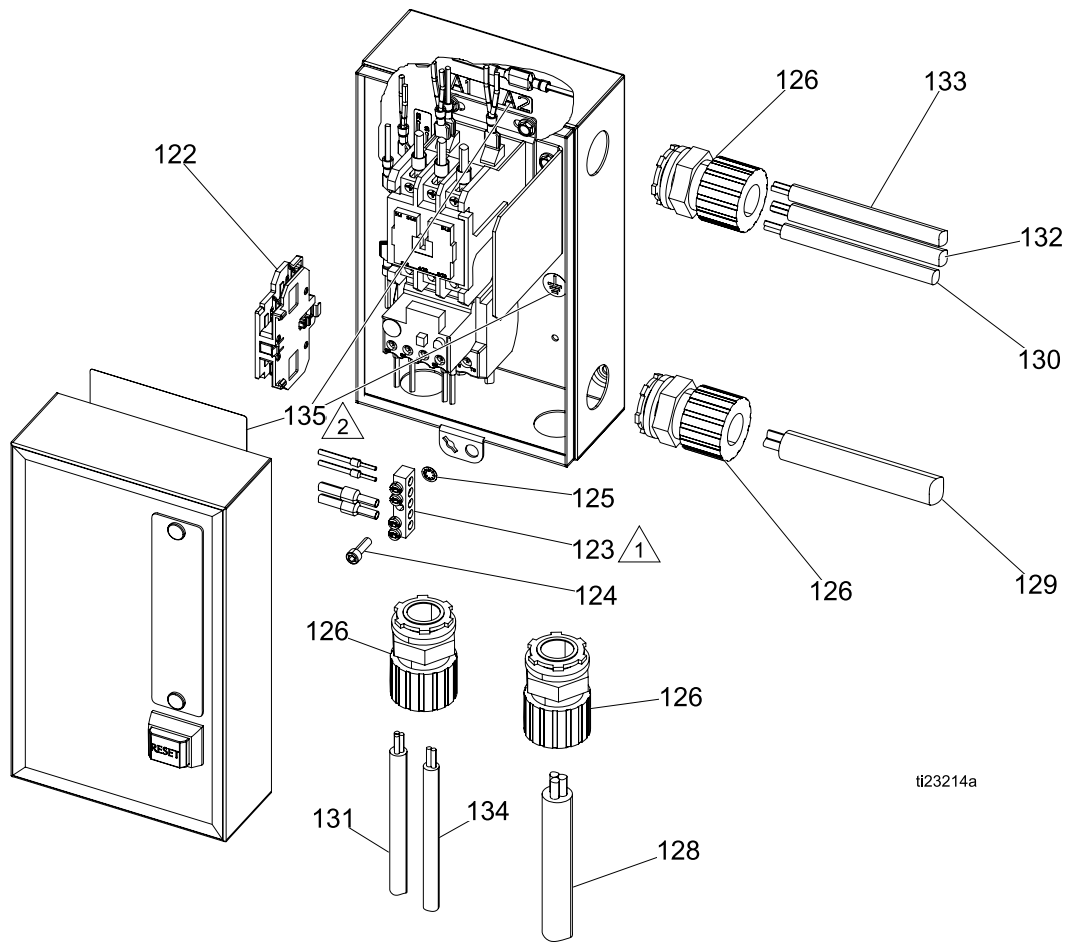
Switch Box Enclosure 24T849



 Assemble switch blocks as shown.

Ref	Part	Description	Qty	Ref	Part	Description	Qty
101	16W575	ENCLOSURE, front	1	106	120495	BLOCK, switch, N.C.	1
102	121618	SWITCH, start, push button, green	1	107	260067	FITTING, strain relief, 1/2 npt	1
103	121619	SWITCH, stop, push button, red	1	108	117625	NUT, locking	1
104	120493	LATCH, mounting	2	109	16W614	LABEL	1
105	120494	BLOCK, switch, N.O.	1				

Motor Starter 24U083



t23214a

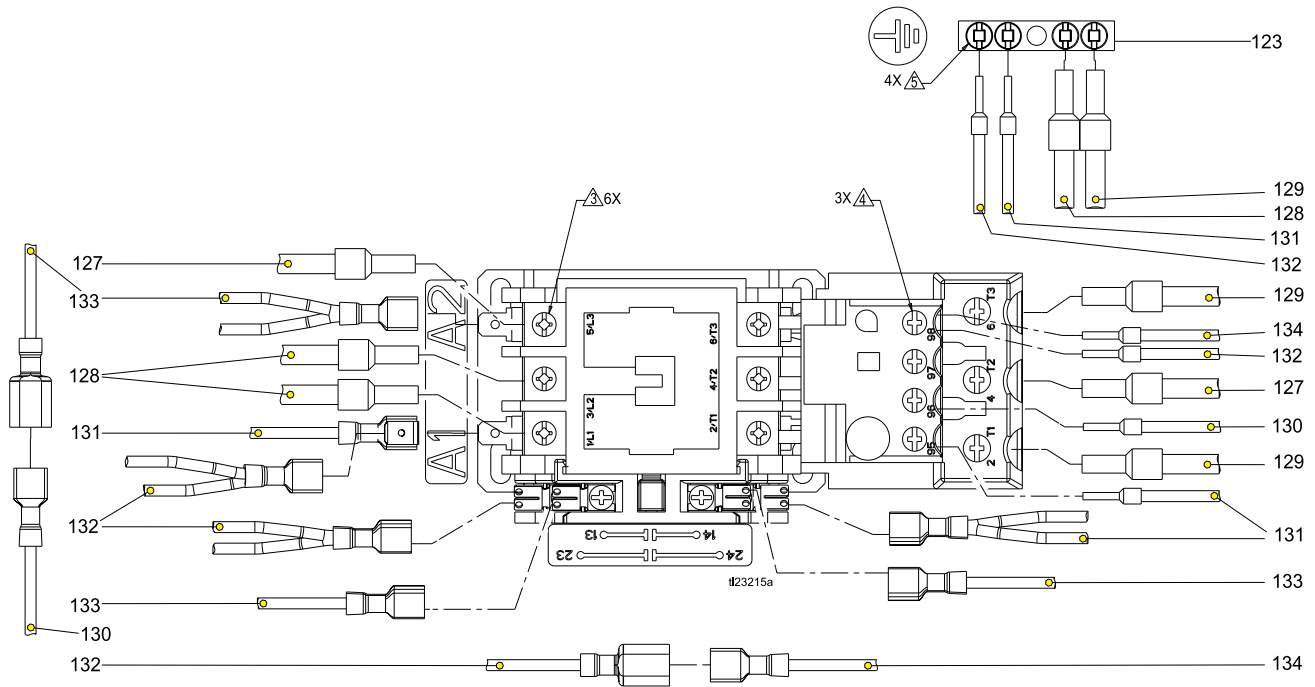





Attach ground connector bar aligned vertically to electrical box with screw and washer.



Labels from sheet (735).

24U083



-  Torque to 38–42 in.-lbs (4.3–4.7 N•m).
-  Torque to 18–22 in.-lbs (2–2.5 N•m).
-  Torque to 28–32 in.-lbs (3.1–3.6 N•m).

Ref	Part	Description	Qty	Ref	Part	Description	Qty
121	24U081	STARTER, int. reactor, 3 phase	1	128	24U080	CABLE, air compressor breaker	1
122	24U082	CONTACT, aux, two no switches	1	129	24U079	CABLE, air compressor	1
123	119257	CONNECTOR, bar, ground	1	130	16X011	CABLE, over temperature, compressor	1
124	555582	SCREW, soc hd cap, #10	1	131	24U078	CABLE, dryer, breaker	1
125	555629	WASHER, #10, external tooth lock	1	132	16X012	CABLE, power, dryer	1
126	16M826	CORD, grip, 3/4 in.	4	133	24U076	CABLE, start-stop	1
127	16X009	CABLE, shunt	1	134	16X010	CABLE, pressure vent	1
				135▲	16X422	LABEL	1

▲ Replacement Warning labels, signs, tags, and cards are available at no cost.

Technical Specifications

Air Compressor and Dryer Kit		
	U.S.	Metric
Total System Load (Watts)	See Reactor 2 Elite Integrated system manual.	
Available Auxiliary Current	See Reactor 2 Elite Integrated system manual.	
Rotary Vane Air Compressor		
Hydrovane Model V04 (PURS type), continuous run		
Part No.	025CK10	
Pressure	140 psi	0.9 MPa, 9.6 bar)
Specifications	16 cfm	
Required Features	Thermal overload switch	
	Safety Relief Valve	
Motor: Baldor		
Part No.	EL1410-CUS	
Specifications	5 HP, 1735 RPM, 240 V, 1 Phase, OPSB	
Required Features	C face, lift rings,	
Refrigerated Air Dryer		
Hankison Model H1T20		
Specifications	115VAC, 1 Phase, 60 Hz, 22 scfm at 150 psi (1 MPa, 10.3 bar)	
Required Features	Pilot valve unloader	

Graco Standard 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.

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.

FOR GRACO CANADA CUSTOMERS

The Parties acknowledge that they have required that the present document, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English. Les parties reconnaissent avoir convenu que la rédaction du présente document sera en Anglais, ainsi que tous documents, avis et procédures judiciaires exécutés, donnés ou intentés, à la suite de ou en rapport, directement ou indirectement, avec les procédures concernées.

Graco Information

For the latest information about Graco products, visit www.graco.com.

To place an order, contact your Graco Distributor or call to identify the nearest distributor.

Phone: 612-623-6921 or Toll Free: 1-800-328-0211 Fax: 612-378-3505

All written and visual data contained in this document reflects the latest product information available at the time of publication.

Graco reserves the right to make changes at any time without notice.

For patent information, see www.graco.com/patents.

Original Instructions. This manual contains English. MM 332733

Graco Headquarters: Minneapolis

International Offices: Belgium, China, Japan, Korea

GRACO INC. AND SUBSIDIARIES • P.O. BOX 1441 • MINNEAPOLIS MN 55440-1441 • USA

Copyright 2014, Graco Inc. All Graco manufacturing locations are registered to ISO 9001.

www.graco.com

Revision B, March 2015