

Operator's Manual and Parts List

SULLAIR[®] COMPRESSOR

H900/H750 CFM 150HP Rotary Screw Air Compressor

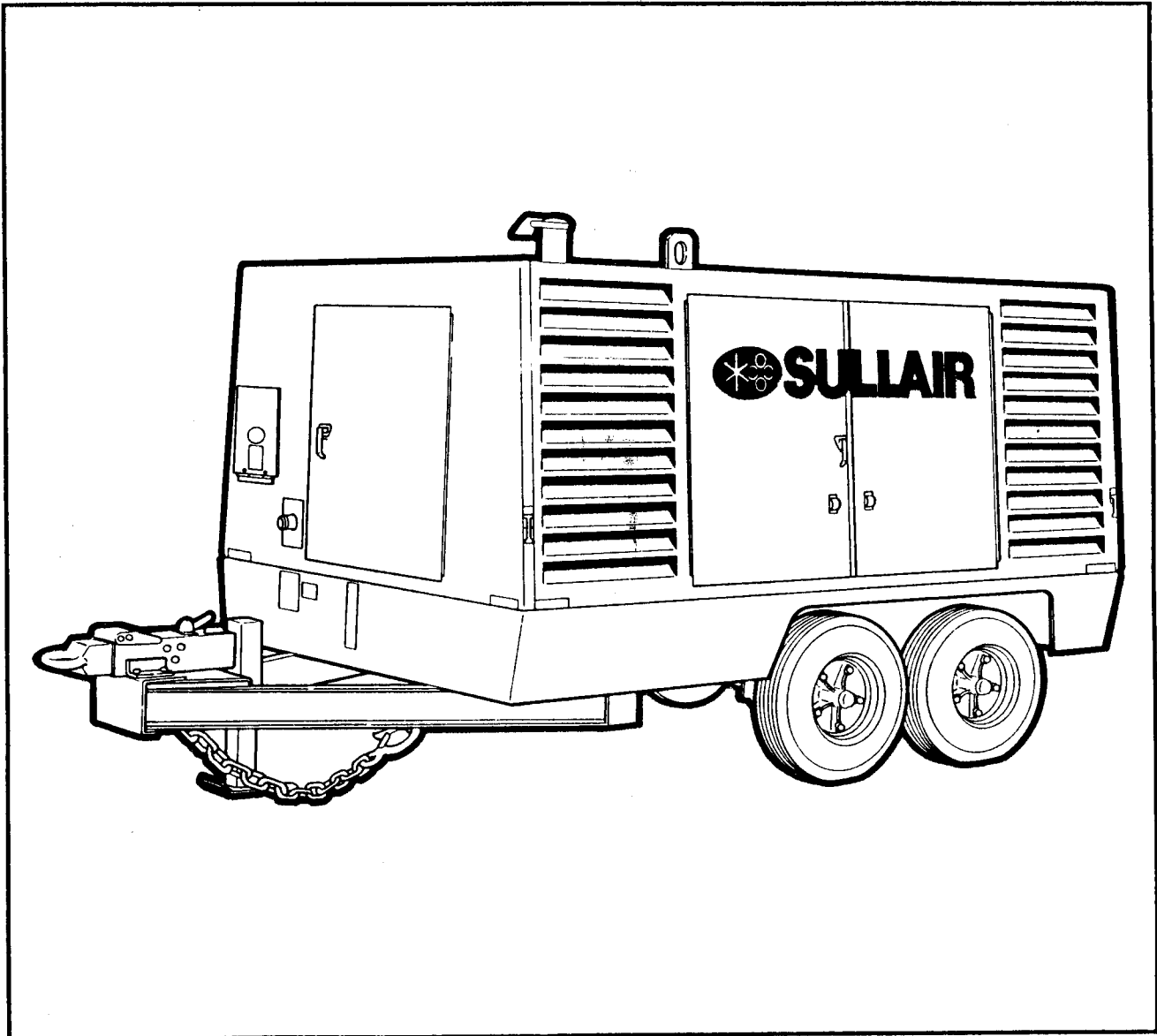




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Section 1 SAFETY

1.1 GENERAL

Sullair® Corporation designs and manufactures all of its products so they can be operated safely. However, the responsibility for safe operation rests with those who use and maintain these products. The following safety precautions are offered as a guide which, if conscientiously followed, will minimize the possibility of accidents throughout the useful life of this equipment.

The air compressor should be operated only by those who have been trained and delegated to do so, and who have read and understood this Operator's Manual. Failure to follow the instructions, procedures and safety precautions in this manual can result in accidents and injuries.

NEVER start the air compressor unless it is safe to do so. **DO NOT** attempt to operate the air compressor with a known unsafe condition. Tag the air compressor and render it inoperative by disconnecting the battery so others who may not know of the unsafe condition will not attempt to operate it until the condition is corrected.

Use and operate the air compressor only in full compliance with all pertinent OSHA requirements and all pertinent Federal, State, and Local codes or requirements. Read your CIMA Safety Manual prior to operation or performing maintenance on this equipment.

DO NOT modify the compressor except with written factory approval.

Each day walk around the air compressor and inspect for leaks, loose or missing, damaged, or parts out of adjustment. Perform all recommended daily maintenance.

Inspect for torn, frayed, blistered, or otherwise deteriorated and degraded hoses. Replace as required.

NOTE

Estimated hose life based on a 5-day, 8-hour work week is 3 years. These conditions exist on an 8-hour shift only. Any other operation of the equipment other than 8-hour shifts would derate the hose life based on hours of operation.

1.2 TOWING (I)

A. PREPARING TO TOW

▲ WARNING

DO NOT tow the compressor should its weight exceed the rated limit of the tow vehicle, as the vehicle may not brake safely with excess weight. See rated limit in tow vehicle Operator's Manual, and review its instructions and other requirements for safe towing.

1. Prior to hitching the air compressor to the tow vehicle, inspect all attachment parts and equipment, checking for (I) signs of excessive wear or corrosion, (II) parts that are cracked, bent, dented or otherwise deformed or degraded, and (III) loose nuts, bolts or other fasteners. Should any such condition be present, **DO NOT TOW** until the problem is corrected.

2. Back the towing vehicle to the compressor and position it in preparation for coupling the compressor.

3. If the compressor is provided with a drawbar latched in the vertical upright position, carefully unlatch drawbar and lower it to engage the coupling device. If not, raise drawbar to engage coupling device or otherwise couple the compressor to the towing vehicle. **DO NOT** attempt to raise or lower drawbars by hand if the weight is more than you can safely handle. Use a lifting device such as a jack or chain fall if you can't lift or lower without avoiding injury to yourself or others. Keep hands and fingers clear of the coupling device and all other pinch points. Keep feet clear of drawbar to avoid injury in case it should slip from your hand.

4. Make sure the coupling device is fully engaged, closed and locked.

5. If chains are provided, pass each chain through its point of attachment on the towing vehicle; then hook each chain to itself by passing the grab hook over (not through) a link. Cross chains under front of drawbar before passing them through points of attachment on towing vehicle to support front of drawbar in case it should accidentally become uncoupled.

6. Make sure that the coupling device and adjacent structures on the towing vehicle (and also, if utilized, chain adjustment, brake and/or electrical interconnections). **DO NOT** interfere with or restrict motion of any part of the compressor, including its coupling device, with respect to the towing vehicle when maneuvering over any anticipated terrain.

7. If provided, make sure chain length, brake and electrical interconnections provide sufficient slack to prevent strain when cornering and maneuvering, yet are supported so they can not drag or rub on road, terrain or towing vehicle surfaces which might cause wear that could render them inoperative.

8. On two-wheeled models, fully retract front screw jack (if provided) and any rear stabilizer legs. If a retractable caster wheel is provided, pull the lock pin and fold and raise the caster wheel, then make sure pin is re-engaged to secure caster wheel in full up and lock position with the wheel horizontal.

9. Make sure tires are in good condition and are the size (load range) specified and are inflated to the specified pressures. **DO NOT** change the tire size or type. Also, make sure wheel bolts, lugs or nuts are tightened to the specified torque.

Section 1 SAFETY

C. Make sure entire lifting, rigging and supporting structure has been inspected, is in good conditions and has a rated capacity of at least the net weight of the compressor plus an additional 10% allowance for weight of snow, ice, mud or stored tools and equipment. If you are unsure of the weight, then weigh compressor before lifting.

D. Make sure lifting hook has a functional safety latch or equivalent, and is fully engaged and latched on the ball.

E. Use guide ropes or equivalent to prevent twisting or swinging of the compressor once it has been lifted clear of the ground.

F. **DO NOT** attempt to lift in high winds.

G. Keep all personnel out from under and away from the compressor whenever it is suspended.

H. Lift compressor no higher than necessary.

I. Keep lift operator in constant attendance whenever compressor is suspended.

J. Set compressor down only on level surfaces capable of supporting at least its net weight plus an additional 10% allowance for the weight of snow, ice, mud or stored tools and equipment.

K. If the compressor is provided with parking brakes, make sure they are set, and in any event, block or chock both sides of all running wheels before disengaging the lifting hook.

1.10 ENTRAPMENT

A. Make sure all personnel are out compressor before closing and latching enclosure doors.

B. If the compressor is large enough to hold a man and if it is necessary to enter it to perform service adjustments, inform other personnel before doing so, or else secure the access door in the open position to avoid the possibility of others closing and possibly latching the door with personnel inside.

1.11 JUMP STARTING

A. Observe all safety precautions mentioned elsewhere in this manual.

B. The batteries may contain hydrogen gas which is flammable and explosive. Keep flames, sparks and other sources of ignition away.

C. The batteries contain acid which is corrosive and poisonous. **DO NOT** allow battery acid to contact eyes, skin, fabrics or painted surfaces as serious personal injury or property damage could result. Flush any contacted areas thoroughly with water immediately. Always wear an acid resistant apron and face shield when attempting to jump start the compressor.

D. Remove all vent caps (if so equipped) from the battery or batteries in the compressor. **DO NOT**

permit dirt or foreign matter to enter the open cells.

E. Check fluid level. If low, bring fluid to proper level before attempting to jump start (not applicable to maintenance-free batteries).

F. **DO NOT** attempt to jump start if fluid is frozen or slushy. Bring batteries up to at least 40°F (4°C) before attempting to jump start or it may explode.

G. Cover open cells of all compressor batteries with clean dampened cloths before attempting to jump start.

H. Attempt to jump start only with a vehicle having a negative ground electrical system with the same voltage and that is equipped with a battery or batteries of comparable size or larger than supplied in the compressor. **DO NOT** attempt to jump start using motor generators sets, welders or other sources of DC power as serious damage may result.

I. Bring the starting vehicle alongside the compressor, but **DO NOT** permit metal to metal contact between the compressor and the starting vehicle.

J. Set the parking brakes of both the compressor (if provided) and the starting vehicle or otherwise block both sides of all wheels.

K. Place the starting vehicle in neutral or park, turn off all non-essential accessory electrical loads and start its engine.

L. Use only jumpers cable that are clean, in good condition and are heavy enough to handle the starting current.

M. Avoid accidental contact between jumper cable terminal clips or clamps and any metallic portion of either the compressor or the starting vehicle to minimize the possibility of uncontrolled arcing which might serve as a source of ignition.

N. Positive battery terminals are usually identified by a plus (+) sign on the terminal and the letters POS adjacent to the terminal. Negative battery terminals are usually identified by the letters NEG adjacent to the terminal or a negative (-) sign.

O. Connect one end of a jumper cable to the positive (POS) (+) battery terminal in the starting vehicle. When jump starting 24V compressors and if the starting vehicle is provided with two (2) 12V batteries connected in series, connect the jumper cable to the positive (POS) (+) terminal of the ungrounded battery.

P. Connect the other end of the same jumper cable to the positive (POS) (+) terminal of the starter motor battery in the compressor, or when jump starting 24V compressor, to the positive (POS) (+) terminal of the ungrounded battery in the compressor.

Section 1 **SAFETY**

Q. Connect one end of the outer jumper cable to the grounded negative (NEG) (-) terminal of the battery in the starting vehicle. When jump starting 24V compressors and if the starting vehicle is provided with two (2) 12V batteries connected in series, connect the jumper cable to the negative (NEG) (-) terminal of the grounded battery.

R. Check your connections. **DO NOT** attempt to start a 24V compressor with one 12V battery in the starting vehicle. **DO NOT** apply 24V to one 12V battery in the compressor.

S. Connect the other end of this same jumper cable to a clean portion of the compressor engine block away from fuel lines, the crank case breather opening, and the battery.

T. Start the compressor in accordance with normal procedure. Avoid prolonged cranking.

U. Allow the compressor to warm up. When the compressor is warm and operating smoothly at

normal idle RPM, disconnect the jumper cable from the engine block in the compressor, then disconnect the other end of this same cable from the grounded negative (NEG) (-) terminal of the battery in the starting vehicle. Then disconnect the other jumper cable from the positive (POS) (+) terminal of the battery in the compressor, or if provided with two (2) 12V batteries connected in series, from the ungrounded battery in the compressor, and finally, disconnect the other end of this same jumper cable from the positive (POS) (+) terminal of the battery in the starting vehicle or from the positive (POS) (+) terminal of the ungrounded battery in the starting vehicle, if it is provided with two (2) 12V batteries connected in series.

V. Remove and carefully dispose of the dampened cloths, as they may now be contaminated with acid, then replace all vent caps.

Section 2 DESCRIPTION

2.1 INTRODUCTION

The Sullair Quiet Portable Air Compressor offers superior performance and reliability while requiring very minimal maintenance.

Your compressor is equipped with a Sullair rotary screw compressor unit. Compared to other compressors, the Sullair is unique for its mechanical reliability, performance and durability. The compressor never needs any inspection of the internal parts.

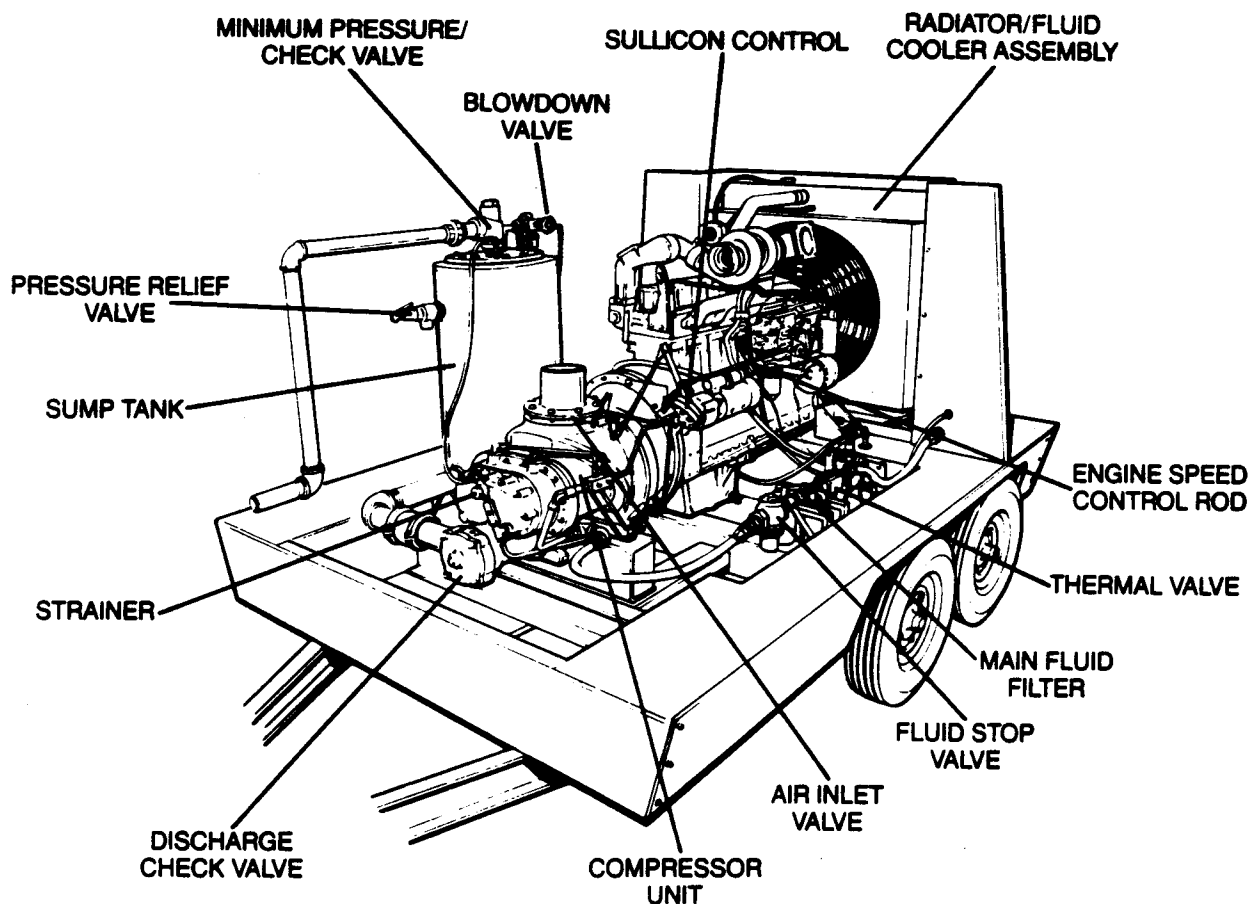
As you continue reading this manual and learn how the compressor operates and is maintained, you will see how surprisingly easy it is to keep a Sullair air compressor in top operating condition.

Read Section 5 (Maintenance) to keep your compressor in top operating condition. Should any problem or question arise which cannot be answered in this text, contact your nearest Sullair representative or the Sullair Corporation Service Department by calling toll free 1-800-348-2722.

2.2 DESCRIPTION OF COMPONENTS

Refer to Figure 2-1. The components and assemblies of the Sullair Quiet Air Compressor are clearly shown. The package includes a compressor unit, diesel engine, compressor inlet system, compressor cooling and lubrication system, compressor discharge system, capacity control system, instrument panel and electrical system. The compressor is also equipped with sound deadening insulation to lower noise emissions to a comfortable level.

Figure 2-1 Sullair® Rotary Screw Portable Air Compressor



Section 2 DESCRIPTION

The Sullair compressor unit is driven by an industrial engine designed to provide enough horsepower for more than adequate reserve at rated conditions. Refer to the Engine Operator's Manual for a more detailed description of the engine.

The engine cooling system is comprised of a radiator, high capacity fan, engine fluid cooler and thermostats. The high capacity fan draws air through the radiator, keeping the engine at the proper operating temperature.

The same fan also cools the fluid used in the compressor cooling and lubrication system. Prior to passing through the radiator, the air blown by the fan passes through the compressor fluid cooler (mounted adjacent to the radiator). The passage of air through the cooler removes the heat of compression from the fluid.

The engine is coupled to the compressor unit with a rubber element-type coupling. The H750/150 is supplied with a fuel tank large enough to keep the compressor running at full load through one eight hour shift.

2.3 SULLAIR COMPRESSOR UNIT, FUNCTIONAL DESCRIPTION

Sullair compressors feature the Sullair compressor unit, a single-stage, positive displacement, fluid lubricated-type compressor. This unit provides continuous pulse-free compression to meet your needs. With a Sullair compressor, no maintenance or inspection of the internal parts of the compressor unit is permitted in accordance with the warranty.

Fluid is injected into the compressor unit and mixes directly with the air as the rotors turn compressing the air. The fluid has three functions:

1. As coolant, it controls the rise of air temperature normally associated with the heat of compression.
2. Seals the leakage paths between the rotors and the stator and also between the rotors themselves.
3. Acts as a lubricating film between the rotors allowing one rotor to directly drive the other, which is an idler.

After the air/fluid mixture is discharged from the compressor unit, the fluid is separated from the air. At this time, the air flows to your service line and the fluid is cooled in preparation for reinjection.

2.4 COMPRESSOR COOLING AND LUBRICATION SYSTEM, FUNCTIONAL DESCRIPTION

Refer to Figures 2-2 and 2-3. The compressor cooling and lubrication system is designed to provide adequate lubrication as well as maintain the proper operating temperature of the compressor. In addition to the cooler and fan, the system consists of a main filter, thermal valve and fluid stop valve.

The fluid in the system is used as both coolant and lubricant. It is housed in the receiver/sump or sump (which will be referred to as the SUMP from hereon). Upon start-up, the temperature is low thus routing to fluid cooler is not necessary. Hence the fluid takes a path of lowest resistance by flowing toward the thermal valve.

The thermal valve has two entrance ports and one exit port. The entrance ports will be referred to as Port A and Port B. Port A accepts fluid from the sump and Port B accepts fluid from the cooler.

As previously stated, upon start-up the fluid temperature is low and thus is not routed to the cooler. The fluid first enters the thermal valve and then flows on to the compressor unit, bypassing the cooler. As the compressor continues to operate, the temperature of the fluid rises and Port A of the thermal valve begins to close. The closing of Port A forces a portion of the fluid through the fluid cooler.

The cooler is a radiator-type that works in conjunction with the engine fan. The fan draws air through the cooler removing the heat of compression from the fluid. From the cooler, the fluid is routed back to the thermal valve entering at Port B. Before the temperature of the fluid becomes high enough that Port A is completely closed, cooled fluid entering at Port B is mixed with warmer fluid entering at Port A. When the temperature of the fluid reaches 140°F (60°C), Port A is completely closed causing all fluid to flow to the cooler (as shown in Figure 2-3). After the fluid passes through the thermal valve it is then directed through the main fluid filter. There the fluid is filtered in preparation for injection into the compression chamber and bearings of the compressor unit.

The filter has two replaceable spin-on elements and a built-in bypass valve which allows the fluid to flow even when the filter elements become plugged and require changing or when the viscosity of the fluid is too high for adequate flow. After the fluid is properly filtered, it then flows through the fluid stop valve and on to the compressor unit where it lubricates, seals and cools the compression chamber as well as lubricating the bearings and gears. The fluid stop valve functions on shutdown when it shuts off the fluid supply to the compressor unit. The fluid stop valve is held open by a pressure signal from the compressor unit.

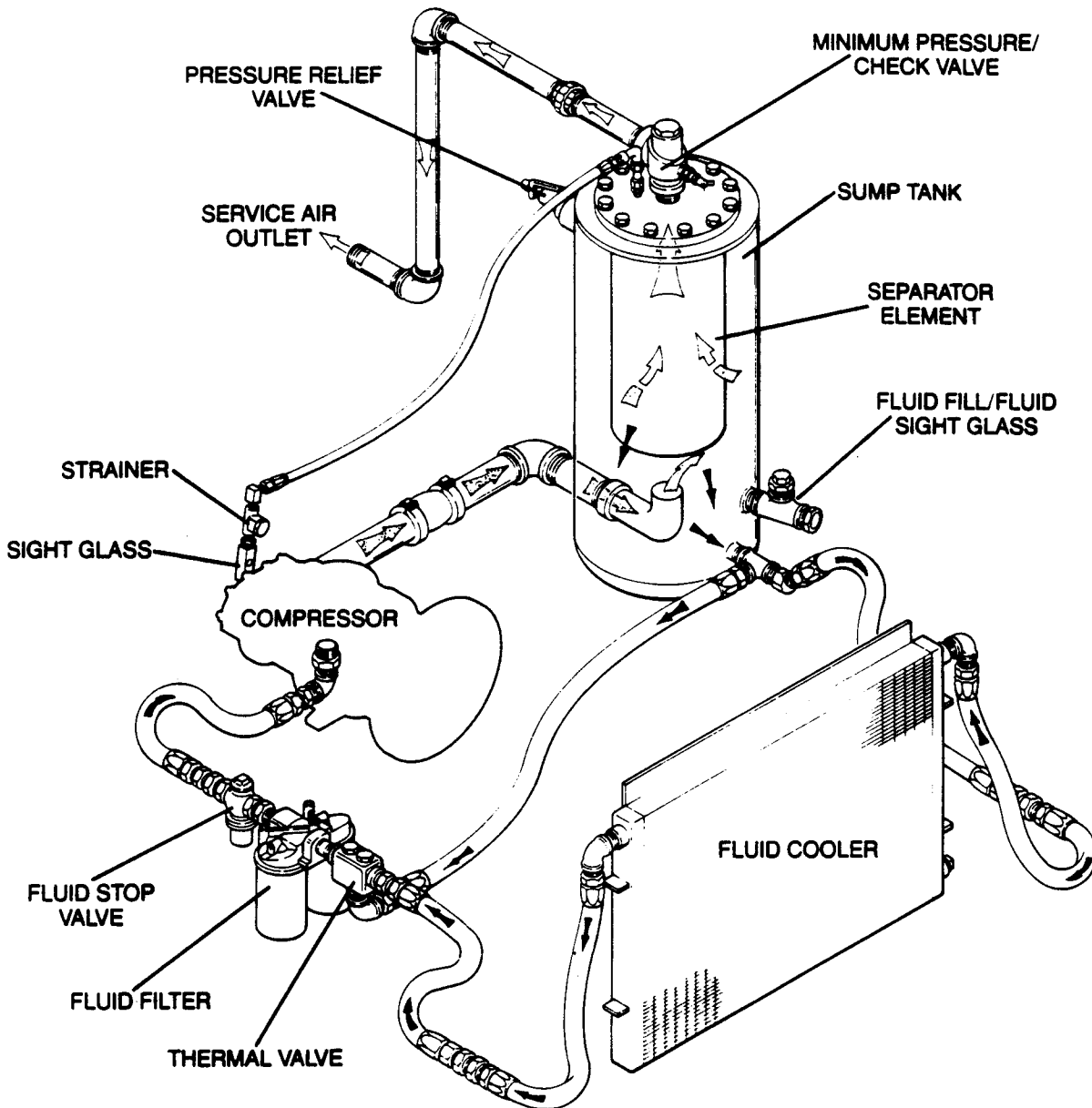
At shutdown, the pressure signal is lost and the fluid stop valve closes, isolating the compressor unit from the cooling system.

2.5 COMPRESSOR DISCHARGE SYSTEM, FUNCTIONAL DESCRIPTION

Refer to Figures 2-2 and 2-3. The Sullair compressor unit discharges a compressed air/fluid mixture through a discharge check valve into the sump. The discharge check valve is located on the rear of the compressor unit at the end opposite of the

Section 2 DESCRIPTION

Figure 2-2 Compressor Discharge and Cooling and Lubrication System



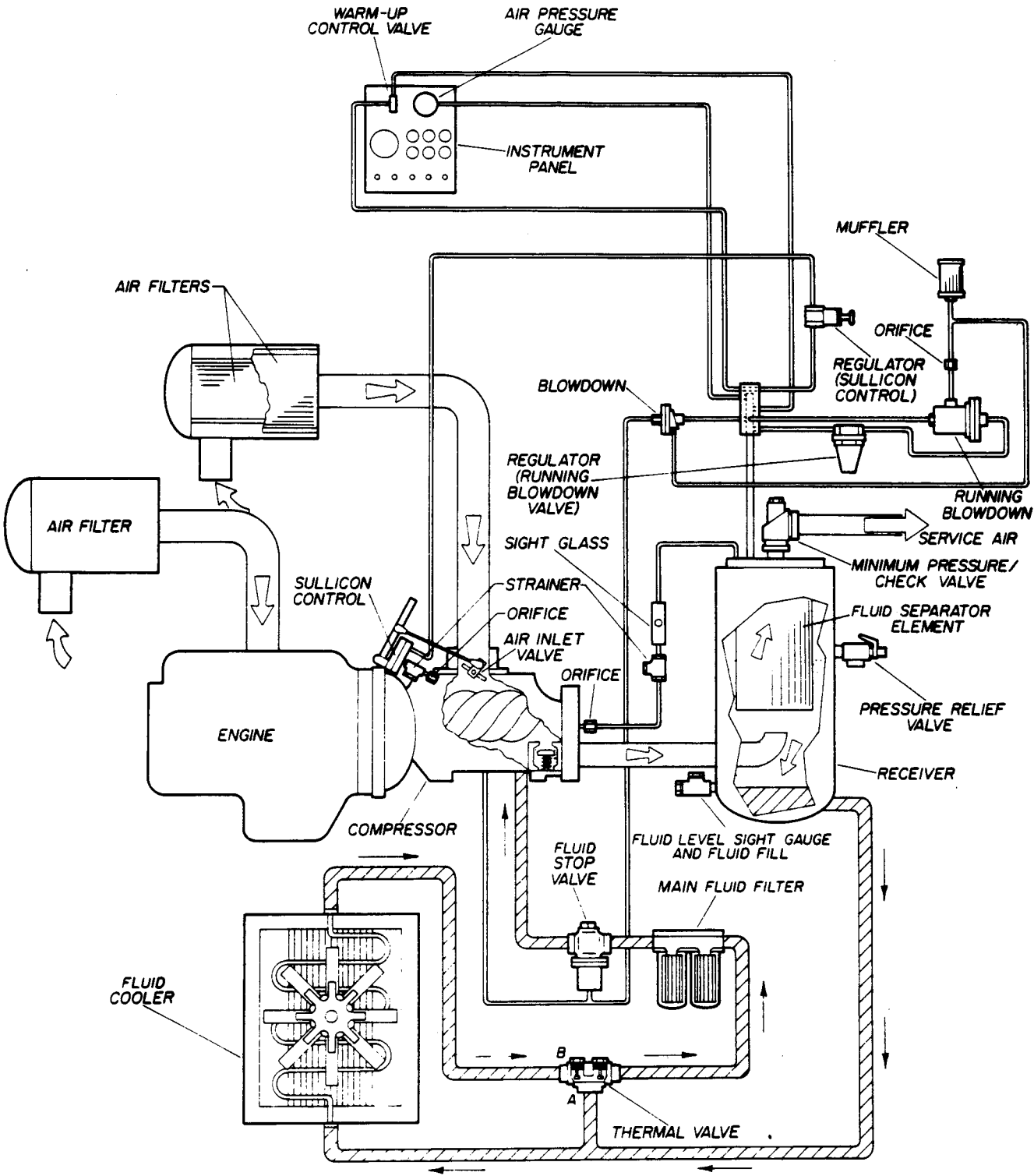
drive shaft. The discharge check valve prevents discharged air from returning to the compression chamber after shutdown. From the discharge valve, the air fluid mixture is directed to the combination sump. The sump has three functions:

1. It acts as a primary fluid separation system.
2. Serves as the compressor fluid sump.
3. Houses the air/fluid separator.

The compressed air/fluid mixture enters the sump and is directed against the side wall. By change of direction and reduction of velocity, larger droplets of fluid fall to the bottom of the sump. The fractional percentage of fluid remaining in the compressed air collects on the surface of the final separator element as the compressed air flows through the separator. As more and more fluid collects in the element surface, the fluid descends

Section 2 DESCRIPTION

Figure 2-3 Control System



Section 2

DESCRIPTION

to the bottom of the separator. A return line (or scavenge tube) leads from the bottom of the separator element to the inlet region of the compressor unit. Fluid collecting on the bottom of the separator element is returned to the compressor by the pressure difference between the area surrounding the separator element and the compressor inlet. An orifice (protected by a strainer) is included on this return line to help assure proper flow.

The sump is ASME code rated at 225 PSIG (1550kPa) working pressure. A minimum pressure/check valve, located downstream from the separator, helps assure a minimum receiver pressure of 65 PSIG (448kPa) during all conditions. This pressure is necessary for proper air/fluid separation and proper fluid circulation.

A check valve at the outlet of the receiver is installed to prevent compressed air in the service line from bleeding back into the receiver on shut-down when the compressor is being run in parallel with other compressors tied to a large air system.

A pressure relief valve (located on the wet side of the separator) is set to open if the sump pressure exceeds 225 PSIG (1550kPa). A temperature switch will shut down the compressor if the discharge temperature reaches 240°F (116°C).

Fluid is added to the sump via a capped fluid filler. A glass fluid level gauge enables the operator to visually monitor the sump fluid level.

WARNING

DO NOT remove caps, plugs, or other components when compressor is running or pressurized.

Stop compressor and relieve all internal pressure before doing so.

2.6 CAPACITY CONTROL SYSTEM, FUNCTIONAL DESCRIPTION

Refer to Figure 2-3. The purpose of the control system is to regulate the amount of air intake in accordance with the amount of compressed air being used. The control system consists of a Sullicon Control, pressure regulating valves, blow-down valves, link rods and hoses connecting the various components to the compressor and engine governor. The functional descriptions of the control system is given in four distinct phases of operation. It applies to any control system with the exception of those with stated pressures which are dependent on pressure requirements. The pressures stated will be in accordance with a compressor having a operating pressure range of 150 PSIG (1034kPa).

START - 0 TO 175 PSIG (0 TO 1206kPa)

COLD START

When starting a cold compressor, the warm-up control valve should be placed in the START position. When the compressor is started, the sump pressure will slowly rise (approximately 60 to 90 seconds depending on ambient temperatures) to 175 PSIG (1206kPa). During this period, the Sullicon spring keeps the inlet valve closed and the engine at machine idle. An orifice in the inlet valve allows a small amount of air into the compressor unit, allowing sump pressure to build. After the engine has warmed up, the warm-up control valve may be switched to the RUN position at which time the compressor is ready for use.

HOT RE-STARTS

When re-starting the compressor while still warm, it is not necessary to have the warm-up control valve in the START position. Place the warm-up control valve in the RUN position and start the compressor. The sump pressure will rise slowly while the Sullicon spring holds the inlet butterfly in the closed position and engine at machine idle. When sump pressure reaches 40 to 60 PSIG (276 to 413kPa), depending on Sullicon spring tension, the Sullicon spring opens the inlet valve by a pressure signal from the regulator. From this point, the control system reacts normally to regulate pressure.

NORMAL OPERATION - 65 TO 150 PSIG (448 TO 1034kPa)

When the sump pressure rises above 65 PSIG (448kPa), the minimum pressure/check valve opens and delivers compressed air to the service line. At this time, the Sullicon Control is pressurized holding the inlet valve fully open for maximum air output. The engine will continue to run at full speed during this phase of operation.

The Sullicon Control has an orifice in its cover which vents a small amount of air to the atmosphere when the pressure regulating valve is open. This allows the Sullicon Control to vary air output matching air demand. The orifice also bleeds any accumulated moisture from the Sullicon Control.

MODULATION - 150 TO 160 PSIG (1033 TO 1102kPa)

Should less than the rated capacity of air be used, the service line pressure will rise above 150 PSIG (1034kPa). The pressure regulating valve gradually closes reducing pressure to the diaphragms on the Sullicon Control. This causes the Sullicon Control spring to close the inlet valve partially and reduce the engine's speed. As the pressure increases, the Sullicon Control will further close the inlet valve and continue reducing the engine speed until it reaches the unloaded speed. While the compressor is unloaded, the running blowdown valve is actuated, bleeding the air from the receiver tank to maintain the proper receiver pressure.

Section 2 DESCRIPTION

SHUTDOWN

The blowdown valve is held closed by a pressure signal from the compressor unit. Upon shutdown, the pressure signal is lost and the blowdown valve opens venting sump pressure to the atmosphere.

2.7 AIR INLET SYSTEM, FUNCTIONAL DESCRIPTION

Refer to Figure 2-4. The compressor air inlet system consists of two air filters, maintenance indicators, a compressor air inlet valve and interconnecting piping to the engine and compressor.

The air filters are 2-stage dry element-type filters. These filters are capable of cleaning extremely dirty air. However, in such cases, frequent checks of the air filter restriction indicators will be required. The air filter maintenance indicator, located on the top end of each air filter, will show red when the flow of air becomes highly restricted.

At this time, clean or change the air filter element. See Section 5 for Air Filter Maintenance Procedures. The indicator should be checked daily and after start-up under normal conditions.

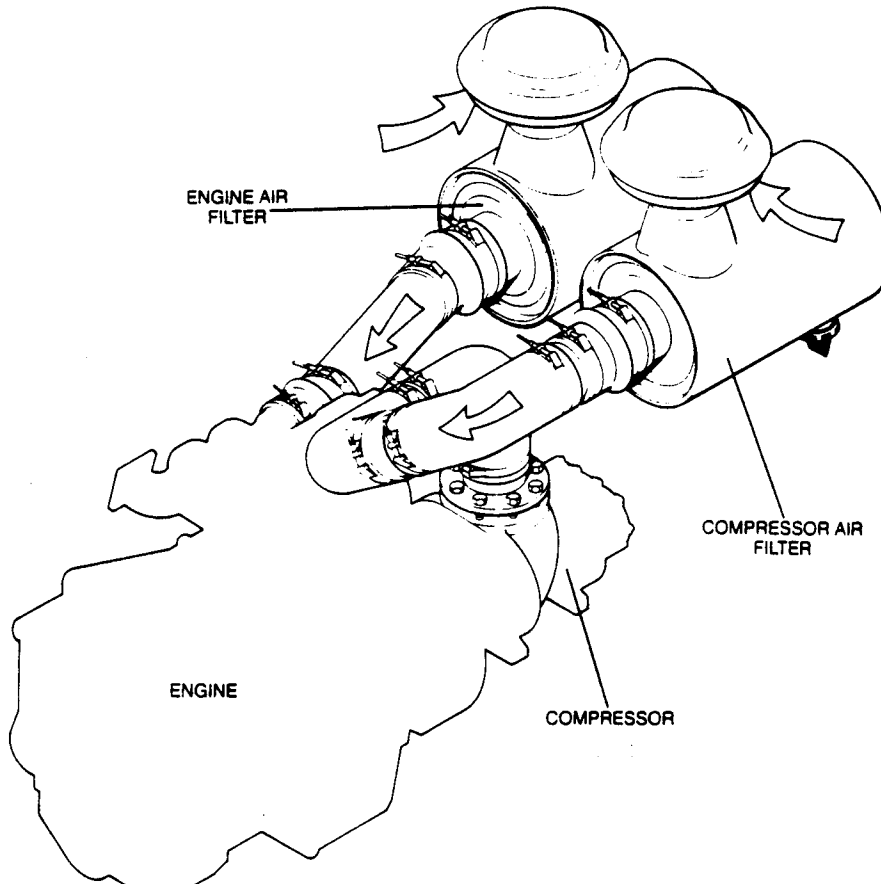
2.8 INSTRUMENT PANEL GROUP, FUNCTIONAL DESCRIPTION

Refer to Figure 2-5. The instrument panel group consists of an engine water temperature gauge, engine oil pressure gauge, receiver pressure gauge, compressor discharge temperature gauge, tachometer, voltmeter, hourmeter, "on/off" switch, starter switch, circuit override switch, warm-up control valve, fuses and fuel gauge.

Refer to Figure 2-5 for locations of the following indicators and controls:

- The engine water temperature gauge is connected to engine at an access port which allows it to sense the temperature of the engine's cooling water. This gauge continually monitors the temperature of the cooling water during operation. The normal reading should be approximately 160°F to 210°F (71°C to 99°C).

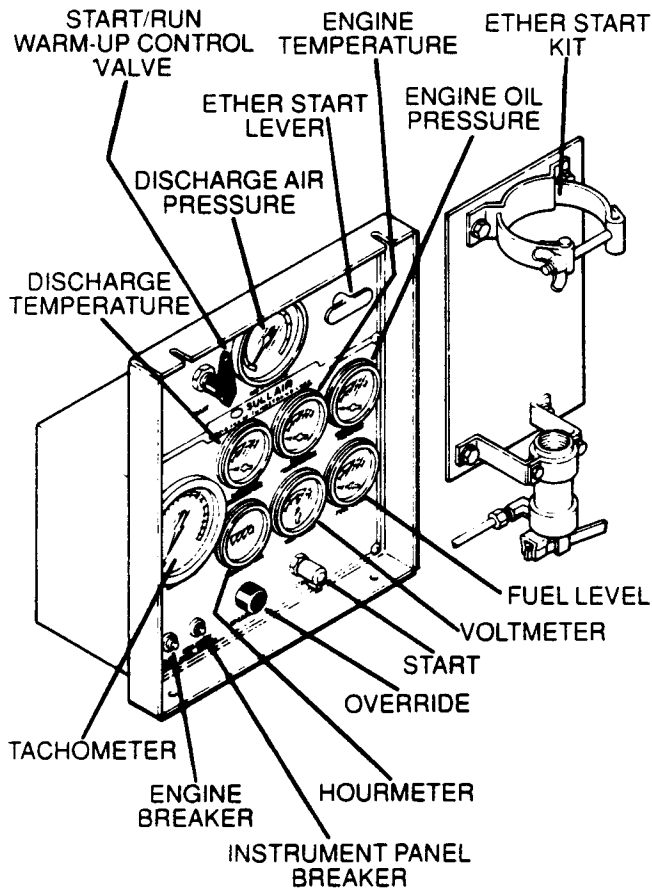
Figure 2-4 Air Inlet System



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- The **engine oil pressure gauge** monitors the engine oil pressure from the moment the compressor is started. It is essential that the proper oil pressure be maintained. The proper oil pressure reading should be approximately 40 to 60 PSIG (276 to 414kPa) at 1200 RPM.
- The **air pressure gauge** continually monitors the sump pressure at various load and/or unload conditions.
- The **voltmeter** monitors the condition of the batteries and the changing circuit. The normal reading is 24 to 28 volts.
- The **compressor discharge temperature gauge** monitors the temperature of the air/fluid mixture leaving the compressor unit. The normal reading should be approximately 180°F to 210°F (82°C to 99°C).

Figure 2-5 Instrument Panel Group



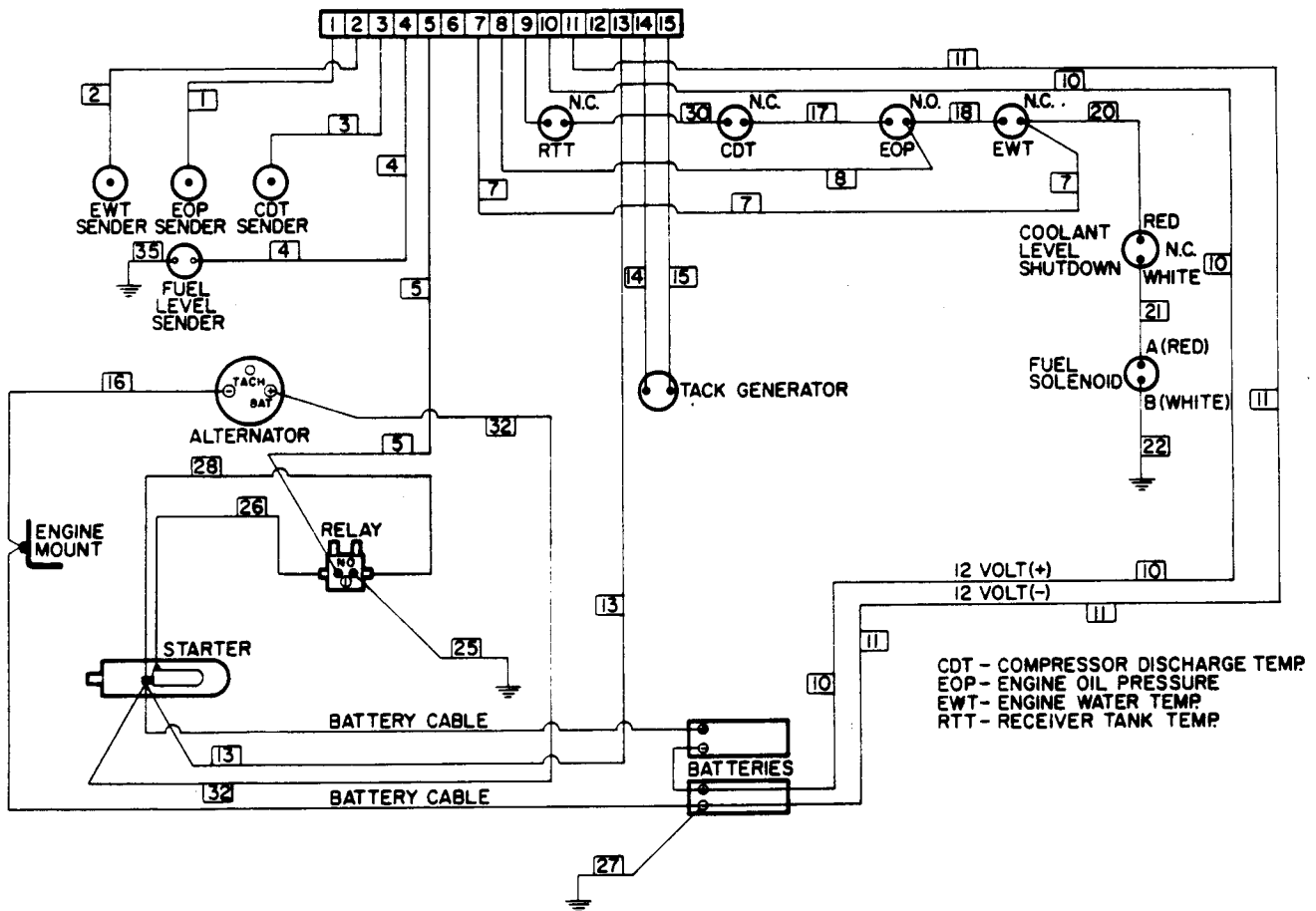
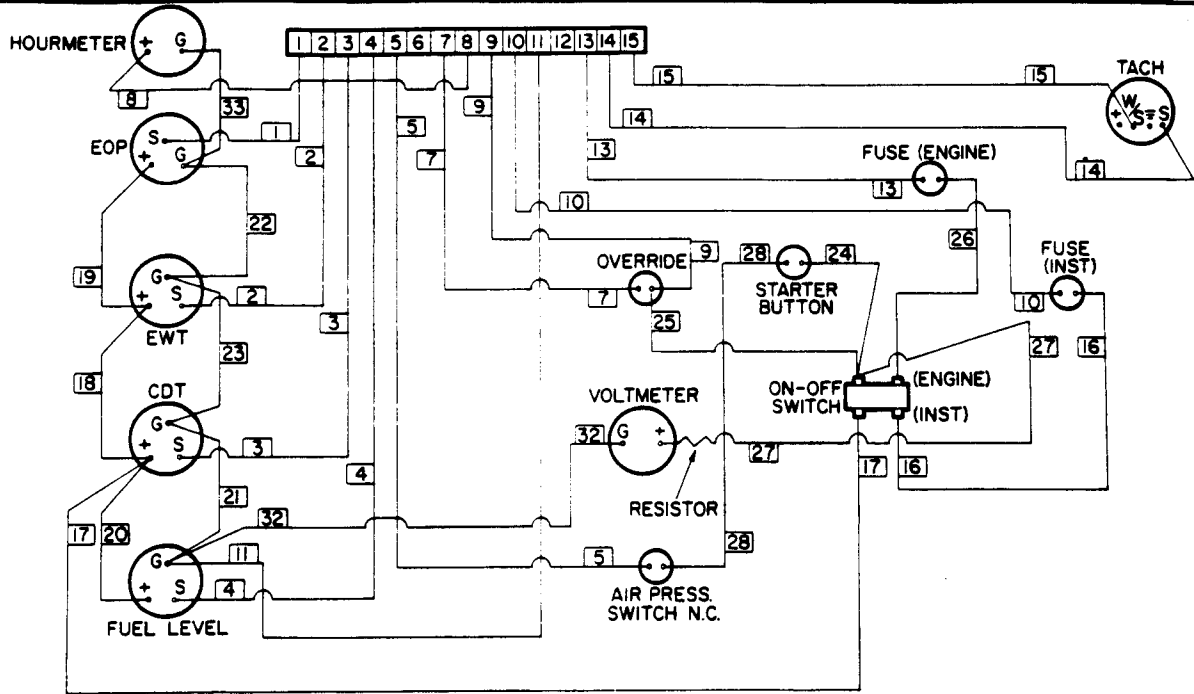
- The **hourmeter** indicates the accumulative hours of compressor operation which is useful for planning and logging service operations.
- The **tachometer** indicates the engine speed.
- The **"on/off" switch** is used to energize the compressor's electrical system and is placed in the "off" position to shut the compressor down. This switch must be in the "on" position before the engine can be started.
- The **starter switch** is depressed when starting the compressor and must be released as soon as the engine starts running.
- The **circuit override switch** is depressed at the same time the starter button is depressed. This switch allows the electrical circuit to bypass the engine oil pressure switch when starting. Without this switch, the engine cannot be started, as no oil pressure is present until the engine is running.
- The **warm-up control valve** is provided for cold weather starting. When placed in the "start" position, the warm-up control valve cuts off the pressure signal to the Sullicon Control causing the inlet valve to remain closed. It will allow the engine to run unloaded until it is properly warmed up at which time the valve should be set in the "run" position.
- The compressor is also equipped with a starter protection relay which is designed to prevent starter engagement once the engine is running.

2.9 ELECTRICAL SYSTEM, FUNCTIONAL DESCRIPTION

Refer to Figure 2-6. The electrical system is comprised of not only the necessary equipment required to operate the compressor, but also a system which shuts down the compressor in the event of a malfunction. The components of the electrical system are an **engine starter** with an integral solenoid, a battery, an alternator with a built-in voltage regulator, a fuel rack solenoid, a compressor discharge temperature switch (which will shut down the compressor should its temperature exceed 240°F [115°C]), an engine water temperature switch (set to shut down the compressor when water temperature reaches 215°F [102°C]), a low coolant level switch and an engine oil pressure switch. The engine oil pressure switch is provided to shut down the compressor when the engine oil pressure becomes insufficient. Upon start-up, it is necessary to override or bypass the engine oil pressure switch and minimum pressure switch by pressing the override button on the instrument panel until the oil pressure throughout the system is high enough to close the switch and complete the circuit to the fuel solenoid. In addition, there is a starter protection engagement after the engine is running or whenever there is pressure in the receiver/sump.

Section 2 DESCRIPTION

Figure 2-6 Electrical System



Section 3 SPECIFICATIONS

SPECIFICATIONS

Model Series	DIMENSIONS						Weight (wet)	
	Length (I)		Width		Height (II)		lb	kg
	in	mm	in	mm	in	mm		
H750/150 Tandem	193	4902	87	2210	91	2311	10020	4545
H750/150 4-Wheel	196	4978	87	2210	97	2464	9870	4477
H900/150 Tandem								
H900/150 4-Wheel								

(I) Length including drawbar
(II) Over lifting ball

COMPRESSOR:

Type
Maximum Operating Pressure
Delivery at 100 PSIG (689kPa)
Cooling
Lubricating Compressor Fluid
Sump Capacity
Track Width - Tandem
Track Width - 4-Wheel
Tire Size (Load Range) Tandem
Tire Size (Load Range) 4-Wheel
Tire Pressure - Tandem
Tire Pressure - 4-Wheel
Wheel Size - Tandem
Wheel Size - 4-Wheel
Operating Tilt (maximum)
Electrical System

Battery (2)

Alternator

H750/150
(Bill of Material - 252899)

Rotary Screw
150 PSIG (1033kPa)
750 Free CFM (21 M³/minute)
Pressurized Compressor Fluid
See Table 1
21 U.S. Gallons (80 Liters)
77" (1956 mm)
79" (2007 mm)
8.00 x 14.5LT (F)
8.75 x 16.5 (D)
100 PSIG (689kPa)
60 PSIG (414kPa)
14.5 x 7
16.5 x 6.75
15°
Engine - 24 Volt
Instrument System - 24 Volt
(4D) 775 cca.
Value at 0°F (18°C)
35 amp

H950Q/150
(Bill of Material - 253424)

ENGINE:

Make
Type
Rated speed
Horsepower, SAE
Cylinders
Cycles
Bore x Stroke

Displacement
Lubricating System
Type of Motor Oil

Fuel Tank Capacity

Radiator Capacity

Idle Speed

Caterpillar
3306DIT
2100 RPM
250 HP (187KW)
6
4
4.5 x 6.00 inches
(114 x 152 mm)
638 cu. in. (10.5 liters)
Full Pressure Oil
Refer to Engine
Operator's Manual
110 U.S. Gallons
(416.4 Liters)
14.75 U.S. Gallons
(55.8 Liters)
1400 RPM

Section 3 SPECIFICATIONS

LUBRICATION GUIDE - COMPRESSOR

<u>FLUID TYPE</u>	<u>CHANGE PERIOD, HOURS</u>	<u>AMBIENT TEMPERATURE RANGE °F (°C)</u>
Sullair AWF (I)	600	-20 to +120 (-29 to +49)
D-A Torque Fluid	300	+10 to +110 (-12 to +43)
Dexron II ATF	300	-20 to +100 (-29 to +38)
SAE10W SE, SF, SG, CD	300	0 to +100 (-8 to +38)
MIL-L-2104E 10W	300	0 to +100 (-18 to +38)

(I) Sullair part numbers for Sullair AWF are 250030-757 (5 gallons) and 250030-758 (55 gallon drum).

APPLICATION GUIDE

Sullair Air Compressors are supplied with Sullair AWF which is heavy duty multi-viscosity, all-weather fluid. Sullair AWF also allows an extended change interval. Detergent motor oils (SAE 10W Class SE, SF, SG or CD) or Dexron II Automatic Transmission Fluid (ATF) can also be used. Any of these oils are suitable under conditions where severe oil oxidations can occur.

Water must be drained from the receiver periodically. In high ambient temperature and high humidity conditions, condensed moisture may emulsify with the oil forming a "milky" color. ATF or SAE 10W is especially prone to this condition. The fluid should be changed if this condition develops.

DO NOT mix different types of fluids. Combinations of different fluids may lead to operational problems such as foaming, filter plugging, orifice or line plugging.

When ambient conditions exceed those noted or if conditions warrant use of other extended life lubricants, contact Sullair for recommendations.

Sullair encourages the user to participate in a fluid analysis program. This could result in a fluid change interval differing from that stated in the manual. Sullair Corporation offers a fluid analysis program for Sullair AWF. Contact your local Sullair representative for details.

D-A Lubricant® Company Inc. offers an analysis program for users of D-A products and Sullair AWF. Contact your D-A lubricant supplier or Sullair representative for details.

LUBRICATION GUIDE - ENGINE

For engine oil specifications, refer to the Engine Operator's manual.

Section 4 OPERATION

4.1 GENERAL

While Sullair has built into this compressor a comprehensive array of controls and indicators to assure you that it is operating properly, you will want to recognize and interpret the readings which will

call for service or indicate the beginning of a malfunction. Before starting your Sullair compressor, read this section thoroughly and familiarize yourself with the controls and indicators - their purpose, location and use.

4.2 PURPOSE OF CONTROLS

CONTROL OR INDICATOR	PURPOSE
"ON/OFF" SWITCH	Turn this switch to the "on" position to energize the electrical system of the compressor. This switch is located on the instrument panel.
ENGINE STARTER SWITCH	Depress to start the engine. This switch is located on the instrument panel and must be released as soon as the engine fires.
OVERRIDE SWITCH	Located on the instrument panel and used to bypass the oil pressure switch when starting the engine.
VOLTMETER	Monitors the condition of the batteries and the charging circuit. The normal reading is 24 to 28 volts.
AIR PRESSURE GAUGE	Continually monitors the pressure inside the receiver pump at various load and unload conditions.
ENGINE WATER TEMPERATURE GAUGE	Monitors the temperature of the engine water. The normal operating temperature should read approximately 160°F to 210°F (71°C to 99°C).
TACHOMETER	Indicates the engine speed.
HOURLMETER	Indicates the accumulated hours of operation. Useful for planning and logging service schedules.
ENGINE OIL PRESSURE GAUGE	Monitors the engine oil pressure. The normal reading is 25 to 50 PSIG (172 to 345kPa) at 1600 RPM.
COMPRESSOR DISCHARGE TEMPERATURE GAUGE	Monitors the temperature of the air/fluid mixture leaving the compressor unit. The normal reading should be approximately 180°F to 210°F (82°C to 99°C).
FLUID LEVEL SIGHT GLASS	Monitors the fluid level in the sump. Proper level is always visible in the sight glass. Check the level when the compressor is shut down.
COMPRESSOR DISCHARGE TEMPERATURE SWITCH	Opens the electrical circuit to shut down the compressor when the discharge temperature reaches 240°F (116°C).
DISCHARGE CHECK VALVE	Cuts off the reverse flow of air/fluid mixture through the compressor discharge system at compressor shutdown.
MINIMUM PRESSURE/CHECK VALVE	Maintains the minimum of 65 PSIG (448kPa) in the compressor sump. This valve restricts receiver air discharge from receiver/sump when pressure falls to 65 PSIG (448kPa), however, full flow is allowed at normal operating pressures. It also prevents air backflow into the sump after shutdown.
PRESSURE RELIEF VALVE	Opens sump pressure to the atmosphere should pressure inside the sump exceed 225 PSIG (1551kPa).

Section 4 OPERATION

4.2 PURPOSE OF CONTROLS (continued)

CONTROL OR INDICATOR	PURPOSE
SULLICON CONTROL	Regulates the amount of air allowed to enter the air inlet valve. This regulation is determined by the amount of air being used at the service line.
PRESSURE REGULATOR	Opens a pressure line between the sump and Sullicon Control allowing the Sullicon Control to regulate air delivery according to air demand.
BLOWDOWN VALVE	Vents sump pressure to the atmosphere at shutdown.
TERMINAL CHECK VALVE	Prevents air backflow into the sump after shutdown.
THERMAL VALVE	Regulates flow of fluid to and around the fluid cooler. It is designed to maintain a minimum operating temperature, and is used for fast warm-up at start-up and to eliminate condensation during operation.
FLUID STOP VALVE	Cuts off flow of fluid to the compressor unit at compressor shutdown, and allows flow of fluid to the unit on start-up.
START/RUN WARM-UP CONTROL VALVE	Used for cold weather starting, it allows the engine to run at unload speed until properly warmed up.
RUNNING BLOWDOWN VALVE PRESSURE REGULATOR	Opens a pressure line between the sump and running blowdown valve allowing the running blowdown valve to vent surplus air pressure from the sump during operation.
RUNNING BLOWDOWN VALVE	Vents surplus sump pressure to the atmosphere during operation.

4.3 INITIAL START-UP PROCEDURE

The following procedure should be used to make the initial start-up of your compressor:

1. Position the compressor on a level surface so that proper amounts of liquid can be added if necessary. (I)
2. If needed, add a water and ethylene glycol solution to the engine radiator. See Section 3, Specifications for engine cooling system capacity.
3. Fill compressor fluid sump with fluid as recommended in Section 3, Specification. System capacity is 21 gallons (80 liters).
4. Check engine oil level and add if necessary.
5. Fill the fuel tank.
6. Fill the battery with electrolyte, if necessary.
7. Turn the warm-up control valve to the start position.
8. Turn the "on/off" switch clockwise to the "on" position.
9. Push the starter and override buttons in simultaneously.
10. If necessary, use the ether starting aid to assist in starting.

11. Release the starter switch as soon as the engine fires and release the override button when oil pressure reaches 20 PSIG (138kPa).
12. Close all doors (required for quiet operation and proper cooling).
13. After the initial run, shut the compressor down and refill the radiator and compressor fluid sump as required. Tighten any loose fittings and check fan belt tension.

(I) The radiator is filled with a 50/50 mixture of ethylene glycol and water at the factory before shipment.

4.4 SUBSEQUENT START-UP PROCEDURE

On subsequent starts, follow the procedure explained below:

1. Check engine oil, water and fuel gauges.
2. Check compressor fluid level.
3. Turn "ignition/starter" switch to "ignition".
4. Simultaneously push the override button and turn "starter" switch.
5. If necessary, use the ether starting aid to assist in starting.

Section 4

OPERATION

6. Release the "starter" switch as soon as the engine fires and release the override button when oil pressure reaches 20 PSIG (138kPa).
7. Allow for sufficient warm-up of compressor before operation.

4.5 SHUTDOWN PROCEDURE

To shut the compressor down, follow the procedure explained below:

1. Close the service valves and turn the "start-run" control valve to the "start" position.
2. Run the compressor for approximately 5 minutes and turn the "on/off" switch to the "off" position. In case of emergency where immediate shutdown is required, this procedure is not necessary.
3. The "on/off" switch should be in the "off" position immediately.

Section 5 MAINTENANCE

5.1 GENERAL

A good maintenance program is the key to long compressor life. Below is a program that when adhered to, should keep the compressor in top operating condition. For maintenance requirements on engine, refer to the Engine Operator's manual for a detailed description of service instructions. See Section 5.8, Parts Replacement and Adjustment Procedures for a detailed description of specific compressor system components. Prior to performing maintenance, read the CIMA Safety Manual.

▲ WARNING

DO NOT remove caps, plugs and other components when compressor is running or pressurized.

Stop compressor and relieve all internal pressure before doing so.

5.2 DAILY OPERATION

Prior to starting the compressor, it is necessary to check the fluid level in the sump. Should the level be low, simply add the necessary amount. If the addition of fluid becomes too frequent, a simple problem has developed which is causing this excessive loss. See the Troubleshooting Section (5.9) under Excessive Fluid Consumption for a probable cause and remedy. Also check the engine oil level and the radiator coolant level prior to starting.

Inspect for torn, frayed, blistered, or otherwise deteriorated and degraded hoses. Replace as required.

NOTE

Estimated hose life based on a 5-day, 8-hour work week is 3 years. These conditions exist on an 8-hour shift only. Any other operation of the equipment other than 8-hour shifts would derate the hose life based on hours of operation.

NOTE

The radiator and engine cooling system must be drained and flushed every two (2) years. Replace the coolant with a solution of 50% ethylene glycol and 50% water or as required for your geographic location. **DO NOT** use a leak sealing type of anti-freeze. Should a 100% water solution be used, a non-chromate rust inhibitor must be added.

After a routine start has been made, observe the instrument panel gauge and be sure it monitors the correct reading for that particular phase of op-

eration. After the compressor has warmed up, it is recommended that a general check on the overall compressor and instrument panel be made to assure that the compressor is running properly. Also check the air filter maintenance indicators.

5.3 MAINTENANCE AFTER INITIAL 50 HOURS OF OPERATION

After the initial 50 hours of operation, a few maintenance requirements are needed to rid the system of any foreign materials if any. Perform the following maintenance operations to prevent unnecessary problems.

1. Clean the return line orifice and strainer.
2. Change the fluid filter elements.
3. Check Engine Operator's Manual for required service.

5.4 MAINTENANCE EVERY 100 HOURS

After 100 hours of operation, it will be necessary to perform the following:

1. Check the battery level and fill with water or electrolyte, if necessary.
2. Check Engine Operator's manual for required service.

5.5 MAINTENANCE EVERY 200 HOURS

Perform the following after every 200 hours of operation:

1. Check fan belt tension.
2. Clean the radiator and cooler exterior. Depending on how contaminated the atmosphere may be, more frequent cooler and radiator cleaning may be necessary.
3. Check Engine Operator's Manual for required service.

5.6 MAINTENANCE EVERY 500 HOURS

Perform the following after every 500 hours of operation:

1. Warm-up the compressor for 5 to 10 minutes to warm the fluid. Shut the compressor off and drain the fluid sump by removing the plug at the bottom of the sump. Change the compressor fluid and replace the fluid filter elements. For fluid filter element replacement, see Section 5.8 Parts Replacement and Adjustment Procedures under Servicing the Fluid Filters. Fill the sump with fluid according to specifications in Section 3. Remove any accumulated dirt from the fluid filler cap prior to filling the sump.
2. Lubricate the control linkage.
3. Check Engine Operator's manual for required service.

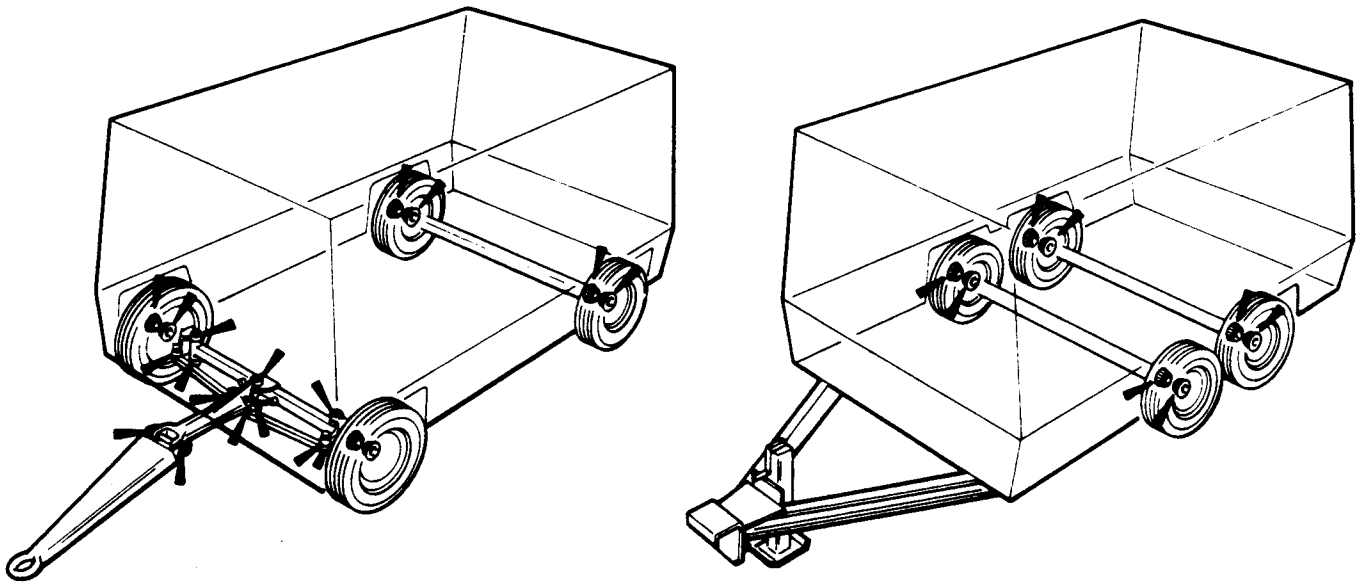
5.7 MAINTENANCE EVERY 1000 HOURS

Perform the following after every 1000 hours of operation:

1. Clean the return line orifice and strainer.
2. Replace the wheel bearings on wheel mounted units.

Section 5 MAINTENANCE

Figure 5-1 Running Gear Lubrication



5.8 PARTS REPLACEMENT AND ADJUSTMENT PROCEDURES

RUNNING GEAR LUBRICATION

Refer to Figure 5-1. An inspection of the running gear should be made on a routine basis. The wheel bearings must be inspected ever 90 days (the wheel bearings are marked "B" in Figure 5-1). When necessary, pack the wheel bearings with a grease conforming to military specification MIL-G-10924 or a high temperature wheel bearing grease.

COMPRESSOR FLUID FILTER ELEMENT REPLACEMENT

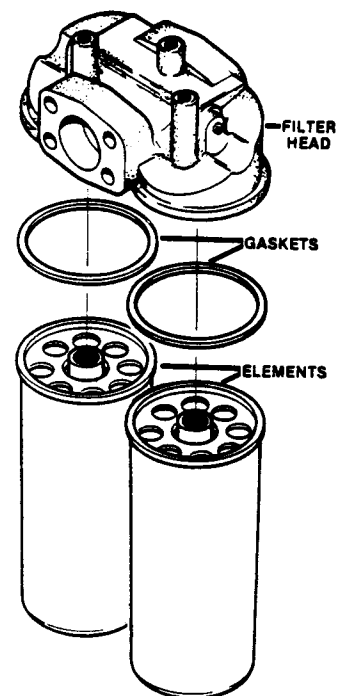
Refer to Figure 5-2.

1. Using a strap wrench, remove the old elements and gaskets.
2. Clean the gasket seating surfaces.
3. Apply a light film of fluid to the new gaskets.
4. Hand tighten the new elements until the new gasket is seated in the gasket groove.
5. Continue tightening the elements by hand an additional $\frac{1}{2}$ to $\frac{3}{4}$ turn.
6. Restart the compressor and check for leaks.

▲ CAUTION

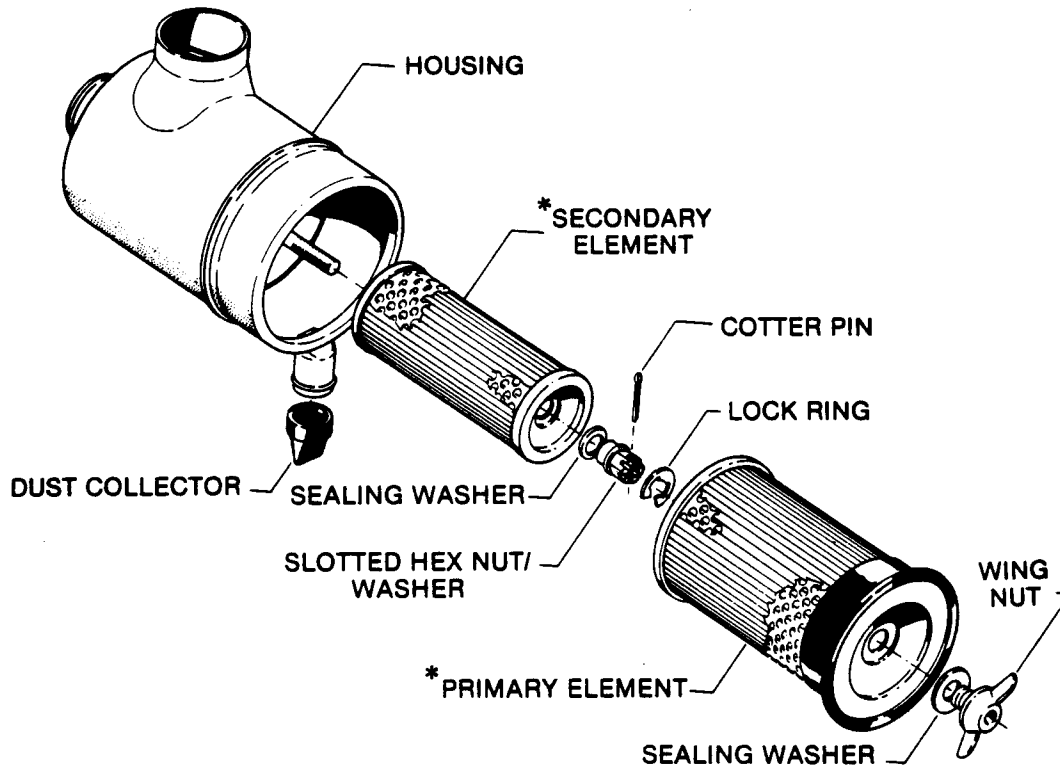
To minimize the possibility of filter element rupture, it is important that only replacement elements identified with the Sullair name, logo and appropriate part number be used. DO NOT use substitute elements. This is due to the fact that such substitution may have inadequate or questionable working pressure ratings.

Figure 5-2 Compressor Fluid Filter
(PIN 250038-315)



* Element Kit P/N 250025-526

Figure 5-3 Air Filter (P/N 048456)



- * Element P/N 048462 (primary)
- * Element P/N 048463 (secondary)

AIR FILTER MAINTENANCE

Refer to Figure 5-3. Air filter (P/N 048456) maintenance should be performed when the air filter maintenance indicator shows red. The maintenance indicator is located on the filter outlet. The air filter is equipped with a primary element and a secondary element. As previously stated, the restriction indicator will alert you as to when primary element maintenance is necessary. When removing the primary element, always check the secondary element for visible dirt, grease or damage. The secondary element must be changed after every six element cleanings or once a year, whichever occurs first.

The primary element is a cleanable-type element, however, the secondary element is to be replaced as needed depending on its condition. **DO NOT** clean the secondary element.

ELEMENT REMOVAL

1. Clean the exterior of the air filter housing.
2. Remove the cover assembly by loosening the wingnut securing the cover clamp.

3. Remove the element assembly from the housing by unscrewing the wingnut.
4. Clean the interior of the housing by using a damp cloth. **DO NOT** blow out dirt with compressed air.
5. Inspect the secondary element and replace if necessary. This element is not cleanable.
6. To remove the secondary element, remove the cotter pin and slotted hex nut/washer from the threaded rod running through the element and pull the element out of the housing.
7. Install the new secondary element and replace the sealing washer, slotted hex nut/washer and cotter pin.
8. With the secondary element in place, clean or replace the primary element. Cleaning instructions are explained below.

AIR FILTER ELEMENT CLEANING

The air filter element can be cleaned by using compressed air. The maximum number of times that an element may be cleaned is six (6), however, the element should be used no longer than a period of one (1) year without changing.

Section 5 MAINTENANCE

Prior to, and after, cleaning an element, check the element for damage. Damaged elements must be replaced. When cleaning an element, NEVER exceed the recommended maximum pressures for compressed air (30PSI/207kPa).

DO NOT strike the element against any hard surface to dislodge dust. This will damage the sealing surfaces and possibly rupture the element.

NEVER blow dirt out of the interior of the filter housing. This may introduce dust downstream of the filter. Instead, use a clean damp cloth.

DO NOT oil the element.

CLEANING THE ELEMENT WITH COMPRESSED AIR

When cleaning the element with compressed air, never let the air pressure exceed 30 PSIG (207kPa). Reverse flush the element by directing the compressed air up and down the pleats in the filter media from the "clean side" of the element. Continue reverse flushing until all dust is removed.

Should any fluid or greasy dirt remain on the filter surface, the element should then be replaced. When the element is sufficiently cleaned, inspect it thoroughly prior to installation (see Element Inspection).

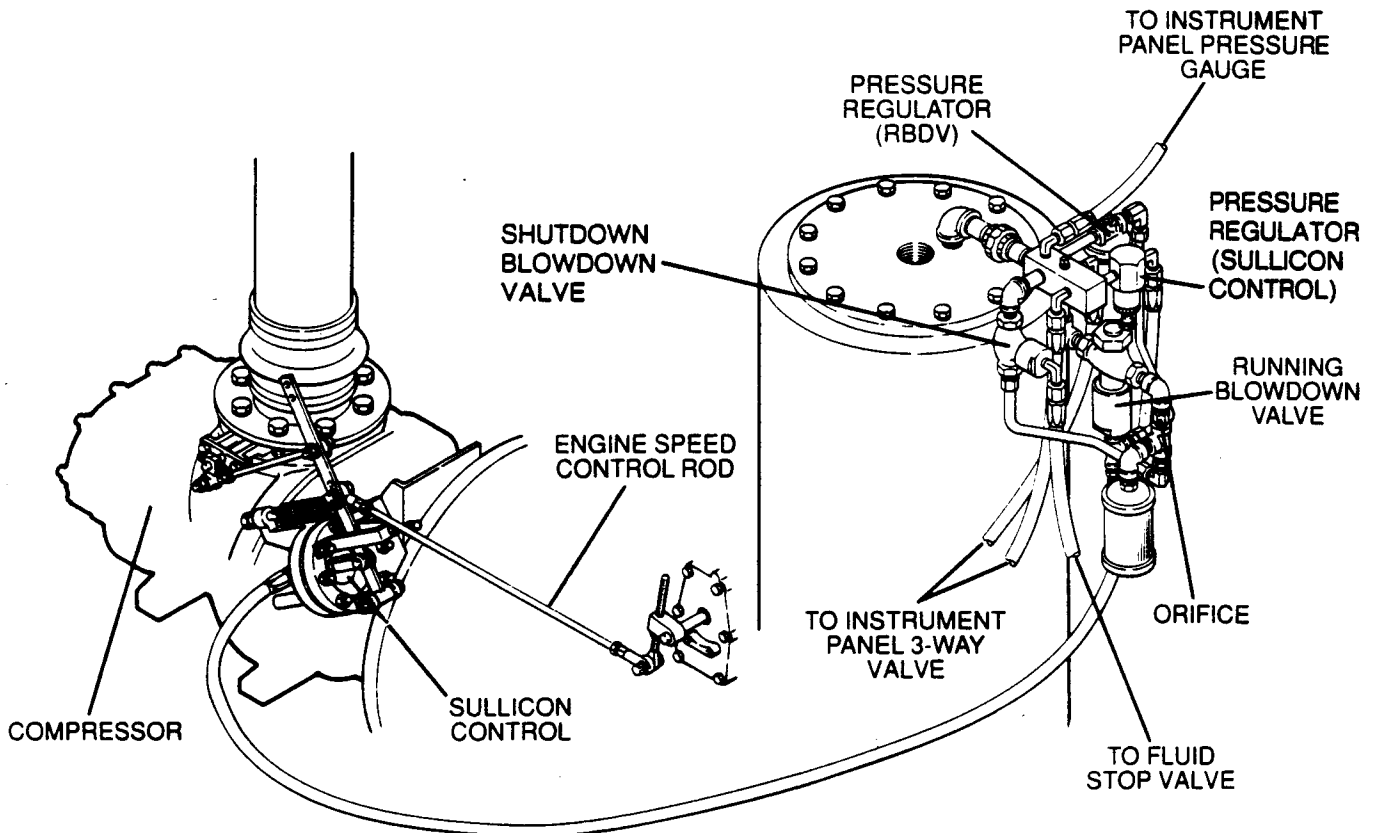
ELEMENT INSPECTION

1. Place a bright light inside the element to inspect for damage or leak holes. Concentrated light will shine through the element and disclose any holes.
2. Inspect all gaskets and gasket contact surfaces of the housing. Should faulty gaskets be evident, correct the condition immediately.
3. If the clean element is to be stored for later use, it must be stored in a clean container.
4. After the element has been installed, inspect and tighten all air inlet connections prior to resuming operation.

PRIMARY ELEMENT REPLACEMENT

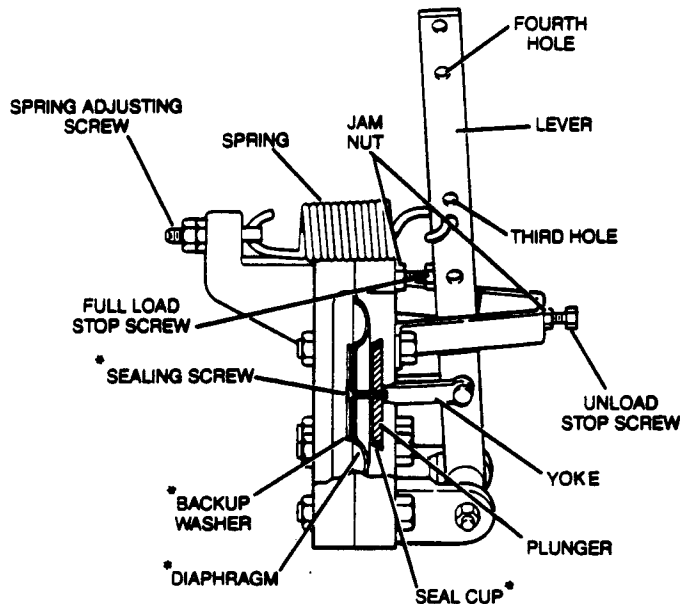
1. Place the element in position over the threaded rod and tighten the wingnut.
2. Install the cover and replace the clamp and tighten the wingscrew.

Figure 5-4 Control System Components



Section 5 MAINTENANCE

Figure 5-5 Sullicon Control (PIN 250026-096)



* Repair Kit P/N 250020-353

CONTROL SYSTEM ADJUSTMENT

Refer to Figures 5-4 and 5-5. Prior to adjusting the Control System, it is necessary to determine the desired operating pressure range as well as the maximum pressure at which your compressor is to operate. This pressure must not exceed the maximum operating pressure which is stamped on the compressor serial number nameplate. The following explanation applies to a typical compressor with a desired operating pressure of 150 PSIG (1033kPa). This information will apply to a compressor with any other operating range except for the stated pressures. To properly set the speed control, the high speed must be adjusted first and the low speed second.

1. Check the position of the inlet butterfly valve. It should be held in the fully closed position with slight tension on the Sullicon spring.
2. Turn the no load stop screw in several turns until there is approximately an $\frac{1}{8}$ " gap between the stop screw and the lever.
3. With the service valve closed and the warm-up control valve in the "start" position, start the

compressor and allow the engine to warm-up to operating temperature. The receiver pressure will rise slowly to the setting of the running blowdown regulator of 160 to 175 PSIG (1102 to 1206kPa). If the pressure is too high or too low, running blowdown valve regulator may need to be adjusted before continuing.

4. Turn the warm-up control valve to the "run" position and gradually open the service valve to atmosphere until the engine comes up in speed and receiver pressure is held to 150 PSIG (1033kPa). At this point, the Sullicon should be pressurized and holding the control arm against the full load stop screw. If the control arm is not against the full load stop screw and the engine has not reached full rated 2100 RPM, the setting of the Sullicon pressure regulator must be raised (turn regulator adjustment clockwise). If the control arm is not against the full load stop screw, but the engine is at full rated RPM, turn the full load stop screw in to meet the control arm.
5. Check to see if any air is being exhausted out of the running blowdown valve. If air is observed, the setting of the blowdown pressure regulator must be raised (turn regulator adjustment clockwise).
6. Check sump pressure again and verify the 150 PSIG (1033kPa) reading. At this time set the high engine speed by adjusting the linkage rod between the engine governor and the Sullicon Control arm to bring the engine speed to its specified setting. The rod may have to be shortened or lengthened depending on whether the engine speed needs to be increased or decreased. While this is being done, the service valve may need to be adjusted to maintain 150 PSIG (1033kPa) sump pressure.
7. Slowly close the service valve until the sump pressure rises to approximately 155 PSIG (1068kPa). At this point adjust the Sullicon pressure regulator so that the Sullicon Control arm just begins to move off of the full load stop screw.
8. Again, check to see if any air is being exhausted out of the running blowdown valve. If air is observed, the setting of the blowdown regulator must be raised (turn regulator adjustment clockwise).
9. Close the service valve slowly. As the sump pressure rises, the Sullicon pressure regulator will close further reducing the air pressure to the diaphragm of the Sullicon Control arm to move further away from the full load stop screw, reducing the engine speed and closing the inlet butterfly valve at the same time.
10. As the service valve is being closed, the sump pressure will rise quickly at first and then slowly creep up in pressure. It is at this point that the running blowdown valve should begin to exhaust air. The running blowdown regulator should be set to open the blowdown at approximately 170 to 175 PSIG (1171 to 1206kPa).

Section 5 MAINTENANCE

NOTE

The compressor inlet butterfly valve must be fully closed before the running blow-down valve begins to exhaust air.

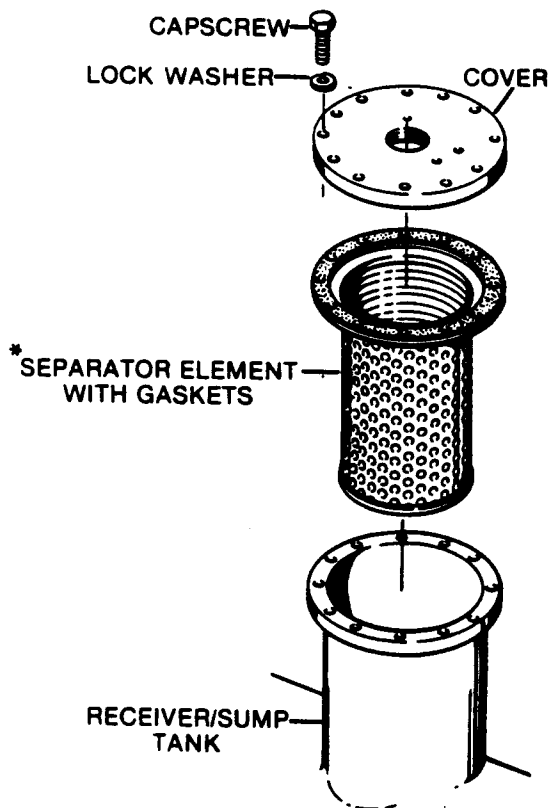
11. With the service valve closed and the sump pressure stabilized at approximately 175 to 180 PSIG (1206 to 1240kPa), the low engine speed can now be set at 1400 RPM, by adjusting the Sullicon linkage rod. The linkage may have to be shortened or lengthened depending on whether the low engine speed (idle) needs to be increased or decreased. During low speed adjustment, the control arm should not come in contact with the no load stop screw.
12. Open the service valve to recheck the high engine speed and control response. Close the service valve and allow the compressor to cycle to recheck low engine speed (idle) and running blowdown valve operation. Set all jam nuts on the linkage rods and regulators so that adjustments are maintained.
13. Shut the compressor down and allow all pressure to bleed off the system. Turn the no load stop screw to keep the inlet butterfly valve just off its seat. Set the jam nut on the no load stop screw.

SEPARATOR ELEMENT REPLACEMENT

Refer to Figure 5-6. When fluid carry-over is evident after the fluid return line strainer and orifice as well as the blowdown valve diaphragm have been inspected and found to be in satisfactory condition, separator element replacement (P/N 250007-139) is necessary. Follow the procedure explained below.

1. Remove all piping connected to the sump cover to allow removal (return line, service line, etc.).
2. Remove the fluid return line from the fitting in the cover.
3. Remove the twelve (12) $\frac{5}{8}$ " x 2" cover bolts and lockwashers and lift the cover from the sump with the minimum pressure/check valve in place.
4. Remove the separator element.
5. Scrape the old gasket material from the cover and the flange on the sump. Be sure to keep all scrapings from falling inside tank.
6. Install the element with bonded gaskets, making sure the staples in the gaskets come in contact with the metal surface of the bolt ring and cover. **DO NOT** use gasket sealer as it can insulate the staples causing the element not to be properly grounded for operation.
7. Replace the sump cover and bolts. Run the cover bolts in finger tight, then gradually tighten in a crisscross pattern in 4 to 5 steps. **ALWAYS** tighten the bolts alternately at opposite sides of the cover. **NEVER** tighten bolts adjacent to each other. Torque bolts to 100 to 200 ft./lbs. (136 to 163 Nm).

Figure 5-6 Separator Element (P/N 250028-316)



* Repair Kit P/N 250007-139

8. Reconnect all piping. The fluid return line should extend to the bottom of the separator element or not more than $\frac{1}{16}$ " up from the bottom. This will assure the proper fluid return flow.
9. Clean the fluid return line strainer and orifice prior to restarting the compressor.

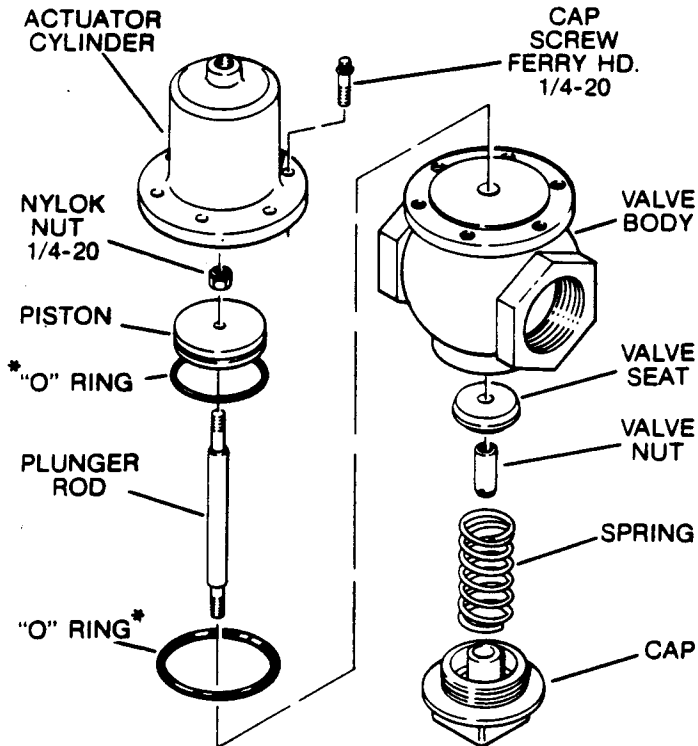
FLUID STOP VALVE MAINTENANCE

Refer to Figure 5-7. When servicing fluid stop valve No. 016742, use repair kit No. 001684. The following instructions are in accordance with repair kit No. 001684.

1. Remove the capscrews securing the cylinder to the valve body and remove the cylinder.
2. Disassemble the o-ring retainer plate cups and follower plates from the plunger rod by removing the $\frac{1}{4}$ " Nyloc nut on the end of the rod.
3. Discard the old o-rings and Nyloc nut. Replace these with new ones provided in the kit. When reassembling, also replace the $\frac{1}{4}$ " Nyloc nut.
4. Remove and replace the valve body o-ring and reassemble the cylinder to the valve body.

Section 5 MAINTENANCE

Figure 5-7 Fluid Stop Valve (P/N 016742)



* Repair Kit P/N 001684

MINIMUM PRESSURE/CHECK VALVE MAINTENANCE

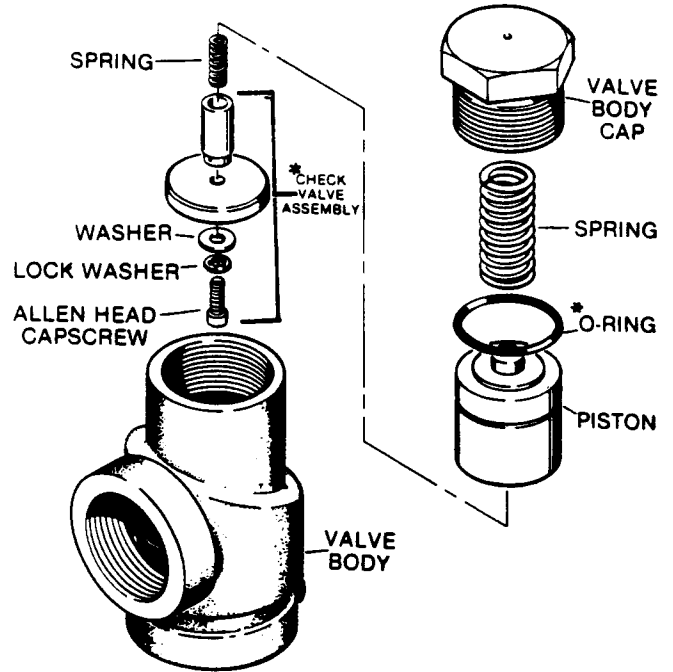
Refer to Figure 5-8. Minimum pressure/check valve (P/N 242405) maintenance is quite minimal. The only part which normally requires replacement is the seal ring on the piston. To replace this ring, order seal repair kit No. 001176 and follow the procedure explained below.

⚠ WARNING

Before performing maintenance on the valve, be sure that all pressure has been relieved in the compressor sump, and all downstream pressure has been vented to the atmosphere. Also be sure that the components of the compressor are cool to the touch.

1. Unscrew the minimum pressure/check valve from the receiver cover.
2. Remove the hexagonal retaining cover from the main body.

Figure 5-8 Minimum Pressure/Check Valve (P/N 242405)



* Repair Kit P/N 001176

3. Remove the flat washer and heavy spring from the main body.
4. Tap the piston assembly (with a screwdriver) from the bottom of the main body and remove. The seal ring will now be seen easily.
5. Remove the seal ring and discard.
6. Clean piston assembly and valve thoroughly.
7. Replace seal ring and coat the piston and seal with Parker Super "O" Ring Seal or an equivalent quality grease.

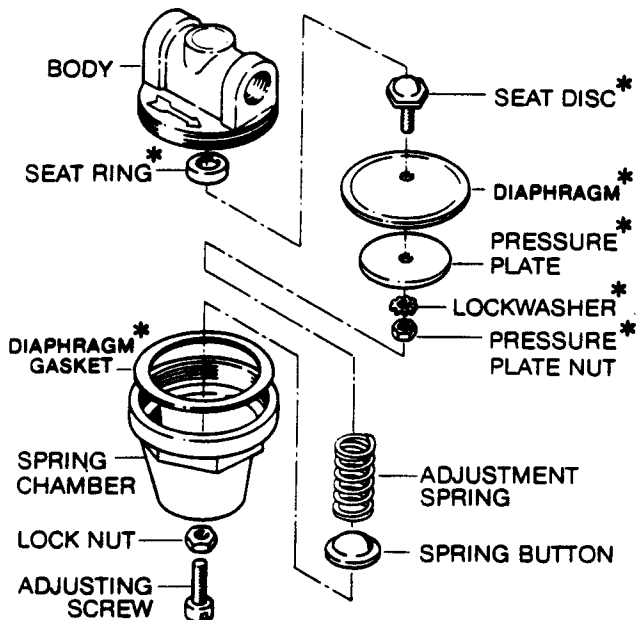
⚠ WARNING

Extreme caution should be used when removing the cap from the body because there is spring tension on the cap.

8. Reset piston assembly into the main body and reposition spring and flat washer.
9. Replace retaining cover.
10. Reattach valve to receiver cover and reconnect all piping.

Section 5 MAINTENANCE

Figure 5-9 Pressure Regulator Valve
(P/N 406929)



* Repair Kit P/N 041742

PRESSURE REGULATOR VALVE MAINTENANCE
Refer to Figure 5-9. Pressure regulator (P/N 406929) maintenance normally requires the replacement of the internal diaphragm. Use repair kit No. 041742, and follow the procedure below for proper installation.

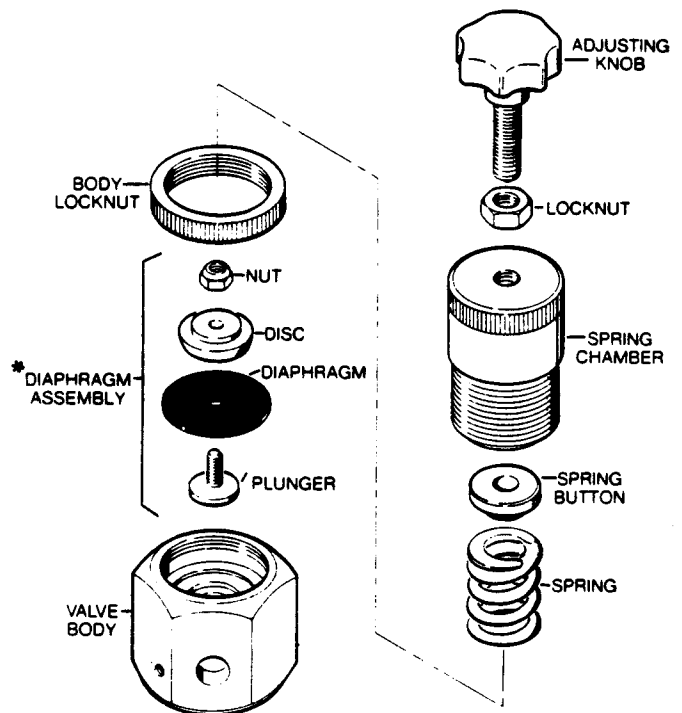
1. Loosen the locknut and turn the adjusting screw counterclockwise until the inner spring tension is relieved. The adjusting screw should turn freely when the spring tension is relieved.
2. Remove the spring chamber from the body to allow access to internal parts.
3. Next, remove the spring button and the spring. The dampener will stay inside the spring as it is removed. Leave the dampener inside the spring as there is no need to remove it.
4. After removing the spring, remove the gasket stop and brass gasket.
5. At this time, remove the pressure plate nut and disassemble the pressure plate, diaphragm, diaphragm gasket (rubberized asbestos), seat disc and seat gasket.
6. Remove and discard the seat ring.

7. The next step is to reassemble the regulator using the new parts provided in the repair kit.
8. Reassemble the diaphragm, pressure plate, gasket, seat disc and seat disc gasket. Tighten the nut. All of these parts with the exception of pressure plate are provided in the repair kit.
9. Replace the old seat ring with the new seat ring provided.
10. Replace the existing brass gasket and diaphragm gasket stop.
11. Next, place these parts in their proper place on the body and replace the spring as it was prior to disassembly.
12. Place the spring button over the spring as shown.
13. With all parts in order, replace the spring chamber and tighten.
14. Tighten the adjusting screw until the tension is realized.
15. At this time, refer to Control System Adjustment procedure and readjust the low pressure control regulator.

CONTROL REGULATOR MAINTENANCE

Refer to Figure 5-10. Control regulator (P/N 250025-094) maintenance normally requires only the replacement of the internal diaphragm. Use

Figure 5-10 Control Regulator (P/N 250025-094)



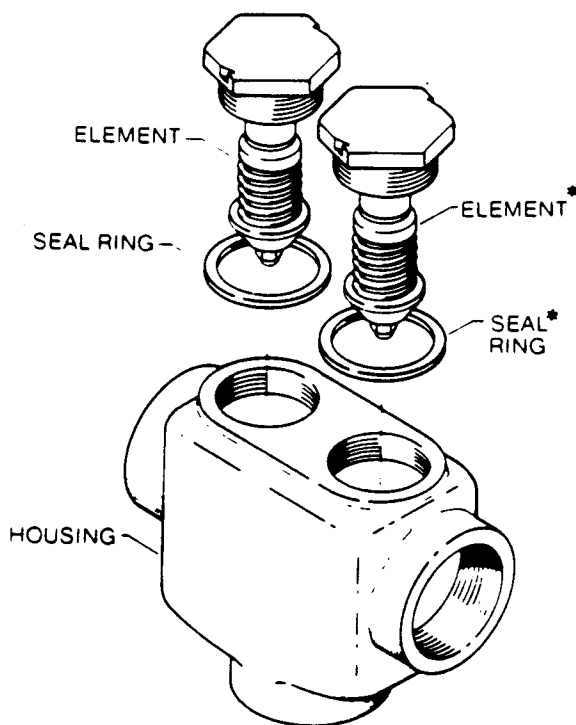
* Repair Kit P/N 250025-095

Section 5 MAINTENANCE

repair kit No. 250025-095 and follow the procedure below for proper installation.

1. Loosen the locknut and turn the adjusting knob counterclockwise until the inner spring tension is relieved. The adjusting knob should turn freely when the spring tension is relieved.
2. Remove the spring chamber from the body to allow access to internal parts.
3. Set aside the spring chamber, spring and spring button.
4. Remove the diaphragm assembly from the valve body.
5. Remove the center nut from the diaphragm assembly. Separate the disc from the plunger and remove and discard the diaphragm.
6. Install the new diaphragm between plunger and disc. Tighten the center nut using Loctite® provided in the repair kit.
7. Blow all internal parts clean using compressed air.
8. Reassemble in reverse order of disassembly. Be sure the spring chamber is fully tightened against the diaphragm before tightening the external body locknut.
9. Refer to Control System Adjustment procedure for readjusting the pilot valve.

Figure 5-11 Thermal Valve (P/N 020382)



* Repair Kit P/N 040518

THERMAL VALVE MAINTENANCE

Refer to Figure 5-11. Thermal valve (P/N 020382) maintenance on this compressor will only require a changing of the thermostatic elements. Use element kit No. 040518 for replacement, and follow the procedure explained below.

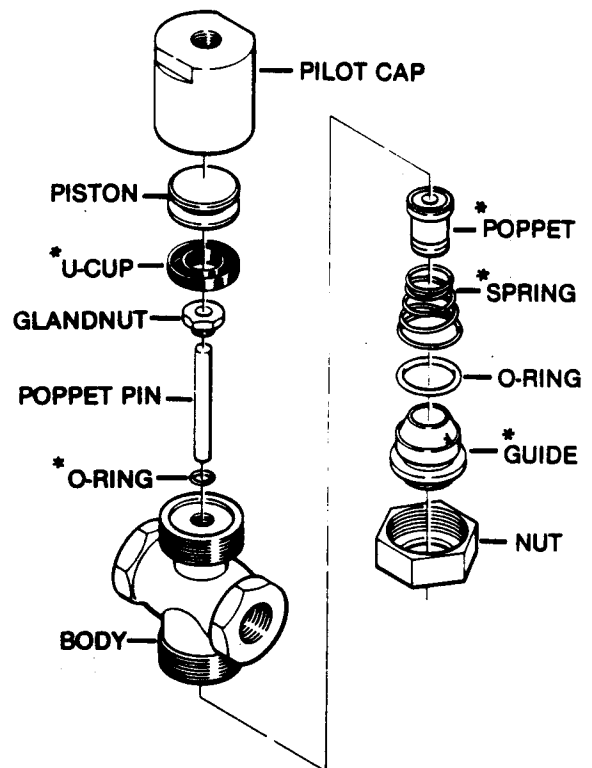
1. With the compressor shutdown, loosen and remove both elements and sealing washers from the housing. Visually inspect the housing and valve seat for a possible burr or obstruction. Should either exist, remove it. In such cases, if the element is not damaged it may be reinstalled.
2. Before installing a new or existing element, be sure that all of the threads on the housing are clean and free of dirt.
3. Install the elements and sealing washers and tighten securely.

RUNNING BLOWDOWN VALVE MAINTENANCE

Refer to Figure 5-12. When it is necessary to make repairs to the running blowdown valve (P/N 045116), use repair kit no. 047524 and follow the instructions provided below.

1. Remove the hex nut from the bottom of the valve. The poppet guide which is secured by the hex nut is under slight spring tension.

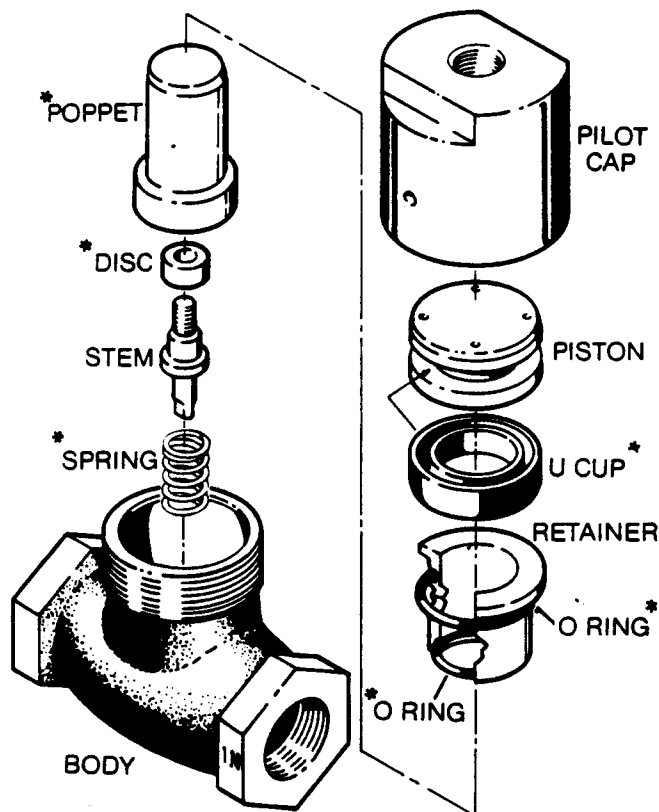
Figure 5-12 Running Blowdown Valve (P/N 045116)



* Repair Kit P/N 250009-703

Section 5 MAINTENANCE

Figure 5-13 Shutdown Blowdown Valve
(P/N 045114)



* Repair Kit P/N 047525

2. Remove the poppet guide, poppet assembly and spring from the valve body.
3. Remove and discard the old o-ring on the poppet guide and replace it with the new o-ring provided in the kit. Be sure to lubricate the o-ring with a silicone base lubricant such as Parker Super "O" lube or an equivalent quality grease.
4. Place the new spring and poppet assembly in the valve body as shown. Then place the poppet guide (with the o-ring in position) over the poppet assembly.
5. Push the hex nut down over the poppet guide and compressor the spring while turning the hex nut until tight. Tighten securely with a wrench.

SHUTDOWN BLOWDOWN VALVE MAINTENANCE

Refer to Figure 5-13. When necessary to make repairs on the shutdown blowdown valve (P/N 045114, use repair kit no. 047525 and follow the instructions provided below.

1. Remove the pilot cap and push the piston out of the pilot cap.
2. Remove the u-cup from the piston and replace it with the new one provided in the kit. Lubricate the u-cup with Parker Super "O" lube or an equivalent quality grease.
3. Thoroughly clean the cap. Place the piston (with u-cup in position) in the cap so the recessed center is showing at the valve body end of the cap.
4. Pull the retainer, poppet and spring out of the valve body. Discard the spring and separate the poppet from the retainer.
5. Remove the o-rings from the inside and outside diameters of the retainer.
6. Unscrew the stem portion of the poppet to allow removal of the disc. **DO NOT** mar the machined finish of the poppet when screwing the stem.
7. Remove the disc and replace it with the new one provided.
8. Replace the stem portion and tighten securely.
9. Clean and poppet and retainer thoroughly.
10. Replace the o-rings in the retainer and lubricate thoroughly with the silicone lubricant used above.
11. Place the poppet in the retainer as it was prior to separating it.
12. Clean the valve body and place the new spring in the valve body.
13. Place the poppet and retainer back in the valve body and replace the pilot cap.
14. Tighten the pilot cap securely with a wrench and the shutdown blowdown is ready to be installed for operation.

PIPE FLEX COUPLING MAINTENANCE

Refer to Figure 5-14. For maintenance on pipe flex coupling no. 046817, order replacement gasket no. 046819 and use the following procedure.

▲ WARNING

Vent all receiver pressure before performing maintenance to coupling.

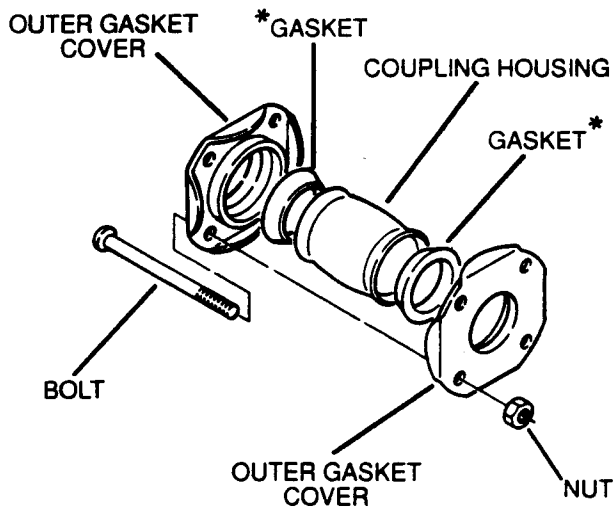
1. Loosen and remove the four (4) bolts on the coupling.
2. Remove the outer gasket covers and discard the gaskets.
3. Replace the gaskets and assemble in reverse order of disassembly. Torque bolts to 90 ft./lbs. (122 Nm)

5.9 TROUBLESHOOTING

The information contained in the Troubleshooting chart has been compiled from field report data and factory experience. It contains symptoms and usual causes for the described problems, however **DO NOT** assume that these are the only problems that may occur. All available data concerning the trouble should be systematically analyzed before undertaking any repairs or component replacement procedures.

Section 5 MAINTENANCE

Figure 5-14 Flexible Pipe Coupling
(P/N 046817)



* Repair Kit P/N 046819

A detailed visual inspection is worth performing for almost all problems. Doing so may prevent damage to the compressor. Always remember to:

1. Check for loose wiring.
2. Check for damaged piping.
3. Check for parts damaged by heat or an electrical short circuit, usually noticeable by discoloration or a burnt order.

Should you problem persist after making the recommended check, consult you nearest Sullair® representative or the Sullair® Corporation factory toll free at 1-800-348-2722.

TROUBLESHOOTING

SYMPTOM	PROBABLE CAUSE	REMEDY	
Compressor will not start	No Fuel	Check fuel level and add fuel if necessary.	
	Plugged fuel filter	Replace the element.	
	Low Battery Voltage		Check electrolyte level and add water. Recharge if necessary.
			Loose battery cables; tighten cables.
			Dirty battery cables; clean thoroughly. Check water level.
		Plugged air filter	Clean or replace the element.
		Engine problems may have developed.	Refer to Engine Operator's manual.
		Defective engine oil pressure switch	Check continuity flow and replace the switch if necessary.
	Blown fuse in wiring harness	Check continuity and replace if necessary.	
	Defective fuel rack solenoid	Check and replace if necessary.	

Section 5 MAINTENANCE

TROUBLESHOOTING

SYMPTOM	PROBABLE CAUSE	REMEDY
Compressor shuts down with air demand present	No fuel	Check fuel gauge and add fuel if necessary.
	Compressor discharge temperature switch is open	Cooling air flow is insufficient; clean cooler and check for proper ventilation. Low fluid sump level; add fluid. Dirty compressor fluid; change fluid. Clogged compressor fluid filters; change elements. Thermostatic element is not functioning properly; change the thermostat element. Defective discharge temperature switch; check for a short or open circuit to the engine fuel rack solenoid. Should this check out normal, it could be possible that the temperature switch itself is defective.
	Defective engine oil pressure switch	Check continuity and replace if necessary.
	Blown fuse in wiring harness	Check continuity and replace if necessary.
	Defective fuel rack solenoid	Check and replace if necessary.
Compressor will not build up full discharge pressure	Air demand is too great.	Check service lines for leaks or open valves.
	Dirty air filter	Check the filter indicator and change or clean element if required.
	Pressure regulator out of adjustment.	Adjust regulator according to control adjustment instructions in the Maintenance Section.
Improper unloading with an excessive pressure build-up causing pressure relief valve to open	Pressure regulating valve is set too high	Readjust
	Running blowdown valve pressure regulating valve set too high	Readjust. Defective pressure regulating valves; repair valves (repair kits available).
	Inlet valve jammed	Free or replace valve.
	Restriction in the control system	Check all control lines and components. Ice and other contaminants could cause restrictions.
	Jammed control linkage	Free the jammed portion of the linkage and adjust if necessary.
	Defective pressure relief valve	Replace pressure relief valve
	Defective pressure regulator	Check diaphragm and replace if necessary (kit available).

Section 5 MAINTENANCE

TROUBLESHOOTING

SYMPTOM	PROBABLE CAUSE	REMEDY
Insufficient air delivery	Plugged air filter	Clean or replace.
	Plugged air/fluid separator	Replace separator element and also change compressor fluid and fluid filter at this time
	Defective pressure regulator	Adjust or repair.
	Engine speed too low	Readjust engine speed.
	Leak in control system causing loss of pressure signal.	Check control lines. Defective diaphragms in the Sullicon Control; replace diaphragm (kit available).
Excessive compressor fluid consumption	Clogged return line	Clear orifice and return line strainer.
	Defective blowdown valve diaphragm	Replace diaphragm.
	Leak in the lubrication system	Check all pipes, connections and components.
	Separator element damaged or not functioning properly	Change separator element.
	Defective minimum pressure/ check valve	Repair or replace
	Fluid sump overfilled	Drain to proper level.
Compressor overheating	Loose or broken fan belt	Tighten or change belt
	Dirty fluid cooler core	Clean core thoroughly.
	Faulty thermostat element	Change thermostat element
	Plugged fluid cooler tube (Internal)	Clean tubes thoroughly.
	Low sump fluid level	Fill.
	Plugged compressor fluid filter	Change element on fluid control center.
	Plugged fluid return line	Clean orifice.
Engine overheating	Loose or broken fan belt	Tighten or change belt.
	Dirty radiator core	Clean thoroughly.
	Low water level	Refill.
	Low fluid level	Refill.
	Faulty water pump	Change pump.
	Plugged radiator	Clean and flush thoroughly.
	Defective engine thermostat	Replace engine thermostat.

Section 6

NOISE CONTROL

6.1 NOISE EMISSIONS WARRANTY

Sullair® Corporation warrants to the ultimate purchaser and each subsequent purchaser that this air compressor was designed, built and equipped to conform at the time of sale to the first retail purchaser, with all applicable U.S. E.P.A. noise control regulations.

This warranty is not limited to any particular part, component, or system of the air compressor. Defects in the design, assembly, or in any part, component, or system of the compressor which, at the time of sale to the first retail purchaser, caused noise emissions to exceed Federal standards are covered by this warranty for the life of the air compressor.

6.2 TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED

Federal Law prohibits the following acts or the causing thereof:

1. The removal or rendering inoperative by any persons, other than for purposes of maintenance, repair, or replacement, of any device or element of design incorporated into any new compressor for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use.

2. The use of the compressor after such device or element of design has been removed or rendered inoperative by any person.

Among those acts included in the prohibition against tampering are the acts listed below:

1. Removal or rendering inoperative any of the following:
 - a. Engine exhaust system or parts thereof
 - b. Compressor air intake system or part thereof
 - c. Enclosure of part thereof
2. Removal of any of the following:
 - a. Vibration isolators
 - b. Control silencer
 - c. Floor panel
 - d. Fan shroud
 - e. Acoustical materials including fiberglass foam or foam tape
3. Operation with canopy doors open for any purpose other than starting, stopping, adjustment, repair, replacement of parts or maintenance.

6.3 NOISE EMISSIONS MAINTENANCE AND MAINTENANCE RECORD LOG

The following instructions and maintenance record log book, for the proper maintenance, use and repair of this compressor, is intended to prevent noise emission degradation (refer to Figure 6-1).

Figure 6-1 Noise Emission Maintenance and Maintenance Record Log

1. ANNUAL MUFFLER AND EXHAUST SYSTEM INSPECTION

At least annually, inspect muffler(s) and engine exhaust system to make sure all parts are securely mounted, that all joints and connections are tight, and that the muffler is in good condition. **DO NOT** operate compressor with defective exhaust system. Remove and replace any defective parts with part numbers indicated in the Parts List.

Maintenance
Performed

By

Location

Date

Maintenance
Performed

By

Location

Date



Section 6
NOISE CONTROL

2. ANNUAL AIR FILTER(S) AND AIR INLET SYSTEM INSPECTION

In addition to the instructions in the Maintenance section of the Operator's Manual, the air filter(s) and entire air inlet system should be inspected at least annually, to make sure all parts are securely mounted, that all joints and connections are tight, that there are no other leaks in the system, and that the filter element(s) are intact. **DO NOT** operate compressor with defective air inlet system. Remove and replace defective parts with part numbers indicated in the Parts List.

Maintenance
Performed

By

Location

Date

Maintenance
Performed

By

Location

Date



3. ANNUAL ENGINE VIBRATION MOUNT INSPECTION

At least annually, inspect engine vibration mounts for security of attachment and to make sure the resilient parts are intact. **DO NOT** operate compressor with defective engine mounting system. Remove and replace defective parts with part numbers indicated in Parts List.

Maintenance
Performed

By

Location

Date

Maintenance
Performed

By

Location

Date



Section 6 NOISE CONTROL

4. ANNUAL FRAME, CANOPY, AND PARTS INSPECTION

At least annually, inspect frame, canopy and parts, for security of attachment to make sure there are no missing members, and to make sure there are no deformed members, including all hinged doors and covers and their fastening devices. DO NOT operate compressor with defective frame, canopy and parts. Remove and replace defective parts with part numbers indicated in Parts List.

Maintenance
Performed

By

Location

Date

Maintenance
Performed

By

Location

Date



5. ANNUAL ACOUSTICAL MATERIALS INSPECTION

At least annually, inspect all acoustical materials, if any, for security of attachment and to make sure no material is missing or damaged (refer to Parts List). Clean or replace, if necessary. DO NOT operate compressor with defective acoustical material. Remove and replace defective parts with part numbers indicated in the Parts List.

Maintenance
Performed

By

Location

Date

Maintenance
Performed

By

Location

Date



Section 6
NOISE CONTROL

6. ANNUAL INSPECTIONS FOR PROPER OPERATION OF ALL SYSTEMS.

In additions to other instructions in the Operator's Manuals, at least annually, operate compressor and inspect to make sure all systems are operating properly and that engine runs at rated speed and pressure. **DO NOT** operate malfunctioning or improperly adjusted compressor. Repair or adjust, per instructions in Operator's Manual, as required.

Maintenance
Performed

By

Location

Date

Maintenance
Performed

By

Location

Date



NOTES

Section 7

ILLUSTRATIONS AND PARTS LIST

7.1 PROCEDURE FOR ORDERING PARTS

Parts should be ordered from the nearest Sullair Representative or the Representative from whom the compressor was purchased. If for any reason parts cannot be obtained in this manner, contact the factory directly at the address below.

When ordering parts always indicate the Serial Number of the compressor. This can be obtained from the Bill of Lading for the compressor or from the Serial Number Plate located on the compressor.

SULLAIR CORPORATION

Subsidiary of Sundstrand Corporation
3700 East Michigan Boulevard
Michigan City, Indiana 46360

Telephone: 219-879-5451
See Toll-free Numbers Below
Telex: 4948922
FAX: (219) 874-1273

SULLAIR CORPORATION

Parts Distribution Division and Service Department
1625 E. Second Street
Michigan City, Indiana 46360

Telephone: (219) 879-5451 or
1-800-348-2722 (U.S. except Indiana)
1-800-225-6226 (Indiana)
1-800-525-5506 (Canada)
Telex: 4320147
FAX: (219) 874-1835 (Parts)
FAX: (219) 874-1805 (Service)

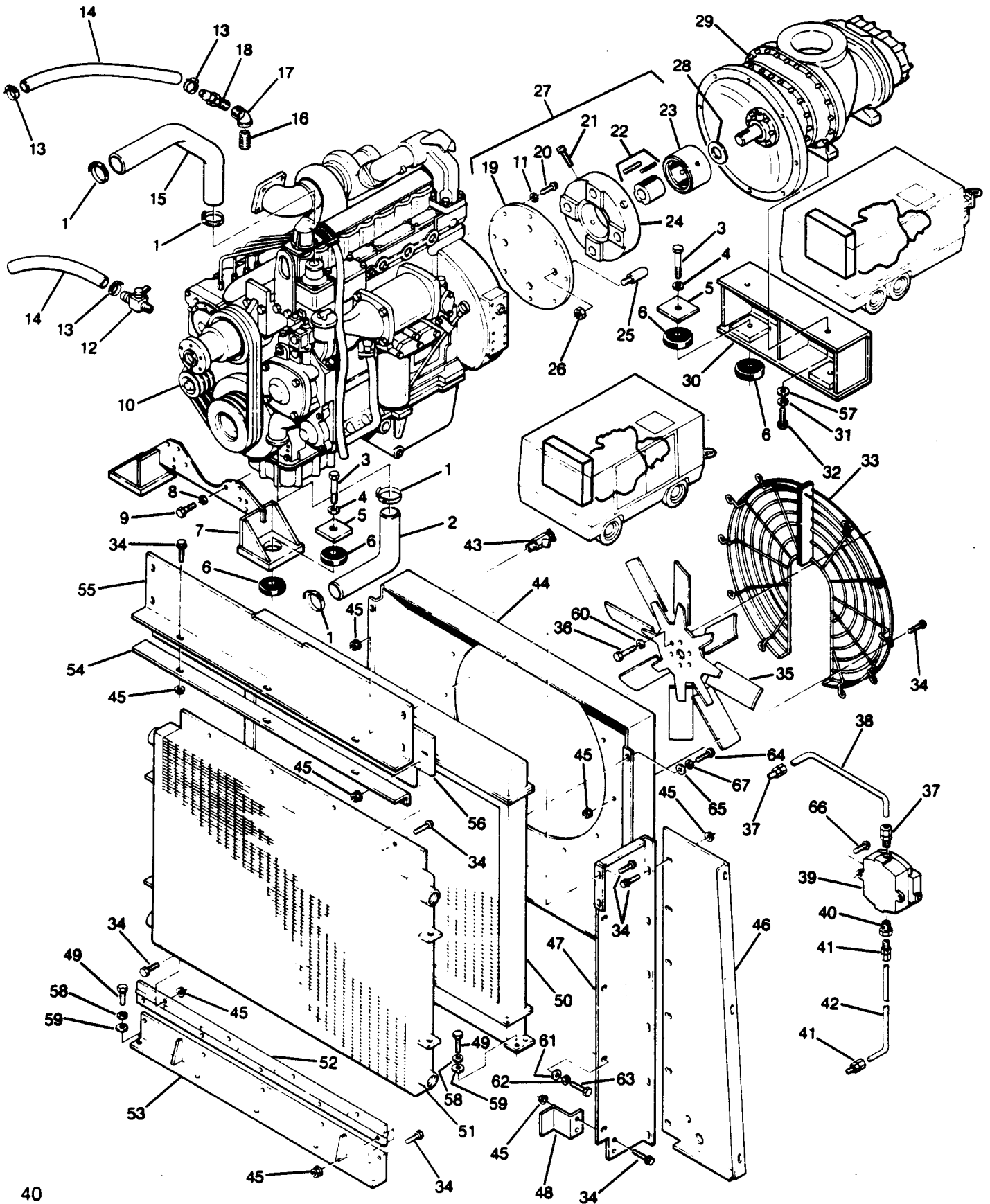
7.2 RECOMMENDED SPARE PARTS LIST

DESCRIPTION	KIT NUMBER	QUANTITY
element for air filter 048456 (primary)	048462	2
element for air filter 048456 (secondary)	048463	2
element for compressor fluid filter 250038-315	250025-526	2
element, for separator	250007-139	1
repair kit for fluid stop valve 016742	001684	1
repair kit for v-type strainer 241771	241772	1
repair kit for minimum pressure/check valve 242405	250018-456	1
repair kit for pipe flexible coupling 046817	046819	1
repair kit for Sullicon Control 250026-096	250020-353	1
repair kit, running blowdown valve 045116	047524	1
repair kit for thermal valve 020382	040518	2
repair kit for pressure regulator 406929	041742	1
repair kit for control regulator 250025-094	250025-095	1
repair kit for shutdown blowdown valve 045114	047525	1
repair kit for shaft seal	013498	1
Sullair AWF (5 gallons)	250030-757	1
Sullair AWF (55 gallon drum)	250020-758	1

Section 7

ILLUSTRATIONS AND PARTS LIST

7.3 COMPRESSOR, ENGINE AND PARTS - H750/150



Section 7 ILLUSTRATIONS AND PARTS LIST

7.3 COMPRESSOR, ENGINE AND PARTS - H750/150

key number	description	part number	quantity
1	clamp, hose	040343	4
2	hose, radiator - lower	250026-513	1
3	capscrew, hex gr5 1"-8 x 5"	828616-500	4
4	washer, springlock 1"	837516-250	4
5	washer, snubbing 6"	222607	4
6	isolator, vibration	049717	4
7	bracket, front engine	250027-101	1
8	washer, springlock regular 3/8"	837506-094	9
9	capscrew, hex gr5 3/8"-16 x 1 1/4"	828606-125	9
10	engine, diesel CAT	250031-731	1
11	washer, springlock regular 1/2"	837508-125	8
12	valve, drain 1 1/8"-12	250031-046	1
13	clamp, hose	040513	3
14	hose, heater 5/8" (ft.)	842115-062	4
15	hose, radiator - upper	250026-512	1
16	nipple, pipe 3/8" x close	822206-000	1
17	elbow, reducing 1/2" x 3/8"	801602-015	1
18	fitting, hose-m end 5/8" x 1/2"	044408	1
19	flange sae 14 (I) (II)	250019-660	1
20	capscrew, hex 1/2"-13 (II)	828208-100	8
21	capscrew, socket head M20 x 65 (I) (II)	250019-658	4
22	bushing, taperlock (II)	250014-456	1
23	hub, drive (I) (II)	250019-656	1
24	element, coupling (I) (II)	250014-698	1
25	bolt, s-style 140 (I) (II)	250019-657	4
26	nut, hex M20	250019-659	4
27	coupling, assembly (III)	250019-655	1
28	spacer, coupling (II)	250026-537	1
29	unit, compressor (V)	-	

(continued on Page 43)

(I) Component included in coupling assembly no. 250031-587.

(II) Component included in coupling kit no. 250033-704.

(III) For maintenance on coupling assembly no. 250019-655, order repair kit no. 250033-704.

(V) There is an exchange program whereby a remanufactured compressor unit can be obtained from Sullair distributors or the factory at less cost than the owner could repair the unit. For information regarding the unit exchange program, contact your nearest Sullair representative or the Sullair Corporation.

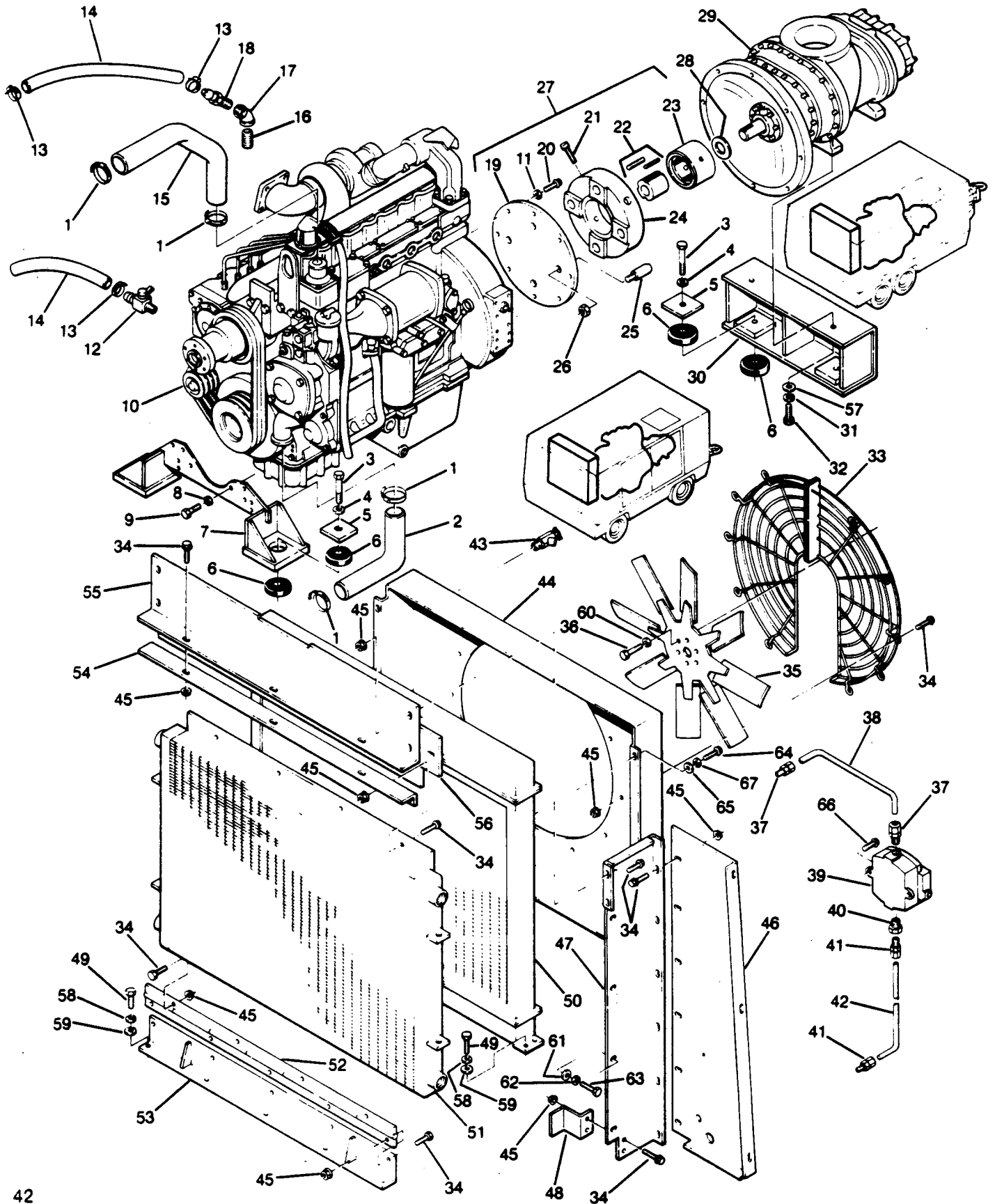
The shaft seal is not considered part of the compressor unit in regard to the 2 year warranty, but the normal Sullair parts warranty applies. For shaft seal repairs, order shaft seal repair kit No. 013498.

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 7

ILLUSTRATIONS AND PARTS LIST

7.3 COMPRESSOR, ENGINE AND PARTS - H750/150



Section 7

ILLUSTRATIONS AND PARTS LIST

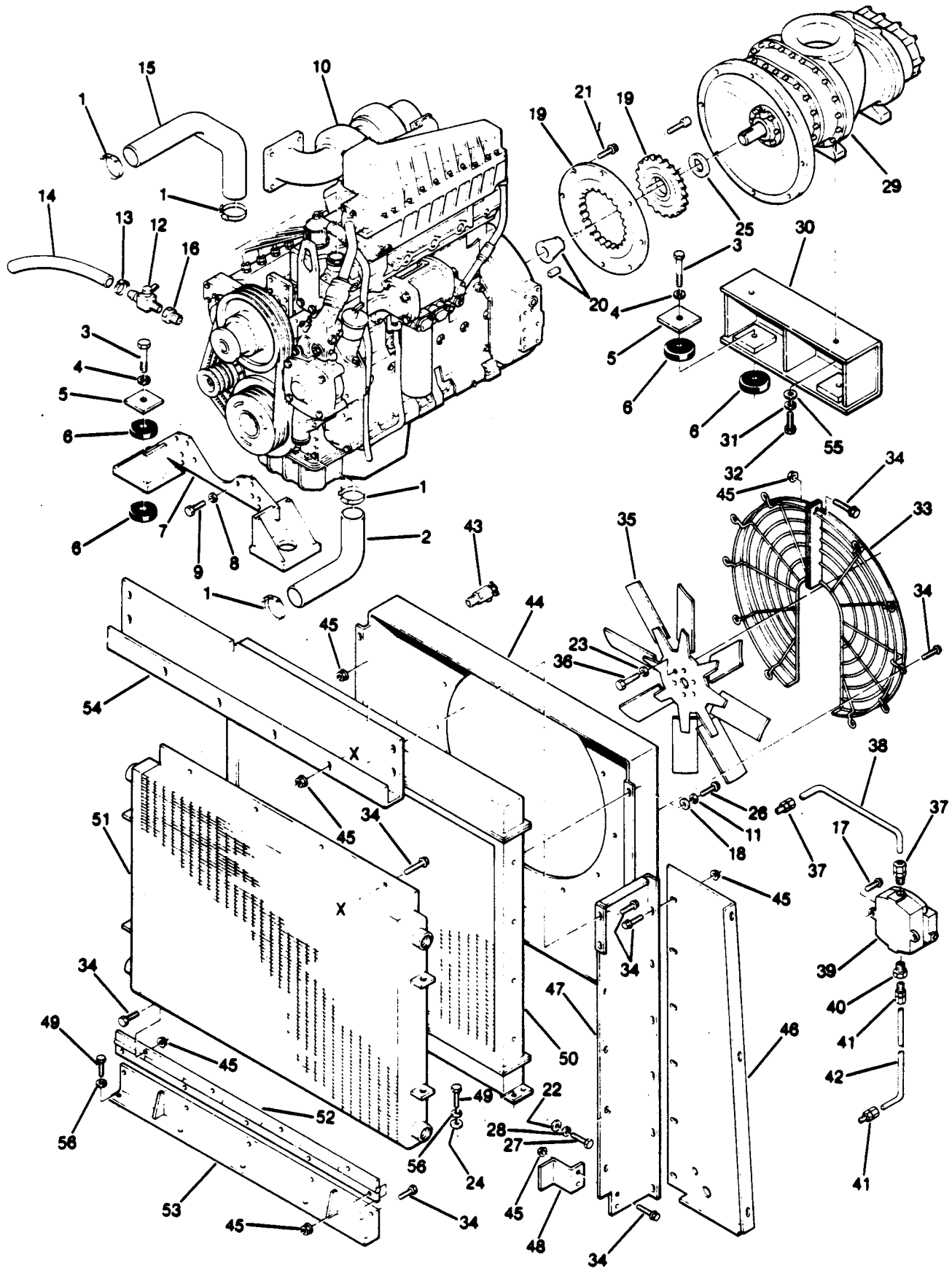
7.3 COMPRESSOR, ENGINE AND PARTS - H750/150 (continued)

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
30	bracket, air end mounting	250023-493	1
31	washer, springlock $\frac{5}{8}$ "	837510-156	2
32	capscrew, hex gr5 $\frac{5}{8}$ "-11 x $1\frac{3}{4}$ "	828610-175	2
33	fan, guard 32"	250027-204	1
34	screw, serrated washer $\frac{5}{16}$ "-18 x $\frac{3}{4}$ "	829705-075	46
35	fan, 32" diameter	250026-163	1
36	capscrew, hex gr5 $\frac{5}{16}$ "-18 x $1\frac{1}{2}$ "	828605-150	6
37	connector, tube-m $\frac{3}{8}$ " x $\frac{3}{8}$ "	812206-038	2
38	tubing, copper $\frac{3}{8}$ " (ft.)	840215-006	2
39	switch, engine coolant	250026-860	1
40	bushing, reducing hex $\frac{1}{4}$ " x $\frac{1}{2}$ "	802102-010	1
41	connector, tube-m $\frac{1}{4}$ " x $\frac{1}{4}$ "	812204-025	2
42	tubing, copper $\frac{1}{4}$ " (ft.)	840215-004	2
43	valve, shut-off	250008-266	1
44	shroud, fan 33"	250026-398	1
45	nut, hex flange $\frac{5}{16}$ "-18	825305-293	33
46	baffle, curb side	250026-582	1
	• baffle, road side	250026-583	1
47	panel, radiator - right hand	250023-487	1
	• panel, radiator - left hand	250023-488	1
48	bracket, radiator	250026-598	2
49	capscrew, hex gr5 $\frac{7}{16}$ "-14 x $1\frac{1}{4}$ "	828607-125	9
50	radiator	250023-489	1
	• cap, radiator	250018-580	1
51	cooler, fluid	250026-161	1
52	hinge, panel cooler	250016-389	1
53	panel, cooler - bottom	250024-475	1
54	baffle, cooler	250023-729	1
55	angle, cooler mount	250026-549	1
56	spacer, cooler	250026-710	1
57	washer, regular $\frac{5}{8}$ "	837210-112	2
58	washer, springlock $\frac{7}{16}$ "	837507-109	9
59	washer, regular $\frac{7}{16}$ "	837207-071	9
60	washer, springlock $\frac{5}{16}$ "	837505-078	6
61	washer, regular $\frac{1}{2}$ "	837208-112	8
62	washer, springlock $\frac{1}{2}$ "	837508-125	8
63	capscrew, hex $\frac{1}{2}$ "-13 x $1\frac{1}{4}$ "	828608-125	8
64	capscrew, hex gr5 $\frac{1}{4}$ "-20 x $\frac{3}{4}$ "	828604-075	6
65	washer, regular $\frac{1}{4}$ "	837204-125	6
66	capscrew, hex gr5 $\frac{1}{4}$ "-20 x $1\frac{1}{4}$ "	828604-125	2
67	washer, springlock $\frac{1}{4}$ "	837504-062	6

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

ILLUSTRATIONS AND PARTS LIST

7.4 COMPRESSOR, ENGINE AND PARTS - H950/150



Section 7

ILLUSTRATIONS AND PARTS LIST

7.4 COMPRESSOR, ENGINE AND PARTS - H950/150

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
1	clamp, hose	040343	4
2	hose, radiator - lower	250026-513	1
3	capscrew, hex gr5 1"-8 x 5"	828616-500	4
4	washer, springlock 1"	837516-250	4
5	washer, snubbing 6"	222607	4
6	isolator, vibration	049717	4
7	bracket, front engine	250027-101	1
8	washer, springlock regular 3/8"	837506-094	9
9	capscrew, hex gr5 3/8"-16 x 1 1/4"	828606-125	9
10	engine, diesel CAT	250026-036	1
11	washer, springlock 1/4"	827504-062	6
12	valve, drain 1 1/8"-12	250031-046	1
13	clamp, hose	040513	3
14	hose, heater 5/8" (ft.)	842115-062	4
15	hose, radiator - upper	250026-512	1
16	bushing, reducing		
17	capscrew, hex head gr5 1/4"-20 x 1 1/4"	828604-125	1
18	washer, regular 1/4"	837204-071	1
19	coupling, drive	250028-417	1
20	bushing, taperlock	250014-456	1
21	capscrew, hex 1/2"-13 x 1"	828208-100	8
22	washer, regular 1/2"	837208-112	8
23	washer, springlock 5/16"	837505-078	6
24	washer, regular 7/16"	837207-071	9
25	spacer, coupling	250028-435	1
26	capscrew, hex head gr5 1/4"-20 x 3/4"	828604-075	6
27	capscrew, hex head 1/2"-13 x 1 1/4"	828608-125	8
28	washer, springlock 1/2"	837508-125	8
29	compressor unit (I)	251208-001	1
30	bracket, air end mounting	250023-493	1

(continued on Page 47)

(I) There is an exchange program whereby a remanufactured compressor unit can be obtained from Sullair distributors or the factory at less cost than the owner could repair the unit. For information regarding the unit exchange program, contact your nearest Sullair representative or the Sullair Corporation.

The shaft seal is not considered part of the compressor unit in regard to the 2 year warranty, but the normal Sullair parts warranty applies. For shaft seal repairs, order shaft seal repair kit No. 013498.

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 7 ILLUSTRATIONS AND PARTS LIST

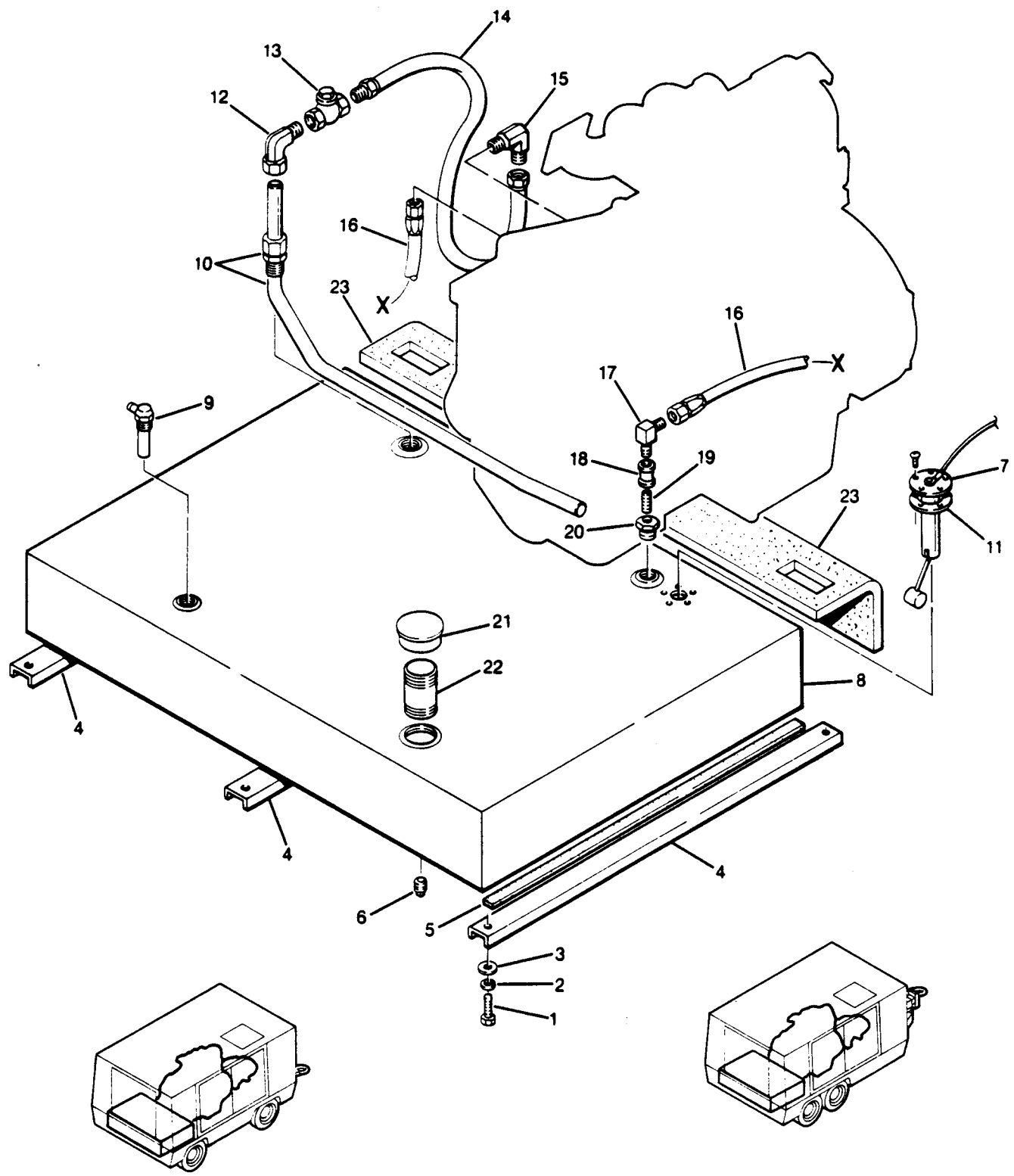
7.4 COMPRESSOR, ENGINE AND PARTS - H950/150 (continued)

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
31	washer, springlock $\frac{5}{8}$ "	837510-156	2
32	capscrew, hex gr5 $\frac{5}{8}$ "-11 x $1\frac{1}{4}$ "	828610-175	2
33	fan, guard 32"	250030-530	1
34	screw, serrated washer $\frac{5}{8}$ "-18 x $\frac{3}{4}$ "	829705-075	46
35	fan, 32" diameter	250033-157	1
36	capscrew, hex gr5 $\frac{5}{8}$ "-18 x $1\frac{1}{2}$ "	828605-150	6
37	connector, tube-m $\frac{3}{8}$ " x $\frac{3}{8}$ "	812206-038	2
38	tubing, copper $\frac{3}{8}$ " (ft.)	840215-006	2
39	switch, engine coolant	250026-860	1
40	bushing, reducing hex $\frac{1}{4}$ " x $\frac{1}{2}$ "	802102-010	1
41	connector, tube-m $\frac{1}{4}$ " x $\frac{1}{4}$ "	812204-025	2
42	tubing, copper $\frac{1}{4}$ " (ft.)	840215-004	2
43	valve, shut-off	250008-266	1
44	shroud, fan 33"	250030-529	1
45	nut, hex flange $\frac{5}{8}$ "-18	825305-293	33
46	baffle, curb side	250026-582	1
	baffle, road side	250026-583	1
47	panel, radiator - right hand	250023-487	1
	panel, radiator - left hand	250023-488	1
48	bracket, radiator	250026-598	2
49	capscrew, hex gr8 $\frac{7}{8}$ "-14 x $1\frac{1}{4}$ "	828607-125	9
50	radiator	250028-444	1
51	cooler, fluid	250026-161	1
52	hinge, panel cooler	250016-389	1
53	panel, cooler - bottom	250031-354	1
54	baffle, cooler top mount	250031-355	1

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 7 ILLUSTRATIONS AND PARTS LIST

7.5 FUEL SYSTEM - H750/150



Section 7 ILLUSTRATIONS AND PARTS LIST

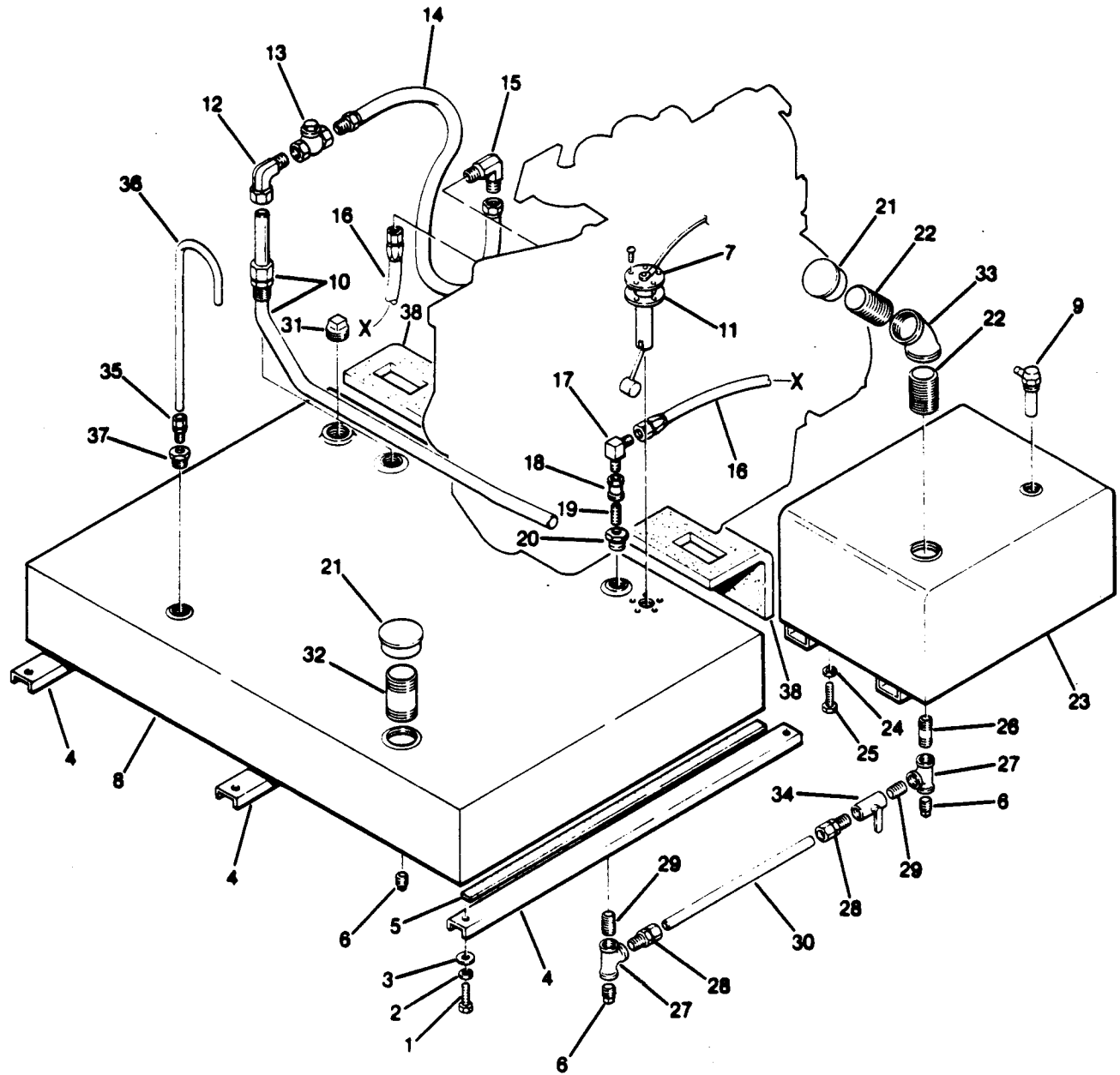
7.5 FUEL SYSTEM - H750/150

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
1	capscrew, hex gr5 $\frac{7}{16}$ "-14 x 1"	828607-100	6
2	washer, springlock $\frac{7}{16}$ "	837507-109	6
3	washer, regular $\frac{7}{16}$ "	837207-071	6
4	channel, tank support	250026-584	3
5	weatherstrip, $\frac{1}{4}$ " x 1" (ft.)	043505	10
6	plug, pipe $\frac{1}{2}$ "	807800-020	2
7	sender, fuel level	041373	1
8	tank, fuel	250031-247	1
9	valve, venting	250025-438	1
10	tube, fuel pick-up	250017-616	1
11	gasket, fuel gauge	040407	1
12	elbow, tube-m $\frac{5}{8}$ " x $\frac{3}{8}$ "	810510-038	1
13	valve, check $\frac{3}{8}$ "	040408	1
14	hose, fuel $\frac{1}{2}$ " x 36"	040346	1
15	elbow, $\frac{1}{2}$ " x 90°	250016-875	1
16	hose, $\frac{1}{4}$ "	249604-028	1
17	elbow, 37fl 90° tube-m $\frac{5}{16}$ " x $\frac{1}{4}$ "	860204-025	1
18	coupling, pipe $\frac{1}{4}$ "	801215-010	1
19	nipple, pipe $\frac{1}{4}$ " x close	822204-000	1
20	bushing, reducing $\frac{3}{4}$ " x $\frac{1}{4}$ "	807603-010	1
21	cap, fuel 2"	250006-063	1
22	nipple, pipe 2" x 6"	822132-060	1
23	panel, fuel tank insulation	250035-341	1

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 7
ILLUSTRATIONS AND PARTS LIST

7.6 FUEL SYSTEM - H950/150



Section 7

ILLUSTRATIONS AND PARTS LIST

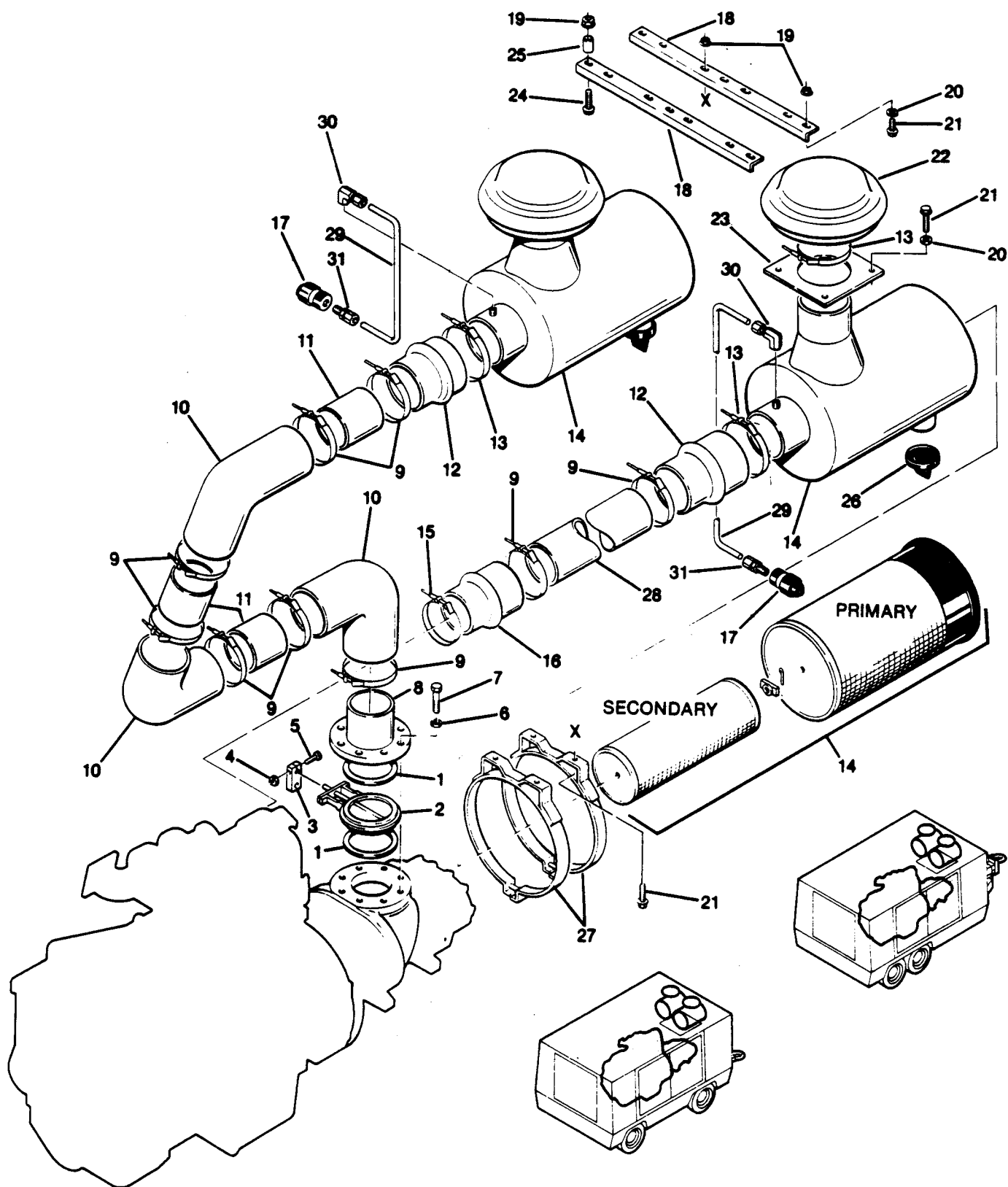
7.6 FUEL SYSTEM - H950/150

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
1	capscrew, hex gr5 $\frac{7}{16}$ "-14 x 1"	828607-100	6
2	washer, springlock $\frac{7}{16}$ "	837507-109	6
3	washer, regular $\frac{7}{16}$ "	837207-071	6
4	channel, tank support	250026-584	3
5	weatherstrip, $\frac{1}{4}$ " x 1" (ft.)	043505	10
6	plug, pipe $\frac{1}{2}$ "	807800-020	3
7	sender, fuel level	041373	1
8	tank, fuel	250031-247	1
9	valve, venting	250025-438	1
10	tube, fuel pick-up	250034-616	1
11	gasket, fuel gauge	250004-752	1
12	elbow, tube-m $\frac{5}{8}$ " x $\frac{3}{8}$ "	810510-038	1
13	valve, check $\frac{3}{8}$ "	040408	1
14	hose, fuel $\frac{1}{2}$ " x 36"	040346	1
15	elbow, $\frac{1}{2}$ " x 90°	250016-875	1
16	hose, $\frac{1}{4}$ "	249604-028	1
17	elbow, 37fl 90° tube-m $\frac{5}{16}$ " x $\frac{1}{4}$ "	860204-025	1
18	coupling, pipe $\frac{1}{4}$ "	801215-010	1
19	nipple, pipe $\frac{1}{4}$ " x close	822204-000	1
20	bushing, reducing $\frac{3}{4}$ " x $\frac{1}{4}$ "	807603-010	1
21	cap, fuel 2"	250006-063	2
22	nipple, pipe 2" x close	822132-000	2
23	tank, fuel	250031-156	1
24	washer, springlock $\frac{3}{8}$ "	837506-094	4
25	capscrew, hex $\frac{3}{8}$ " x 1"	828606-100	4
26	nipple, pipe $\frac{1}{2}$ " x 3"	822108-030	1
27	tee, pipe $\frac{1}{2}$ "	802415-020	2
28	connector, tube $\frac{1}{2}$ " x $\frac{1}{2}$ "	812208-050	2
29	nipple, close $\frac{1}{2}$ " x close	822208-000	2
30	tube, copper $\frac{1}{2}$ " (ft.)	840215-008	4
31	plug, pipe 1 $\frac{1}{4}$ "	802815-050	1
32	nipple, pipe 2" x 6"	822132-060	1
33	elbow, pipe 45° x 2"	801415-080	1
34	valve, venting	250025-438	1
35	connector, tube $\frac{1}{4}$ " x $\frac{1}{4}$ "	812204-025	1
36	tubing, steel $\frac{1}{4}$ "	841115-004	1
37	bushing, reducing	802102-010	1
38	panel, fuel tank insulation	250035-341	1

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 7 ILLUSTRATIONS AND PARTS LIST

7.7 AIR INLET SYSTEM



Section 7 ILLUSTRATIONS AND PARTS LIST

7.7 AIR INLET SYSTEM

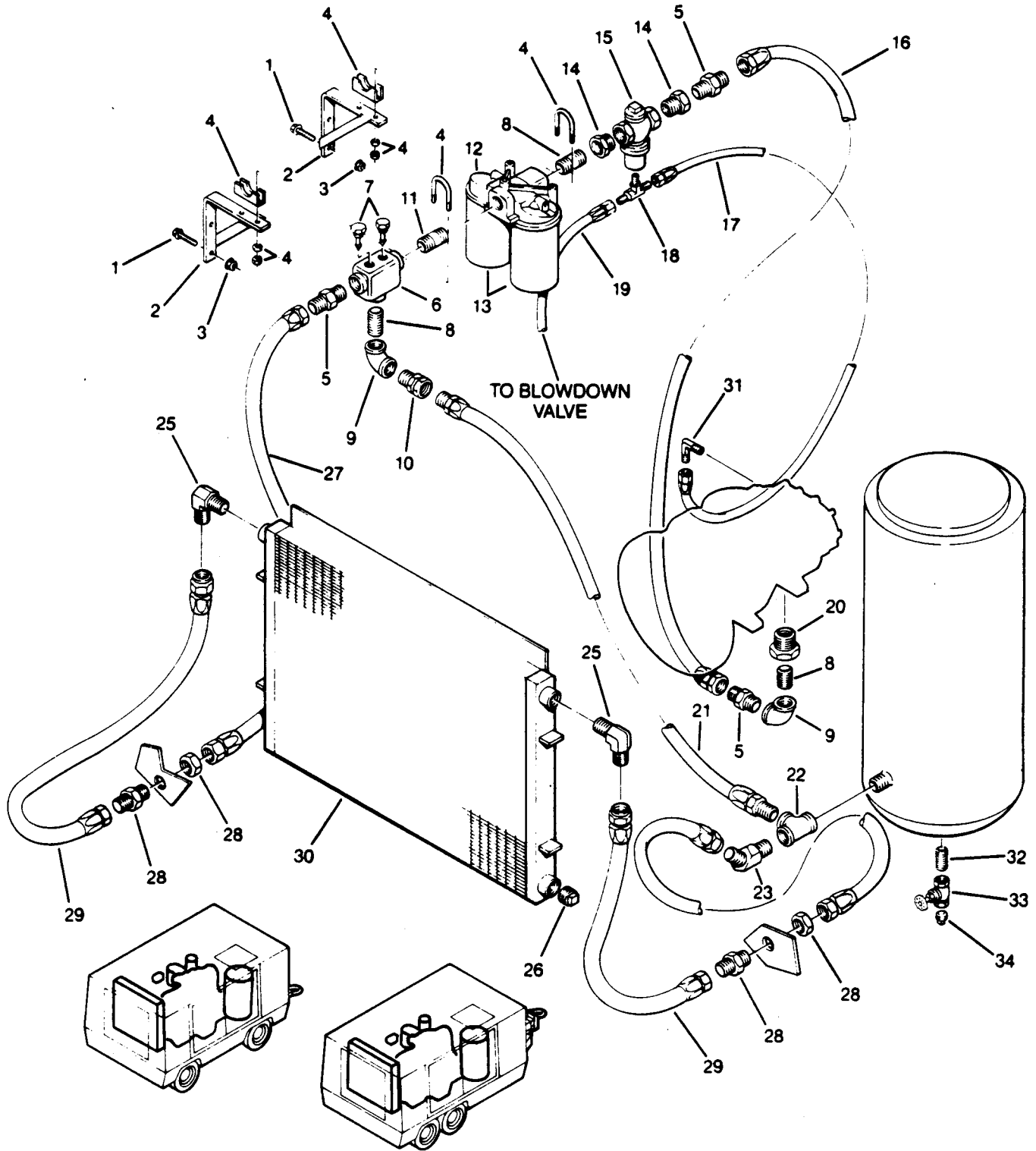
<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
1	gasket	040696	2
2	valve, inlet butterfly 6"	250019-544	1
3	lever, inlet valve	250018-988	1
4	nut, hex locking $\frac{5}{16}$ "-18	825505-166	1
5	capscrew, ferry head $\frac{5}{16}$ "-18 x $1\frac{1}{2}$ "	828405-150	1
6	washer, springlock $\frac{1}{2}$ "	837508-125	8
7	capscrew, hex gr5 $\frac{1}{2}$ "-13 x $2\frac{1}{2}$ "	828608-250	8
8	adapter, air inlet	013122	1
9	clamp, hose 6"	250020-159	9
10	elbow, rubber 90° 6"	040304	3
11	tube, aluminum 6" x 5"	028111	3
12	hose, reducing hump 6" x 7"	044801	2
13	clamp, hose 7"	041992	4
14	filter, air assembly (I)	048456	2
15	clamp, hose $5\frac{1}{2}$ "	250028-404	1
16	hose, reducing hum 6" x 5"	042325	1
17	indicator, restriction 2" water	250003-869	2
18	angle, filter mounting	250027-584	2
19	nut, hex flanged plated $\frac{5}{16}$ "	825305-283	14
20	washer, regular wide $\frac{5}{16}$ "	838305-071	8
21	screw, hex serrated washer $\frac{5}{16}$ " x $\frac{3}{4}$ "	829705-075	16
22	cap, air inlet 7"	046307	2
23	plate, cover air filter	250029-896	2
24	screw, hex serrated washer $\frac{5}{16}$ " x $1\frac{1}{2}$ "	829705-150	6
25	spacer, air inlet filter	250009-412	6
26	valve, actuator filter	250029-911	2
27	band, mounting 16"	044248	4
28	tube, aluminum 6" x 23"	250028-041	1
29	tube, filter indicator	250009-862	2
30	elbow, tube-f $\frac{1}{4}$ " x $\frac{1}{8}$ "	812304-012	2
31	connector, tube-m $\frac{1}{4}$ " x $\frac{1}{8}$ "	812204-012	2

(I) For maintenance on air filter No. 048456, order element repair kit No. 048462 (primary) and No. 48463 (secondary).

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

ILLUSTRATIONS AND PARTS LIST

7.8 COMPRESSOR COOLING AND LUBRICATION SYSTEM



Section 7

ILLUSTRATIONS AND PARTS LIST**7.8 COMPRESSOR COOLING AND LUBRICATION SYSTEM**

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
1	screw, serrated washer $\frac{5}{16}$ "-18 x 1"	829705-100	4
2	support, filter	250028-260	2
3	nut, hex flanged $\frac{5}{16}$ "-18	825305-283	4
4	u-bolt, $\frac{1}{4}$ " x $1\frac{1}{2}$ "	829004-150	2
5	connector, $1\frac{1}{2}$ " x $1\frac{1}{2}$ "	860124-150	3
6	valve, thermal (I)	020382	1
7	element, thermal valve	040518	2
8	nipple, pipe $1\frac{1}{2}$ " x close	822224-000	3
9	elbow, pipe 90° $1\frac{1}{2}$ "	801515-060	2
10	adapter, swivel	040292	1
11	nipple, pipe $1\frac{1}{2}$ " x $2\frac{1}{2}$ "	822224-025	1
12	filter, fluid assembly $1\frac{1}{2}$ "	250038-315	1
13	element, fluid filter	250025-526	2
14	bushing, reducing hex 2" x $1\frac{1}{2}$ "	802108-060	2
15	valve, fluid stop 2" (II)	016742	1
16	hose, medium pressure $1\frac{1}{2}$ " x 28"	249624-022	1
17	hose, 36"	049486	1
18	tee, tube-m bearing $\frac{5}{16}$ " x $\frac{1}{4}$ "	814605-025	1
19	hose, 82"	049482	1
20	bushing, reducing hex $2\frac{1}{2}$ " x $1\frac{1}{2}$ "	802110-060	1
21	hose, hydraulic $1\frac{1}{2}$ " x 46"	041512	1
22	tee, pipe $1\frac{1}{2}$ "	802415-060	1
23	elbow, swivel 45° $1\frac{1}{2}$ "	860024-150	1
24	hose, medium pressure $1\frac{1}{2}$ " x 46"	249624-036	1
25	elbow, 90° $1\frac{1}{2}$ "	860224-150	2
26	plug, pipe $1\frac{1}{2}$ "	802815-060	1
27	hose, medium pressure $1\frac{1}{2}$ " x 38"	249624-025	1
28	bulkhead, union $1\frac{1}{2}$ "	250016-401	2
29	hose, medium pressure $1\frac{1}{2}$ " x 44"	249624-027	2
30	cooler, fluid	250026-161	1
31	elbow, tube 45fl $\frac{5}{16}$ " x $\frac{1}{4}$ "	814205-025	1
32	nipple, close $\frac{3}{4}$ " x close	822212-000	1
33	valve, globe $\frac{3}{4}$ "	040520	1
34	plug, pipe $\frac{3}{4}$ "	807800-030	1

(I) For maintenance on thermal valve No. 020382, order repair kit No. 040518.

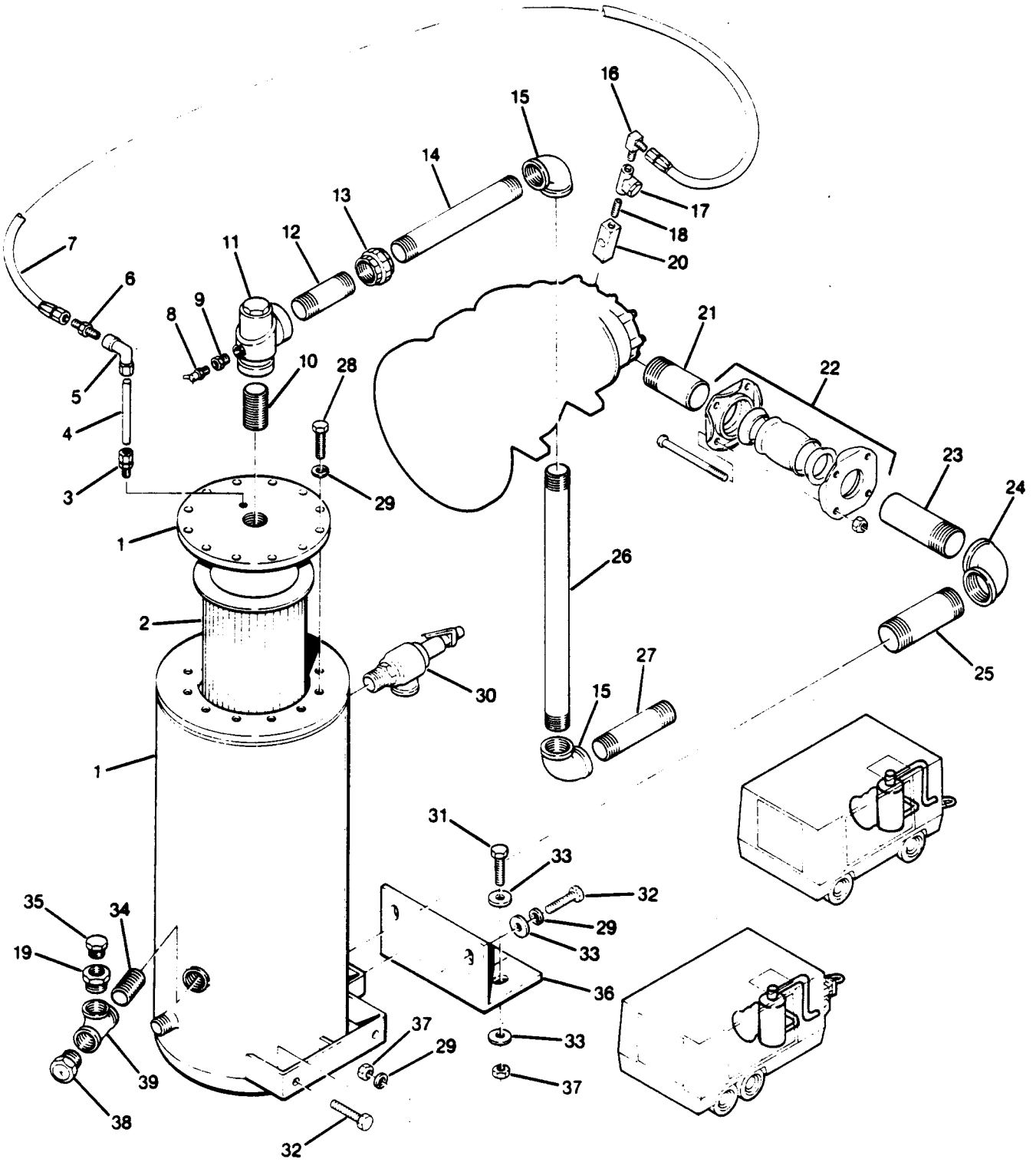
(II) For maintenance on fluid stop valve No. 016742, order repair kit No. 001684.

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 7

ILLUSTRATIONS AND PARTS LIST

7.9 COMPRESSOR DISCHARGE SYSTEM



Section 7

ILLUSTRATIONS AND PARTS LIST**7.9 COMPRESSOR DISCHARGE SYSTEM**

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
1	tank, fluid separator (with cover plate)	250030-800	1
2	element, separator	250007-139	1
3	fitting, flex $\frac{5}{16}$ " x $\frac{1}{4}$ "	020501	1
4	tube, $\frac{5}{16}$ " x 29"	025604	1
5	elbow, tube-f $\frac{5}{16}$ " x $\frac{1}{4}$ "	812305-025	1
6	connector, tube-m $\frac{5}{16}$ " x $\frac{1}{4}$ "	814105-025	1
7	hose, $\frac{1}{4}$ " x 54"	049484	1
8	switch, temperature 240°	043374	2
9	bushing, reducing $\frac{3}{4}$ " x $\frac{1}{2}$ "	807603-020	3
10	nipple, pipe 2" x close	822232-000	2
11	valve, minimum pressure/check 2" (I)	242405	1
12	nipple, pipe 2" x 4"	822232-040	1
13	union, pipe 2"	802515-080	2
14	nipple, pipe 2" x 24"	822232-240	1
15	elbow, pipe 90°	801515-080	2
16	elbow, tube-m $\frac{5}{16}$ " x $\frac{1}{4}$ "	814205-025	1
17	strainer, v-type (II)	241771	1
18	nipple, pipe $\frac{1}{4}$ " x close	822204-000	1
19	adapter, filler	020044	1
20	glass, sight	046559	1
21	nipple, half 3" x 8"	822848-080	1
22	coupling, pipe flexible (III)	046817	1
23	nipple, half 3" x $7\frac{1}{2}$ "	822848-075	1
24	elbow, pipe 90° 3"	801515-120	1
25	nipple, pipe 3" x 16"	822148-160	1
26	nipple, pipe 2" x 32"	822232-320	1
27	nipple, pipe 2" x 6"	822232-060	1
28	capscrew, hex gr8 $\frac{5}{8}$ "-11 x 2"	828610-200	12
29	washer, springlock $\frac{5}{8}$ "	837510-156	12
30	valve, relief $\frac{1}{4}$ " (225 PSI)	250027-842	1
31	capscrew, hex gr8 $\frac{5}{8}$ "-11 x 2"	828210-200	2

(continued on Page 55)

(I) For maintenance on minimum pressure/check valve no. 242405, order repair kit no. 250018-456.

(II) For maintenance on v-type strainer no. 241771, order repair kit no. 241772.

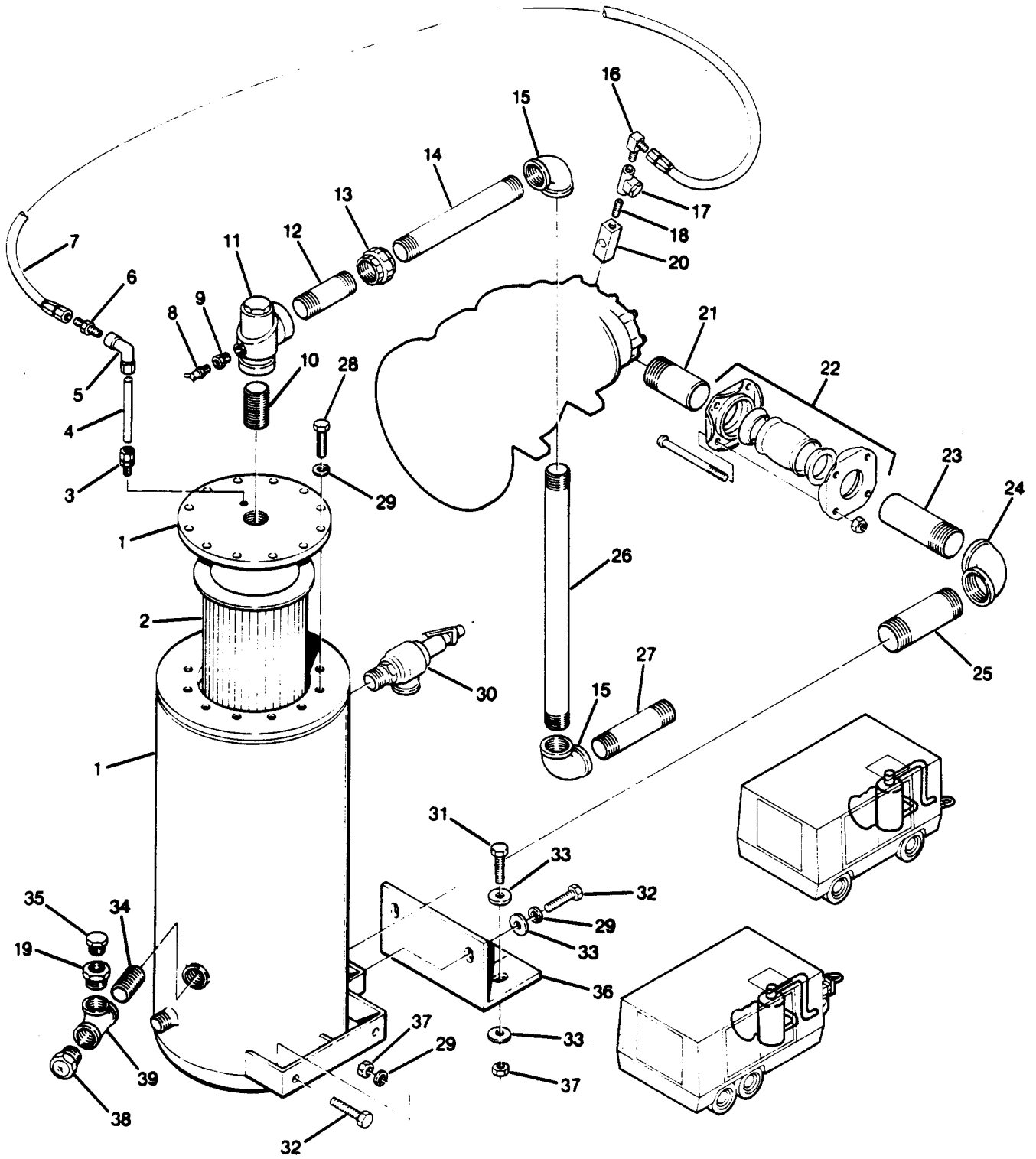
(III) For maintenance on flexible pipe coupling no. 046817, order repair kit No. 046819.

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 7

ILLUSTRATIONS AND PARTS LIST

7.9 COMPRESSOR DISCHARGE SYSTEM



Section 7
ILLUSTRATIONS AND PARTS LIST

7.9 COMPRESSOR DISCHARGE SYSTEM (continued)

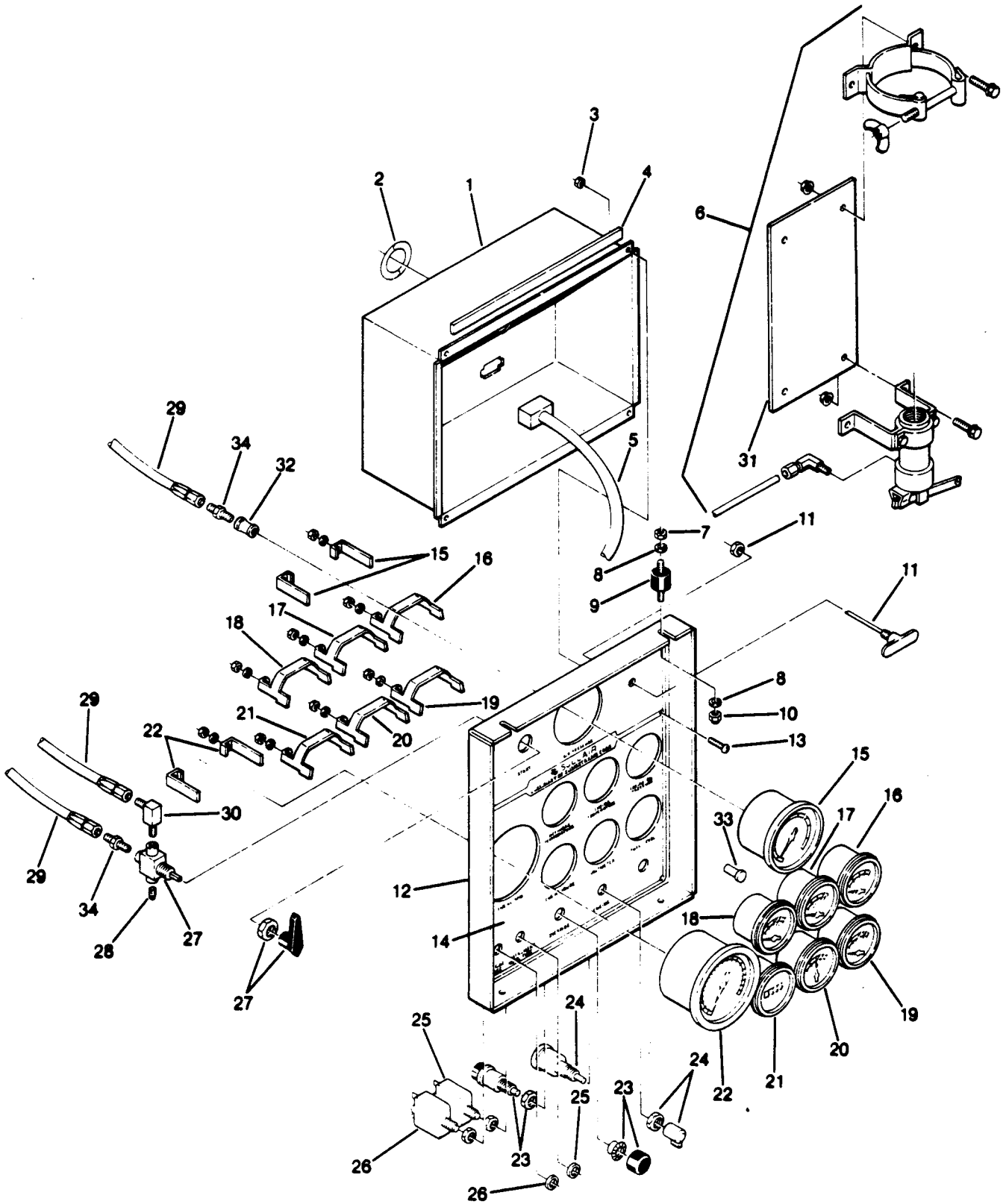
<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
32	capscrew, hex gr8 $\frac{5}{8}$ "-11 x $2\frac{1}{2}$ "	828210-250	4
33	washer, flat $\frac{5}{8}$ "	837210-112	6
34	nipple, pipe $1\frac{1}{2}$ " x close	822224-000	1
35	plug, o-ring $1\frac{1}{4}$ "	040029	1
36	bracket, receiver support	250028-266	1
37	nut, hex locking $\frac{5}{8}$ "-11	825510-329	6
38	glass, fluid level	040279	1
39	tee, pipe $1\frac{1}{2}$ "	802415-060	1

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 7

ILLUSTRATIONS AND PARTS LIST

7.10 INSTRUMENT PANEL AND PARTS



Section 7 ILLUSTRATIONS AND PARTS LIST

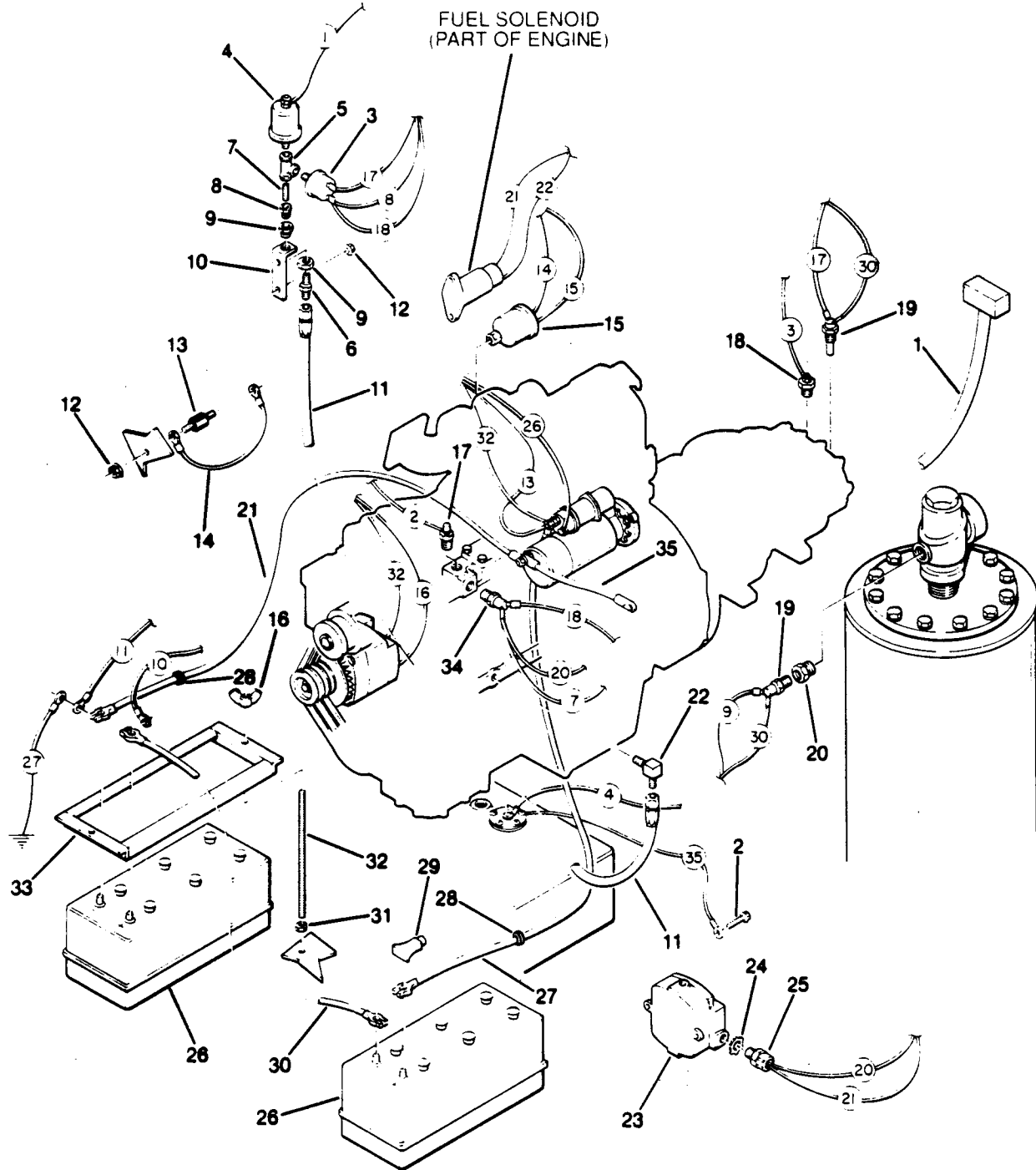
7.10 INSTRUMENT PANEL AND PARTS

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
1	cover, instrument	250024-872	1
2	plug, plastic 1"	234114	2
3	nut, hex #10	825202-130	4
4	weatherstrip, $\frac{3}{16}$ " x $\frac{3}{8}$ " (ft.)	250022-436	3
5	harness, wiring	250034-681	1
6	kit, starting aid ether	040348	1
7	nut, hex $\frac{1}{4}$ "	825204-228	4
8	washer, springlock regular $\frac{1}{4}$ "	838504-065	8
9	isolator, vibration	040091	4
10	nut, acorn $\frac{1}{4}$ "	825615-004	4
11	cable, starting aid 36" long	250008-325	1
12	panel, instrument	250034-663	1
13	screw, machine rod head #10-24 x 1"	831602-100	4
14	decals, instrument panel	250034-664	1
15	gauge, pressure	250025-093	1
16	gauge, fluid pressure	250030-197	1
17	gauge, temperature	250025-365	1
18	gauge, temperature	250025-367	1
19	gauge, fuel	250025-368	1
20	voltmeter	250025-363	1
21	hourmeter	250025-369	1
22	tachometer, mechanical	250025-370	1
23	switch, override	040038	1
24	switch, "ignition/start"	250034-601	1
25	breaker, circuit 5 amp	250034-599	1
26	breaker, circuit 25 amp	250034-600	1
27	valve, ball 3-way	044205	1
28	plug, pipe $\frac{1}{4}$ "	807800-010	1
29	hose, assembly $\frac{1}{4}$ " id 72"	049483	3
30	elbow, tube-m $\frac{5}{16}$ " 90°	814205-025	2
31	plate, ether start	250009-010	1
32	coupling, pipe $\frac{1}{4}$ "	801215-010	1
33	bulb, 24V instrument light	250021-680	1
34	connector, tube-m $\frac{5}{16}$ " x $\frac{1}{4}$ "	814105-025	2

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 7 ILLUSTRATIONS AND PARTS LIST

7.11 ELECTRICAL SYSTEM



Section 7 ILLUSTRATIONS AND PARTS LIST

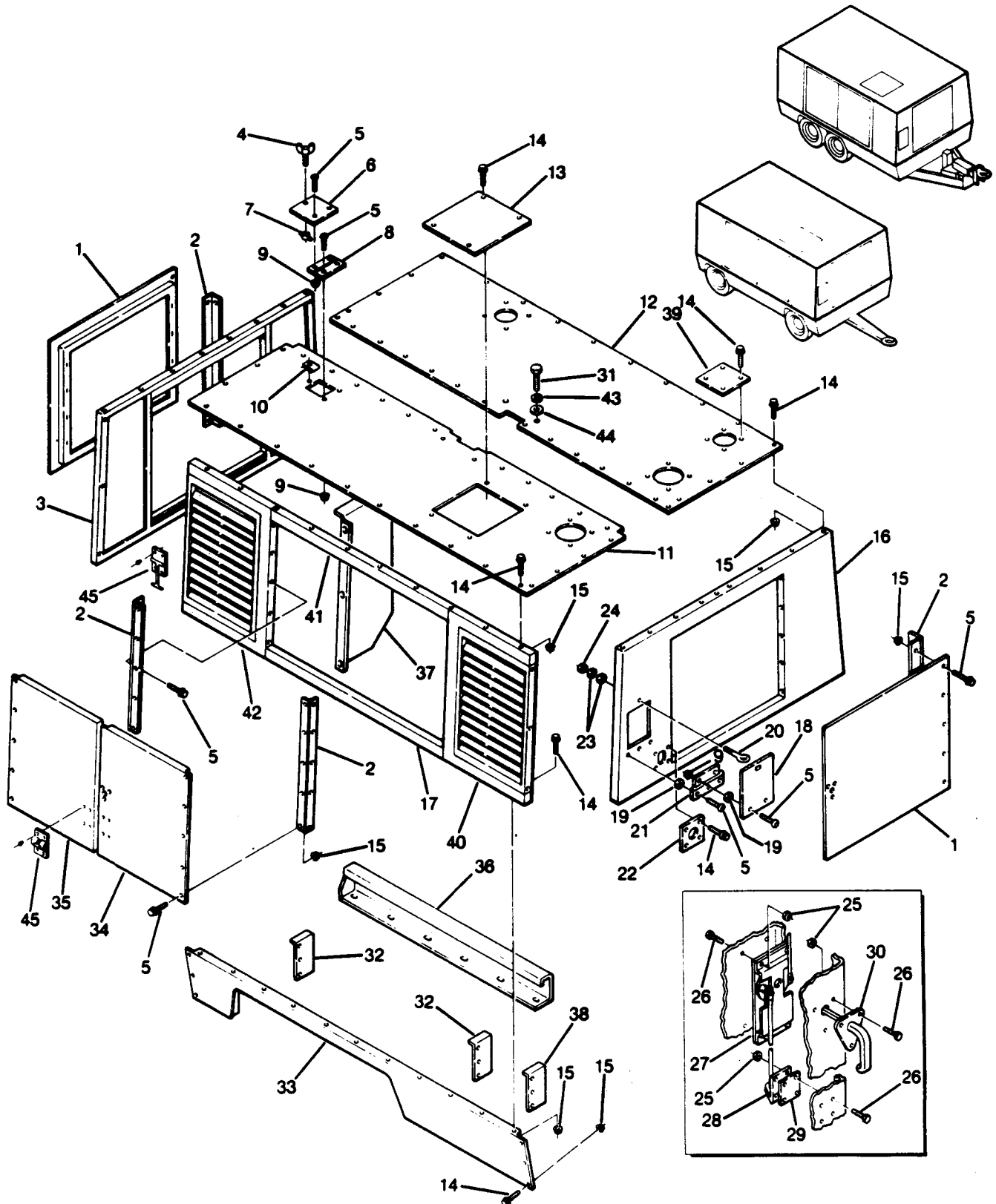
7.11 ELECTRICAL SYSTEM

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
1	harness, wiring	250034-621	1
2	cable, battery 34"	250034-212	1
3	switch, eop warning	040434	1
4	sender, fluid pressure	250030-196	1
5	tee, pipe 1/8"	802415-005	1
6	connector, tube 5/16" x 1/4"	814105-025	1
7	nipple, pipe 1/8" x close	822202-000	1
8	bushing, reducing 1/4" x 1/8"	807600-005	1
9	bulkhead, pipe 1/4"	841500-004	1
10	angle, fluid switch mounting	250018-085	1
11	hose, medium pressure 1/4" x 44"	249604-022	1
12	nut, hex flange 1/4"-20	825304-236	4
13	isolator, vibration	040091	2
14	wire, jumper	250018-112	1
15	generator, tachometer	250025-372	1
16	nut, wing 3/8"-16	824815-006	4
17	sender, temperature	250025-364	1
18	sender, temperature	250025-366	1
19	switch, temperature 240° - normally closed	043374	2
20	bushing, reducing 3/4" x 1/2"	807603-020	3
21	cable, battery	040317	1
22	elbow, male 1/4" x 1/4" 90°	860204-025	1
23	switch, engine coolant	250026-860	1
24	locknut, conduit 1/2"	847200-050	1
25	connector, 1/2" cord grip	046765	1
26	battery, 12 volt	040161	2
27	cable, battery 85" - red	250023-059	1
28	grommet, battery cable	232537	2
29	boot, battery terminal	041561	4
30	cable, battery 50"	250025-462	1
31	nut, hex 3/8"-16	825206-337	4
32	rod, 3/8"-16 x 12"	020130	4
33	holddown, battery	011032	2
34	switch, engine water temperature	040653	1
35	cable, battery		

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 7 ILLUSTRATIONS AND PARTS LIST

7.12 CANOPY WITH RUNNING GEAR



Section 7 ILLUSTRATIONS AND PARTS LIST

7.12 CANOPY WITH RUNNING GEAR

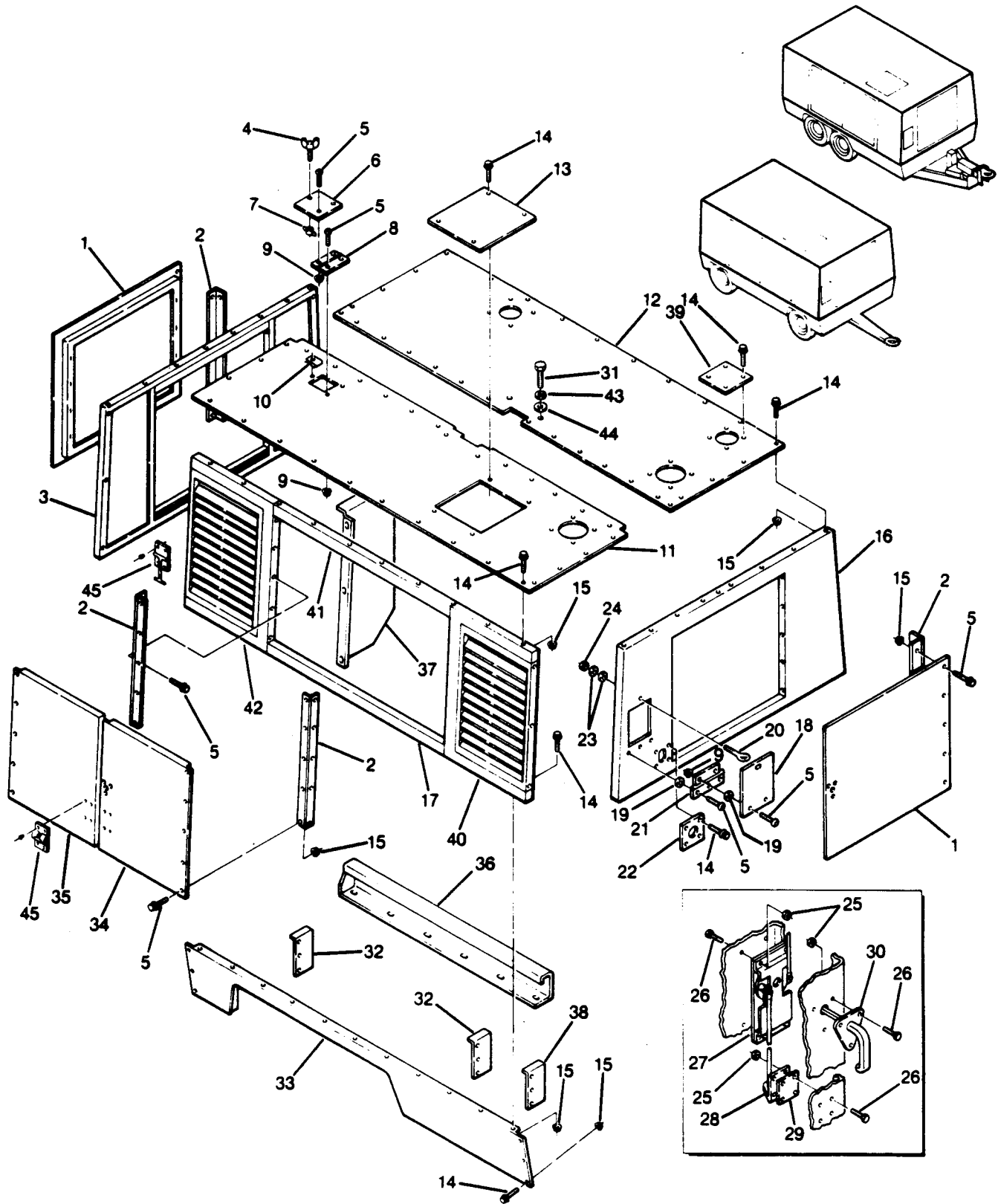
<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
1	door, access panel	250023-737	2
2	hinge, door	250023-917	6
3	panel, rear end	250023-485	1
4	screw, #12 wing head	407514	1
5	capscrew, button head $\frac{5}{16}$ "-18 x $\frac{3}{4}$ "	250004-144	60
6	cover, access panel	231792	1
7	retainer, screw	407515	1
8	hinge, access panel	231793	1
9	nut, hex locking $\frac{1}{4}$ "-20	825504-145	28
10	receptacle, clip-on	407516	1
11	panel, housing roof - right hand	250026-761	1
12	panel, housing roof - left hand	250026-760	1
13	cover, separator access	017326	1
14	screw, hex serrated washer $\frac{5}{16}$ "-18 x $\frac{3}{4}$ "	829705-075	144
15	nut, flange $\frac{5}{16}$ "-18	825305-283	142
16	panel, housing - front	250026-581	1
17	channel, housing - bottom	250031-011	2
18	door, instrument panel	250008-151	1
19	washer, flat nylon $\frac{5}{16}$ "	250011-537	25
20	eyebolt, regular $\frac{5}{16}$ "-18 x $1\frac{1}{8}$ "	839105-112	1
21	hinge, instrument panel door	250008-152	1
22	cover, outlet - receiver	220744	1
23	grommet, rubber	040125	2
24	nut, hex locking $\frac{5}{16}$ "-18	825705-166	1
25	nut, hex locking plated $\frac{1}{4}$ "-20	825504-145	28
26	capscrew, hex $\frac{1}{4}$ "-20 x $\frac{3}{4}$ "	829104-075	28
27	latch, door	042082	4
28	guide, rod	250016-267	8
29	spacer, lock rod guide	233937	8
30	handle, door latch	042081	4
31	capscrew, hex gr8 $\frac{1}{2}$ "-13 x $1\frac{1}{2}$ "	828208-150	4
32	brace, side member - right hand	250023-731	2
	brace, side member - left hand	250023-732	2
33	panel, side fender - right hand	250023-749	1
	• panel, side fender - left hand	250023-748	1
34	door, housing side	250023-745	2
35	door, housing side	250023-738	2

(continued on Page 67)

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 7 ILLUSTRATIONS AND PARTS LIST

7.12 CANOPY WITH RUNNING GEAR



Section 7
ILLUSTRATIONS AND PARTS LIST

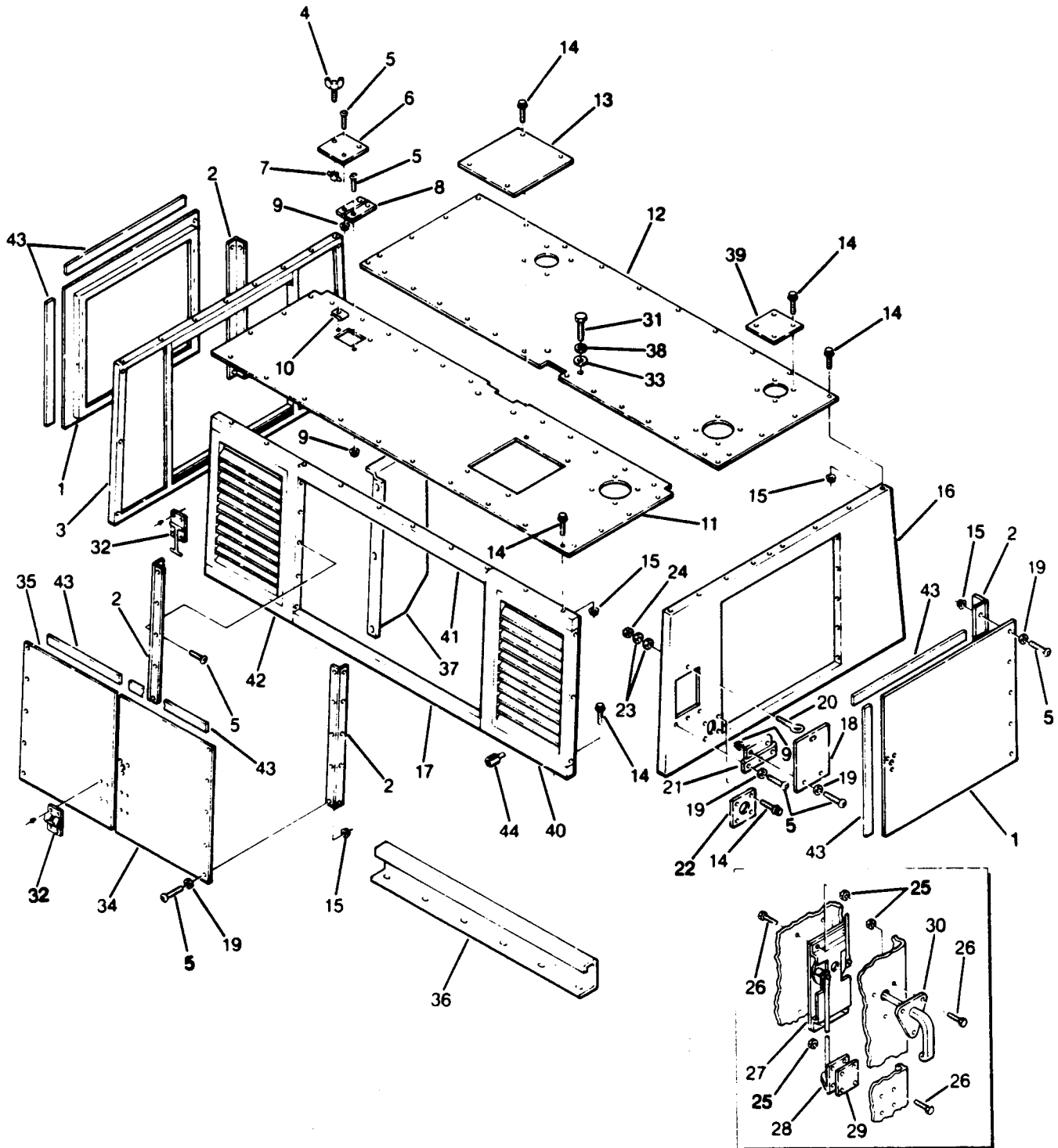
7.12 CANOPY WITH RUNNING GEAR (continued)

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
36	panel, tool box - curb side	250028-934	1
	• panel, tool box - street side	250028-154	1
37	baffle, front - curb side	250028-813	1
	• baffle, front - street side	250028-069	1
38	support, side member - right hand	250027-149	1
	• support, side member - left hand	250027-150	1
39	plate, cover exhaust	250028-981	1
40	panel, side - right hand	250031-013	2
41	channel, housing - top	250031-010	2
42	panel, side - left hand	250031-012	2
43	washer, springlock ½"	837508-125	4
44	washer, regular ½"	837208-112	4
45	hook, door latch	409801	5

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 7 ILLUSTRATIONS AND PARTS LIST

7.13 CANOPY LESS RUNNING GEAR



Section 7 ILLUSTRATIONS AND PARTS LIST

7.13 CANOPY LESS RUNNING GEAR

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
1	door, access panel	250023-737	2
2	hinge, door	250023-917	6
3	panel, rear end	250023-485	1
4	screw, #12 wing head	407514	1
5	capscrew, button head $\frac{5}{16}$ "-18 x $\frac{3}{4}$ "	250004-144	60
6	cover, access panel	231792	1
7	retainer, screw	407515	1
8	hinge, access panel	231793	1
9	nut, hex locking $\frac{1}{4}$ "-20	825504-145	28
10	receptacle, clip-on	407516	1
11	panel, housing roof - right hand	250026-761	1
12	panel, housing roof - left hand	250026-760	1
13	cover, separator access	017326	1
14	screw, hex serrated washer $\frac{5}{16}$ "-18 x $\frac{3}{4}$ "	829705-075	144
15	nut, flange $\frac{5}{16}$ "-18	825305-283	142
16	panel, housing - front	250026-581	1
17	channel, housing - bottom	250031-011	2
18	door, instrument panel	250008-151	1
19	washer, flat nylon $\frac{5}{16}$ "	250011-537	25
20	eyebolt, regular $\frac{5}{16}$ "-18 x $1\frac{1}{8}$ "	839105-112	1
21	hinge, instrument panel door	250008-152	1
22	cover, outlet - receiver	220744	1
23	grommet, rubber	040125	2
24	nut, hex locking $\frac{5}{16}$ "-18	825705-166	1
25	nut, hex locking plated $\frac{1}{4}$ "-20	825504-145	28
26	capscrew, hex $\frac{1}{4}$ "-20 x $\frac{3}{4}$ "	829104-075	28
27	latch, door	042082	4
28	guide, rod	250016-267	8
29	spacer, lock rod guide	233937	8
30	handle, door latch	042081	4
31	capscrew, hex gr8 $\frac{1}{2}$ "-13 x $1\frac{1}{2}$ "	828208-150	4
32	hook, door latch	409801	5
33	washer, regular $\frac{1}{2}$ "	837208-112	4
34	door, housing side	250023-745	2
35	door, housing side	250023-738	2

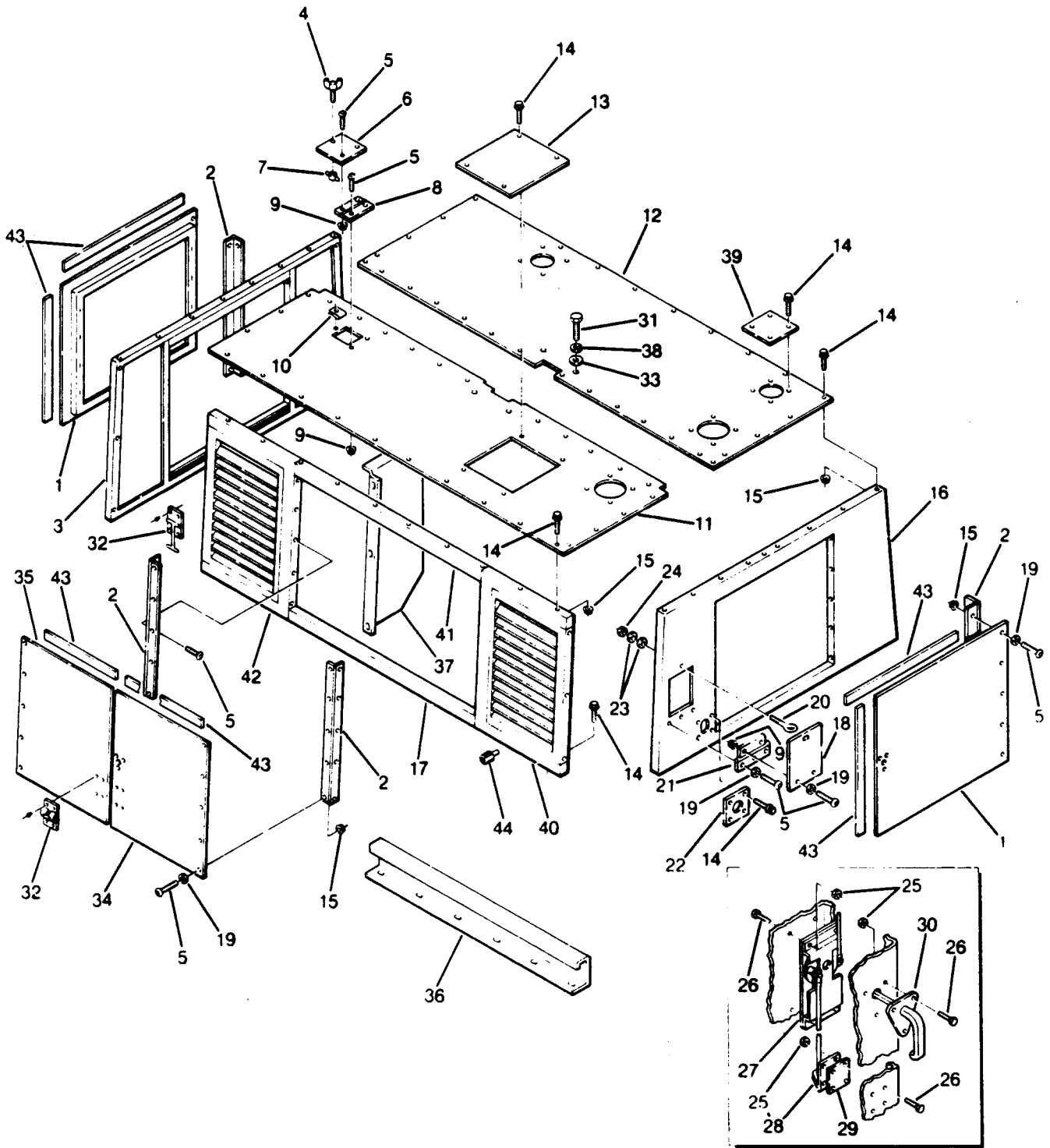
(continued on Page 71)

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 7

ILLUSTRATIONS AND PARTS LIST

7.13 CANOPY LESS RUNNING GEAR



Section 7
ILLUSTRATIONS AND PARTS LIST

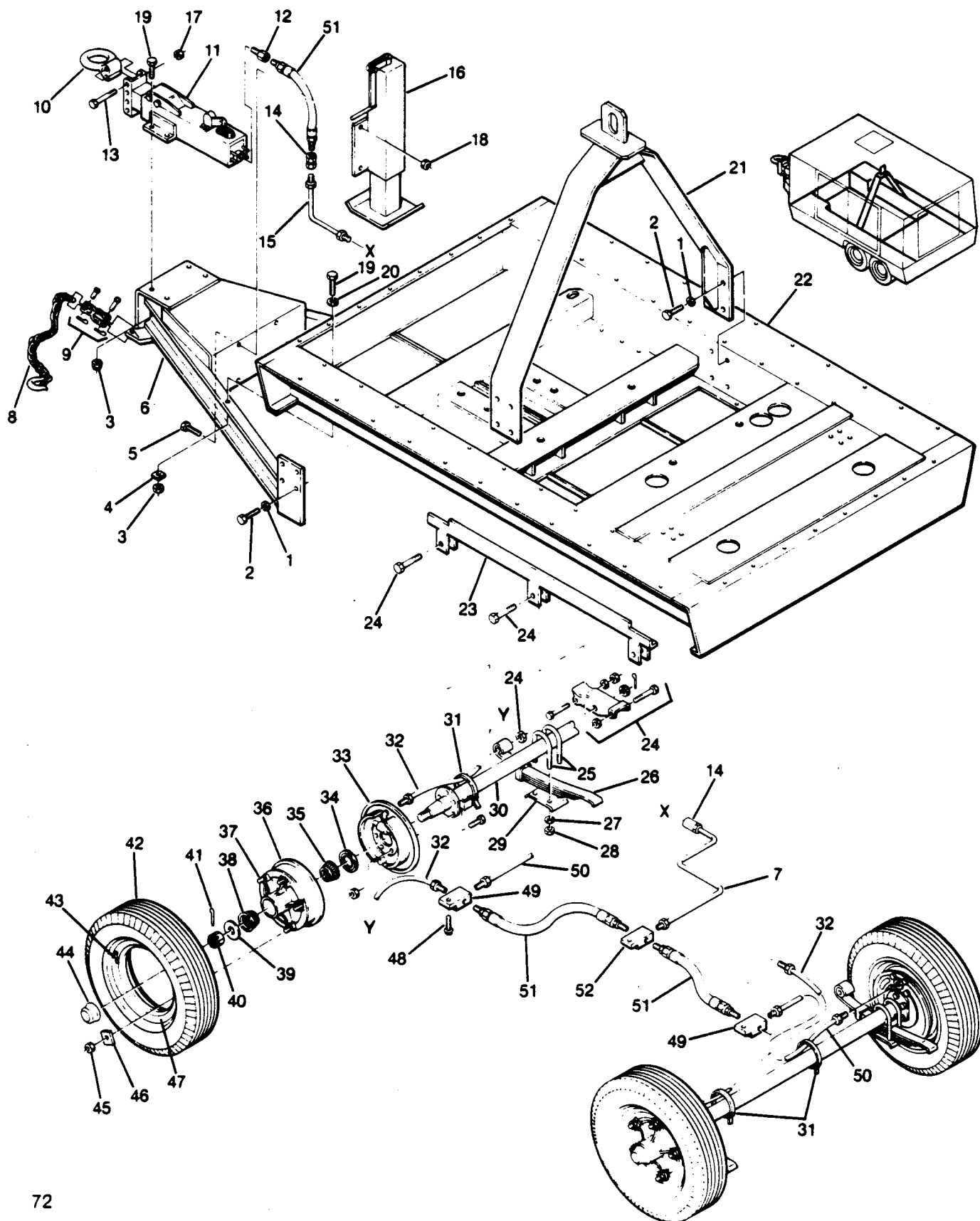
7.13 CANOPY LESS RUNNING GEAR (continued)

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
36	panel, tool box - curb side	250028-934	1
	• panel, tool box - street side	250028-154	1
37	baffle, front - curb side	250028-813	1
	• baffle, front - street side	250028-069	1
38	washer, springlock ½"	837508-125	4
39	plate, cover exhaust	250028-981	1
40	panel, side - right hand	250031-013	2
41	channel, housing - top	250031-010	2
42	panel, side - left hand	250031-012	2
43	weatherstrip, ⅜" x ⅜" (ft.)	250022-436	38
44	stop, rubber	250010-249	1

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 7 ILLUSTRATIONS AND PARTS LIST

7.14 FRAME AND RUNNING GEAR - TANDEM



Section 7

ILLUSTRATIONS AND PARTS LIST**7.14 FRAME AND RUNNING GEAR - TANDEM**

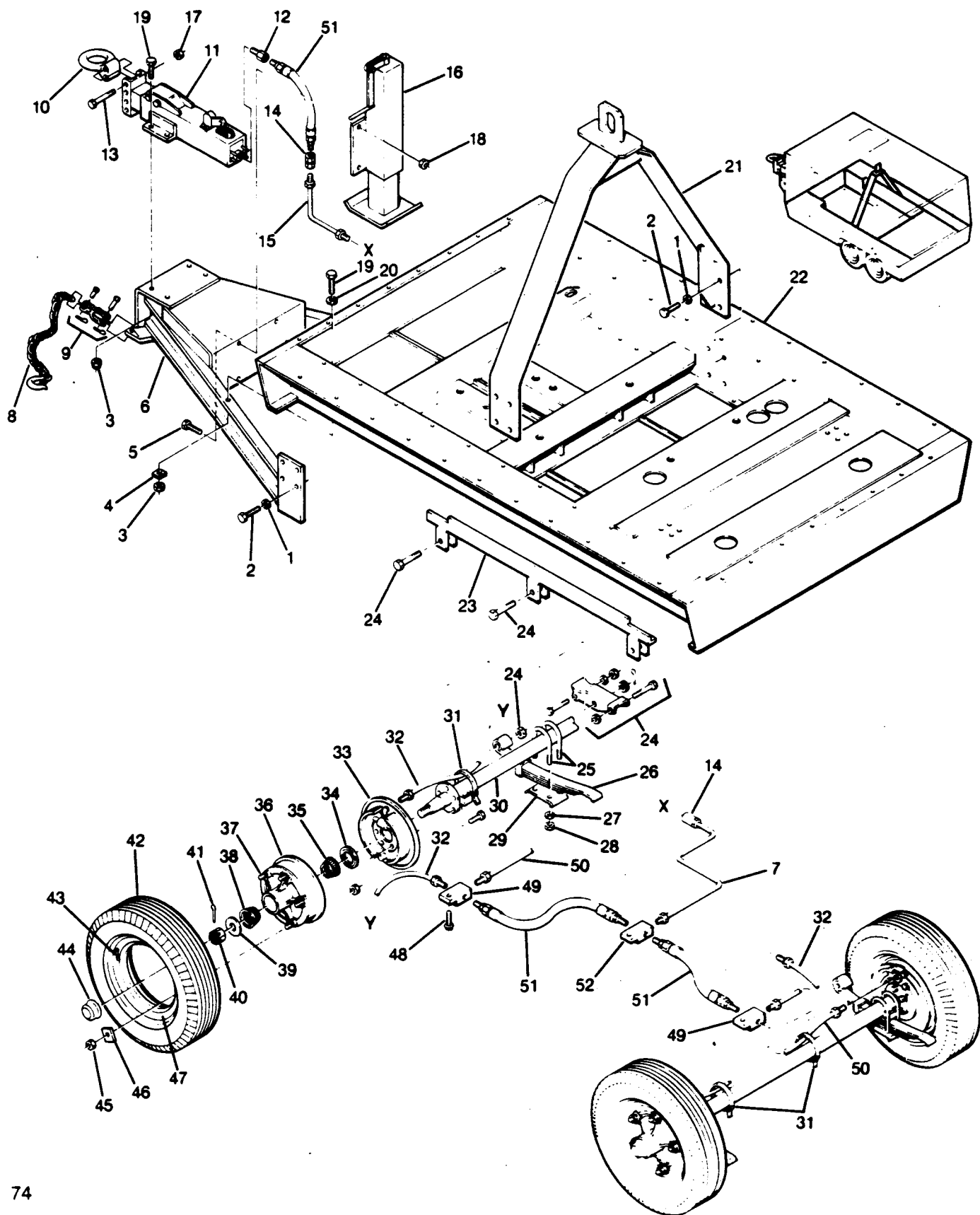
<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
1	washer, springlock ½"	837508-125	16
2	capscrew, ½"-13 x 1¼"	828208-125	16
3	nut, hex locking ⅝"-1'1	825510-329	6
4	washer, bevel ⅝"	837010-150	2
5	capscrew, hex ½"-13 x 1½"	828208-150	4
6	towbar, adjustable height	250028-896	1
7	line, brake ¼" x 51"	041739	1
8	chain, tow ½" x 48"	250018-697	2
9	clevis, ½"	046033	2
10	eye, lunette 3"	250002-221	1
11	actuator, brake	250029-099	1
12	adapter, weatherhead	045567	1
13	capscrew, hex gr8 ⅝"-11 x 4½"	828210-450	2
14	union, tube	242258	2
15	line, brake	041739	1
16	leg, landing gear	250014-027	1
17	nut, hex locking plated ⅝"-11	825510-329	2
18	nut, hex locking plated	825508-262	4
19	capscrew, ⅝"-11 x 2"	828210-200	6
20	washer, plated ⅝"	837210-112	2
21	bail, lifting	250023-495	1
22	frame	250027-033	1
23	• bracket, spring hanger - street side • bracket, spring hanger - curb side	016605 016604	1 1
24	hardware group	015785	1
25	u-bolt	045840	8
26	spring, leaf	045845	4
27	washer	045842	16
28	nut, u-bolt	045841	16
29	plate, tie	045839	4
30	axle	410367	2
31	wrap, tie plastic	843200-027	4
32	line, brake ⅜" x 20"	405032	2
33	• brake, assembly - right hand • brake, assembly - left hand	045473 045474	2 2
34	seal, grease	040120	4
35	bearing, inner	040118	4

(continued on Page 75)

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 7 ILLUSTRATIONS AND PARTS LIST

7.14 FRAME AND RUNNING GEAR - TANDEM



Section 7
ILLUSTRATIONS AND PARTS LIST

7.14 FRAME AND RUNNING GEAR - TANDEM (continued)

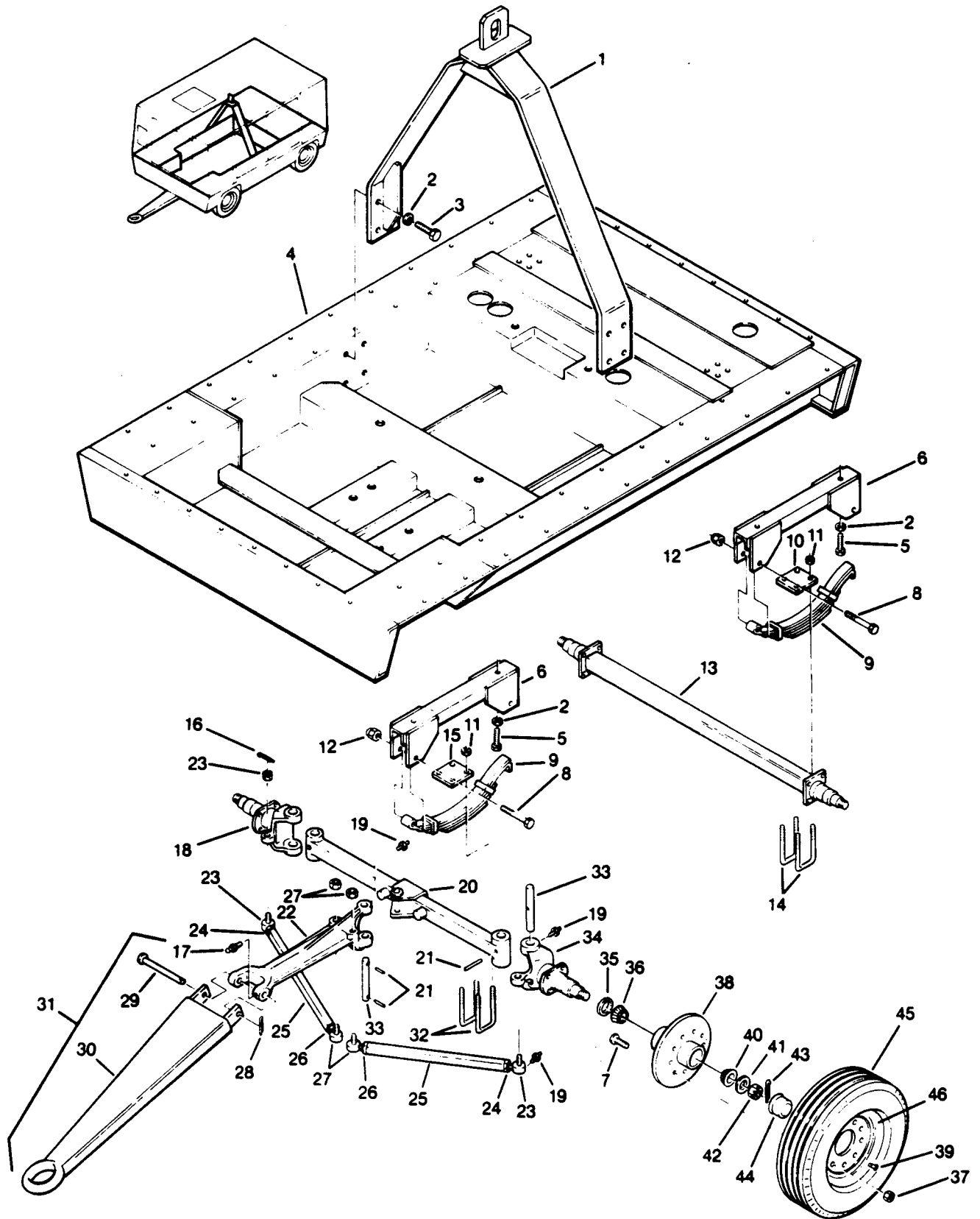
<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
36	hub and drum assembly	046064	4
37	stud	046068	20
38	bearing, outer	046065	4
39	washer, spindle nut	042353	4
40	nut, spindle	040122	4
41	pin, cotter	046067	4
42	tire, tubeless	248375	4
43	valve, rim	040171	4
44	cap, dust	040121	4
45	nut, rim	046071	20
46	clamp, rim	046070	20
47	wheel	248374	4
48	screw, self-tap ¼"	834504-075	6
49	tee, brake line	250009-593	2
50	line, brake ⅜" x 51"	405033	2
51	hose, hydraulic ¼" x 18"	408011	2
52	fitting, brake	041740	1

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 7

ILLUSTRATIONS AND PARTS LIST

7.15 FRAME AND RUNNING GEAR - 4-WHEEL



Section 7 ILLUSTRATIONS AND PARTS LIST

7.15 FRAME AND RUNNING GEAR - 4-WHEEL

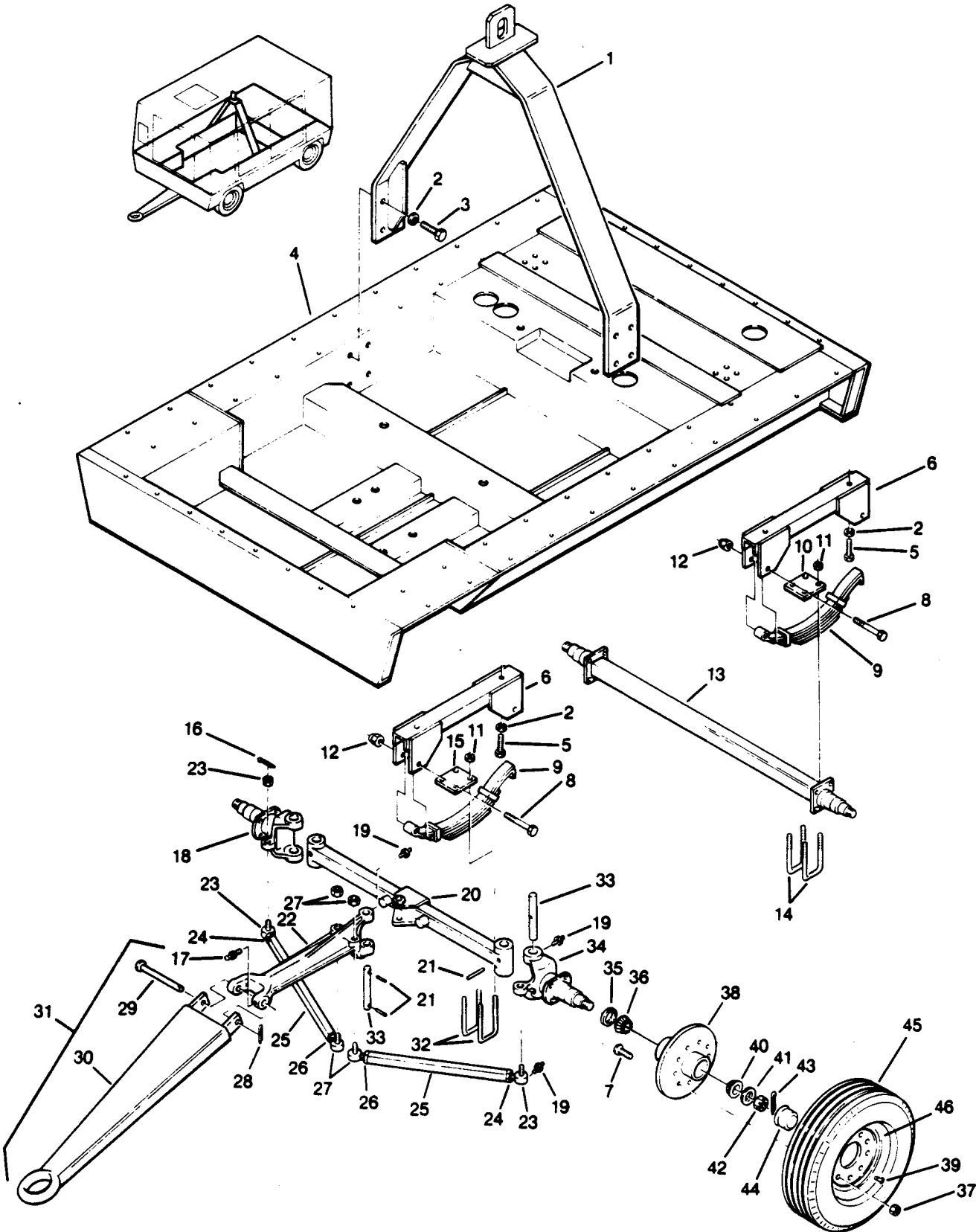
<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
1	bail, lifting	250023-495	1
2	washer, springlock 1/2"	837508-125	20
3	capscrew, hex 1/2"-13 x 1 1/4"	828208-125	8
4	frame	250027-033	1
5	capscrew, hex gr8 1/2"-13 x 1"	828208-100	12
6	hanger, spring assembly	250027-009	4
7	stud, wheel	049589	32
8	capscrew, hex gr8 3/4"-10 x 4 1/2"	828212-450	8
9	spring	250001-851	4
10	plate, tie	250002-136	2
11	nut, u-bolt	242081	16
12	nut, hex locking plated 3/4"	825512-382	8
13	beam, axle	250001-852	1
14	u-bolt	250002-137	4
15	plate, tie	250002-134	2
16	pin, cotter	827102-150	4
17	fitting, lube	049503	8
18	knuckle, steering - right hand	049495	1
19	fitting, lube	049505	4
20	beam, axle	250001-848	1
21	pin, roll	245622	3
22	arm, steering	242074	1
23	joint, ball w/nut - right hand	245629	2
24	nut, jam - right hand	245625	2
25	rod, tie	250001-850	2
26	nut, jam - left hand	245628	2
27	joint, ball w/nut - left hand	245626	2
28	pin, cotter 1/4"	049530	1
29	pin, hinge 1"	049429	1
30	drawbar	049527	1
31	drawbar, assembly	014178	1
32	u-bolt	250002-135	4
33	pin, king	245621	3
34	knuckle, steering - left hand	049494	1
35	seal, grease	049594	4
36	bearing, inner	049592	4
37	nut, wheel stud	049596	32

(continued on Page 79)

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

ILLUSTRATIONS AND PARTS LIST

7.15 FRAME AND RUNNING GEAR - 4-WHEEL



Section 7

ILLUSTRATIONS AND PARTS LIST

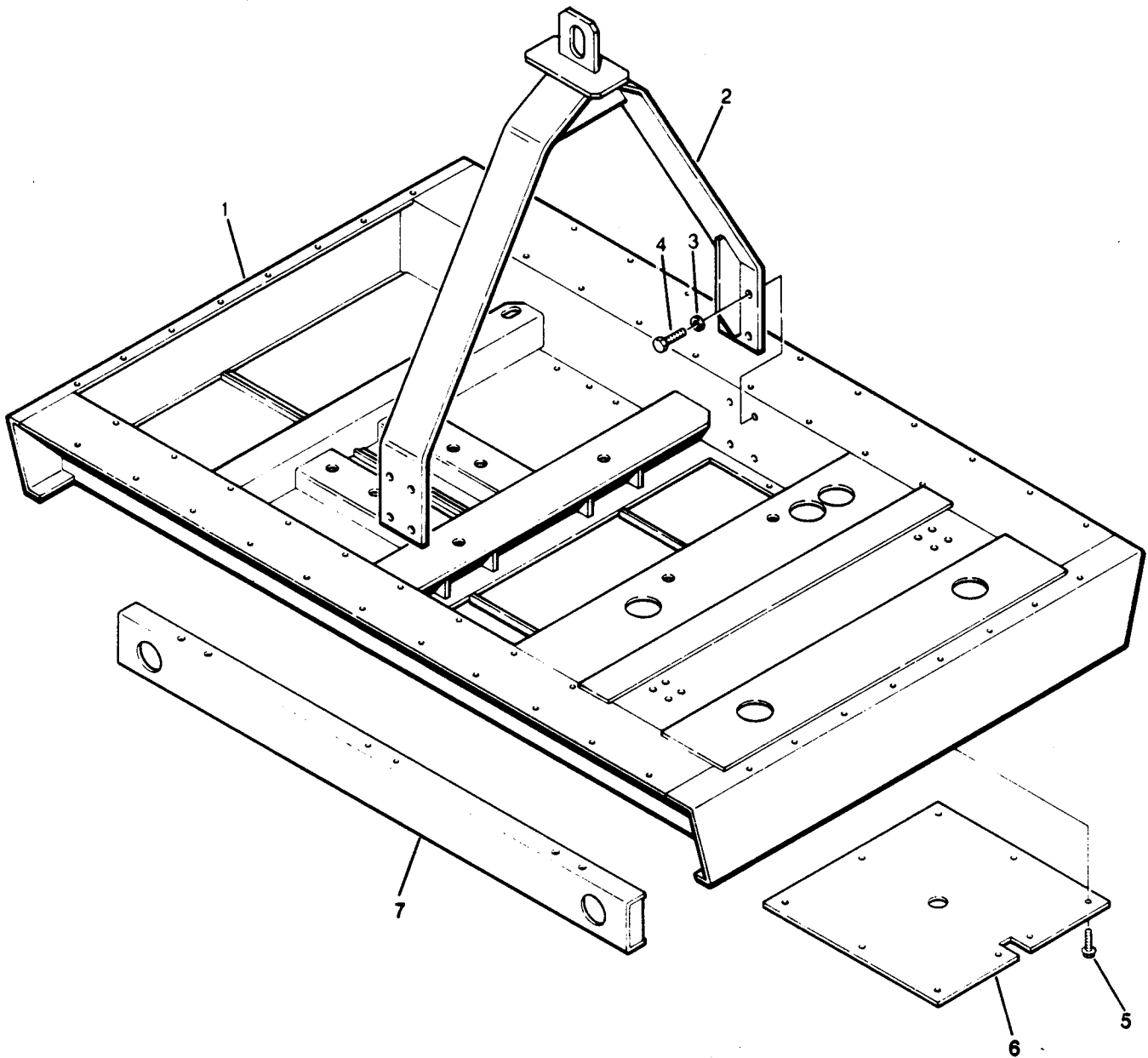
7.15 FRAME AND RUNNING GEAR - 4-WHEEL (continued)

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
38	hub,	049504	4
39	valve, tire	241563	4
40	bearing, outer	049593	4
41	washer, spindle	043292	4
42	nut, spindle	043299	4
43	pin, spindle cotter	827102-200	4
44	cap, grease	049595	4
45	tire, 8.75 x 16.5	241527	4
46	wheel, 16.5 x 6.75	241528	4

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

ILLUSTRATIONS AND PARTS LIST

7.16 FRAME LESS RUNNING GEAR



Section 7
ILLUSTRATIONS AND PARTS LIST

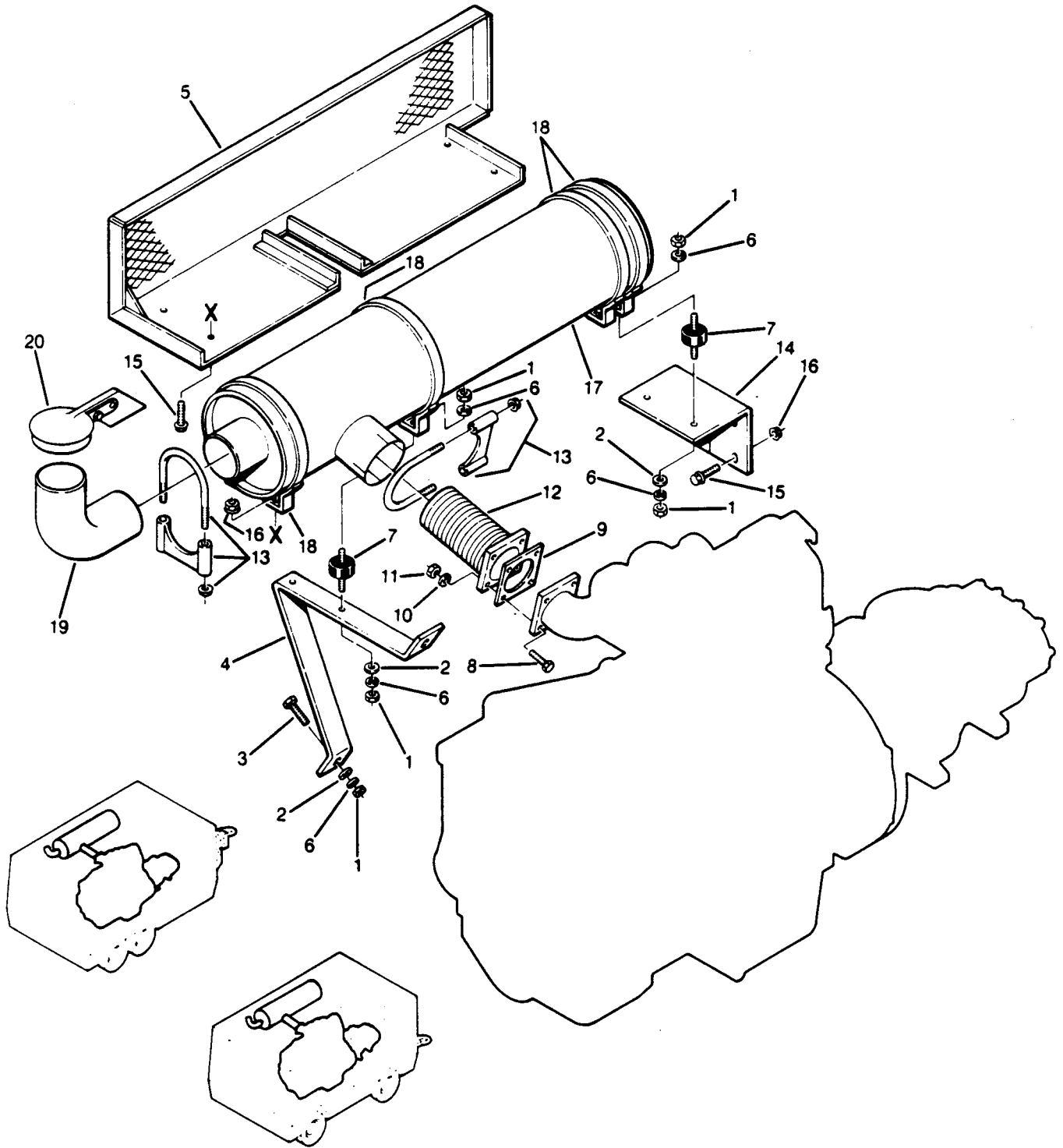
7.16 FRAME LESS RUNNING GEAR

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
1	frame	250027-033	1
2	bail, lifting	250023-495	1
3	washer, springlock 1/2"	837508-125	16
4	capscrew, 1/2"-13 x 1 1/4"	828208-125	16
5	screw, hex 5/16" x 3/4"	829705-075	1
6	pan, floor	250031-823	1
7	channels, utility	250026-607	2

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 7 ILLUSTRATIONS AND PARTS LIST

7.17 EXHAUST SYSTEM



Section 7 ILLUSTRATIONS AND PARTS LIST

7.17 EXHAUST SYSTEM

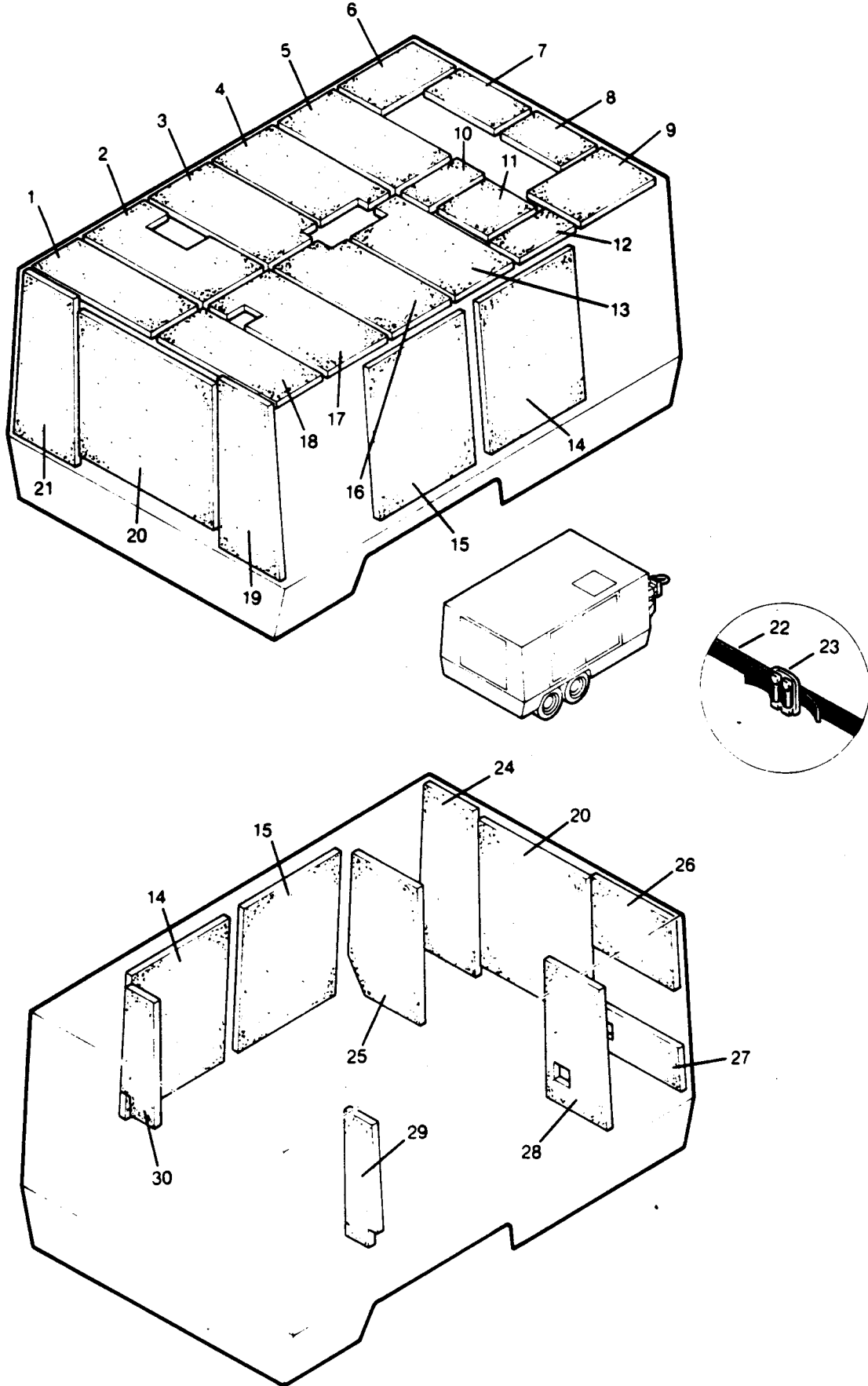
<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
1	nut, hex $\frac{3}{8}$ "-16	824206-337	10
2	washer, flat $\frac{3}{8}$ "	837206-071	6
3	capscrew, hex gr5 $\frac{3}{8}$ "-16 x $1\frac{1}{4}$ "	828606-125	2
4	bracket, muffler - front	250028-458	1
5	guard, muffler	250028-772	1
6	washer, springlock $\frac{3}{8}$ "	837506-094	10
7	isolator, vibration muffler	250028-657	4
8	capscrew, hex gr8 $\frac{5}{8}$ "-11 x $2\frac{1}{4}$ "	828210-225	4
9	gasket, exhaust	250028-042	1
10	washer, springlock $\frac{5}{8}$ "	837510-156	4
11	nut, hex $\frac{5}{8}$ "-11	824210-559	4
12	flange, flexible pipe	250027-096	1
13	clamp, exhaust 5"	043364	2
14	bracket, muffler end	250028-457	8
15	screw, hex serrated washer $\frac{5}{16}$ " x $\frac{3}{4}$ "	829705-075	8
16	nut, hex flanged plated $\frac{5}{16}$ "	825305-283	8
17	muffler	250027-182	1
18	band, mounting	250028-658	4
19	tube, exhaust elbow 90°	250027-222	1
20	raincap	047559	1

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 7

ILLUSTRATIONS AND PARTS LIST

7.18 ACOUSTICAL PANELS



Section 7 ILLUSTRATIONS AND PARTS LIST

7.18 ACOUSTICAL PANELS

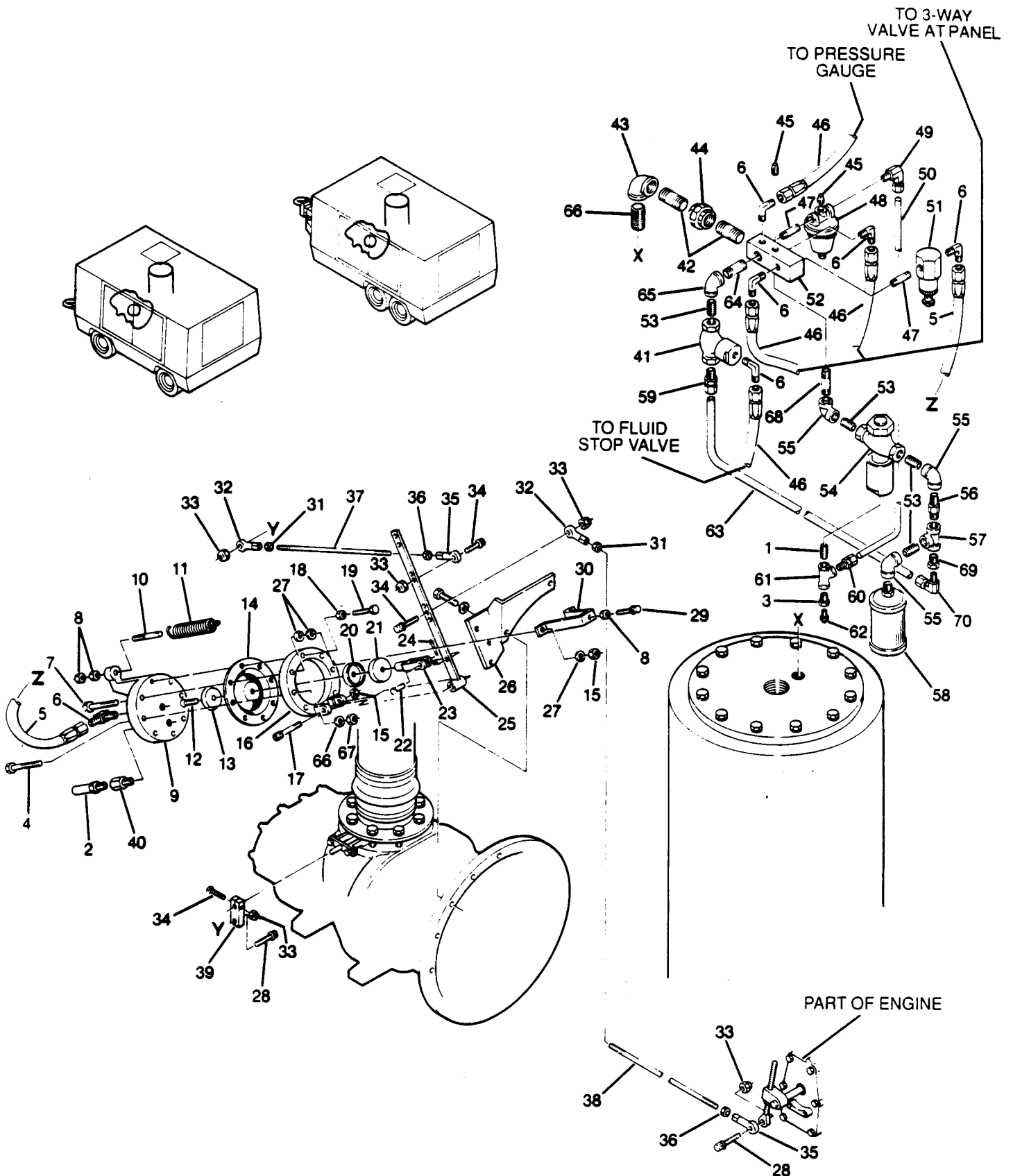
<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
1	panel, fiberglass 16.5" x 36.5"	242538-172	1
2	panel, fiberglass 21" x 13" x 20"	250029-041	1
3	panel, fiberglass 20.25" x 36.5"	250028-142	1
4	panel, fiberglass 20.25" x 36.5"	250025-258	1
5	panel, fiberglass 19.5" x 36.5"	242538-165	1
6	panel, fiberglass 25.25" x 11.5"	242538-173	1
7	panel, fiberglass 16.5" x 19.5"	242538-174	1
8	panel, fiberglass 16.5" x 15.25"	242538-175	1
9	panel, fiberglass 25.25" x 19.5"	242538-176	1
10	panel, fiberglass 19.5" x 9.5"	242538-171	1
11	panel, fiberglass 17" x 17"	242538-168	1
12	panel, fiberglass 19.5" x 8"	242538-166	1
13	panel, fiberglass 20.25" x 36.5"	250025-256	1
14	panel, fiberglass 31" x 42"	242538-169	2
15	panel, fiberglass 29.5" x 42"	242538-170	2
16	panel, fiberglass 20.25" x 36.5"	250025-257	1
17	panel, fiberglass 20.25" x 36.5"	250025-255	1
18	panel, fiberglass 16" x 36.5"	242538-163	1
19	panel, fiberglass 50" x 20" x 16.5"	407447-048	1
20	panel, fiberglass 40.5" x 41.25"	242538-162	2
21	panel, fiberglass 50" x 20" x 16.5"	407447-047	1
22	strapping, ½" wide (ft.)	047829	200
23	buckle, reusable	047820	50
24	panel, fiberglass 49" x 16.5" x 12.5"	407447-050	1
25	panel, fiberglass 17.68" x 47.5" x 14.5"	250029-052	1
26	panel, fiberglass 21" x 19" x 17"	407447-051	1
27	panel, fiberglass 13" x 21" x 20"	250029-039	1
28	panel, fiberglass 12.5" x 47.5" x 9.12"	250029-053	1
29	panel, fiberglass 15" x 47" x 11.75"	250029-054	1
30	panel, fiberglass 15" x 47" x 11.75"	250029-058	1

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 7

ILLUSTRATIONS AND PARTS LIST

7.19 SULLICON CONTROL



Section 7 ILLUSTRATIONS AND PARTS LIST

7.19 SULLICON CONTROL

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
1	nipple, pipe ¼" x close	822204-000	1
2	silencer	044916	1
3	bushing, pipe ¼" x ⅛"	807600-005	1
4	capscrew, hex ⅝" x 2¼"	828605-225	3
5	hose, assembly ¼" id 72"	049483	1
6	elbow, tube-m ⅝" x ¼"	814205-025	6
7	capscrew, hex gr5 ⅜"-16 x 2½"	828606-250	4
8	nut, hex ⅜"-16	824206-337	7
9	cover, control	021654	1
10	bolt, Sullicon spring adjustment	250009-134	1
11	spring, control	250020-214	1
12	screw, sealing ¾"	041264	1
13	washer, back-up	021172	1
14	diaphragm, Sullicon (I)	250020-028	1
15	nut, hex locking ⅜"-16	825506-198	1
16	body, control	021635	1
17	screw, machine ⅜" x 2"	830506-200	1
18	nut, hex jam - right hand ⅝"-24	824605-195	1
19	screw, machine ⅝"-24 x 2"	831105-200	1
20	cup, seal	042538	1
21	plunger	020094	1
22	pin, yoke ¼"	040065	1
23	yoke, rod end	040138	1
24	pin, cotter	827101-075	1
25	lever, control	250015-919	1
26	bracket, Sullicon mount	250024-641	1
27	washer, springlock ⅜"	837506-094	2
28	capscrew, ferry ⅝"-18 x 1½"	828405-150	2
29	capscrew, ferry ⅜"-16 x 1½"	828406-150	1
30	bracket, control stop	020864	1
31	nut, hex jam ⅝"-24 - left hand	824705-194	2
32	rod end, spherical ⅝"-18	042004	4
33	nut, locking ⅝"-18 x 1¼"	825506-166	3
34	capscrew, ferry ⅝"-18 x 1 x 1¼"	828405-125	3

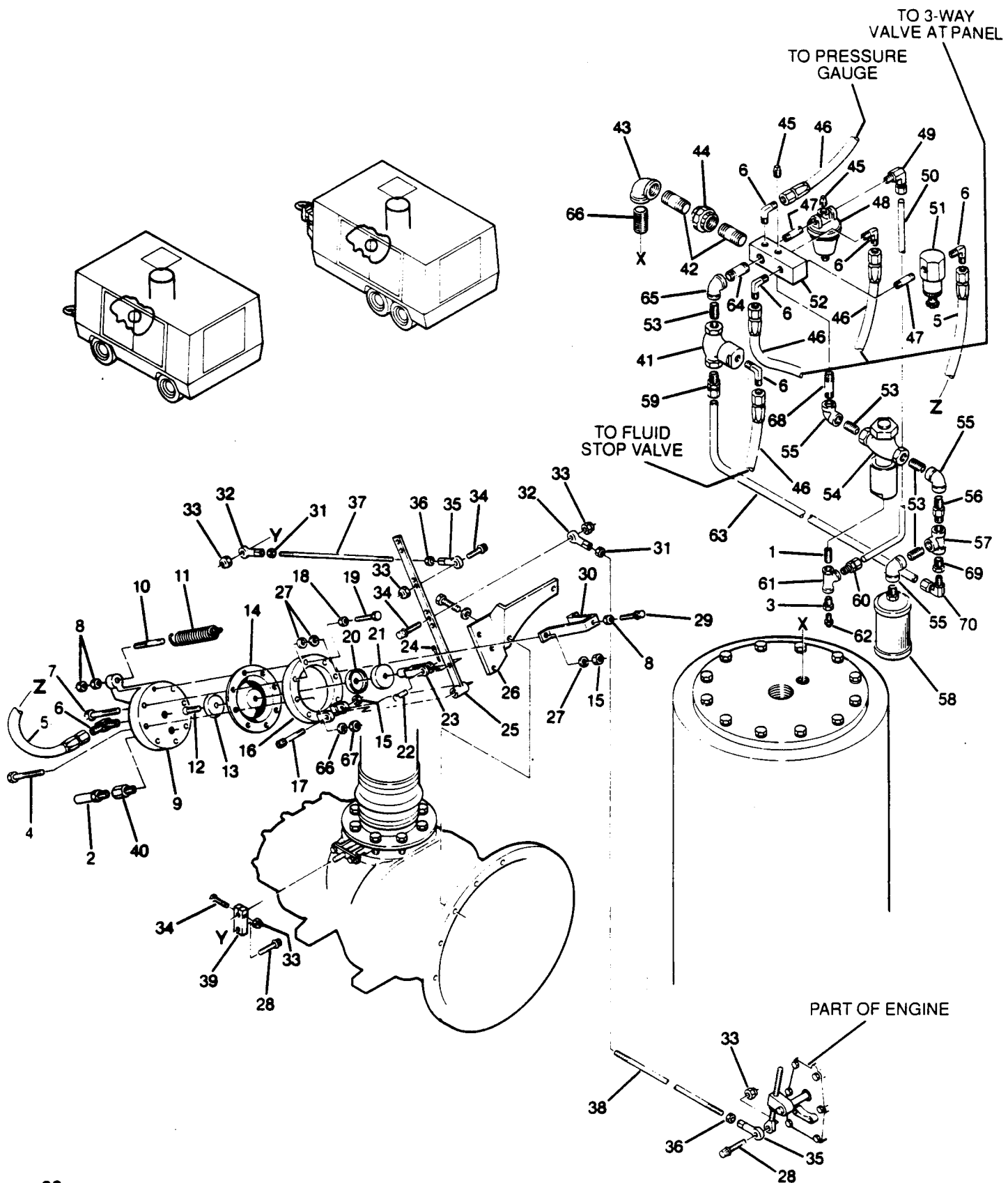
(continued on Page 89)

(I) For maintenance on Sullicon Control 250026-096, order repair kit No. 250020-353.

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 7 ILLUSTRATIONS AND PARTS LIST

7.19 SULLICON CONTROL



Section 7 ILLUSTRATIONS AND PARTS LIST

7.19 SULLICON CONTROL (continued)

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
35	rod end, spherical $\frac{5}{16}$ " - right hand	040136	2
36	nut, hex jam $\frac{5}{16}$ "-24 - right hand	824605-195	2
37	rod, compressor control $\frac{5}{16}$ " x 12"	222745	1
38	rod, $\frac{5}{16}$ " x 30 $\frac{1}{4}$ "	250010-335	1
39	lever, inlet valve	250018-988	1
40	orifice	250025-459	1
41	valve, running blowdown (II)	045116	1
42	nipple, pipe $\frac{3}{4}$ " x 2 $\frac{1}{2}$ "	822212-025	2
43	elbow, pipe $\frac{3}{4}$ "	801515-030	1
44	union, pipe $\frac{3}{4}$ "	802515-030	1
45	plug, pipe $\frac{1}{4}$ "	807800-010	1
46	hose, assembly $\frac{1}{4}$ " x 82"	049482	4
47	nipple, pipe $\frac{1}{4}$ " x 2"	822204-020	2
48	valve, pressure regulator (III)	406929	1
49	elbow, tube-m $\frac{1}{4}$ " x $\frac{1}{4}$ "	810504-025	1
50	tubing, steel $\frac{1}{4}$ " (ft.)	841115-004	1
51	regulator, control (IV)	250025-094	1
52	manifold	250024-015	1
53	nipple, pipe $\frac{1}{2}$ " x close	822208-000	2
54	valve, shutdown blowdown	045114	1
55	elbow, pipe 90° $\frac{1}{2}$ "	801515-020	1
56	orifice	250025-294	1
57	tee, pipe $\frac{1}{2}$ "	802415-020	1
58	silencer, air	250023-532	1
59	connector, tube-m $\frac{1}{2}$ " x $\frac{1}{2}$ "	810208-050	2
60	connector, tube-m $\frac{1}{4}$ " x $\frac{1}{4}$ "	810204-025	1
61	tee, pipe $\frac{1}{4}$ "	802415-010	1
62	valve, drain	041111	1
63	tubing, steel $\frac{1}{2}$ " (ft.)	841115-008	1
64	nipple, pipe $\frac{3}{8}$ " x 1 $\frac{1}{2}$ "	822206-015	1
65	elbow, reducing $\frac{1}{2}$ " x $\frac{3}{8}$ "	801602-015	1

(continued on Page 91)

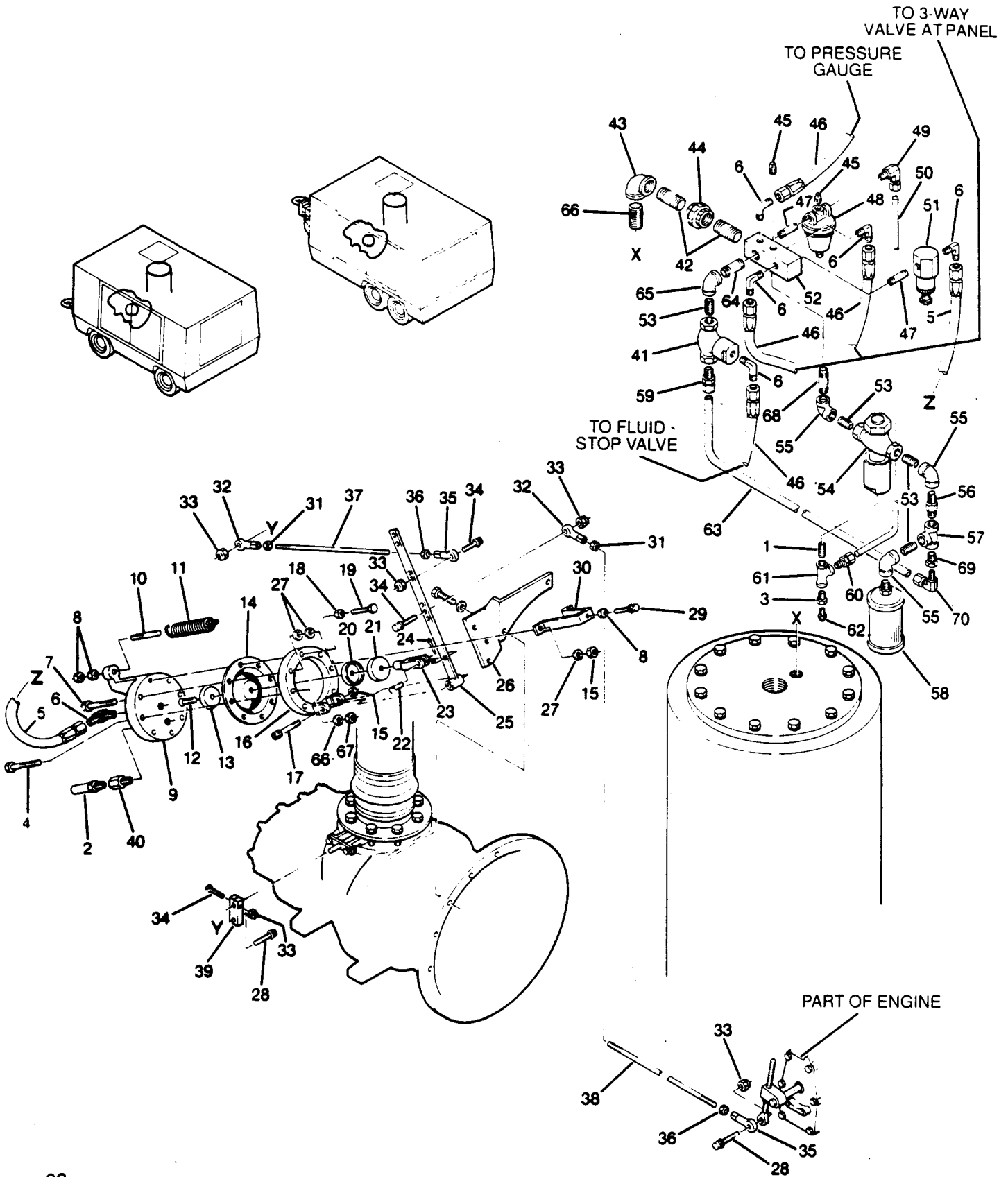
- (II) For maintenance on running blowdown valve no. 045116, order repair kit no. 047524.
 (III) For maintenance on pressure regulator valve No. 406929, order repair kit No. 041742.
 (IV) For maintenance on control regulator No. 250025-094, order repair kit no 250025-095.
 (V) For maintenance on shutdown blowdown valve no. 045114, order repair kit no. 047525.

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 7

ILLUSTRATIONS AND PARTS LIST

7.19 SULLICON CONTROL



Section 7
ILLUSTRATIONS AND PARTS LIST

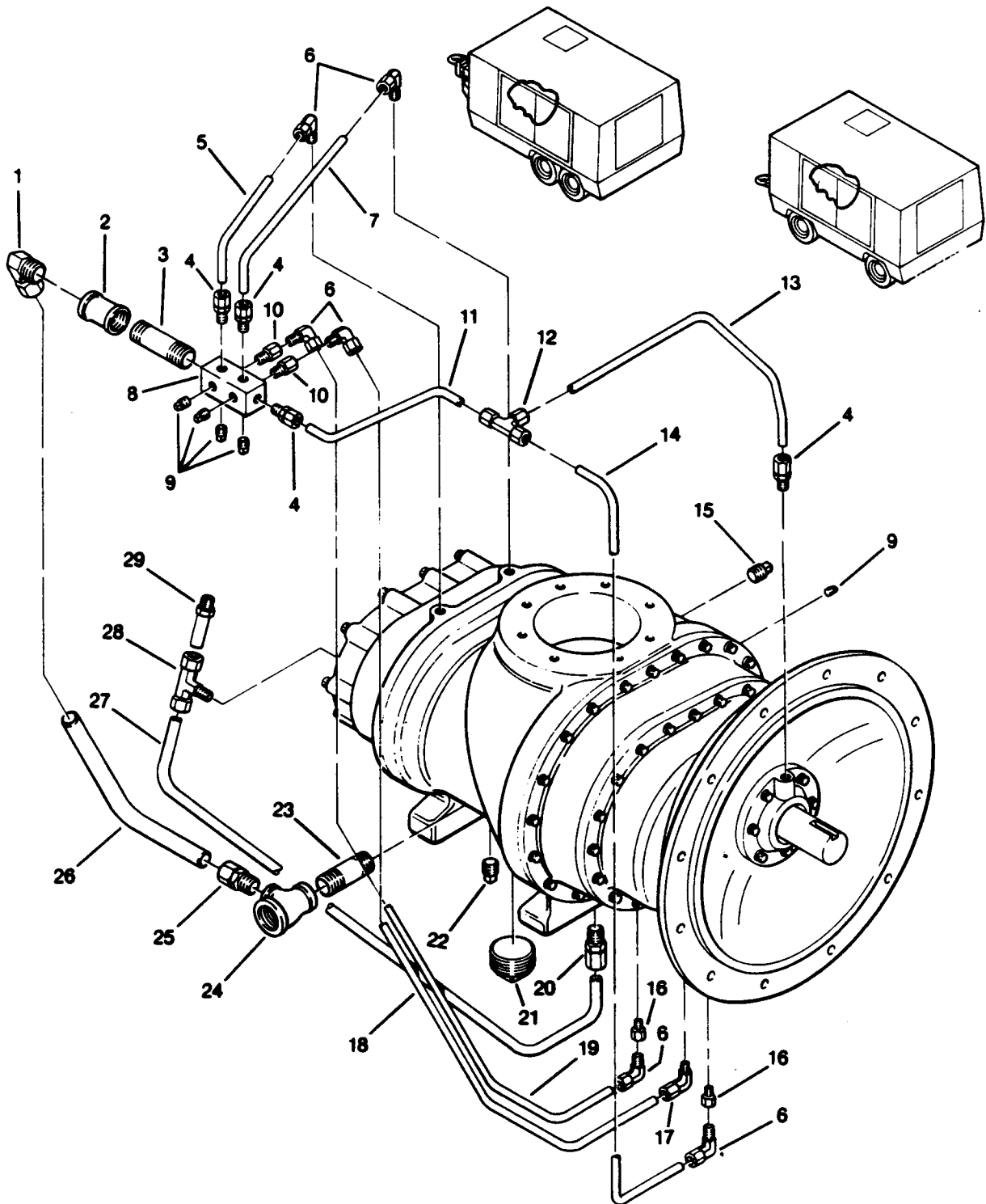
7.19 SULLICON CONTROL (continued)

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
66	washer, lock $\frac{5}{16}$ "	837505-078	3
67	nut, hex $\frac{5}{16}$ "	824205-273	3
68	nipple, pipe $\frac{1}{2}$ " x $2\frac{1}{2}$ "	822108-025	1
69	bushing, reducing $\frac{1}{2}$ " x $\frac{3}{8}$ "	807602-015	1
70	elbow, tube $\frac{1}{2}$ " x $\frac{3}{8}$ "	810508-038	1

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 7 ILLUSTRATIONS AND PARTS LIST

7.20 COMPRESSOR UNIT TUBING



Section 7
ILLUSTRATIONS AND PARTS LIST

7.20 COMPRESSOR UNIT TUBING

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
1	elbow, tube-m 3/4" x 3/4"	810512-075	1
2	coupling pipe 3/4"	801215-030	1
3	nipple, pipe 3/4" x 4"	822112-040	1
4	connector, tube-m 3/8" x 1/4"	810206-025	4
5	tube, outlet bearing male 0.38	221077	1
6	elbow, tube-m 3/8" x 1/4"	810506-025	6
7	tube, outlet bearing female 0.38	221078	1
8	manifold, 0.75 inlet x .25 outlet	220945	1
9	plug, pipe 1/4" 3000# steel	807800-010	5
10	orifice, .062 x .25m x .25f	028831	2
11	tube, seal gear 0.38	221079	1
12	tee, tube union 3/8"	811406-038	1
13	tube, seal fluid 0.38	221080	1
14	tube, gear fluid 0.38	221081	1
15	plug, pipe 3/4"	807800-030	1
16	orifice, 1/8"m x 1/4"f x 188	220959	2
17	elbow, tube-m 3/8" x 1/8"	810506-012	1
18	tube, inlet bearing female 0.38	221083	1
19	tube, inlet bearing male 0.38	221082	1
20	connector, tube-m 1/2" x 1/2"	810208-050	1
21	plug, pipe 2 1/2" 3000# steel	807800-100	1
22	plug, pipe 1/2" 3000# steel	807800-020	1
23	nipple, pipe 1" x 3"	822116-030	1
24	tee, reducing 1 1/4" x 1" x 3/4"	802205-043	1
25	connector, tube-m 3/4" x 3/4"	810212-075	1
26	tube, filter inlet 0.75	221086	1
27	tube, bearing drain 0.50	221084	1
28	tee, tube-m 1/2" x 1/2"	810808-050	1
29	orifice, 1/4"m x 1/2"t x .093	220956-093	1

NOTE: Compressor unit related parts (unit tubing) should be ordered from the Sullair Corporation Unit Division Sales office.

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR

Section 7 ILLUSTRATIONS AND PARTS LIST

7.21 DECAL GROUP

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CAUTION

Observe all local and Federal traffic laws including those specifying minimum speed.

Tow at speeds LESS THAN 15 m.p.h. (24 km p.h.) under ideal conditions.

Reduce speed accordingly as dictated by posted signs, weather and road or terrain conditions.

CAUTION

Adjust lunette eye height to level trailer as much as possible, then torque lock nuts to 100-110 ft. lb. (136-149 N.m.)

Observe all local and Federal traffic laws.

Tow at speeds LESS THAN 15 m.p.h. (24 km p.h.) under ideal conditions.

Reduce speed accordingly as dictated by posted signs, weather and road or terrain conditions.

SULLAIR CORPORATION
Airanteed
SCREW COMPRESSORS

OIL FOR COMPRESSOR - SULLAIR AWF - (ALL WEATHER FLUID)

DO NOT ATTEMPT TO OPEN FILLER CAP WHILE UNIT IS RUNNING OR PRESSURIZED. NO AIR HOSE IS REQUIRED ON CAP.

CAUTION
DIESEL FUEL ONLY

WATER DRAIN

DANGER

DO NOT PERMIT AIR FROM THIS EQUIPMENT TO CONTACT FOODSTUFF, EXCEPT IN FULL COMPLIANCE WITH FDA STANDARDS FOR FOOD CONTACT. THE RECESSED SAFETY DEVICES SHOULD BE TESTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS TO VERIFY THEY MEET PRESSURE IN CASE OF HOSE FAILURE AND WILL NOT RELEASE THE HOSE AND TOOL CONNECTIONS IN USE.

DEATH OR SERIOUS INJURY CAN OCCUR FROM INHALING COMPRESSED AIR WITHOUT USING PROPER SAFETY EQUIPMENT.

SEE OSHA STANDARDS ON SAFETY EQUIPMENT.

DO NOT FILL ABOVE LINE

Do not remove caps, plugs or other components when compressor is running or pressurized. Stop completely and release all internal pressure before changing oil.

Slip on wet surfaces and use proper walking gait.

Wear gloves to protect hands.

RATED SPEED 2100 RPM
MIN IDLE SPEED 1400 RPM

INFLATE TIRES TO 100 PSIG

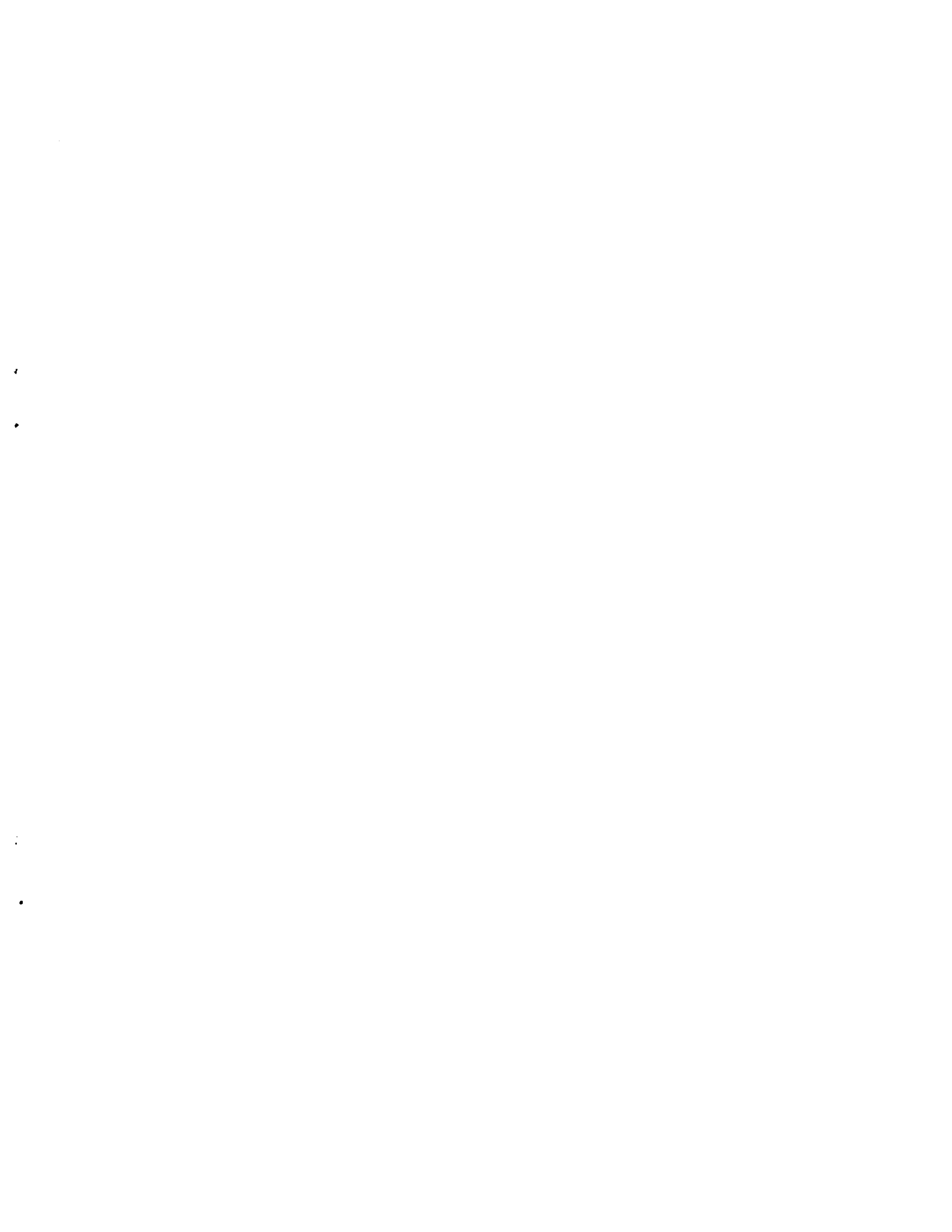
Section 7

ILLUSTRATIONS AND PARTS LIST

7.21 DECAL GROUP

<i>key number</i>	<i>description</i>	<i>part number</i>	<i>quantity</i>
1	decal, operating instruction	049574	1
2	decal, towing speed (4-wheel steerable)	049210	1
3	sign, caution towing (tandem 4-wheel)	250003-292	1
4	decal, airanteed - white	043067	1
5	decal, compressor fluid	250032-902	1
6	decal, diesel fuel	040248	1
7	decal, water drain	040345	2
8	decal, warning/danger 100/1600	250028-258	1
9	decal, noise emission control	049463	1
10	sign, warning compressor fluid fill cap	049685	1
11	sign, warning sever fan port	049965	2
12	sign, warning sever belt drive	049964	1
13	reflector, 2" x 8" red stripe	040103	4
	• reflector, 2" x 8" amber - (not shown)	250034-319	2
14	decal, slow moving vehicle (4-wheel)	049211	1
15	decal, rated 2100 idle 1400 rpm	250023-687	1
16	decal, tire pressure 100 PSIG (689kPa) (Tandem)	250019-552	1
	decal, tire pressure 60 PSIG (413kPa) (4-Wheel) (not shown)	250019-556	1
17	sign, warning crush/sever	408919	1
18	decal, receiver fluid fill level	250023-655	1
19	decal, H750 3" - white (not shown)	250032-332	1
20	decal, 150HP - white 3" (not shown)	250033-977	1
21	decal, Sullair logo (not shown)	250003-206	1
22	decal, Sullair logo 60" (not shown)	407967	2

PLEASE NOTE: WHEN ORDERING PARTS, INDICATE SERIAL NUMBER OF COMPRESSOR



WORLDWIDE SALES AND SERVICE

SULLAIR CORPORATION

A SUBSIDIARY OF SUNDSTRAND CORPORATION

3700 E. Michigan Blvd. Michigan City, Indiana 46360-9990
Telephone (219) 879-5451 Telex 4946922



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Specifications Subject To
Change Without Prior Notice
Part No. 253493