Manual Part No. 99904145

IMT CAS2545 Air Compressor

Operation, Maintenance and Spare Parts

Revised 20120308

IOWA MOLD TOOLING CO., INC.
PO Box 189
Garner, IA 50438
Tel: 641-923-3711 FAX: 641-923-2424
Website: http://www.imt.com

Iowa Mold Tooling Co., Inc. is an Oshkosh Corporation company.

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Contents

Revisions

DATE	LOCATION	DESCRIPTION
20070115	99904166, 99903712	ECN 10334 - ADDED TELE TOP INSTALLATION INSTRUCTIONS
	99904093	ADDED PART NUMBERS PER PAGE
20070220	99904093, 99904148, 99904154	ECN 10382 - UPDATE AFTER PILOT BUILD
20070815	77441157	REMOVED TEXT WHICH DID NOT APPLY.
	SPECS	ADDED METRIC UNITS.
	99903573	ADDED HARNESS, RELAY PART NUMBERS.
20071002	99904093	ECN 10382-1 - UPDATE BOM ON COMPRESSOR ASM.
20080318	99904093	ECN 10694 - BOM CORRECTIONS TO ITEMS 30, 85
20090630	99904154	ECN 11062 - ADDED 70397804 COMPRESSOR CLEARANCE DECAL TO DECAL KIT. ADDED CLEARANCE REQUIREMENT IN INSTALLATION SECTION, AND WARNING IN SAFETY SECTION.
20091210	99904093	ECN 11119 – ADDED PNEUMATIC KIT.

SECTION 1

Compressor Introduction

This volume provides information on the installation, operation, and repair of IMT hydraulic air compressors. In addition to reading the manual, it is your responsibility to become familiar with government regulations, hazards, and the specific operation of your equipment. Use caution and common sense while operating and maintaining the equipment and follow all safety procedures and regulations. Treat this equipment with respect and service it regularly.

MODIFICATIONS

Modifications to your equipment must be performed with IMT approved accessories, parts and optional equipment. If in doubt, contact IMT prior to making any modifications. DO NOT alter or modify any safety device! All safety devices must be inspected, tested and maintained in proper working condition.

Decals regarding safety and operation are considered safety equipment, and must be kept clean and legible.

The equipment owner and/or designated employee is responsible for informing all operators, maintenance personnel, and others involved in equipment operation about the safe operation and maintenance of the equipment. If questions arise concerning safe operation, contact IMT or your IMT distributor for clarification.

WARRANTY

Warranty of this unit will be void on any part of the unit subjected to misuse due to overloading, abuse, lack of maintenance and unauthorized modifications. No warranty - verbal, written or implied - other than the official, published IMT new machinery and equipment warranty will be valid with this unit.

NOTICE TO THE OWNER / USER

If your equipment is involved in a property damage accident, contact your IMT distributor immediately and provide them with the details of the accident and the serial number of the equipment. If an accident involves personal injury, immediately notify your distributor and IMT Technical Support at:

IOWA MOLD TOOLING CO., INC.
500 HWY 18 WEST
GARNER, IA 50438
641 - 923 - 3711

WARNING

READ YOUR MANUAL!! FAILURE TO READ, UNDERSTAND AND FOLLOW ANY SAFETY PROCEDURES APPLICABLE TO YOUR EQUIPMENT MAY RESULT IN EQUIPMENT DAMAGE, SERIOUS INJURY, OR DEATH.

MANUAL STRUCTURE

Throughout this manual, three means are used to draw the attention of personnel. They are NOTEs, CAUTIONs and WARNINGs and are defined as follows:

NOTE

A NOTE is used to either convey additional information or to provide further emphasis for a previous point.

CAUTION

A CAUTION is used when there is the very strong possibility of damage to the equipment or premature equipment failure.

WARNING

A WARNING is used when there is the potential for personal injury or death.

Compressor Safety

AIR COMPRESSOR SAFETY PRECAUTIONS

Safety is basically common sense. While there are standard safety rules, each situation has its own peculiarities that cannot always be covered by rules. Through experience and common sense, you are in the best position to ensure your safety. Lack of attention to safety can result in accidents, personal injury, reduction of efficiency and worst of all, loss of life. Watch for safety hazards. Correct them promptly. Use the following safety precautions as a general guide to safe operation:

WARNING

All units are shipped with a detailed Operators and Parts Manual. This Manual contains vital information for the safe use and effective operation of this unit. Carefully read the Operators Manual before starting the unit. Failure to adhere to the instructions could result in SERIOUS BODILY INJURY or PROPERTY DAMAGE.

- Make sure all protective covers and guards are in place, and that the canopy / doors are closed during operation.
- Be very cautious in using this machine in flammable gas risk areas. Use in these areas may require additional safety equipment such as gas detectors, exhaust spark arrestors and shut-off valves, depending on local regulations of the level of risk involved.
- Relieve pressure from the entire system before attempting to service the compressor or removing any compressor parts.
- Do not attempt to service any part while machine is operating.
- Ensure adequate ventilation when releasing discharge air into a confined space.
- For proper airflow, maintain a minimum of 8" of clearance on each end of the compressor. If installing the compressor with a hydraulic aftercooler, keep 10" minimum between the compressor and aftercooler, and maintain 8" on each end of the compressor-cooler combination.

WARNING

Check the compressor sump oil level only when the compressor is not operating and system is completely relieved of pressure. Open service valve to ensure relief of system air pressure when performing maintenance on compressor air/oil system.

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

- Do not operate the compressor at pressure or speed in excess of its rating as indicated in “Compressor Specifications”.

- Periodically check all safety devices for proper operation.
- Do not play with compressed air. Pressurized air can cause serious injury. Avoid bodily contact with compressed air.
- Exercise cleanliness during maintenance and when making repairs. Keep dirt away from parts by covering parts and exposed openings.

DANGER

Do NOT use IMT compressor systems to provide breathing air. Such usage, whether supplied immediately from the compressor source, or supplied to breathing tanks for subsequent use, can cause serious bodily injury. Air discharged from the compressor may contain carbon monoxide or other contaminants.

IMT disclaims any and all liabilities for damage or loss due to personal injuries, including death, and/or property damage including consequential damages from using any IMT compressors for breathing air.

- Do not disconnect or bypass safety circuit system.
- Do not install safety devices other than authorized IMT replacement devices.
- Close all openings and replace all covers and guards before operating compressor unit.
- Do not leave tools, rags, or loose parts on the compressor or drive parts.
- Do not use flammable solvents for cleaning parts.
- Keep combustibles out of and away from the compressor and any associated enclosures.
- Use hearing protection around the compressor. The compressor produces loud noises which, over extended exposure, can cause hearing loss.

The owner, lessor, or operator of the compressor are hereby notified and forewarned that any failure to observe these safety precautions may result in damage or injury.

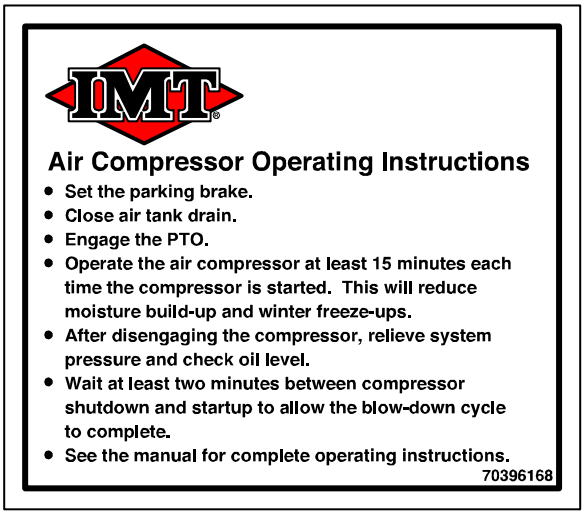
IMT expressly disclaims responsibility or liability for any injury or damage caused by failure to observe these specified precautions or by failure to exercise that ordinary caution and due care required when operating or handling the compressor, even though not expressly specified above.

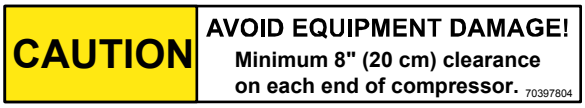
Safety Decals

A compliment of warning decals are supplied with each unit. These decals must be affixed to the unit after it has been painted, trimmed, and undercoated, etc. and prior to being put into service. The decal placement should ensure decals are clearly visible to the user and service personnel.

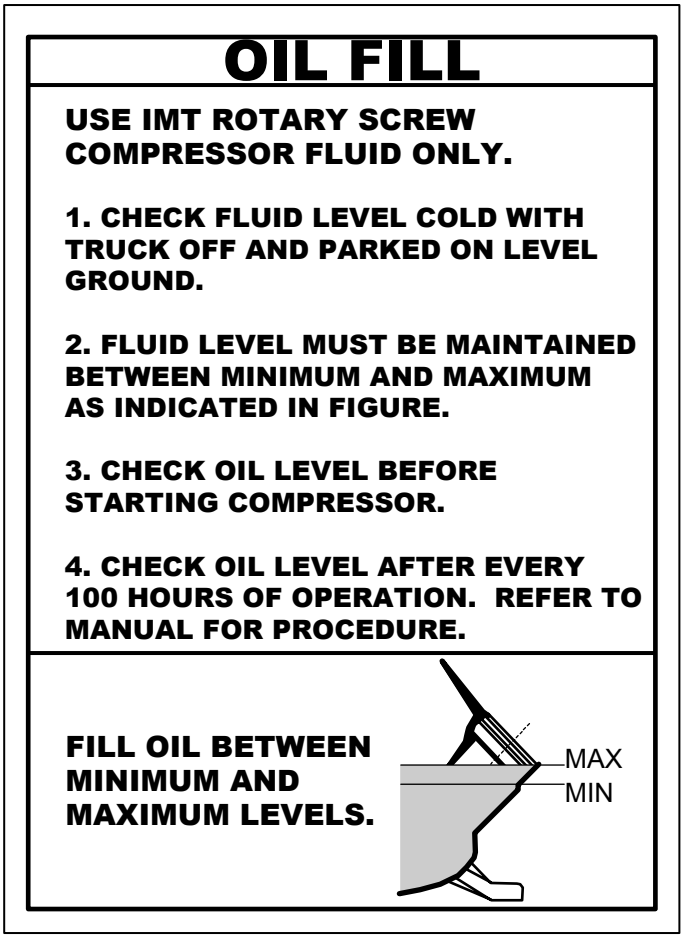
All decals for the IMT CAS2545 Air Compressor can be ordered on a decal sheet, part number 95720760.

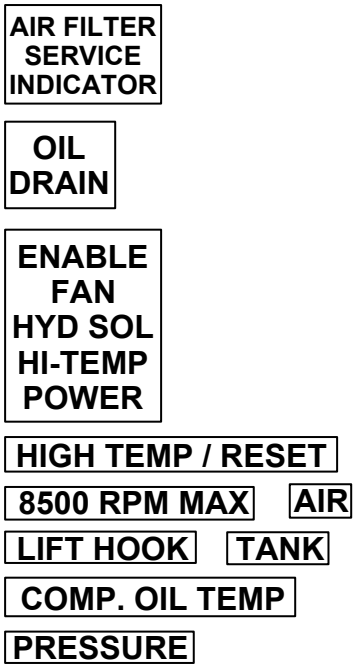
Warning & Caution Decals





Instruction Decals





In addition to these instruction decals, the CAS2545 air compressor is marked with a serial number tag at the bottom of the back of the unit.

CAS2545 System Description & Specifications

The IMT CAS2545 air compressor is a single-stage, air-cooled, rotary screw, pressure lubricated, hydraulically driven unit designed for mobile or industrial applications. The compressor provides high pressure air for use in air tools, tire service trucks, and other mobile or stationary compressed air needs.

The compressor includes an oil-flooded, rotary screw-type design, a compressor inlet system, a capacity control system, a lubricating oil system, and a discharge system in addition to basic instrumentation. The instrumentation includes a temperature gauge, an hourmeter, a hi-temp warning indicator, an oil level sightglass, and an air restriction indicator. All instrumentation is on the front panel of the compressor. The air delivery rate of the unit is 45 cfm at 100 psi.

CAUTION

Operating the compressor at pressures above 150 psi will shorten the service life and void the product warranty.

The unit has openings for cooling air intake on each end. Free airflow on all sides is desirable. The front and rear of the compressor cannot be blocked.

CAS2545 Specifications		
	Units (English)	**Units (Metric)**
Power Source	Hydraulic Motor	Hydraulic Motor
Dimensions	20" W x 33" L x 24.5" H	508 mm W x 838 mm L x 622 mm H
Delivery	See charts.	See charts.
Cooling	Oil cooler	Oil cooler
Fan Diameter	16"	406 mm
Operating Speed	See charts.	See ***charts***.
Lubrication	Oil pump	Oil pump
Oil Capacity	3.75 qts	3.5 L
Maximum Compressor Oil Temperature	240°F	116°C
Maximum Hydraulic Oil Temperature	180°F	82°C
Weight	290 lb wet	132 Kg wet
Normal Hydraulic Flow	See ***charts***.	See ***charts***.
Normal Operating Pressure	1850 psi	128 bar
Maximum Pressure	2400 psi	165 bar
Ambient Operating Temperature	0°F to 120°F	-18°C to 49°C
* Add 2-5/8" (67 mm) to height for air filter cap.		
Specifications subject to change without prior notice.		

CAS2545 Performance Data (English)

Flow (cfm) @ 100 psi	25	30	35	40	45
Input Power (hp)	6.3	7.6	8.9	10.2	11.7
Compressor Speed (rpm)	4960	5747	6064	7083	7906
Hydraulic Motor Speed (rpm)	1905	2207	2329	2720	3036
Hydraulic Motor Flow (gpm)	6	7	8	9	10
Hydraulic Motor Pressure (psi)	1800	1850	1900	1950	2000
Hydraulic Motor Torque (ft-lb)	17.4	18.0	20.0	19.8	20.2

Flow (cfm) @ 125 psi	25	30	35	40	45
Input Power (hp)	7.2	8.4	11.3	12.5	15.8
Compressor Speed (rpm)	4929	5717	7074	7882	8437
Hydraulic Motor Speed (rpm)	1893	2196	2717	3027	3240
Hydraulic Motor Flow (gpm)	6	7	9	10	11
Hydraulic Motor Pressure (psi)	2050	2050	2150	2150	2200
Hydraulic Motor Torque (ft-lb)	19.9	20.0	21.8	21.8	22.9

Flow (cfm) @ 150 psi	25	30	35	40
Input Power (hp)	9.2	10.5	12.1	15.3
Compressor Speed (rpm)	5700	6028	7063	8413
Hydraulic Motor Speed (rpm)	2189	2315	2713	3231
Hydraulic Motor Flow (gpm)	7	8	9	11
Hydraulic Motor Pressure (psi)	2250	2250	2300	2381
Hydraulic Motor Torque (ft-lb)	21.4	23.8	23.4	24.8

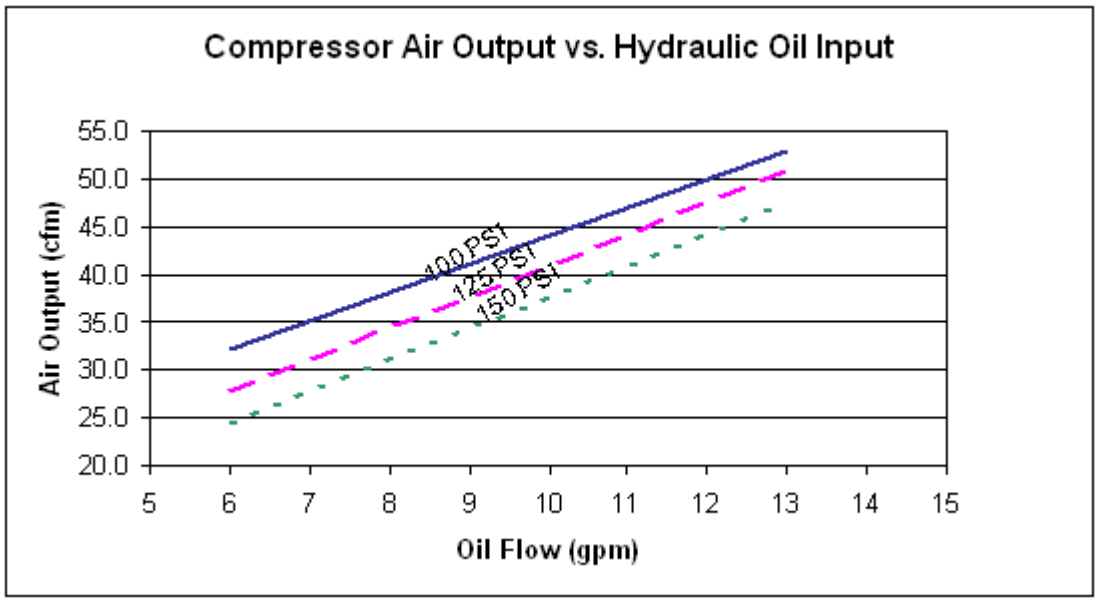
CAS2545 Performance Data (Metric)

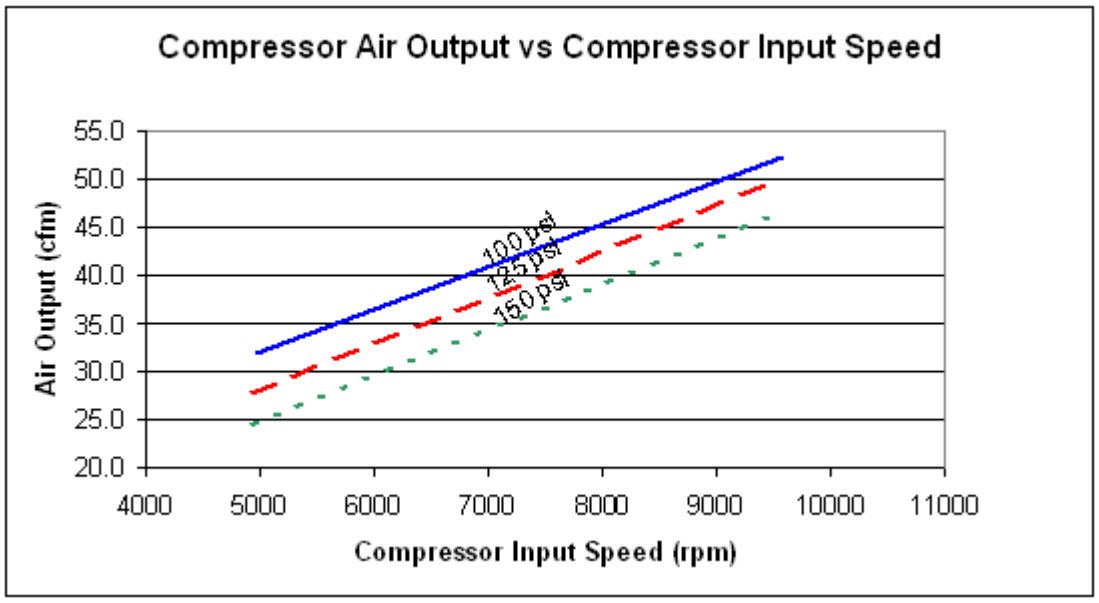
Flow (LPM) @ 6.9 bar	708	850	991	1133	1274
Input Power (kw)	4.7	5.7	6.6	7.6	8.7
Compressor Speed (rpm)	4960	5747	6064	7083	7906
Hydraulic Motor Speed (rpm)	1905	2207	2329	2720	3036
Hydraulic Motor Flow (lpm)	22.7	26.5	30.3	34	37.9
Hydraulic Motor Pressure (bar)	124	127.6	131	134.5	137.9
Hydraulic Motor Torque (Nm)	23.6	24.4	27.1	26.8	27.4

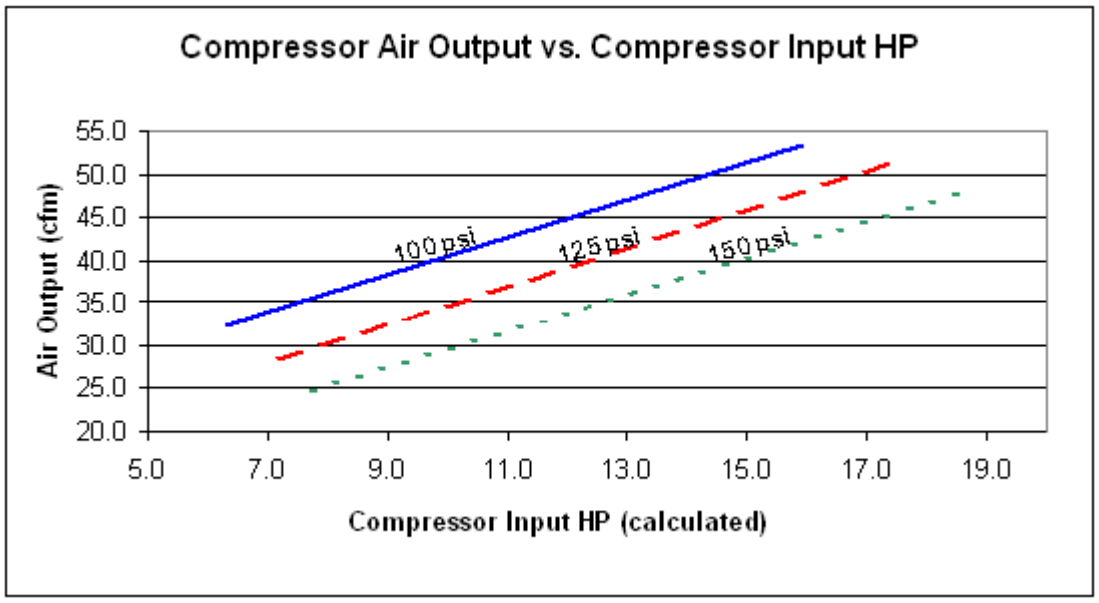
Flow (LPM) @ 8.6 bar	708	850	991	1133	1274
Input Power (kw)	5.4	6.3	8.4	9.3	11.8
Compressor Speed (rpm)	4929	5717	7074	7882	8437
Hydraulic Motor Speed (rpm)	1893	2196	2717	3027	3240
Hydraulic Motor Flow (lpm)	22.7	26.5	34.1	37.9	41.6
Hydraulic Motor Pressure (bar)	141.3	141.3	148.2	148.2	151.7
Hydraulic Motor Torque (Nm)	27	27.1	29.6	29.6	31

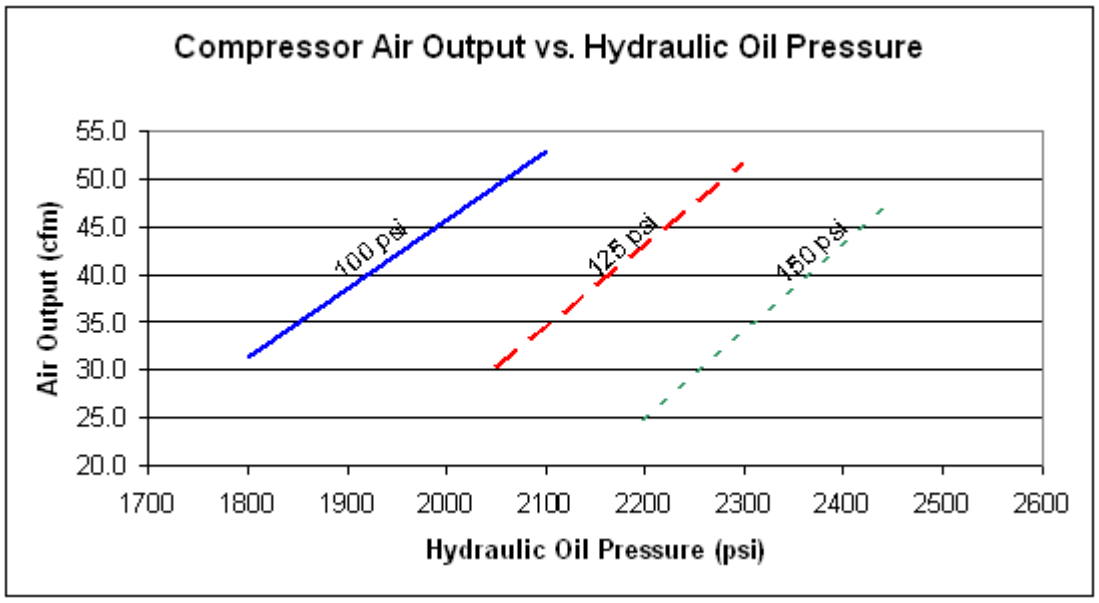
Flow (lpm) @ 10.3 bar	708	850	991	1133
Input Power (kw)	6.7	7.8	9	11.4
Compressor Speed (rpm)	5700	6028	7063	8413
Hydraulic Motor Speed (rpm)	2189	2315	2713	3231
Hydraulic Motor Flow (lpm)	26.5	30.3	34	41.6
Hydraulic Motor Pressure (bar)	155.1	155.1	158.6	164.1
Hydraulic Motor Torque (Nm)	29	32.3	31.7	33.6

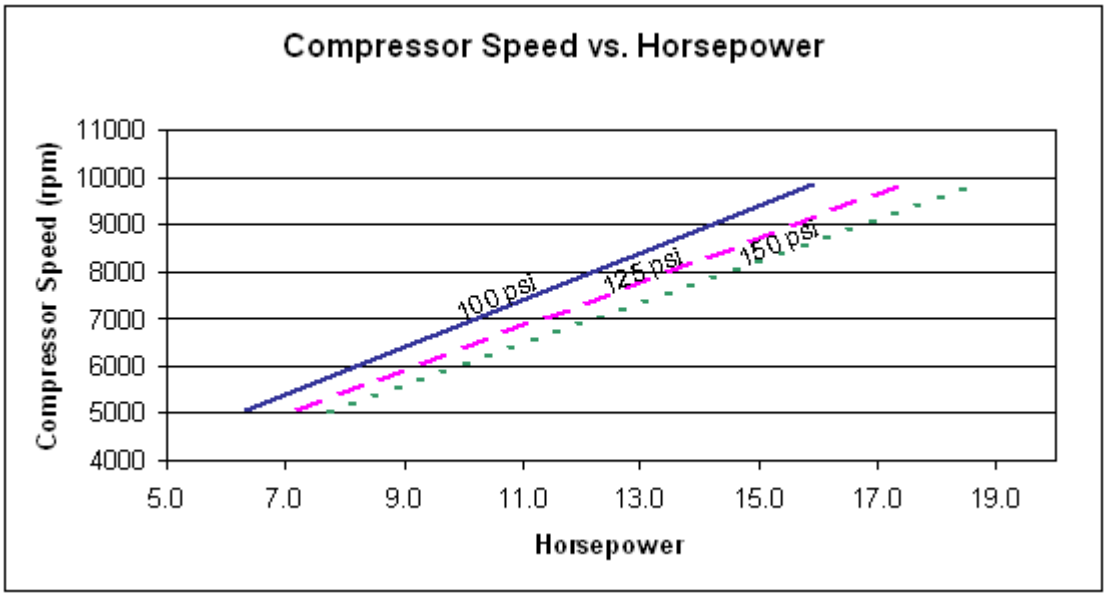
CAS2545 Performance Charts



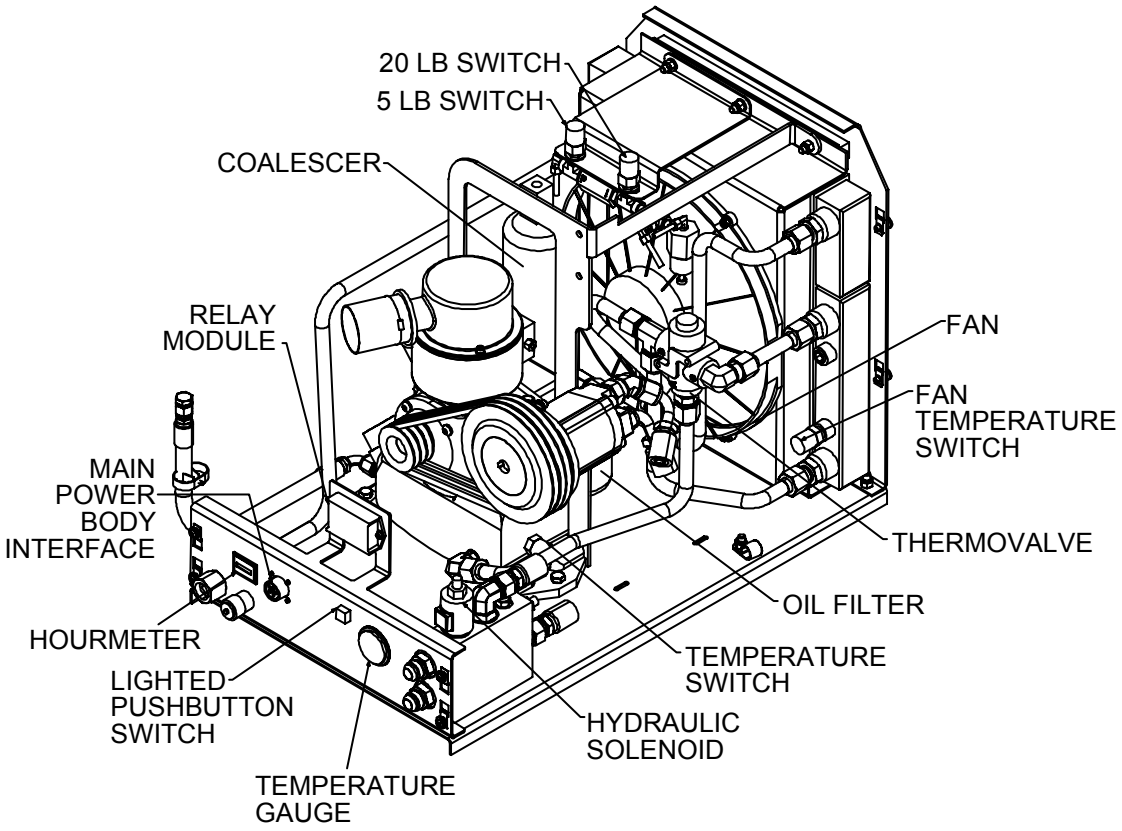



Compressor Air Output vs. Compressor Input HP
Air Output (cfm)
55.0
50.0
45.0
40.0
35.0
30.0
25.0
20.0
100 psi
125 psi
150 psi
5.0
7.0
9.0
11.0
13.0
15.0
17.0
19.0
Compressor Input HP (calculated)


Compressor Air Output vs. Hydraulic Oil Pressure
Air Output (cfm)
55.0
50.0
45.0
40.0
35.0
30.0
25.0
20.0
100 psi
125 psi
150 psi
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
Hydraulic Oil Pressure (psi)


Compressor Speed vs. Horsepower
Compressor Speed (rpm)
11000
10000
9000
8000
7000
6000
5000
4000
5.0
7.0
9.0
11.0
13.0
15.0
17.0
19.0
Horsepower
100 psi
125 psi
150 psi

CAS2545 Component Identification



SECTION 2

Installation

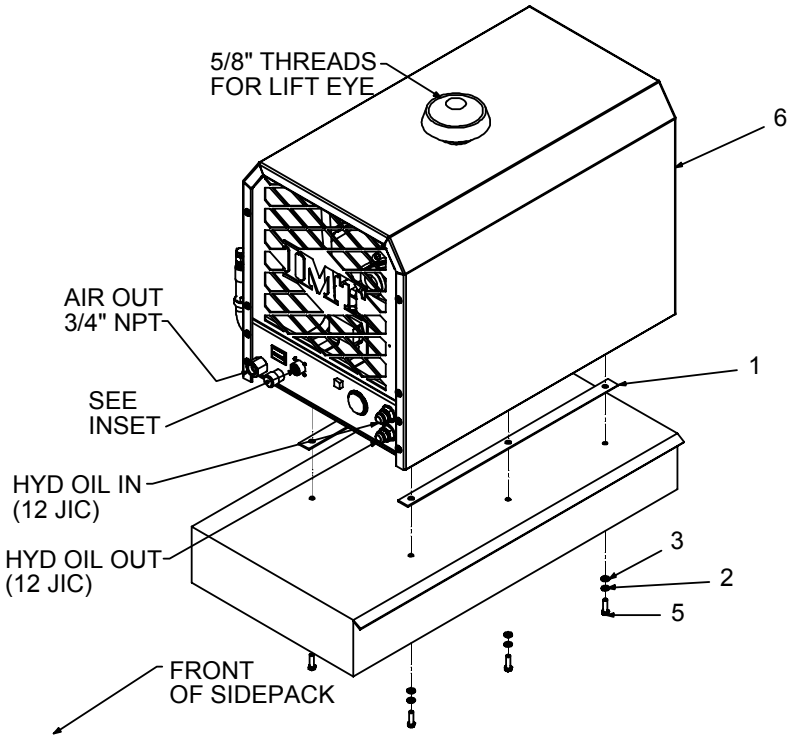
Compressor Installation Notes

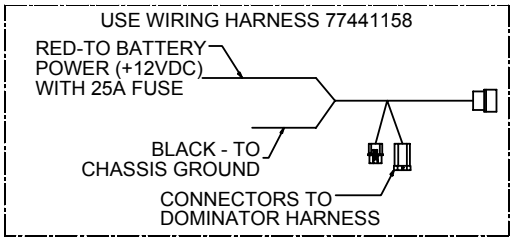
Satisfactory installation depends upon the ability of the installer. Refer to the installation drawing below for the foundation plan for the IMT CAS2545 air compressor installation. When installing, choose a location that will permit top access to service the unit. The required clearance is 28-inches. Compressor performance is optimum with a level installation. The maximum tilt allowed is 20°. You do not need to use isolators with installation - the gasket material is sufficient.

Use hydraulic connections and hoses of proper size. Smaller hoses and fittings will reduce compressor performance. IMT recommends the following:

- Pressure Hose: 12 (3/4") rated at 3125 PSI (100R2)
- Return Hose: 12 (3/4") rated at 300 PSI (100R4)
- Air Discharge Hose: 3/4" air hose rated at 250 psi and 185° F

Compressor Installation (99904153)





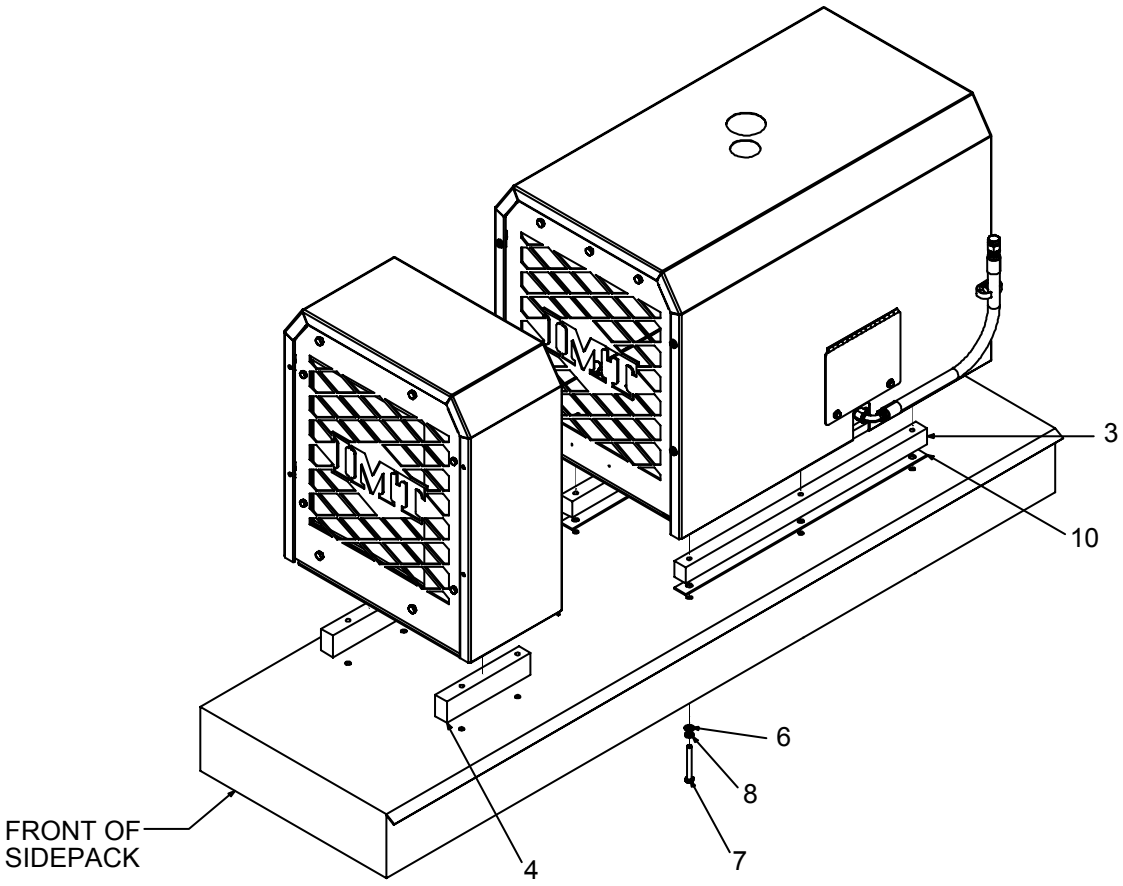
INSET DRAWING

NOTE:

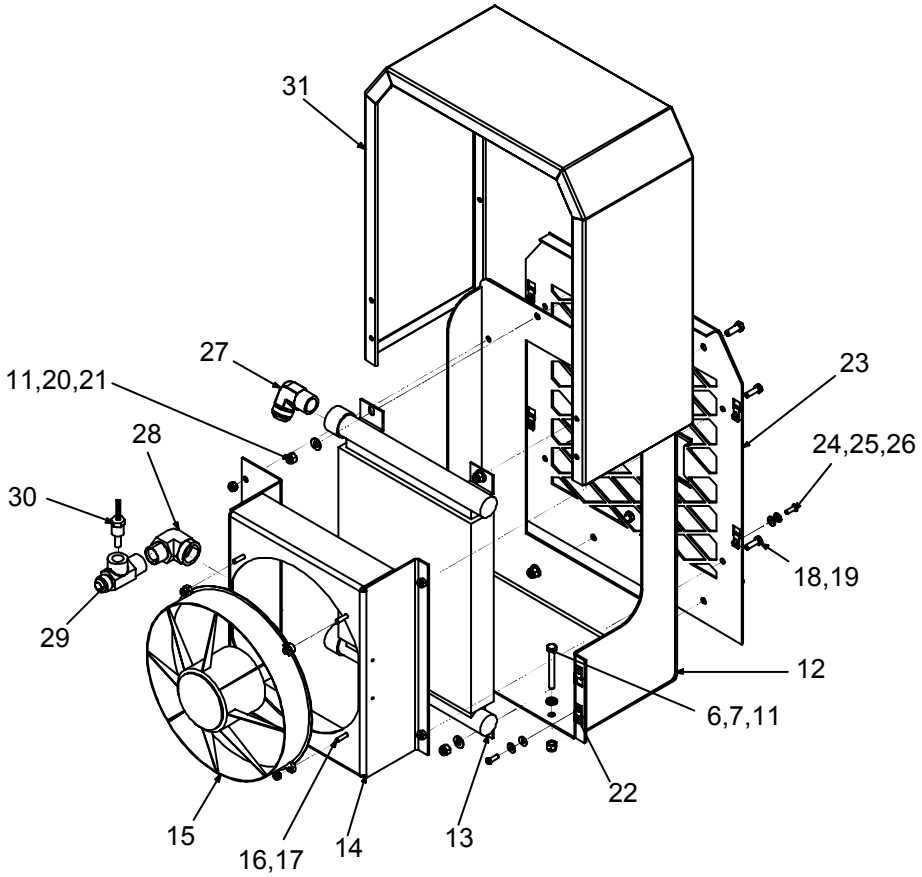
1 MAINTAIN AT LEAST 8" OF CLEARANCE ON EACH END OF THE COMPRESSOR. WHEN INSTALLING IN CONJUNCTION WITH A HYDRAULIC AFTER-COOLER, KEEP AT LEAST 10" BETWEEN THE COOLER AND THE COMPRESSOR, WHILE MAINTAINING AT LEAST 8" ON EACH END OF THE COMPRESSOR-COOLER COMBINATION.

99904153 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	76396381	GASKET-MOUNT COMPRESSOR	2
2.	72063051	WASHER .38 LOCK	6
3.	76392821	WASHER-BONDED PLTD .38	6
5.	72060047	CAP SCR .38-16X 1.25 HH GR5 Z	6
6.	99904093	COMPRESSOR ASSEMBLY	1
NEW 20061129			

Compressor Installation, Telescopic Top (99904166)



99904166-1 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
3.	60131197	SPACER-COMPRESSOR	2
4.	60131198	SPACER-AFTER COOLER	2
6.	76392821	WASHER-BONDED PLTD .38	6
7.	72060054	CAP SCR .38-16X 3.00 HH GR5 Z	9
8.	72063051	WASHER .38 LOCK	6
10.	76396381	GASKET-MOUNT COMPRESSOR	2
NEW 20070115			



99904166-2 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
6.	76392821	WASHER-BONDED PLTD .38	6
9.	72060053	CAP SCR .38-16X 2.75 HH GR5	4
11.	72062103	NUT .38-16 HEX NYLOCK	8
12.	52718363	MOUNT-COOLER HYD	1
13.	73052133	COOLER-HYDRAULIC	1
14.	60125752	SHROUD-COOLER HYD AUX SIDEPACK	1
15.	70733880	FAN-12" PUSHER	1
16.	72060004	CAP SCR .25-20X 1.00 HH GR5 Z	4
17.	72062104	NUT .25-20 HEX NYLOCK	4
18.	72060025	CAP SCR .31-18X 1.00 HH GR5 Z	4
19.	72062109	NUT .31-18 HEX NYLOCK	4
20.	72060046	CAP SCR .38-16X 1.00 HH GR5 Z	4
21.	72063003	WASHER .38 FLAT	4
22.	72062301	NUT-TINNERMAN 1/4-20UNC	8
23.	60125785	GRILLE-COOLER HYDRAULIC	1
24.	72063228	WASHER-NYLON .25 idX .625 od X .062 thk	8
25.	72063001	WASHER .25 FLAT	8
26.	72601652	SCR-MACH .25-20X .75TRHTORXSS	8
27.	72531430	ELBOW-MPT/90/M JIC 1.00 16	1
28.	72531134	ELBOW-STREET STL 1.00 X 90 DEG	1

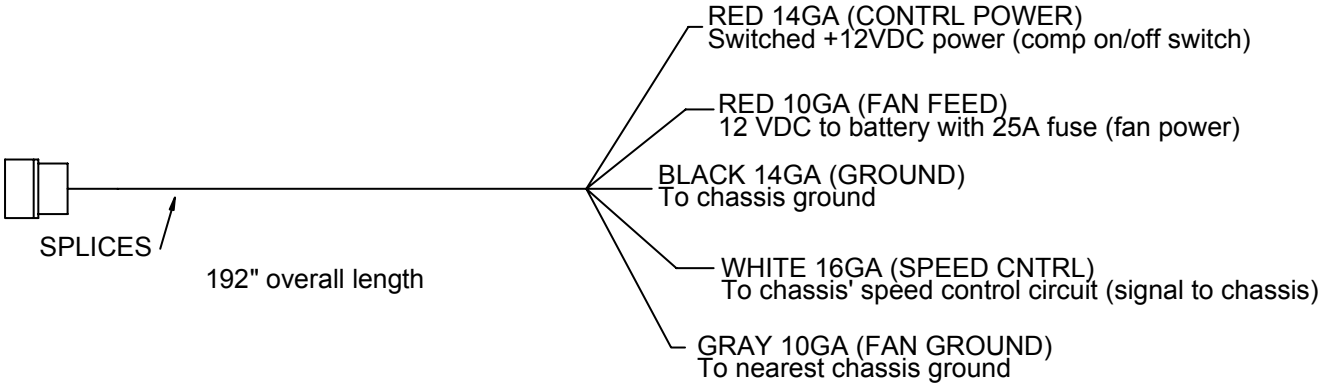
99904166-2 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
29.	72534390	TEE-STL JIC/FPT/MPT 12 8 16	1
30.	77041659	SWITCH-TEMP FAN NO 120 DEGREES	1
31.	60125784	COVER-COOLER HYD	1
NEW 20070115			

Electrical Installation

The IMT CAS2545 air compressor is powered with 12VDC power supplied through a wiring harness which is included with the compressor. If the compressor comes with an IMT service truck package with a crane, the unit will be wired and ready to use and will be controlled through the crane remote. If the compressor comes with an IMT service truck without a crane, the compressor will be wired through the truck and will be controlled with a switch. If the compressor is sold individually, it is up to the customer or his agent to connect the wiring harness appropriately. Use the wiring diagram provided in the parts section to connect the power, ground, and other wires.

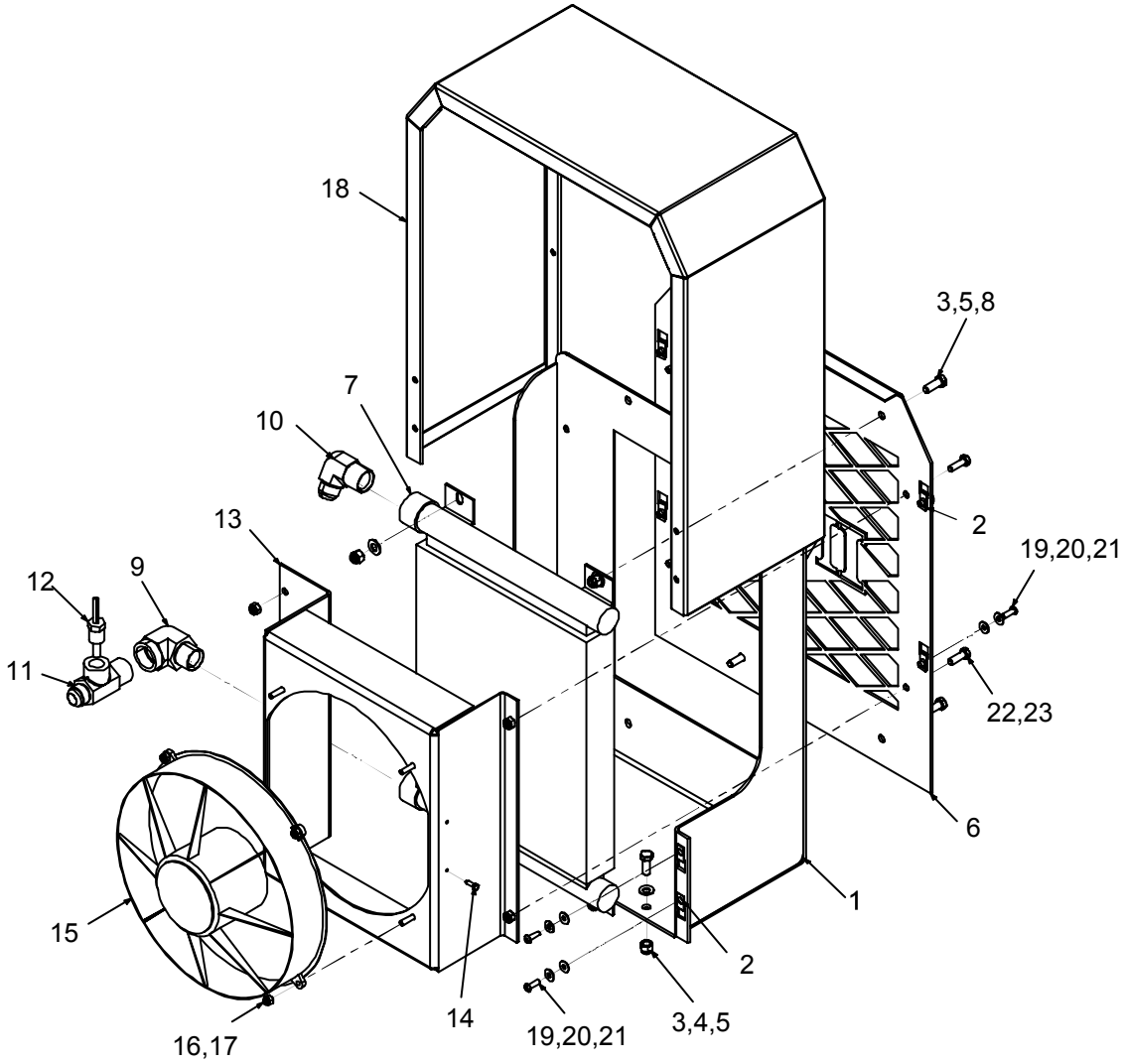
The compressor is protected from overheating with a thermal-type discharge oil temperature switch. The switch is factory-set to shut down the compressor at 240° F.

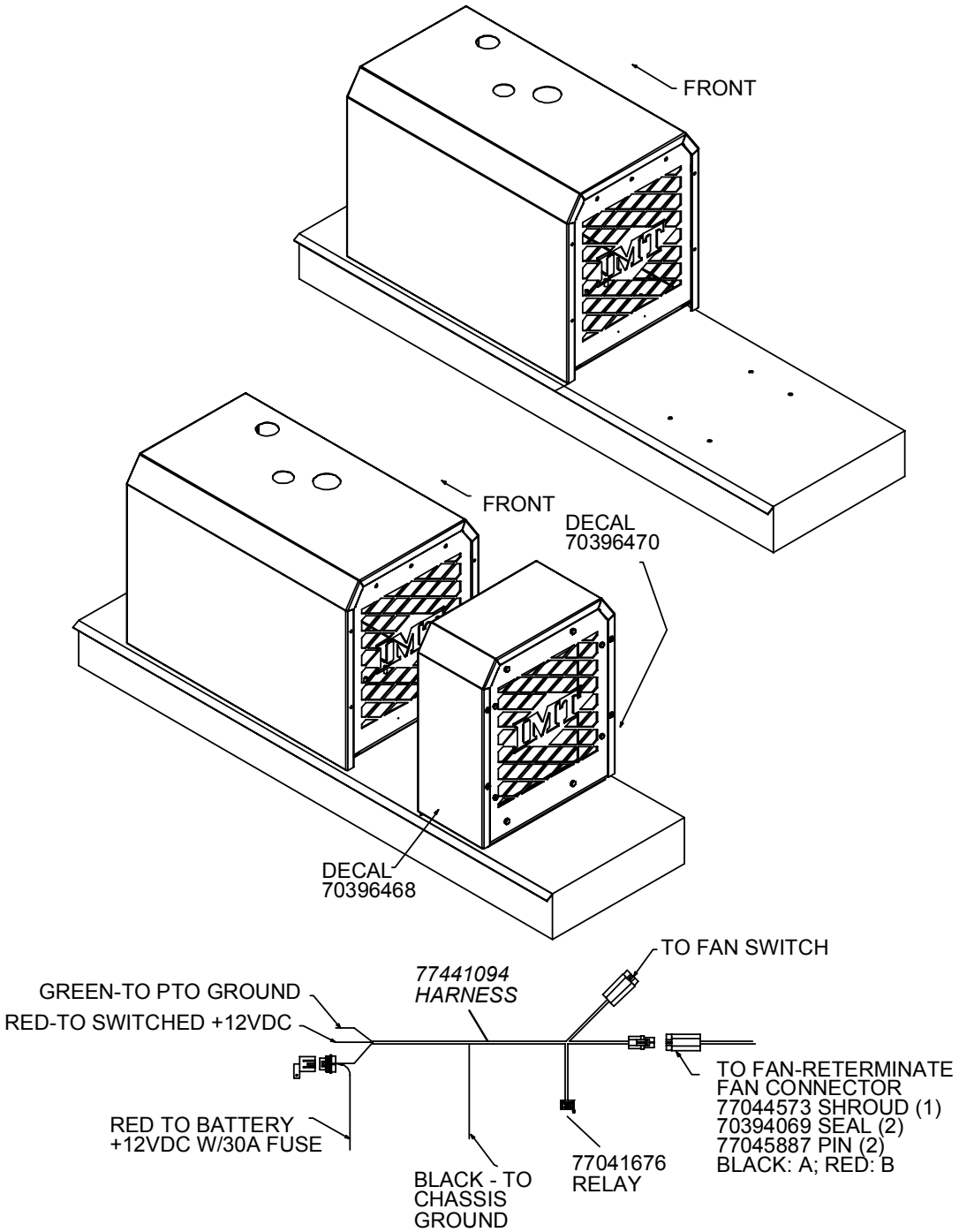
Electrical Installation (Non-IMT Application) (77441157)



NEW 20050127

Cooler Installation (99903573)





99903573 PARTS			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	52718363	MOUNT-COOLER HYD	1
2.	72062301	NUT-TINNERMAN 1/4-20 UNC	8
3.	72062103	NUT 3/8-16 HEX NYLOC	8
4.	76392821	WASHER-BONDED PLT 3/8	4
5.	72060046	CAP SCR 3/8-16X1 HHGR5Z (WAS 8)	4
6.	60125785	HYD COOLER GRILL	1
7.	73052133	HYDRAULIC COOLER	1
8.	72063003	WASHER 3/8 FLAT	4

99903573 PARTS			
ITEM	PART #	DESCRIPTION	QUANTITY
9.	72531134	ELBOW STREET STL 1X90°	1
10.	72531430	ELBOW MPT/90/JIC 1.00 16 (WAS 72534342)	1
11.	72534390	TEE #12JIC #8FPT #16MPT STL	1
12.	77041659	TEMP SWITCH, FAN	1
13.	60125752	COOLER SHROUD, HYD AUX SIDEPACK	1
14.	72061090	SCR-SELF TAP #12-24X.62 PL HEX WH	1
15.	70733880	FAN	1
16.	72060004	CAP SCR 1/4-20X1 HHGR5Z	4
17.	72062104	NUT 1/4-20 HEX NYLOC	4
18.	60125784	HYD COOLER COVER	1
19.	72063228	WASHER, NYLOC 1/4X5/8X1/16	8
20.	72063001	WASHER 1/4 FLAT	8
21.	72601652	SCR-MACH 1/4-20X3/4 TRHTORXSS	8
22.	72060025	CAP SCR 5/16-18X1 HHGR5Z	4
23.	72062109	NUT 5/16-18 HEX NYLOC	4
24.	77441094	HARNESS-AUX HYD COOLER	1
25.	72060047	CAP SCR 3/8-16X1.25 HHGR5Z	4

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NOTE:
When the compressor is installed with a hydraulic after-cooler, the minimum space between the cooler and the compressor must be 10".

Compressor Space Requirements

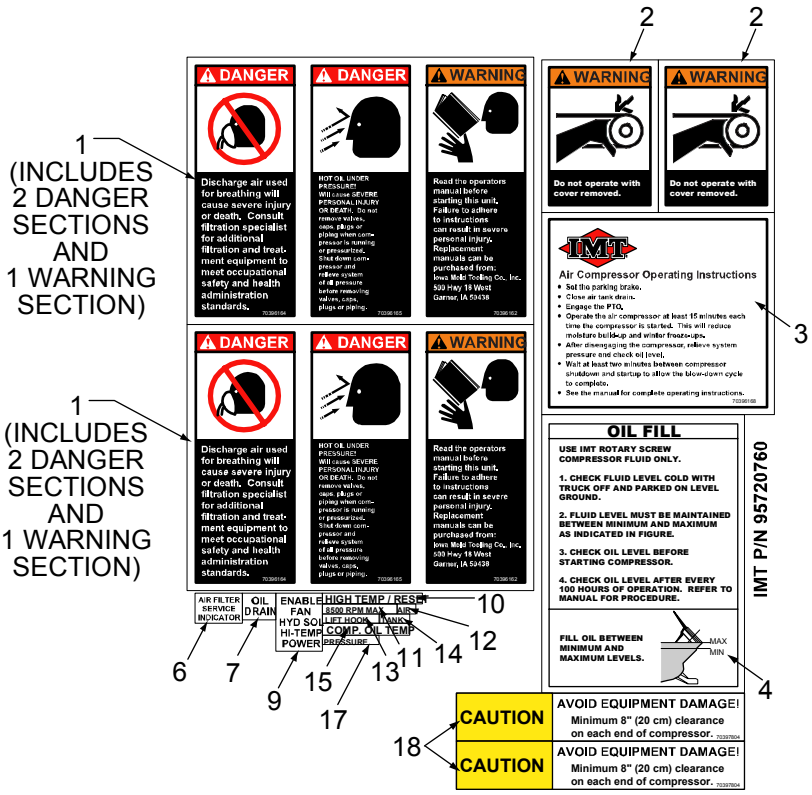
CAUTION

Maintain a minimum of 8" clearance on each end of the compressor for proper airflow. If installing the compressor with a hydraulic aftercooler, keep 10" minimum between the compressor and cooler, while still maintaining the 8" of space on each end of the compressor - cooler combination. Failure to follow the recommended installation guidelines will void the warranty on the compressor.

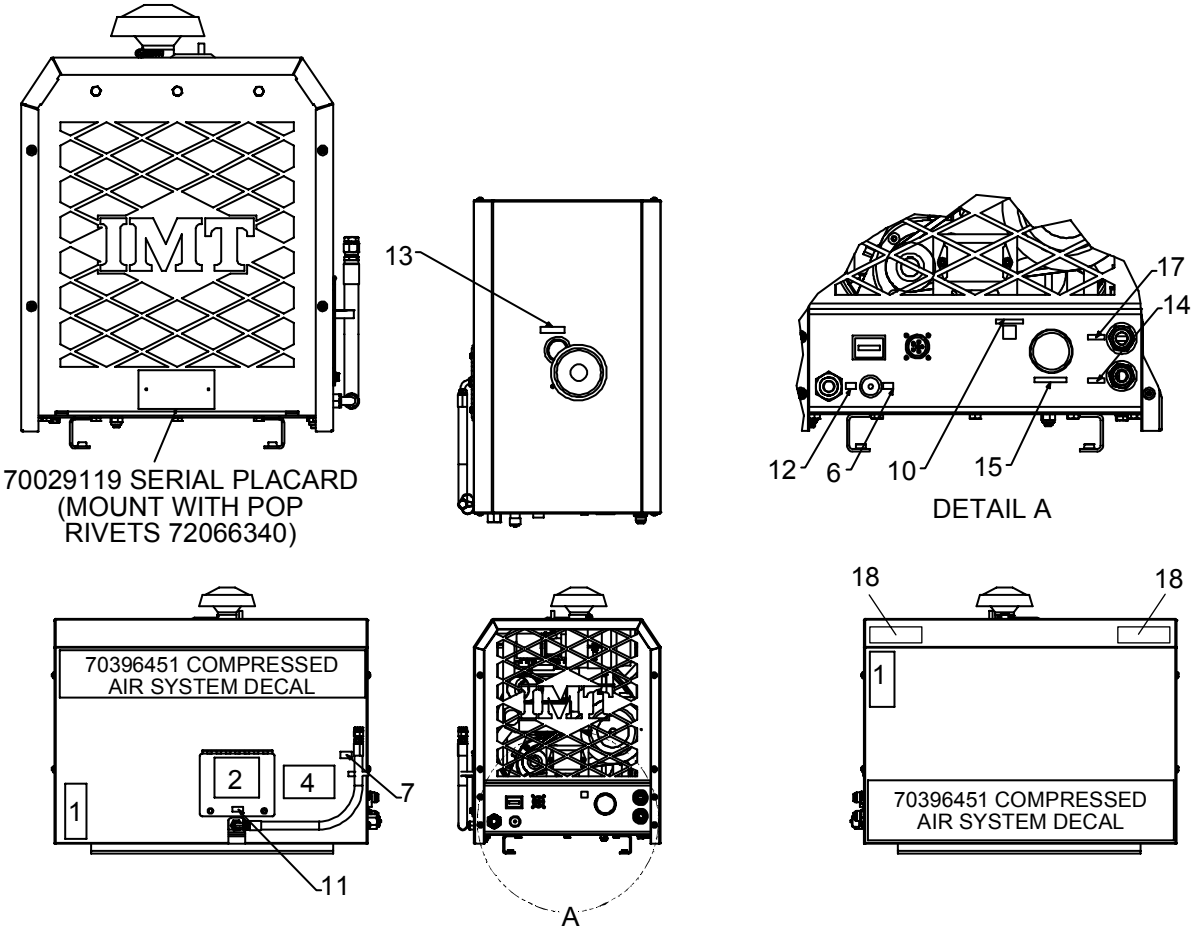
Decal Installation (99904154)

All decals for the CAS2545 compressor are available on a single sheet of decals, part number 95720760. See the decal sheet illustration for decal item numbers. These item numbers are referred to in the placement instructions.

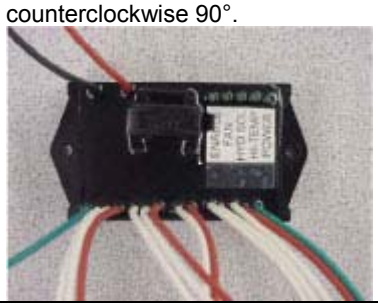
Decal Item Numbers



Decal Placement



Placement Locations for Decals Not Shown on Compressor

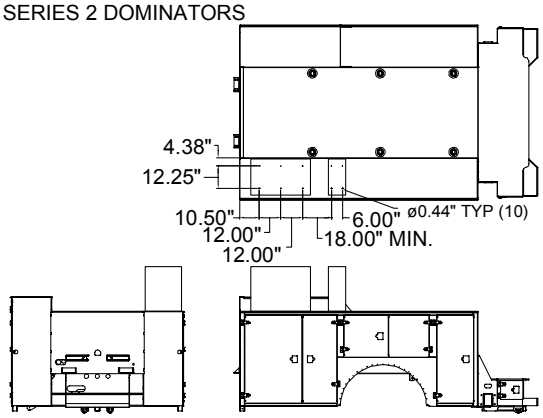
ITEM	LOCATION
2	Place 1 on 52718087 (lift station) near relay module 70146433.
3	Place in cab on the dash board on the passenger side.
9	Place on relay module 70146433 over the existing decal, rotated counterclockwise 90°. 

Compressor Mounting Locations (99903712)

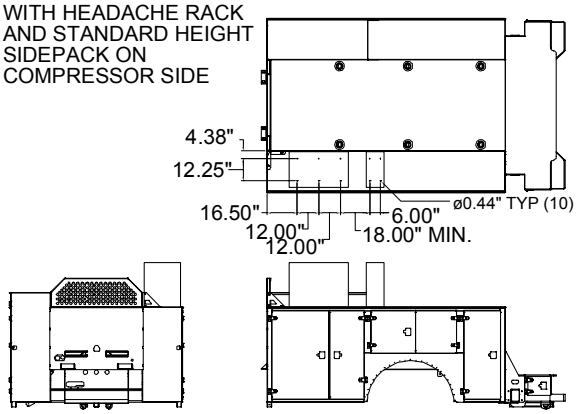
NOTE:

When installed with hydraulic after-cooler, the minimum space between the cooler and the compressor must be 10". A minimum of 8" must be maintained at each end of the compressor (without aftercooler), or the compressor-aftercooler combination.

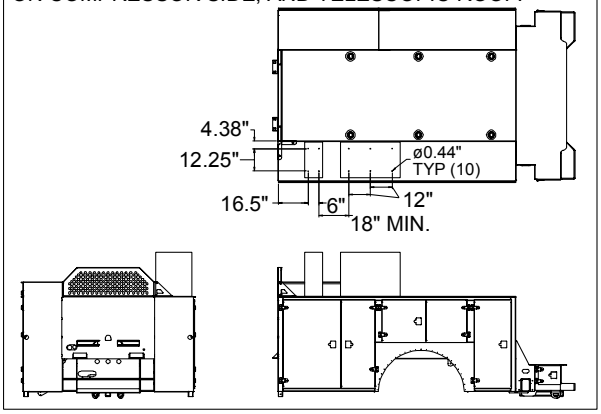
CAS3560 & CAS2545 INSTALLATION ON SERIES 1 AND SERIES 2 DOMINATORS



CAS3560 & CAS2545 INSTALLATION ON SERIES 2 DOM WITH HEADACHE RACK AND STANDARD HEIGHT SIDEPACK ON COMPRESSOR SIDE



CAS3560 & CAS2545 INSTALLATION ON SERIES 2 DOM WITH HEADACHE RACK, STANDARD HEIGHT SIDEPACK ON COMPRESSOR SIDE, AND TELESCOPIC ROOF.



SECTION 3

Operation

Compressor Terminology

AIR/OIL COALESCER	Performs second stage separation of oil from compressed air feeding tools. Sometimes referred to as the separator cartridge or purifier cartridge.
CFM	Refers to the volume of compressed air being produced expressed as cubic feet of air per minute.
SPEED CONTROL	Sometimes referred to as the engine speed control
OIL SUMP	The first stage of oil separation from compressed air. Also serves as reservoir area for compressor lubricant, measured in rpm (revolutions per minute).
PSI	Refers to the operating pressure the system is set up at, expressed as pounds per square inch.
PRESSURE RELIEF VALVE	A valve located on the oil sump which opens in case of excessive pressure. Sometimes referred to as the pop-off valve or the check valve.
HI-TEMP SHUTDOWN SWITCH	Works in conjunction with a power relay, sending a signal to stop the compressor power source in cases of high compressor oil temperature.

Description of Components

COMPRESSOR ASSEMBLY

The IMT compressor assembly is a positive displacement, oil flooded, rotary screw type unit employing one stage of compression to achieve the desired pressure. Components include a housing (stator), two screws (rotors), bearings, and bearing supports. Power from the hydraulic motor is transferred to the male rotor through a belt and pulley configuration. The female rotor is driven by the male rotor. There are four lobes on the male rotor and five roots on the female rotor.

PRINCIPLES OF OPERATION

In operation, two helical grooved rotors mesh to compress air. Inlet air is trapped as the male lobes roll down the female grooves, pushing trapped air along, compressing it until it reaches the discharge port in the end of the stator and delivers smooth-flowing, pulse-free air to the receiver.

During the compression cycle, oil is injected into the compressor. The oil lubricates the rotating parts and bearings; serves as a cooling agent for the compressed air; and seals the running clearances.

LUBRICATION SYSTEM

Oil from the compressor oil sump, at compressor discharge pressure, is directed through the oil filter, cooling system, and to the side of the compressor stator, where it is injected into the compressor. At the same time oil is directed internally to the bearings and shaft seal of the compressor. The oil-laden air is then discharged back into the sump.

OIL SUMP

Compressed, oil-laden air enters the sump from the compressor. As the oil-laden air enters the sump, most of the oil is separated from the air as it passes through a series of baffles and diffusion plates. The oil accumulates at the bottom of the sump for recirculation. However, some small droplets of oil remain suspended in the air and are passed on to the coalescer.

PRESSURE RELIEF VALVE

The pressure relief valve is set at 210 psi**.** It is located at the top of the air/oil sump. This valve acts as a backup to protect the system from excessive pressure that might result from a malfunction.

AIR/OIL COALESCER

The coalescer is self-contained within the air end assembly. When air is demanded at the service line, it passes through the coalescer which efficiently provides the final stage of oil separation.

MINIMUM PRESSURE VALVE

The minimum pressure valve is located at the outlet of the coalescer head and serves to maintain a minimum discharge pressure of 85 psig in operation, which is required to assure adequate compressor lubrication pressure.

OIL FILTER

The compressor oil filter is the full-flow replaceable element type.

COMPRESSOR COOLING SYSTEM

The compressor cooling system consists of a remote mounted oil/air cooler with an electric fan. The fan is activated through a temperature switch (180°) and latching relay, so it will not turn off until the compressor is disengaged and the system pressure is fully relieved, or when the engine is turned off. The thermal valve will divert oil to the oil cooler at 160°F.

ELECTRICAL AND SAFETY CIRCUIT SYSTEM

The unit is supplied with an hourmeter, wire harness and a high temperature shutdown switch. Compressor shutdown occurs in the event of high compressor temperature (> 240°).

AUTOMATIC BLOW DOWN VALVE

There is one blow down valve in the compressor system. It is located inside the compressor. The valve will automatically bleed the sump to atmospheric pressure when the compressor is disengaged. The blow down time interval is typically less than 45 seconds.

CONTROL SYSTEM

The prime component of the compressor control system is the compressor inlet valve. The control system is designed to match air supply to air demand and to prevent excessive discharge pressure when compressor is at idle. Control of air delivery is accomplished by the inlet valve regulation and modulation as directed by the discharge pressure regulator.

PRESSURE REGULATOR VALVE

This valve, located inside the compressor, is used to set the desired discharge pressure within the operating pressure range. Turning the regulator screw clockwise increases the working pressure; a counterclockwise movement of the screw reduces the working pressure. This system has a maximum operating pressure of 150 psi. This is factory set and should not be changed without consulting the factory.

NOTE

The operating pressure range for most air tools is between 90 and 100 psi. Operating above the tools' recommended pressure will decrease the life of the tool. Higher operating pressure can also over torque nut and bolts fatiguing the fastener and mating parts. Strictly adhere to tool operating pressures and torque standards set forth by the tool manufacturer and the specifications of the equipment that work is being performed on.

INLET VALVE

The compressor inlet valve is a piston operated disc valve that regulates the inlet opening to control capacity and serves as a check valve at shutdown.

AIR AFTERCOOLER

The air after-cooler is a second chamber of the oil cooler. Air leaving the compressor enters the after-cooler. Temperature of the air is reduced to approximately 10-15°F above ambient temperature. Condensation is directed to the air tank, where it is collected.

CONTROL SYSTEM OPERATION

The following discussion explains the operation of the control system from a condition of “no load” to a condition of “full capacity” at working pressure. For the working pressure range of your machine, refer to applicable data in “Specifications”.

The pressure regulator, mounted near the fan/cooler assembly, operates as follows:

1 As the demand for air decreases, the receiver pressure rises. When this pressure exceeds the set point of the pressure regulator, the regulator opens sending a secondary pressure signal to the inlet valve. The poppet valve moves towards the valve inlet against the force of the modulating spring inside the valve. This regulates the opening area of the inlet valve.

2 If the air demand goes to zero, (service valve closed or air dead headed at tool) the inlet valve will close completely.

3 As the demand for air increases, the secondary pressure signal to the inlet valve is removed and the inlet valve poppet modulates to full open.

Compressor Operation Test

Each compressor is bench tested under load at the factory to ensure proper break-in and operation. While it is not necessary to follow any break-in procedures, complete the following checks before putting the unit into service and periodically during use.

1 Before start-up

a) Check the compressor oil level. If oil is required, use only IMT synthetic compressor oil. Always check compressor oil level with the truck cold and the compressor on level ground.

b) Check the air intake filter indicator (visible at the front of the compressor) for cleanliness and obstructions. A dirty or obstructed filter may cause reduced air output. The indicator will be in the red zone when the filter needs attention.

c) Avoid operating the compressor package when the side-to-side or front-to-rear tilt is greater than 20°.

CAUTION

Prior to compressor start-up, make sure the cover, guards, and access plugs are in place and secured.

2 With the compressor engaged:

a) Adjust engine speed to ensure that compressor speed does not exceed 8500 rpm (max.) under load. Crack open air discharge valve until air pressure drops to 125 psi and maintains this pressure. Doing so simulates a maximum load condition.

b) If engine speed increase is required, readjust air discharge valve to 125 psi after speed has been increased. Repeat until appropriate compressor rpm (NOT engine rpm) is achieved.

c) Check the compressor rpm using a phototach on the compressor input pulley, located through the canopy cover.

Compressor Start-Up & Shut-Down

Compressor Start-Up

a Make sure all guards, covers, and access plugs are in place and secured.

b Start the vehicle engine.

c Engage the PTO per the manufacturer's instructions.

d Engage the compressor by turning on the power. The power switch location varies depending on the installation. If the compressor is mounted on an IMT service truck with a crane, the power switch is located on the crane remote. Otherwise, the power switch may be located on the truck or as a custom wiring application.

e Check the rotation. The correct rotation direction is counterclockwise, as shown on the compressor. Incorrect rotation for more than two seconds may result in compressor damage.

WARNING

This compressor produces loud noise. Extended exposure to loud noise can cause hearing loss. Wear hearing protection when operating.

Use the relay module, visible through the compressor front panel grill, to determine if the compressor is operating normally. The *enable* and *power* indicator lights will light. When the compressor oil temperature reaches 180° F, the *fan* indicator light will turn on, indicating that the fan is running. Once the fan starts to run, it will "latch" on and continue to run until the compressor is turned off.

Do not run the compressor for less than 15-minute increments. Short run times will increase water / moisture content in the compressor system. Water and moisture will adversely affect the life of the compressor.

CAUTION

Operating this unit in excess of 8500 rpm will void the warranty and will shorten the normal service life of the compressor.

Compressor Shut-Down

a Turn off the compressor using the power switch.

b Disengage the hydraulic pump / PTO.

c Once the drive motor stops, the compressor will purge itself of air. This "blowdown cycle" typically requires approximately 45 seconds. It will not purge the reservoir tank, but only the compressor unit. During the blowdown cycle, the compressor will not restart if turned on. If the power switch is turned on, the compressor will not restart until the blowdown cycle is complete.

d If the compressor is mounted on a vehicle, and the vehicle needs to be moved, work is completed for the day, or the compressor needs maintenance, you must relieve all pressure from the system. Turn off the compressor normally and allow the blowdown cycle to complete. Then, drain all air using the service valve located on the truck. Close the valve once the air release is complete.

WARNING

Federal law prohibits moving a compressor without first releasing all air.

Sub-Zero Temperature Operating Instructions

For IMT rotary screw compressors (both shaft driven and hydraulically driven) sub-zero temperature operation is defined as operation of the compressor when the oil temperature is below 0º F. It is possible to operate an IMT rotary screw compressor when the ambient temperature is below 0º F, as long as the oil temperature is above 0° F. Follow these guidelines to protect the compressor:

1 MAINTENANCE REQUIREMENTS

If the IMT rotary screw compressor is expected to operate at temperatures below 0º F, the oil filter, coalescer, air filter, and oil should be changed before the compressor is run in sub-zero temperatures (ex: late fall, but this may vary by location and environment). Performing this maintenance will improve the performance of the system during sub-zero temperature operation. Use only IMT approved rotary screw compressor oils and filters.

2 STORAGE REQUIREMENTS

The IMT rotary screw compressor should be stored at or above 0º F. If the ambient temperature is below 0º F the vehicle should be stored inside, preferably in a heated environment. After moving the vehicle from the heated environment, the compressor system should be operated for 15 minutes before proceeding to a job site. During this time, the service valve must be slightly ajar such that the pressure gauge reads between 100 and 125 psi. This ensures that the oil temperature has had adequate time to come up to operating temperature, and that most of the water in the system has been removed. This will allow for approximately one hour of travel time before the oil cools to ambient temperature. If an extended driving time is expected, the operator may need to stop driving and run the system for 15 minutes every hour to ensure that the oil temperature does not cool to below 0º F. The operator should use his/her judgment when deciding what interval is needed between running the compressor to warm the oil. Lower ambient temperature will require more frequent warming of the compressor oil.

3 FAILURE TO FOLLOW MAINTENANCE AND STORAGE REQUIREMENTS

At temperatures below 0º F, failure to follow the guidelines may result overheating of the compressor due to the oil's inability to circulate through the compressor system. The lack of circulation leads to rapid warming of the compressor air end, and eventually the compressor air end will exceed the maximum operating temperature. If the system shuts down due to high temperature during sub-zero temperature operation, the oil will need to be warmed before restarting. This may require moving the vehicle to a heated location or waiting for the ambient temperature (and therefore the oil temperature) to exceed 0º F.

CAUTION

Failure to adhere to these guidelines and repeated running of the compressor to high temperature shutdown may result in permanent damage to the air end.

SECTION 4

Maintenance & Repair

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

The 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 interval. 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 avoided 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. The hourmeter shows the total number of hours your compressor has run. 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 for the tenth time, and all items under “EVERY 50 HOURS” should be serviced for the second time, and so on.

DANGER

Compressor must be shut down and completely relieved of pressure prior to checking fluid levels. Open drain valve on air tank, and compressor service valve, to ensure relief of system air pressure. Failure to comply with this warning may cause damage to property and serious bodily harm.

Maintenance Schedule

MAINTENANCE OPERATION	SERVICE INTERVAL (Hours/Months)				
	DAILY	WEEKLY	250/3	500/6	1000/12
Air end oil level - check, add if needed	■				
Air receiver - drain condensation	■				
Check fittings and air lines for leaks	■				
Inspect air/oil cooler. Clean if needed.	■				
Air intake - inspect		■			
Pressure relief valve - check operation		■			
Receiver pressure relief valve - check operation		■			
Belt tension (see Note 1)			■		
Pressure relief valve - clean			■		
Tighten and check all valves			■		
Check all electrical connections			■		
Air end oil - change (see Note 2)				■	
Inspect drive system for wear (tension)				■	
Air cleaner - change				■	
Coalescer element - change					■

Service intervals are listed as hours/months, whichever occurs first.

Use only IMT synthetic compressor oil. The use of any other oil causes excessive carbon buildup and will void the warranty on the compressor.

NOTES:
1) Check belt tension and condition after first 50 hours. Then, check belt tension and condition every 250 hours / 3 months.

2) Under normal operating conditions, oil changes are required every 3 months. When operating in a dirty environment, change the oil and air filter more frequently as your particular operating conditions dictate.

CAS2545 Maintenance Procedures

Maintenance intervals in the schedule outlined in this manual are based on one hour of compressor operation equal to about 40 road miles on an engine. Thus, eight hours operation is equal to 320 road miles, 250 hours is equal to 10,000 road miles, etc.

Only inspection processes can be completed with the compressor covers on. To complete any maintenance procedures, the covers must be removed.

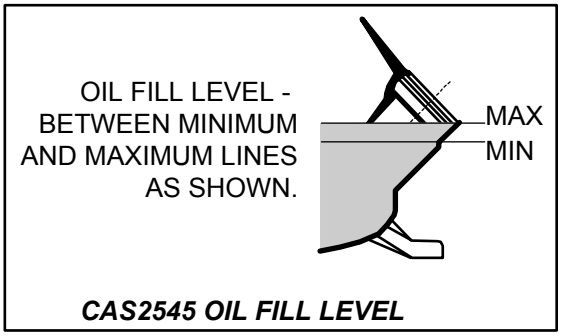
LIFTING COMPRESSOR

A hole with 5/8-11 UNC threads is provided on the top of the compressor. This threaded hole is designed to be used with an eyehook or lifting hook to lift the compressor. Lift hooks or eyehooks with a rating of at least 600 pounds must be provided by the customer.

COMPRESSOR OIL SUMP FILL, LEVEL, AND DRAIN

CHECKING COMPRESSOR OIL LEVEL

The proper compressor oil level, when unit is shut down and has had time to settle, is level to the top of the oil fill opening. The truck must be level both side to side and front to back when checking the oil.



CAS2545 OIL FILL LEVEL

ADDING OIL TO COMPRESSOR

1 Before adding or changing compressor oil, completely drain air tank and relieve pressure by opening pressure relief valve.

2 Remove filler cap and add new oil until the maximum limit is reached. Oil can be added at the oil fill opening.

3 Replace filler cap.

4 Close pressure relief valve.

CHANGING COMPRESSOR OIL

1. Run compressor until oil temperature is 100° - 122° F (40° - 50° C). Then, completely drain air tank and relieve pressure by opening pressure relief valve.
2. Remove filler cap. Open drain valve and drain oil, making sure to follow local and state regulations on waste oil collection and disposal.
3. Close drain valve. Add oil as described in the section, "Adding Oil to Compressor."
4. Replace oil fill cap.
5. Close pressure relief valve and open shut-off valve between compressor and compressed-air system.

DANGER

Do not attempt to drain condensate, remove the oil level fill plug, or break any connection in the air or oil system without first shutting off compressor and manually relieving pressure from the sump and air storage tank. Failure to comply with this warning may cause damage to property and seriously bodily harm.

NOTE

The screw-on cap for the oil inlet pipe includes a lateral safety opening which air or oil may penetrate in case of residual pressure in the separator receiver. Wait until the residual pressure is relieved prior to checking the oil level.

The compressor cannot be overfilled with oil. Excess oil will run out the oil fill tube.

AIR INTAKE FILTER

The air intake filter is a heavy-duty two-stage dry type high efficiency filter designed to protect the compressor from dust and foreign objects. The filter is equipped with an evacuator cup for continuous dust ejection while operating and when stopped. 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_20). The filter is equipped with a pressure drop indicator. Change the element based on the pressure drop indicator reading, at least as frequently as outlined in the maintenance schedule.

PURIFIER/SEPARATOR CARTRIDGE

The purifier cartridge is the air/oil separating element of the screw compressor unit. The cartridge, which is connected to the filter support of the separator tank using a fitting, must be changed at least once per year, after 3,000 to 6,000 operating hours, or as soon as the differential pressure is more than 14 psi (1 bar) If the intake air is highly contaminated or the oil quality is poor, the cartridge will clog and may have to be replaced sooner. The purifier cartridge screws on to the filter support of the separator tank via a fitting.

1 Shut down compressor and wait for complete blow down (zero pressure). Also, completely drain air tank.

2 Unscrew the cartridge by turning counterclockwise with an oil filter tool.

3 Screw in the new purifier cartridge by hand. Do not use a tool or wrench.

4 Check whether the cartridge is tight. Do not overtighten!

5 Dispose of the used cartridge following local, state and federal regulations.

6 Run system. Check for leaks.

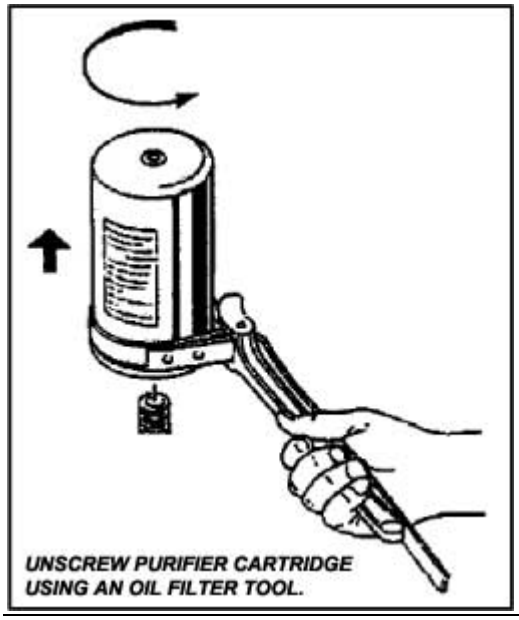
7 Enter cartridge change in maintenance log.

NOTE

When connecting drain line, hold canister nut securely when tightening the hose fitting.

WARNING

Do not substitute element. Use only a genuine IMT 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 and/or resulting in damage to property and serious bodily harm.



UNSCREW PURIFIER CARTRIDGE USING AN OIL FILTER TOOL.

OIL FILTER

The compressor oil filter is a spin-on, throw away type. After replacing filter, dispose of used filter according to local and state hazardous waste regulations.

To replace filter:

1. Make sure system pressure is relieved.
2. Remove filter by unscrewing from filter head (turn counterclockwise by hand) and discard.
3. Install a new filter by applying a little oil to the seal and then screw the filter on by hand (turning it clockwise until hand tight, plus one - third turn). Do not use tools to tighten the filter.
4. Check for leaks in operation.
5. Re-check compressor oil level.

WARNING

Do not substitute element. Use only a genuine IMT 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 and/or resulting in damage to property and serious bodily harm.

OIL COOLER

The interior of the oil cooler should be cleaned when the pressure drop across it at full flow exceeds 25 psi.

The following procedure has been recommended by the vendor who supplies the cooler:

1. Remove cooler.
2. Circulate a suitable solvent to dissolve and remove varnish and sludge.
3. Flush generously with IMT compressor lubricant.
4. After cooler is reinstalled and compressor is filled with fresh oil, change compressor oil afer 50 hours of normal operation.

BELT TENSION

Tension belt as follows:

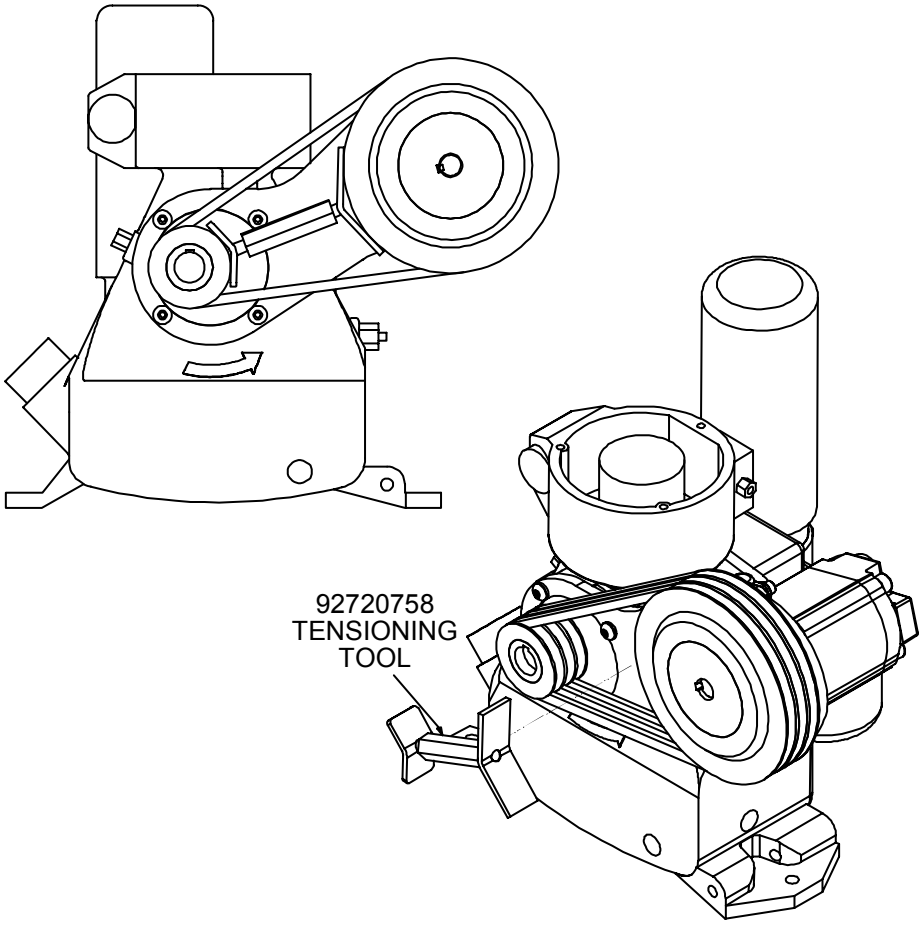
1. With hydraulic motor mounting bolts loose, install belt.
2. Spread pulleys by hand, roughly tensioning belt.
3. Install tensioning tool (IMT # 92720758) between pulleys. Rotate center section to spread pulleys apart.

4 Place straightedge across top of pulleys with long edge perpendicular to belt. Push on top of belt to a deflection of 0.141". Measure force using belt tension gauge 79733864. The belt tension at a span of 9" (center-to-center between motor shaft and compressor input shaft), with a deflection of 0.141", should be 10 to 12 lb force.

5 With tool still in place, tighten motor mount bolts. Release tool.

6 Re-check belt deflection and force with gauge. Adjust as necessary.

The ideal tension is the lowest tension at which the belt will not slip under peak load conditions. Check the tension frequently during the first 24-48 hours of operation. Over tensioning shortens the belt and bearing life. Keep belts free from foreign material which may cause slip. Inspect V-belts regularly. Tension when slipping. Never apply belt dressing as this will damage the belt and cause early failure.



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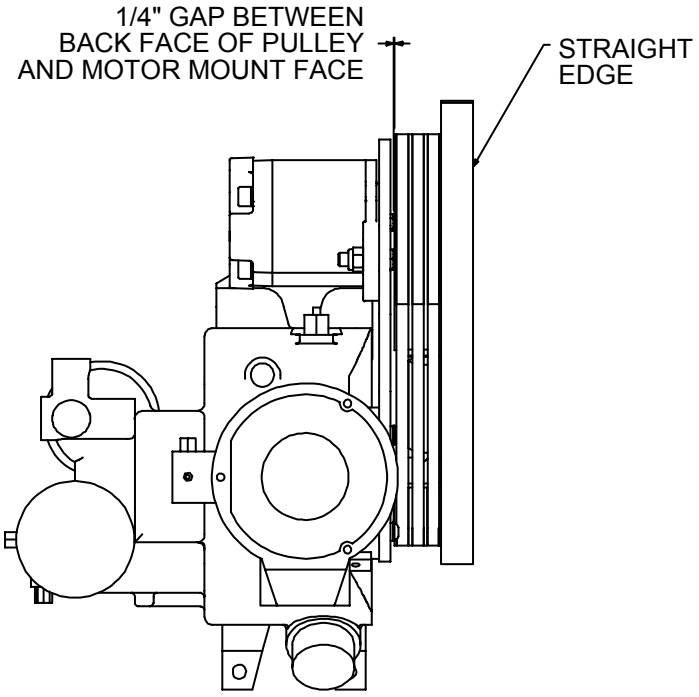
BELT SHEAVE/PULLEY ALIGNMENT AND CONDITION

Check Condition of Sheaves. Before a new set of V-belts are installed, check the condition of the sheaves. Dirty or rusty sheaves impair the drive efficiency and abrade the belts, which results in premature failure. Worn sheaves shorten the belt life as much as 50 percent. If the grooves are worn such that the belt bottoms out, slippage may result and burn the belts. If the sidewalls are "dished out", the bottom shoulder ruins the belts prematurely by wearing off the bottom corners.

Check Sheave Alignment. Sheave adjustment should be checked by placing a straight edge or tight cord across the sheave face so it touches all four points of contact. A misalignment of more than 1/2° (1/8") per 12" of distance will adversely affect belt life. Improper sheave alignment produces uneven wear on one side of the belt, causes the belt to roll over in the sheaves, or throws all of the load on one side of the belt, stretching or breaking the cords on that side.



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Installing Belts on Sheaves. Shorten the center distance of the drive until the belts can be put on the sheaves without force. Forcing the belts can damage them.

Belt Selection. For best service, replace V-belt drives with a complete new matched set of belts. Never replace one of a set belts with a used belt, as used belts are worn in cross-section and stretched. If a single belt fails, the entire set of belts should be replaced. A new belt will ride higher in the sheave, will travel faster, and operate at a much higher tension than the used belts. Mixing new and used belts can cause cord rupture in the new belts, which allows the new belts to elongate. If the cord in a new belt ruptures, the new belt will fail to carry its full share of the load, and the drive will be under-belted. Belts from different manufacturers should not be mixed, either, for the same reasons.

Lubricant Recommendations

WARNING

AVOID INJURY OR EQUIPMENT DAMAGE!

Use IMT-recommended compressor oil. Inspect and replace oil, air filter, oil filter, and coalescer elements as stated in this manual.

The combination of a coalescer 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.

The following are general characteristics for IMT rotary screw lubricant. It is impossible to 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, so the responsibility for recommending and consistently furnishing a suitable heavy duty lubricant must rest with the individual supplier if they choose not to use the recommended IMT rotary screw lubricant. 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. The owner of this equipment should contact the factory if IMT rotary screw lubricant is not used as supplied with this equipment.

CAUTION

We do not recommend mixing different types or brands of lubricants, due to the possibility of a dilution of the additives or reaction between additives of different types.

LUBRICANT SPECIFICATIONS

IMT specified rotary screw lubricant shipped with your kit contains additives for rust, corrosion and anti-wear inhibitors. Use of any other lubricant is not recommended.

1 Flash point 450°F minimum

2 Pour point -55°F.

3 Contains rust and corrosion inhibitors.

4 Contains foam suppressors.

5 Contains oxidation stabilizer.

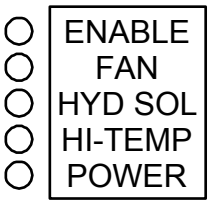
NOTE

Due to environmental factors, the useful life of all 'Extended Life' lubricants may be shorter than quoted by the lubricant supplier. IMT encourages the user to closely monitor the lubricant condition and to participate in an oil analysis program with the supplier.

No lubricant, however good and/or expensive, can replace proper maintenance and attention. Select and use lubricant wisely.

Relay Module

The IMT CAS2545 compressor includes a relay module which is very useful in troubleshooting. Each relay on the module has an LED which indicates the status of the relay. A decal next to the relay indicates which lights control which functions.



- Enable - Control relay which enables other relays
- Fan - Relay for electric fan
- Hyd Sol - Hydraulic solenoid relay which is fed by power relay, controls hi-temp relay
- Hi-Temp - High temperature relay, controls hydraulic solenoid relay
- Power - Main power to solenoid

Normal Operation

When the compressor is turned on, the *Power* and *Enable* relays will light, indicating normal operation. When the oil temperature reaches 180° F, the *Fan* relay turns on, indicating that the fan is on. The fan will "latch" on and stay on until the compressor is shut down.

High Temperature Shut-Down

When a high temperature situation occurs, with a temperature above 240° F, the *Power* relay will turn off and the *Hi-Temp* and *Hyd Sol* relays will light, indicating high temperatures. The lighted switch on the user control panel will also light. The fan will stay on if it was already on.

To reset, push the lighted pushbutton switch on the control panel. This will reset all switches to normal condition (*Enable* and *Power* relays will be on) and the compressor will restart. If there is still a problem, the unit will shut down again once the temperature reaches 240° F.

NOTE: Even if the reset switch is pressed, the light will stay on and the unit will not restart until the temperature has dropped. Once the *Power* relay lights, the unit is ready to be reset.

Flash Recovery Procedure

WARNING

A guard MUST be placed over the pulley and belt if it is necessary to operate the compressor without the cover.

WARNING

Severe burns and / or injury could occur from contact with hot surfaces. Several parts of the compressor are hot during and after operation.

When the compressor has flashed, take the following steps to flush the system:

1 Flush air compressor and check for rotor grinding.

a) Remove 2-1/2” inlet hose from inlet valve.

b) Drain compressor oil.

c) Completely fill compressor air inlet with clean IMT specified oil. Once full, lower oil drain hose into bucket and rotate compressor by hand to evacuate any remaining oil. Repeat until oil is clean. Make sure the compressor turns freely by hand and that there is no grinding present.

2 Flush oil cooler.

a) Remove both tubes from oil cooler.

b) Verify that the plastic shroud and fan blades are intact. Put power direct to red lead (ground black lead) at fan motor to verify that motor works. Do not run the motor outside of the shroud. Leave package assembled. Fan is a puller style; verify that air from fan pulls air through the oil cooler from the outside.

c) Connect a hose to each of the inlet and outlet of the oil cooler.

d) Pour IMT compressor oil into lower port (note” hose will need to be higher than cooler). Upper port hose should be drained into a bucket / pan.

e) Use low pressure (about 50 psi) air to remove all oil. Input air into the lower port.

f) Reconnect tubes (removed in 2a).

g) Fill with clean IMT approved oil. Reconnect all fittings and electrical terminals.

3 Start compressor.

a) Run for 5 minutes. Note operation, sound, check for leaks, etc.

b) Drain oil, change oil filter, fill oil to proper level, and finish testing.

4 Test safety circuit

a) Start compressor. Disconnect temperature switch and verify the compressor stops running (oil should cycle through the valve block, but not through the hydraulic motor). *High Temp / Reset* light should be active until depressed. If compressor does not stop running, DO NOT PROCEED! Contact IMT Technical Support. If the compressor stops running, reconnect the temperature switch and depress the *High Temp / Reset* light. The compressor will restart.

Compressor Troubleshooting

PROBLEM	CAUSE	RESOLUTION
Compressor does not make air.	Air tank drain open.	▪ Close tank drain valve.
	Blow down valve stuck.	▪ Remove blow-down valve, clean out, reassemble.
	PTO not engaged.	▪ Engage PTO per instructions.
Compressor/truck shuts down.	High air end temperature.	▪ Check oil level. Add as required per filling instructions. Do not overfill. Wait for compressor to cool down. Restart truck and compressor. If truck shuts down again, continue with troubleshooting.
	Fan not operating.	▪ Insure that cooling fan is operating. If not, check fuse in harness. See speed control troubleshooting.
	Air flow.	▪ Insure that cooler has no airflow obstructions.
		▪ Check air cooler core. Clean as needed.
		▪ High ambient air temperature. Contact IMT Technical Support.
	Leaks.	▪ Check for air leaking from tank or blow down fittings.
	Safety System Failure	▪ Check high temperature shut down circuitry for proper operation.
	Oil flow restricted.	▪ Check oil filter head for blockage.
		▪ Check for cold (< 0º F) oil.
Erratic speed. (Compressor revs, slows, then dies.)	Low oil.	▪ Check oil, and add if needed.
Low system pressure.	Air tank drain open.	▪ Close tank drain valve.
	Dirty air filter.	▪ Check filter condition. Replace as required.
	Air leak.	▪ Check air system fittings.
	Pressure control valve stuck.	▪ Remove, disassemble, clean. Reassemble and install.
	Inlet valve not fully open.	▪ Inspect and repair. Check control system operation.
	System demands exceed compressor delivery.	▪ Reduce air demand and/or consumption.

PROBLEM	CAUSE	RESOLUTION
		▪ Do not operate multiple tools at one time.
Coalescer filter plugging.	Excessive water in system.	▪ Reduce short run (i.e. less than 15 minute) times. Run compressor for at least 15-20 minutes each time it is started.
	Foreign material entering compressor inlet.	▪ Check air filter.
		▪ Replace if damaged.
High oil consumption / oil in air system.	Excessive oil level.	▪ Check level per filling instructions. Drain excess oil if necessary.
	Plugged coalescer filter.	▪ Replace coalescer filter.
	Compressor operating at low pressure (60 psi or below).	▪ Operate at rated pressure.
		▪ Reduce system load.
	Compressor oil leak.	▪ Inspect and repair leaks.
	Leaking oil lines or cooler.	▪ Inspect and repair all oil lines and/or cooler.
	Leaking compressor shaft seal.	▪ Replace seal.
Water in air system.	Defective moisture separator/drain trap.	▪ Inspect and clean if required. Replace separator/trap if required.
	Air cooler core dirty.	▪ Inspect and clean.
	Air tank not drained.	▪ Open tank drain. (This should be done each time compressor is run, prior to driving the truck.
	Excess moisture in compressor oil.	▪ Let truck sit overnight. Open oil drain valve on compressor until oil starts to drain. Close drain and check oil level per filling instructions.
Excessive noise level.	Incorrect compressor speed.	▪ Check pulley speed using phototach. WARNING - Do not check speed manually. Do not exceed speeds of 8000 RPM. If speed control is not working properly, contact IMT Technical Support.
	Low oil level.	▪ Check oil level per filling instructions. Fill as required.
Excessive vibration.	Loose components.	▪ Inspect and tighten.
	Compressor bearing failure.	▪ Contact authorized distributor or IMT immediately. Do not operate unit.

PROBLEM	CAUSE	RESOLUTION
Shaft seal leak.	Defective seal.	▪ Replace seal, or contact authorized distributor or IMT Technical Support.
Pressure relief valve opens.	Compressor operating over pressure.	▪ Inspect and verify pressure control valve and control connections.
		▪ Remove, disassemble, and clean pressure control valve. Reassemble and reinstall.
	Defective valve.	▪ Replace valve.
	Plugged coalescer filter.	▪ Replace filter.
Speed control does not come up.	Parking brake is not set.	▪ Engage parking brake.
	Blown fuse.	▪ Check and replace 5 amp fuse.
	Compressor is not making air.	▪ Insure compressor is engaged and that the pulleys are turning.
	No signal to speed control module from compressor.	▪ With compressor running, check for 12 volts across 20 lb pressure switch (N.O.). If switch is not closing, replace.
		▪ With the compressor off, check for 12 volts across 5 lb pressure switch (N.C.). If switch does not close, replace switch.
Speed control comes on when engaging the parking brake with the PTO off.	20 lb pressure switch.	▪ With the compressor off, check for 12 volts across 20 lb pressure switch. If switch is not open, replace switch.
Compressor has experienced a "flash".	Low oil level, high operating temperature, or oil starvation.	▪ See resolutions in troubleshooting guide for low oil level, high operating temp., or oil starvation conditions.
		▪ Check oil level per filling instructions. Fill as required.
		▪ See Flash Recovery Procedure.
Excessive blowdown time.	Blowdown valve stuck.	▪ Replace valve.
	Minimum pressure valve stuck.	▪ Replace valve.
Oil discharges from blowdown valve.	Bad seal in blowdown valve.	▪ Replace seal.
	Improper blowdown valve installation.	▪ Remove and reinstall per parts section.

SECTION 5

Parts

Parts Ordering Information

When placing orders or requesting assistance, refer to the information below:

TO BE COMPLETED BY DEALER	
CHASSIS INFORMATION	
Transmission Make:	Model:
PTO Number:	PTO %:
COMPRESSOR AND HYDRAULIC PUMP INFORMATION	
Compressor Model:	Serial Number:
Pump Make:	Model:
Reservoir Capacity:	Engine RPM:

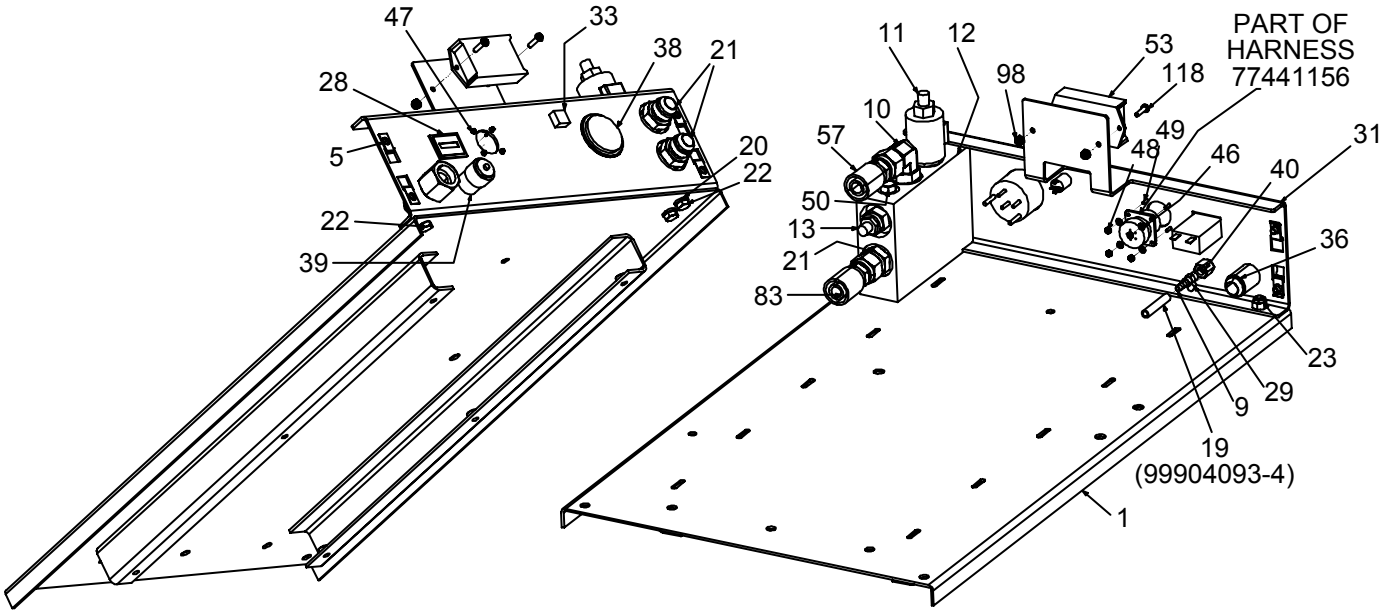
CAS2545 Recommended Spare Parts List

Part #	Description	Qty.
79733864	Belt tensioning gauge	1
92720758	Belt tensioning tool	1
89086192	Oil (quart)	1
89086201	Oil (gallon)	1
	Lifting eye	Ref
70048233	Oil filter	1
70048217	Air filter	1
70580187	V-Belt	3
70048234	Coalescer element	1
94744159	Shaft seal kit	1
73540245	Relief valve	1
94744161	Minimum pressure valve kit	1
94744160	Inlet valve	1
70075117	Cap, oil filler (complete)	1
70075118	Fitting, oil filter	1
70075119	Terminal block (pneumatic control)	1
70075120	Nozzle, 1.0 blowdown	1
70075121	Valve core	1
70075122	Gasket, separator head	1

Compressor Assembly (99904093)

99904093-2 Drawing

See parts list. (see "99904093 Complete Parts List" on page 65)

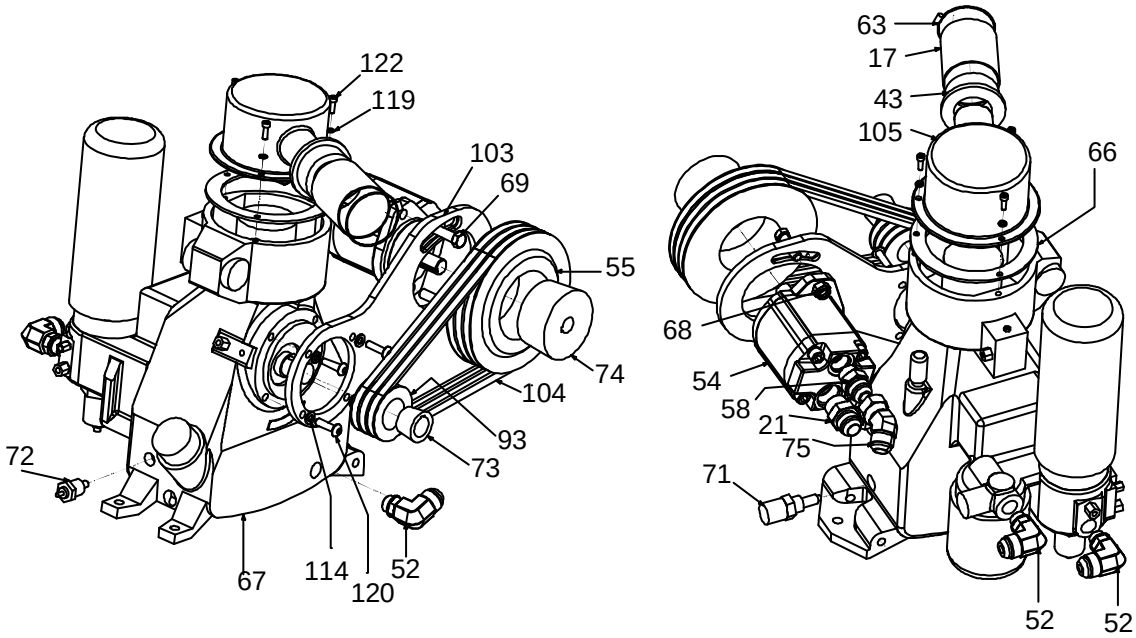


99904093-2 PARTS LIST				
ITEM	PART #	DESCRIPTION	KIT #	QUANTITY
1.	52720642	BASE-WELDMENT COMPRESSOR		1
5.	72062301	NUT-TINNERMAN 1/4-20UNC	109,112	12
9.	72531534	NIPPLE-BARB BRS .12MPT .25 220CF		2
10.	72053767	ELBOW-M STR/90/M JIC 12 12		1
11.	73540127	VALVE-SOL SV12-21-0-N-12DW		1
12.	60125143	VALVE BLOCK-COMPRESSOR		1
13.	73540139	VALVE-RELIEF 2500 PSI RVPS10NS030		1
19.	89392146	HOSE-GP .25X250 WP GRAY 801-4		2' 6"
20.	72063051	WASHER .38 LOCK	112	3
21.	72532366	ADPTR-M STR/M JIC 12 12		4
22.	72060044	CAP SCR .38-16X .75 HH GR5 Z	112	4
23.	72062103	NUT .38-16 HEX NYLOCK (PART OF	110,111,112	12
28.	70733496	METER-HOUR		1
29.	72066452	CLAMP-HOSE .25- .62 SAE 4 SS		2
31.	60130765	BULKHEAD-COMPRESSOR		1
33.	77041660	SWITCH-LIGHTED PUSHBUTTON		1
36.	72534381	ADPTR-BULKHEAD FNPT/MJIC 1.00 1.00		1

99904093-2 PARTS LIST				
ITEM	PART #	DESCRIPTION	KIT #	QUANTITY
38.	70048225	GAUGE-TEMPERATURE 101345		1
39.	70048222	INDICATOR-AIR FILTER		1
40.	72534358	ADPTR-MPT/FPT STL .12- .12		1
46.	72063173	WASHER # 4 W FLAT ANSI B27.2		4
47.	72063172	WASHER # 4 LOCK ZINC		4
48.	72062206	NUT # 4-40 HEX ZINC		4
49.	72601806	SCR-MACH 4-40 .50 SKT HEAD		4
50.	72532140	PLUG-STR HEX HD STL .56		1
53.	70146433	ENGINE FUNCTION MODULE (E.F.M.)		1
57.	51396385	HOSE-FJ .75 X 17.00 (12-12) 100R17		1
83.	72533726	TEE-M PIPE/F PIPE MALE RUN .25		3
98.	72062106	NUT 10-24 HEX NYLOCK		2
109.	51718586	KIT-HRDW CAS3560 CANOPY		1
110.	51718588	KIT-HRDW CAS3560 COOLER		1
111.	51720751	KIT-HRDW CAS2545 AIR END		1
112.	51720752	KIT-HRDW CAS2545 BASE		1
118.	72060636	SCR-MACH #10-24X .75 RDH PH ZINC		2
REV				

99904093-3 Drawing

See parts list. (see "99904093 Complete Parts List" on page 65)

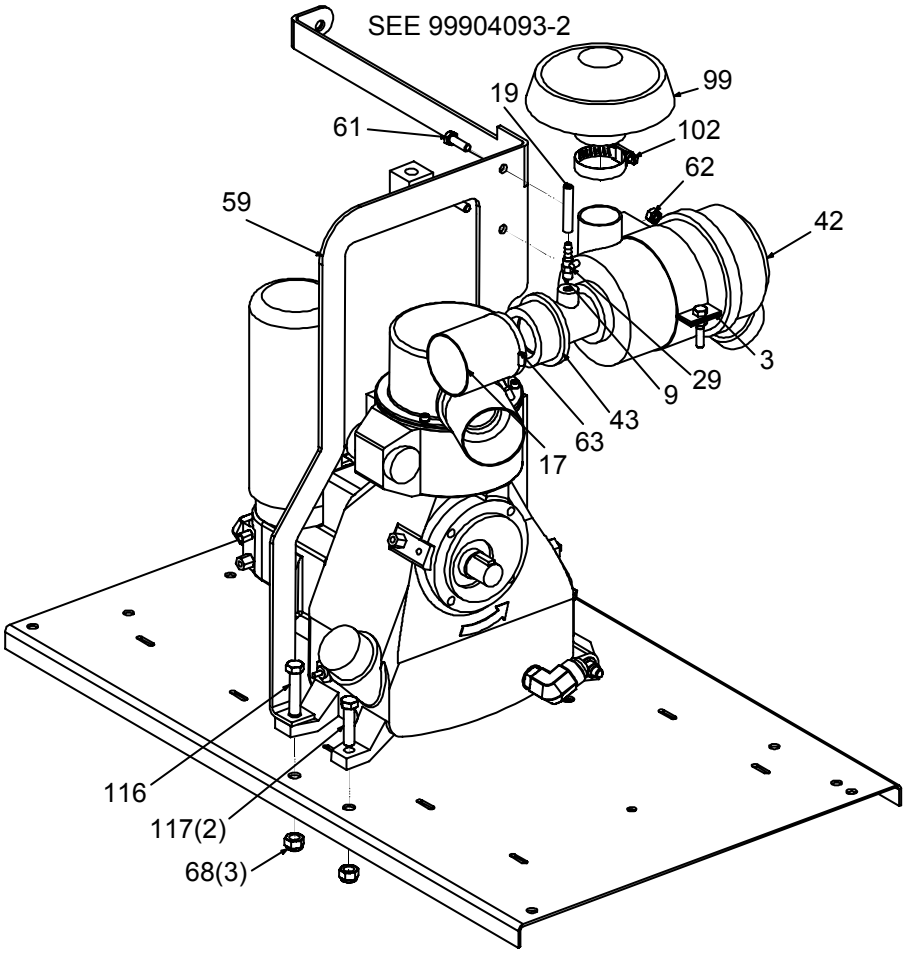


99904093-3 PARTS LIST				
ITEM	PART #	DESCRIPTION	KIT #	QUANTITY
17.	70396152	HOSE-2.5 ID GT 150 CL		2'
21.	72532366	ADPTR-M STR/M JIC 12 12		4
43.	76396153	INSERT-RUBBER AIR FILTER 2.5 X 1.75		2
52.	72534482	ELBOW-M JIC/90/M BSPP 12 8		3
54.	301256	MOTOR-HYD .87		1
55.	60130815	PULLEY-DRIVER COMPRESSOR		1
58.	72532365	ADPTR-M STR/M JIC 10 12		1
63.	72661549	CLAMP-DUCT 2.5"		2
66.	70397043	GASKET-2545 CPRSR INLET		1
67.	70734163	CMPRSR - CAS2545		1
68.	72062105	NUT .44-14 HEX NYLOCK	111	5
69.	72060064	CAP SCR .44-14X 1.50 HH GR5 Z	111	1
71.	77041640	SWITCH-TEMP 1/2" 240R NC		1
72.	70048224	SENDER-TEMPERATURE		1
73.	71412637	BUSHING-TL W/KW 25MM		1
74.	71412638	BUSHING-TL W/KW .75		1
75.	72533032	ELBOW-M JIC/45/F JIC 12 12		1
93.	60130816	PULLEY-DRIVEN COMPRESSOR		1
103.	52720744	WLDMT-MOTOR BRKT CAS2545		1
104.	70580187	BELT-3V		3
105.	60130976	CAP-2545 CMPRSR INLET		1
111.	51720751	KIT-HRDW CAS2545 AIR END		1

99904093-3 PARTS LIST				
ITEM	PART #	DESCRIPTION	KIT #	QUANTITY
114.	72601797	WASHER-LOCK 8MM	111	4
119.	72601927	WASHER-LOCK 5MM	111	3
120.	72601925	CAP SCR M 8-1.25X 30 BTNHD	111	4
122.	72601928	CAP SCR M 5-0.80X 16 SH PLAIN	111	3
REV D 20071002				

99904093-4 Drawing

See parts list. (see "99904093 Complete Parts List" on page 65)

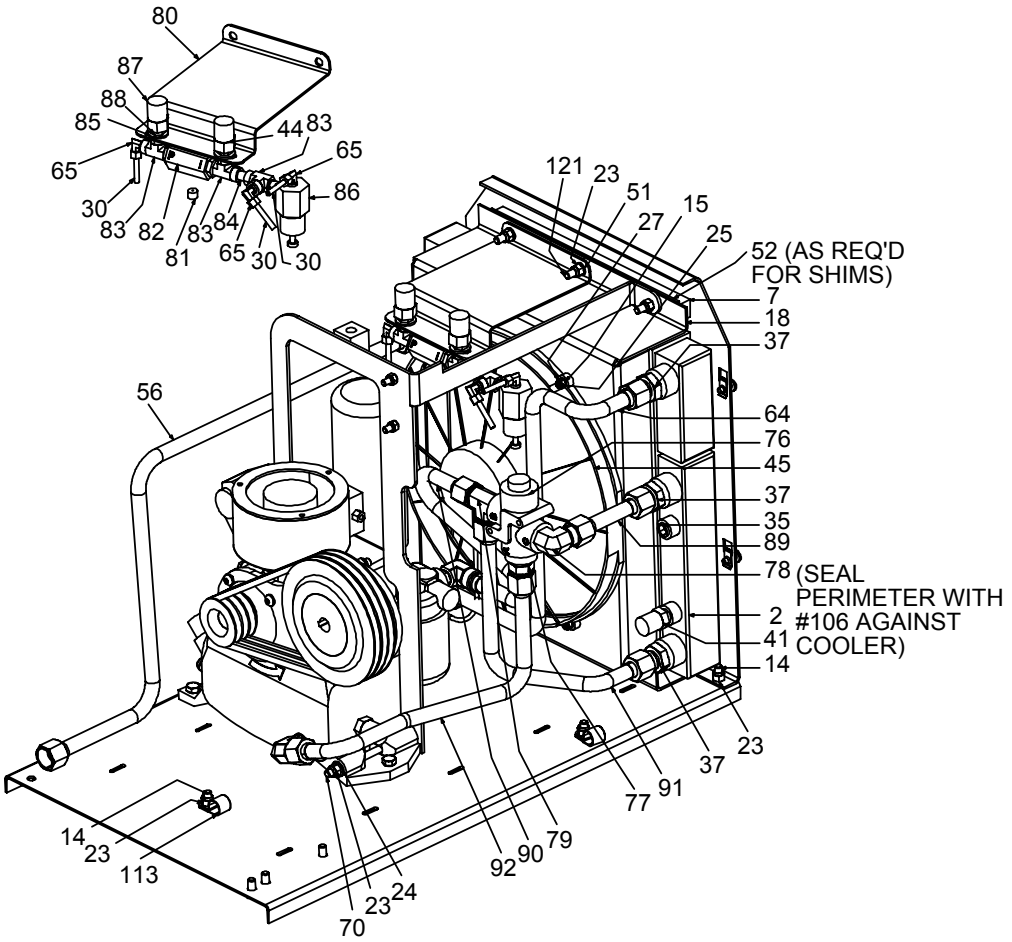


99904093-4 PARTS LIST				
ITEM	PART #	DESCRIPTION	KIT #	QUANTITY
3.	70048216	BAND-AIR FILTER 4.8		1
9.	72531534	NIPPLE-BARB BRS .12MPT .25 220CF		2
17.	70396152	HOSE-2.5 ID GT 150 CL		2'
19.	89392146	HOSE-GP .25X250 WP GRAY 801-4		2' 6"
29.	72066452	CLAMP-HOSE .25- .62 SAE 4 SS		2
42.	70048215	FILTER-AIR ASSY		1
43.	76396153	INSERT-RUBBER AIR FILTER 2.5 X 1.75		2
59.	52720643	BRACKET-WELDMENT,LIFT CANOPY		1
61.	72060025	CAP SCR .31-18X 1.00 HH GR5 Z	111	2
62.	72062109	NUT .31-18 HEX NYLOCK	111	2
63.	72661549	CLAMP-DUCT 2.5"		2
68.	72062105	NUT .44-14 HEX NYLOCK	111	5
99.	70048223	CAP-AIR FILTER 4.8		1

99904093-4 PARTS LIST				
ITEM	PART #	DESCRIPTION	KIT #	QUANTITY
102.	72066005	CLAMP-HOSE 1.57-2.50 SAE #32		1
111.	51720751	KIT-HRDW CAS2545 AIR END		1
116.	72060066	CAP SCR .44-14X 2.00 HH GR5 Z	111	1
117.	72060065	CAP SCR .44-14X 1.75 HH GR5 Z	111	2
REV				

99904093-5 Drawing

See parts list. (see "99904093 Complete Parts List" on page 65)

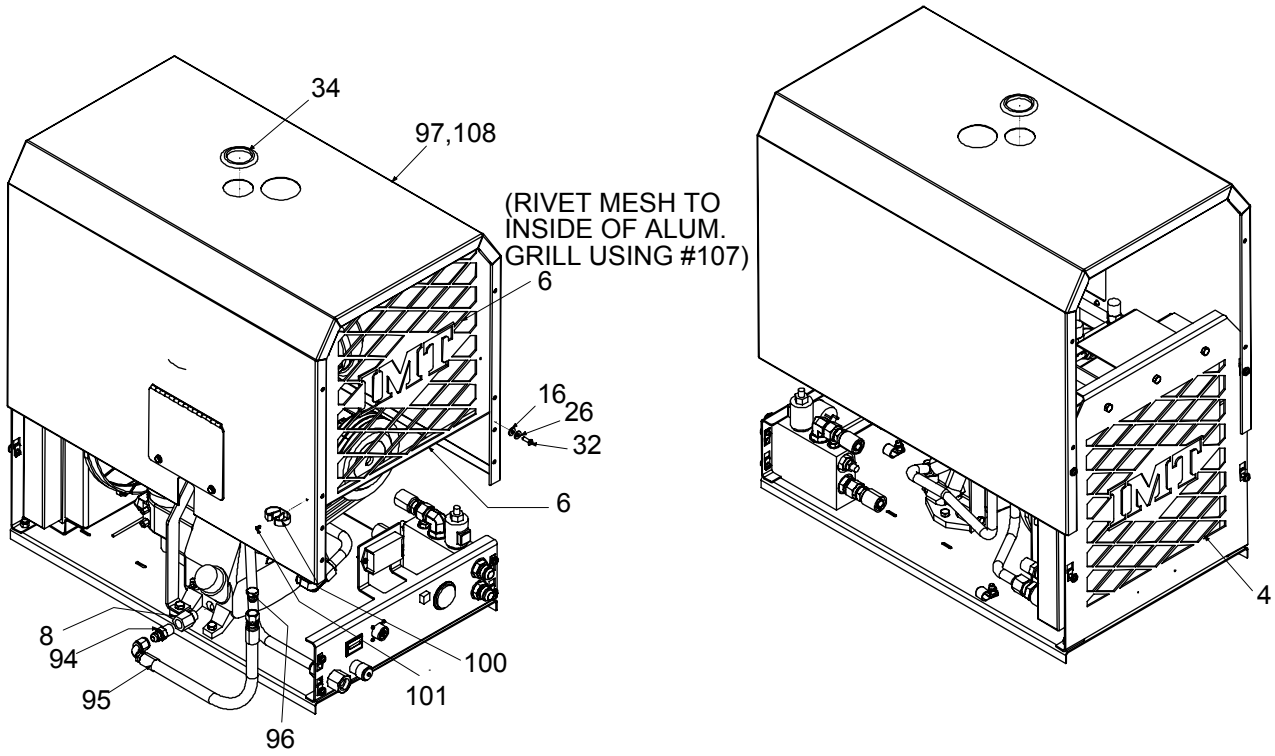


99904093-5 PARTS LIST				
ITEM	PART #	DESCRIPTION	KIT #	QUANTITY
2.	73052132	COOLER-AIR/OIL CANOPY		1
7.	60125146	SPACER-COOLER		1
8.	72534353	ADPTR-M BSPP/FPT 8 8		1
9.	72531534	NIPPLE-BARB BRS .12MPT .25		2
10.	72053767	ELBOW-M STR/90/M JIC 12 12		1
11.	73540127	VALVE-SOL		1
12.	60125143	VALVE BLOCK-COMPRESSOR		1
13.	73540139	VALVE-RELIEF 2500 PSI RVPS10NS030		1
14.	72060046	CAP SCR .38-16X 1.00 HH GR5 Z	110,112	6
15.	72063000	WASHER .19 W FLAT ANSI B27.2Z	112	4
16.	72063228	WASHER-NYLON	109	12
17.	70396152	HOSE-2.5 ID GT 150 CL		2'
18.	60125145	SHROUD-FAN COMPRESSOR		1
23.	72062103	NUT .38-16 HEX NYLOCK (PART OF	110,111,	

99904093-5 PARTS LIST				
ITEM	PART #	DESCRIPTION	KIT #	QUANTITY
24.	72063003	WASHER .38 FLAT	110,111	4
25.	72060002	CAP SCR .25-20X .75 HH GR5 Z	112	4
27.	72062104	NUT .25-20 HEX NYLOCK	112	4
30.	70034475	TUBE-CLEAR PLASTIC .250 OD .125 ID		3
35.	72532661	PLUG-PIPE SOC HEX STL .50		1
37.	72053677	ADPTR-MPT/M JIC 1.00 12		4
41.	77041645	SWITCH-TEMP 1/2" 180R NO		1
44.	77041639	SWITCH-PRESSURE 20LB 1/8" N/O		1
45.	70733695	FAN-ASSEMBLY		1
51.	72063002	WASHER .31 FLAT	110	2
52.	72534482	ELBOW-M JIC/90/M BSPP 12 8		3
56.	71410007	TUBE ASM-AIR DISCHARGE		1
64.	71412608	TUBE ASM-COALESCER		1
65.	72534360	ELBOW-MPT/90/TUBE 4 4		3
70.	72060060	CAP SCR .38-16X 6.00 HH GR5 Z	111	1
76.	73540113	VALVE-THERMAL		1
77.	72053676	ADPTR-MPT/M JIC .75 12		1
78.	72531427	ELBOW-MPT/90/M JIC .75 12		1
79.	72534487	TEE-MALE RUN .75 MPT .75 JIC		1
80.	60125300	BRACKET-CONTROLS COMPRESSOR		1
81.	60124689	PLUG-BLOWDOWN		1
82.	73540110	VALVE-BLOWDOWN		1
83.	72533726	TEE-M PIPE/F PIPE MALE RUN .25		3
84.	72053013	NIPPLE-PIPE BLK .25X CLOSE		1
85.	72063005	WASHER .50 FLAT	111	2
86.	73540109	VALVE-REGULATOR .25		1
87.	77041638	SWITCH-PRESSURE 5LB 1/8" N/C		1
88.	72531826	REDUCER BUSH-STL .25- .12		2
89.	71412622	TUBE ASM - COOLER TO THERMOVALVE PORT C		1
90.	71412620	TUBE ASM - OIL FILTER TO THERMOVALVE PORT B		1
91.	71412621	TUBE ASM - COOLER TO THERMOVALVE PORT B		1
92.	71412619	TUBE ASM - SUMP TO THERMOVALVE PORT A		1
109.	51718586	KIT-HRDW CAS3560 CANOPY		1
110.	51718588	KIT-HRDW CAS3560 COOLER		1
111.	51720751	KIT-HRDW CAS2545 AIR END		1
112.	51720752	KIT-HRDW CAS2545 BASE		1
113.	72066580	CLAMP		2
121.	72060051	CAP SCR .38-16X 2.25 HH GR5 Z	110	3

99904093-6 Drawing

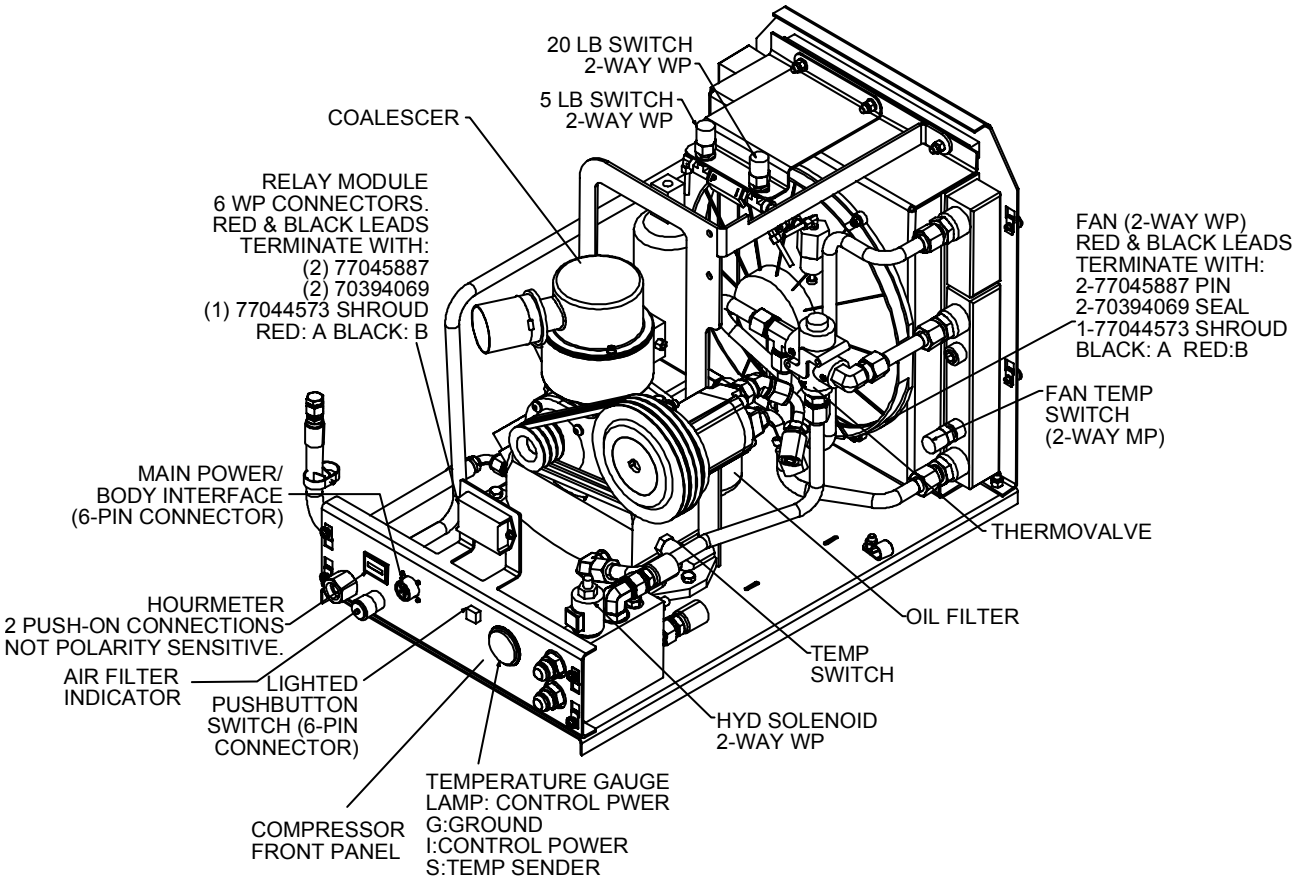
See parts list. (see "99904093 Complete Parts List" on page 65)



99904093-6 PARTS LIST				
ITEM	PART #	DESCRIPTION	KIT #	QUANTITY
4.	60125141	GRILLE-COOLER COMPRESSOR		1
6.	60125142	GRILLE-COMPRESSOR		1
8.	72534353	ADPTR-M BSPP/FPT 8 8		1
16.	72063228	WASHER-NYLON .25 idX .625 od X .062 thk	109	12
26.	72063001	WASHER .25 FLAT	109	12
32.	72601652	SCR-MACH .25-20X .75TRHTORXSS	109	12
34.	70034429	PLUG-PLSTC BUTTON B-80-21 2.31	109	1
94.	72053497	ADPTR-MPT/M JIC .50 8		1
95.	51396580	HOSE-FJ .50 X 24.00 100R16		1
96.	72532679	PLUG-JIC HEX HD STL .75 THD		1
97.	60130977	COVER-2545 COMPRESSOR		1
100.	70146286	HOLDER-TENSION CLIP 1.125"		1
101.	72661369	RIVET-POP SS .156 X .25 GRIP	109	1
108.	76397042	SOUNDPROOFING-COMPRESSOR		1
109.	51718586	KIT-HRDW CAS3560 CANOPY		1
REV B 20071002				

99904093-7 Drawing

See parts list. (see "99904093 Complete Parts List" on page 65)



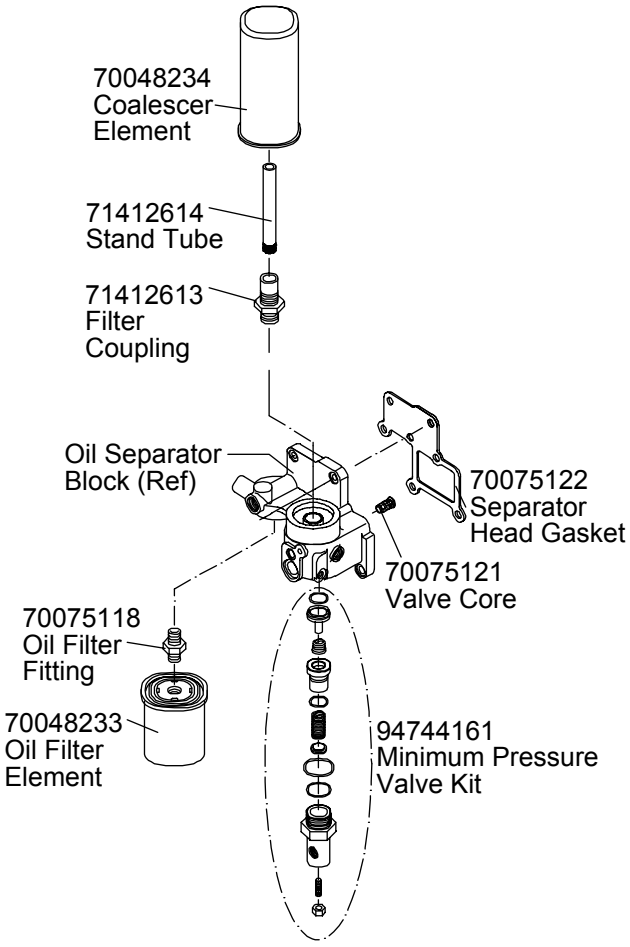
99904093 Complete Parts List

99904093 PARTS LIST				
ITEM	PART #	DESCRIPTION	KIT #	QUANTITY
1.	52720642	BASE-WELDMENT COMPRESSOR		1
2.	73052132	COOLER-AIR/OIL CANOPY		1
3.	70048216	BAND-AIR FILTER 4.8		1
4.	60125141	GRILLE-COOLER COMPRESSOR		1
5.	72062301	NUT-TINNERMAN 1/4-20UNC	109,112	12
6.	60125142	GRILLE-COMPRESSOR		1
7.	60125146	SPACER-COOLER		1
8.	72534353	ADPTR-M BSPP/FPT 8 8		1
9.	72531534	NIPPLE-BARB BRS .12MPT .25		2
10.	72053767	ELBOW-M STR/90/M JIC 12 12		1
11.	73540127	VALVE-SOL		1
12.	60125143	VALVE BLOCK-COMPRESSOR		1
13.	73540139	VALVE-RELIEF 2500 PSI RVPS10NS030		1
14.	72060046	CAP SCR .38-16X 1.00 HH GR5 Z	110,112	6
15.	72063000	WASHER .19 W FLAT ANSI B27.2Z	112	4
16.	72063228	WASHER-NYLON	109	12
17.	70396152	HOSE-2.5 ID GT 150 CL		2'
18.	60125145	SHROUD-FAN COMPRESSOR		1
19.	89392146	HOSE-GP .25X250 WP GRAY 801-4		2' 6"
20.	72063051	WASHER .38 LOCK	112	3
21.	72532366	ADPTR-M STR/M JIC 12 12		4
22.	72060044	CAP SCR .38-16X .75 HH GR5 Z	112	4
23.	72062103	NUT .38-16 HEX NYLOCK (PART OF	110,111, 112	12
24.	72063003	WASHER .38 FLAT	110,111	4
25.	72060002	CAP SCR .25-20X .75 HH GR5 Z	112	4
26.	72063001	WASHER .25 FLAT	109	12
27.	72062104	NUT .25-20 HEX NYLOCK	112	4
28.	70733496	METER-HOUR		1
29.	72066452	CLAMP-HOSE .25- .62 SAE 4 SS		2
30.	70034475	TUBE-CLEAR PLASTIC .250 OD .125 ID (WAS 3)		4
31.	60130765	BULKHEAD-COMPRESSOR		1
32.	72601652	SCR-MACH .25-20X .75TRHTORXSS	109	12
33.	77041660	SWITCH-LIGHTED PUSHBUTTON		1
34.	70034429	PLUG-PLSTC BUTTON B-80-21 2.31	109	1
35.	72532661	PLUG-PIPE SOC HEX STL .50		1
36.	72534381	ADPTR-BULKHEAD FNPT/MJIC 1.00 1.00		1
37.	72053677	ADPTR-MPT/M JIC 1.00 12		4
38.	70048225	GAUGE-TEMPERATURE 101345		1
39.	70048222	INDICATOR-AIR FILTER		1
40.	72534358	ADPTR-MPT/FPT STL .12- .12		1
41.	77041645	SWITCH-TEMP 1/2" 180R NO		1
42.	70048215	FILTER-AIR ASSY		1
43.	76396153	INSERT-RUBBER AIR FILTER 2.5 X 1.75		2

99904093 PARTS LIST				
ITEM	PART #	DESCRIPTION	KIT #	QUANTITY
44.	77041639	SWITCH-PRESSURE 20LB 1/8" N/O		1
45.	70733695	FAN-ASSEMBLY		1
46.	72063173	WASHER # 4 W FLAT ANSI B27.2		4
47.	72063172	WASHER # 4 LOCK ZINC		4
48.	72062206	NUT # 4-40 HEX ZINC		4
49.	72601806	SCR-MACH 4-40 .50 SKT HEAD		4
50.	72532140	PLUG-STR HEX HD STL .56		1
51.	72063002	WASHER .31 FLAT	110	2
52.	72534482	ELBOW-M JIC/90/M BSPP 12 8		3
53.	70146433	ENGINE FUNCTION MODULE (E.F.M.)		1
54.	301256	MOTOR-HYD .87		1
55.	60130815	PULLEY-DRIVER COMPRESSOR		1
56.	71410007	TUBE ASM-AIR DISCHARGE		1
57.	51396385	HOSE-FJ .75 X 17.00 (12-12) 100R17		1
58.	72532365	ADPTR-M STR/M JIC 10 12		1
59.	52720643	BRACKET-WELDMENT,LIFT CANOPY		1
60.	51396386	HOSE-FJ .75 X 19.00 (12-12) 100R17		1
61.	72060025	CAP SCR .31-18X 1.00 HH GR5 Z	111	2
62.	72062109	NUT .31-18 HEX NYLOCK	111	2
63.	72661549	CLAMP-DUCT 2.5"		2
64.	71412608	TUBE ASM-COALESCER		1
65.	72534360	ELBOW-MPT/90/TUBE 4 4		3
66.	70397043	GASKET-2545 CPRSR INLET		1
67.	70734163	CMPRSR - CAS2545		1
68.	72062105	NUT .44-14 HEX NYLOCK	111	5
69.	72060064	CAP SCR .44-14X 1.50 HH GR5 Z	111	1
70.	72060060	CAP SCR .38-16X 6.00 HH GR5 Z	111	1
71.	77041640	SWITCH-TEMP 1/2" 240R NC		1
72.	70048224	SENDER-TEMPERATURE		1
73.	71412637	BUSHING-TL W/KW 25MM		1
74.	71412638	BUSHING-TL W/KW .75		1
75.	72533032	ELBOW-M JIC/45/F JIC 12 12		1
76.	73540113	VALVE-THERMAL		1
77.	72053676	ADPTR-MPT/M JIC .75 12		1
78.	72531427	ELBOW-MPT/90/M JIC .75 12		1
79.	72534487	TEE-MALE RUN .75 MPT .75 JIC		1
80.	60125300	BRACKET-CONTROLS COMPRESSOR		1
81.	60124689	PLUG-BLOWDOWN		1
82.	73540110	VALVE-BLOWDOWN		1
83.	72533726	TEE-M PIPE/F PIPE MALE RUN .25		3
84.	72053013	NIPPLE-PIPE BLK .25X CLOSE		1
85.	72063005	WASHER .50 FLAT (WAS PART OF KIT 112)	111	2
86.	73540109	VALVE-REGULATOR .25		1
87.	77041638	SWITCH-PRESSURE 5LB 1/8" N/C		1
88.	72531826	REDUCER BUSH-STL .25- .12		2
89.	71412622	TUBE ASM - COOLER TO THERMOVALVE PORT C		1

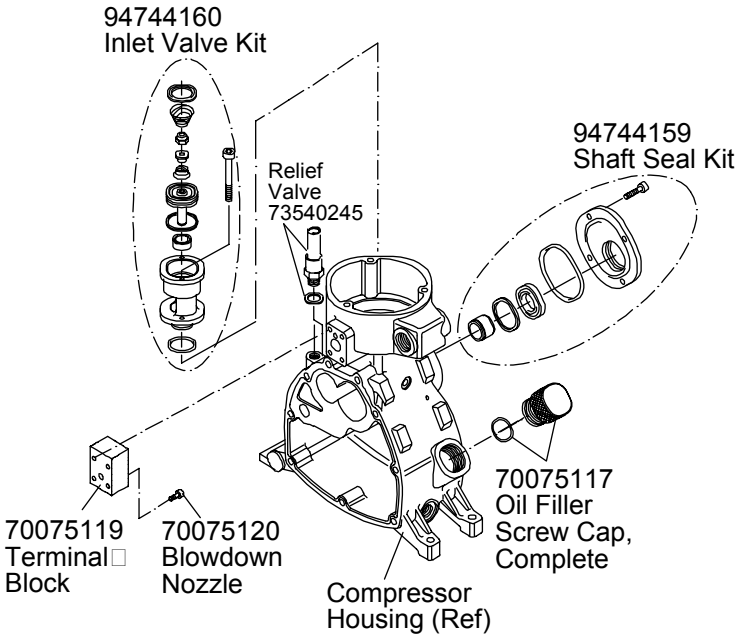
99904093 PARTS LIST				
ITEM	PART #	DESCRIPTION	KIT #	QUANTITY
90.	71412620	TUBE ASM - OIL FILTER TO THERMOVALVE PORT B		1
91.	71412621	TUBE ASM - COOLER TO THERMOVALVE PORT B		1
92.	71412619	TUBE ASM - SUMP TO THERMOVALVE PORT A		1
93.	60130816	PULLEY-DRIVEN COMPRESSOR		1
94.	72053497	ADPTR-MPT/M JIC .50 8		1
95.	51396580	HOSE-FJ .50 X 24.00 100R16		1
96.	72532679	PLUG-JIC HEX HD STL .75 THD		1
97.	60130977	COVER-2545 COMPRESSOR		1
98.	72062106	NUT 10-24 HEX NYLOCK		2
99.	70048223	CAP-AIR FILTER 4.8		1
100.	70146286	HOLDER-TENSION CLIP 1.125"		1
101.	72661369	RIVET-POP SS .156 X .25 GRIP	109	1
102.	72066005	CLAMP-HOSE 1.57-2.50 SAE #32		1
103.	52720744	WLDMT-MOTOR BRKT CAS2545		1
104.	70580187	BELT-3V		3
105.	60130976	CAP-2545 CMPRSR INLET		1
106.	89393607	WEATHERSTRIP- .62X.50		6'
107.	72066340	RIVET-POP AL .12 X .375 GRIP	109	8
108.	76397042	SOUNDPROOFING-COMPRESSOR		1
109.	51718586	KIT-HRDW CAS3560 CANOPY		1
110.	51718588	KIT-HRDW CAS3560 COOLER		1
111.	51720751	KIT-HRDW CAS2545 AIR END		1
112.	51720752	KIT-HRDW CAS2545 BASE		1
113.	72066580	CLAMP		2
114.	72601797	WASHER-LOCK 8MM	111	4
115.	60125408	GRILLE-CPRSR		1
116.	72060066	CAP SCR .44-14X 2.00 HH GR5 Z	111	1
117.	72060065	CAP SCR .44-14X 1.75 HH GR5 Z	111	2
118.	72060636	SCR-MACH #10-24X .75 RDH PH ZINC		2
119.	72601927	WASHER-LOCK 5MM	111	3
120.	72601925	CAP SCR M 8-1.25X 30 BTNHD	111	4
121.	72060051	CAP SCR .38-16X 2.25 HH GR5 Z	110	3
122.	72601928	CAP SCR M 5-0.80X 16 SH PLAIN	111	3
123.	73540368	KIT-PNEUMATIC FITTINGS CAS2545		1
REV D 20091210				

Oil Separator Block Spare Parts



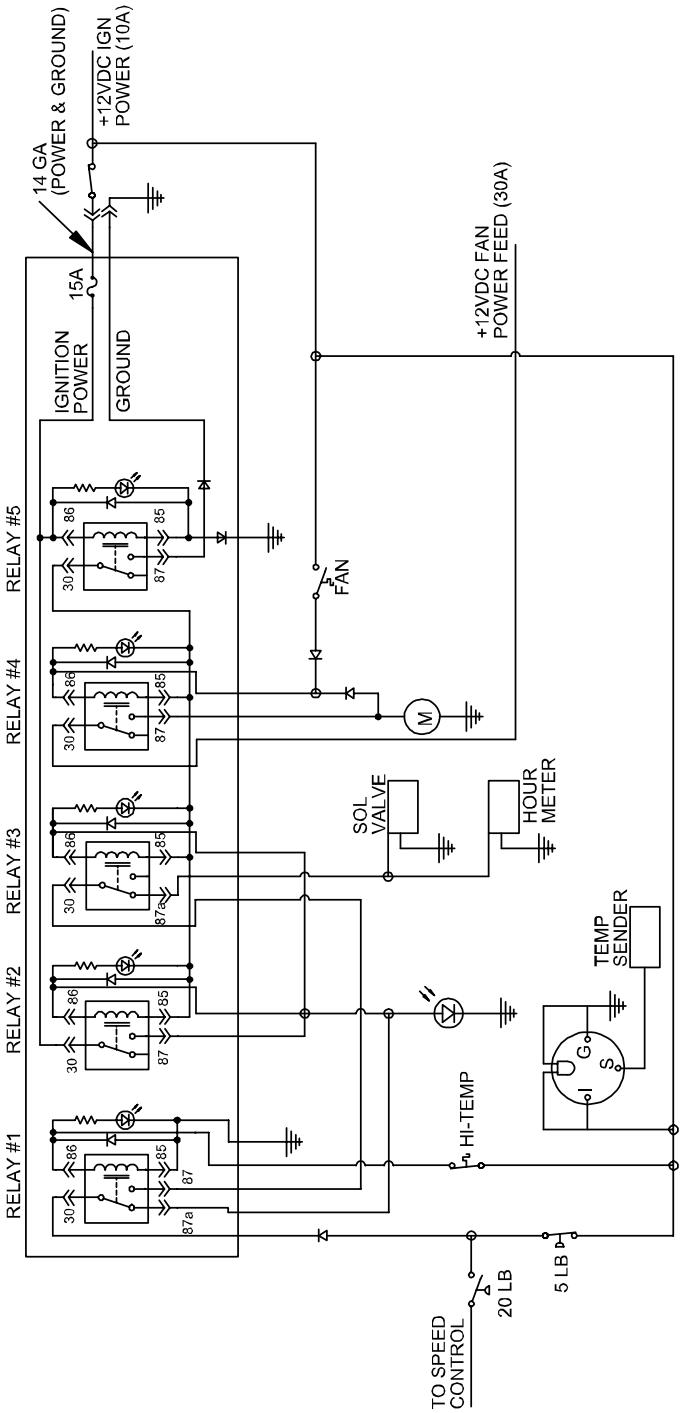
Reference Drawing 70734163

Compressor Spare Parts



Reference Drawing 70734163

Electrical Schematic (77441156)



Hydraulic Schematic (99904155)