OWNER'S MANUAL

INLINE CENTRIFUGAL FAN
INSTALLATION AND OPERATION

PNEG-119

Model #: _____

OK

_____ 1. All wire connections
_____ 2. Tip clearance on blade
_____ 3. Fan blade torqued to torque specs
_____ 4. Grill guard in place and tight
_____ 5. Fuse in place, extra fuse provided
_____ 6. Motor rotation correct
_____ 7. Contactor engages properly
_____ 8. Running amperage
_____ 9. Vibration
_____ 10. All fasteners tight
_____ 11. Indicator light
_____ 12. All decals and serial number tag
_____ 13. Aesthetic appearance
_____ 14. Manual

Tester Signature_____

Date_____

TABLE OF CONTENTS

Record in the space provided below the Model No. and Serial No. of this product. These numbers are found on the Model and Serial Tags located on the outside of the unit.

Model No. _____

Serial No. _____

Keep these numbers for future reference.

THE GSI GROUP DOES NOT WARRANT ANY ROOF DAMAGE CAUSED BY EXCESSIVE VACUUM OR INTERNAL PRESSURE FROM FANS OR OTHER AIR MOVING SYSTEMS. ADEQUATE VENTILATION AND/OR "MAKEUP AIR" DEVICES SHOULD BE PROVIDED FOR ALL POWERED AIR HANDLING SYSTEMS. THE MANUFACTURER DOES NOT RECOMMEND THE USE OF DOWNWARD FLOW SYSTEMS (SUCTION). SEVERE ROOF DAMAGE CAN RESULT FROM ANY BLOCKAGE OF AIR PASSAGES. RUNNING FANS DURING HIGH HUMIDITY/COLD WEATHER CONDITIONS CAN CAUSE AIR EXHAUST OR INTAKE PORTS TO FREEZE.

Fan Operation

Thank you for choosing a GSI Group product. It is designed to give excellent performance and service for many years.

This manual describes the operation of the Inline Fan. Many models are available to accommodate different types of grain conditioning.

The principal concern of The GSI Group is your safety and the safety of others associated with grain handling equipment. This manual is written to help you understand safe operating procedures, and some of the problems that may be encountered by the operator or other personnel.

As owner and/or operator, it is your responsibility to know what requirements, hazards and precautions exist, and to inform all personnel associated with the equipment, or who are in the heater area. Avoid any alterations to the equipment. Such alterations may produce a very dangerous situation, where serious injury or death may occur.

Safety Alert Symbol

The symbol shown is used to call your attention to instructions concerning your personal safety. Watch for this symbol; it points out important safety precautions. It means "ATTENTION", "WARNING", "CAUTION", and "DANGER". Read the message and be cautious to the possibility of personal injury or death.

⚠ CAUTION

Warning! Be Alert!

Personnel operating or working around electric fans should read this manual. This manual must be delivered with the equipment to its owner. Failure to read this manual and its safety instructions is a misuse of the equipment.

SAFETY FIRST
General Safety Statements

The GSI Group Inc's Principal concern is your safety and the safety of others associated with grain handling equipment. We want to keep you as a customer. This manual is to help you understand safe operating procedures and some problems which may be encountered by the operator and other personnel.

As owner and/or operator, it is your responsibility to know what requirements, hazards and precautions exist and inform all personnel associated with, or in the area of the Grain Dryer System. Safety precautions may be required from the personnel. Avoid any alteration to the equipment. Such alterations may produce a very dangerous situation, where serious injury or death may occur.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury

WARNING indicates a potentially hazardous situation which , if not avoided, could result in death or serious injury.

CAUTION indicates a potentially hazardous situation which, ifnot avoided, may result in minor or moderate injury.

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

BE ALERT!
Danger!

Personnel operating or working around electrical equipment should read this manual. This manual must be delivered with equipment to its owner. Failure to read this manual and its safety instructions is a misuse of the equipment.

This product is intended for the use of conveying feed only. Any other use is a misuse of the product!

This product has sharp edges! These sharp edges may cause serious injury. To avoid injury handle sharp edges with caution and use proper protective clothing and equipment at all times.

The GSI Group Inc. recommends that you contact your local power company and have a representative review your installation so your wiring will be compatible with their system and so that you will have adequate power supplied to your unit.

All precautions should be taken when lifting and/or moving. Use at least two men when moving the unit anywhere.

The safety pages that follow are to show you where you can find the safety decals. The photographs show exactly where the decals should be. If a decal has been damaged or is missing contact The GSI Group, Inc. for a free replacement.


WARNING
Stay clear of rotating blade. Blade could start automatically. Can cause serious injury. Disconnect power before servicing.
DC-1225


ROTATION
DANGER!
10-3


DANGER!
High voltage.
Will cause injury
or death.
Lockout power
before servicing.
DC-889

Fan Pad Location

Fan pad should be poured level with top of bin foundation for all Inline fans 18" through 28" diameter. Fan should be centered on center line of bin. Front of pad should be perpendicular to bin wall. Recommended thickness for fan pad is 4" minimum.

IMPORTANT! FAN PAD AND FAN MUST BE LEVEL AND SMOOTH FOR PROPER OPERATION. VIBRATION PROBLEMS CAN RESULT FROM IMPROPER FAN LEVELING.

TR-6918 & TR-6920
A = 32" for fans without heaters
A = 55" for fans without heaters

TR-4734
A = 21"

TR-7048
A = 45" for fans without heaters
A = 68" for fans with heaters

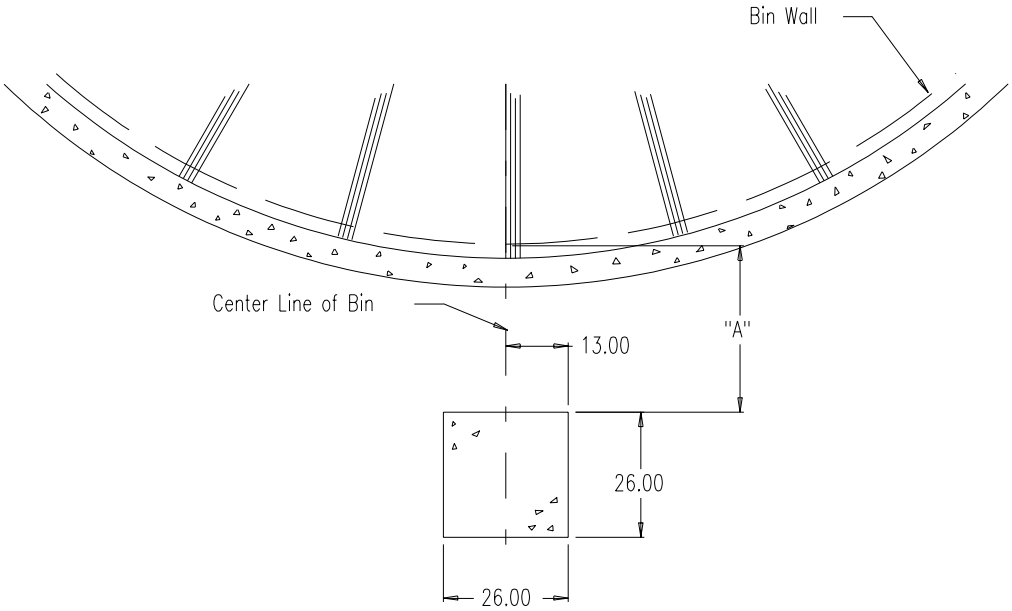


Figure 1: Fan pad installation guidelines.

Checklist before Installing the Fan

1. One of the most important factors for installation is providing adequate power to run the unit. Undersized wire can lead to voltage drop and can cause motor overheating and shortened life. Therefore, it is necessary to know the distance from the unit to available transformer and the horsepower of your fan unit. These two factors will determine the size of wire needed for efficient operation. See Fan specifications on the following page.

2. It is recommended to contact your local power company, and having a representative survey your installation so the wiring is compatible with their system, and adequate power is supplied to your unit.

3. Each fan motor should be wired through a fused or circuit breaker disconnect switch.

4. Refer to Fan Specifications on page 10 for the recommended slow blow fuse or breaker size to use when installing your particular fan.

5. Standard electrical safety practices and codes should be used. (Refer to National Electrical Code Standard Handbook by National Fire Protection Association).

6. A qualified electrician should make all electrical wiring installations.

Installation

1. Be sure that the disconnect and the fan are well grounded. See machine to earth ground on page 12.

2. **Important! All fans with controls use 120 volt control circuit. Neutral must be supplied on 230 volt single and three phase models for unit to operate.**

3. Rotate the fan blade to be sure that it revolves easily and does not rub the housing.

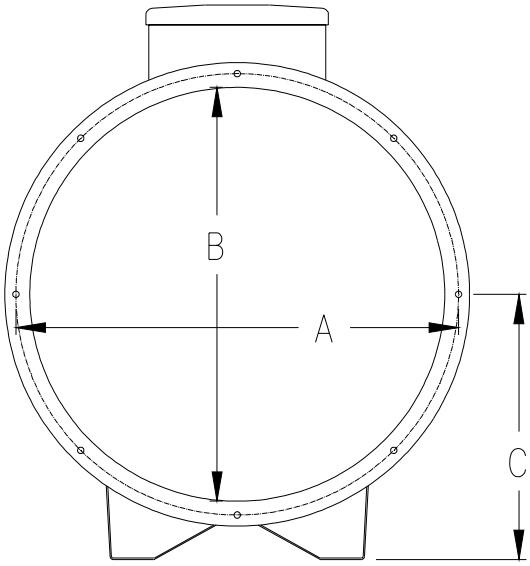
4. Check all fasteners on motor mounts, fan blades and other bolted items to make sure they are tight. If any are loose, check for proper clearance and retighten fasteners. They may have loosened in shipping.

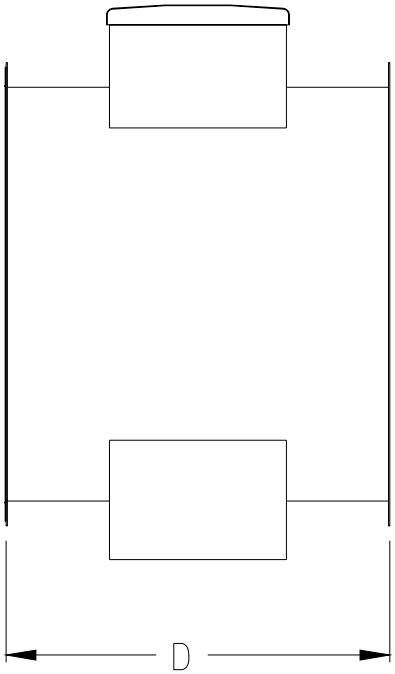
5. Fans should be mounted to set level and solid. It may be necessary to shim one or more corners of the foot mount to achieve a solid mounting. Fans not solidly mounted and properly shimmed may have excess vibration in them.

6. Check and retighten all electrical connections. They may have loosened in shipping.

ALWAYS DISCONNECT AND LOCK OUT POWER BEFORE WORKING ON OR AROUND FAN

Fan Specifications





Fan	18" dia	24" dia	28" dia
A (Bolt circle)	19.1/2	25.3/4	29.5/8
B (Inside diameter)	18.1/4	24.1/4	28.1/8
C (CL to bottom of leg)	13.5/16	15.3/8	18.1/8
D (Length)	22	23.1/2	26
E	---	25.1/2	25.1/2

Fan Electrical Specifications

FAN HORSEPOWER	1.5				3			
RPM	3450				3450			
PHASE	1	3			1	3		
VOLTS	230	230	460	575	230	230	460	575
FULL LOAD AMPS	7.5	4.6	2.3	1.8	15	7.4	3.7	3
MINIMUM WIRE SIZE	Copper Wire				Copper Wire			
50' RUN	14	14	14	14	12	12	14	14
100' RUN	12	14	14	14	10	12	12	12
200' RUN	8	12	14	14	8	10	12	12
300' RUN	6	10	12	12	6	8	10	10
MINIMUM WIRE SIZE	Aluminum Wire				Aluminum Wire			
50' RUN	12	12	14	14	12	12	12	12
100' RUN	10	12	12	14	8	10	12	12
200' RUN	6	10	12	12	6	10	10	10
300' RUN	4	10	12	12	4	8	10	10
FUSE SIZE (SLOW BLOW)	15	10	5	5	30	15	10	10
BREAKER SIZE	20	15	10	10	40	20	15	15

FAN HORSEPOWER	7				10				15			
RPM	3450				3450				3450			
PHASE	1	3			1	3			1	3		
VOLTS	230	230	460	575	230	230	460	575	230	230	460	575
FULL LOAD AMPS	30	18	9	6.9	47	25	13	9.6	57	32	16	14
MINIMUM WIRE SIZE	Copper Wire				Copper Wire				Copper Wire			
50' RUN	10	12	12	12	10	10	12	12	8	8	12	12
100' RUN	8	10	12	12	6	8	10	12	6	6	10	12
200' RUN	4	8	10	12	4	6	10	10	2	4	10	10
300' RUN	4	6	8	10	2	4	8	8	0	4	8	10
MINIMUM WIRE SIZE	Aluminum Wire				Aluminum Wire				Aluminum Wire			
50' RUN	8	10	12	12	8	10	12	12	6	8	10	10
100' RUN	6	8	10	12	4	8	10	10	4	6	8	10
200' RUN	3	6	10	10	2	4	8	10	0	4	6	8
300' RUN	2	4	8	10	0	2	6	8	00	2	4	6
FUSE SIZE (SLOW BLOW)	40	25	15	15	60	30	20	15	75	40	20	20
BREAKER SIZE	60	30	15	15	80	40	20	20	100	60	30	20

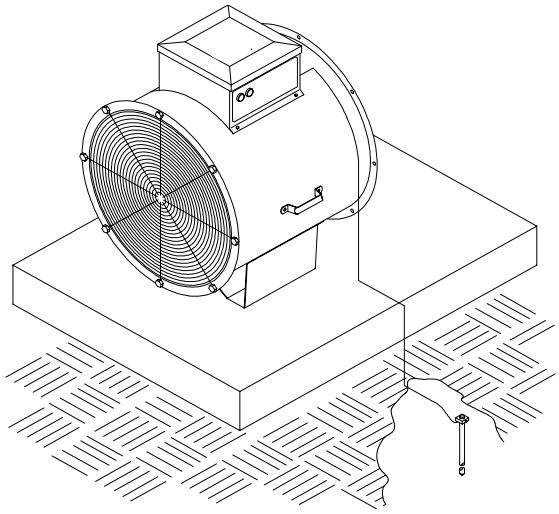


Figure 1: Use a #6 or approved size bare copper ground wire. Install a 5/8" diameter 8' long copper-clad ground rod, 2' away from the foundation and 1' below the surface of the ground or in accordance with local requirements.

Cross-sectional area of phase conductors supplying the equipment S (mm²)	Minimum cross-sectional area of the external protective conductor (mm²)
S<=16	S
16<=S<35	16
S=>35	S÷2

Previously Installed Units

It is recommended that previously installed units be checked to see that a machine to earth ground has been installed by an electrician.

Dig a hole large enough to hold 1 or 2 gallons of water. Work the ground rod into the earth until it is completely in the ground.

Machine to Earth Ground

It is very important that a machine to earth ground rod be installed at the fan. This is true even if there is a ground at the pole 15 feet away. This ground needs to be as close to the fan as possible, but no more than 8 feet away. The ground rod should be connected to the fan control panel with at least a #6 solid bare copper ground wire, or in accordance with local requirements. The machine to earth ground provides additional safety if there is a short. It also provides the grounding necessary for long life and operation of the solid state

Proper Installation of the Ground Rod

(Ground rods and wires are not supplied by GSI). It is recommended that the rod not be driven into dry ground. The following steps ensure proper ground rod installation:

1. Dig a hole large enough to hold 1 to 2 gallons of water.
2. Fill hole with water.
3. Insert rod through water and jab it into the ground.

4. Continue jabbing the rod up and down, the water will work its way down the hole, making it possible to work the rod completely into the ground. This method of installing the rod gives a good conductive bond with the surrounding soil.
5. Connect the bare copper ground wire to the rod with the proper ground rod clamp.
6. Connect the bare ground wire to the fan control boxes with a grounding lug. See Figure 3
7. Ground wire must not have any breaks or splices. Insulated wire is not recommended for grounding.

Start-Up

On initial start-up of the fan, run it momentarily to make sure that the fan blade is rotating in the proper direction and airflow is correct. If not, change motor direction using instructions on the motor.

Proper installation and start-up ensures many years of trouble-free operation.

Maintaining Grain Quality

To properly maintain the quality of stored grain, it is necessary to keep the grain dry, cool and insect free. Any one of these problems can contribute to spoilage. Wet, warm grain promotes insect growth as well as grain spoilage. Cool, dry grain can keep for long periods of time.

It is recommended that the grain be kept cool (avoid freezing as freezing can reduce quality). Grain should be cooled through the fall and winter, warmed in the spring and summer.

Grain Storage

Average grain temperature should be above 35°F in the winter and below 65°F in the summer. Always try to keep the grain within 10-15°F of the average monthly outside temperature. This means grain may need to be aerated on warm days during the winter to stay above 35°F when freezing temperatures are predominate.

During the summer it may be necessary to aerate the grain on cool nights, so the 65°F temperature is not exceeded during the hot days of summer.

Conditions and requirements may vary from area to area. We suggest that you contact your local Agriculture Extension Office or State Ag. University for more exact guidelines.

If the grain is to be stored more than one year, it has to be recooled the following fall and winter, repeating the process as long as the grain is in storage. **Frequent and regular inspection (at least weekly during fall and spring) is the best prevention against grain spoilage).**

Equilibrium Moisture Chart

Air Temperature	Percentage Relative Humidity													
	35	40	45	50	55	60	65	70	75	80	85	90	95	100
20°F	11.2	11.7	12.7	13.7	14.5	15.1	16.2	17.1	18.0	19.6	21.2	23.5	25.8	29.1
30°F	10.8	11.3	12.2	13.1	13.9	14.6	15.5	16.4	17.4	18.7	20.2	22.5	25.0	28.3
40°F	10.5	11.0	11.7	12.5	13.3	14.0	14.8	15.5	16.6	17.8	19.4	21.5	24.2	27.5
50°F	10.1	10.6	11.3	12.0	12.7	13.3	14.1	14.8	15.8	16.9	18.6	20.5	23.4	26.7
60°F	9.7	10.2	10.9	11.6	12.1	12.7	13.4	14.2	15.0	16.0	17.8	19.5	22.6	25.9
70°F	9.0	9.7	10.4	11.1	11.5	12.0	12.8	13.5	14.5	15.4	16.8	18.5	21.3	24.5
80°F	8.3	9.1	9.8	10.5	10.8	11.2	12.1	13.0	13.9	14.8	15.8	17.4	20.0	22.8

Safe moisture for normal winter storage of shelled corn is about 15%. Grain to be stored through the summer or long term, needs to be 1 to 3 points dryer.

Approximate Allowable Holding Time for Field-Shelled Corn, to Maintain Grade*

Grain (°F) Temperature	15% days	18% days	20% days	22% days	24% days	26% days	28% days	30% days
40°F	898	195	85	54	38	28	24	20
50°F	451	102	46	28	19	16	13	11
60°F	242	63	26	16	10	8	6.5	5.5
70°F	147	37	13	8	5	4	3.5	3
80°F	109	27	10	6	4	3	2.5	2

*Allowable holding time for field-shelled corn at various grain temperatures and moisture

Drying fronts and/or temperature fronts move through grain at different rates depending on bin and fan size and different moistures and temperatures.

The table below lists the approximate time required to completely change the temperature of a bin. Current conditions can cause this time to vary greatly. Therefore, this should only be used as a guide.

It may be necessary to run the fan only part of a day because of changing weather conditions. It would be necessary to run it a few hours each day on several days to complete the temperature change.

Approximate Hours of Fan Time to Change Bin Temperature

Fan Size	Bin dia. approx. 22 ft. to eave-approx. hours of fan time required									Approx. 32 ft. to eave		
H. P.	18	21	24	27	30	33	36	42	48	36	42	48
1	73	79	90	NR	NR	NR	NR	NR	NR	NR	NR	NR
1.5	56	61	65	66	76	82	92	NR	NR	NR	NR	NR
3	44	51	52	57	63	69	78	93	NR	NR	NR	NR
7	38	42	44	47	52	56	61	71	81	79	93	NR
10	35	37	41	42	45	49	53	62	71	72	82	92
15	30	32	35	39	40	42	45	54	63	62	70	80
App. BU	4,500	6,500	8,500	11,000	13,500	16,500	19,500	27,000	35,500	28,000	38,500	50,500

- Bushels are rounded and approximate.
- The hours required are based on clean grain. HIgh moisture grain and grain containing fines or foreign material will require more time to complete the air change.

NR

- Not Recommended: Bins in the NR range, may require fan(s) of a different size to get the cool time into the accepted range.
- Bins requiring more than 100 hours of aeration to totally change the temperature may require continuous aeration at about 1/10th cfm per bushel or some other acceptable method.

Motors used in fan units are all standard NEMA frame motors and are specially designed for use in crop drying applications. Replacement parts for these motors are handled by authorized service stations of the various motor manufacturers.

1. Always disconnect and lock out power before work ing on or around fan motor and electrical compo nents.
2. Malfunctioning electrical components should be checked by a qualified electrician.
3. For extra motor life, any electric motor should be run for 30 minutes, once a month. This will help eliminate any damaging moisture build-up in the motor and bearings.
4. Fans setting idle in the summer offer an excel lent place for mud dobbers to build their nests. A mud dobber nest on the back of the fan blade will cause the fan to be out of balance and vibrate.

This is a ball bearing motor. The bearings have been given initial lubrication at the factory. Motors without regreasing capability are factory lubricated for normal bearing life.

LUBRICATION

Relubrication Intervals (Motors with Regreasing Capability)

New motors having been in storage for over a year should be relubricated by the procedure noted in the chart to ensure long operating life.

Hours of Service Per Year	Suggested Relube Interval NEMAFRAME SIZE		
	42 to 215T	254 to 326T	364 to 447T
5000 Hrs.	5 years	3 years	1 years
Continuous Normal Application	2 years	1 years	9 months
Seasonal Service Motor is idle for 6 months or more	1 year (beginning of season)	1 year (beginning of season)	1 year (beginning of season)
Continuous high ambients, dirty or moist locations, high vibration or where shaft end is hot (pumps-fans)	6 months	6 months	3 months

Lubricant

Baldor motors are pre-greased normally with Shell Oil Company's "Dolium R". Several equivalent greases which are compatible with the Baldor furnished grease are Chevron Oil's "SRI No. 2" and Texaco Inc.'s "Premium RB".

Procedure

Overgreasing bearings can cause premature bearing failure. If motor is equipped with Alemite fitting, clean tip of fitting and apply grease gun. Use 1 to 2 full strokes on motors in NEMA 215 frame and smaller. Use 2 to 3 strokes on NEMA 254 thru NEMA 365 frame. Use 3 to 4 strokes on NEMA 404 frames and larger. On motors having drain plugs, remove grease drain plug and operate motor for 20 minutes before replacing drain plug.

On motors equipped with slotted head grease screw, remove screw and apply grease tube to hole. Insert 2 to 3 inch length of grease string into each hole on motors in NEMA 215 frame and smaller. Insert 3 to 5 inch length on larger motors. Motors having grease drain plugs, remove plug and operate motor for 20 minutes before replacing drain plug. **Keep grease clean. Lubricate motors at standstill. Remove and replace drain plugs at standstill. Do not mix petroleum grease and silicone grease in motor bearings.**

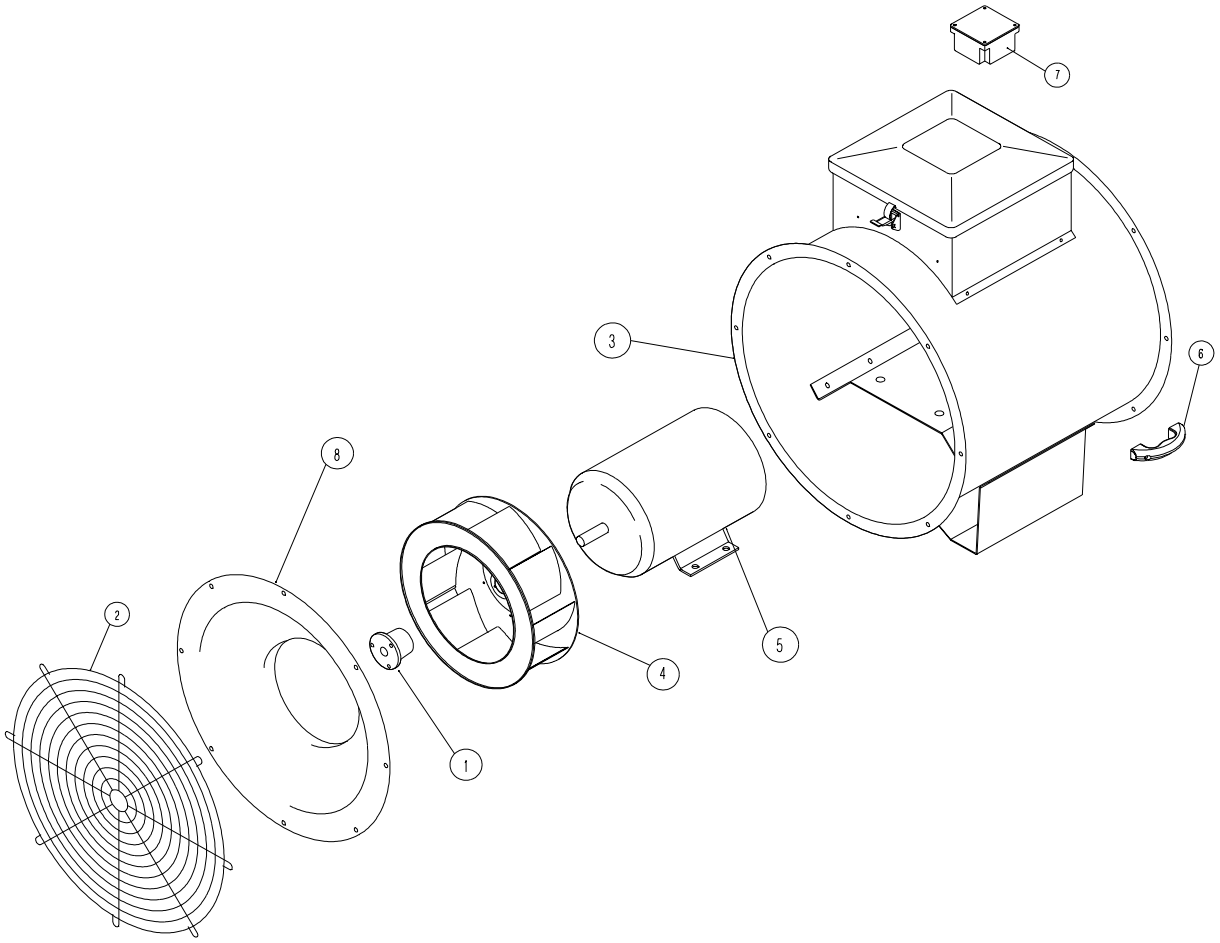
Hub Bolt Torque Requirement for Fan Blades

18"-1.5HP through 18" 3HP.....12ft. lbs. (Browning)
24"-7HP through 28" 15HP.....16ft. lbs. (Browning)

Fan Troubleshooting Chart

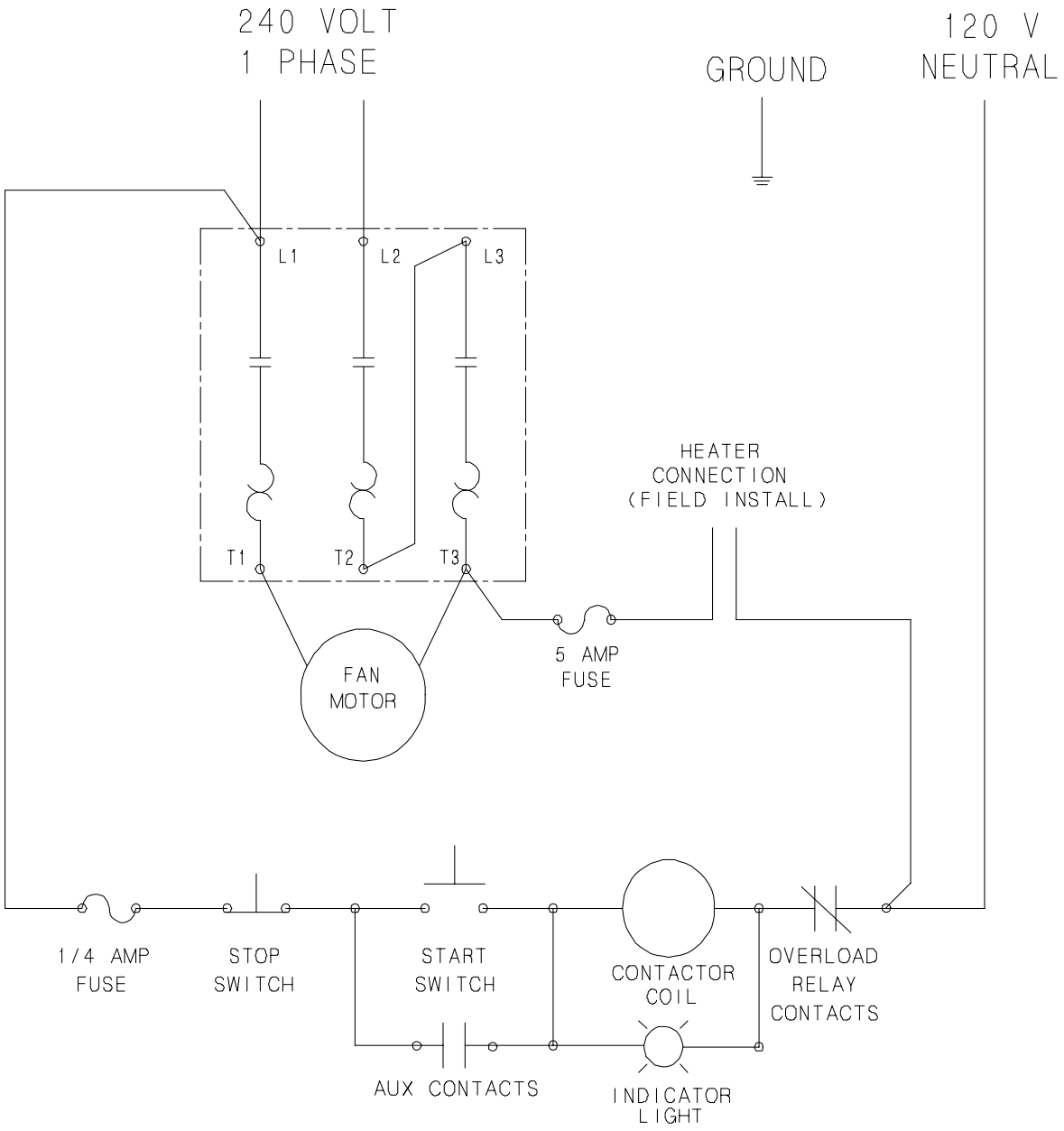
SYMPTOM	POSSIBLE CAUSE	SOLUTION
Fan will not run	Blown fuse or breaker in disconnect switch	Replace fuses or reset breakers
	Main power not turned on	Turn power on at all disconnects ahead of the unit
	Defective wiring or loose connection	Follow wiring diagram and tighten any loose connections
	Incorrect wire size	See wire size charts for proper sire size and change if needed
	Overload kicked out	Check manual reset, push in to reset
	Defective motor	Replace motor
	Defective magnetic contactor	Check the magnetic contactor
Fan runs for a short period of time then shuts off	Undersize wiring	Check to see that power supply wires are the proper size, contact your local power company.
	Low line voltage at the installation. Power failure.	Call power company after making sure wire size is correct
	Magnetic contactor malfunctioning.	Change magnetic contactor
	Defective start/stop button	Replace necessary part
	Overload setting incorrect	Adjust overload to correct setting
Fan makes ticking noise	Fan blade hitting fan housing	Stop fan and turn off electricity. Remove fan screen and check to see if fan blade is hitting the housing. Adjust motor position to obtain proper clearance.
	Motor bearing bad	Replace motor bearing
Fan vibrates	Fan not mounted securely to pad.	Mount fan securely
	Fan not level	Level fan
	Fan has dirt deposit on blade	Clean blade
	Motor shaft is bent	Replace motor
	Blade not mounted properly on shaft	Mount blade properly on shaft
	Blade out of balance	Replace or have blade rebalanced

18"-28" INLINE PARTS

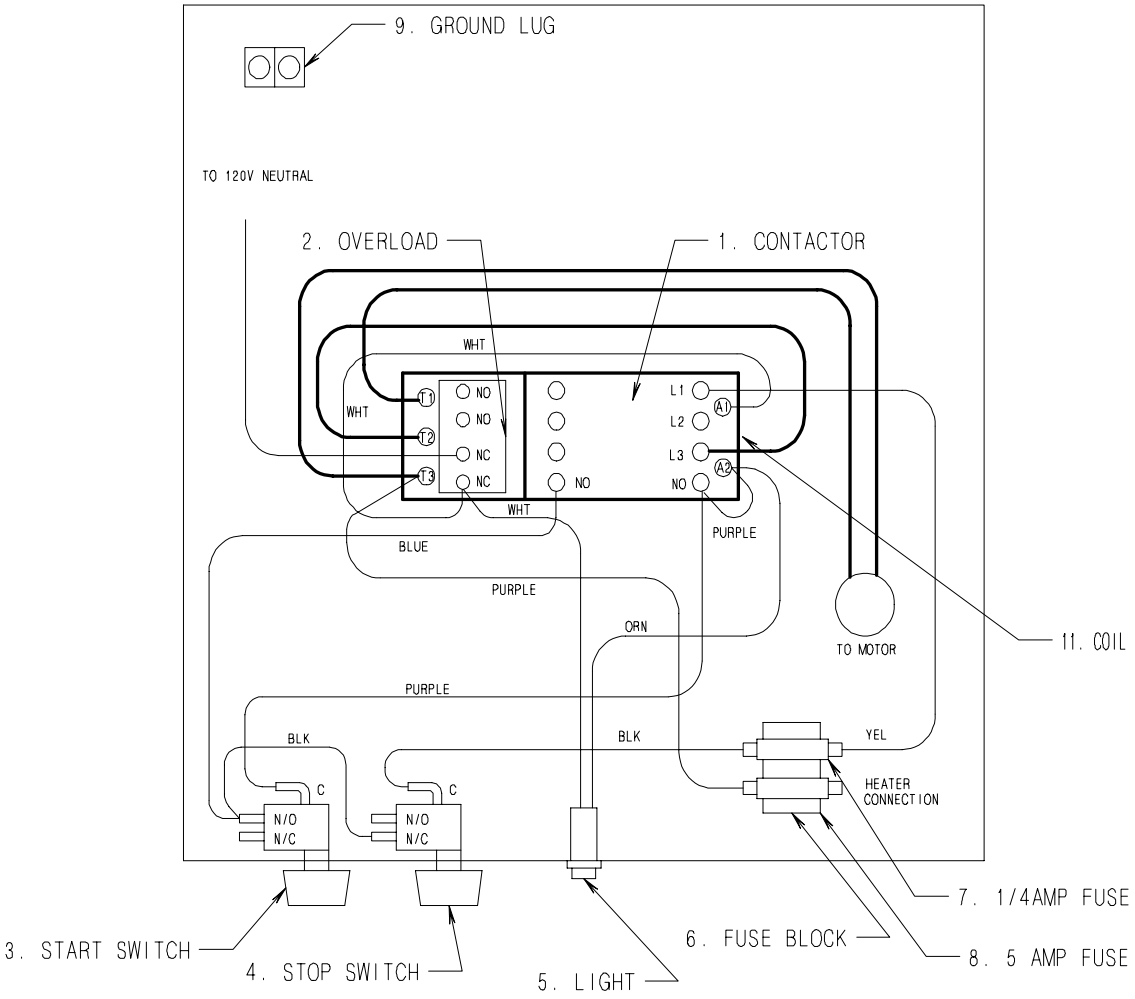


Key	Part Number						Description
	18" 1.5HP	18" 3HP	24" 3HP	24" 7HP	28" 10HP	28" 15HP	
1	FH-3660	FH-3660	F-7199	F-7199	F-7199	F-7199	Split Taper Bushing
2	F-7179	F-7179	F-7065	F-7065	F-7063	F-7061	Grill Guard
3	F-6876	F-6875	F-6879	F-6879	F-6882	F-6883	Fan Housing Assembly (complete)
3	NA	F-6698	F-6859	F-6859	F-6859	F-6858	Straightening Vane
3	F-6983	F-6983	F-6860	F-6860	F-6862	F-6854	Can Wrapper
3	F-6701	F-6701	F-6856	F-6856	F-6861	F-7002	Motor Mount
3	F-6701	F-6701	F-6857	F-6857	F-6857	F-6857	Base Leg
3	F-1131	F-1131	NA	NA	NA	NA	Base Leg Strap
4	FH-5820	FH-5821	FH-6005	FH-5822	FH-6006	FH-5823	Blade Assembly w/ Bushing
5	FH-5539	FH-5537	FH-5537	FH-5645	FH-5647	FH-5649	1 PH Fan Motor
5	FH-5540	FH-5538	FH-5538	FH-5646	FH-5648	FH-5650	3 PH Fan Motor
6	F-7050	F-7050	F-7050	F-7050	F-7050	F-7050	Handle
7	FH-6972	FH-6972	FH-6972	FH-6972	FH-6972	FH-6972	PVC Electric Box Assembly
8	F-7180-R	F-7181-R	F-7183-R	F-7183-R	F-7185-R	F-7185-R	Inlet Cone

1 Phase Schematic

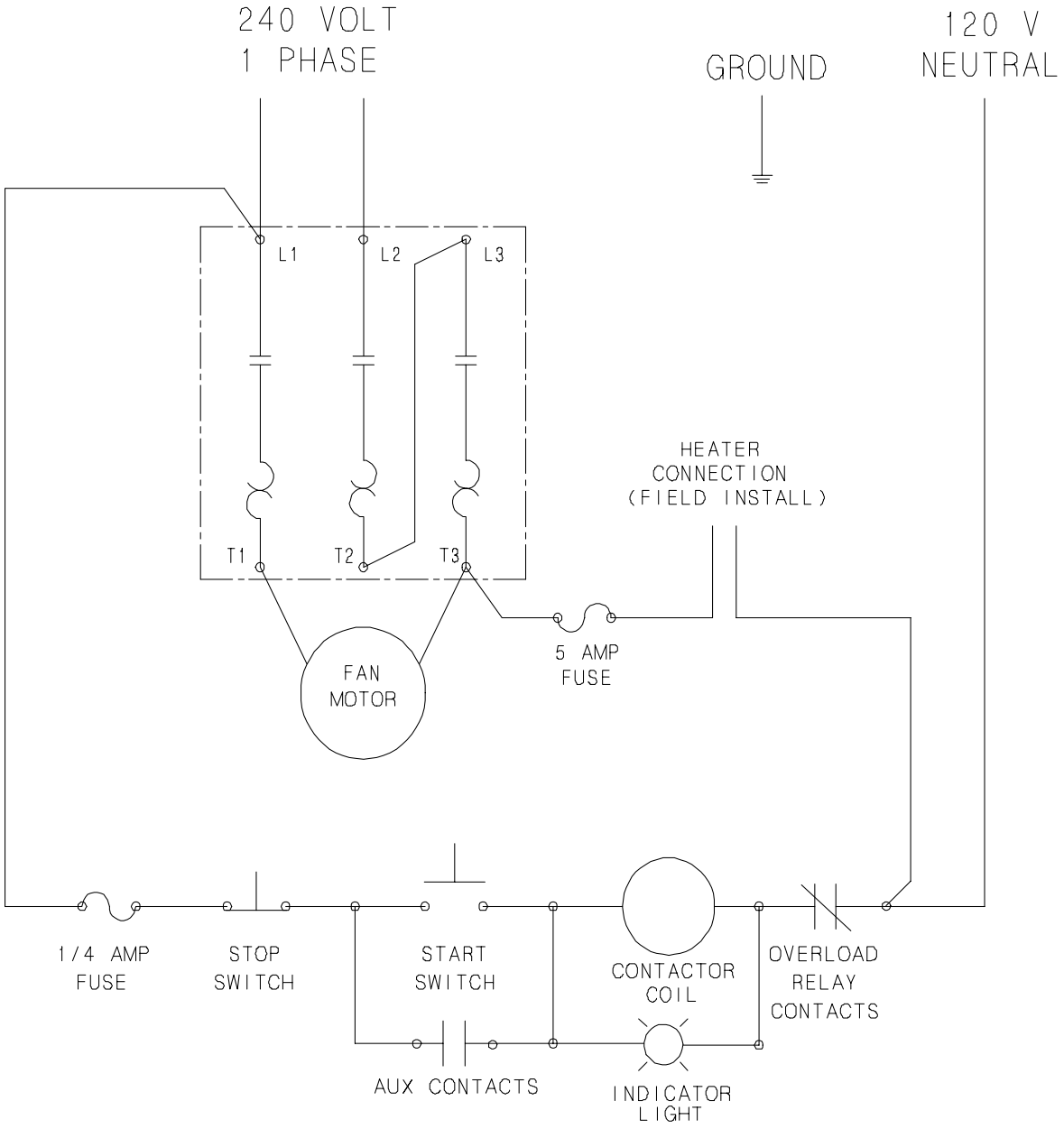


3Hp 1 Phase Wiring Diagram and Parts

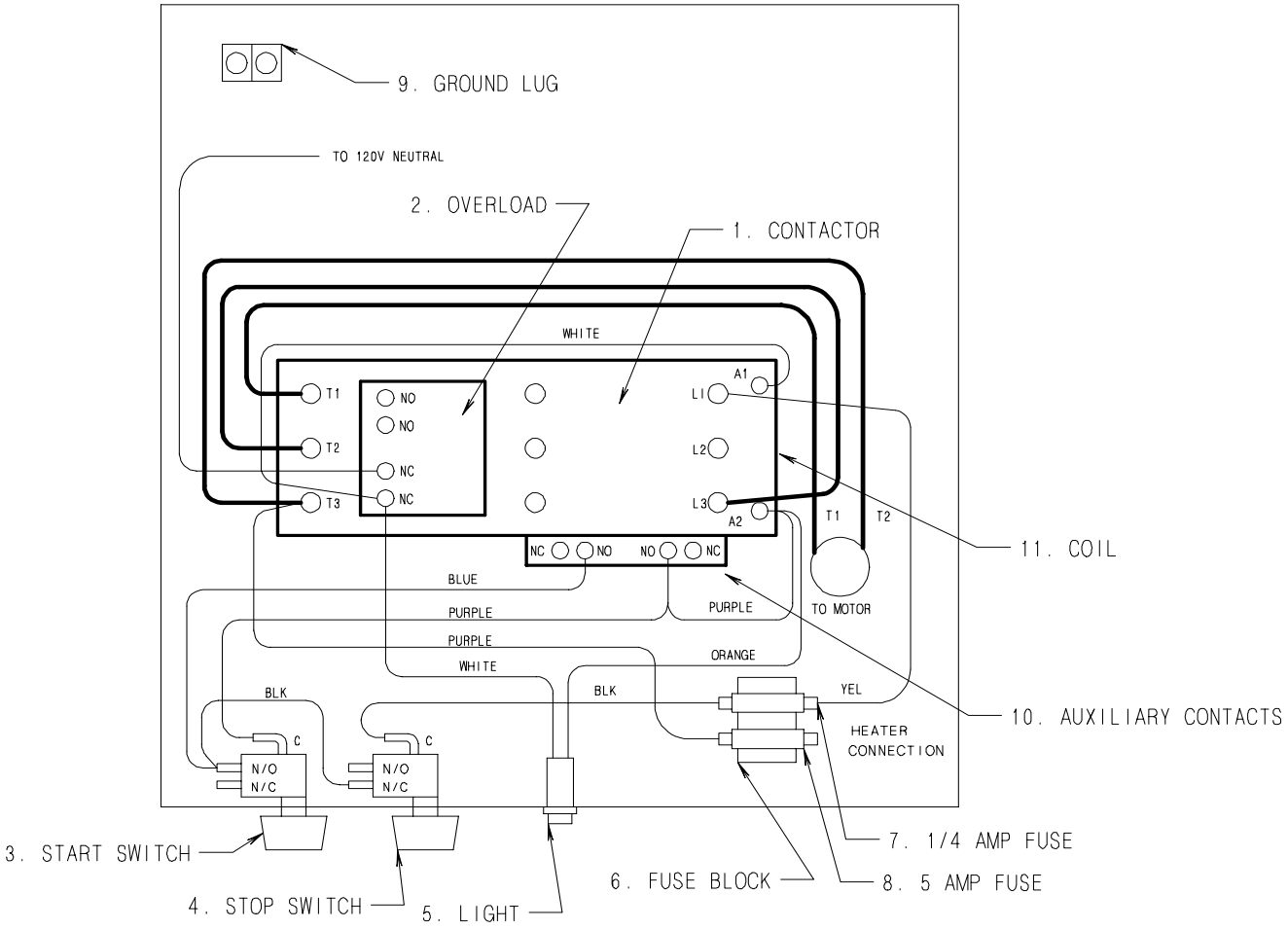


Key	Part Number 18" 3HP	Description
1	D03-0490	Contactor
2	D03-0476	Overload
3	FH-999	Start Switch
4	FH-1000	Stop Switch
5	TFH-2021	Light
6	FH-1058	Fuse Block
7	00147938	1/4 Amp Fuse
8	FH-1059	5 Amp Fuse
9	FH-6634	Ground Lug
NS	D03-0511	Auxiliary Contact
11	D03-0670	120 Volt Coil

1 Phase Schematic

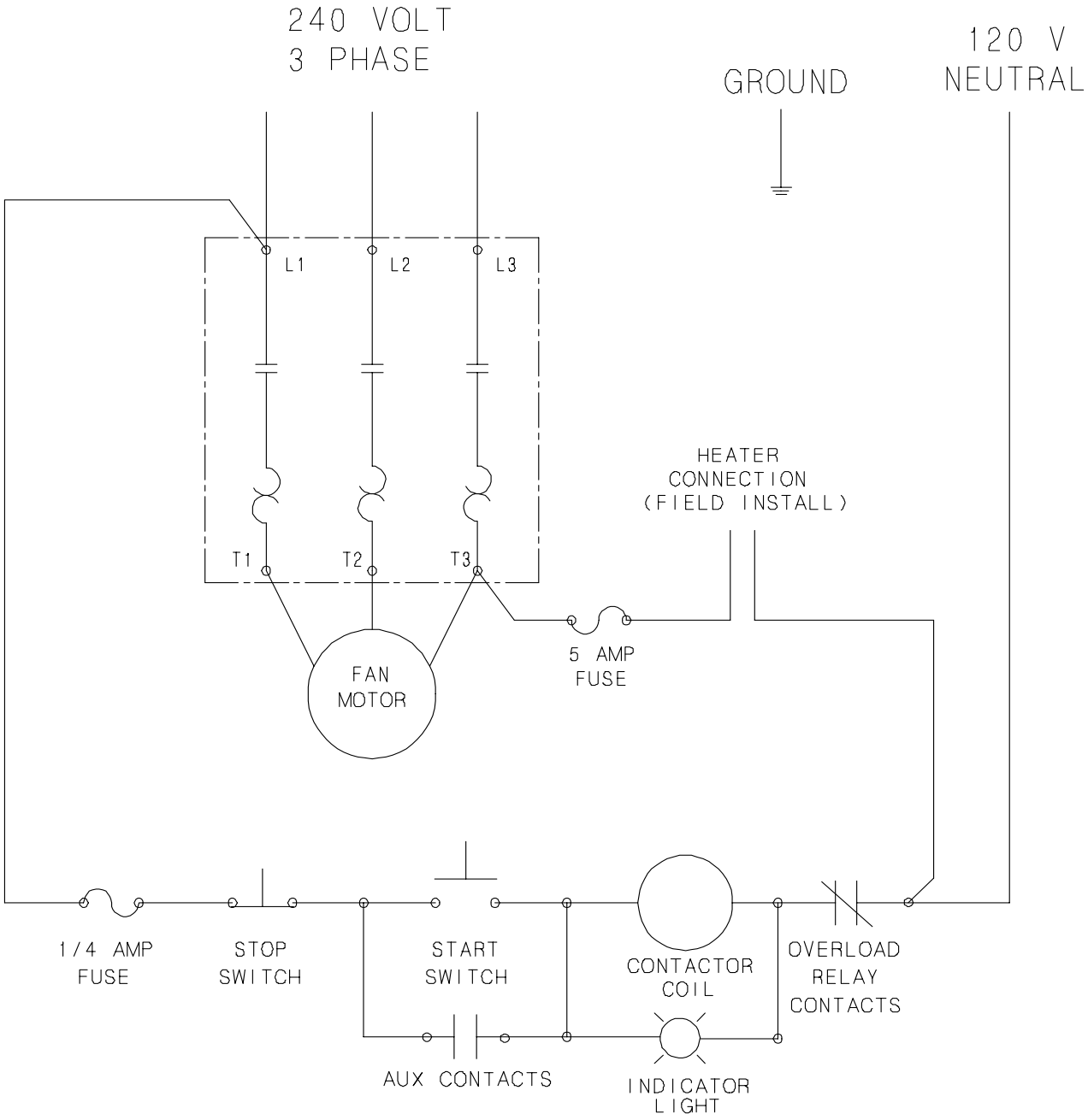


5-15Hp 1 Phase Wiring Diagram and Parts

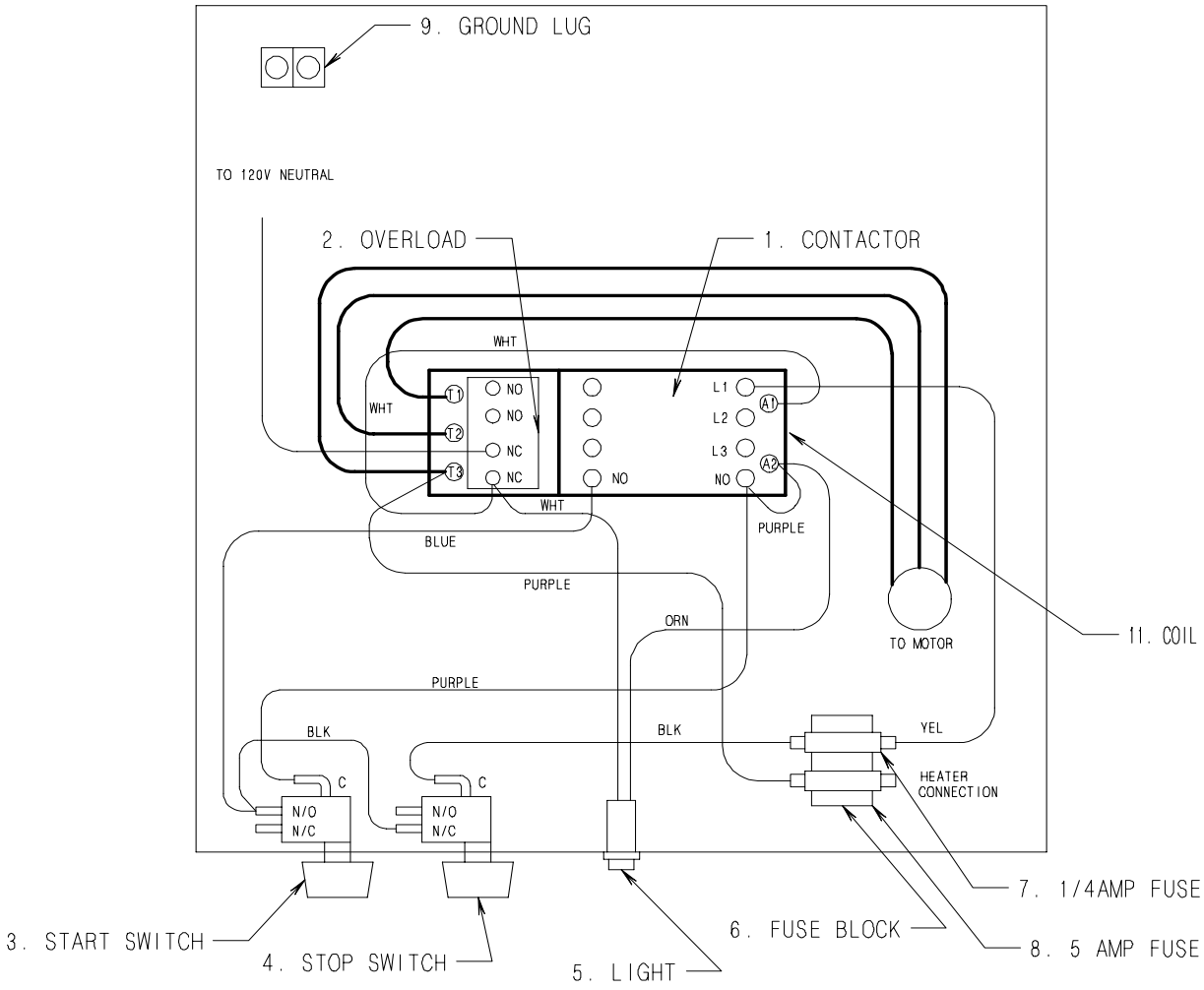


Key	Part Number					Description
	24" 5HP	24" 7HP	24" 10HP	26" 15HP	28" 15HP	
1	D03-0494	D03-0494	DO3-0495	D03-0496	D03-0496	Contactor
2	D03-0482	D03-0482	D03-0483	D03-0484	D03-0484	Overload
3	FH-999	FH-999	FH-999	FH-999	FH-999	Start Switch
4	FH-1000	FH-1000	FH-1000	FH-1000	FH-1000	Stop Switch
5	TFH-2021	TFH-2021	TFH-2021	TFH-2021	TFH-2021	Light
6	FH-1058	FH-1058	FH-1058	FH-1058	FH-1058	Fuse Block
7	00147938	00147938	00147938	00147938	00147938	1/4 Amp Fuse
8	FH-1059	FH-1059	FH-1059	FH-1059	FH-1059	5 Amp Fuse
9	FH-6634	FH-6634	FH-6634	FH-6634	FH-6634	Ground Lug
10	D03-0511	D03-0511	D03-0511	D03-0511	D03-0511	Auxilliary Contact
11	D03-0670	D03-0670	D03-0670	D03-0670	D03-0670	120 Volt Coil

3 Phase 230 Volt Schematic

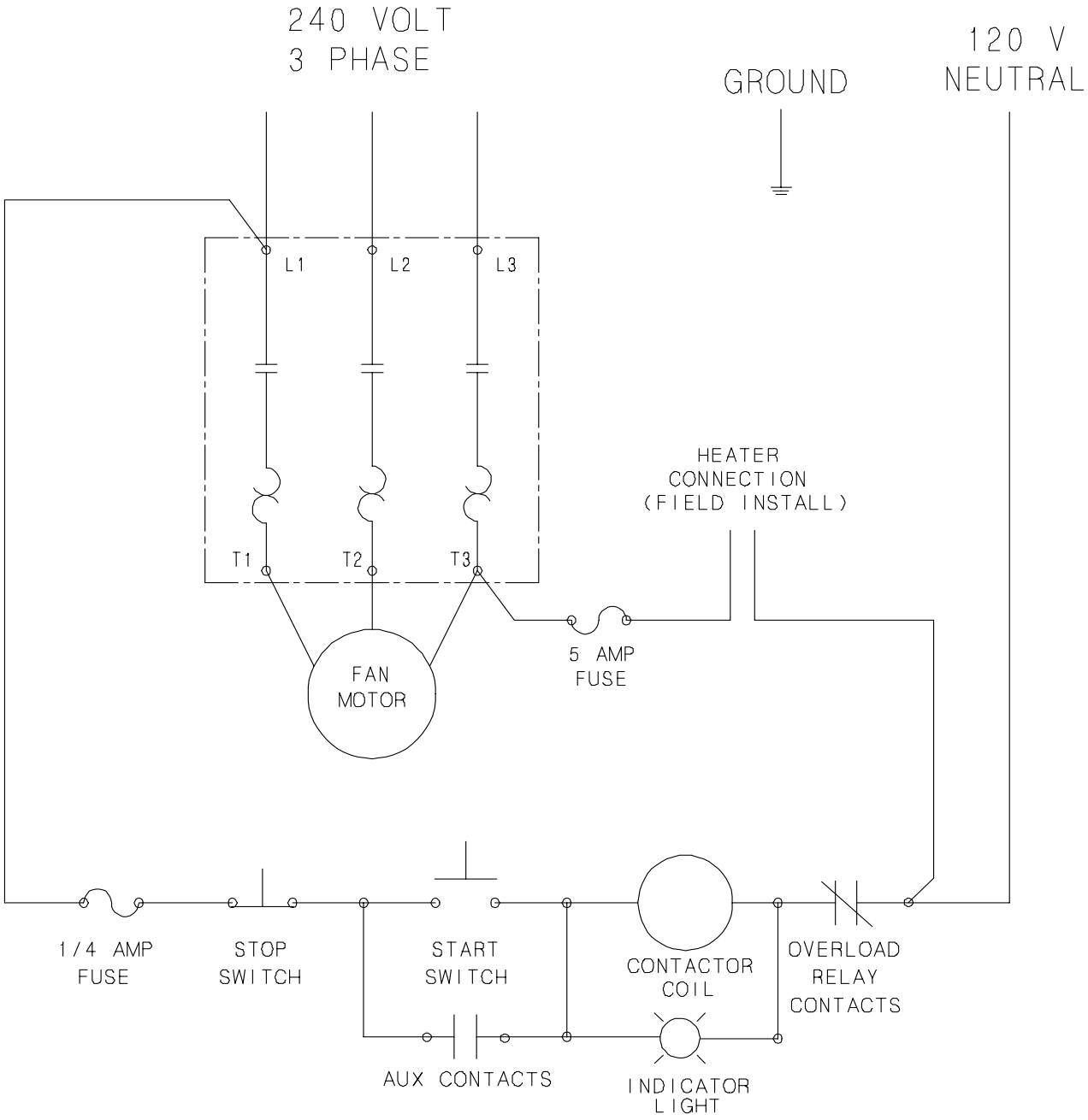


3, 10Hp 3 Phase 230 Volt Wiring Diagram and Parts

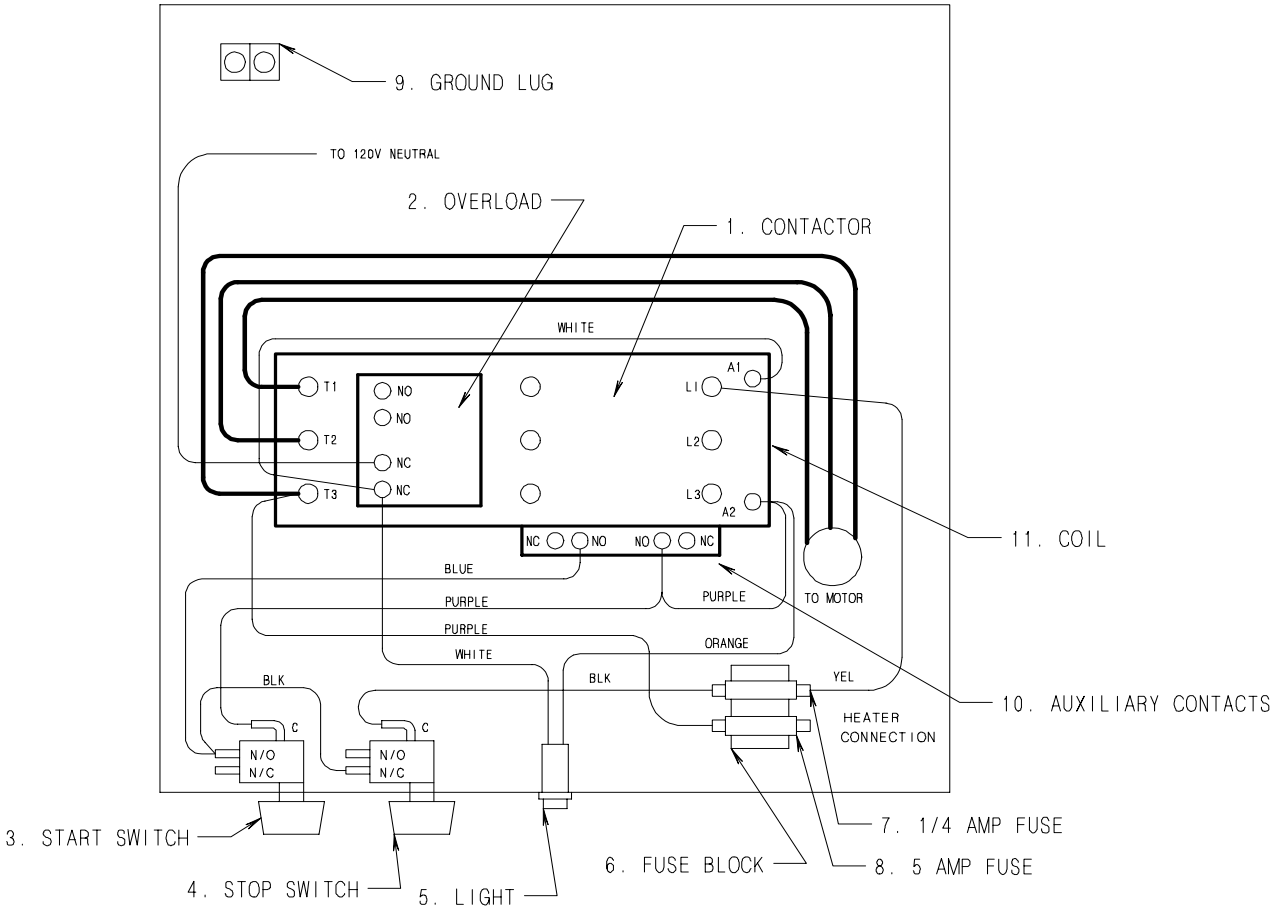


Key	Part Number		Description
	18" 3HP	24" 10HP	
1	D03-0489	D03-0492	Contactor
2	D03-0473	D03-0479	Overload
3	FH-999	FH-999	Start Switch
4	FH-1000	FH-1000	Stop Switch
5	TFH-2021	TFH-2021	Light
6	FH-1058	FH-1058	Fuse Block
7	00147938	00147938	1/4 Amp Fuse
8	FH-1059	FH-1059	5 Amp Fuse
9	FH-6634	FH-6634	Ground Lug
NS	D03-0511	D03-0511	Auxiliary Contact
11	D03-0670	D03-0670	120 Volt Coil

3 Phase 230 Volt Schematic

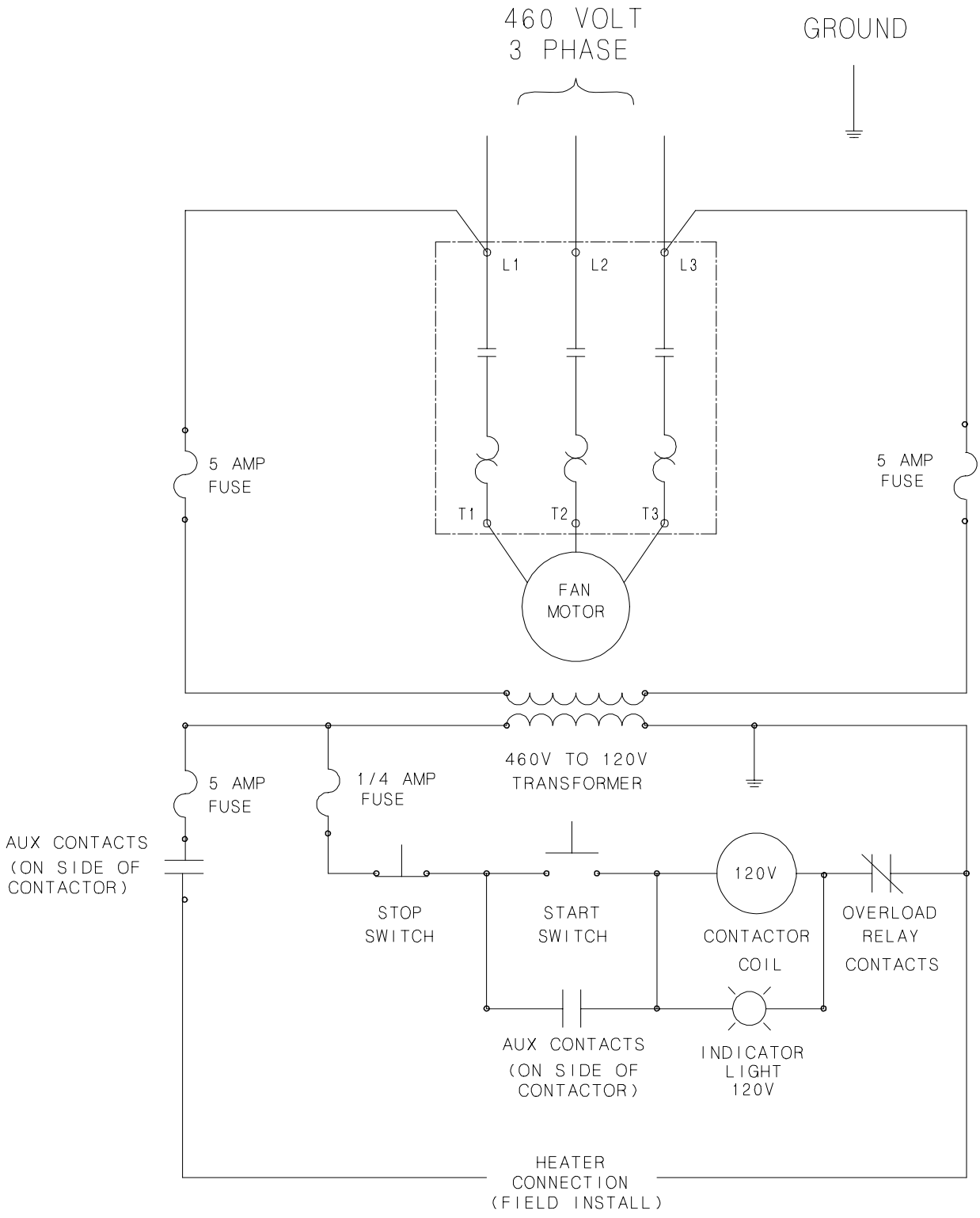


5, 7, 15Hp 3 Phase 230 Volt Wiring Diagram and Parts

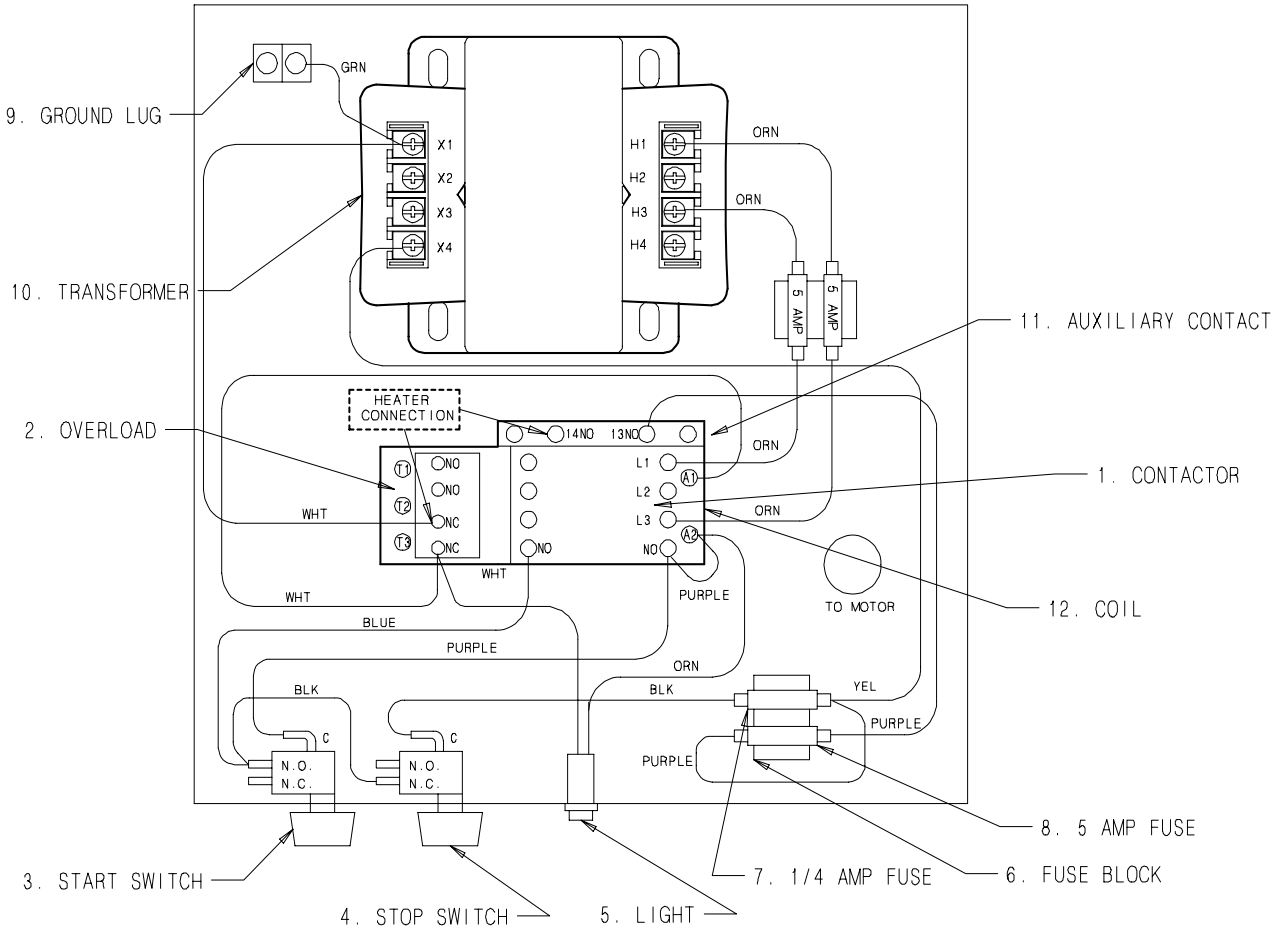


Key	Part Number				Description
	24" 5HP	24" 7HP	26" 15HP	28" 15HP	
1	D03-0491	D03-0491	D03-0493	D03-0493	Contactor
2	D03-0477	D03-0477	D03-0480	D03-0480	Overload
3	FH-999	FH-999	FH-999	FH-999	Start Switch
4	FH-1000	FH-1000	FH-1000	FH-1000	Stop Switch
5	TFH-2021	TFH-2021	TFH-2021	TFH-2021	Light
6	FH-1058	FH-1058	FH-1058	FH-1058	Fuse Block
7	00147938	00147938	00147938	00147938	1/4 Amp Fuse
8	FH-1059	FH-1059	FH-1059	FH-1059	5 Amp Fuse
9	FH-6634	FH-6634	FH-6634	FH-6634	Ground Lug
NS	D03-0511	D03-0511	D03-0511	D03-0511	Auxiliary Contact
11	D03-0670	D03-0670	D03-0670	D03-0670	120 Volt Coil

3 Phase 460 Volt Schematic

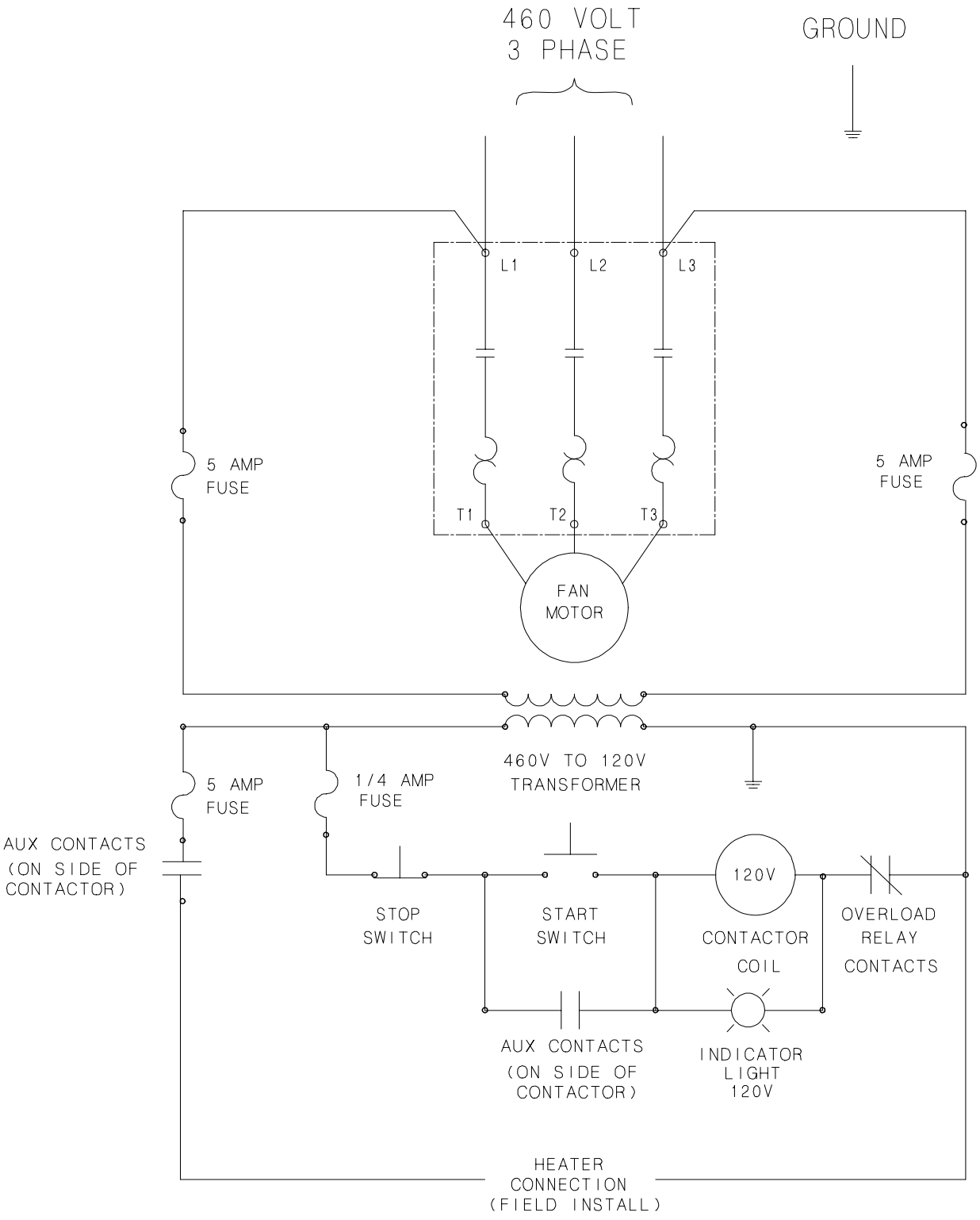


3, 5, 7, 10Hp 3 Phase 460 Volt Wiring Diagram and Parts

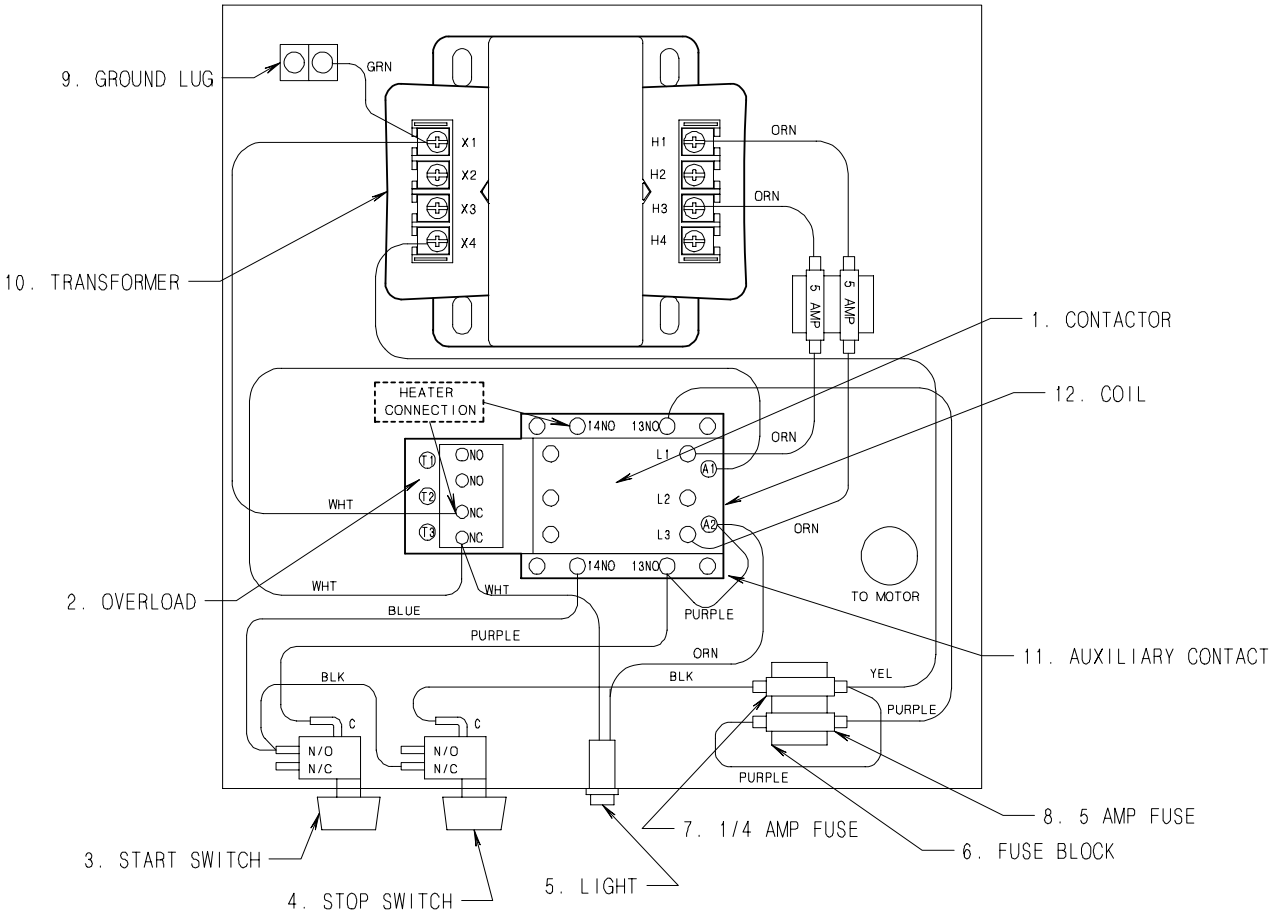


Key	Part Number				Description
	18" 3HP	24" 5HP	24" 7HP	24" 10HP	
1	D03-0488	D03-0489	D03-0489	D03-0490	Contactor
2	D03-0472	D03-0473	D03-0473	D03-0475	Overload
3	FH-999	FH-999	FH-999	FH-999	Start Switch
4	FH-1000	FH-1000	FH-1000	FH-1000	Stop Switch
5	TFH-2021	TFH-2021	TFH-2021	TFH-2021	Light
6	FH-1058	FH-1058	FH-1058	FH-1058	Fuse Block
7	00147938	00147938	00147938	00147938	1/4 Amp Fuse
8	FH-1059	FH-1059	FH-1059	FH-1059	5 Amp Fuse
9	FH-6634	FH-6634	FH-6634	FH-6634	Ground Lug
10	HF-7566	HF-7566	HF-7566	HF-7566	Transformer
11	D03-0511	D03-0511	D03-0511	D03-0511	Auxiliary Contact
12	D03-0670	D03-0670	D03-0670	D03-0670	120 Volt Coil

3 Phase 460 Volt Schematic

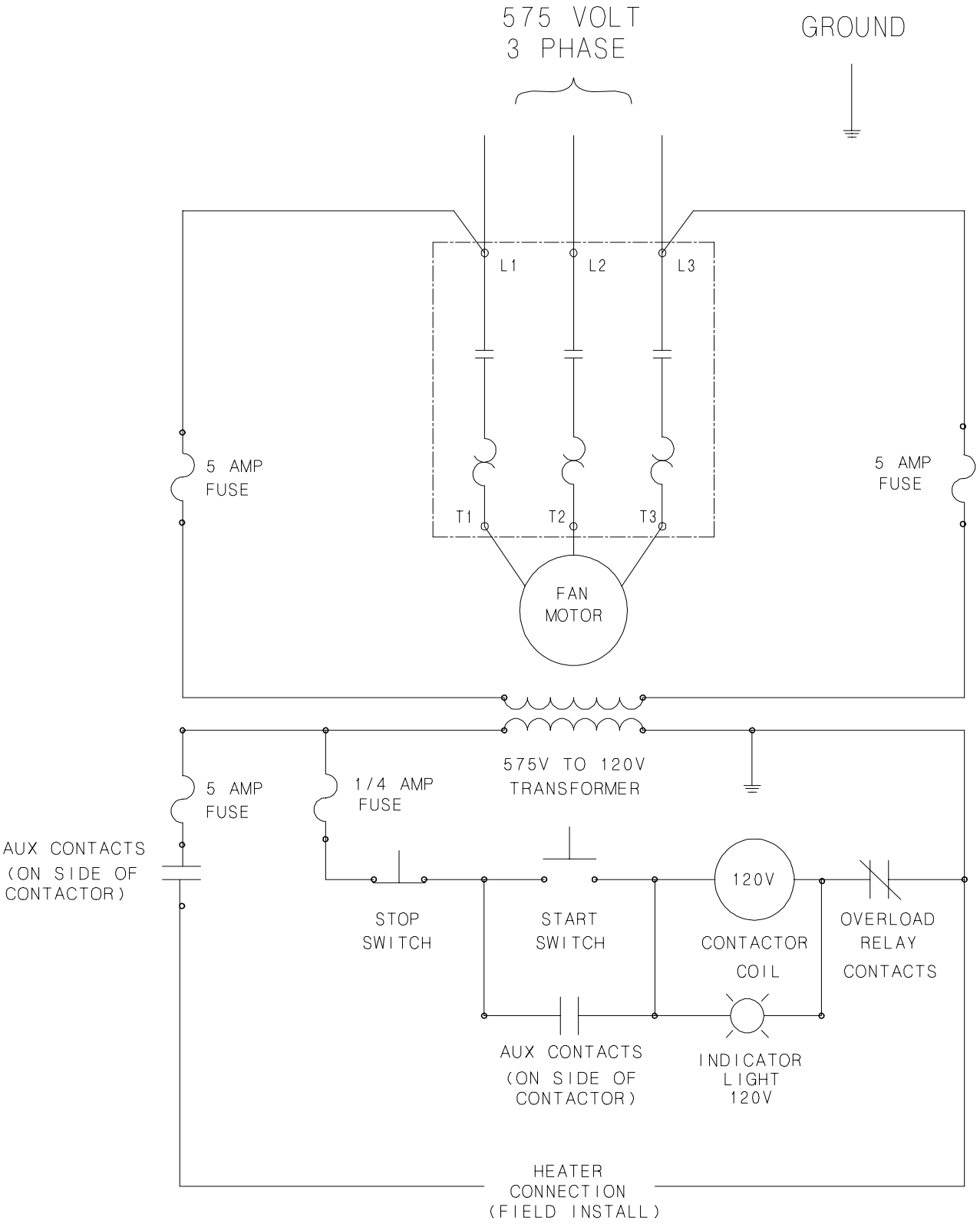


15Hp 3 Phase 460 Volt Wiring Diagram and Parts

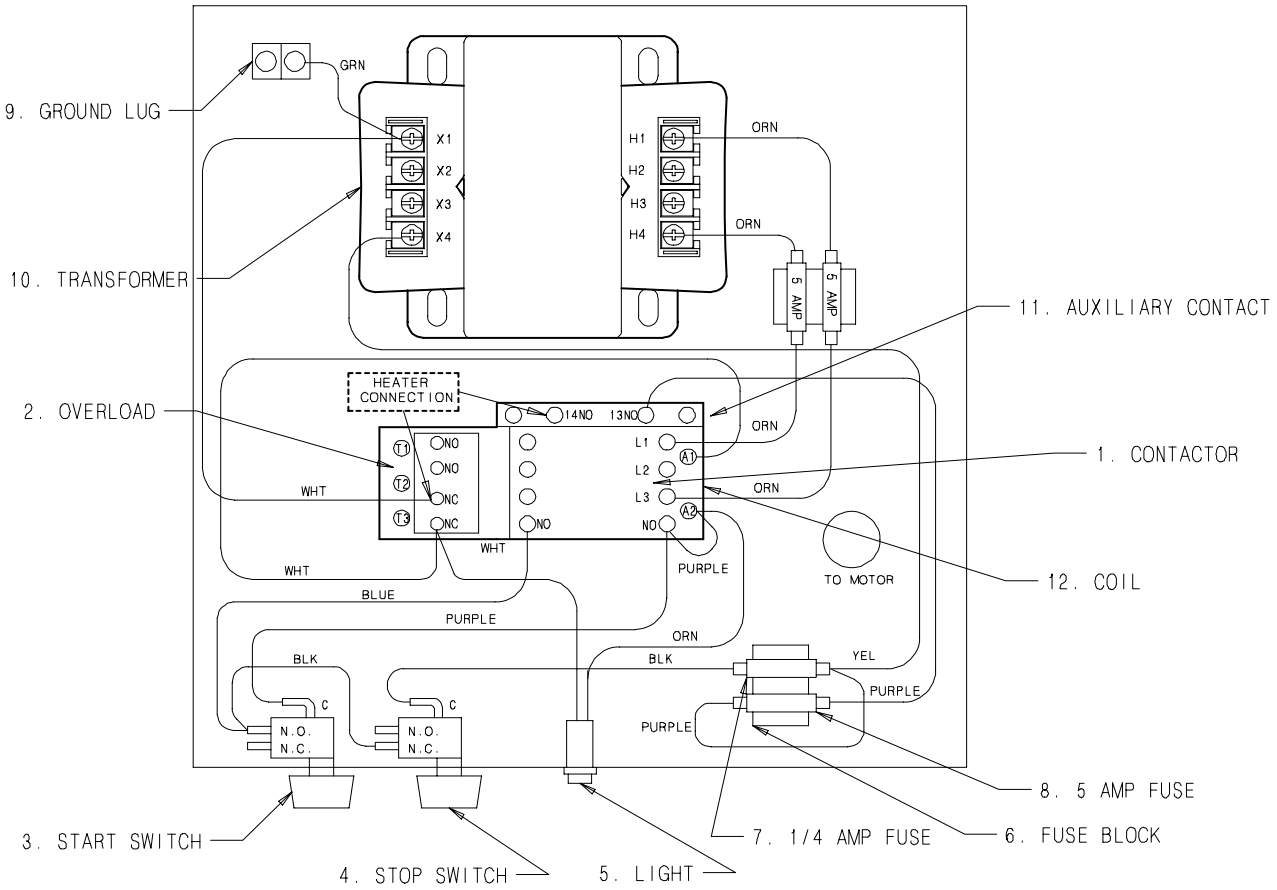


Key	Part Number		Description
	26" 15HP	28" 15HP	
1	D03-0491	D03-0491	Contactor
2	D03-0476	D03-0476	Overload
3	FH-999	FH-999	Start Switch
4	FH-1000	FH-1000	Stop Switch
5	TFH-2021	TFH-2021	Light
6	FH-1058	FH-1058	Fuse Block
7	00147938	00147938	1/4 Amp Fuse
8	FH-1059	FH-1059	5 Amp Fuse
9	FH-6634	FH-6634	Ground Lug
10	HF-7566	HF-7566	Transformer
11	D03-0511	D03-0511	Auxiliary Contact
12	D03-0670	D03-0670	120 Volt Coil

3 Phase 575 Volt Schematic



All Hp 3 Phase 575 Volt Wiring Diagram and Parts



Key	Part Number						Description
	18" 3HP	24" 5HP	24" 7HP	24" 10HP	26" 15HP	28" 15HP	
1	D03-0488	D03-0488	D03-0489	D03-0489	D03-0490	D03-0490	Contactor
2	D03-0471	D03-0473	D03-0473	D03-0474	D03-0475	D03-0475	Overload
3	FH-999	FH-999	FH-999	FH-999	FH-999	FH-999	Start Switch
4	FH-1000	FH-1000	FH-1000	FH-1000	FH-1000	FH-1000	Stop Switch
5	TFH-2021	TFH-2021	TFH-2021	TFH-2021	TFH-2021	TFH-2021	Light
6	FH-1058	FH-1058	FH-1058	FH-1058	FH-1058	FH-1058	Fuse Block
7	00147938	00147938	00147938	00147938	00147938	00147938	1/4 Amp Fuse
8	FH-1059	FH-1059	FH-1059	FH-1059	FH-1059	FH-1059	5 Amp Fuse
9	FH-6634	FH-6634	FH-6634	FH-6634	FH-6634	FH-6634	Ground Lug
10	HF-7566	HF-7566	HF-7566	HF-7566	HF-7566	HF-7566	Transformer
11	D03-0511	D03-0511	D03-0511	D03-0511	D03-0511	D03-0511	Auxiliary Contact
12	D03-0670	D03-0670	D03-0670	D03-0670	D03-0670	D03-0670	120 Volt Coil

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