MORSE GENERATORS
MODEL GC-40 & GCRS-40-40
40 KW OPEN SKID
SAFETY, MAINTENANCE
AND PARTS MANUAL

40 KW PRIME POWER
45 KW STAND-BY POWER

www.morseindustrial.ca

MORSE
INDUSTRIAL EQUIPMENT

Mississauga Ontario
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01/24/2007 NDD

SAFETY, MAINTENANCE, AND PARTS MANUAL
MORSE GENERATORS GC-40

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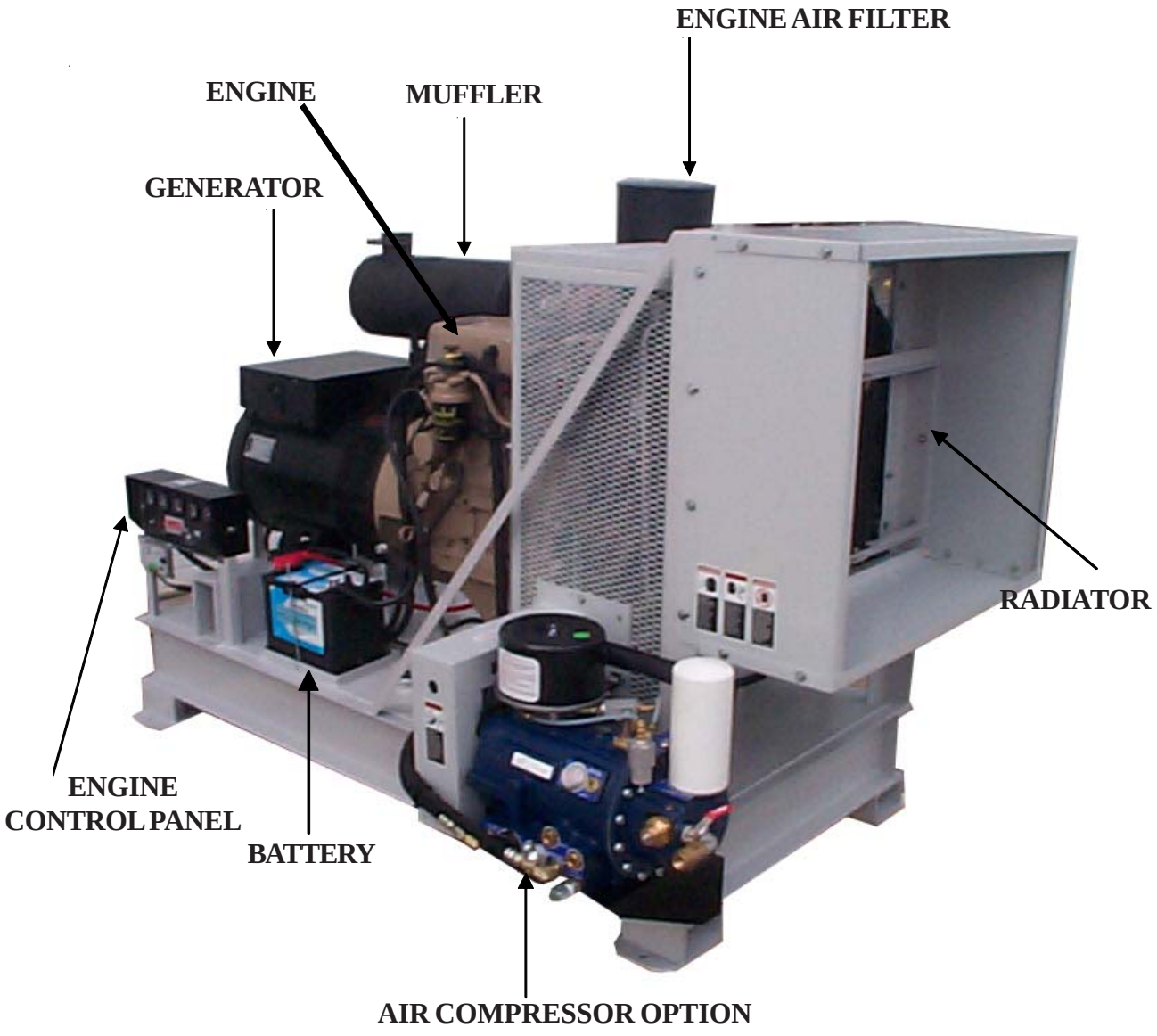
INTRODUCTION

Every effort has been expended to make sure that the information in this manual is both accurate and current. However, Morse Industrial Inc. reserves the right to change, alter or otherwise improve the product at any time without prior notice.

Bold printed **DANGER** boxes point out important safety instructions, which if not followed, could endanger personal safety and/or property.

Read this manual, the engine manual, and the generator manual thoroughly for both the Diesel Engine and the Generator prior to operating this unit. Follow all instructions in all three manuals. If you do not understand any portion of the manuals, contact your Morse Generator authorized dealer for starting operating and servicing procedures.

GENERATOR SHOWN WITH COMPRESSOR OPTION



SAFETY

DANGER

IF THIS UNIT IS USED FOR BACK-UP POWER IN THE EVENT OF A UTILITY POWER FAILURE, THE FOLLOWING STEP MUST BE TAKEN BEFORE CONNECTING THE GENERATOR TO AN ELECTRICAL SYSTEM. OPEN THE MAIN CIRCUIT BREAKER OR MAIN SWITCH SERVING THE SYSTEM TO ISOLATE THE GENERATOR SYSTEM FROM THE ELECTRIC UTILITY. FAILURE TO ISOLATE THE GENERATOR AND UTILITY SYSTEMS MAY RESULT IN DAMAGE TO THE GENERATOR AND MAY ALSO RESULT IN INJURY OR DEATH TO ELECTRIC UTILITY WORKERS, DUE TO A BACKFEED OF ELECTRICAL ENERGY.

DANGER

- THIS UNIT PRODUCES DANGEROUS HIGH VOLTAGE THAT CAN CAUSE EXTREMELY HAZARDOUS ELECTRICAL SHOCK. AVOID CONTACT WITH BARE WIRES, TERMINALS, ETC. NEVER PERMIT AN UNQUALIFIED PERSON TO OPERATE OR SERVICE THIS UNIT.

- NEVER HANDLE ANY ELECTRICAL CORDS OR DEVICES WHILE STANDING IN WATER, BAREFOOT, OR HANDS AND FEET ARE WET. HARMFUL OR FATAL ELECTRICAL SHOCK CAN RESULT.

- LOCAL ELECTRICAL CODES MAY REQUIRE THE USE OF AN APPROVED EARTH GROUND TO THE FRAME OF THE GENERATOR. THE GENERATOR IS EQUIPPED WITH A MOUNTING GROUND BOLT AND NUT FOR PROPER CONNECTION. CONSULT WITH A LOCAL ELECTRICIAN FOR GROUNDING REQUIREMENTS IN YOUR AREA.

DANGER

- NEVER ADD FUEL WHILE UNIT IS RUNNING.
- DO NOT SMOKE WHEN PUTTING FUEL IN THE TANK
- DO NOT OVERFILL THE FUEL TANK
- DIESEL ENGINE EXHAUST CONTAINS DEADLY CARBON MONOXIDE GAS. IF BREATHED IN SUFFICIENT CONCENTRATIONS, IT CAN CAUSE UNCONSCIOUSNESS OR EVEN DEATH. MAKE SURE THE GENERATOR HAS ADAQUETE VENTILATION FOR THE EXHAUST.
- BOTH THE DIESEL ENGINE AND THE GENERATOR REQUIRE FRESH AIR FOR COOLING. MAKE SURE SUFFICIENT VENTILATION IS AVAILABLE FOR BOTH THE GENERATOR AND ENGINE FANS.
- OPERATE GENERATOR ON LEVEL SURFACES UP TO + OR - 10% GRADE
- DO NOT OPERATE GENERATOR WHERE IT WILL BE EXPOSED TO EXCESSIVE MOISTURE, DIRT, DUST OR CORROSIVE VAPORS.
- NEVER START OR STOP THE GENERATOR WITH ELECTRICAL LOADS CONNECTED AND THE CONNECTED DEVICES TURNED ON! START THE ENGINE FIRST AND LET IT STABILIZE BEFORE TURNING ON THE ELECTRICAL LOADS. TURN OFF ALL ELECTRICAL LOADS BEFORE SHUTTING DOWN THE ENGINE.

SAFETY RULES

- Morse Industrial Equipment Inc. recommends that the installation, initial start-up and maintenance of this generator is carried out by a Morse Generator Dealer. Do not attempt to install, start, wire or perform maintenance on this generator unless you are trained and qualified to do so. Personal injury or death may occur.

- Keep hands, feet, clothing, etc. away from drive belts, fans, and other moving parts. Never remove drive belts or fan guards while the unit is running.

- Keep hands and all body parts away from the hot engine exhaust. This includes the muffler, turbo charger, and all exhaust pipes. Other parts of the engine and radiator are also hot.

- When working on this generator, remain alert at all times. Wear protective clothing including safety glasses. Never work on this equipment when you are mentally or physically fatigued.

- Before performing any maintenance on this equipment, disconnect the battery cables to prevent accidental start-up. Take care not to "arc" the battery posts (do not touch positive (+) to negative (-)) with the ends of the cable or tools used to remove the cables. Disconnect the negative (-) cable first. Reconnect the negative (-) cable last.

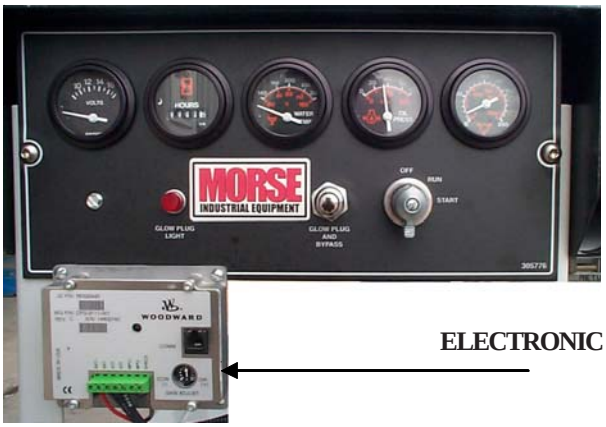
- Never wear jewelry when working on this generator. Jewelry can conduct electricity resulting in electric shock, or may get caught in moving components such as fans or belts causing injury.

- Study the DANGER WARNINGS and SAFETY RULES carefully. Become familiar with both the Engine and Generator safety rules and warnings found in their respective manuals.

- Morse Industrial Equipment Inc. cannot anticipate every possible circumstance that might involve a safety hazard. The warnings in this manual and also the engine and generator manuals are not all-inclusive and one must use common sense to satisfy oneself that this equipment is safe for you and others to operate and/or service.

GENERATOR DESCRIPTION

This generator is a frame mounted. diesel engine driven, revolving field, alternating current (AC) generator. The generators revolving field is driven at 1800 rpm by the diesel engine; the diesel engine speed is controlled by an electronic governor. Please refer to the John Deere Engine Operator's Manual for more information on the electronic governor or engine control unit (ECU).



ELECTRONIC GOVERNOR (ECU)

- This generator can be used for prime or stand by power and can be wired 3 phase or 1 phase at a frequency of 60 hertz. Voltage can be 120/240 1-PH or 208 to 240; and 416 to 480 volt 3-PH. Please refer to the Generator Manual for details.

- Follow all local electrical codes that may require proper grounding of the generator and its electrical system.

- In case of an accident caused by electric shock, immediately shut down the generator. Move the rotary OFF-RUN-START switch on the control panel to the "OFF" position. Do not try to free the victim with the generator running; the electric shock could pass from the victim to anyone in contact with the victim. Make sure the generator is off and the electric system is de-energized. Seek medical attention immediately.

OFF-RUN-START SWITCH

HAZARDS

ELECTRICAL SHOCK HAZARDS

- This generator produces dangerous electrical voltages that can cause fatal electrical shock. Avoid contact with bare wires, terminals, connections, etc. while the unit is running. Make sure all appropriate covers, guards, and barriers are in place before operating the generator.

- Do not assume that there is not power flow to the terminals, connections, bare wires, etc. when the generator is not running. The unit could be connected to another power source that could back feed through the generator wire leads. Always test the wire leads for power before working on the unit.

- The National Electrical Code (NEC) requires the frame and external electrically conductive parts of the generator to be connected to an approved earth ground unless the generator is vehicle mounted. See article 250.34 of the NEC handbook if the generator is to be mounted in a portable vehicle.

FIRE HAZARDS

- For fire safety, the generator must be operated and maintained properly. Operation must always comply with applicable codes, standards, laws and regulations. Adhere strictly to local state and national electrical and building codes. Comply with regulations of the Occupational Safety and Health Administration (OSHA). Ensure the generator and engine are operated in accordance with the manufacturer's instructions and recommendations. Do not alter the construction of the generator or engine or change controls which might create an unsafe operating condition.

- Keep a fire extinguisher near the generator at all times. Make sure the extinguisher is rated "ABC" by the National Fire Protection Association. Keep the extinguisher properly charged and be informed on instructions for use.

EXPLOSION HAZARDS

- Do not smoke around the generator. Wipe any fuel or oil spills immediately. Make sure there are no combustible materials near or on the generator that can cause a FIRE or EXPLOSION. Keep the area surrounding the generator clean and free from debris.

WARNING

DO NOT START OR STOP GENERATOR WITH ANY CONNECTED ELECTRICAL DEVICE TURNED ON. GENERATOR MUST NOT BE STARTED OR STOPPED WITH ANY TYPE OF ELECTRICAL LOAD ON THE GENERATOR. LOAD GENERATOR AFTER THE GENERATOR IS WARMED UP.

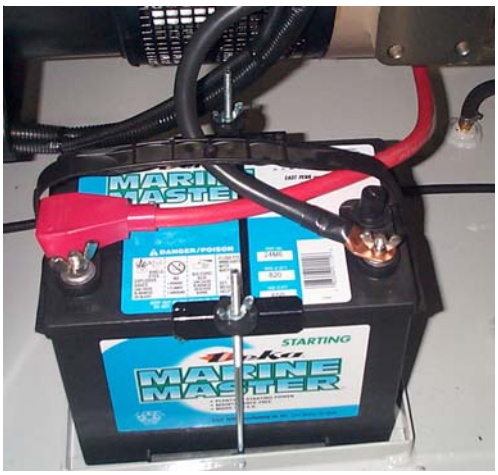
- Operators must not tamper with engine governed speed. High operating speeds are dangerous and increase risk of personal injury or damage to equipment. The generator supplies correct rated frequency and voltage only when running at proper governed speed. Incorrect frequency and/or voltage can damage some connected electrical loads. Only trained service technicians should work on the controll unit, (ECU).

- Electrical surges and spikes can cause serious damage to your system and everything plugged into it. Proper surge protectors should be used between the receptacles and every electrical system being used. Improperly tuned engines can force the electronic engine speed control to spike and fade thus creating damaging electrical surges.

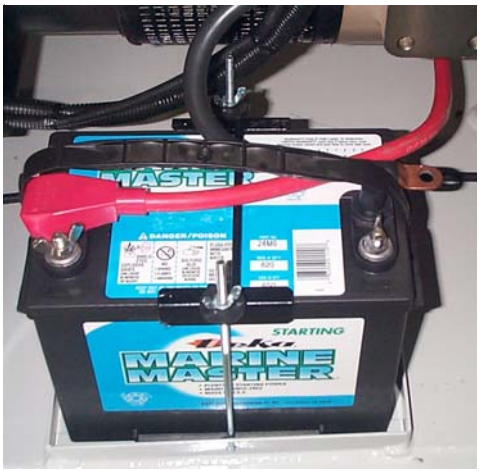
- Never weld to truck or trailer chassis, as this will cause damage to many electrical or electronic components grounded to vehicle chassis.

PREPARATION FOR INITIAL START-UP

Every GC-40 and GCRS 40-40 is tested at the factory before shipment. This testing assures that the unit is operating properly and that the generator and/or compressor will deliver its rated capacity. Regardless of the care taken at the factory, there still exists a possibility that damage may occur during shipment. For this reason, it is recommended that the unit be carefully inspected for evidence of damage during shipment. The unit is shipped with the negative battery cable removed. The negative battery cable will need to be connected before starting.



BATTERY CABLE INSTALLED



BATTERY CABLE REMOVED

NOTE

All wiring connections to the generator should be made by a qualified electrician and inspected to meet all local standards and codes. Make sure the unit is safe to run before attempting to start.

NORMAL STARTING

1. Inspect the generator, engine, compressor* and other assemblies for loose connections or damage that might have occurred since the last operation.

2. Check engine oil, engine fuel, compressor oil* and anti-freeze levels; add fluids if necessary.

3. If equipped with a compressor, close service valves.

4. Push in GLOW PLUG and BYPASS BUTTON and hold.

5. Turn the engine OFF-RUN-START switch to START and hold until engine starts, but do not hold any longer than ten seconds at a time.

6. Release GLOW PLUG and BYPASS BUTTON after engine has started and run for five to ten seconds.

7. Let the engine warm-up. Once engine is warm the generator/and compressor are ready for full- load operation (normal engine temperature is 160 to 190 degrees Fahrenheit).

NORMAL STOPPING

1. Make sure all electrical devices are turned off. Do not turn off the generator while loaded!

2. Run generator unloaded for several minutes to allow engine to cool down.

3. Turn OFF-RUN-START switch to the OFF position.

* Inspect and check only if equipped with a compressor Model GCRS 40-40

SPECIFICATIONS

MODEL GC-40

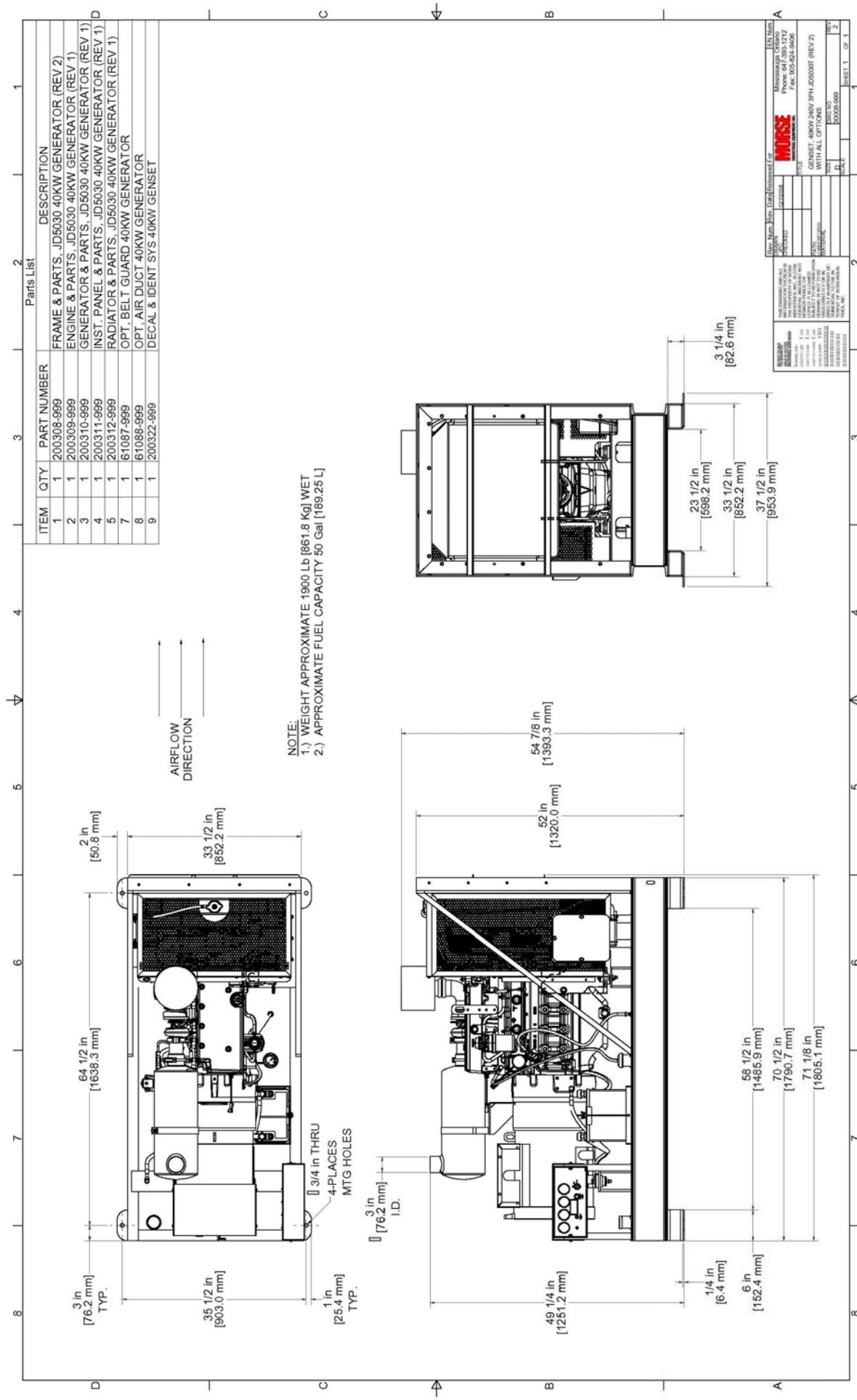
Weight =1900 lbs. (862 kg)
Fuel Capacity = 50 gal (189 liters)

ENGINE

Model:	John Deere 5030TF270
Power @ 1800 rpm:	80 hp (60 kw) Stand-by,72 hp (54 kw) Prime
Number of Cylinders:	5
Bore and Stroke:	3.4 x 4.1 in (86 x 105 mm)
Displacement:	186 in (3.05 L)
Aspiration:	Turbo-charged
Battery:	12 v 650 cca @ 0 degrees Fahrenheit

GENERATOR

Model:	Meccalte spa Type ECO 32-35/4
Output kw:	40 kw Prime, 45 kw Stand-by
Voltage:	208 - 240, 3 ph, 60 hz
Amps:	138 @ 208 v, 131 @ 220v, 120 @ 240v


Parts List
ITEM QTY PART NUMBER DESCRIPTION
1 1 200308-999 FRAME & PARTS, JD5030 40KW GENERATOR (REV 2)
2 1 200309-999 ENGINE & PARTS, JD5030 40KW GENERATOR (REV 1)
3 1 200310-999 GENERATOR & PARTS, JD5030 40KW GENERATOR (REV 1)
4 1 200311-999 INST. PANEL & PARTS, JD5030 40KW GENERATOR (REV 1)
5 1 200312-999 RADIATOR & PARTS, JD5030 40KW GENERATOR (REV 1)
7 1 61087-999 OPT. BELT GUARD 40KW GENERATOR
8 1 61088-999 OPT. AIR DUCT 40KW GENERATOR
9 1 200322-999 DECAL & IDENT SYS 40KW GENSET
NOTE:
1.) WEIGHT APPROXIMATE 1900 Lb [861.8 Kg] WET
2.) APPROXIMATE FUEL CAPACITY 50 Gal [189.25 L]
AIRFLOW DIRECTION
2 in [50.8 mm]
33 1/2 in [852.2 mm]
64 1/2 in [1638.3 mm]
3 in [76.2 mm] TYP.
35 1/2 in [903.0 mm]
1 in [25.4 mm] TYP.
3/4 in THRU 4-PLACES MTG HOLES
3 in [76.2 mm] I.D.
54 7/8 in [1393.3 mm]
52 in [1320.0 mm]
49 1/4 in [1251.2 mm]
1/4 in [6.4 mm]
6 in [152.4 mm]
58 1/2 in [1485.9 mm]
70 1/2 in [1790.7 mm]
71 1/8 in [1805.1 mm]
3 1/4 in [82.6 mm]
23 1/2 in [598.2 mm]
33 1/2 in [852.2 mm]
37 1/2 in [953.9 mm]
MORSE
GENSET, 40KW 240V 3PH JD5030T (REV 2)
WITH ALL OPTIONS
SIZE D
SCALE
WEIGHT
SHEET 1 OF 1

SPECIFICATIONS

MODEL GCRS-40-40

Weight =2210 lbs. (1002 kg)
Fuel Capacity = 50 gal (189 liters)

ENGINE

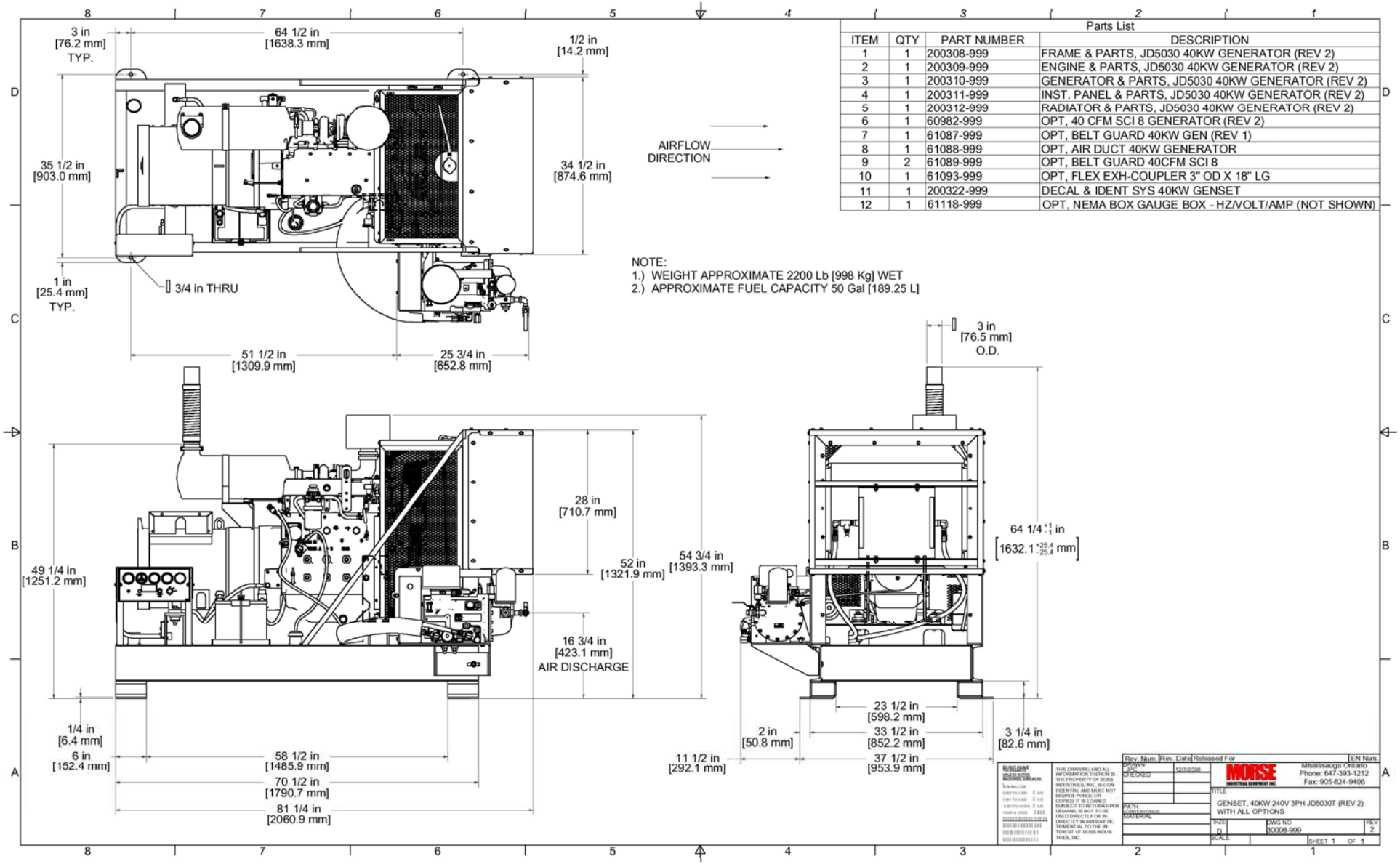
Model:	John Deere 5030TF270
Power @ 1800 rpm:	80 hp (60 kw) Stand-by,72 hp (54 kw) Prime
Number of Cylinders:	5
Bore and Stroke:	3.4 x 4.1 in (86 x 105 mm)
Displacement:	186 in (3.05 L)
Aspiration:	Turbo-charged
Battery:	12 v 650 cca @ 0 degrees Fahrenheit

GENERATOR

Model:	Meccalte spa Type ECO 32-35/4
Output kw:	40 kw Prime, 45 kw Stand-by
Voltage:	208 - 240, 3 ph, 60 hz
Amps:	138 @ 208 v, 131 @ 220v, 120 @ 240v

COMPRESSOR

Model:	SCI8 Integrated Air Compressor
Type:	Oil Flooded Rotary Screw
Delivery:	40 cfm (1.13 m /min)
Operating Pressure Range:	80 to150 PSIG (5.5 to 10.3 bar)
Ambient Operating Temp Range:	-20 degrees Fahrenheit to + 105 degrees Fahrenheit (-29 degrees Celsius to 41 degrees Celsius)
Oil Sump Capacity:	.75 gal (2.83 L)
Total System Capacity:	1.0 gal (3.80 L)
Type Cooling System:	Oil to Air
Air Intake Filter:	Single Stage Dry
Type of Control:	0-100% Demand
Air Service Connection:	1/2” NPT



Parts List			
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2	1	200309-999	ENGINE & PARTS, JD5030 40KW GENERATOR (REV 2)
3	1	200310-999	GENERATOR & PARTS, JD5030 40KW GENERATOR (REV 2)
4	1	200311-999	INST. PANEL & PARTS, JD5030 40KW GENERATOR (REV 2)
5	1	200312-999	RADIATOR & PARTS, JD5030 40KW GENERATOR (REV 2)
6	1	60982-999	OPT, 40 CFM SCI 8 GENERATOR (REV 2)
7	1	61087-999	OPT, BELT GUARD 40KW GEN (REV 1)
8	1	61088-999	OPT, AIR DUCT 40KW GENERATOR
9	2	61089-999	OPT, BELT GUARD 40CFM SCI 8
10	1	61093-999	OPT, FLEX EXH-COUPLER 3" OD X 18" LG
11	1	200322-999	DECAL & IDENT SYS 40KW GENSET
12	1	61118-999	OPT, NEMA BOX GAUGE BOX - HZ/VOLT/AMP (NOT SHOWN)

Rev. Num.	Rev. Date	Released For	EN Num.
	12/7/2009		

DRAWN
CHECKED
PATH
MATERIAL

MORSE INDUSTRIAL EQUIPMENT INC.
Mississauga Ontario
Phone: 647-393-1212
Fax: 905-824-9406

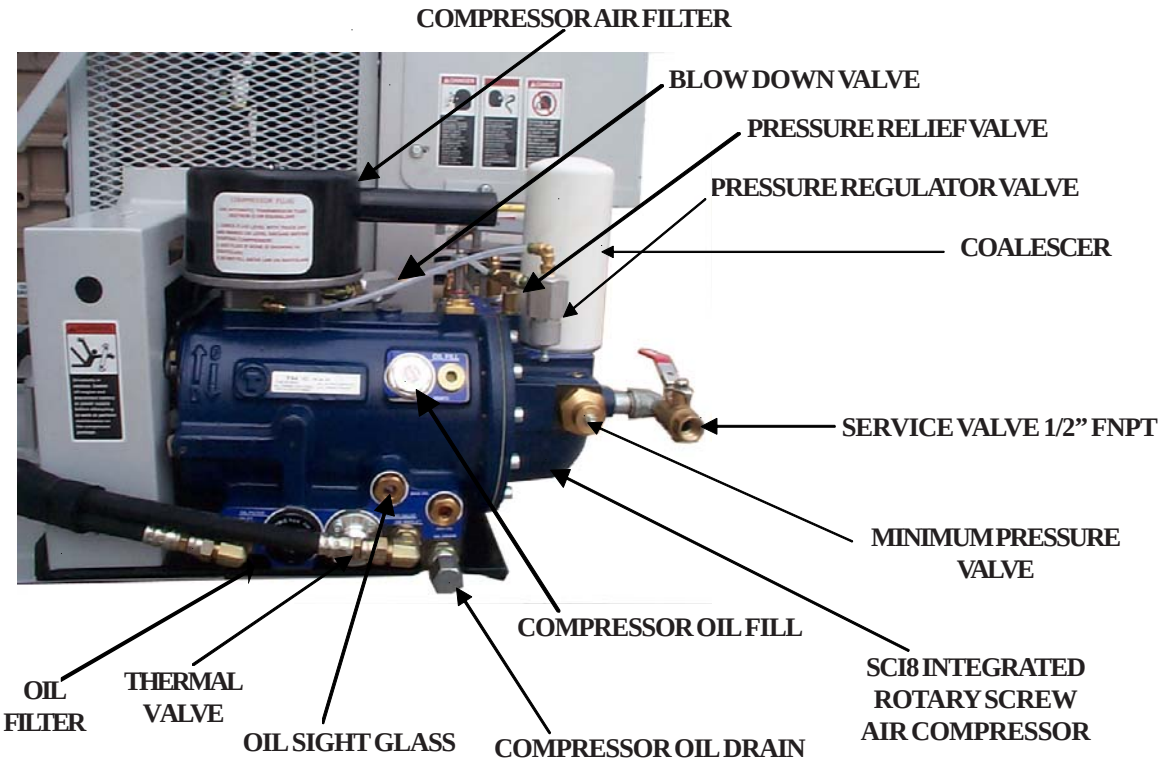
TITLE
GENSET, 40KW 240V 3PH JD5030T (REV 2)
WITH ALL OPTIONS

SIZE D | DWG NO. 30008-999 | REV 2
SCALE | SHEET 1 OF 1

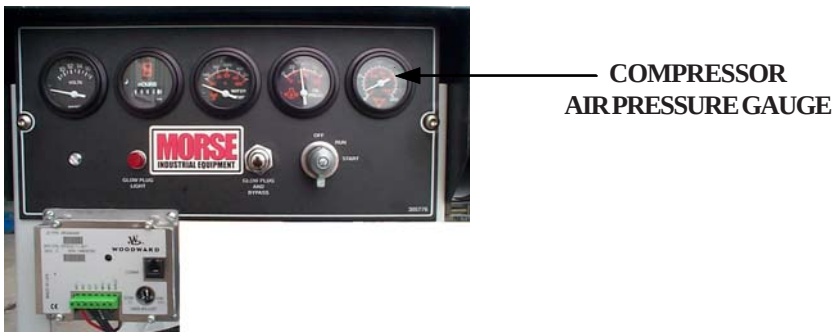
COMPRESSOR OPTION

MODEL GCRS-40-40

Your Morse Generator may be equipped with a belt driven integrated rotary screw air compressor.



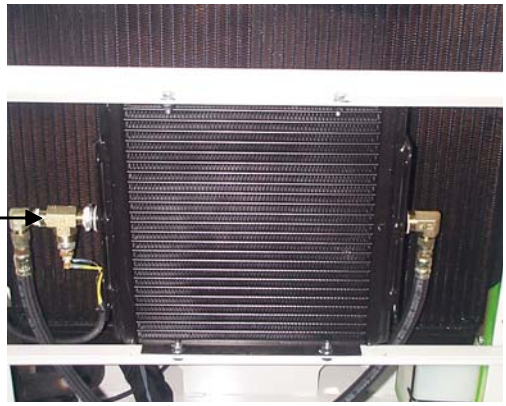
This machine is a positive displacement air compressor that supplies its rated capacity (cfm) and its rated pressure (psi) continuously (100% duty cycle). Please see figure above for location of the compressors main components.



To use air from this compressor, simply connect your airline to the 1/2" FNPT ball valve mounted on the discharge end of the compressor unit. This compressor is running when the engine is and has an automatic pressure regulating valve that opens and closes the inlet valve depending on air usage.

COMPRESSOR OPERATION

HIGH COMPRESSOR OIL TEMPERATURE SHUTDOWN SWITCH



COMPRESSOR OIL COOLER

CONTROL OR INDICATOR	PURPOSE
AIR PRESSURE GAUGE	Continually monitors the sump pressure at various load and unload conditions
COMPRESSOR HIGH DISCHARGE TEMPERATURE SHUTDOWN SWITCH	Opens the electrical circuit to shut the machine down when the discharge temperature reaches 240 degrees F.
UPPER FLUID LEVEL SIGHTGLASS	Indicates the fluid level in sump. Proper level should fill half the glass. Check this level when the machine is shutdown.
PRESSURE RELIEF VALVE	Vents sump pressure to the atmosphere should pressure inside the sump exceed 217 PSIG.
COMPRESSOR INLET CONTROL VALVE	Regulates the amount of air intake in accordance with the amount of compressed air being used. Isolates fluid in compressor unit on shutdown.
PRESSURE REGULATING VALVE	Senses air pressure signal from sump to provide automatic regulation of the compressor inlet control valve and load controller.
BLOWDOWN VALVE	Vents sump pressure to the atmosphere at shutdown.
MINIMUM PRESSURE VALVE	Restricts airflow to balance sump and service air pressure. Assures a minimum of 60 PSIG to the service line.

COMPRESSOR OPERATION

OPERATING CONDITIONS

The following conditions should exist for maximum performance of the compressor. The compressor should be as close to level as possible when operating. The compressor will operate on a 15-degree sideward lengthwise tilt without any adverse problems. Fluid carryover and oil starvation may occur if operated beyond this tilt.

NOTE

IF THE COMPRESSOR IS BEING USED TO POWER SANDBLASTING EQUIPMENT OR AN AIR TANK, USE A CHECK VALVE DIRECTLY AFTER THE SERVICE VALVE TO PREVENT BACK-FLOW INTO THE SUMP. THIS CHECK VALVE SHOULD HAVE A MAXIMUM PRESSURE DROP RATING OF 2 PSIG (13.78 kPa) OPERATING AND A CAPACITY RATING EQUAL TO THE MAXIMUM RATING OF THE COMPRESSOR.

COMPRESSOR INSPECTION, LUBRICATION AND MAINTENANCE

This section contains instructions for performing the inspection, lubrication and maintenance procedures required to keep the compressor in proper operating condition. The importance of performing the maintenance described herein cannot be over emphasized.

Periodic maintenance procedures to be performed on the equipment covered by this manual are listed below. It should be understood that the intervals between inspections specified are maximum intervals. More frequent inspections should be made if the unit is operating in a dusty environment, in high ambient temperature, or in other unusual conditions. A planned program of periodic inspection and maintenance will help avoid premature failure and costly repairs. Daily visual inspections should become a routine.

The LUBRICATION AND MAINTENANCE CHART lists serviceable items on this compressor package. The items are listed according to their frequency of maintenance, followed by those items which need only "As Required" maintenance. The maintenance time intervals are expressed in hours. Use the hourmeter readings for determining your maintenance schedules. Perform the maintenance at multiple intervals of the hours shown. For example, when the hourmeter shows "100" on the dial, all items listed under "EVERY 10 HOURS" should be serviced now for the tenth time, and all items under "EVERY 50 HOURS" should be served for the second time. In addition to the following LUBRICATION AND MAINTENANCE CHART refer to the Engine Operator's manual for recommended engine lubrication and maintenance.

DANGER

COMPRESSOR MUST BE SHUT DOWN AND COMPLETELY RELIEVED OF PRESSURE PRIOR TO CHECKING FLUID LEVELS. OPEN SERVICE VALVE TO ASSURE RELIEF OF SYSTEM AIR PRESSURE. FAILURE TO COMPLY WITH THIS WARNING MAY CAUSE DAMAGE TO PROPERTY AND SERIOUS BODILY HARM.

COMPRESSOR INSPECTION, LUBRICATION, AND MAINTENANCE CHART

INTERVAL	ACTION
EVERY 10 HOURS OR DAILY	1. Check compressor and engine oil level. 2. Check air filter. 3. Check for oil and air leaks. 4. Check fuel supply after running. 5. Check for fuel, oil and compressor fluid leaks.
EVERY 50 HOURS OR WEEKLY	1. Drain water from compressor oil at sump. 2. Check belt tension. 3. Drain water and sediment from fuel tank.
EVERY 500 HOURS OR 6 MONTHS	1. Change compressor oil and clean oil filter. 2. Check air filter piping, fittings and clamps. 3. Install new air filter element. (Shorter interval may be necessary under dusty conditions). 4. Check for excessive wear on drive belts. Replace if necessary.
EVERY 1000 HOURS OR 1 YEAR	1. Check safety circuit switches. 2. Clean battery terminals. 3. Check compressor shaft seal for leakage. 4. Install new air filter element. (Shorter interval may be necessary under dusty conditions) 5. Replace spin-on coalescer element.
PERIODICALLY OR AS REQUIRED	1. Inspect air filter element 2. Replace spin-on coalescer element if necessary. 3. Inspect and clean compressor oil system cooler, etc. 4. Check engine and compressor supports.

NOTE: See Maintenance Section for clarification on above.

COMPRESSOR INSPECTION, LUBRICATION, AND MAINTENANCE

NOTE

OBSERVE ALL GAUGE READINGS. NOTE ANY CHANGE FROM THE NORMAL READING AND DETERMINE THE CAUSE. HAVE NECESSARY REPAIRS MADE. "NORMAL" IS THE USUAL GAUGE READING WHEN OPERATING AT SIMILAR CONDITIONS ON A DAY-TO-DAY OPERATION.

FIRST COMPRESSOR OIL AND OIL FILTER CLEANING SHOULD BE DONE AT 50 HOURS. ALSO, MORE FREQUENT OIL CHANGES WILL BE REQUIRED UNDER EXTREME OPERATING CONDITIONS OF EXTREMELY HIGH OR LOW TEMPERATURES, AND HIGH HUMIDITY.

CHANGE OIL EVERY SIX MONTHS, EVEN IF THE NORMAL OIL CHANGE PERIOD, IN HOURS, HAS NOT YET ELAPSED.

ALWAYS WARM UP THOROUGHLY PRIOR TO CHANGING EITHER THE ENGINE OIL OR THE COMPRESSOR OIL.

DO NOT OPEN COMPRESSOR OIL DRAIN; OIL FILTER CAP, OR OIL FILTER UNTIL ALL PRESSURE HAS BEEN RELIEVED. CHECK BY MANUALLY OPENING THE ASME SUMP PRESSURE RELIEF VALVE.

DRAINING WATER FROM COMPRESSOR OIL

Prior to initial start-up; it is recommended to drain water from the compressor sump. Compressor must be shut off for at least 4-6 hours. First, verify there is no pressure in the system. Then, slowly crack the oil drain cap. When opening the oil drain port, any water will drain out before the oil if fully separated. Catch all fluids in a container and dispose of properly. When no water is present, retighten the compressor oil drain cap. Check the compressor oil level and add oil if necessary.

LUBRICATION

LUBRICANT RECOMMENDATIONS

WARNING

IT IS IMPORTANT THAT THE COMPRESSOR FLUID BE OF A RECOMMENDED TYPE AND THAT THIS OIL AS WELL AS THE AIR FILTER, OIL FILTER AND COALESCER ELEMENTS BE INSPECTED AND REPLACED AS STATED IN THIS MANUAL.

THE COMBINATION OF A SEPARATOR ELEMENT LOADED WITH DIRT AND OXIDIZED OIL PRODUCTS TOGETHER WITH INCREASED AIR VELOCITY AS A RESULT OF THIS CLOGGED CONDITION MAY PRODUCE A CRITICAL POINT WHILE THE MACHINE IS IN OPERATION WHERE IGNITION CAN TAKE PLACE AND COULD CAUSE A FIRE IN THE OIL SUMP.

FAILURE TO COMPLY WITH THIS WARNING MAY CAUSE DAMAGE TO PROPERTY AND SERIOUS BODILY HARM.

The following general characteristics categorize lubricants that have been found to be satisfactory for use in helical screw type air compressors. Due to the impossibility of establishing limits on all physical and chemical properties of lubricants which can affect their performance in the compressor over a broad range of environmental influences, the responsibility for recommending and consistently furnishing a suitable heavy-duty lubricant must rest with the individual supplier. The lubricant supplier's recommendation must, therefore, be based upon not only the following general characteristics, but also upon his own knowledge of the suitability of the recommended lubricant in helical screw type air compressors operating in the particular environment involved.

CAUTION

MIXING DIFFERENT TYPES OF BRANDS OF LUBRICANTS IS NOT RECOMMENDED DUE TO THE POSSIBILITY OF A DILUTION OF THE ADDITIVES OR A REACTION BETWEEN ADDITIVES OF DIFFERENT TYPES.

LUBRICATION

APPLICATION GUIDE

Not all lubricating oils are suitable for rotary screw compressor use. The most satisfactory oils are the non-detergent types that contain high levels of corrosion, oxidation, and foam inhibitors.

Your Morse SCI8 compressor is factory filled with Dextron III ATF. Other non-detergent motor oils, SAE 10W, class SE or CD, and HD32 HYD OIL that meet the requirements below can be used. However, Morse recommends you use Dextron III ATF.

The viscosity of the oil chosen depends largely on the ambient operating temperature range. The oil must provide sufficient lubrication for bearings and rotors at operating temperature, and it must have a pour point low enough to provide fluidity at low starting temperatures. In general, the viscosity range represented by these SAE grades is satisfactory for the temperature range shown:

-20 degrees Fahrenheit to 120 degrees Fahrenheit HD 32 HYD OIL
(-25 degrees Fahrenheit Pour Point)
-10 degrees Fahrenheit to 75 degrees Fahrenheit SAE 10 W
(-20 degrees Fahrenheit Pour Point)
-40 degrees Fahrenheit to 120 degrees Fahrenheit Auto Trans. Fluid
(-50 degrees Fahrenheit Pour Point)

PRIME LUBRICANT CHARACTERISTICS

1. Flash point 400 degrees F minimum (ASTM D-92 — COC).
2. Pour point must be at least 20 degrees F lower than the lowest expected ambient temperature.
3. Contain rust and oxidation inhibitors.
4. Contain foam suppressors.

SYNTHETIC DIESTER AND SYNTHESIZED HYDROCARBON LUBRICANTS OIL

All elastomeric components and all metal used in the compressor are fully compatible with synthetic diester and synthesized hydrocarbon lubricants. The viscosity grade chosen for synthetic diester base or SHC lubricants should be based upon the suggested viscosity ranges listed under prime lubricant characteristics and the lubricant supplier.

LUBRICATION

NOTE

UNKNOWN INFLUENCES OF ENVIRONMENTAL FACTORS SUCH AS THE INTAKE OF REACTIVE GASES OR VAPORS IN THE AIR MAY LEAD TO CHEMICAL CHANGES IN ANY OIL. CAUSING PREMATURE FAILURE OF THE LUBRICANT AND THE USEFUL LIFE OF ALL "EXTENDED LIFE" LUBRICANTS MAY BE SHORTER THAN QUOTED BY THE LUBRICANT SUPPLIER. BECAUSE THE NORMAL "DRAIN AND REPLACE" PERIOD MAY BE EXCEEDED USING SYNTHETIC LUBRICANTS, DIFFERING FROM THOSE SPECIFIED IN THIS MANUAL, MORSE ENCOURAGES THE USER TO CLOSELY MONITOR THE LUBRICANT CONDITION AND TO PARTICIPATE IN AN OIL ANALYSIS PROGRAM WITH THE SUPPLIER.

NOTE

NO LUBRICANT, HOWEVER GOOD AND/OR EXPENSIVE, CAN REPLACE PROPER MAINTENANCE AND ATTENTION. SELECT AND USE IT WISELY.

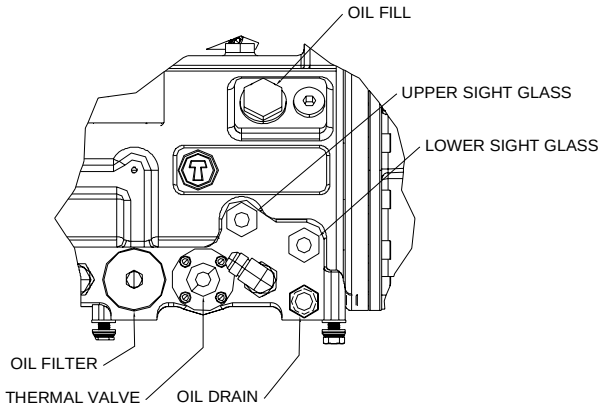
ENGINE LUBRICATION

Refer to Engine Operator's manual for recommended engine lubricating oil.

MAINTENANCE

COMPRESSOR OIL SUMP FILL, LEVEL, AND DRAIN

Before adding or changing compressor oil make sure that the sump is completely relieved of pressure. Oil is added at the fill cap on the side of the compressor. A drain plug is provided at the bottom of the sump. The proper oil level, when unit is shutdown and has had time to settle is at the midpoint of the upper oil sightglass. The package must be level when checking the oil. DO NOT OVERFILL. The oil sump capacity is given in "Compressor Specifications".



DANGER

WHILE COMPRESSOR IS RUNNING DO NOT ATTEMPT TO DRAIN CONDENSATE, REMOVE THE OIL LEVEL FILL PLUG OR BREAK ANY CONNECTION IN THE AIR OR OIL SYSTEM WITHOUT SHUTTING OFF COMPRESSOR AND RELIEVING PRESSURE FROM THE SUMP. FAILURE TO COMPLY WITH THIS WARNING MAY CAUSE DAMAGE TO PROPERTY AND SERIOUS BODILY HARM.

AIR INTAKE FILTER

The air intake filter is a heavy-duty single-stage high efficiency filter designed to protect the compressor from dust and foreign objects. See compressor mounting system in illustration section.

Frequency of maintenance of the filter depends on dust conditions at the operating site. The filter element must be serviced when clogged (maximum pressure drop for proper operation is 15" H_2O).

MAINTENANCE

AIR/OIL COALESCER

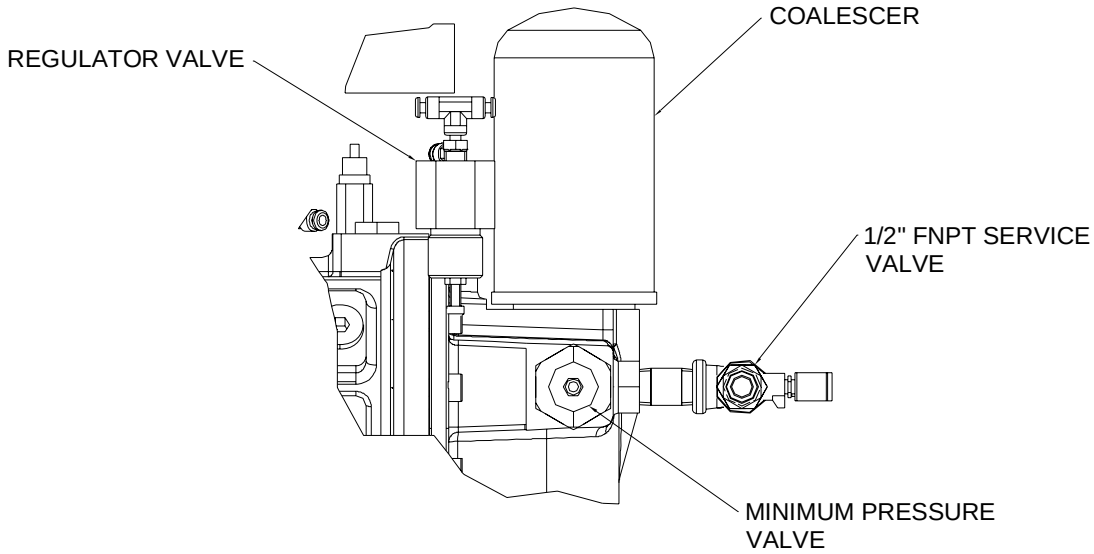
The air/oil coalescer employs an element permanently housed within a spin-on canister. This is a single piece unit that requires replacement when it fails to remove the oil from the discharge air.

To replace element, P/N 302600, proceed as follows:

1. Shutdown compressor and wait for complete blow down (zero pressure).
2. Turn element counterclockwise for removal (as viewed from top).
3. Install new rubber seal in head and supply a film of fluid directly on the seal.
4. Rotate element clockwise by hand until element contact seal (as viewed from top).
5. Rotate element at edge of can one more turn clockwise with band wrench.
6. Run system and check for leaks.

WARNING

DO NOT SUBSTITUTE ELEMENT. USE ONLY A GENUINE MORSE INDUSTRIAL REPLACEMENT ELEMENT. THIS ELEMENT IS RATED AT 200 PSI WORKING PRESSURE. USE OF ANY OTHER ELEMENT MAY BE HAZARDOUS AND COULD IMPAIR THE PERFORMANCE AND RELIABILITY OF THE COMPRESSOR, POSSIBLY VOIDING THE WARRANTY.



OIL FILTER

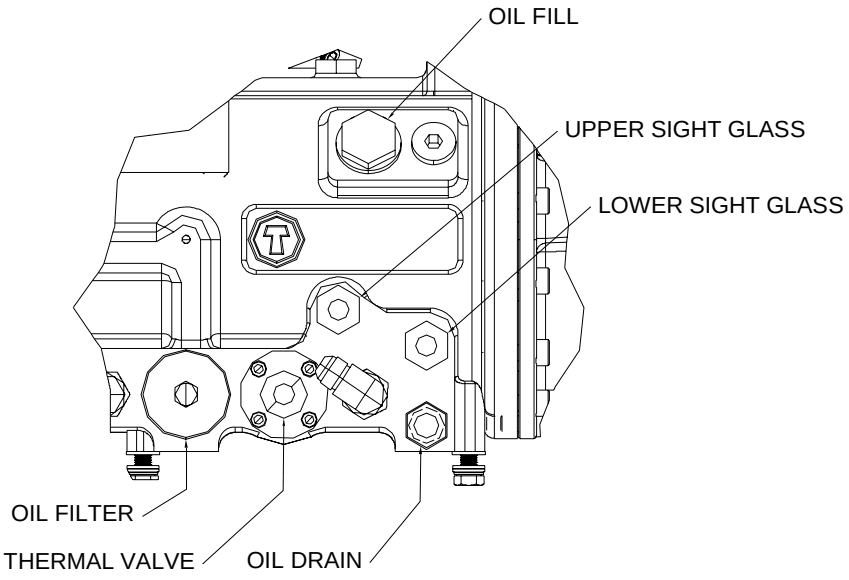
The compressor oil filter is a cartridge. It is designed with a built in by-pass so that if there is a large restriction, due to cold oil or clogged element, the compressor will still be lubricated.

To replace filter (P/N:302601) proceed as follows:

1. Make sure system pressure is relieved.
2. Unscrew with 14mm allen wrench.
3. Remove oil filter from housing.
4. Remove gasket and clean or replace the screen.
5. Reinsert filter and gasket into housing and tighten with 14mm allen wrench.
6. Add oil, re-tighten filler cap.
7. Check for leaks in operation.

WARNING

DO NOT SUBSTITUTE ELEMENT. USE ONLY A GENUINE MORSE INDUSTRIAL REPLACEMENT ELEMENT. THIS ELEMENT IS RATED AT 200 PSI WORKING PRESSURE. USE OF ANY OTHER ELEMENT MAY BE HAZARDOUS AND COULD IMPAIR THE PERFORMANCE AND RELIABILITY OF THE COPRESSOR, POSSIBLY VOIDING THE WARRANTY.



TROUBLESHOOTING

UNPLANNED SHUTDOWN

When the operation of the machine has been interrupted by an unexplained shutdown, check the following:

1. Check to determine if compressor oil is at proper level.
2. Check oil cooler for dirt, slush, ice on the fins, or any other obstructions to cooling airflow.
3. Make a thorough external check for any cause of shutdown such as broken hose, broken oil lines, loose or broken wire, etc.
4. Check the engine oil level with the engine stopped and in a level position. If the oil level is low, remove the oil filler cap, and fill to the upper limit mark on the dipstick with the recommended oil.

IMPROPER DISCHARGE PRESSURE

1. If discharge pressure is too low, check the following:
    a. Too much air demand.
    b. Service valves open blowing to atmosphere.
    c. Leaks in service line.
    d. Restricted compressor inlet air filter.
    e. Faulty control system operation (regulator, inlet valve etc.)
    f. Low engine speed.

2. If discharge pressure is too high or safety valve blows, check the following:
    a. Oil separator plugged up.
    b. Faulty safety valve.
    c. Faulty regulator or set to high.
    d. Inlet valve leaking, or partially open. Loss of pressure signal to inlet valve from regulator causing inlet valve to stay open.

TROUBLESHOOTING

BLOWDOWN VALVE

If after the compressor is shutdown, pressure does not automatically blow-down, check for:

1. Automatic blowdown valve may be inoperative.
2. Blockage in air line from compressor to blow down valve.
3. Orifice at blowdown clogged.

ENGINE OVERHEATING

1. Low oil level, refill.
2. Air blockage into engine fan.
3. Air blockage from fan exhaust side of engine.
4. Dirty oil in engine.
5. Low engine coolant level.

COMPRESSOR

Abnormal compressor oil consumption or oil in service line, check for the following:

1. Over filling of oil sump.
2. Leaking oil lines or oil cooler.
3. Defective separator element.
4. Compressor shaft seal leakage.
5. Discharge pressure below 55 PSI.

SEPARATOR PLUGGING

If the separator element has to be replaced frequently because it is plugging up, it is an indication that foreign material may be entering the compressor inlet or the compressor oil is breaking down or excessive moisture is not being drawn from the unit.

Compressor oil can break down prematurely for a number of reasons.

1. Extreme operating temperature
2. Negligence in draining condensate from oil sump
3. Using the improper type of oil
4. Dirty oil.

The complete inlet system should be checked for leaks.

TROUBLESHOOTING

HIGH COMPRESSOR DISCHARGE TEMPERATURE

1. Check compressor oil level. Add oil if required (see section for oil specifications).
2. Check engine fan and fan belt.
3. Clean outside of oil cooler.
4. Clean oil system (cooler) internally.
5. Plugged compressor oil filter. Change element.
6. Plugged oil return line, clean orifice and check valve.

INSUFFICIENT AIR DELIVERY

1. Plugged compressor air filter, clean or replace.
2. Plugged air/oil separator. Replace separator element and also change compressor oil and oil filter at this time.
3. Defective pressure regulator, adjust or repair.
4. Engine speed too low, readjust engine speed.

COMPRESSOR RECOMMENDED SPARE PARTS

Below you will find a list of parts we recommend you keep on hand for your compressor option. The parts can be orderded under kit P/N: 61095

QUANITY	DESCRIPTION	PART NUMBER
1	AIR FILTER ELEMENT	302091
1	OIL FILTER ELEMENT	302601
1	COALESCER, SPIN-ON	302600
1	SHAFT SEAL REPAIR KIT	302193
2	DRIVE BELTS	300742-670

WARRANTY

SECTION

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WARRANTY

FOR DIESEL ENGINE WARRANTY REFER TO JOHN DEERE MANUAL

Morse Industrial Equipment warrants that this generator unit conforms to applicable drawings and specifications approved in writing by Morse. The unit assembly will be free from defects in material and workmanship for a period of one (1) year from the date of initial operation or thirty (30) months from the date of shipment, whichever period first expires. All other components and parts of Morse manufacture, will be free from defects in material and workmanship for a period of one (1) year from the date of initial operation or eighteen (18) months from the date of shipment, whichever period first expires. If within such period Morse receives from the Buyer written notice ofalleged defect in or nonconformance of the unit, all other components and parts of Morse manufacture and if in the judgment of Morse these items do not conform or are found to be defective in material of workmanship, Morse will at its option either, (a) furnish a Service Representative to correct defective workmanship, or (b) upon return of the item F.O.B. Morse original shipping point, repair or replace the item or issue credit for the replacement item ordered by Buyer, (Defective material must be returned within thirty (30) days of return shipping instructions from Morse. Failure to do so within specified time will result in forfeiture of claim), or (c) refund the full purchase price for the item without interest. Factory installed compressor units will also include warranty on installation for a period of one (1) year. This warranty does not cover damage caused by accident, misuse or negligence. If the generator or compressor unit is disassembled the warranty is void. Morse's sole responsibility and Buyer's exclusive remedy hereunder is limited to such repair, replacement, or repayment of the purchase price. Parts not of Morse manufacture are warranted only to the extent that they are warranted by the original manufacture. Morse shall have no responsibility for any cost or expense incurred by Buyer from inability of Morse to repair under said warranty when such inability is beyond the control of Morse or caused solely by Buyer.

There are no other warranties, express, statutory or implied, including those of merchantability and of fitness of purpose; nor any affirmation of fact or representation which extends beyond the description of the face hereof.

This warranty shall be void and Morse shall have no responsibility to repair, replace, or repay the purchase price of defective or damaged parts or components resulting directly or indirectly from the use of repair or replacement parts not of Morse manufacture or approved by Morse or from Buyer's failure to store, install, maintain, and operate the equipment according to the recommendations contained in the Operating and Parts Manual and good engineering practice. The total responsibility of Morse for claims, losses, liabilities or damages, whether in contract or tort, arising out of or related to its products shall not exceed the purchase price. In no event shall Morse be liable for any special, indirect, incidental or consequential damages of any charter, including, but not limited to, loss of use of productive facilities or equipment, loss of profits, property damage, expenses incurred in reliance on the performance of Morse, or lost production, whether suffered by Buyer or any third party.

Morse Industrial Equipment

6990 Cordingley Crescent

Mississauga ONTARIO L5N 4Z4

Phone: 647-393-1212

Fax: 905-824-9406

www.morseindustrial.ca

SUMMARY OF MAIN WARRANTY PROVISIONS

As claims, policies and procedure are governed by the terms of the Morse Industrial Equipment warranty, it is necessary to outline some of the more important provisions.

The Morse warranty applies only to new and unused products which, after shipment from the factory, have not been altered, changed, repaired or mistreated in any manner whatsoever. Normal maintenance items such as lubricants and filters are not warrantable items.

Parts not of Morse manufacture are warranted only to the extent they are warranted by the original manufacturer.

Damage resulting from abuse, neglect, misapplication or overloading of a machine, accessory or part is not covered under warranty.

Deterioration or wear occasioned by chemical and/or abrasive action or excessive heat shall not constitute defects.

Parts replacement and/or correction of defective workmanship will normally be handled by Morse or their authorized distributor.

Failure to file a detailed warranty claim/service report for each occurrence of material defect of defective workmanship will cause warranty claim to be rejected.

Defective material must be returned within 30 days of receipt of shipping instructions. Failure to do so within specified time will result in forfeiture of claim.

The distributor is responsible for the initial investigation and write up of the warranty claim.

Distributor shall be allowed no more than 30 days from date of repair to file a warranty claim/service report.

Warranty for failure of Morse relacement parts covers the net cost of the part only, not labor and mileage.

The Morse warranty does not cover diagnostic calls and travel. That is time spent traveling to the machine to analyze the problem and returning with the proper tools and parts to correct the problem.

Morse will deduct from allowable credits for excess freight caused by sender failing to follow return shipping instructions.

Distributors or end-users automatically deducting the value of a warranty claim from outstanding balances due and payable to Morse prior to receiving written notification of Morse approval of the warranty claim may be subject to forfeiture of the entire claim.

WARRANTY INTRODUCTION

The warranty policy and procedures outlined here within are detailed to provide the claimant with the information necessary when filing a warranty claim, and enabling Morse the ability to best serve it's customers.

WARRANTY CLAIMS - GENERAL

An approved claim depends on the following provision:

1. A warranty claim/service report # must be issued by Morse. (See filing procedures).
2. Failed part must be returned within 30 days, freight prepaid, with receipt of warranty claim/ service report.
3. Part is definitely defective.
4. Workmanship is definitely defective.
5. Machine is within warranty period.
6. Machine has been operating within design conditions.

Claims made by customers must be verified by distributor prior to contacting Morse.

WARRANTY CLAIMS - FILING PROCEDURES

1. Initiate through purchase order for warranty part or request for credit.
2. Warranty Claims/Service Report will accompany replacement part. When returning failed part to the factory for warranty credit, fill out all information requested on Warranty Claims/Service Report when it is returned to you with replacement part.
3. Morse will confirm disposition of failed part within 30 days, and or request additional information.
4. Claim acceptance or denial will result in release of a credit or confirmation letter of denial.
5. Morse will consider each claim on it's own merit and reserves the right to accept or reject claim request. In case of air-ends, these will be returned to the manufacturer for their analysis/ input.
6. Send Warranty Claim/Service Report request to:

Morse Industrial Equipment
6990 Cordingley Crescent
Mississauga ONTARIO L5N 4Z4

Phone: 647-393-1212
Fax: 905-824-9406
www.morseindustrial.ca

WARRANTY CLAIMS - PREPARATION OF PART RETURN

Parts returned to the factory must be properly packaged to prevent damage during shipment. Damage to a part as a result of improper handling or packing could be cause for claims disallowance of credit. When addressing the package for shipment, the following information must be on the outside of or tagged clearly to package.

1. Return Goods Authorization number.
2. Distributor or end-users return address.
3. Correct factory address.
4. Warranty Claim/Service Report number.
5. Number of packages pertaining to each claim.

NOTE: Our warranty requires that all defective parts be returned to Morse freight prepaid. Items sent without RGA number will not be accepted.

DAMAGE IN TRANSIT

Do not return damaged merchandise to Morse Industrial, Inc. please follow claim procedure.

1. Loss in transit:

All equipment is tested prior to shipping from our facility. Rregardless of the care taken at the factory, there is a possibility that damage may occur in shipment. For this reason, it is recommended that the unit be carefully inspected for evidence of possible damage or malfunction during the first few hours of operation. Responsibility for the safe delivery of the equipment was assumed by the carrier at the time of shipment. Therefore, claims for loss or damage to the equipment should be made upon the carrier.

2. Concealed loss or damage:

Concealed loss or damage means loss or damage which does not become apparent until the equipment is unpacked or ran by the end-user. The equipment may be damaged due to rough handling while in route to its destination, even though the unit shows no external damage. When the damage is discovered upon unpacking, make a written request for inspection by the carrier agent within fifteen days of delivery date. Then file a claim with the carrier since such damage is the carrier's responsibility.

MORSE INDUSTRIAL EQUIPMENT WARRANTY REGISTRATION

Fax Transmission

To: Warranty Department Fax: (905)824-9406

From: _____ Date: _____

Re: Product Registration Pages: _____

End User Information: (Required for Warranty Activation)

Name: _____ Phone: _____

Address: _____

City: _____ State: _____ Zip: _____

Contact: _____ E-mail Address: _____

Distributor Information: (Required for Warranty Activation)

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Contact: _____ E-mail Address: _____

Product Information: (Required for Warranty Activation)

Model No.: _____ Serial No.: _____

Date Product Delivered: _____ Compressor Serial No.:*

Date Product in Service: _____ _____

* if units equipped with compressor option

ONE REGISTRATION FORM PER UNIT

Registration form must be mailed or faxed within 15 days of customer installation.

Mail to:
Morse Industrial Equipment
Warranty Department
6990 Cordingley Cresent
Mississauga, Ontario L 5N 4Z4

Phone: 657-393-1212
Fax: 905-824-9406

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ILLUSTRATION

DRAWINGS

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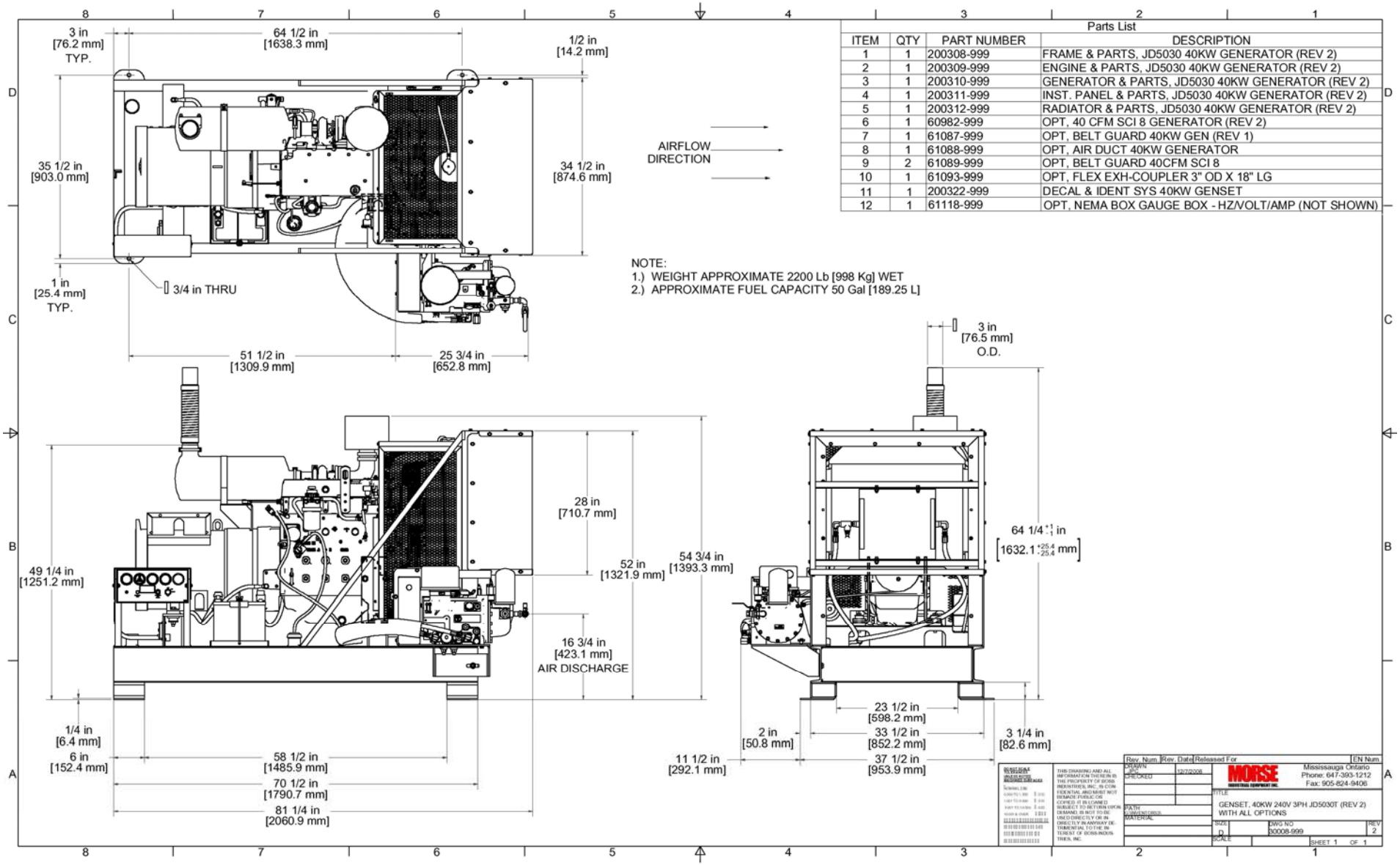
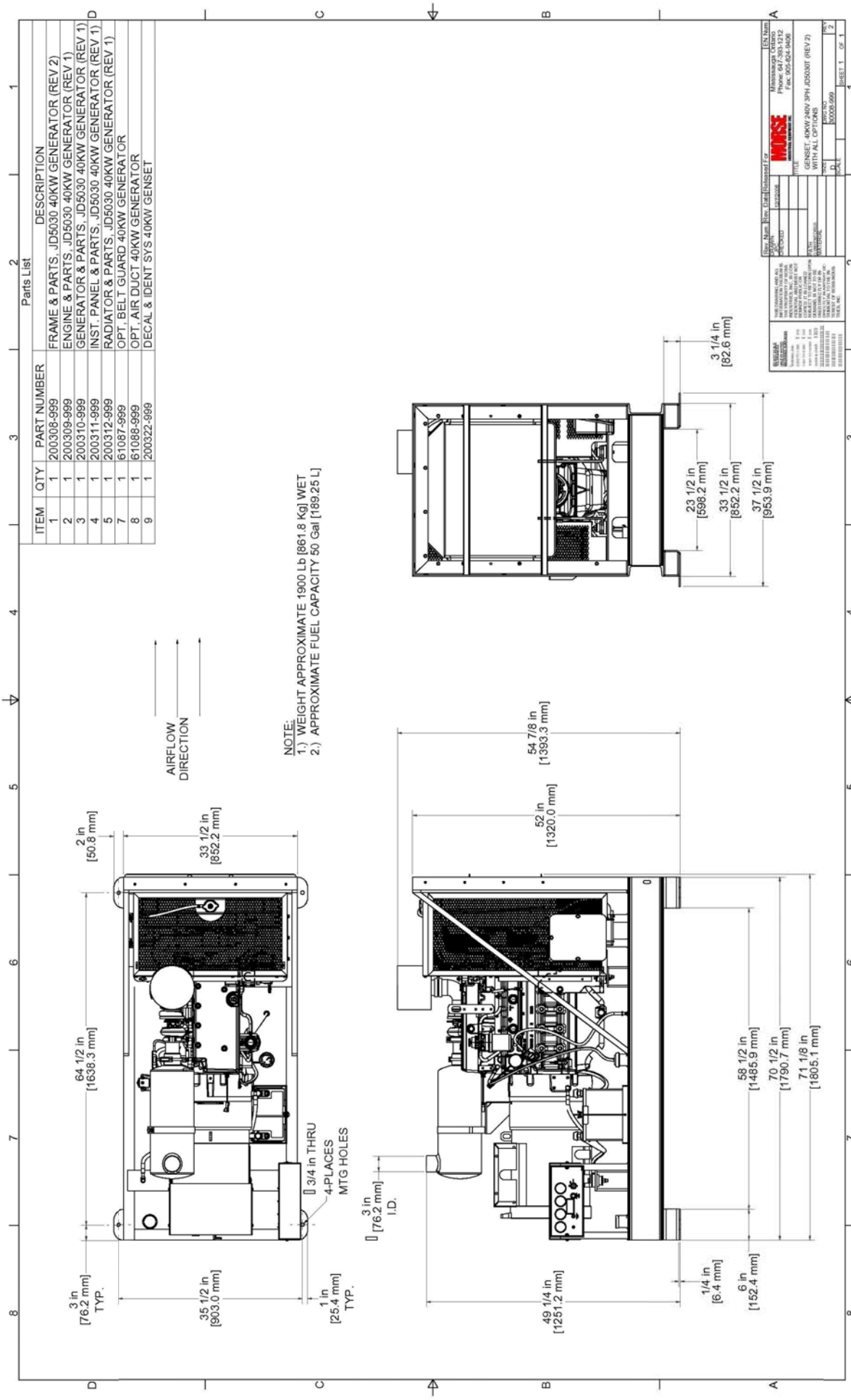


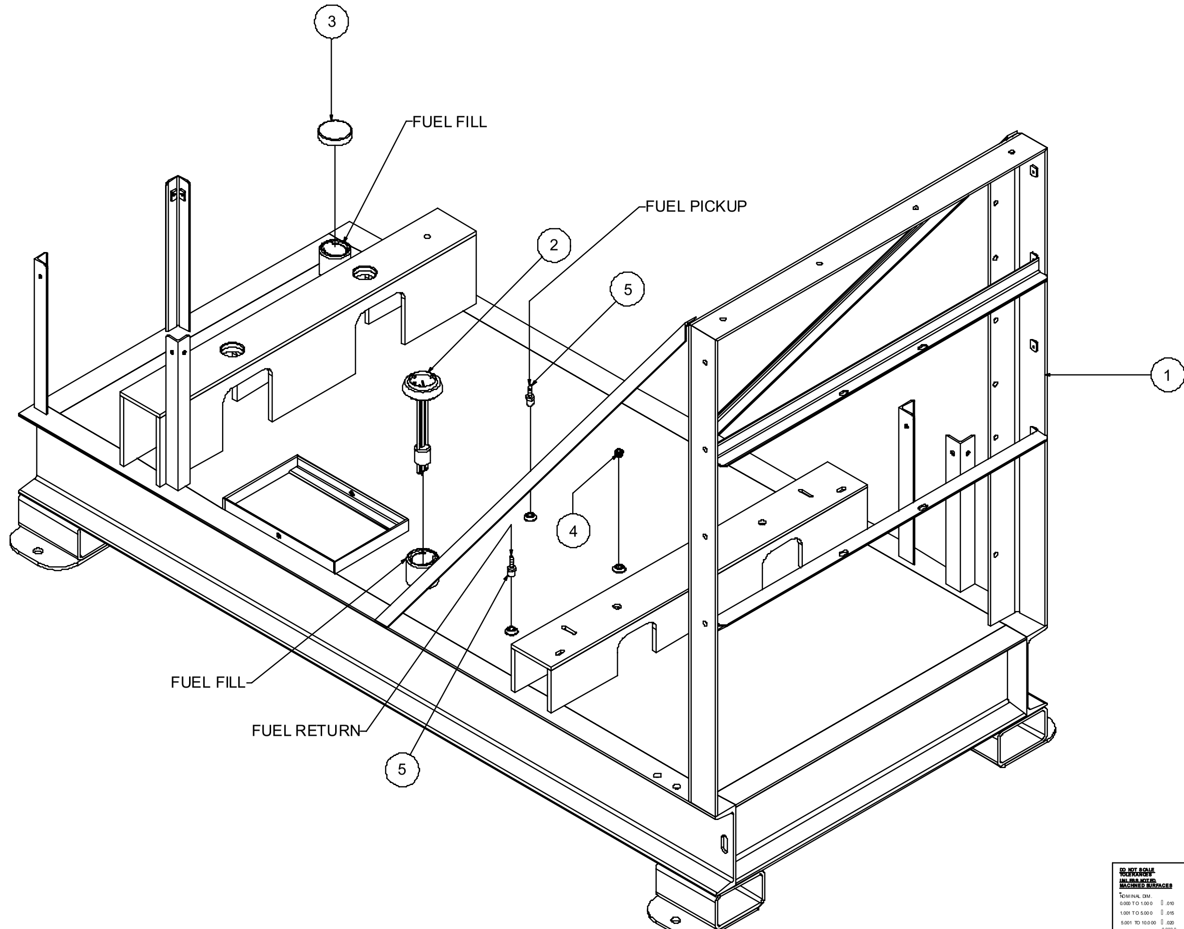
Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	200308-999	FRAME & PARTS, JD5030 40KW GENERATOR (REV 2)
2	1	200309-999	ENGINE & PARTS, JD5030 40KW GENERATOR (REV 2)
3	1	200310-999	GENERATOR & PARTS, JD5030 40KW GENERATOR (REV 2)
4	1	200311-999	INST. PANEL & PARTS, JD5030 40KW GENERATOR (REV 2)
5	1	200312-999	RADIATOR & PARTS, JD5030 40KW GENERATOR (REV 2)
6	1	60982-999	OPT, 40 CFM SCI 8 GENERATOR (REV 2)
7	1	61087-999	OPT, BELT GUARD 40KW GEN (REV 1)
8	1	61088-999	OPT, AIR DUCT 40KW GENERATOR
9	2	61089-999	OPT, BELT GUARD 40CFM SCI 8
10	1	61093-999	OPT, FLEX EXH-COUPLER 3" OD X 18" LG
11	1	200322-999	DECAL & IDENT SYS 40KW GENSET
12	1	61118-999	OPT, NEMA BOX GAUGE BOX - HZ/VOLT/AMP (NOT SHOWN)

P/N: 305834


Parts List
ITEM QTY PART NUMBER DESCRIPTION
1 1 200308-999 FRAME & PARTS, JD5030 40KW GENERATOR (REV 2)
2 1 200309-999 ENGINE & PARTS, JD5030 40KW GENERATOR (REV 1)
3 1 200310-999 GENERATOR & PARTS, JD5030 40KW GENERATOR (REV 1)
4 1 200311-999 INST. PANEL & PARTS, JD5030 40KW GENERATOR (REV 1)
5 1 200312-999 RADIATOR & PARTS, JD5030 40KW GENERATOR (REV 1)
7 1 61087-999 OPT, BELT GUARD 40KW GENERATOR
8 1 61088-999 OPT, AIR DUCT 40KW GENERATOR
9 1 200322-999 DECAL & IDENT SYS 40KW GENSET
NOTE:
1.) WEIGHT APPROXIMATE 1900 Lb [861.8 Kg] WET
2.) APPROXIMATE FUEL CAPACITY 50 Gal [189.25 L]
AIRFLOW DIRECTION
2 in [50.8 mm]
33 1/2 in [852.2 mm]
64 1/2 in [1638.3 mm]
3/4 in THRU 4-PLACES MTG HOLES
3 in [76.2 mm] TYP.
35 1/2 in [903.0 mm]
1 in [25.4 mm] TYP.
54 7/8 in [1393.3 mm]
52 in [1320.0 mm]
3 in [76.2 mm] I.D.
58 1/2 in [1485.9 mm]
70 1/2 in [1790.7 mm]
71 1/8 in [1805.1 mm]
49 1/4 in [1251.2 mm]
1/4 in [6.4 mm]
6 in [152.4 mm]
3 1/4 in [82.6 mm]
23 1/2 in [598.2 mm]
33 1/2 in [852.2 mm]
37 1/2 in [953.9 mm]
GENSET, 40KW 240V 3PH JD5030T (REV 2)
WITH ALL OPTIONS

Parts List

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	305715	FRAME, JD5030 40KW GENERATOR (REV 7)
2	1	305862	CAP, FUEL GAUGE 3 DIA QUARTER TURN 7 1/2 KELCH GAURDIAN
3	1	306061	CAP, FUEL FILL QUARTER TURN STEEL VENTED WISCO PN 301
4	1	902915-010	PLUG, PIPE 1/4 RECESSED ZINC
5	2	974805-025	CONNECTOR, 5/16 BARB X 1/4 MNPT



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Rev. Num.	Rev. Date	Released For	EN Num.
DRAWN JPC	9/12/2006	MORSE INDUSTRIAL EQUIPMENT — Mississauga Ontario, Phone: 647-393-1212, Fax: 905-824-9406	
CHECKED		TITLE: FRAME & PARTS, JD5030 40KW GENERATOR (REV 2)	
PATH G:\INVENTOR\53100-200k		SIZE D	DWG NO 200308-999 — REV 0
MATERIAL		SCALE 1=2	SHEET 1 OF 1

Parts List

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	101-14310	TUBING EXHAUST 2 1/2 OD X 16GA X 3"
2	2	120-16832	WASHER, SNUBBING .531 ID (B)
3	2	120-28144	CLAMP, EXHAUST HALF
4	1	123-19735	SENDER, OIL PRESSURE
5	1	123-62178	CABLE, ASSY 15" NEG
6	1	126-28145	GASKET,EXHAUST-JD
7	1	140-90032	SOLENOID, GLOW PLUG 100DP 8-653
8	3	300033-250	CLAMP, AIR INLET HOSE 2 1/2
9	1	300071-250	ELBOW, RUBBER 2 1/2
10	1	300112	CLAMP, HOSE 3/4 ID
11	27"	300524-031	HOSE, 5/16" ID FUEL LINE - FUEL RETURN
12	38"	300524-031	HOSE, 5/16" ID FUEL LINE - FUEL PICKUP
13	18"	300574-012	SLEEVE, SILICONE FIRE 1 1/4 HOSE (NOT SHOWN)
14	1	301834	SWITCH, PRESS 18# N.O. 1/8MNPT
15	4	301861	CLAMP, HOSE 1/4"
16	1	302296	FAN, SUCKER 20inDIA JD4045 (REV 1)
17	2	302764	ISOLATOR, VIBRATION 1000 LB 185-210
18	1	304067	MUFFLER, 8 1/2" JD04
19	1	304071	BAND, 8 1/2 DIA. MUFFLER
20	1	304077	SENDER, WATER TEMP M14 X 1 1/2
21	1	304078	SWITCH, WATER TEMP M14 X 1 1/2
22	1	304081	PIPE, EXHAUST FLANGE JD04
23	1	304103	BUSHING, M18 X M14 O-RING
24	1	304104M	HARNESS, ENGINE/COMP JD4024-5030 (NOT SHOWN)
25	1	304106	FUSE, 50 AMP SLOW BLOW
26	1	304107	HOLDER, FUSE 50 AMP SLOW BLOW
27	1	304117	INSERT, RUBBER 2 1/2 X 2 1/4
28	1	304118	BRACKET, MUFFLER JD04 (REV 1)
29	1	304185	CABLE, BATT-RED 1/0 48" POST X 3/8-EYE
30	1	304204	BRACKET, OIL PRES SENDER JD04
31	26"	304783-025	HOSE, AEROQUIP FC350 1/4 - OIL PRESSURE JD5030
32	1	304784-025	FITTING, HOSE 90 DEG 1/4"
33	1	304785-025	FITTING, HOSE 1/4" AEROQUIP CRIMP JIC
34	1	305005	BRACKET, OIL PRESSURE 100 DU
35	1	305695M	ENGINE, JD5030TF270 80HP@1800 40KW GENSET
36	1	305715	FRAME, JD5030 40KW GENERATOR (REV 9)
37	1	305721	MOUNT, FRONT RIGHT JD5030 (REV 0)
38	1	305722	MOUNT, FRONT LEFT JD5030 (REV 0)
39	1	305885	GOVERNOR, 1800RPM JD5030 GENSET
40	1	305889	SPACER, FAN JD 3.000 LG
41	1	306018	FILTER, AIR 8 1/2" X 6 1/2" X 3" INLET

Parts List

ITEM	QTY	PART NUMBER	DESCRIPTION
42	2	306062	TERMINAL, RING 3/8 STUD #8AWG HEAT SHRINK
43	3	306118	COVER, BATTERY POSITIVE SMALL
44	4	924302-130	NUT, NYLOC GR5 #10-24
45	3	924304-145	NUT, NYLOC GR5 1/4-20
46	2	924305-166	NUT, NYLOC GR5 5/16-18
47	4	925305-283	NUT, WHIZ LOCK 5/16-18
48	2	925508-262	NUT, NYLOC GR8 1/2-13
49	4	928016-550	BOLT, HEX GR8.8 16MM X 55MM
50	3	929104-075	BOLT, HEX GR5 1/4-20 X 3/4
51	4	929208-100	BOLT, HEX GR10.9 8MM X 100MM
52	4	929212-250	BOLT, HEX 12MM X 25MM GR 10.9
53	2	929216-350	BOLT, HEX GR10.9 16MM X 35MM
54	4	929705-125	BOLT, WHIZLOCK GR5 5/16-18 X 1 1/4
55	2	929808-350	BOLT, HEX GR8 1/2-13 X 3 1/2
56	4	931602-075	SCREW, MACH RD HD #10-24 X 3/4
57	2	938208-112	WASHER, FLAT GR8 1/2
58	4	938602-049	WASHER, FLAT GR5 #10
59	6	938604-071	WASHER, FLAT GR5 1/4
60	4	938808-200	WASHER, LOC 8MM
61	4	938812-250	WASHER, LOC 12MM
62	6	938816-350	WASHER, LOC 16MM
63	2	938912-200	WASHER, FLAT 12MM
64	6	938916-225	WASHER, FLAT 16MM GR10.9
65	2	960104-012	CONNECTOR, 1/4 MJIC X 1/8 MNPT
66	1	980100-300	CLAMP, EXHAUST 3"

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NOMINAL D.M.
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1.001 TO 5.000 .015
5.001 TO 10.000 .020
10.001 & OVER

Rev. Num.	Rev. Date	Released For	EN Num.
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MATERIAL			

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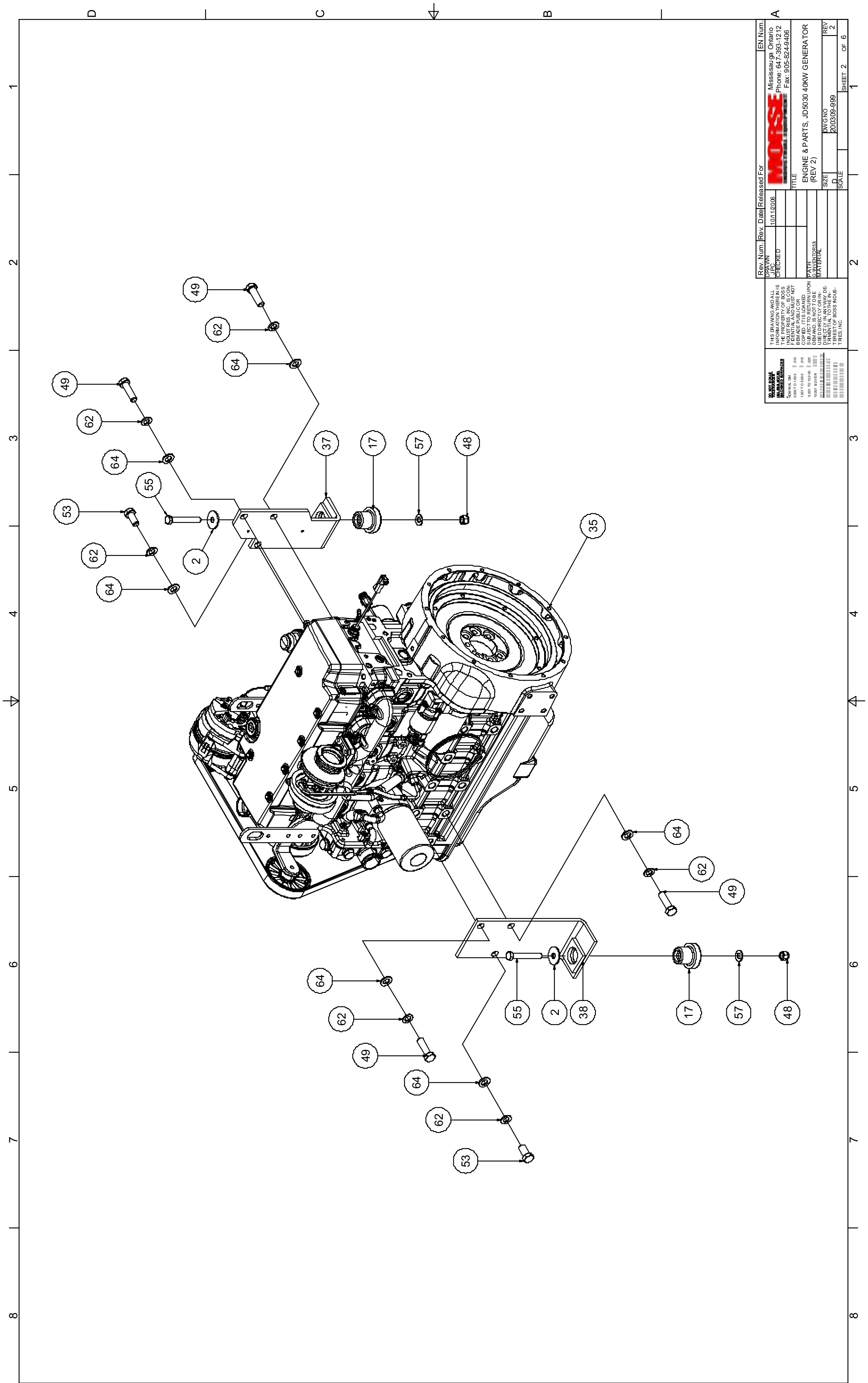
TITLE: ENGINE & PARTS, JD5030 40KW GENERATOR (REV 2)

SIZE	DWG NO	REV
C	200309-999	2

SCALE | SHEET 1 OF 6


49
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Rev. Num.
Rev. Date
Released For
EN Num.
DRAWN
JPC
10/11/2006
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Mississauga Ontario
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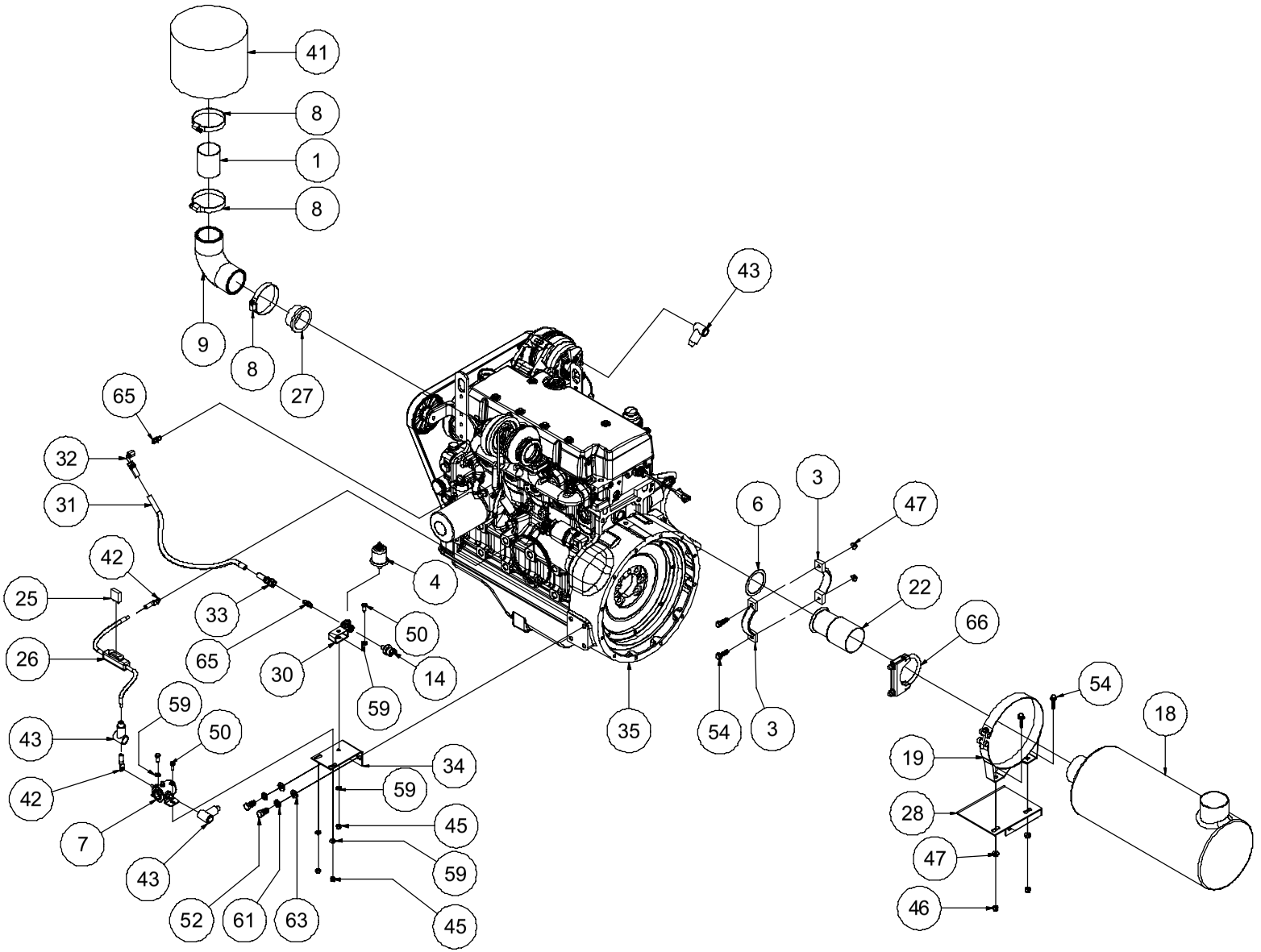
Fax: 905-824-9406
TITLE
ENGINE & PARTS, JD5030 40KW GENERATOR
(REV 2)
SIZE
D
DWG NO
200309-999
REV
2
SCALE
SHEET 2 OF 6
PATH
MATERIAL



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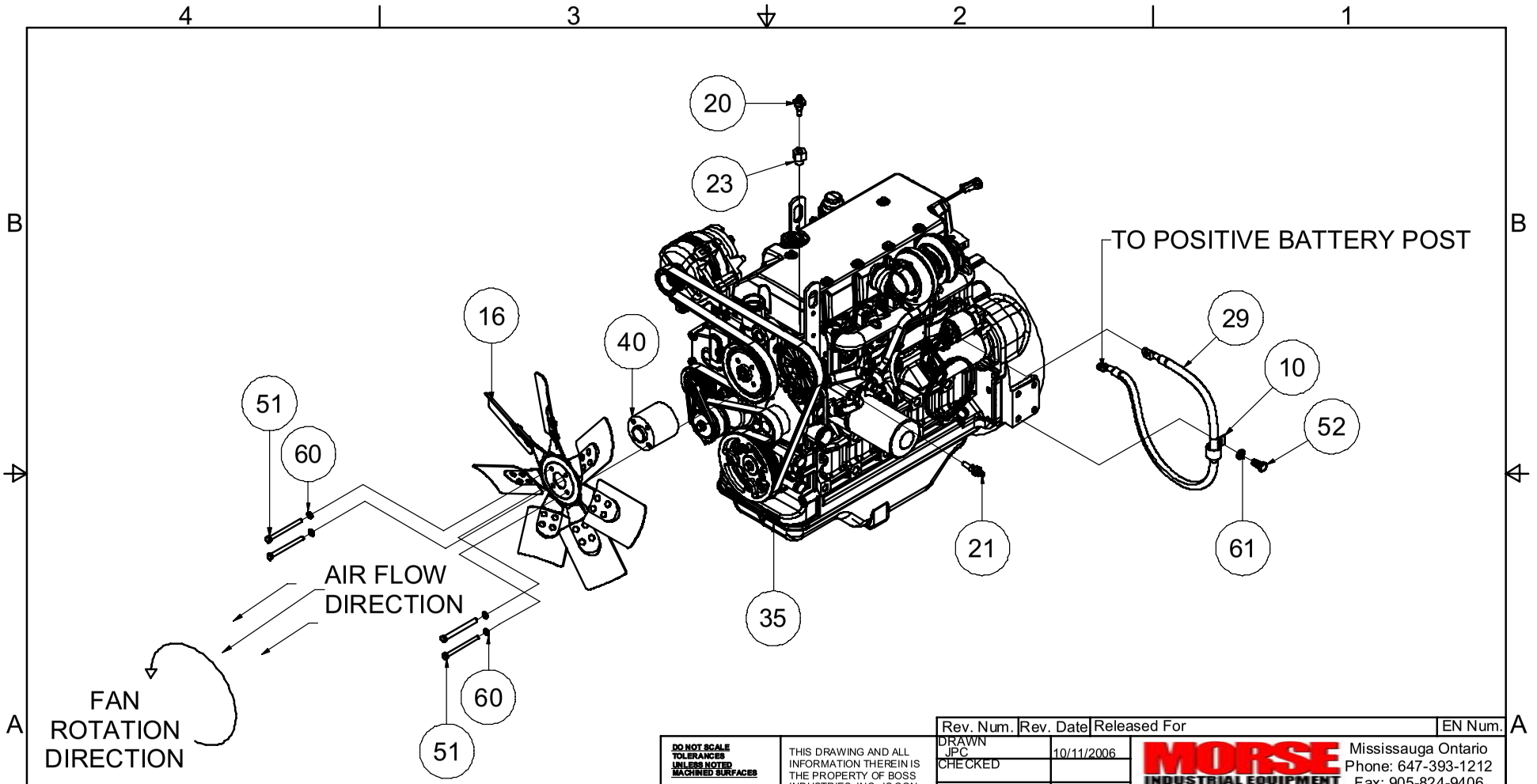

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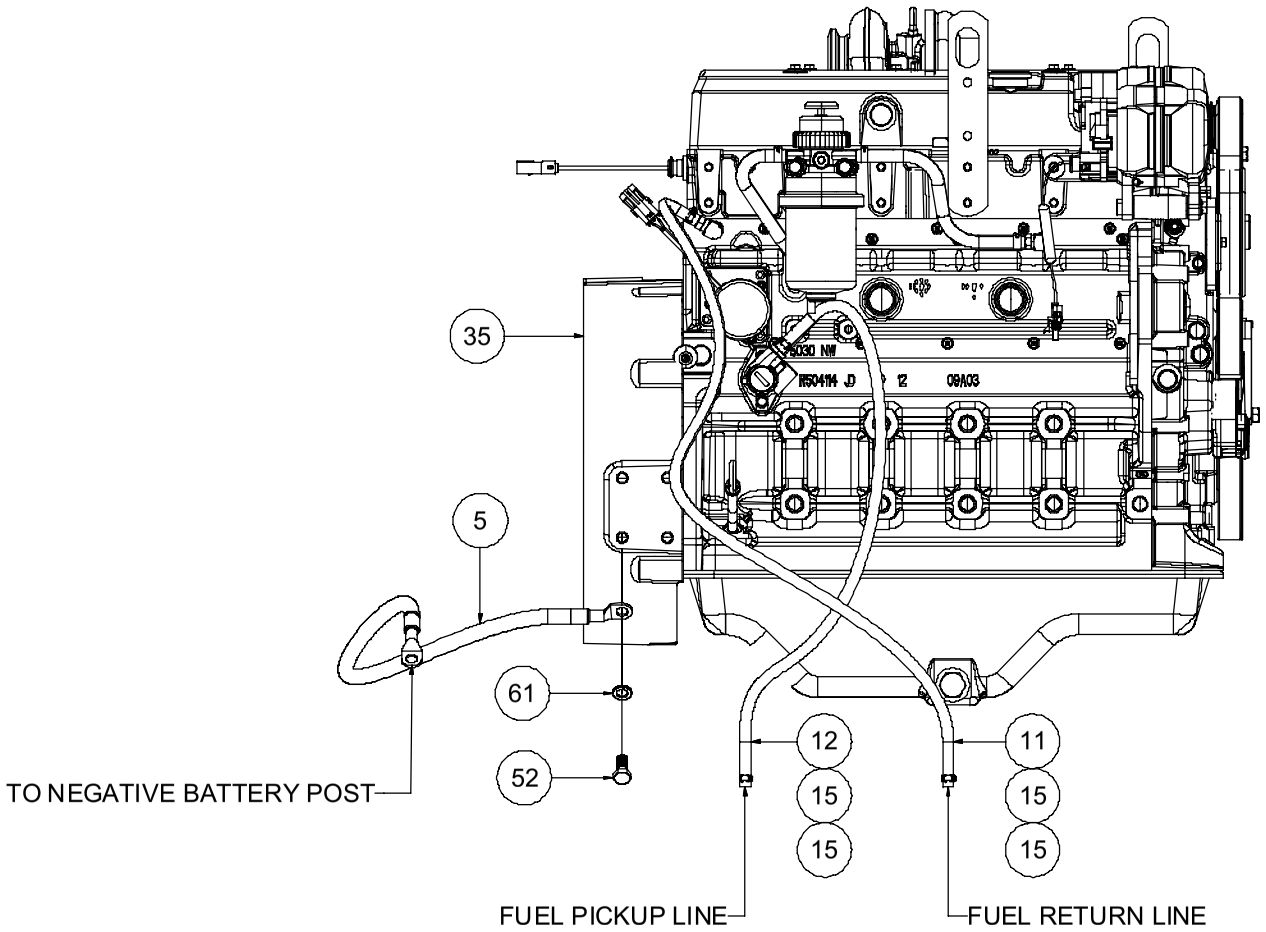
TITLE
ENGINE & PARTS, JD5030 40KW GENERATOR (REV 2)

SIZE B | DWG NO 200309-999 | REV 2
SCALE | SHEET 4 OF 6



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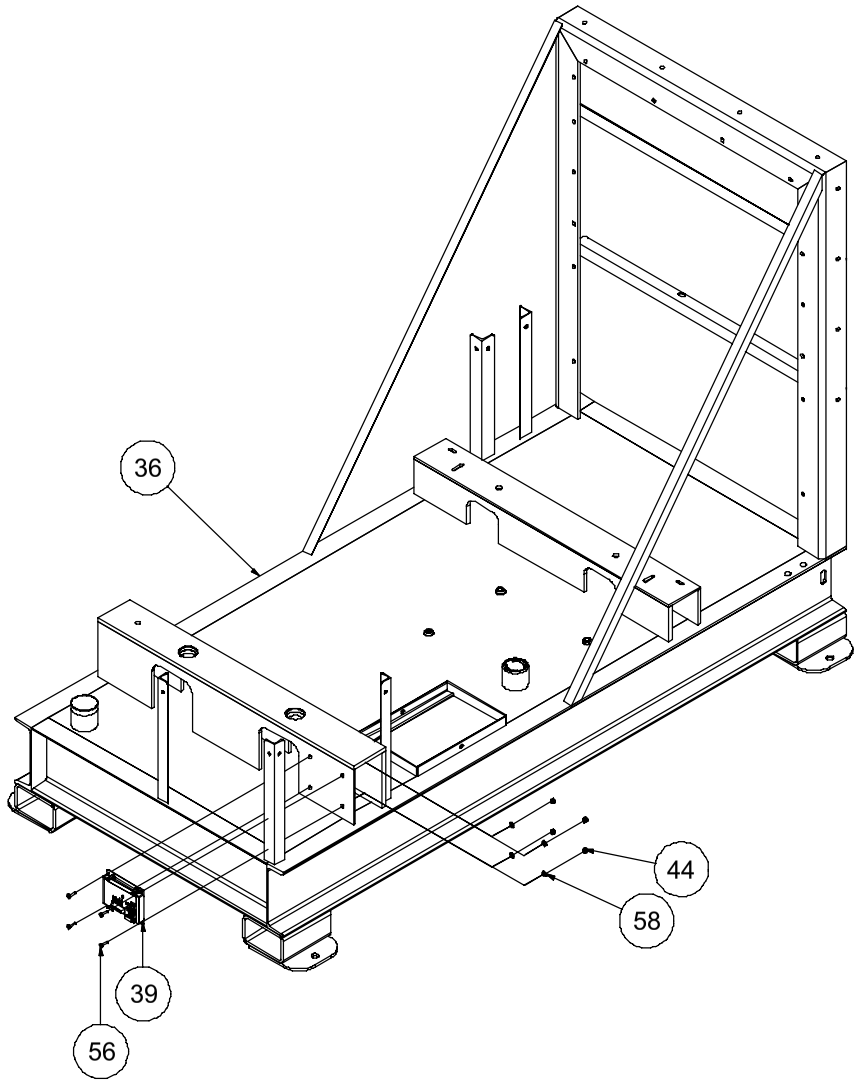
TITLE
ENGINE & PARTS, JD5030 40KW GENERATOR (REV 2)

SIZE	DWG NO	REV
C	200309-999	2

SCALE

SHEET 5 OF 6



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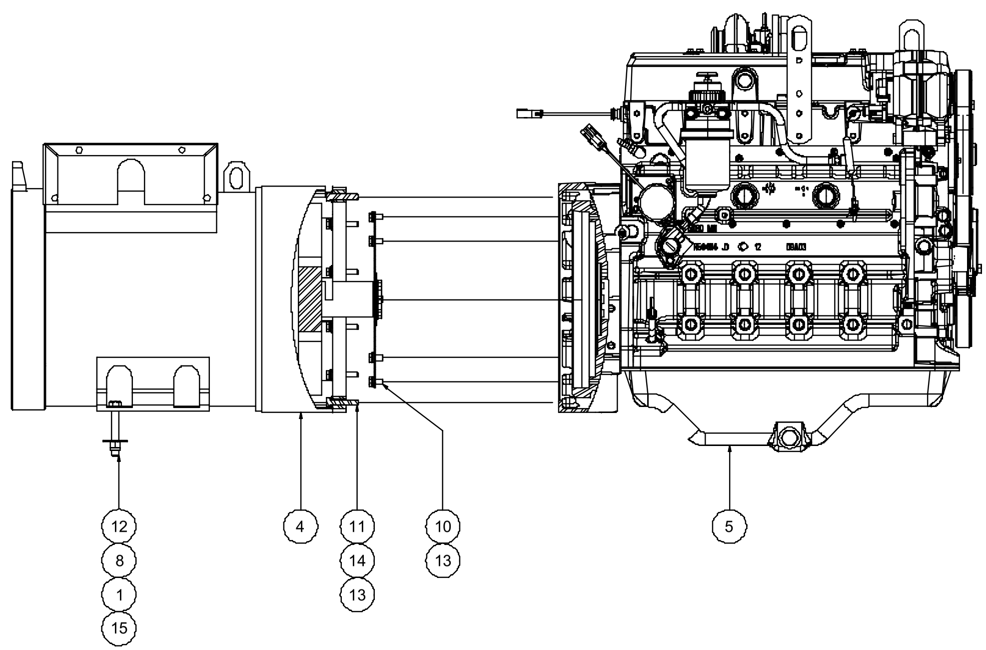
TITLE
ENGINE & PARTS, JD5030 40KW GENERATOR (REV 2)

SIZE C | DWG NO 200309-999 | REV 2
SCALE | SHEET 6 OF 6

Parts List

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	120-16832	WASHER, SNUBBING .531 ID (B)
2	1	123-62178	CABLE, ASSY 15" NEG
3	2	302764	ISOLATOR, VIBRATION 1000 LB 185-210
4	1	305675	GENERATOR, 40KW 240V 3PH 1800RPM (REV 1)
4.1	1	929104-075	BOLT, HEX GR5 1/4-20 X 3/4
5	1	305695M	ENGINE, JD5030TF270 80HP@1800 40KW GENSET
6	1	305715	FRAME, JD5030 40KW GENERATOR (REV 7)
7	1	925506-198	NUT, NYLOC GR8 3/8-16
8	2	925508-262	NUT, NYLOC GR8 1/2-13
9	1	929106-125	BOLT, HEX GR5 3/8-16 X 1 1/4
10	8	929806-075	BOLT, HEX GR8 3/8-16 X 3/4
11	12	929806-200	BOLT, HEX GR8 3/8-16 X 2
12	2	929808-350	BOLT, HEX GR8 1/2-13 X 3 1/2
13	20	937806-094	WASHER, LOC GR8 3/8
14	14	938206-071	WASHER, FLAT GR8 3/8
15	2	938208-112	WASHER, FLAT GR8 1/2
16	1	984004-071	WASHER, FLAT WIDE 1/4 SS



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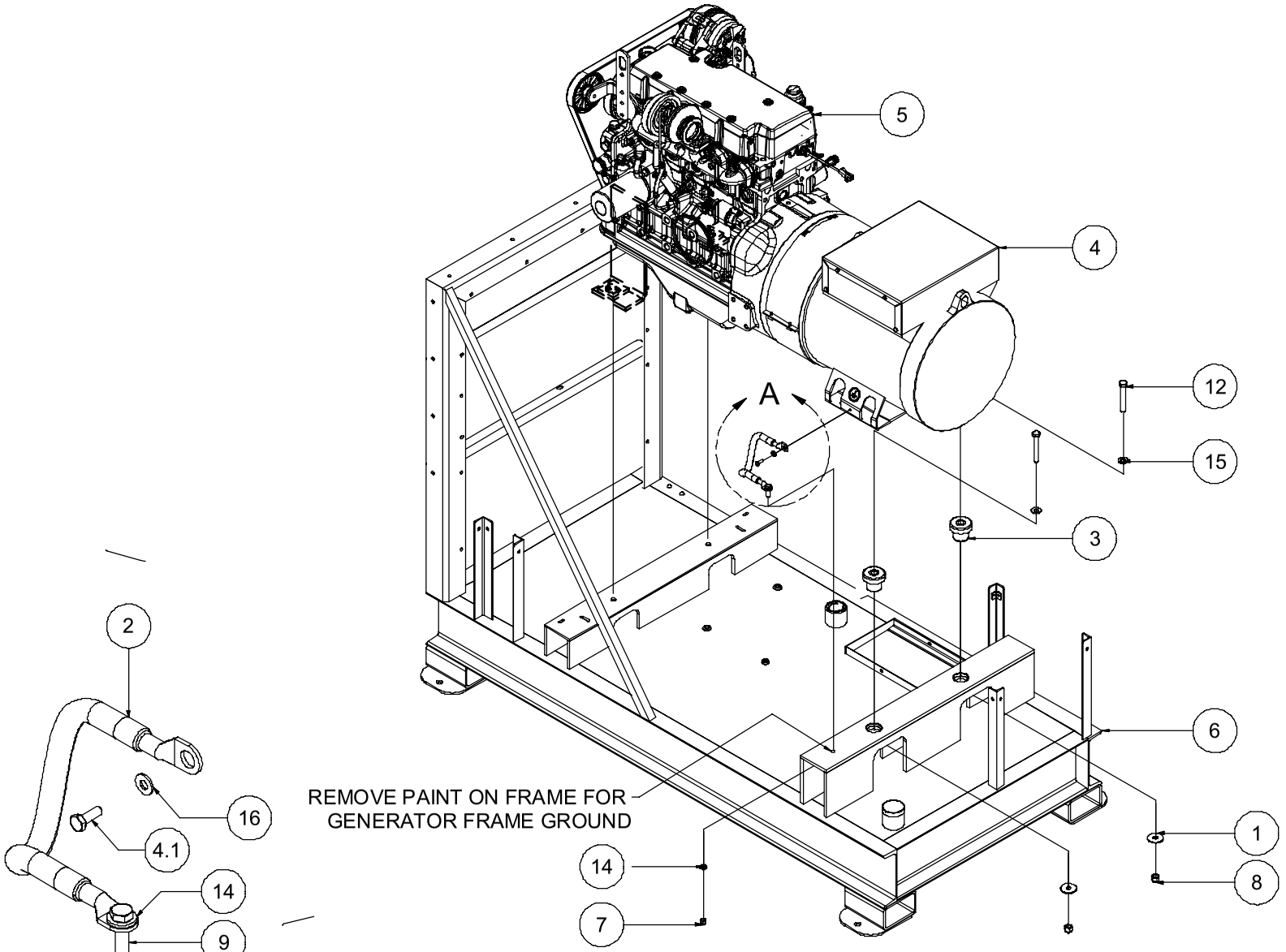
PATH G:\INVENTOR\53100-200K		TITLE GENERATOR & PARTS, JD5030 40KW GENERATOR (REV 2)	
MATERIAL		SIZE D	DWG NO 200310-999 REV 2
		SCALE AS NOTED	SHEET 1 OF 2



DETAIL A
SCALE 1 / 2

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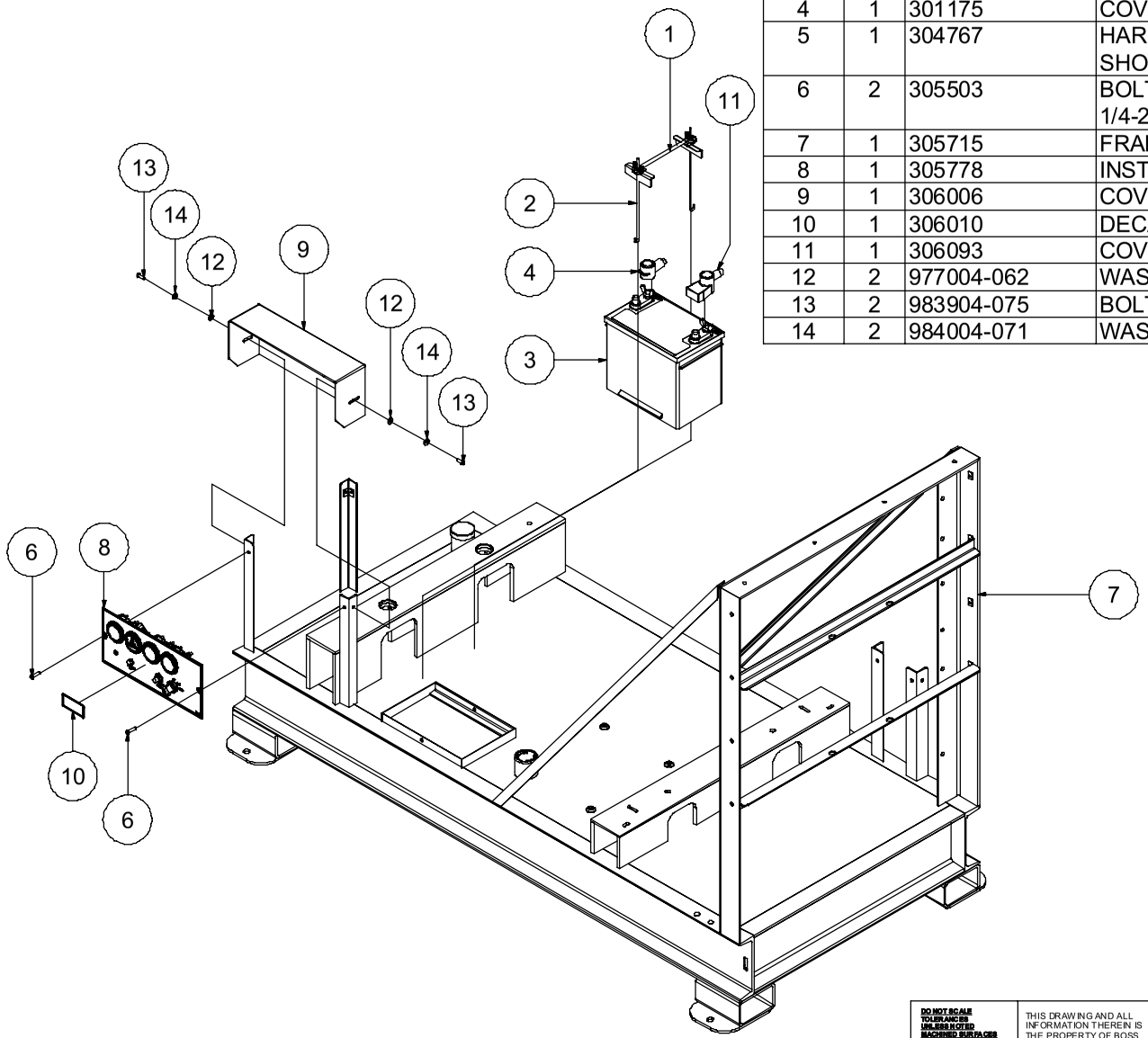
Mississauga Ontario
Phone: 647-393-1212
Fax: 905-824-9406

TITLE
GENERATOR & PARTS, JD5030 40KW GENERATOR (REV 2)

SIZE	DWG NO	REV
C	200310-999	2

SCALE

SHEET 2 OF 2



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	120-14966	BRACKET, BATTERY HOLD DOWN
2	2	120-26804	BOLT, BATTERY HOLD DOWN
3	1	123-66019	BATTERY, 12VOLT 650CCA
4	1	301175	COVER, BATTERY CABLE END NEG
5	1	304767	HARNESS, JD 4024/5030 INST-PANEL (NOT SHOWN)
6	2	305503	BOLT, FLAT BLACK BTNHD SS PHILLIPS HEAD 1/4-20 X 1"
7	1	305715	FRAME, JD5030 40KW GENERATOR (REV 7)
8	1	305778	INST PANEL, 40 & 60 KW GEN (REV 3)
9	1	306006	COVER, INST PANEL 40-60KW GEN
10	1	306010	DECAL, MORSE INDUSTRIES
11	1	306093	COVER, BATT 2 POST POS
12	2	977004-062	WASHER, NYLON 1/4 X .06 X .62
13	2	983904-075	BOLT, BTNHD SS STAR-DRIVE 1/4-20 X 3/4
14	2	984004-071	WASHER, FLAT WIDE 1/4 SS

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Rev. Num.	Rev. Date	Released For	EN Num.
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MATERIAL			

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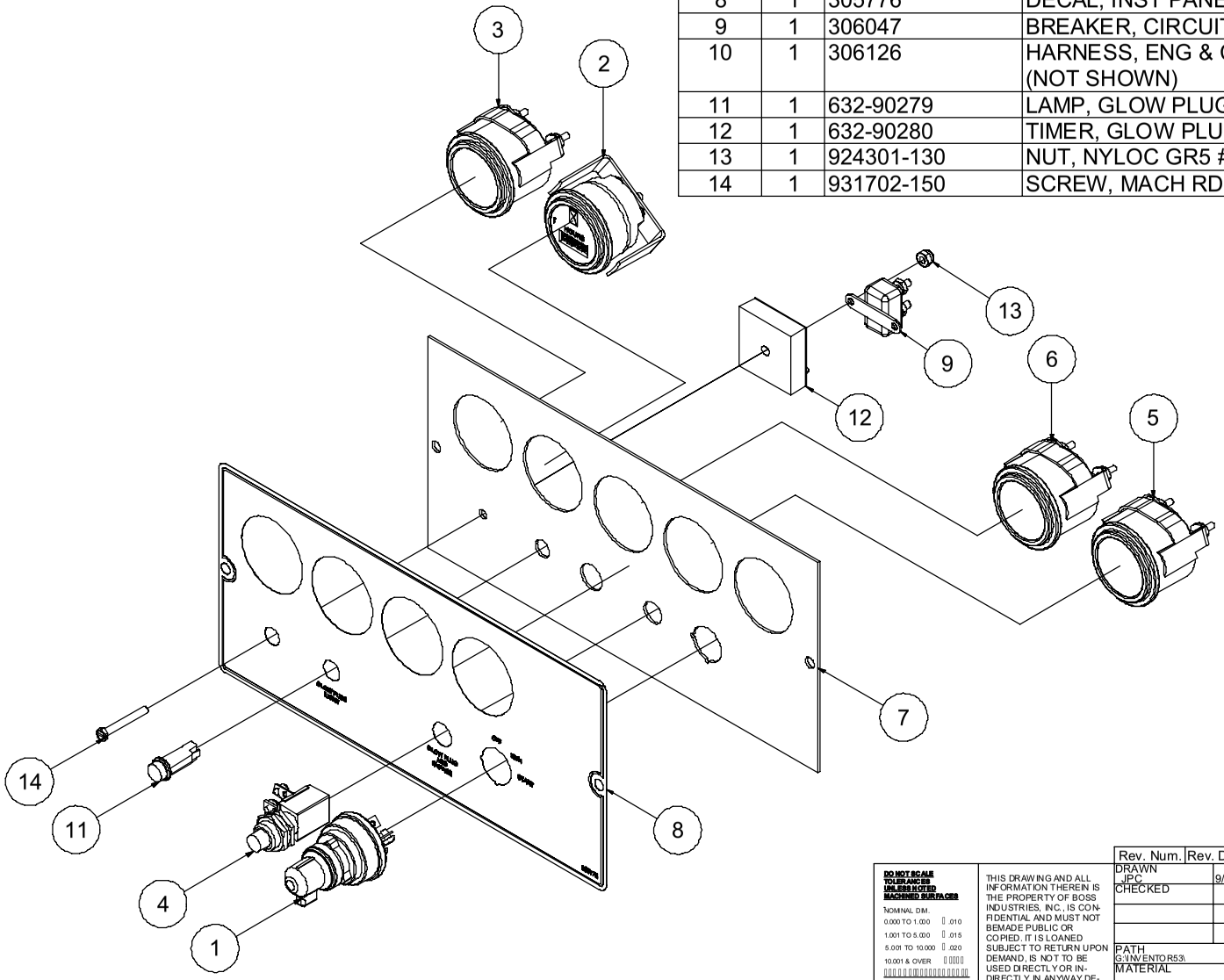
Fax: 905-824-9406

TITLE
INST. PANEL & PARTS, JD5030 40KW GENERATOR (REV 2)

SIZE	DWG NO	REV
C	200311-999	2

SCALE 1=4 SHEET 1 OF 2

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	140-90007	SWITCH, IGNITION 8-248 (REV A)
2	1	140-90008	METER, HOUR M1150 (REV A)
3	1	140-90009	GAUGE, VOLT METER 8-108 (REV A)
4	1	140-90017	SWITCH, PUSH BUTTON (REV A)
5	1	142-90002	GAUGE, OIL PRESSURE C-293 (REV A)
6	1	142-90003	GAUGE, TEMP (C288) (REV A)
7	1	158-90638	PANEL, INST 185-250 JD02 (REV B)
8	1	305776	DECAL, INST PANEL 40 & 60KW GEN (REV 3)
9	1	306047	BREAKER, CIRCUIT 20 AMP RIGHT ANGLE MTG BRKT
10	1	306126	HARNESS, ENG & COMP JD5030 GENSET (NOT SHOWN)
11	1	632-90279	LAMP, GLOW PLUG (8-620) (REV A)
12	1	632-90280	TIMER, GLOW PLUG (8-621) (REV A)
13	1	924301-130	NUT, NYLOC GR5 #10-32
14	1	931702-150	SCREW, MACH RD HD #10-32 X 1 1/2



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5.001 TO 10.000 ±.020
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Rev. Num.	Rev. Date	Released For	EN Num.
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PATH G:\INVENTOR53\			
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TITLE
INST. PANEL & PARTS, JD5030 40KW GENERATOR (REV 2)

SIZE	DWG NO	REV
C	200311-999	2

SCALE | SHEET 2 OF 2

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	150-90199	TANK, COOLANT RECOVERY
1.1	1	150-90199	HOSE, 1/4 ID CLEAR COOLANT RECOVERY TANK
1.2	2	150-90199	CLAMP, HOSE COOLANT RECOVERY TANK
1.3	2	150-90199	CLAMP, SPRING HOSE COOLANT RECOVERY TANK
2	1	156-90581	RADIATOR,185-210 (A)
3	18"	301954	WEATHERSTRIP, COMPRSN RUBBER 20GA-9GA
4	18"	301954	WEATHERSTRIP, COMPRSN RUBBER 20GA-9GA
5	1	305695M	ENGINE, JD5030TF270 80HP@1800 40KW GENSET
6	1	305715	FRAME, JD5030 40KW GENERATOR (REV 7)
7	2	305892	HOSE, RAD FLEX 2" X 1.75" X 19"LG
8	1	306008	SHROUD, FAN CROSS MOUNT COOLER
9	2	306162	CLAMP, T HOSE 2.03 TO 2.34
10	2	306163	CLAMP, T HOSE 2.16 TO 2.47
11	4	924304-145	NUT, NYLOC GR5 1/4-20
12	2	925305-283	NUT, WHIZ LOCK 5/16-18
13	4	929104-075	BOLT, HEX GR5 1/4-20 X 3/4
14	4	929104-100	BOLT, HEX GR5 1/4-20 X 1
15	2	929705-075	BOLT, WHIZLOCK GR5 5/16-18 X 3/4
16	4	938004-062	WASHER, LOC GR5 1/4
17	12	938604-071	WASHER, FLAT GR5 1/4

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0.000 TO 1.000 .010
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10.001 & OVER

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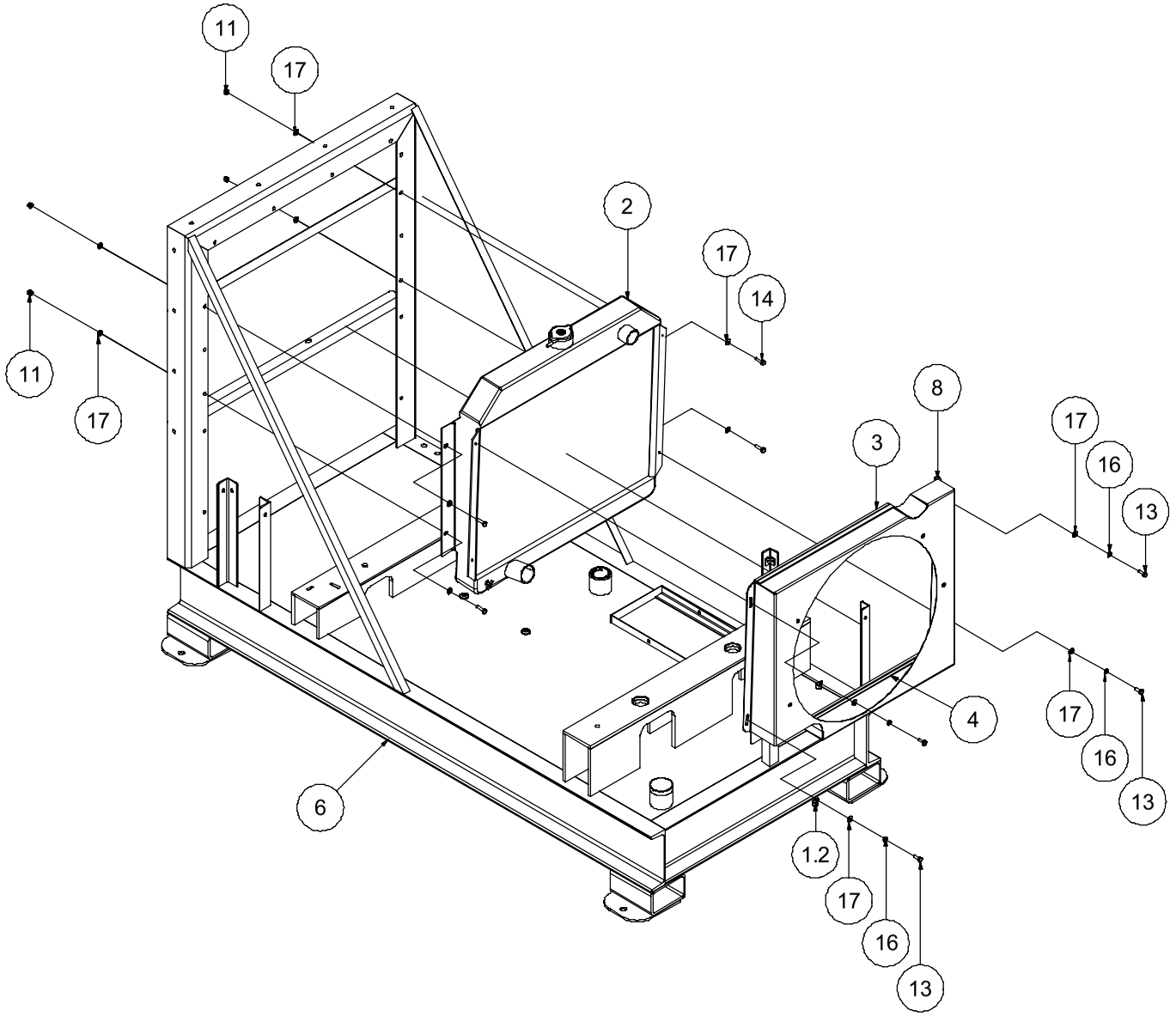
TITLE
RADIATOR & PARTS, JD5030 40KW GENERATOR (REV 2)

SIZE	DWG NO	REV
B	200312-999	2

SCALE

SHEET 1 OF 4



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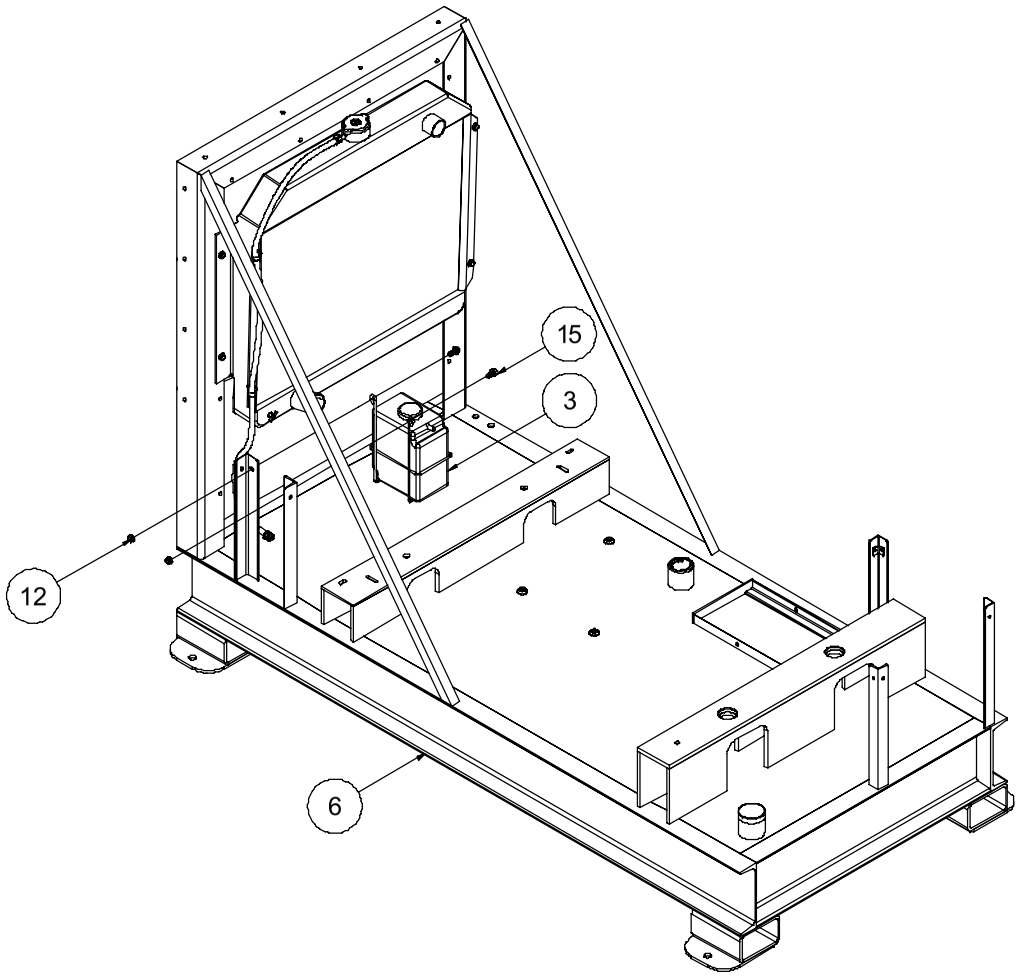
TITLE
RADIATOR & PARTS, JD5030 40KW GENERATOR (REV 2)

SIZE	DWG NO	REV
C	200312-999	2

SCALE

SHEET 2 OF 4



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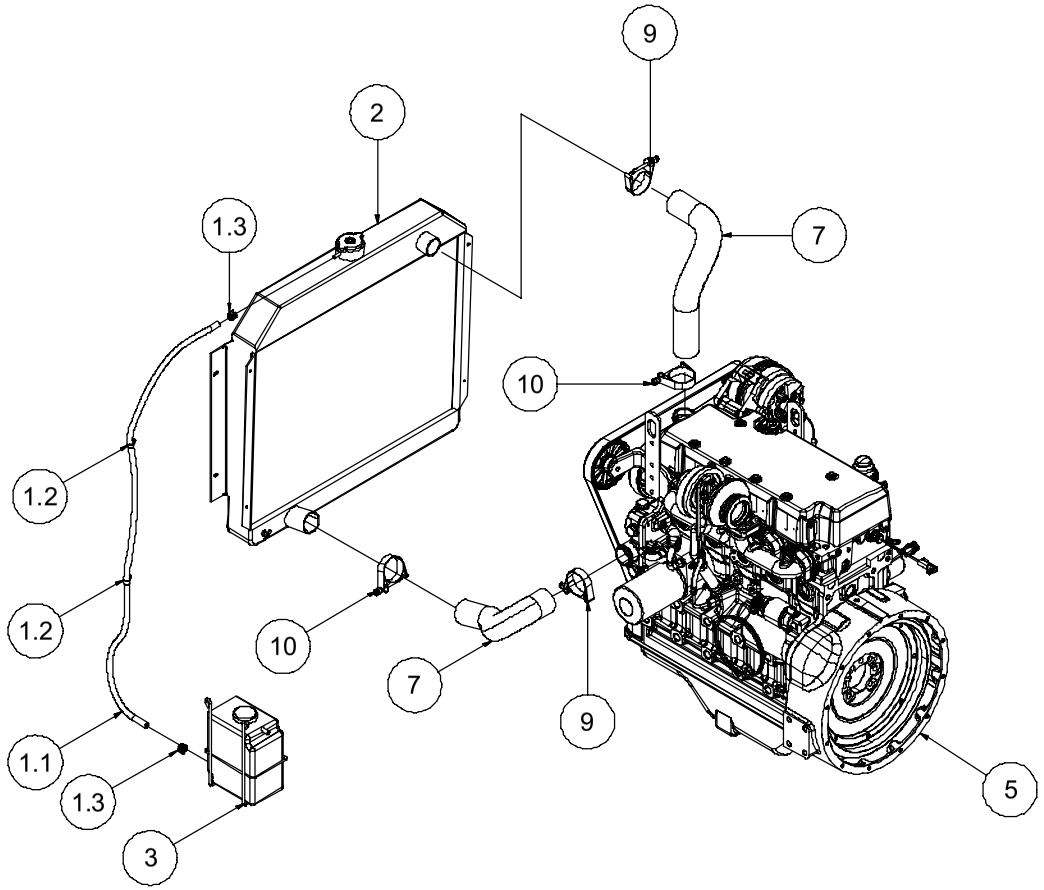
		CHECKED MFP 7/12/2006	TITLE: RADIATOR & PARTS, JD5030 40KW GENERATOR (REV 2)
		PATH G:\INVENTOR53\	
		MATERIAL	SIZE C / DWG NO 200312-999 / REV 2
			SCALE / SHEET 3 OF 4



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TITLE
RADIATOR & PARTS, JD5030 40KW GENERATOR (REV 2)

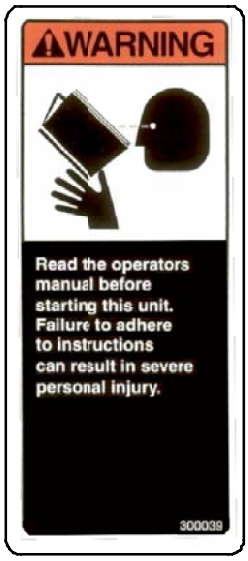
SIZE	DWG NO	REV
C	200312-999	2

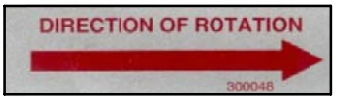
SCALE

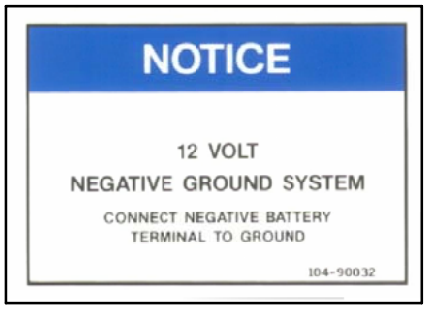
SHEET 4 OF 4

Parts List

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	104-90027	DECAL, HOT EXHAUST 2-377
2	1	104-90032	DECAL, 12 VOLT 2-380
3	1	300039	DECAL, WARNING READ MANUAL (REV 1)
4	4	300041	DECAL, WARNING FAN GUARD
5	2	300048	DECAL, DIRECTION OF ROTATION
6	1	300516	DECAL, ENGINE OIL FILL
7	1	300913	DECAL, OIL DRAIN







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MATERIAL AS NOTED
SCALE 1=1

MORSE INDUSTRIAL EQUIPMENT INC.
Mississauga Ontario
Phone: 647-393-1212
Fax: 905-824-9406

TITLE
DECAL & INDENT SYS 40KW GENSET

SIZE B | DWG NO 200322-999 | REV 0
SHEET 1 OF 1

Parts List

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	140-90011	SWITCH, TEMP M1006 (230 DEG)
2	1	300022-050	VALVE, SERVICE 1/2 VENTED PORT
3	1	300057	VALVE, REGULATOR 1/4
4	2	300742-670	BELT, 3VX670
5	1	300836	COOLER, OIL 13 X 12
6	1	301594	DECAL, TEMP. COMPR.- 250 F
7	3.75 FT	301701-219	SLEEVE, ABRASION 1.220 ID
8	1	301722	AIREND, SCI8 INTEGRATED
8.1	1	301722	GASKET, INLET VALVE SCI8G/TMAR
8.2	1	301722	INTAKE MTG PLATE
8.3	1	301722	INLET VALVE
8.4	1	301722	INTAKE COVER
8.5	1	302553	ELEMENT, AIR FILTER SCI7-8
9	1	301827	VALVE, BLOWDOWN 1/4 N.C. 55502
10	4 FT	301960-025	TUBE, PARAFLEX 1/4 OD X .040
11	1	302453	GASKET, INLET VALVE SCI8G/TMAR
12	1	302551	ADAPTER, SCI8G INLET VALVE/TMAR WREG
13	1	302616	IDLER, BELT WHEEL P1B
14	1	302617	TENSIONER, ARM IS1662
14.1	1	302617	NUT, NYLOC GR8 5/8-11
15	1	302631	ADAPTER, 1/2 BSPP X 1/2 NPT
16	1	303113	WASHER, SCA8 PULLEY
17	1	304725	BASE, SUPPORT BELT TENSIONER TM44
18	67"	304783-050	HOSE, AEROQUIP FC350 1/2"
19	76"	304783-050	HOSE, AEROQUIP FC350 1/2"
20	4	304785-050	FITTING, HOSE 1/2" AEROQUIP CRIMP JIC SWIVEL STR FEMALE
21	1	305160	GAUGE, AIR PRESS 0-200PSI 2"
22	1	305391	BRKT, IDLER PULLEY TO SCI8 COMP (REV 1)
23	1	305475	DECAL, SHEET SCI8
24	1	305624	PLUG, PIPE 1/8 BSPP HEX DRIVE
25	1	305695M	ENGINE, JD5030TF270 80HP@1800 40KW GENSET
26	1	305715	FRAME, JD5030 40KW GENERATOR (REV 7)
27	1	305746	PULLEY, 8.76" DIA. JD5030
28	1	305747	PULLEY, 3.0 2GR 3V
29	1	305748	BRACKET, COMPRESSOR SUPPORT SCI8 (REV 2)
30	1	305778	INST PANEL, 40 & 60 KW GEN (REV 3)
31	1	306010	DECAL, MORSE INDUSTRIES
32	1	901115-020	ELBOW, PIPE STREET 1/2 GAL
33	1	901515-005	ELBOW, PIPE 1/8 GAL 150PSI
34	1	902915-005	PLUG, PIPE 1/8 RECESSED ZINC

Parts List

ITEM	QTY	PART NUMBER	DESCRIPTION
35	1	902915-010M	PLUG, PIPE 1/4 RECESSED ZINC W/3/64 HOLE
36	1	906030-020	CAP, PIPE HEX 1/2 ZINC
37	1	907602-015	BUSHING, RED 1/2 X 3/8 GAL
38	1	907603-020	BUSHING, RED 3/4 X 1/2 GAL
39	1	922108-020	NIPPLE, PIPE 1/2 X 2 GAL SCH40
40	7	925506-198	NUT, NYLOC GR8 3/8-16
41	3	925508-262	NUT, NYLOC GR8 1/2-13
42	1	929208-300	BOLT, HEX GR10.9 8MM X 30MM
43	2	929210-200	BOLT, HEX GR10.9 10MM X 20MM
44	4	929210-250	BOLT, HEX GR10.9 10MM X 25MM
45	4	929308-450	BOLT, SOC HD 8MM X 45MM GR 10.9
46	4	929310-550	BOLT, SOC HD 10MM X 55MM GR 10.9
47	4	929706-100	BOLT, WHIZLOCK GR5 3/8-16 X 1
48	3	929806-150	BOLT, HEX GR8 3/8-16 X 1 1/2
49	3	929808-200	BOLT, HEX GR8 1/2-13 X 2
50	2	937008-125	WASHER, BEVELED 1/2
51	10	938206-071	WASHER, FLAT GR8 3/8
52	6	938208-112	WASHER, FLAT GR8 1/2
53	1	938808-200	WASHER, LOC 8MM
54	10	938810-220	WASHER, LOC 10MM
55	4	938908-180	WASHER, FLAT 8MM
56	6	938910-200	WASHER, FLAT 10MM
57	1	960208-050	ELBOW, 1/2 JIC X 1/2 MNPT
58	1	960208-075	ELBOW, 1/2 JIC X 3/4 MNPT
59	1	960802-012	ELBOW, PIPE 45° STREET 1/8
60	2	961604-012	NIPPLE, HYD HEX RED 1/4 X 1/8
61	1	961902-012	TEE, MB 1/8 F X 1/8 F X 1/8 M
62	1	964808-050	TEE, PIPE 1/2F X 1/2M X 1/2F
63	2	970608-050	ELBOW, HYD 1/2 MBSPP X 1/2 MJIC
64	2	970802-012	ADAPTER, 1/8 MBSPP X 1/8 FNPT
65	2	980604-012	CONNECTOR, TUBE 1/4 PAR X 1/8 NPT
66	1	980704-012	ELBOW, 1/4 TUBE SWVL X 1/8 MNPT
67	2	980704-025	ELBOW, 1/4 TUBE SWVL X 1/4 MNPT
68	1	980704-025M	ELBOW, 1/4 TUBE SWVL X 1/4 MNPT W/HOLE

DO NOT SCALE TOLERANCES UNLESS NOTED
MACHINED SURFACES
NOMINAL DIM.
0.000 TO 1.000 ±.010
1.001 TO 5.000 ±.015
5.001 TO 10.000 ±.020
10.001 & OVER ±.025

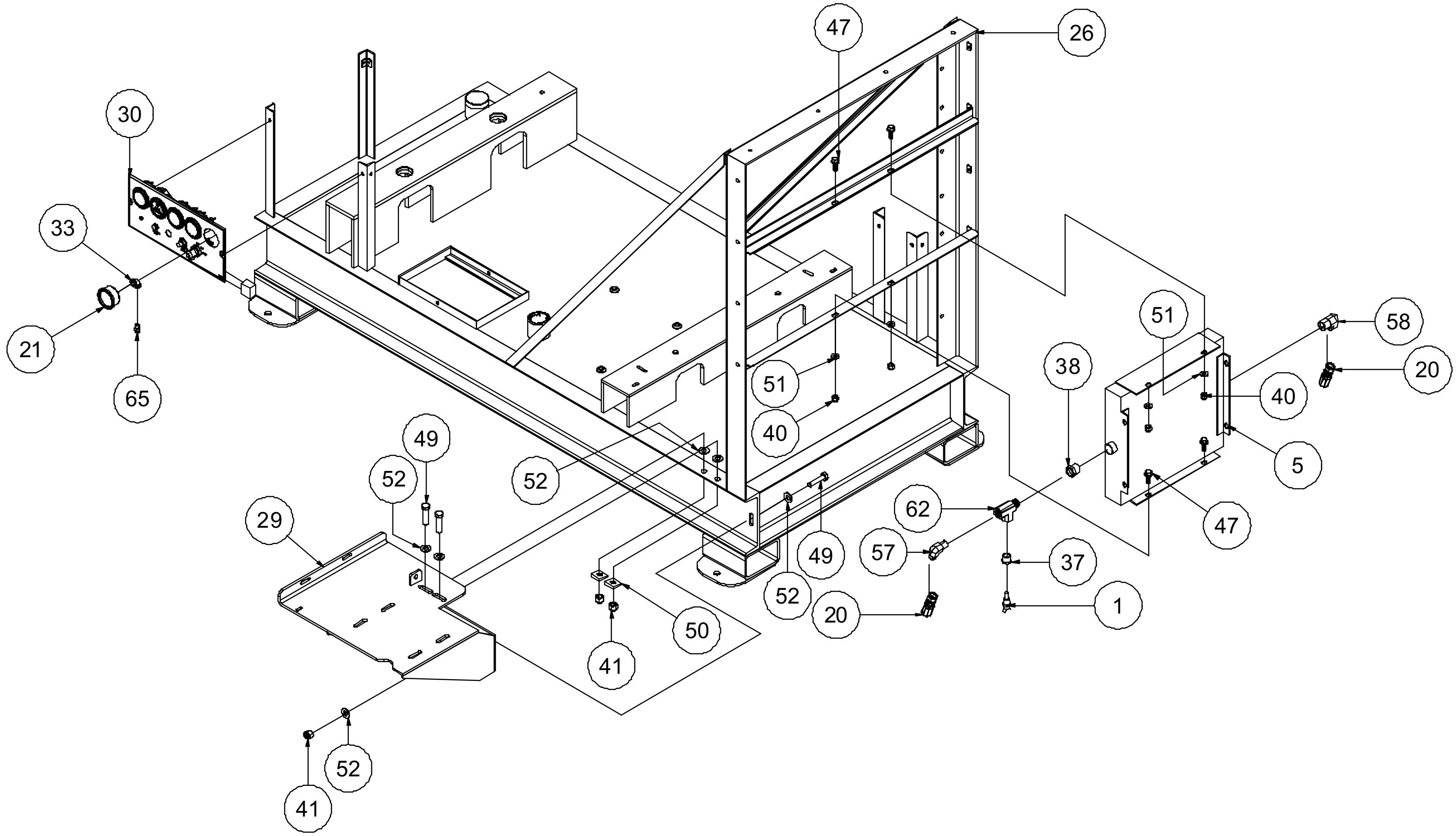
Rev. Num.	Rev. Date	Released For	EN Num.
DRAWN JPC	10/2/2006		
CHECKED			
PATH G:\INVENTOR53\60K			
MATERIAL			

MORSE INDUSTRIAL EQUIPMENT INC.
Mississauga Ontario
Phone: 647-393-1212
Fax: 905-824-9406

TITLE: OPT, 40 CFM SCI 8 GENERATOR (REV 2)

SIZE	DWG NO	REV
C	60982-999	2

SCALE 1=8 SHEET 1 OF 8



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TOLERANCES
UNLESS NOTED
MACHINED SURFACES

NOMINAL DIM.
0.000 TO 1.000 .010
1.001 TO 5.000 .015
5.001 TO 10.000 .020
10.001 & OVER

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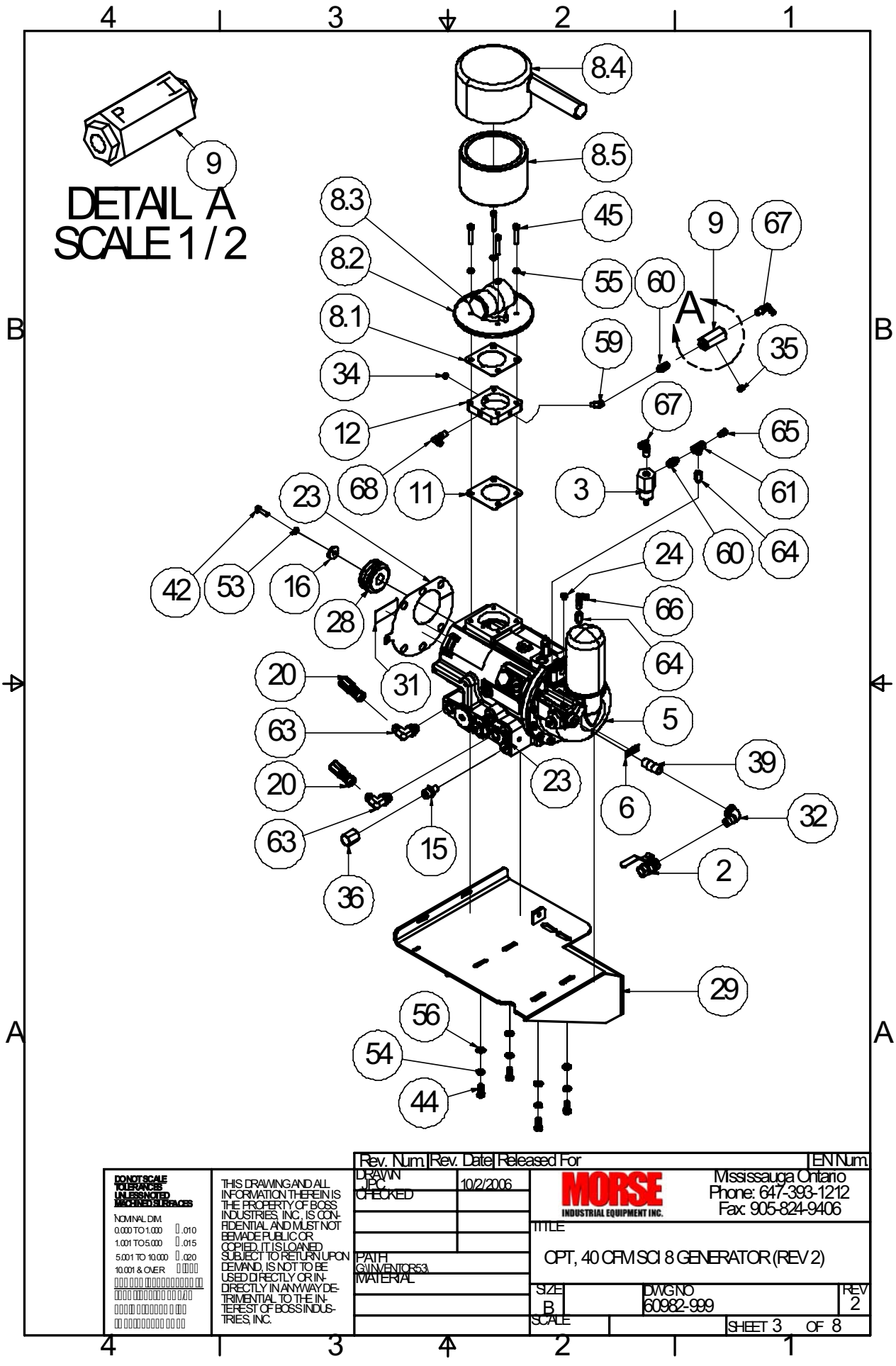
Rev. Num.	Rev. Date	Released For	EN Num.
DRAWN JPC	10/2/2006	MORSE INDUSTRIAL EQUIPMENT INC.	Mississauga Ontario Phone: 647-393-1212 Fax: 905-824-9406
CHECKED			
PATH G:\INVENTOR53\		TITLE OPT, 40 CFM SCI 8 GENERATOR (REV 2)	
MATERIAL		SIZE C	DWG NO 60982-999	REV 2
		SCALE	SHEET 2 OF 8



Rev. Num.	Rev. Date	Released For	ENI Num.

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NOMINAL DIM.
0.000 TO 1.000 ±.010
1.001 TO 5.000 ±.015
5.001 TO 10.000 ±.020
10.001 & OVER ±[illegible]

[illegible]

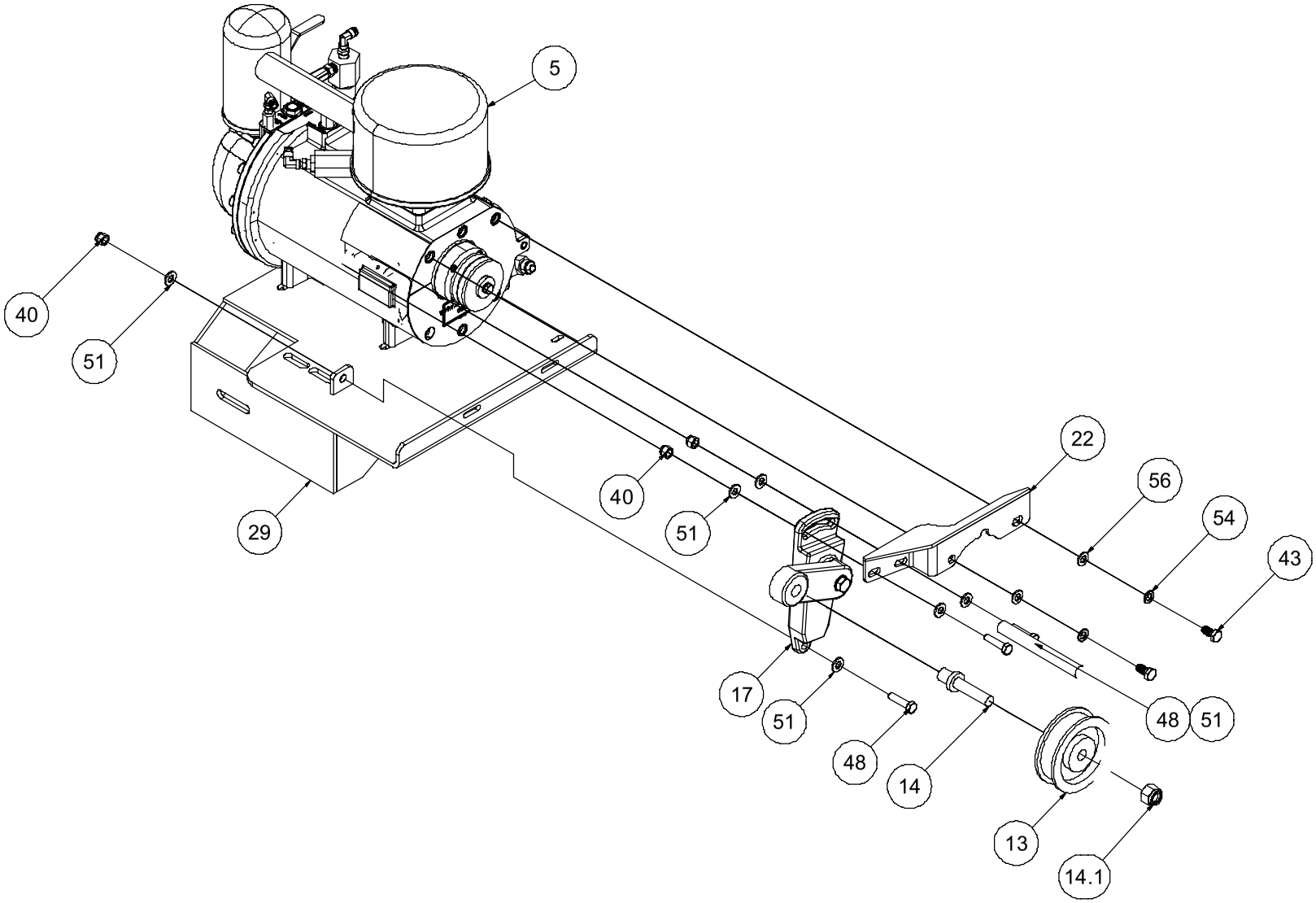
DRAWN: J.P.C. 10/2/2006
CHECKED:
PATH: G:\INVENTOR53\
MATERIAL:

MORSE INDUSTRIAL EQUIPMENT INC.
Mississauga Ontario
Phone: 647-393-1212
Fax: 905-824-9406

TITLE: OPT, 40 CFM SCI 8 GENERATOR (REV 2)

SIZE: B | DWG NO: 60982-999 | REV: 2

SCALE: | SHEET 3 OF 8



Rev. Num.	Rev. Date	Released For	EN Num.
DRAWN JPC	10/2/2006		
CHECKED			

DO NOT SCALE
TOLERANCES
UNLESS NOTED
MACHINED SURFACES

NOMINAL DIM.
0.000 TO 1.000 ±.010
1.001 TO 5.000 ±.015
5.001 TO 10.000 ±.020
10.001 & OVER ±.025

PATH
G:\INVENTOR53\
MATERIAL

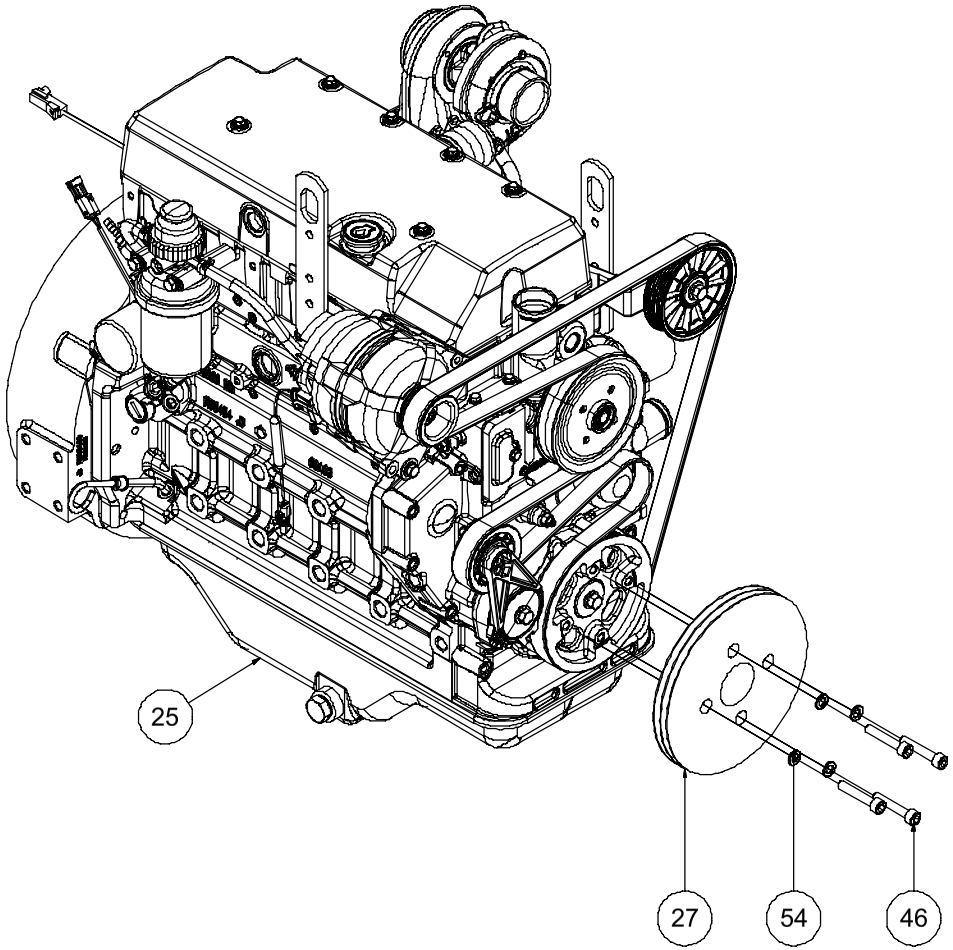
MORSE INDUSTRIAL EQUIPMENT INC.
Mississauga Ontario
Phone: 647-393-1212
Fax: 905-824-9406

TITLE
OPT, 40 CFM SCI 8 GENERATOR (REV 2)

SIZE	DWG NO	REV
C	60982-999	2

SCALE

SHEET 4 OF 8



Rev. Num.	Rev. Date	Released For	EN Num.

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NOMINAL DIM.
0.000 TO 1.000 .010
1.001 TO 5.000 .015
5.001 TO 10.000 .020
10.001 & OVER

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MATERIAL

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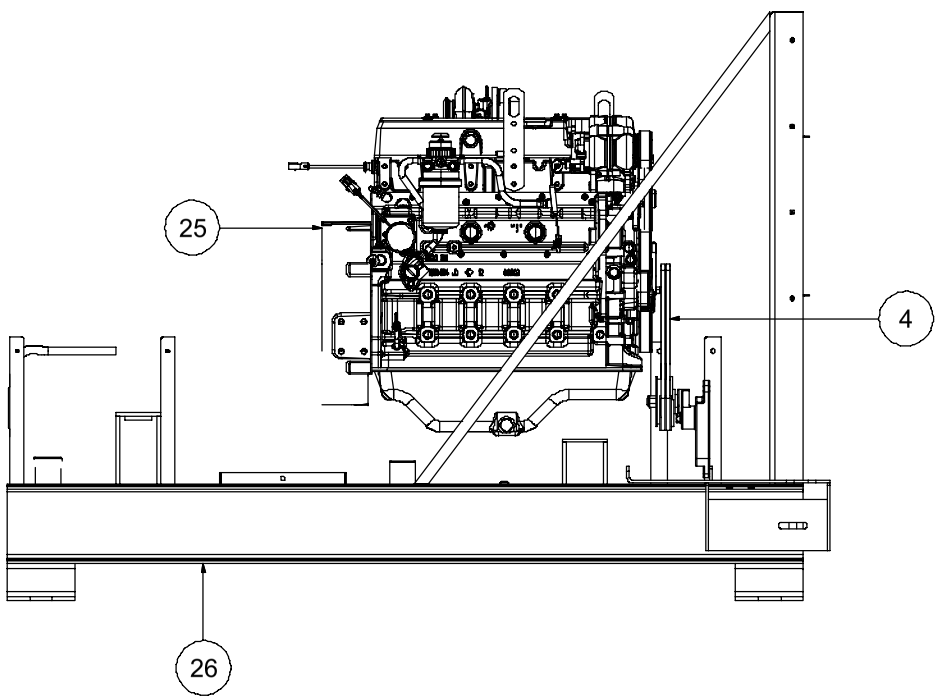
Mississauga Ontario
Phone: 647-393-1212
Fax: 905-824-9406

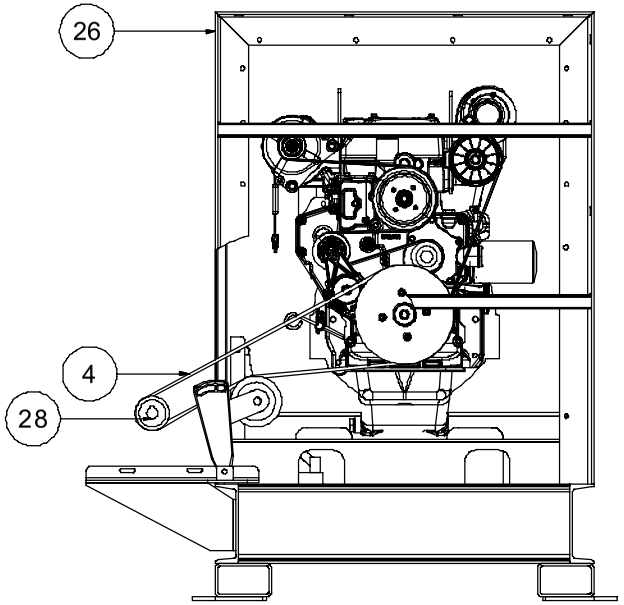
TITLE
OPT, 40 CFM SCI 8 GENERATOR (REV 2)

SIZE C | DWG NO 60982-999 | REV 2

SCALE | SHEET 5 OF 8

P/N: 305834





Rev. Num.	Rev. Date	Released For	EN Num.

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NOMINAL DIM.
0.000 TO 1.000 .010
1.001 TO 5.000 .015
5.001 TO 10.000 .020
10.001 & OVER

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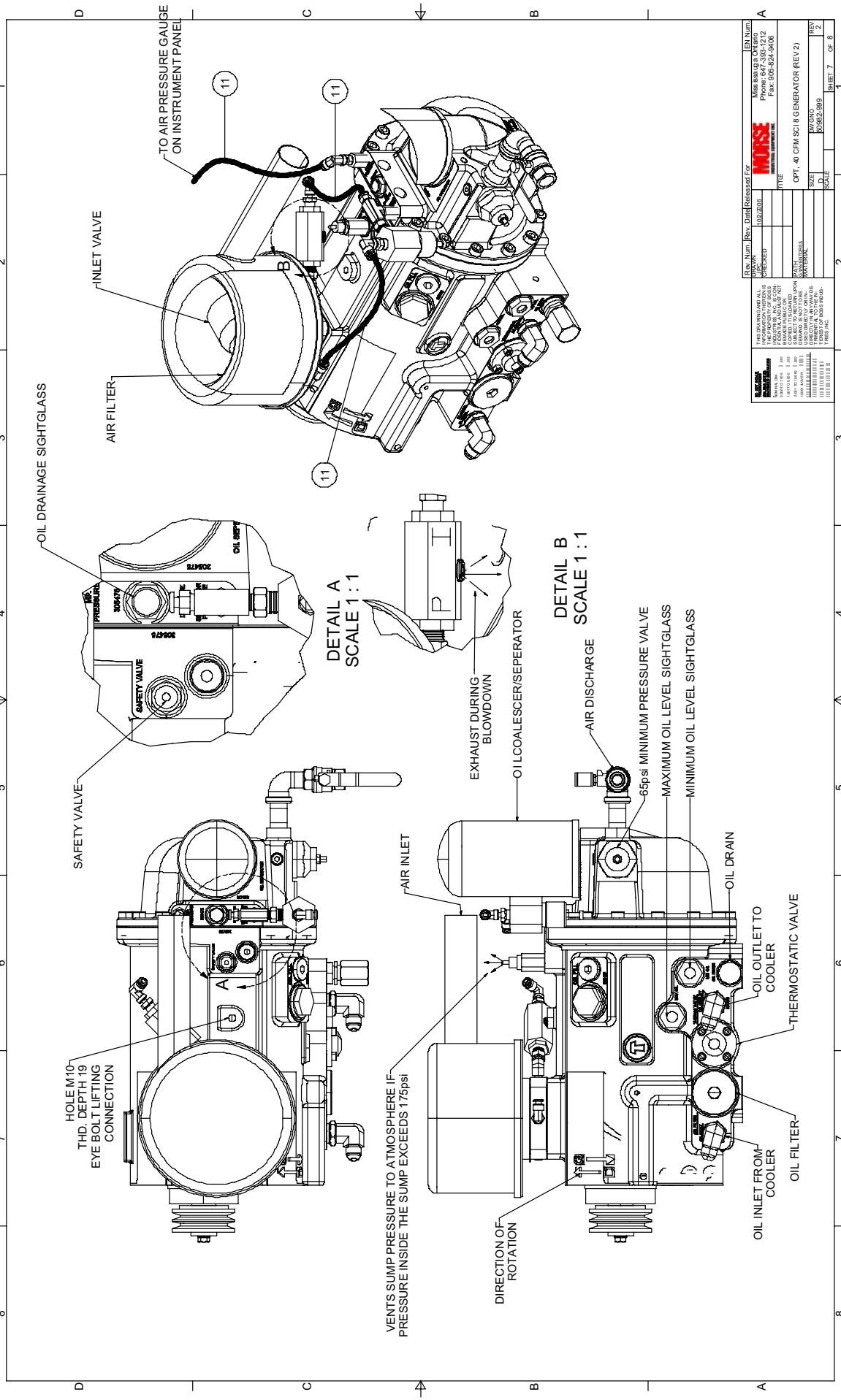
PATH G:\INVENTOR53\
MATERIAL

MORSE INDUSTRIAL EQUIPMENT INC.
Mississauga Ontario
Phone: 647-393-1212
Fax: 905-824-9406

TITLE
OPT, 40 CFM SCI8 GENERATOR (REV 2)

SIZE C | DWG NO 60982-999 | REV 2
SCALE | SHEET 6 OF 8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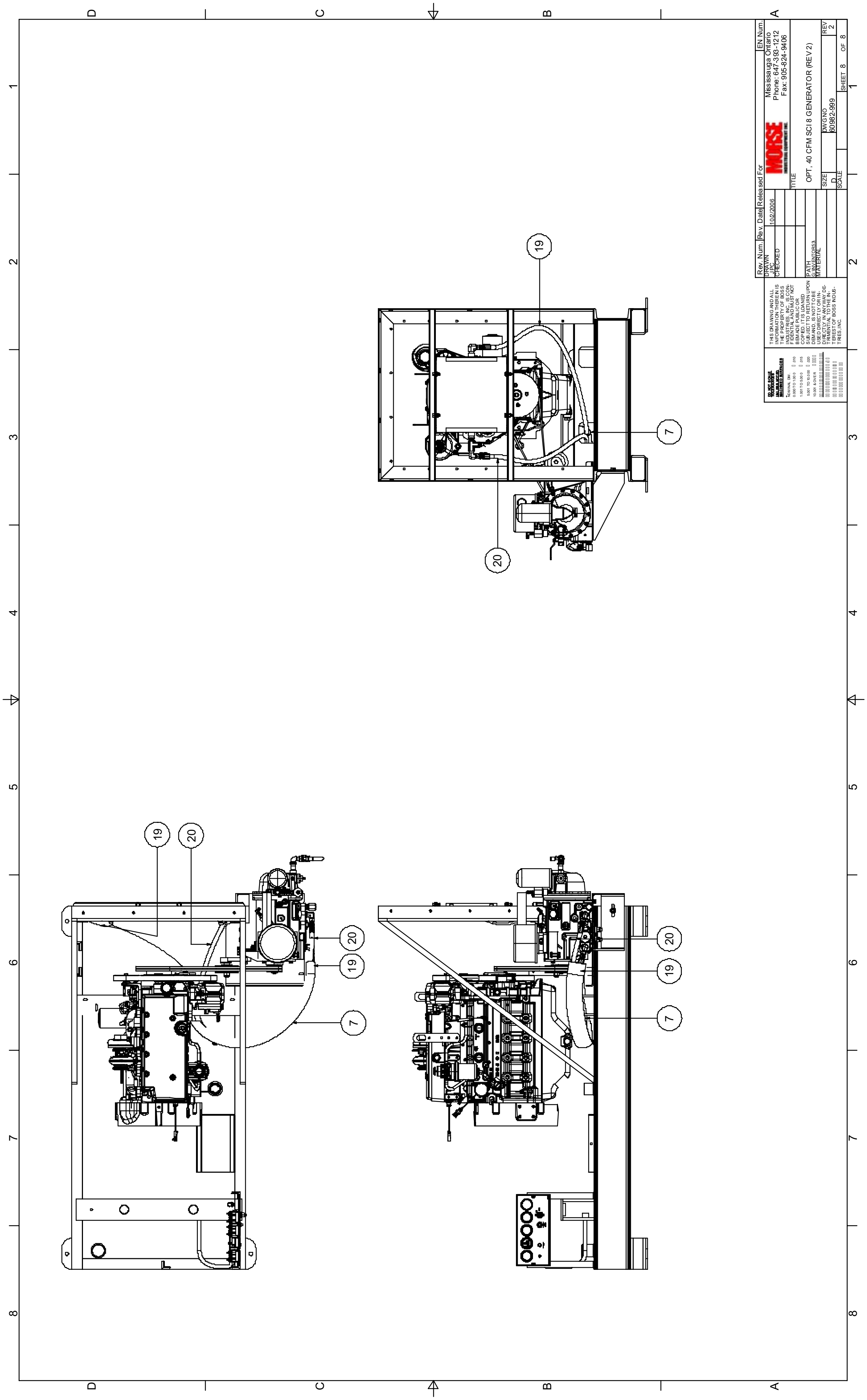
INLET VALVE
AIR FILTER
OIL DRAINAGE SIGHTGLASS
SAFETY VALVE
DETAIL A SCALE 1 : 1
EXHAUST DURING BLOWDOWN
OIL COALESCER/SEPERATOR
DETAIL B SCALE 1 : 1
AIR DISCHARGE
65psi MINIMUM PRESSURE VALVE
MAXIMUM OIL LEVEL SIGHTGLASS
MINIMUM OIL LEVEL SIGHTGLASS
AIR INLET
OIL DRAIN
OIL OUTLET TO COOLER
THERMOSTATIC VALVE
OIL FILTER
OIL INLET FROM COOLER
DIRECTION OF ROTATION
VENTS SUMP PRESSURE TO ATMOSPHERE IF PRESSURE INSIDE THE SUMP EXCEEDS 175psi
HOLE M10 THD. DEPTH 19 EYE BOLT LIFTING CONNECTION
Rev. Num.
Rev. Date
Released For
DRAWN
CHECKED
11/2/2006
MORSE
Mississauga Ontario
Phone: 647-393-1212
Fax: 905-624-9486
TITLE
OPT. 40 CFM SCI 8 GENERATOR (REV 2)
SIZE
D
DWG NO
0082-999
REV
2
SCALE
SHEET 7 OF 8


OPT, 40 CFM SCI 8 GENERATOR (REV 2)
Mississauga Ontario
Phone: 647-393-1212
Fax: 905-824-9406
DRAWN JPC
10/2/2006
CHECKED
PATH G:\INVENTOR53
MATERIAL
SIZE D
DWG NO 60982-999
REV 2
SHEET 8 OF 8
SCALE
DO NOT SCALE
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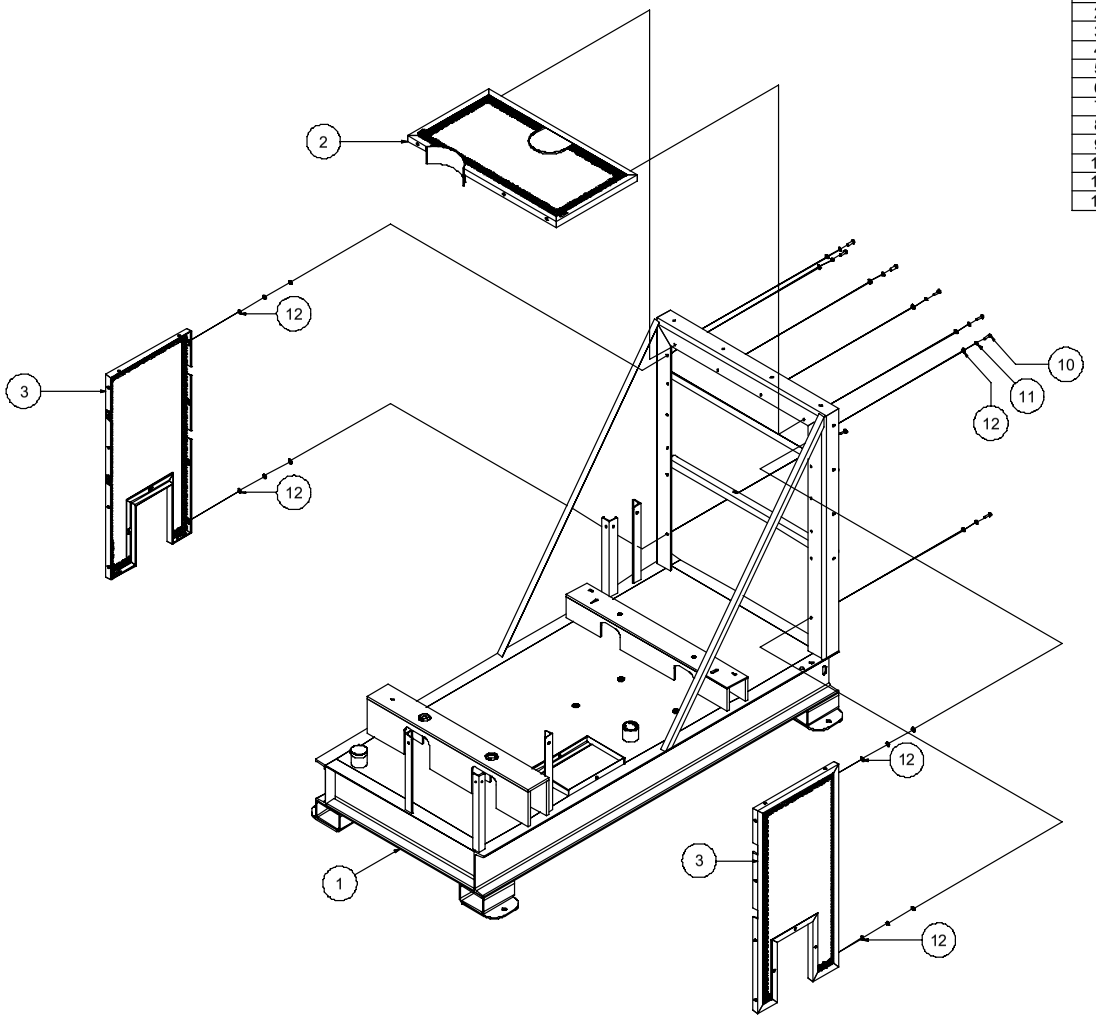

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	305715	FRAME, JD5030 40KW GENERATOR (REV 7)
2	1	306013	GUARD, BELT TOP 40-60KW JD5030
3	2	306015	GUARD, BELT TOP 40-60KW JD5030
4	1	306016	PLATE, BELT GUARD DOOR
5	1	306028	GUARD, ENG 40KW JD5030 RH SIDE
6	1	306029	GUARD, ENG 40KW JD5030 RH SIDE
7	1	306032	GUARD, BELT 40KW JD5030 ENG TOP
8	4	924304-145	NUT, NYLOC GR5 1/4-20
9	16	929104-075	BOLT, HEX GR5 1/4-20 X 3/4
10	10	929104-100	BOLT, HEX GR5 1/4-20 X 1
11	26	938004-062	WASHER, LOC GR5 1/4
12	42	938604-071	WASHER, FLAT GR5 1/4

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1.001 TO 5.000	± .015
5.001 TO 10.000	± .020
10.001 & OVER	± .030

Rev. Num.	Rev. Date	Released For	EN Num.

DRAWN JPC 10/2/2006
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PATH Q:\INVENTOR\3160K
MATERIAL

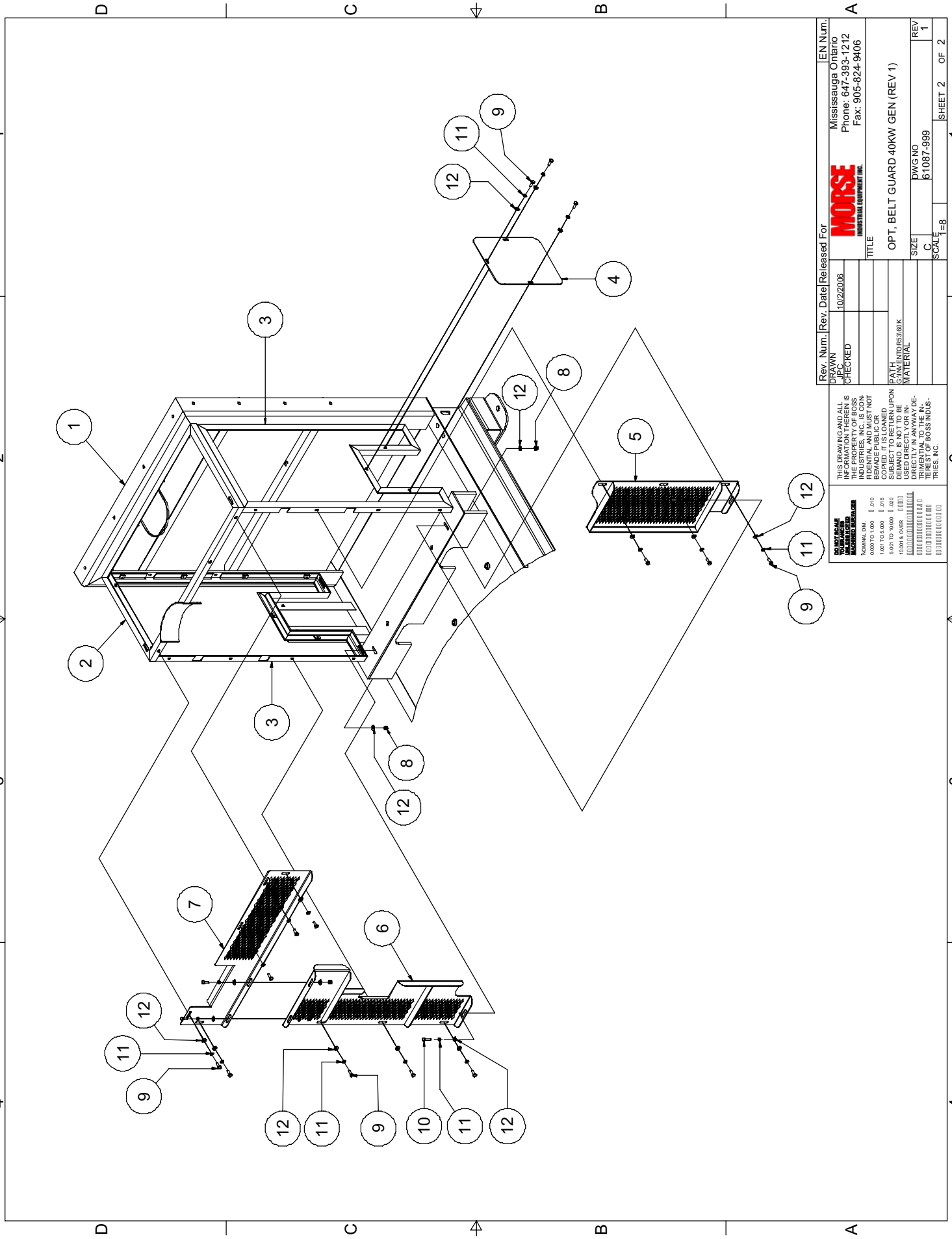
MORSE INDUSTRIAL EQUIPMENT INC.
Mississauga Ontario
Phone: 647-393-1212
Fax: 905-824-9406

TITLE
OPT, BELT GUARD 40KW GEN (REV 1)

SIZE D | DWG NO 61087-999 | REV 1

SCALE 1=8 | SHEET 1 OF 2

P/N: 305834


Rev. Num.
Rev. Date
Released For
DRAWN
JPC
10/2/2006
CHECKED
TITLE
OPT. BELT GUARD 40KW GEN (REV 1)
PATH
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MATERIAL
SIZE
C
DWG NO
61087-999
REV
1
SCALE
1=8
SHEET 2 OF 2
EN Num.
MORSE
INDUSTRIAL EQUIPMENT INC.
Mississauga Ontario
Phone: 647-393-1212
Fax: 905-824-9406
DO NOT SCALE
TOLERANCES
UNLESS NOTED
MACHINED SURFACES
NOMINAL DIM.
0.000 TO 1.000 .010
1.001 TO 5.000 .015
5.001 TO 10.000 .020
10.001 & OVER
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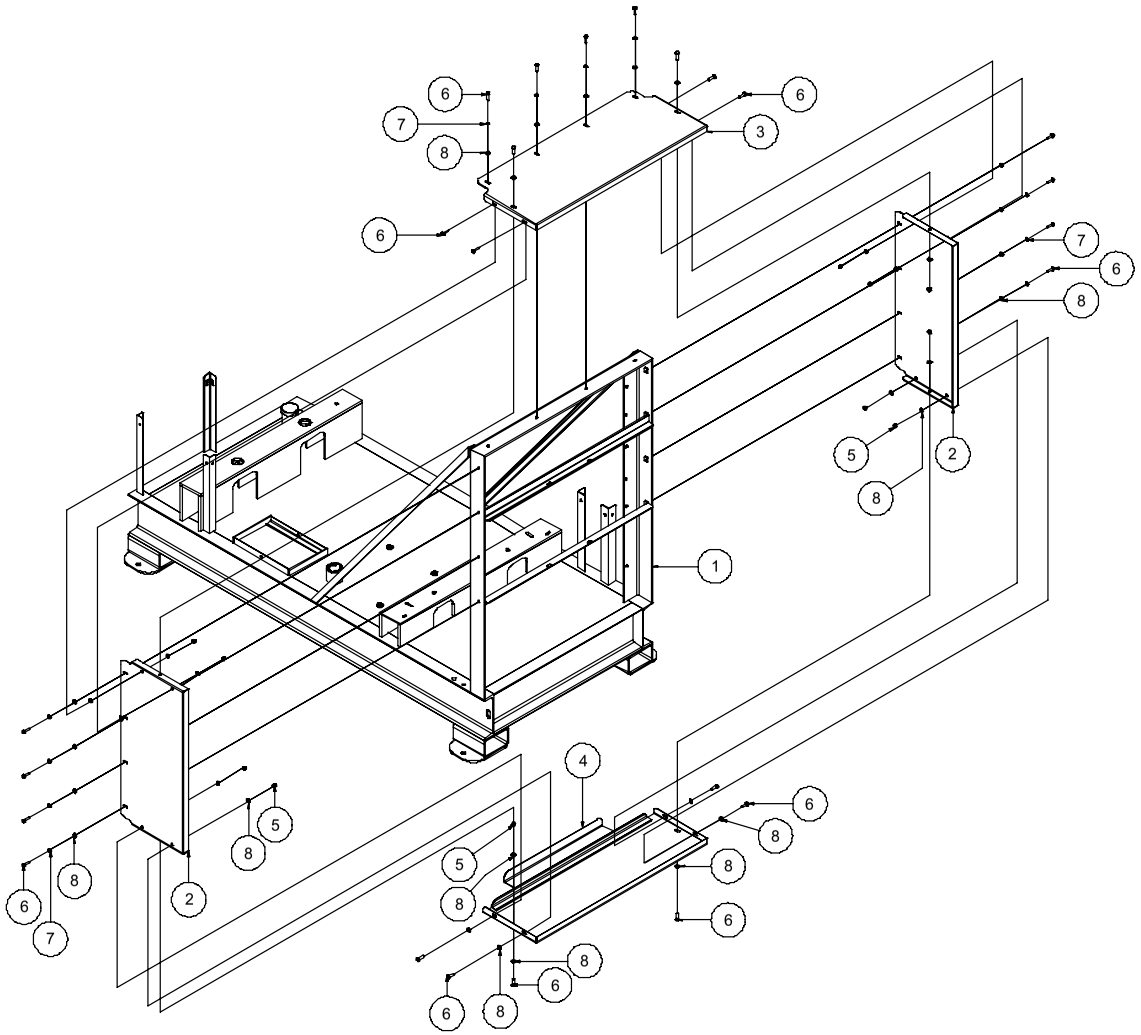

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	305715	FRAME, JD5030 40KW GENERATOR (REV 7)
2	2	306033	PANEL, LH & RH AIR DUCT 40KW GEN
3	1	306034	PANEL, TOP AIR DUCT 40KW GEN
4	1	306035	PANEL, BOTTOM AIR DUCT 40KW GEN (REV 2)
5	12	924304-145	NUT, NYLOC GR5 1/4-20
6	24	929104-100	BOLT, HEX GR5 1/4-20 X 1
7	12	938004-062	WASHER, LOC GR5 1/4
8	36	938604-071	WASHER, FLAT GR5 1/4

Rev. Num.	Rev. Date	Released For	EN Num.
DRAWN CRN	10/4/2006		
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MORSE INDUSTRIAL EQUIPMENT INC.
Mississauga Ontario
Phone: 647-393-1212
Fax: 905-824-9406

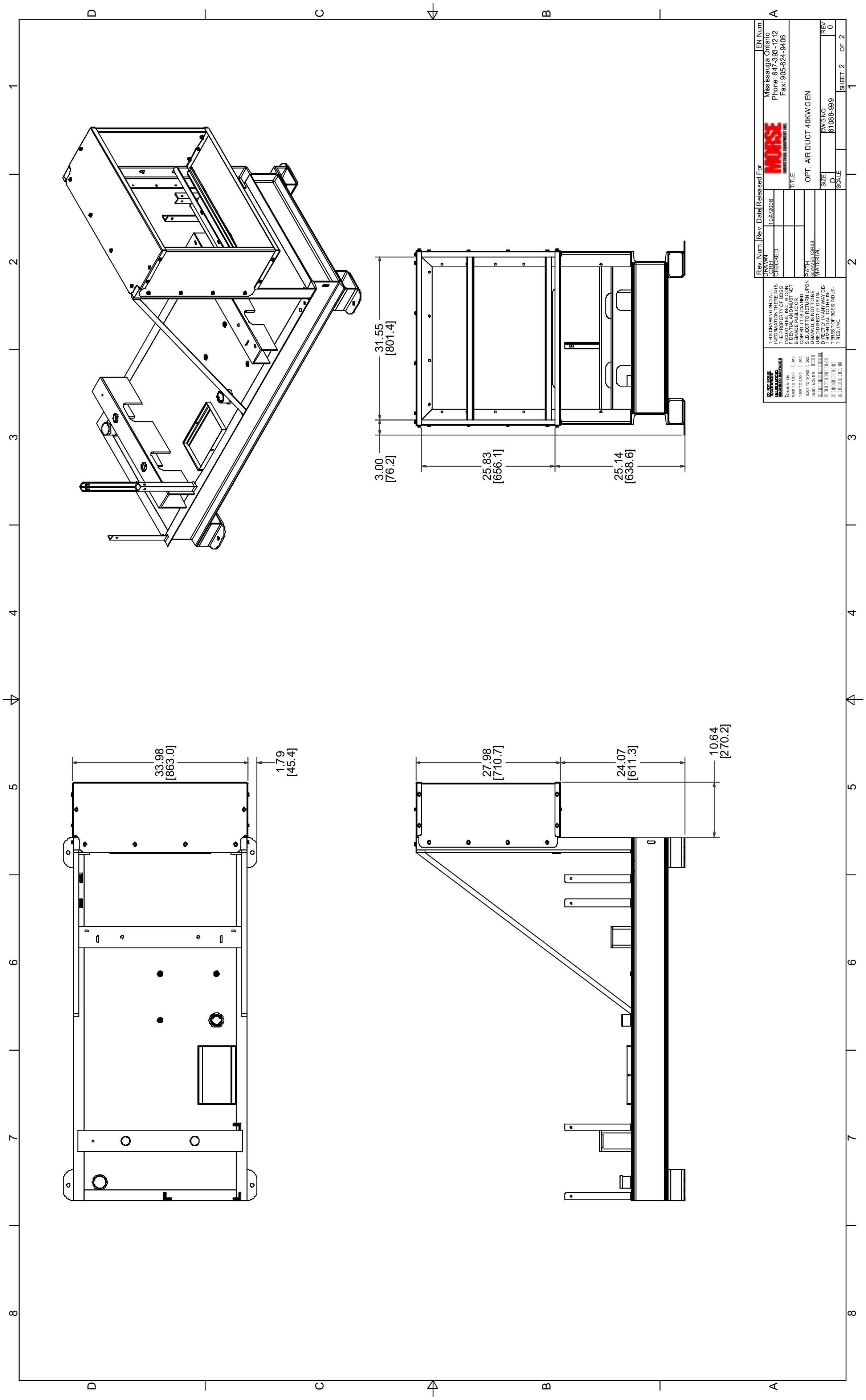
PATH: G:\WINTORS\3.60k
MATERIAL:

TITLE: OPT, AIR DUCT 40KW GEN

SIZE: D | DWG NO: 3108-999 | REV: 0

SCALE: 1=8 | SHEET 1 OF 2

P/N: 305834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Rev. Num.
Rev. Date
Released For
EN Num.
DRAWN
CRH
10/4/2006
CHECKED
Mississauga Ontario
Phone: 647-393-1212
Fax: 905-824-9406
TITLE
OPT, AIR DUCT 40KW GEN
PATH
G:\INVENTOR53
MATERIAL
SIZE
D
DWG NO
61088-999
REV
0
SCALE
SHEET 2 OF 2
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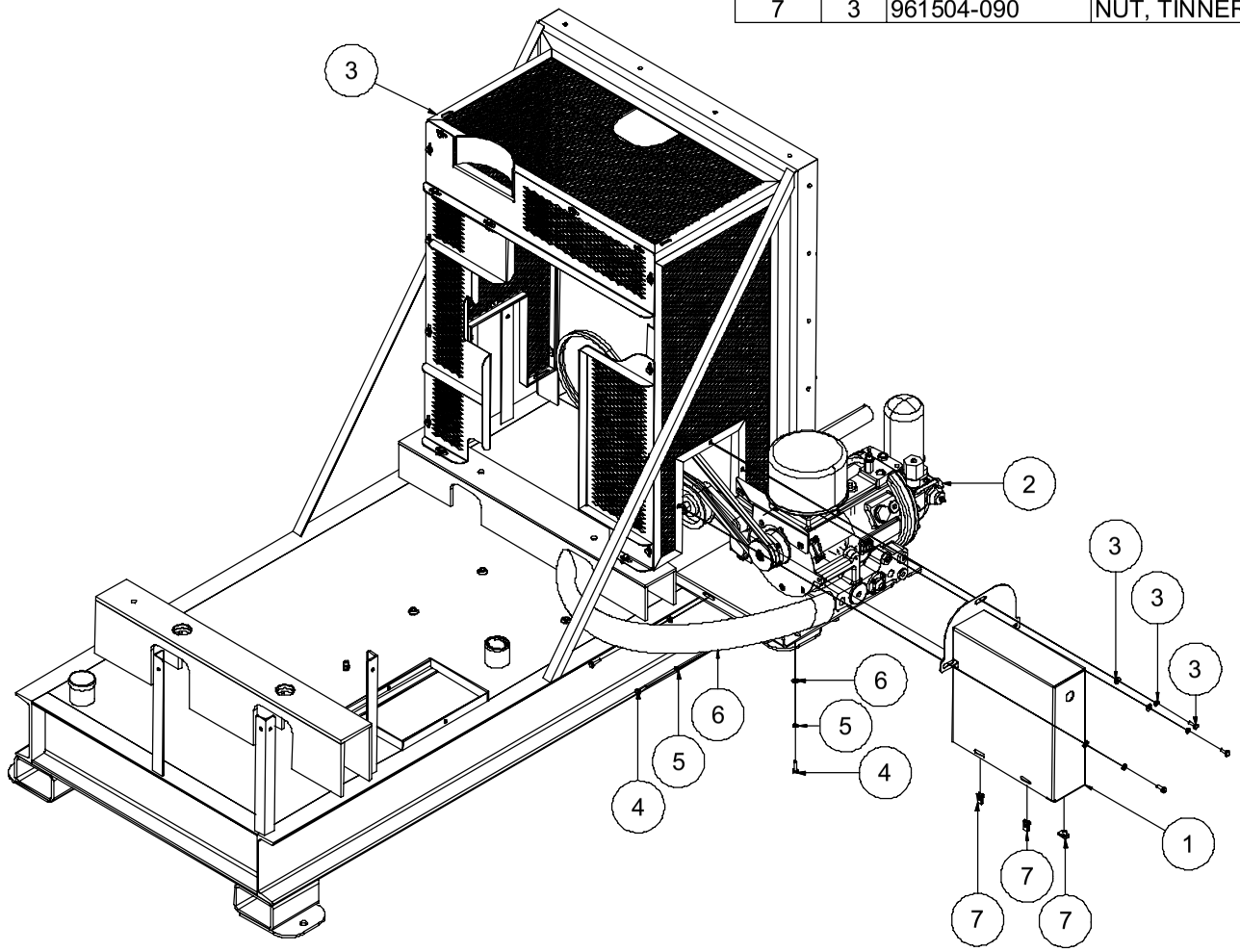
TOLERANCES
UNLESS NOTED
MACHINED SURFACES

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	306031	GUARD, BELT SCI8 OPT FOR 40KW FRAME
2	1	60982-999	OPT, 40 CFM SCI 8 GENERATOR (REV 2)
3	1	61087-999	OPT, BELT GUARD 40KW GEN (REV 1)
4	3	929104-100	BOLT, HEX GR5 1/4-20 X 1
5	3	938004-062	WASHER, LOC GR5 1/4
6	3	938604-071	WASHER, FLAT GR5 1/4
7	3	961504-090	NUT, TINNERMAN 1/4-20



Rev. Num.	Rev. Date	Released For	EN Num.
DRAWN JPC	10/11/2006		
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0.000 TO 1.000 .010
1.001 TO 5.000 .015
5.001 TO 10.000 .020
10.001 & OVER

PATH: G:\INVENTOR53\100-200k
MATERIAL:

MORSE INDUSTRIAL EQUIPMENT
Mississauga Ontario
Phone: 647-939-1212
Fax: 905-824-9406

TITLE: OPT, BELTGUARD -40CFM SCI8 - 40KW GEN

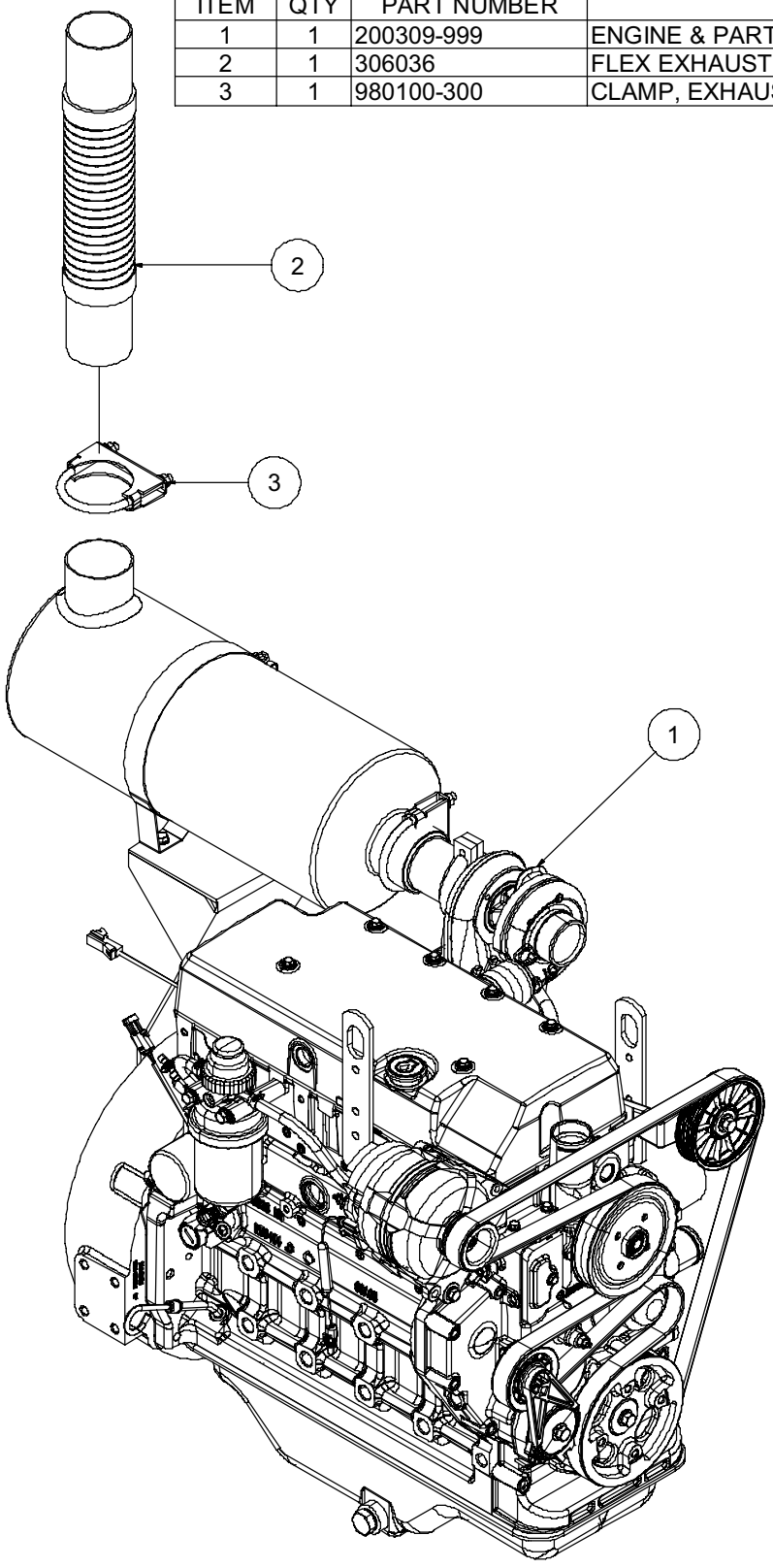
SIZE	DWG NO	REV
C	61089-999	0

SCALE 1=8 SHEET 1 OF 1

P/N: 305834

Parts List

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	200309-999	ENGINE & PARTS, JD5030 40KW GENERATOR (REV 2)
2	1	306036	FLEX EXHAUST 3"OD X 18"LG SS
3	1	980100-300	CLAMP, EXHAUST 3"



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0.000 TO 1.000 .010
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Rev. Num.	Rev. Date	Released For	EN Num.
DRAWN JPC	9/20/2006		
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PATH G:\INVENTOR53\60K			
MATERIAL			

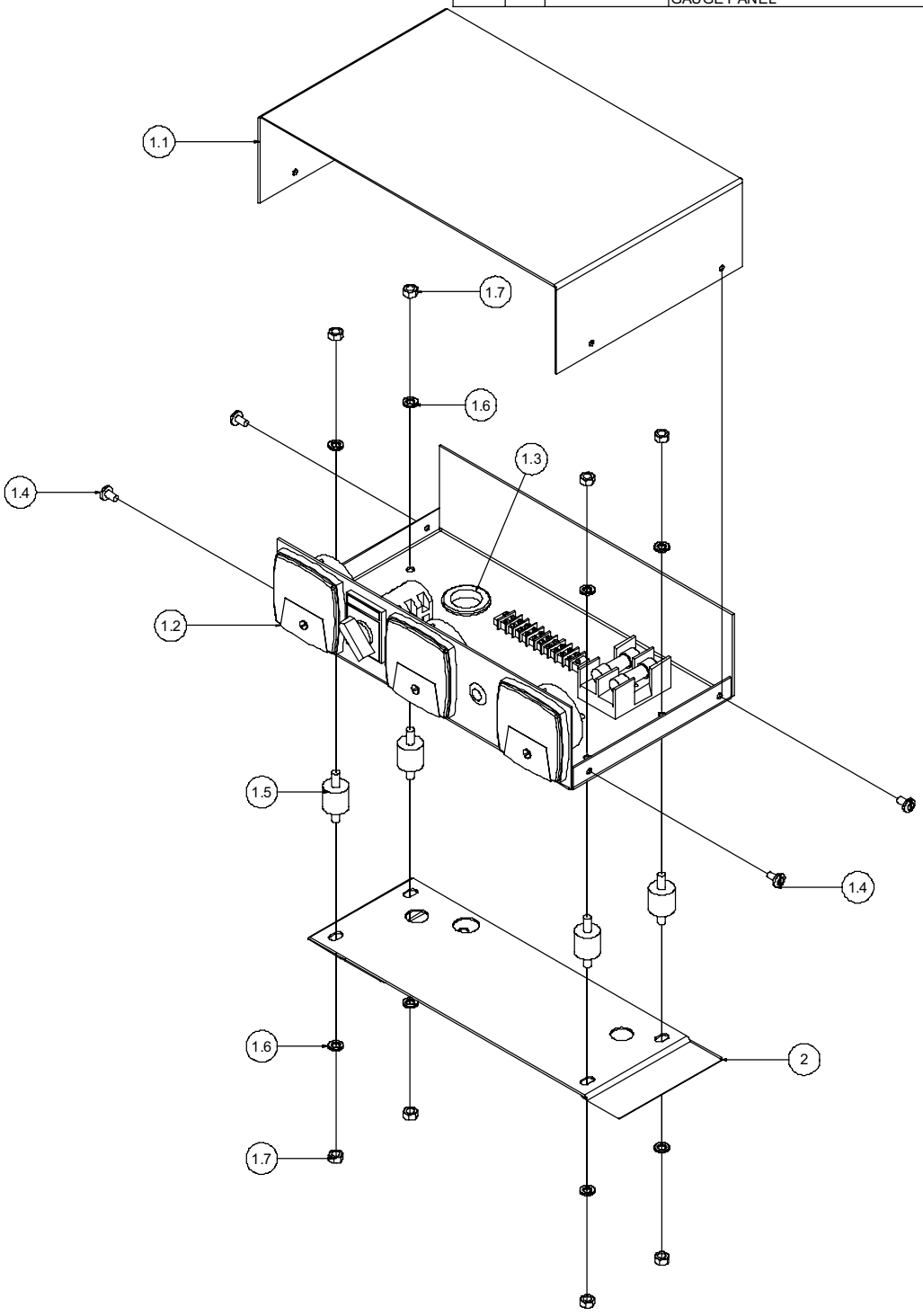
MORSE INDUSTRIAL EQUIPMENT
Mississauga Ontario
Phone: 647-393-1212
Fax: 905-824-9406

TITLE: OPT, FLEX EXH-COUPLER 3" OD X 18" LG

SIZE	DWG NO	REV
C	61093-999	0

SCALE 1=4 SHEET 1 OF 1

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	305696	BOX, NEMA1 W-HZ-VOLT-AMP 40KW
1.1	1	305696A	COVER, NEMA1 BOX
1.2	1	305696B	BASE, NEMA1 BOX
1.3	1	305696C	GROMMIT, 1"
1.4	4	305696D	BOLT, 1/4"-20
1.5	4	305696E	ISOLATOR, 5/16 X 2 1/2 RUBBER
1.6	8	305696F	WASHER, LOC GR5 5/16
1.7	8	305696G	NUT, HEX GR5 5/16-18
2	1	306047	PLATE, MTG 40KW GAUGE BOX TO GEN (REV 1)
3	1	306824	DIAGRAM, WIRING GENERATOR 40 & 60KW GAUGE PANEL



Rev. Num.	Rev. Date	Released For	EN Num.

DRAWN JDC 1/19/2007
CHECKED

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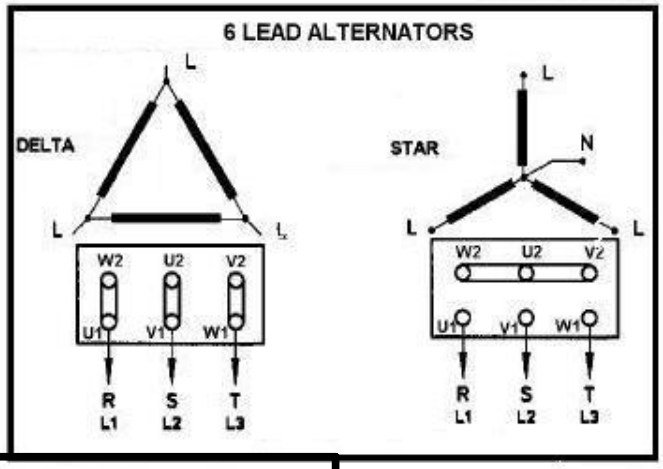
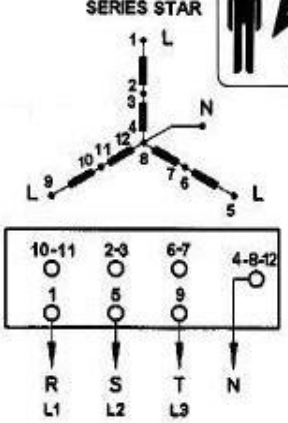
MORSE INDUSTRIAL EQUIPMENT INC.
Mississauga Ontario
Phone: 647-393-1212
Fax: 905-824-9406

TITLE: OPT, NEMA BOX GAUGE BOX - HZ-VOLT-AMP

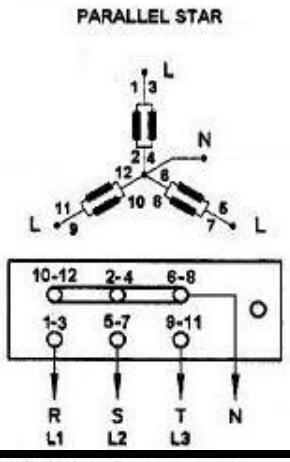
PATH: G:\INVENT\DRS\160K
MATERIAL: AS NOTED
SIZE: D
DWG NO: 61118-999
REV: 0
SCALE: 1=2
SHEET 1 OF 1

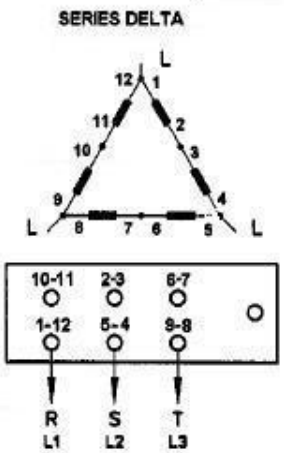
CONNECTIONS FOR 12 LEAD ALTERNATORS

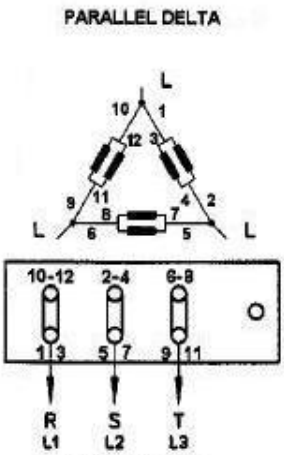




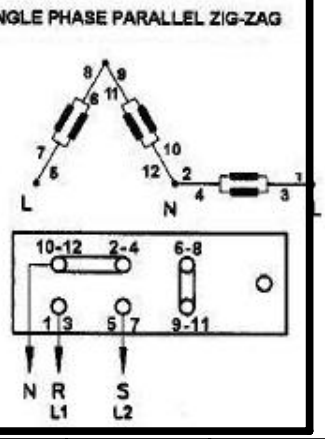
(FACTROY SETTING)
3-PHASE

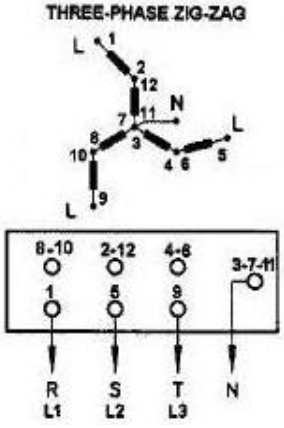


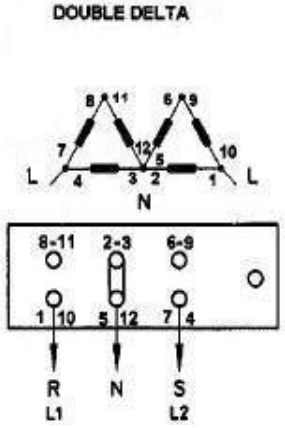




SINGLE PHASE
SETTING

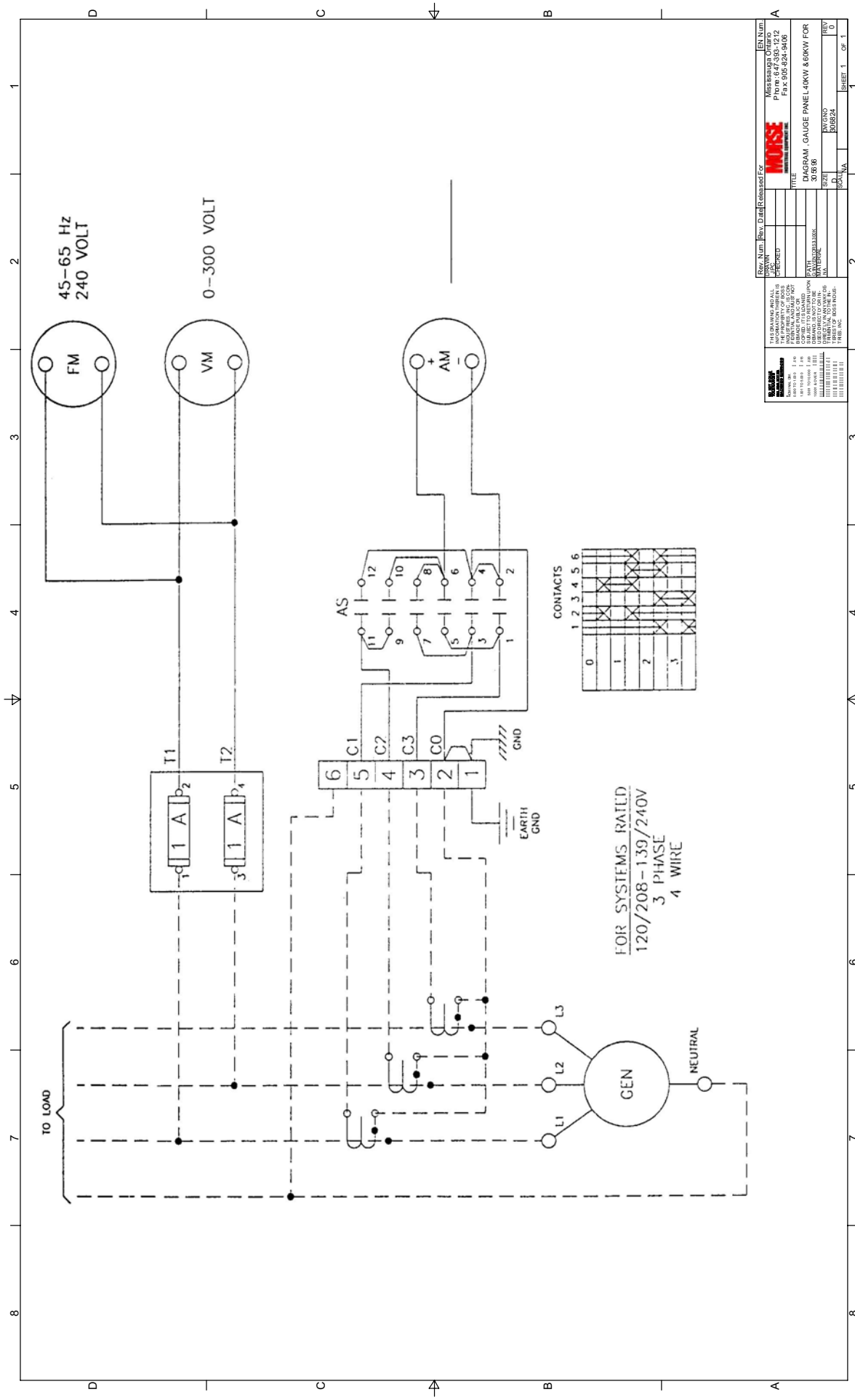






Rev. Num.	Rev. Date	Released For	EN Num.

DRAWN JPC		MORSE INDUSTRIAL EQUIPMENT INC.	Mississauga Ontario Phone: 647-393-1212 Fax: 905-824-9406
CHECKED			
		TITLE	DIAGRAM, WIRING GENERATOR 40 & 60 KW
PATH G:\INVENTOR53\300K			
MATERIAL NA		SIZE A	DWG NO 306823 REV 0
		SCALE NA	SHEET 1 OF 1


45-65 Hz
240 VOLT
0-300 VOLT
FM
VM
AM
T1
T2
1 A
1 A
AS
C1
C2
C3
C0
GND
EARTH GND
CONTACTS
TO LOAD
GEN
L1
L2
L3
NEUTRAL
FOR SYSTEMS RATED
120/208-139/240V
3 PHASE
4 WIRE
DIAGRAM , GAUGE PANEL 40KW &60KW FOR
305696
Mississauga Ontario
Phone: 647-393-1212
Fax: 905 824-9406
DWG NO
305824
REV
0
SHEET 1 OF 1

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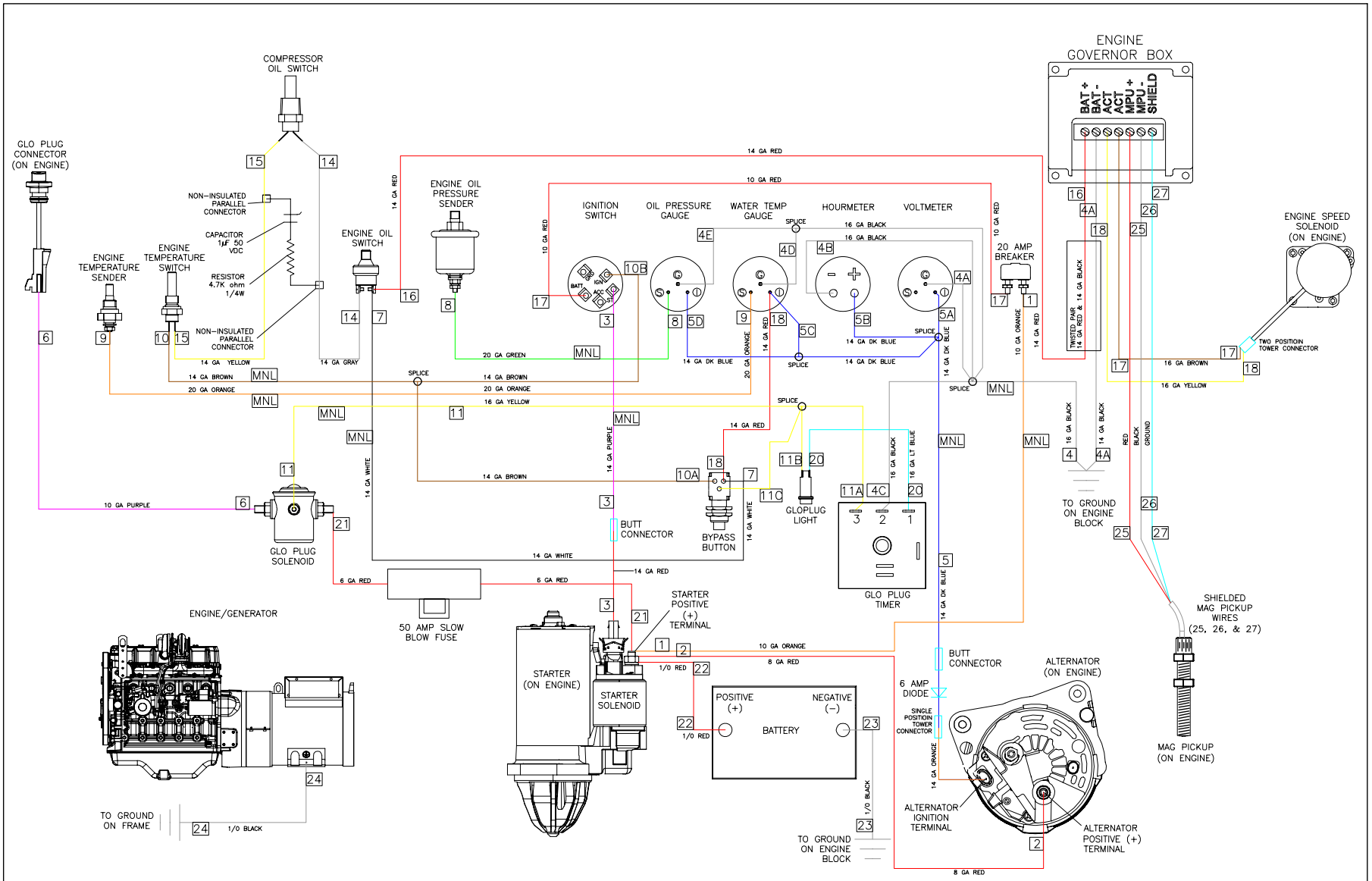

NOTE:

MNL = MATE AND LOCK CONNECTOR CAP/SOCKET CONNECTION BETWEEN INSTRUMENT PANEL AND ENGINE/COMPRESSOR WIRING HARNESSES

DO NOT SCALE

TOLERANCES UNLESS NOTED

MACHINED SURFACES

NOMINAL DIM
0.000 TO 1.000 ±.010
1.001 TO 5.000 ±.015
5.001 TO 10.000 ±.020
10.001 & OVER ±.025

UNMACHINED SURFACES

FRACTIONAL ±1/16
DECIMAL ±.03
ANGULAR ±1°

CHANGE NO.	DATE:	RELEASED FOR	INT
DR. JPC	DATE: 10/31/06		
CK.			
ENG.			
MAT'L			
HARDNESS			
NEXT ASSY			

MORSE INDUSTRIAL EQUIPMENT
Mississauga Ontario
Phone: 647-393-1212
Fax: 905-824-9406

DIAGRAM, WIRING 40-60KW GENSET JD5030

SIZE	CODE IDENT.	DRAWING NO.	REV.
C		306124	2

PATH: G:/Mcad/300K | PLOT SCALE: N/A | SHEET 1 OF 1