



**OPERATING AND SERVICE MANUAL
MODEL: AIR STREAM T-M SPRAY
INJECTION PATCHER**

**PARTS MANUAL - 91685
REV. "C"
REVISED 9/02**

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CRAFCO AIR STREAM T-M SPRAY INJECTION PATCHER

This manual is furnished with each new **CRAFCO AIR STREAM T-M SPRAY INJECTION PATCHER**. The manual will help your machine operators learn to run the machine properly and understand its mechanical functions for trouble-free operation.

Your **CRAFCO AIR STREAM T-M SPRAY INJECTION PATCHER** is designed to give excellent service and save maintenance expense. However, as with all specifically engineered equipment, you can get best results at minimum costs if:

- (1) You operate your machine as instructed in this manual, and
- (2) Maintain your machine regularly as stated in this manual.

SAFETY PRECAUTIONS

- High operating temperatures of machine require protective clothing and gloves be worn by operator.

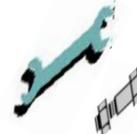


- Always wear eye protection.

- Observe all **CAUTION AND WARNING** signs posted on machine.



- Avoid bodily contact with hot emulsion material, serious burns may result.
- Read Operator Manual thoroughly before operating machine.
- Make sure operator is familiar with machine operation.
- Do not operate in closed building or confined areas.
- Shut-down engine prior to refilling diesel tank.
- Keep hands, feet, and clothing away from all moving parts.
- Always keep a fire extinguisher near the unit. Maintain extinguisher properly and be familiar with its use.
- Calibrate temperature control prior to initial operation and at each 50 hours of operation thereafter.
- Replace any hoses which show signs of wear, fraying, or splitting. Be sure all fittings and joints are tight and leak-proof.
- Precaution is the best insurance against accidents.
- The Crafcro Air Stream T-M Spray Injection Patcher should not be left unattended when running.
- Tighten all bolts and screws after every 100 hours of operation.
- CRAFTCO, Inc. assumes no liability for an accident or injury incurred through improper use of the machine.



CRAFCO AIR STREAM T-M SPRAY INJECTION PATCHER LIMITED WARRANTY

Crafco, Inc., through its authorized Dealer, will replace for the original purchaser free of charge any parts found upon examination by the factory at Mesa, Arizona, to be defective in material or workmanship. The warranty provided herein extends only to the repair and/or replacement of those components on the equipment covered below and does not cover labor costs.

Crafco, Inc. warrants the following parts or components for two (2) years from delivery date: John Deere diesel engine and compressor, and machined venturi on Air Stream Spray Injection Patcher and Air Stream T-M Spray Injection Patcher models.

Crafco, Inc. warrants the following parts or components for one (1) year from delivery date: blower and coupling, circulating transfer fluid emulsion heating system, boom arm, and air feed system (excluding rubber discharge hose and nozzle, and auger and housing tube on Magnum model).

Crafco, Inc. warrants all parts or components for ninety (90) days from delivery date. This warranty excludes tires and battery (as these items are subject to warranties issued by the manufacturers), normal wear items i.e. hoses, belts, switches, filters and lubricants. Crafco, Inc. shall not be liable for parts that have been damaged by accident, alteration, abuse, improper lubrication/maintenance, normal wear, or other cause beyond our control.

The warranty does not extend to incidental or consequential damages incurred as a result of any defect covered by this warranty. All transportation and labor cost incurred by the purchaser in submitting or repairing covered components must be borne by the purchaser. Crafco, Inc. specifically disavows any other representation, warranty, or liability related to the condition or use of the product.



WARNING: Use of replacement parts other than genuine Crafco parts may impair the safety or reliability of your equipment and nullifies any warranty.

WARRANTY CLAIM INSTRUCTIONS

Please follow the instructions stated below when calling in a Warranty Claim. Failure to follow these procedures may be cause to void the warranty.

1. Call your local CrafcO distributor. If you do not know who your local distributor is, call a CrafcO Customer Service Representative, (Toll Free 1-800-528-8242) for name, location, and telephone number.
2. On contacting the Dealer, be prepared to identify the machine type, model number, and serial number, also, the date of purchase if available.
3. Should the cause of the malfunction be a defective part, the Dealer will advise you of the procedure to follow for a replacement.
4. The warranty is valid only for parts that have been supplied or recommended by CrafcO, Inc.

If you have any additional questions regarding warranty repairs and parts, please do not hesitate to call toll free 1-800-528-8242.

CrafcO, Inc.
Corporate Office
420 N. Roosevelt Ave.
Chandler, AZ 85226
Toll Free 1-800-528-8242
602-276-0406

CrafcO, Inc.
Mesa Equipment Plant
235 S. Hibbert
Mesa, AZ 85210
480-655-8333

CAUTIONS



1. Never operate machine without all guards in place.
2. Do not open emulsion tank lid or open flush tank fill port when either tank is under pressure. Relieve pressure on emulsion tank using psi relief valve. Relieve pressure on diesel tank using relief valve. Gauge should read "0" pressure. Never relieve pressure in any other manner. Very serious injury can result.
3. Do not plug in emulsion tank heater unless emulsion is above the heating element enclosure inside the tank. This requires a minimum of 60 gallons in the tank.
4. Keep emulsion tank airtight when not in use.
5. Do not allow emulsion to freeze.
6. Do not fill flush tank more than 2/3 full.
7. Do not point the nozzle at another person.
8. Do not operate near an open flame.
9. Do not use any type of flame to unclog the emulsion hose or spray ring if they should become clogged.
10. When shooting material out the nozzle, protective eye glasses must be worn.
11. Do not place hand or fingers in the venturi eductor opening.
12. Do not touch the silencer as it can become very hot while the Air Stream T-M Spray Injection Patcher is operating.
13. Caution: Do not fill the emulsion storage tank more than 2/3's full. The emulsion will expand after the emulsion is heated up. Starting at the bottom of the lid opening, fill the emulsion about 12" down from the bottom of the lid opening. If you over fill the emulsion storage tank, you can damage the slide gate, compressor, and other vital components of the machine. If you over fill your emulsion storage tank you will void the warranty.

CRAFECO AIR STREAM T-M SPRAY INJECTION PATCHER OPERATING INSTRUCTIONS

START UP SERVICING

The Crafcoc Air Stream T-M Spray Injection Patcher is fully serviced and tested prior to shipment. However, shipping regulations sometimes do not allow shipment of a fully serviced unit. The following should be checked prior to operation:

DIESEL FLUSH TANK

Fill diesel flush tank 2/3 full with diesel fuel. Do not fill completely as this may cause diesel fuel to enter compressor or may cause the slide gate solenoid to have diesel fuel in it.

DIESEL ENGINE FUEL TANK

Fill diesel tank located at rear of machine.

BLOWER

Check oil level. See Blower Operating Manual in back of book. Re-check weekly. Grease the blower often. See manual.

AIR COMPRESSOR

Check oil sight gauge. Fill if required. Off-board compressor. See operating manual in back of book. Re-check daily. Check John Deere manual for the on-board compressor.

ENGINE - (4045 D John Deere)

Check oil level. See engine operating manual, in back of book. Re-check daily.
--8.5L crankcase oil with off-board compressor.
--13.5L crankcase oil with on-board compressor.

ENGINE AIR FILTER

Remove and clean. See Engine Operating Manual in back of book. Re-check weekly.

EMULSION TANK

Fill emulsion tank with asphalt emulsion. Temperature must be between 160 and 175° F prior to operation. If emulsion is not loaded above 160° F, fill tank 8 hours in advance of operation and plug in heating element to raise temperature to a minimum of 160° F.

THERMOSTAT

CRAFCO AIR STREAM T-M SPRAY INJECTION PATCHER OPERATING PROCEDURES

PREPARING FOR OPERATION

Emulsion - The emulsion tank should be filled with an asphalt emulsion suitable for the climate and condition in which the unit will be operating. Commonly this is an RS 2 or a CRS 2.

(Note: All emulsions are not compatible. When changing emulsions brand or type you should completely empty and flush out the tank before the new emulsion is added.)

Proper operation temperature for the emulsion is 160°F (+/-10°F). If the emulsion is below this temperature the unit must be plugged into a 110 Volt outlet. *(Optional 220 Volt wiring is available.)* The thermostat should be set at 160°F. The electric heating elements are designed to gently heat the emulsion at a rate of 10°F per hour. If the emulsion temperature is low it will take several hours to get the emulsion to operation temperature. Plugging the unit in overnight is recommended.

(Never allow emulsion to freeze or heat emulsion above 190°F.)

Stone - A 3/8" crushed washed aggregate is the most common and versatile stone to use in patching operations. Smaller stone (1/4") can be used and may improve results when skin patching. Larger stone (1/2") can be used to improve results when patching larger hold or repairing shoulders.

Solvent - Fill the solvent tank with diesel fuel or another solvent that has been recommended by the emulsion supplier.

Each day, before operating the unit, raise the dump body on the truck and rinse the stone with water. Allow the water to drain for several minutes. This will greatly reduce the dust developed during the patching operation and will improve the adhesion of the emulsion to the stone.

CRAFCO AIR STREAM T-M SPRAY INJECTION PATCHER OPERATING PROCEDURES

START UP

1. Pressurize the emulsion tank.

- a. Remove the boom from the holder and remove the nozzle from the Flush Box.
- b. With the nozzle pointed at the ground, start the engine and allow to run for several minutes. The compressor runs when the engine is running and will automatically start building pressure in the emulsion tank. Allow the pressure to build until the pressure reaches a minimum of 90 PSI.

2. Purge the solvent from the emulsion lines.

- a. Locate the EMULSION TANK VALVE at the rear of the emulsion tank.
- b. With the nozzle positioned in the flush box and the engine off, turn the EMULSION TANK VALVE to the position marked Emulsion Only.
- c. Slowly open the EMULSION VALVE at the OPERATOR CONTROL PANEL approximately 1/4 open. Solvent will begin to flow from the nozzle. This will take 10 to 15 seconds.
- d. When the solvent is purged and emulsion is visible at the nozzle, quickly close the EMULSION VALVE on the boom.

3. Patching

- a. Remove the boom from the transport supports and position the nozzle over the area to be repaired.
- b. Start the engine.
- c. Adjust the throttle up to 1800 RPM.
- d. Lower the nozzle to about 12" from the ground and blow all dust, dirt and standing water away for the repair area.
- e. Reduce the engine RPMs to:
 - Skin Patching - 900 to 1000 RPM
 - Holes - 1100 to 1800 RPM
 - Shoulder Repairs 1300 to 1800 RPM

CRAFCO AIR STREAM T-M SPRAY INJECTION PATCHER OPERATING PROCEDURES

START UP

5. **Patching** (continued)

(with variables in stone, equipment and operator you may find that your unit works better at slightly higher RPM. These setting are our recommended setting for 3/8" stone. Each operator can adjust to their comfort level. We suggest with 1/2" stone increase by 100 RPM and with 1/4" stone decrease slightly.)

- f. With the nozzle over the repair area at about knee high slowly open the EMULSION VALVE approximately 1/4 open.
- g. Tack the repair area with emulsion. (Coating the entire area including 6" past the edge of the repair is best. Highly distressed areas and damp areas require heavier tack application for good long lasting repairs.)
- h. With the emulsion running turn on the STONE SWITCH. Stone will immediately start shooting from the nozzle.
- i. Continuously move the nozzle over the repair building your repair from the bottom up. *(If you hold the nozzle still material will build up and you will not achieve a smooth repair.)*
- j. As the stone builds on the pavement you should see that less than 10% of the stone looks uncoated when your stone and emulsion flow are adjusted properly. If an excess of emulsion appears reduce the emulsion flow. If the stone appears undercoated increase the emulsion flow. *(Emulsion is the glue. To get a long-lasting repair, make sure you have enough emulsion.)*
- k. When the repair is at the desired level, close the EMULSION VALVE. Dry stone will continue to flow from the nozzle. Lightly cover the entire repair with dry stone to complete the repair.
- l. Shut off STONE SWITCH. *(Stone continues to flow for about 10 to 20 seconds after the switch is off.)*
- m. Move the nozzle away from the repair area.
- n. Lower the engine RPM.

(TIP: With a push broom clean up any overspray of material by sweeping it back onto the repair area.)

CRAFCO AIR STREAM T-M SPRAY INJECTION PATCHER OPERATING PROCEDURES

START UP

6. Move to next repair area.

(Never travel without properly stowing boom in the transport supports and locking into position. NEVER place the nozzle in the flush box with the engine running.)

SHUT DOWN

1. Shut down the engine.
2. Stow boom in transport supports and place the nozzle in the FLUSH BOX.
3. Turn the FLUSH VALVE to Flush Only.
4. Open the EMULSION VALVE and allow emulsion to flow into the FLUSH BOX until solvent replaces the emulsion coming out of the nozzle.
5. Shut EMULSION VALVE.
6. Turn the FLUSH VALVE to Off.
7. Stow the boom and the nozzle and lock in position for transport.

To assure proper operation of the Air Stream T-M unit, the aggregate feed system should be washed each day. This is done by pouring water into the empty aggregate hopper with the unit running a low RPM. This flushing will remove any dust and dirt build-up in the venturi, feed pipe, and hose.

CRAFCO AIR STREAM T-M SPRAY INJECTION PATCHER OPERATING PROCEDURES

CLEAN OUT INSTRUCTIONS

ASPHALT EMULSION LINE

The emulsion line should be flushed with diesel fuel, or solvent, when the time between repairs exceeds 20 minutes, and at the end of every day. To flush the line: Turn valve to flush and open valve. Flush into flush box. Flush only when engine is turned off. If the emulsion line ever becomes clogged do not attempt to unclog by applying any type of open flame to the emulsion line.

If some asphalt emulsion is spilled on machine it can be wiped off immediately with diesel fuel or solvent.

If asphalt emulsion has accumulated on the machine or hoses, you should spray them with your diesel fuel, or asphalt solvent, let soak approximately 3 minutes and wash off with water or steam. This should be done weekly.

AGGREGATE FEED SYSTEM

The entire aggregate feed assembly (aggregate hopper, venturi eductor, and aggregate hose) should be cleaned daily. The aggregate feed system should be flushed with water for 10 minutes daily. Start the engine and run at 2400 RPM MAX. Then run water from a hose into the aggregate hopper and venturi eductor and blow the water out the aggregate hose and nozzle. For a more thorough cleaning, fill a 5 gallon bucket with water and dump the water into the aggregate hopper and venturi eductor and blow the water out the aggregate hopper and nozzle. Repeat two or three times. This will thoroughly clean the unit of any fines and aggregate buildup that may accumulate in the aggregate hopper, venturi eductor or aggregate hose and assure smooth operation and maximum Air Stream T-M Spray Injection Patcher output. After cleaning, shut off the engine.

CRAFCO AIR STREAM T-M SPRAY INJECTION PATCHER OPERATING PROCEDURES

LUBRICATING AND MAINTENANCE INSTRUCTIONS

1. Engine - refer to separate manual in packet. (John Deere Maintenance Manual)
2. Blower - refer to separate manual in packet. (Tuthill Blower Manual)
3. Compressor - check separate manual in packet. (IMA Manual if off-board compressor)
4. Lubricate bearings at each pivot point on boom (every 75 hours).
5. Check hydraulic oil level every day.
6. Check drive belt on air compressor after 100 hours.
7. Check and tighten all bolts periodically, including axles (approximately 100 hours).
8. Remove and clean hydraulic oil filter in first 30 hours and then every 100 hours.
Replace return line filter the first 30 hours then every 100 hours.
9. Lubricate bearings every 100 hours for boom. Boom has two bearings, an upper and a lower. Grease lightly.

CRAFCO AIR STREAM T-M SPRAY INJECTION PATCHER OPERATING PROCEDURES

TROUBLE SHOOTING

NO EMULSION

CHECK THE FOLLOWING:

1. Emulsion tank empty. (Remove tank pressure first. Open pressurized lid on emulsion tank.)
2. Emulsion line valve closed on tank.
3. Low P.S.I. in emulsion tank. Check gauge.
4. Spray ring plugged. Remove and clean.
5. Hose from emulsion tank to nozzle plugged. If equipped with heated hose start engine to allow heating and turn flush on. Do not attempt to unplug the emulsion hose by applying an open flame to the emulsion hose or spray ring. The system has a water heating system (standard). Start engine. Let run to heat emulsion hose.
6. Emulsion cold. Check temperature. Check to be sure thermostat and heating element are working.
7. Emulsion has separated and become lumpy. Check emulsion by placing a rod to the bottom to check for "bubble gum" like asphalt residue on the bottom. If separated, drain tank and flush with diesel fuel.

HYDRAULIC SYSTEM MALFUNCTION (OPTIONAL)

CHECK FOLLOWING:

1. Check oil in hydraulic reservoir.
2. Check hydraulic pump bolted to air compressor on John Deere engine.
3. Check switch for loose wire.
4. Check solenoid, 200 series. (To check: hold hand on solenoid and energize switch, you should be able to feel impulse in valve.)
5. Hydraulic system overload (PSI over 1,000 on hydraulic gauge).
 - A. Check augers in the tailgate. If too much stone is piled on top of the augers the weight of the stone may cause the augers to stop turning or if dirty wet stone sits in the augers overnight it may harden thereby preventing the augers from turning. If either of these conditions exist, be sure engine is turned off, then remove stone from top of augers (Top of auger should be visible) and loosen any packing or buildup under the augers.

CRAFCO AIR STREAM T-M SPRAY INJECTION PATCHER OPERATING PROCEDURES

TROUBLE SHOOTING

5.
 - B. Check tailgate feeder aggregate shoot. If stone is not free falling it will wedge at the top and create undue strain on the hydraulic system. Turn off the Air Stream T-M Spray Injection Patcher engine, raise the dump bed, lower shoot or remove the obstruction from the shoot as required. Lower truck bed to appropriate height. Lower shoot, and increase angle of shoot in aggregate hopper so stone cannot "sit" on the shoot.

MOTOR WILL NOT START

CHECK THE FOLLOWING:

Refer to engine manual.

AGGREGATE NOT COMING THROUGH HOSE

CHECK THE FOLLOWING:

1. Aggregate hopper empty.
2. Check gravity feed tailgate to be sure stone is flowing down the dump body into the tailgate feeder hose.
3. Check hydraulic (optional) system.
4. Check engine R.P.M. - 2,400 MAX.
5. Aggregate hose plugged. Angle front section of hose and nozzle down and shake hose. If hose is still plugged, remove hose from air flow pipe, angle down and shake hose, then reattach hose to air flow pipe. If hose is still plugged, flush out with large amounts of water as described in aggregate feed system.
6. Nozzle plugged - remove and clean.
7. Check venturi eductor to be sure an unusually large rock or can has not gotten wedged in the venturi eductor air flow.

WIRING CODE FOR TAIL LIGHTS AND BRAKES

GD (Ground) - Black
LT (Left Turn) - Red
RT (Right Turn) - Green
S (Brakes) - White
TM (Running Lights) - Brown

CRAFCO AIR STREAM T-M SPRAY INJECTION PATCHER

MATERIAL SPECIFICATIONS

Below are general specifications for the materials used in a CrafcO Air Stream T-M Spray Injection Patcher. The materials are very common. This is not a complete list, as a variety of materials can be used and manufacturer trade names vary by locality. Please call if we can assist in any way.

STONE

General description: 3/8" or 1/4" preferably washed angular crushed stone. Round river rock also acceptable, crushed preferred.

GENERAL SIEVE ANALYSIS

100%	1/2 inch
90 - 100%	3/8 inch
20 - 100%	3/16 inch (#4 screen)
5 - 30%	1/8 inch (#8 screen)
0 - 10%	1/16 inch (#16 screen)

EMULSION

General description: Rapid setting asphalt emulsion, commonly referred to as RSII, CRSII and sometimes CMSII. Other trade names are used in some areas. Rapid setting high floats are also acceptable, and are preferable in cold weather (less than 32°F.) operation.

SPECIFICATIONS

	Min.	Max.
Viscosity, Saybolt Furol @ 122 degrees F. (50°C.), s.....	75	400
Settlement, 5-Day, %.....		5
Storage Stability, Test, 24-h, %.....		1
Demulsibility, 35 ml, 60.....	40	
Sieve test, %.....		0.10
Residue by distillation, %.....	63	
Penetration, 77°F. (25°C.).....	100	
Ductility, 77°F. (25°C.), 5.....	40	
Solubility in trichloroethylene, %.....	97.5	

CRAFCO AIR STREAM T-M SPRAY INJECTION PATCHER

TENSIONING V-BELT DRIVES INSTRUCTIONS

GENERAL RULES OF TENSIONING - for off-board compressor, older style belt driven blowers and hydraulic pumps.

Ideal tension is the lowest tension at which the belt will not slip under peak load conditions.

Check tension frequently during the first 24 - 48 hours of operation.

Over tensioning shortens belt and bearing life.

Keep belts free from foreign material which may cause slip.

Make V-drive inspection on a periodic basis. Tension when slipping.

Never apply belt dressing as this will damage the belt and cause early failure.

CRAFCO AIR STREAM T-M SPECIFIC RULES FOR TENSIONING

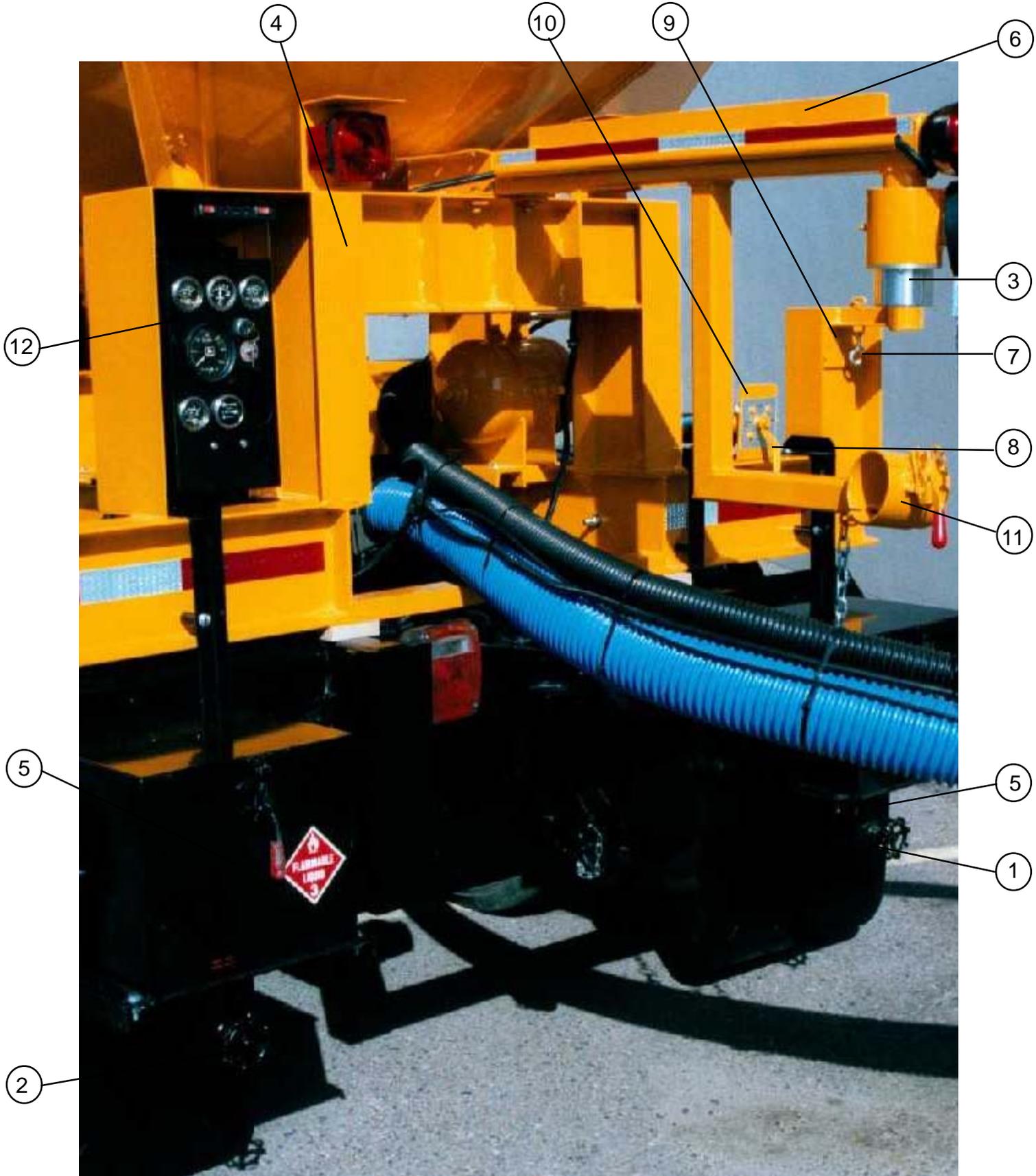
To check for proper belt tightness you must measure the force required to achieve the desired deflection at the center of the belt span, midway between the two pulleys. Below are the minimum and maximum forces permissible to achieve the desired deflection. This should be checked after the first 24 hours, 48 hours and weekly thereafter.

Belt	Drive	Desired Deflection	Force to Achieve Deflection - Min.	Force to Achieve Deflection - Max.
AMZ2708	Air Compressor	.343"	5.7#	9.4#
AMZ2709A	Hydraulic Pump	.281"	4.9#	7.2#
AMZ711B	Blower	.156"	7.1#	10.5#

MAINTENANCE GUIDE OF THE V-BELT DRIVES

TYPE OF MAINTENANCE	WHEN TO DO	WHAT TO DO
Check for sheave groove wear.	Initial inspection - 8 hours. Second inspection - 24 hours. Third inspection - 100 hours. Periodically thereafter.	Check for belt riding in the groove. In multiple groove drives, belt ride should be uniform, not more than 1/16" above or below top of sheave groove. Check groove wear area for wear. Side wall of groove should be straight, not dished out. Bottom of groove should show no signs of belt contact.
Check for sheave runout.	Initial inspection - 8 hours. Second inspection - 24 hours. Third inspection - 100 hours. Periodically thereafter.	Check sheave by eye for runout. If runout is excessive, it can easily be seen by visual inspection. If runout is noticeable, check sheave for source of problem and correct.
Inspect for heat build-up and proper ventilation.	Initial inspection - 8 hours. Second inspection - 24 hours. Third inspection - 100 hours. Periodically thereafter.	Check belts for heat. Ambient temperatures should not exceed 140°F. Contact temperatures should not exceed 180 °F. Make sure drives are properly ventilated.
Clean belts and sheave grooves.	Initial inspection - 8 hours. Second inspection - 24 hours. Third inspection - 100 hours. Periodically thereafter.	Inspect belts for contaminates, such as oil or grease. Wipe belts clean with detergent and water. Inspect sheave grooves for buildup of such material and remove, if necessary.
Check belt tension.	Initial inspection - 8 hours. Second inspection - 24 hours. Third inspection - 100 hours. Periodically thereafter.	Check belt tension using Browning belt tension checker. Tension to recommendations shown in current catalogs.
Check sheave alignment.	Initial inspection - 8 hours. Second inspection - 24 hours. Third inspection - 100 hours. Periodically thereafter.	Check alignment with straight edge, string or machinist level. Correct alignment to as near perfect as possible.
Mismatched belt check.	Initial inspection - 8 hours. Second inspection - 24 hours. Third inspection - 100 hours. Periodically thereafter.	Check belt sag on slack side of drive. All belts should have a slight bow. If this bow is not uniform with all belts, replace entire set with a matched set.
Check for worn belts.	Initial inspection - 8 hours. Second inspection - 24 hours. Third inspection - 100 hours. Periodically thereafter.	Check wear surfaces of belt for excessive wear. If belts have a slick, glazed look, belts are slipping. Check drive capacity and belt tension. Never replace only one belt in a used set, as used belts will elongate. Replace entire set if replacement is necessary.
Check sheave setscrews and/or bushing capscrews.	Initial inspection - 8 hours. Second inspection - 24 hours. Third inspection - 100 hours. Periodically thereafter.	Check all setscrews and/or capscrews for looseness. Retighten to recommended torque, if necessary.

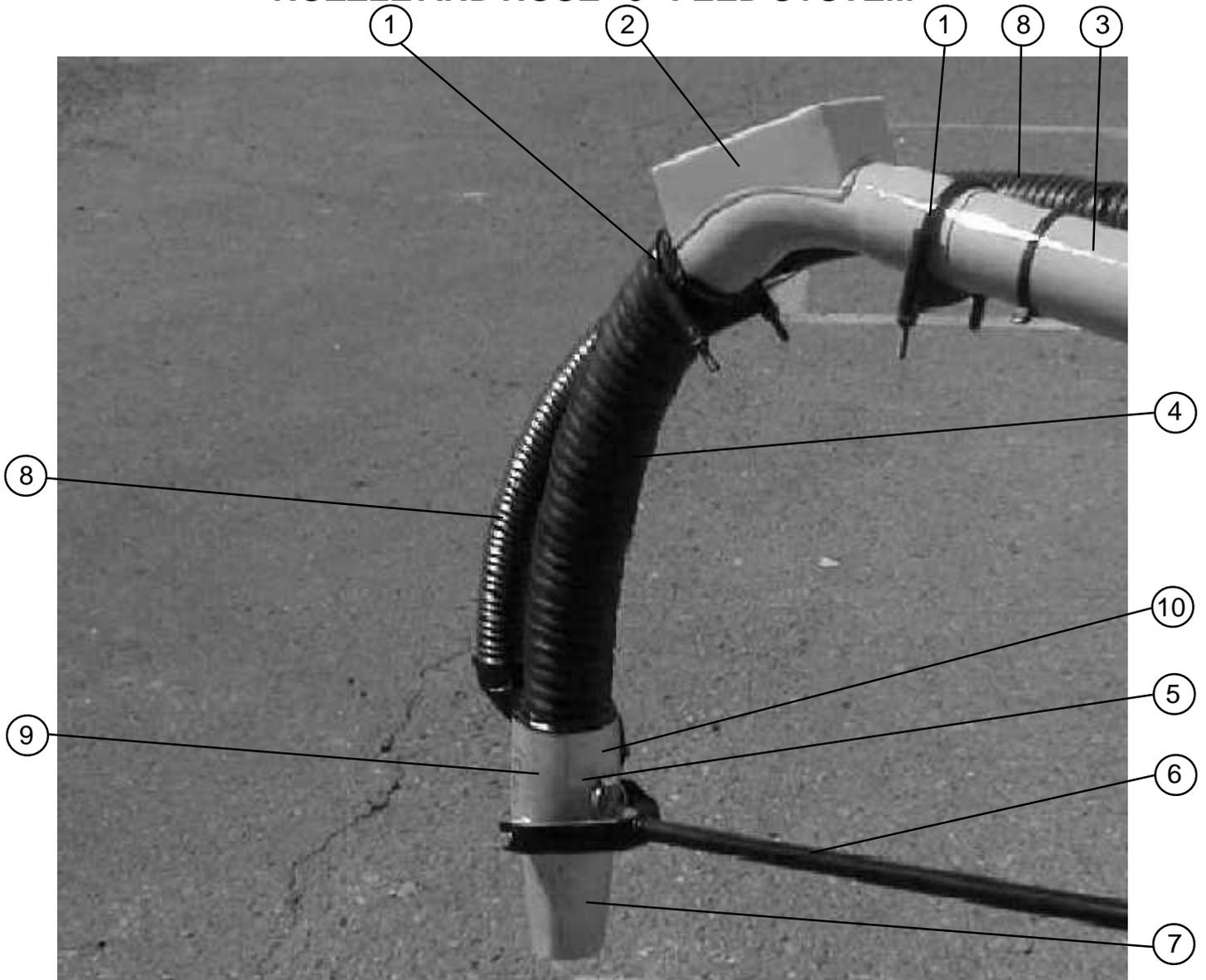
REAR VIEW OF THE MACHINE - JOHN DEERE ENGINE CONTROLS



REAR VIEW OF THE MACHINE - JOHN DEERE ENGINE CONTROLS

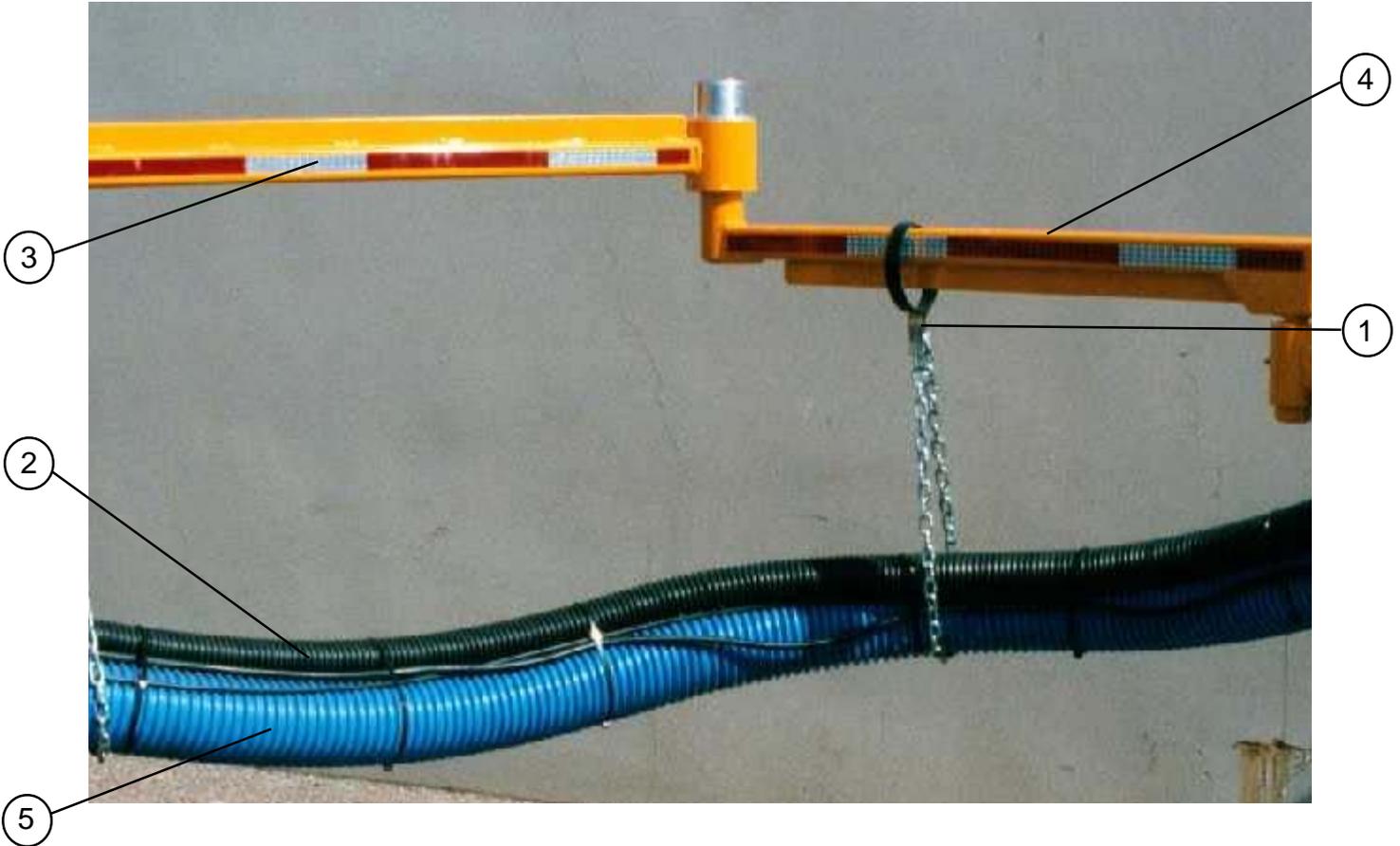
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	29270	1	BRONZE GATE VALVE - 2"
2	91530	1	DEEP NOZZLE STORAGE BOX
3	90508	1	LARGE GREASE CAP - STEEL
4	91505	1	T-M FRAME
5	91530	1	DEEP NOZZLE STORAGE & BOX
6	91540	1	SECTION BOOM - BOLT ON - T-M
7	91648	1	BOOM STOW SAFETY CHAIN ASSEMBLY
8	91679	1	EMULSION REAR FRAME VALVE ASSEMBLY
9	91359	1	2ND SECTION SUPPORT ASSEMBLY
10	91380	1	JIB SUPPORT ASSEMBLY
11	91312	1	AGGREGATE BOOM CLAMP ASSEMBLY
12	91032	1	ENGINE CONTROL PANEL PURCHASED

NOZZLE AND HOSE - 3" FEED SYSTEM



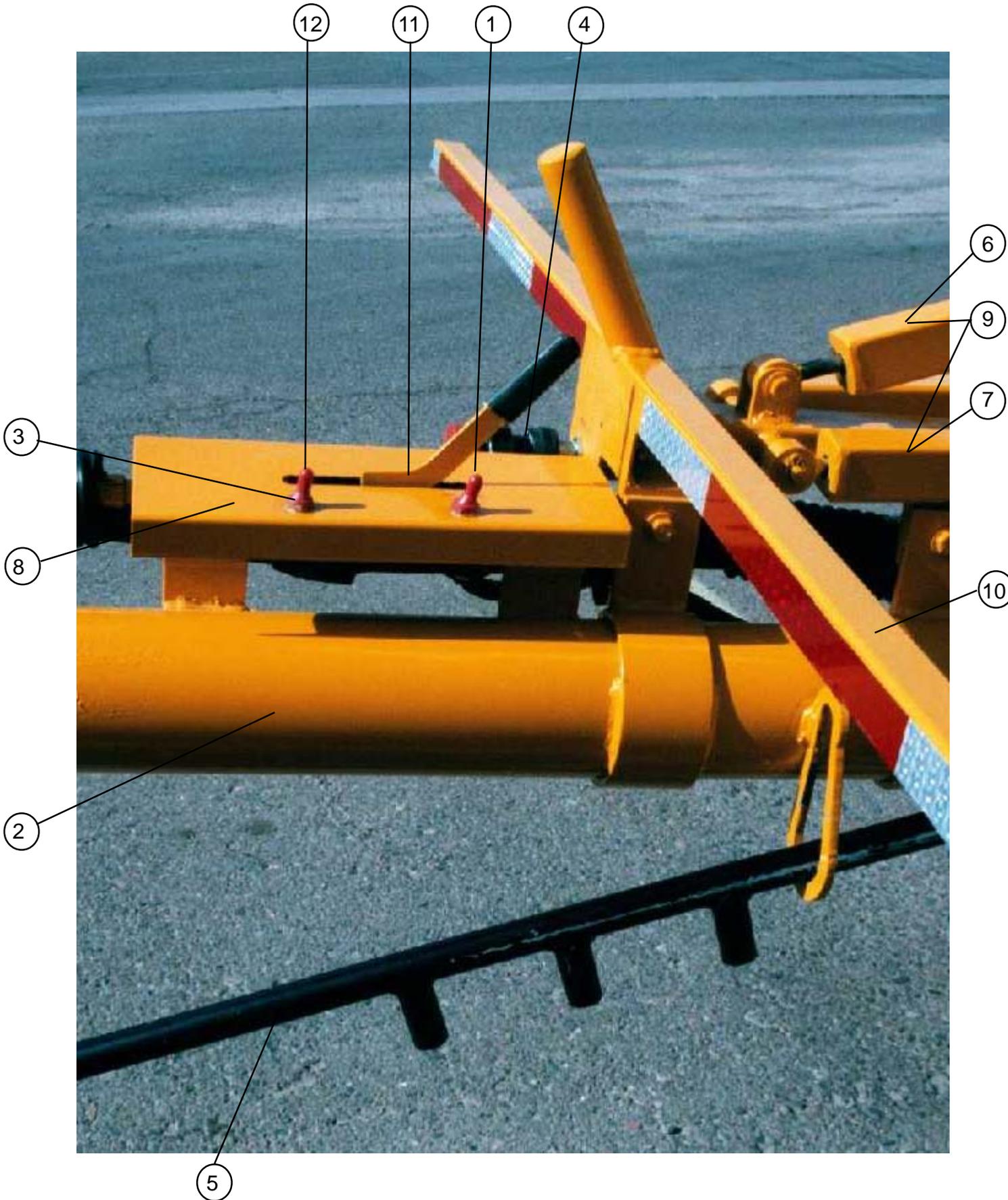
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	25951	1	3" U-BOLT MUFFLER CLAMP
2	91220	1	3" BOXED 45° ELBOW
3	91055	1	3" AGGREGATE PIPE & TRI HANDLE
4	91155	1	HOSE 3" X 24" GUM RUBBER LINED
5	91103	1	3" ALUMIN NOZZLE HOUSING
6	91162	1	NOZZLE POSITION HANDLE
7	91100	1	NOZZLE W/SPRAY RING ATTACHED
8	90810	1	2" I.D. EMULSION INSULATION COVER
9	91099	1	3" O-RING
10	90301	1	EMULSION WATER RETURN BUTTON "U"

OPERATOR BOOM



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90149	1	4" ID AGGREGATE (TIGRFLEX) HOSE HANGER
2	90810	1	2" ID EMULSION HOSE COVER-BULK
3	91535	1	1ST BOOM SECTION
4	91545	1	BOOM SECTION 2ND COMPLETE
5	91565	1	HOSE 4" AGGREGATE (BULK)

OPERATOR BOOM CONTROL PANEL/SPRING ARM ASSEMBLY

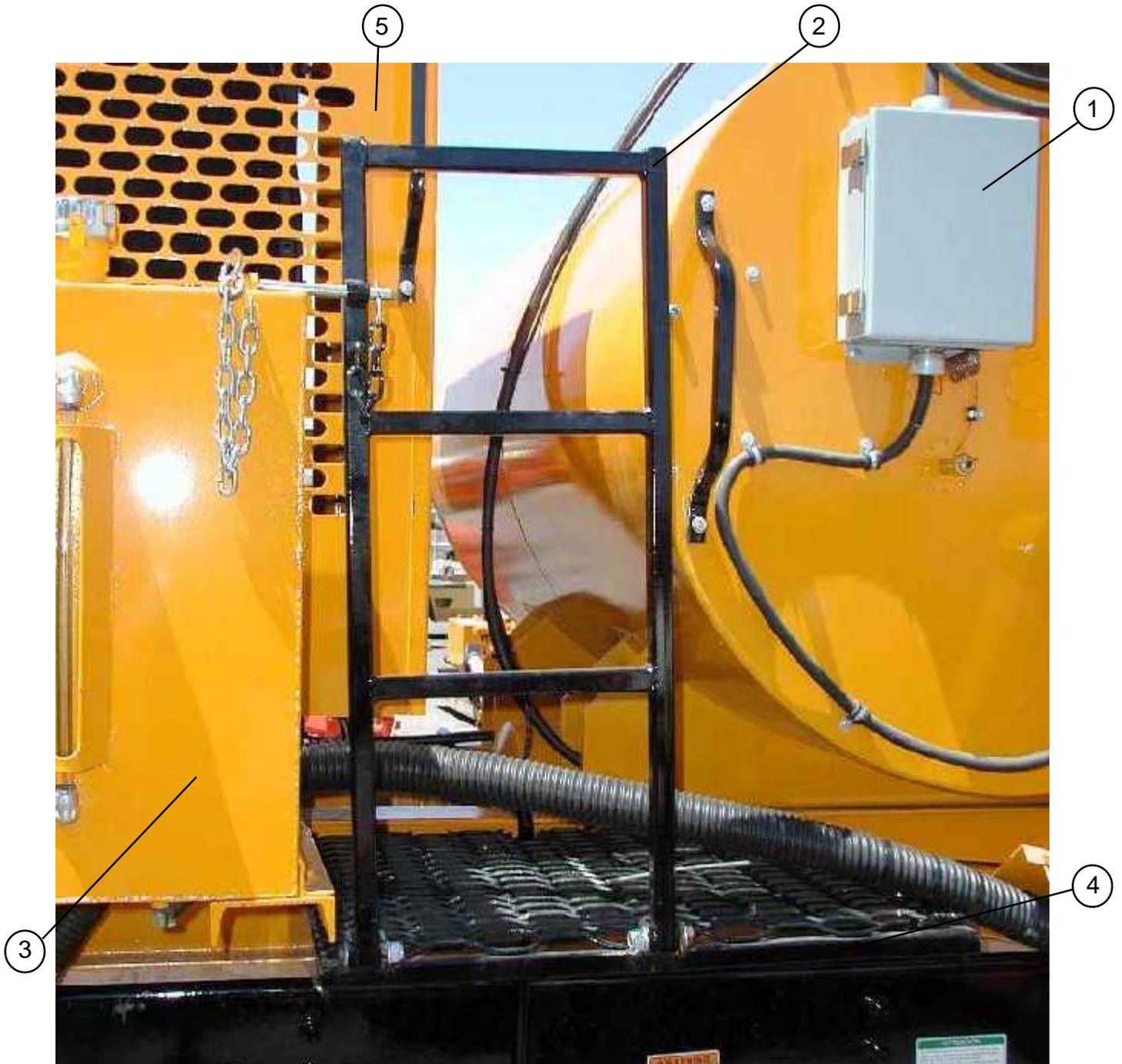


SPRING ARM ASSEMBLY



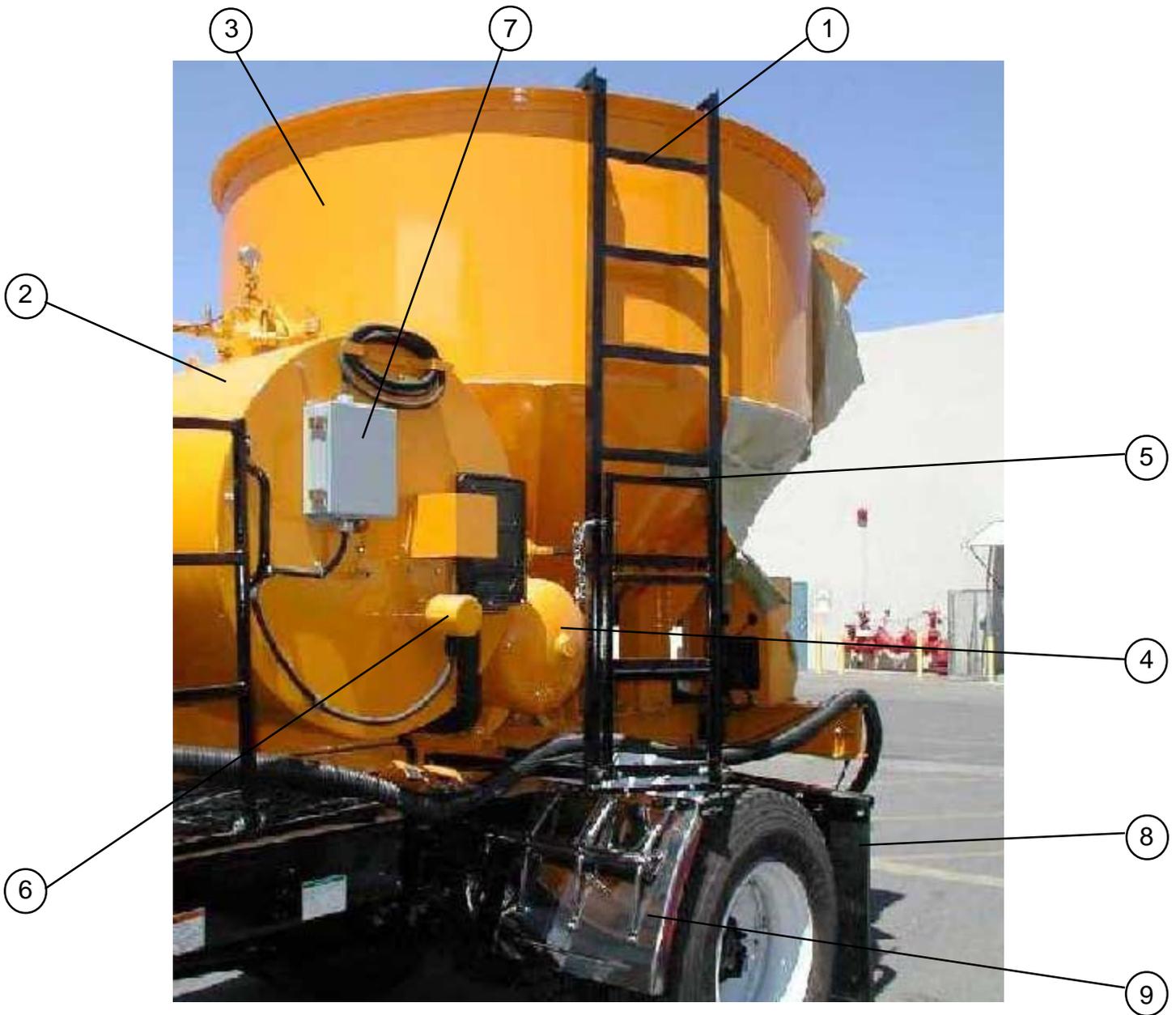
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	32513	1	TOGGLE SWITCH-ACTUATOR
2	91073	1	3" PIPE WELD ASSEMBLY
3	50719	1	STONE SWITCH-TOGGLE SWITCH
4	91046	1	THROTTLE CABLE
5	91162	1	NOZZLE POSITION HANDLE
6	91169	1	UPPER SPRING CYLINDER COMPLETE
7	91170	2	SPRING CYLINDER COMPLETE
8	91230	1	COMPLETE ASSEMBLY CONTROL CONSOLE
9	91350	1	SPRING ARM ASSEMBLY
10	91396	1	HANDLE ASSEMBLY
11	91700	1	EMULSION REGULATION VALVE ASSEMBLY
12	91723	1	SWITCH COVER BOOT - RED

DRIVER'S SIDE ACCESS PLATFORM EXTENSION LADDER



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91095	1	READY TO MOUNT THERMOSTAT ASSEMBLY
2	91475	1	ACCESS PLATFORM EXTENSION LADDER
3	43594	1	26 GALLON DIESEL FUEL TANK
4	91465	1	ACCESS PLATFORM STEP
5	91015	1	ENGINE COVER PURCHASED

DRIVER'S SIDE - AGGREGATE HOPPER AND COMPONENTS

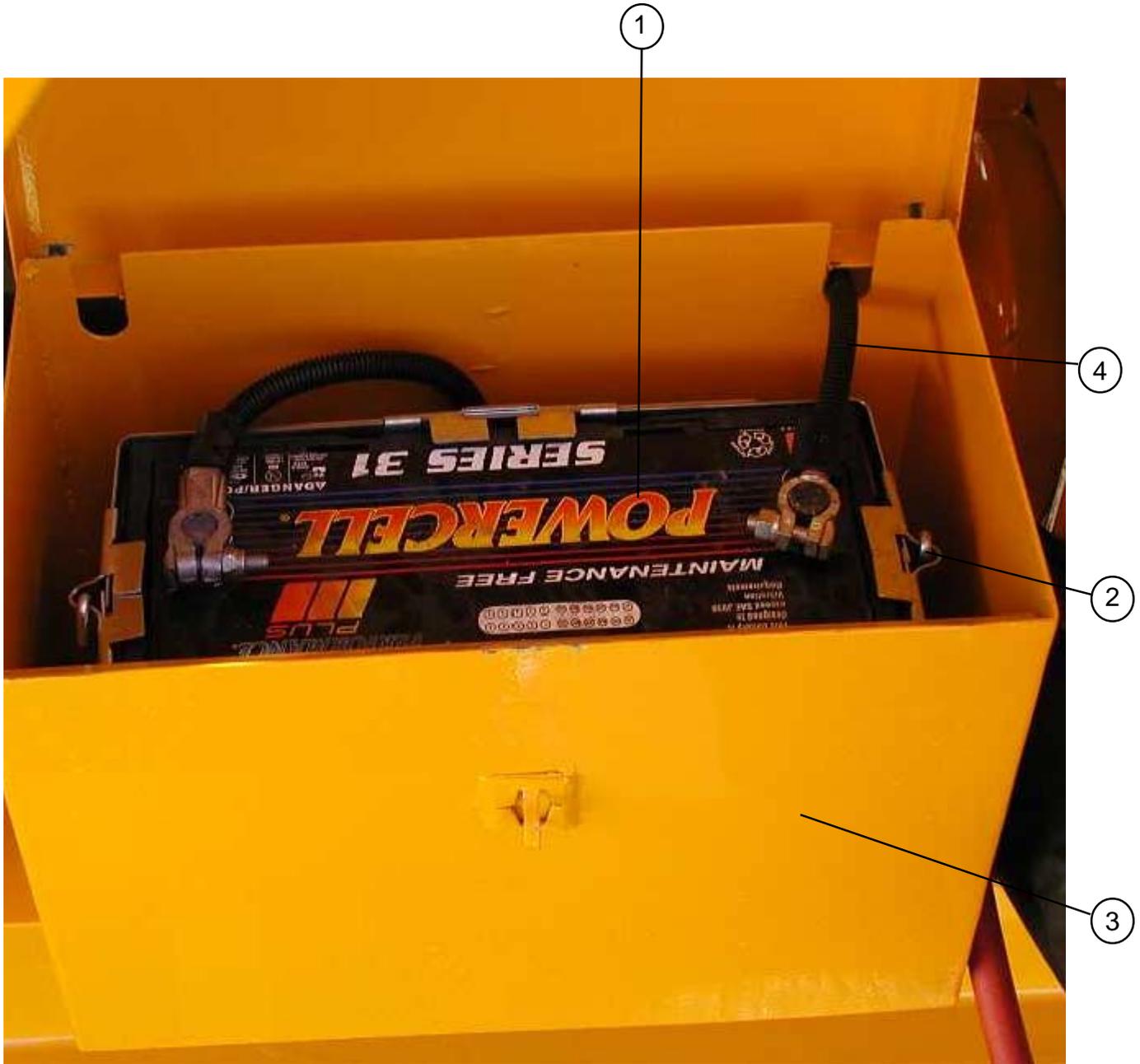


NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91605	1	HOPPER ACCESS LADDER
2	91615	1	250 GALLON FAT BODY EMULSION TANK
3	91610	1	AGGREGATE HOPPER 6 CUBIC YARD
4	90860	1	30 GALLON DIESEL FLUSH TANK
5	91475	1	ACCESS PLATFORM EXTENSION LADDER
6	91799	1	EMULSION TANK HEATER
7	91455	1	EMULSION TANK HEAT SHIELD
8	-	2	MUD FLAPS SUPPLIED BY CUSTOMER
9	-	2	FENDER'S SUPPLIED BY CUSTOMER

**BATTERY BOX
PHOTO 1**

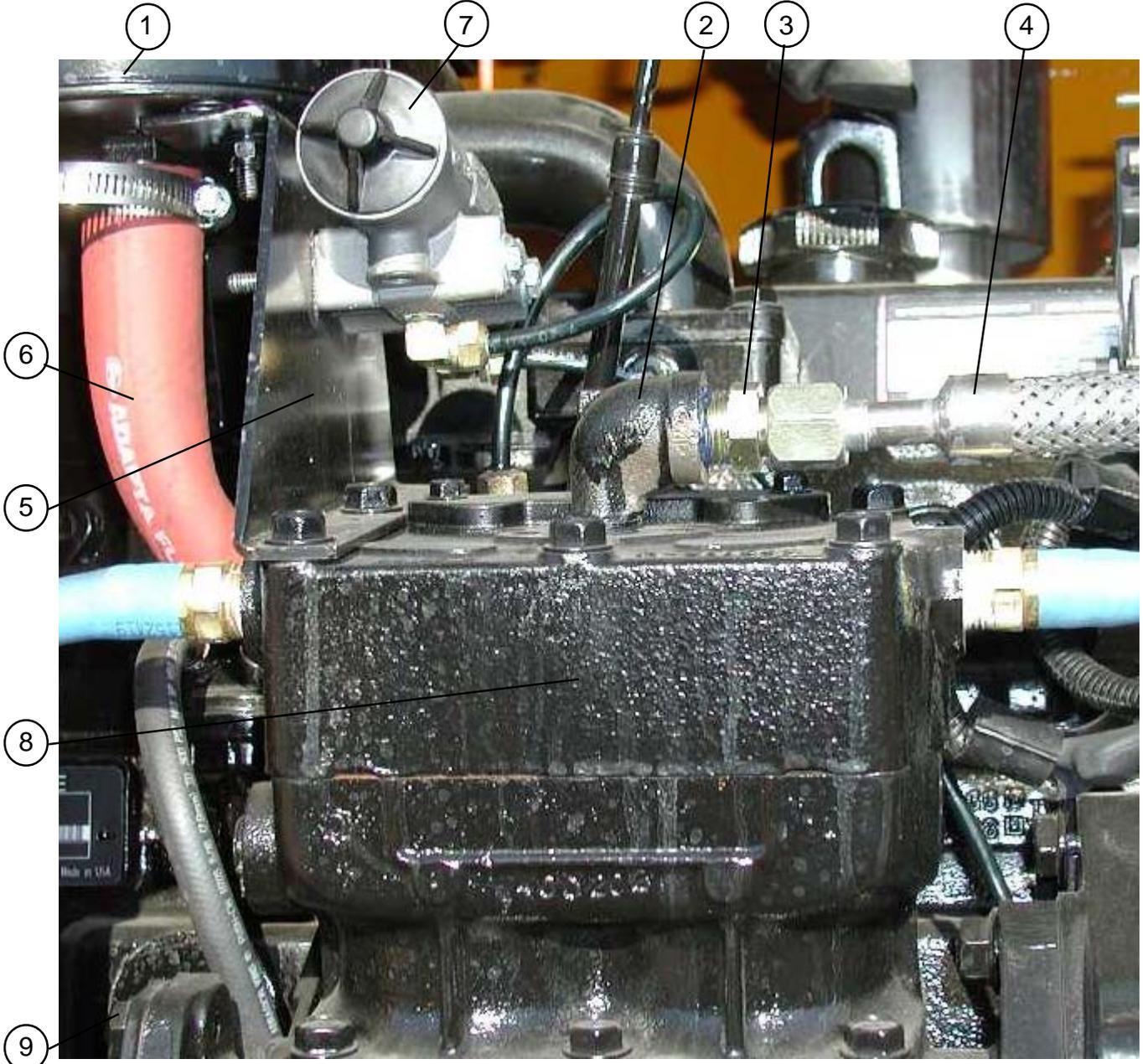


BATTERY BOX AND BATTERY PHOTO 2



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	24001	1	1000 C.C.A. BATTERY
2	32030	1	BATTERY HOOK BOLTS
3	90200	1	BATTERY LOCK BOX ASSEMBLY
4	90905	1	BATTERY CABLE 93" LONG

ENGINE AIR COMPRESSOR AND COMPRESSOR GOVERNOR



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	50109	1	AIR COMPRESSOR FILTER
2	28238	1	1/2" STREET ELBOW
3	29844	1	1/2" MPT X 1/2" 37° ADAPTER
4	41403	1	1/2" STAINLESS STEEL LINE
5	90890	1	BRACKET
6	90891	1	INTAKE AIR COMPRESSOR HOSE
7	90899K	1	GOVERNOR - COMPRESSOR UNLOADING
8	91022	1	ENGINE - BOLT ON AIR COMPRESSOR
9	90800	1	HYDRAULIC MOTOR ASSEMBLY

WATER PUMP OUTLET HEATING VALVE



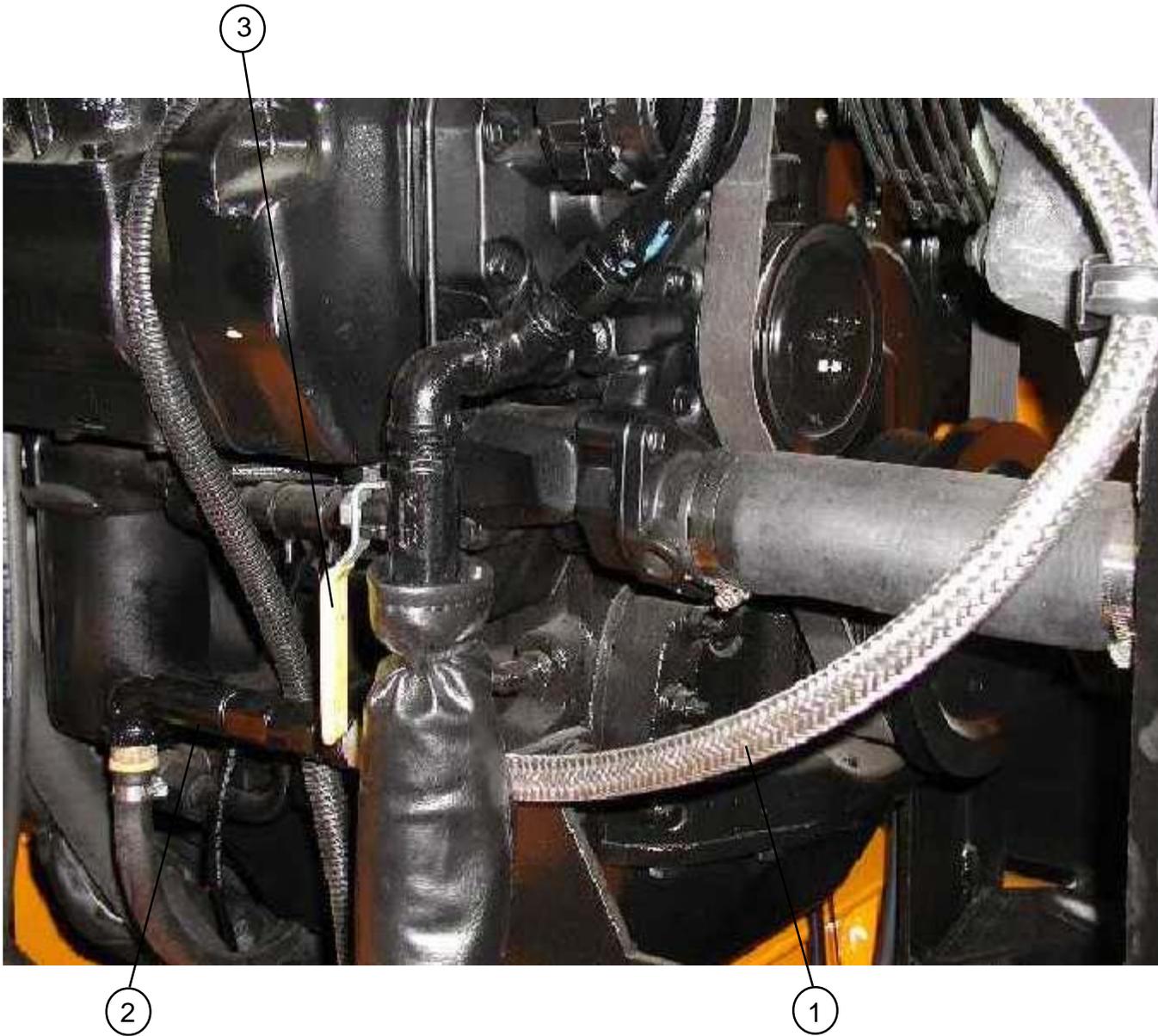
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	41403	1	1/2" STAINLESS LINE
2	90530	1	WATER PUMP OUTLET HEATING VALVE
3	91022	1	ENGINE BOLT ON 13CFM COMPRESSOR J.D. ENGINE

BOLT-ON ENGINE COMPRESSOR AND COMPONENTS



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	50109	1	FILTER AIR COMPRESSOR
2	90899	1	GOVERNOR - COMPRESSOR UNLOADING MECHANISM
3	41403	1	1/2" STAINLESS STEEL LINE
4	91022	1	ENGINE BOLT-ON 13 CFM COMPRESSOR - JOHN DEERE ENGINE
5	90890	1	INTAKE AIR COMPRESSOR FILTER BRACKET
6	90861	1	INTAKE AIR COMPRESSOR HOSE

ON-BOARD COMPRESSOR VALVE ASSEMBLY



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	41403	1	1/2" STAINLESS STEEL LINE
2	90895	1	ON-BOARD COMPRESSOR VALVE ASSEMBLY
3	90530	1	WATER PUMP OUTLET HEATING VALVE ASSEMBLY

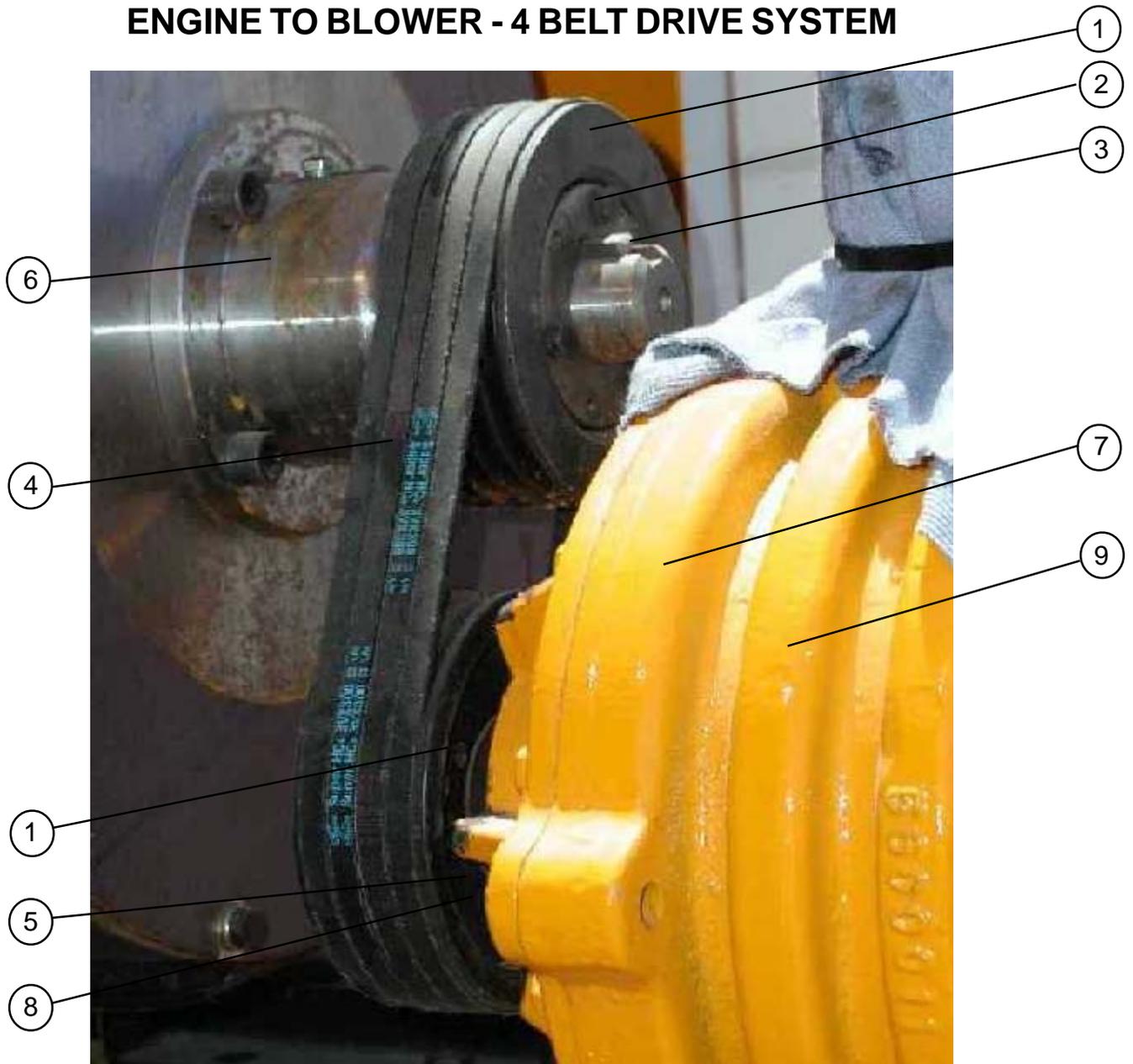
CONTROL PANEL



CONTROL PANEL

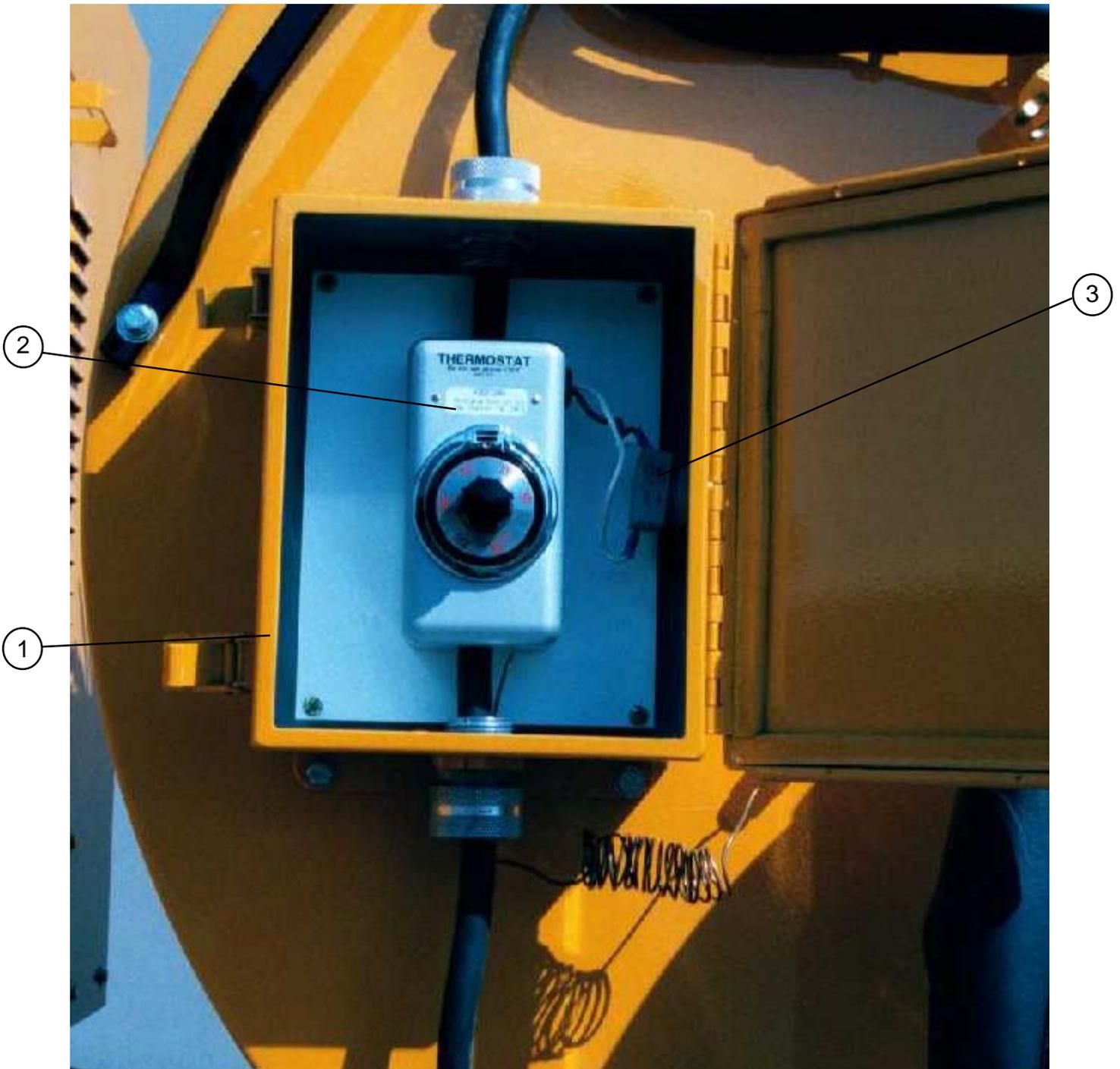
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	51695	1	CIRCUIT BREAKER 30 AMPS
2	50238	1	JUMPER
3	51694	1	CIRCUIT BREAKER 5 AMPS
4	91764	1	TEMPERATURE SWITCH GAUGE
5	91822	1	AMP METER
6	90537	1	SWITCH KEY
7	91854	1	TACHOMETER WITH HOUR METER
8	91780	1	HOUR METER
9	91837	1	COOLANT PRESSURE SWITCH GAUGE
10	91758	1	MAGNETIC SWITCH
11	91846	1	ENCLOSURE ASSEMBLY
12	91847	1	BACK PANEL
13	91869	1	OIL PRESSURE SWITCH GAUGE
14	91177	1	FUSE HOLDER
15	91032	1	CONTROL PANEL-PURCHASED COMPLETE
16	90453	1	2" 0-300 HYDRAULIC PRESSURE GAUGE
17	90625	1	ARROW BOARD & CONTROL BOX
18	91032	1	ENGINE CONTROL PANEL - PURCHASED

ENGINE TO BLOWER - 4 BELT DRIVE SYSTEM



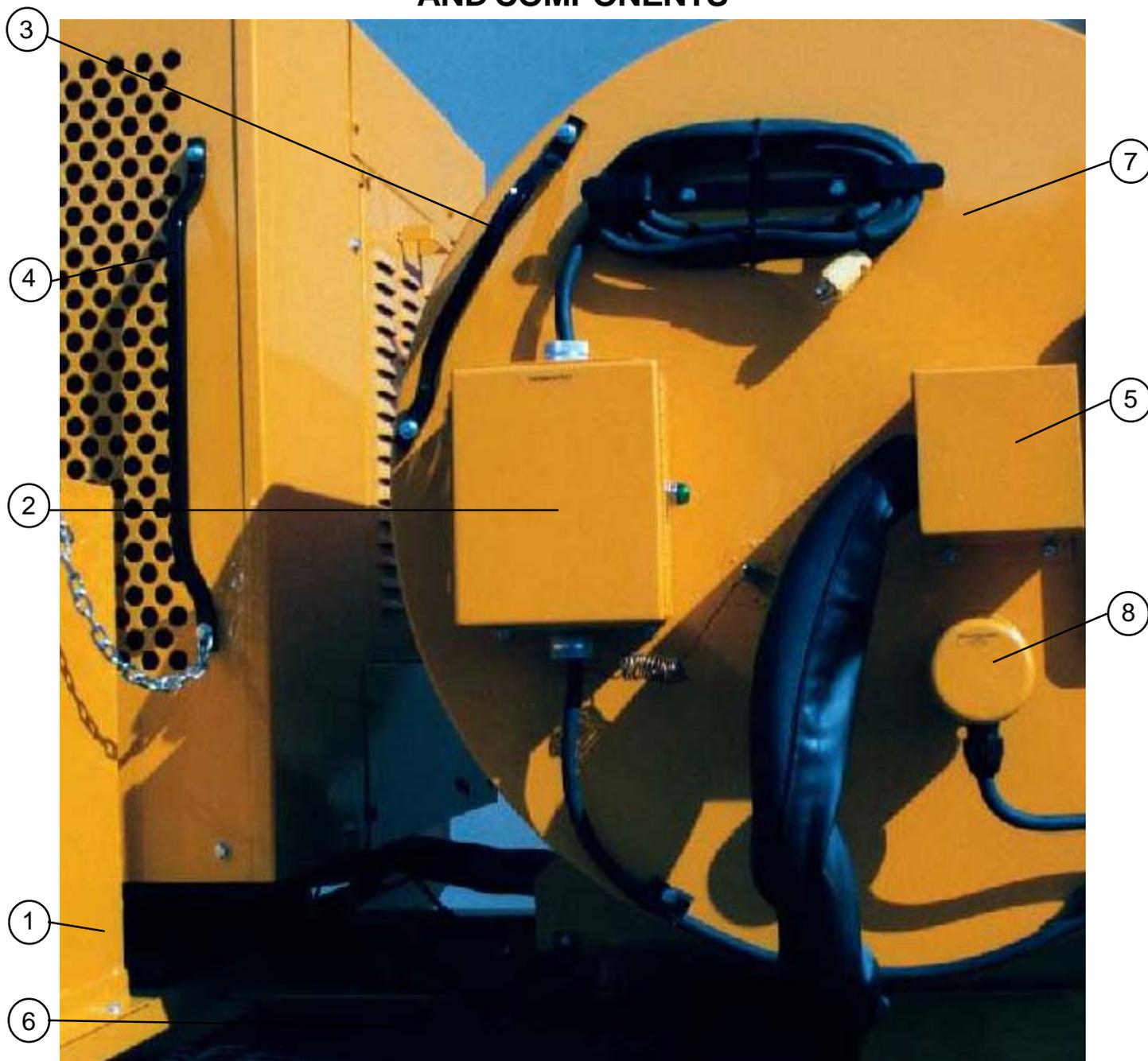
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91412	1	ENGINE BLOWER 4 GROOVE SHEAVES
2	91411	1	1-1/2" SDS BUSHING ENGINE
3	91326	1	ENGINE SHAFT KEY 3/8" X 3/8"
4	91409	4	ENGINE/BLOWER BELTS
5	91410	1	1-1/8" SDS BUSHING BLOWER
6	91335	1	BEARING SUPPORT STUB SHAFT
7	91660	1	BLOWER
8	91327	1	BLOWER KEY 3/16" X 1-7/8"
9	60191	0 oz.	OIL - ROTARY AIR BLOWER

THERMOSTAT AND THERMOSTAT BOX



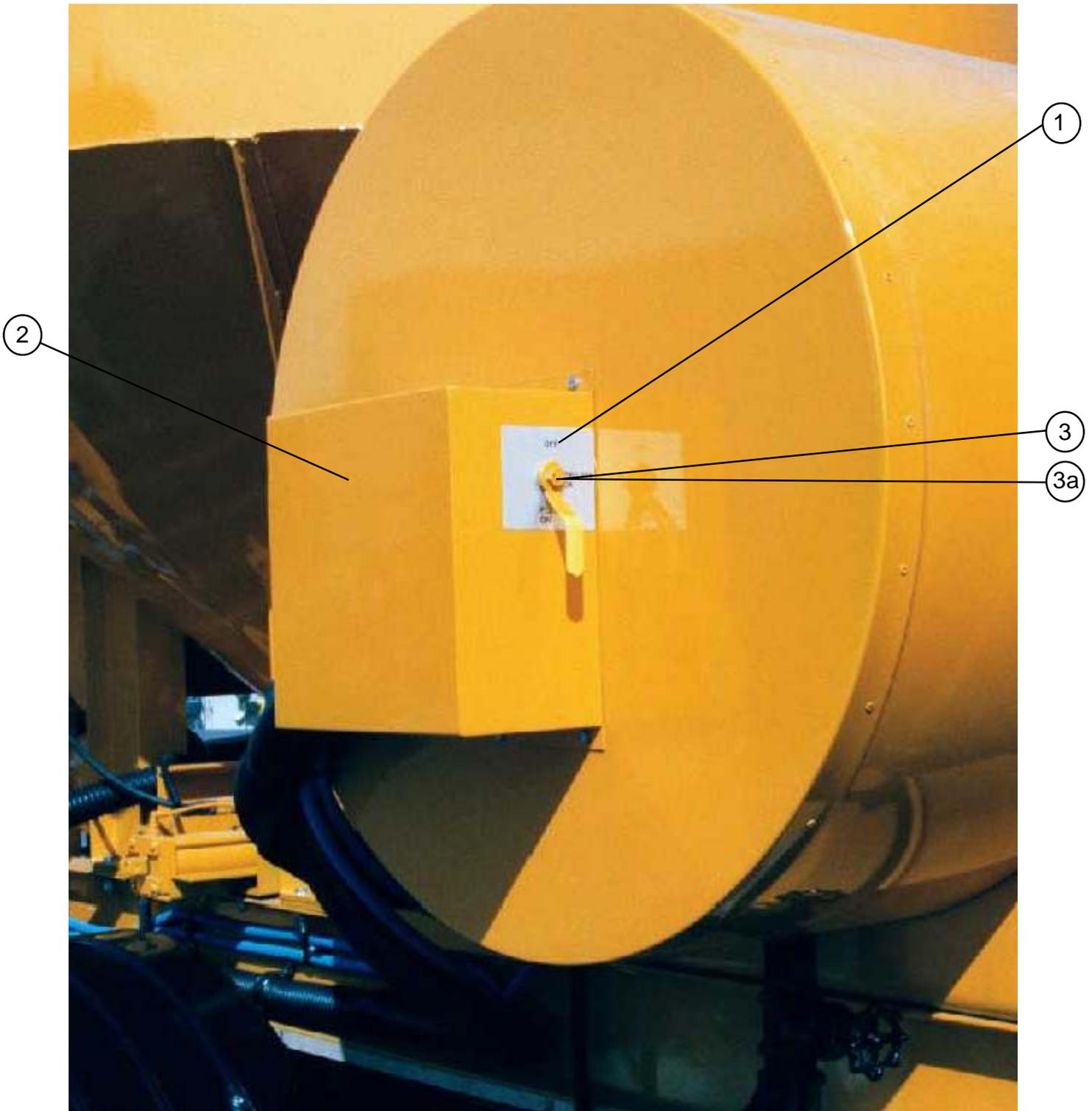
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91095	1	READY TO MOUNT THERMOSTAT ASSEMBLY
2	91215	1	THERMOSTAT
3	90542	1	LIGHT FIXTURE

PASSENGER SIDE VIEW OF EMULSION TANK AND COMPONENTS



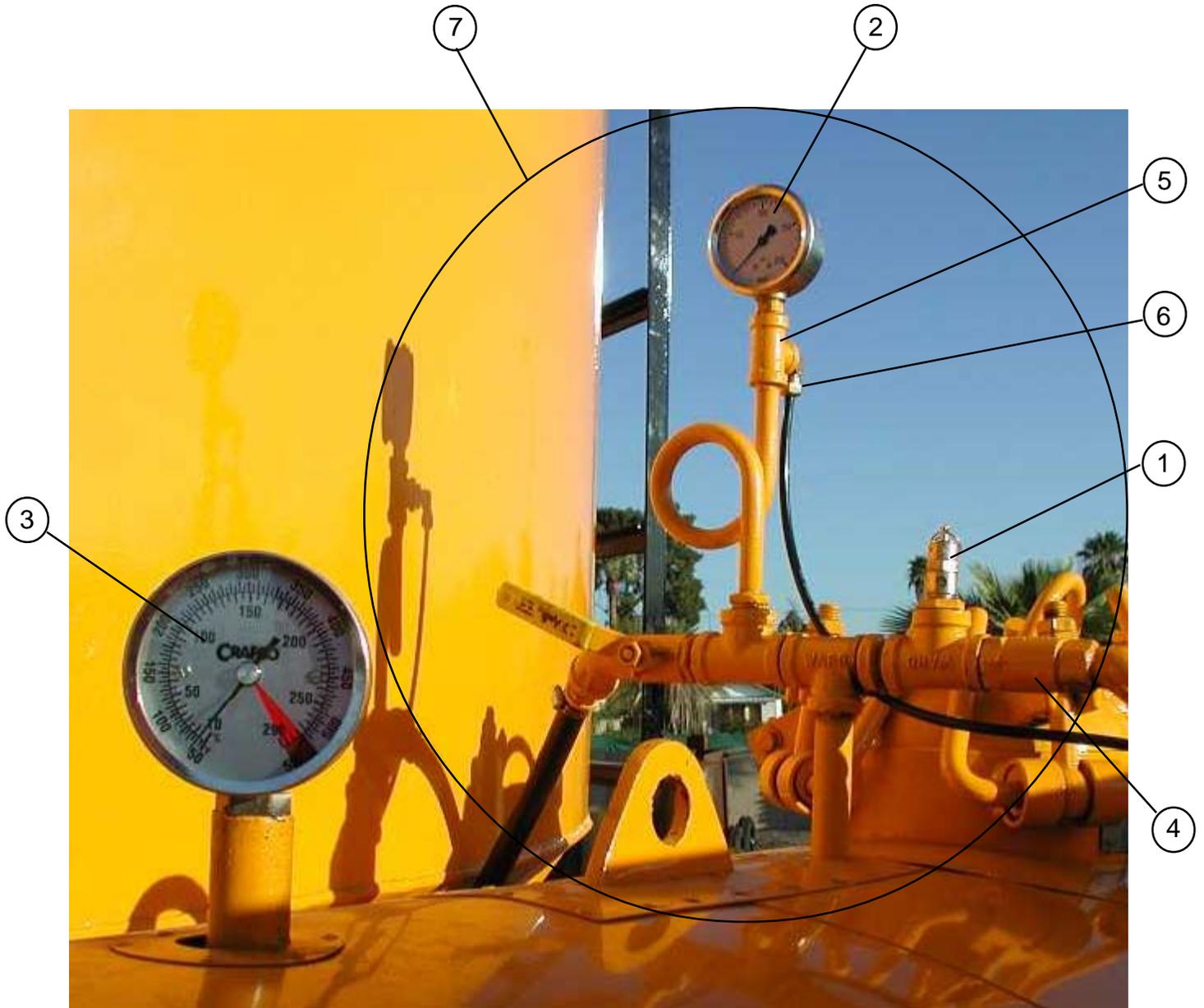
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	43594	1	26 GALLON DIESEL TANK ASSEMBLY
2	91095	1	READY TO MOUNT THERMOSTAT ASSEMBLY
3	91453	1	GRAB HANDLE SUPPORT RAIL-SHORT
4	91454	1	GRAB HANDLE SUPPORT RAIL-LONG
5	91455	1	EMULSION TANK HEAT SHIELD ASSEMBLY
6	91465	1	ACCESS PLATFORM STEP
7	91615	1	TANK 250 GALLON COMPLETE FATBOY
8	91799	1	EMULSION TANK HEATER

DRIVER'S SIDE OF THE EMULSION TANK AND COMPONENTS



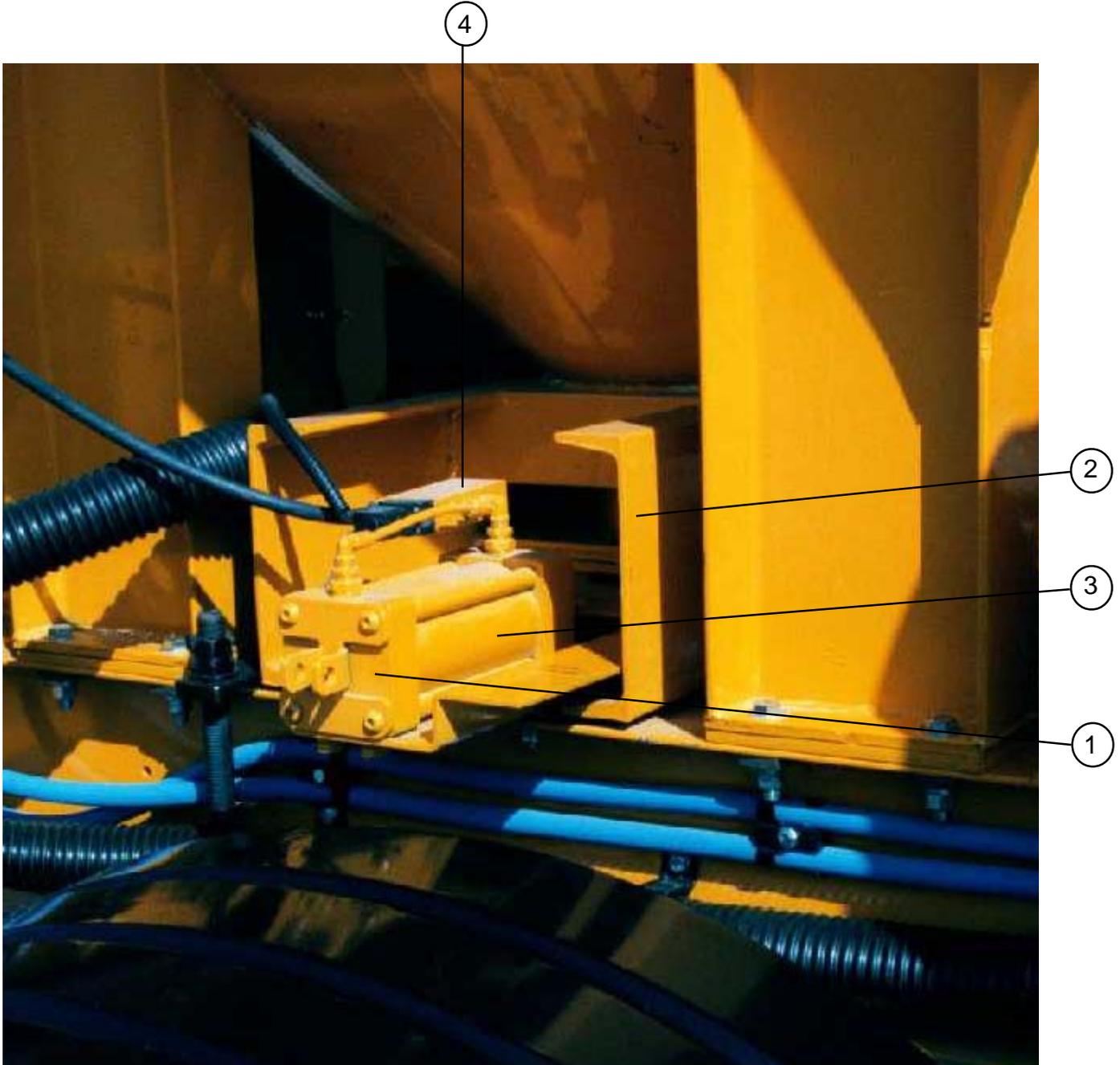
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91403	1	INDICATOR DECAL - EMULSION TANK
2	91460	1	LARGE EMULSION TANK HEAT SHIELD ASSEMBLY
3	91683	1	EMULSION CONTROL VALVE PIPE ASSEMBLY
3a	90618	1	5 PART BALL VALVE

EMULSION TANK PRESSURE GAUGE AND THERMOSTAT



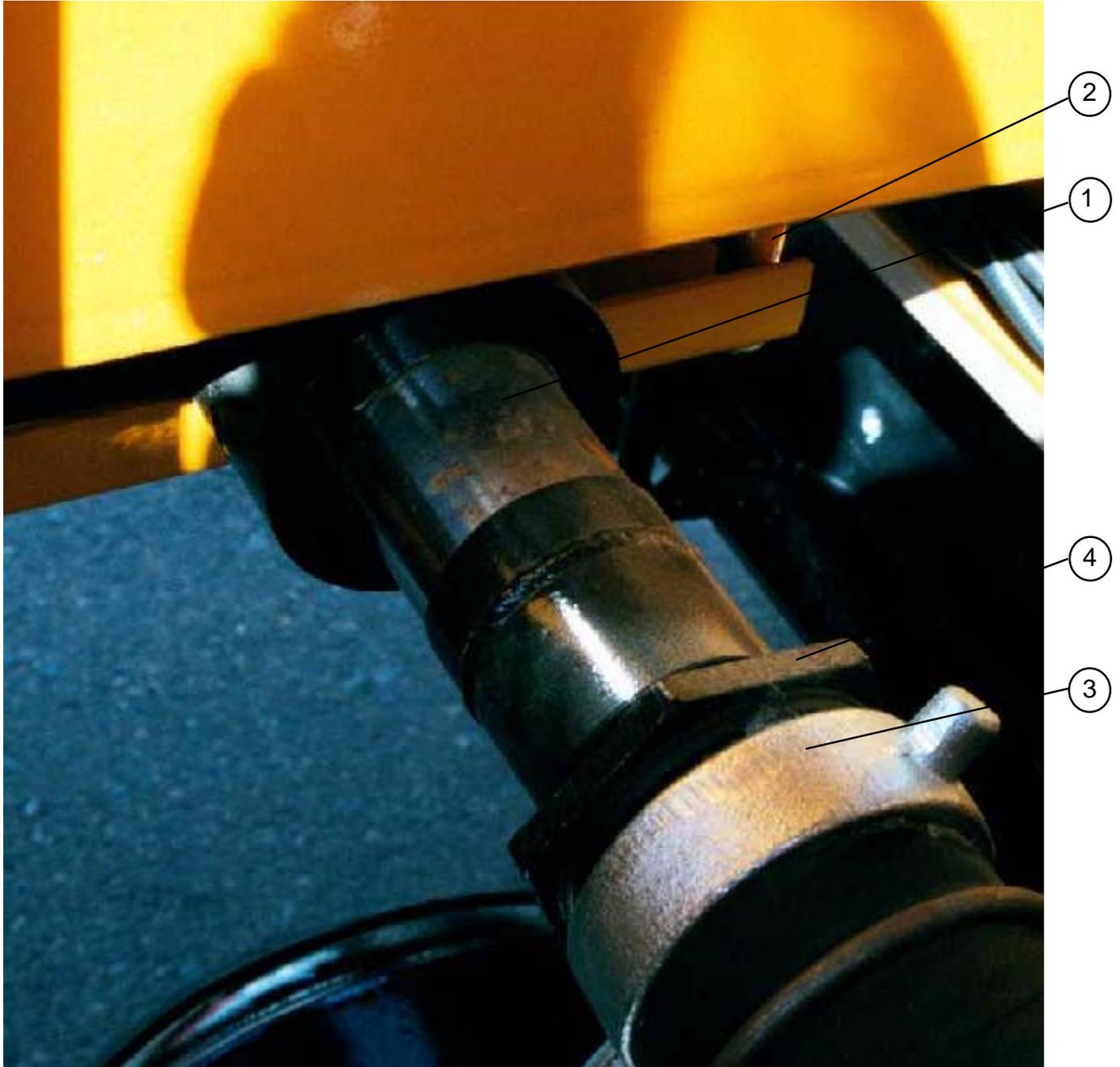
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	42629	1	SAFETY VALVE
2	29961	1	200 PSI PRESSURE GAUGE
3	41243	1	24" TEMPERATURE GAUGE BOTTOM MOUNT
4	90861	1	1/2" CHECK VALVE
5	28251	1	1/4" TEE
6	90896	1	AIR BRAKE FITTING 90°
7	90629	1	EMULSION TANK TOP VALVE ASSEMBLY

SLIDE CHANNEL WITH SOLENOID/AIR CYLINDER



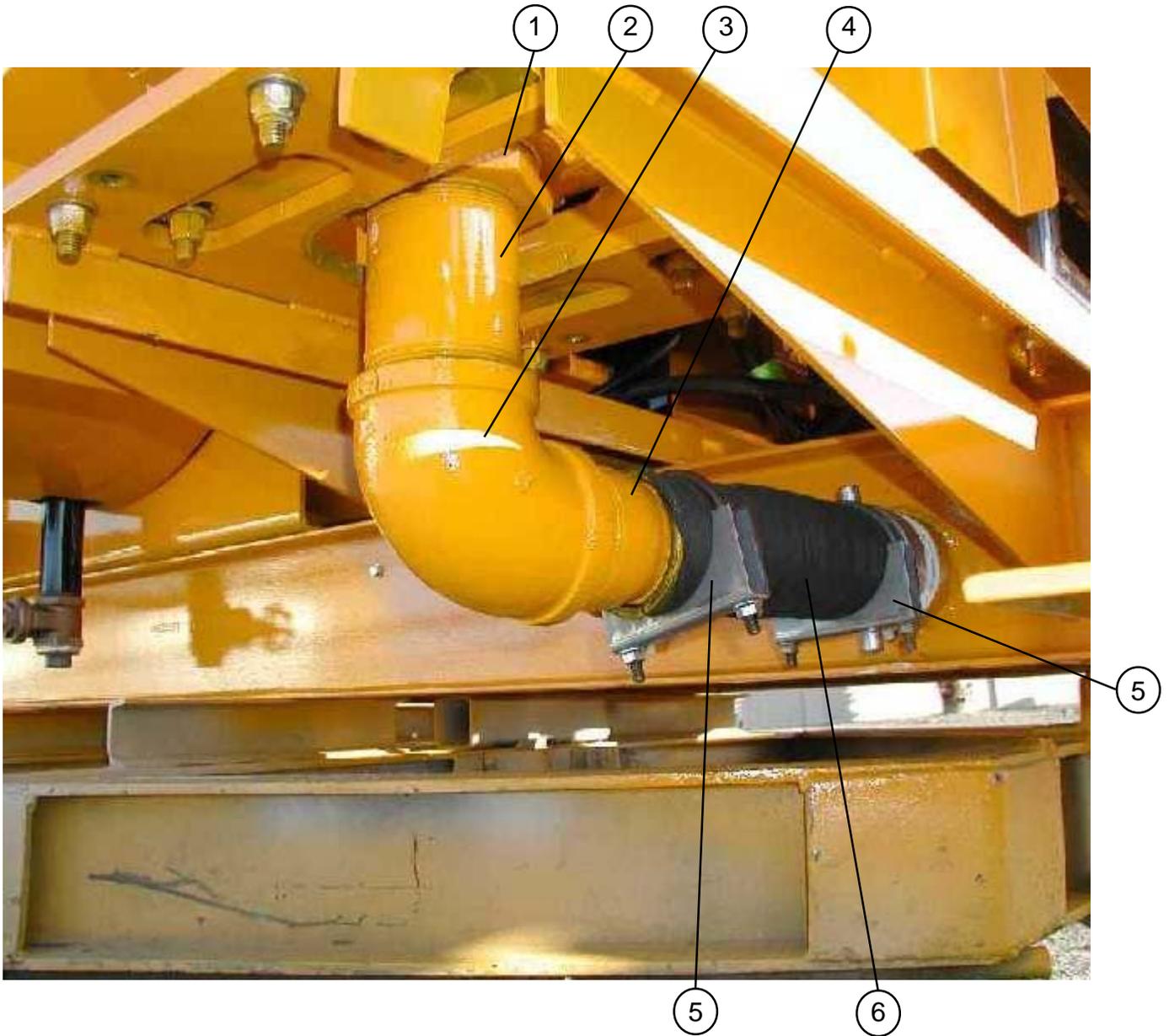
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90085	1	SLIDE CHANNEL - WITH SOLENOID/AIR CYLINDER
2	90089	1	SLIDE PLATE
3	90091	1	AIR CYLINDER FOR SLIDE PLATE
4	90092	1	AIR CYLINDER ACTUATOR SOLENOID VALVE

VENTURI



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90140	1	VENTURI
2	90141	1	VENTURI VERTICLE SPACER TUBE
3	90554	1	PIN PLUG/3" FEMALE COUPLER
4	28369	1	3" X 2-1/2" REDUCER BUSHING

BLOWER/BASE FRAME - PLUMBING - AIR FEED SYSTEM



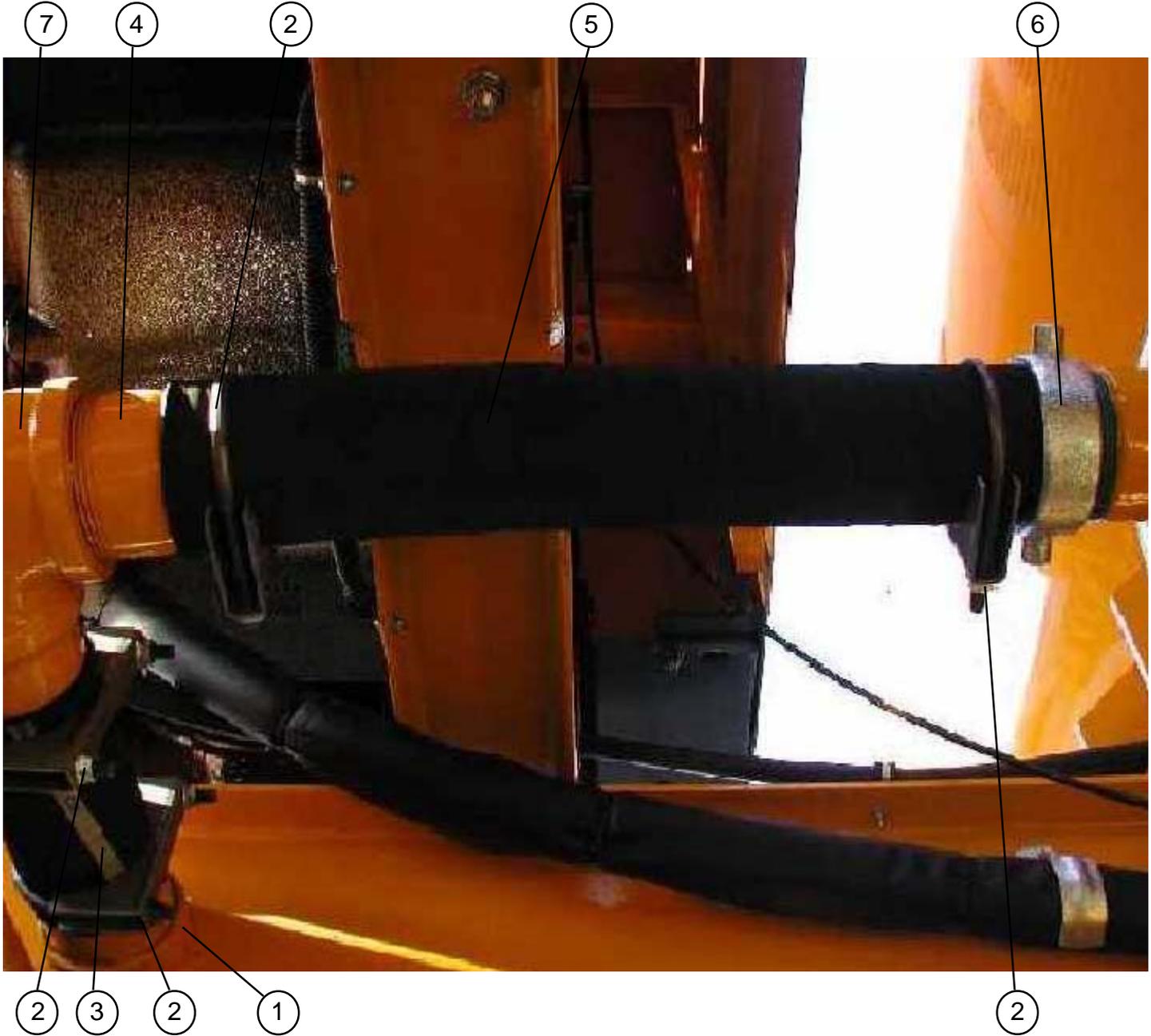
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	28364	1	4" X 3" BUSHING
2	28077	1	3" X 6" BLACK PIPE NIPPLE
3	28215	1	3" 90° ELBOW
4	91344	1	3" KING NIPPLE
5	25952	1	3-1/2" U-BOLT MUFFLER CLAMP
6	91662	1	3" WILDCAT HOSE X 10.5" LONG

ROTARY AIR BLOWER - RELIEF VALVE



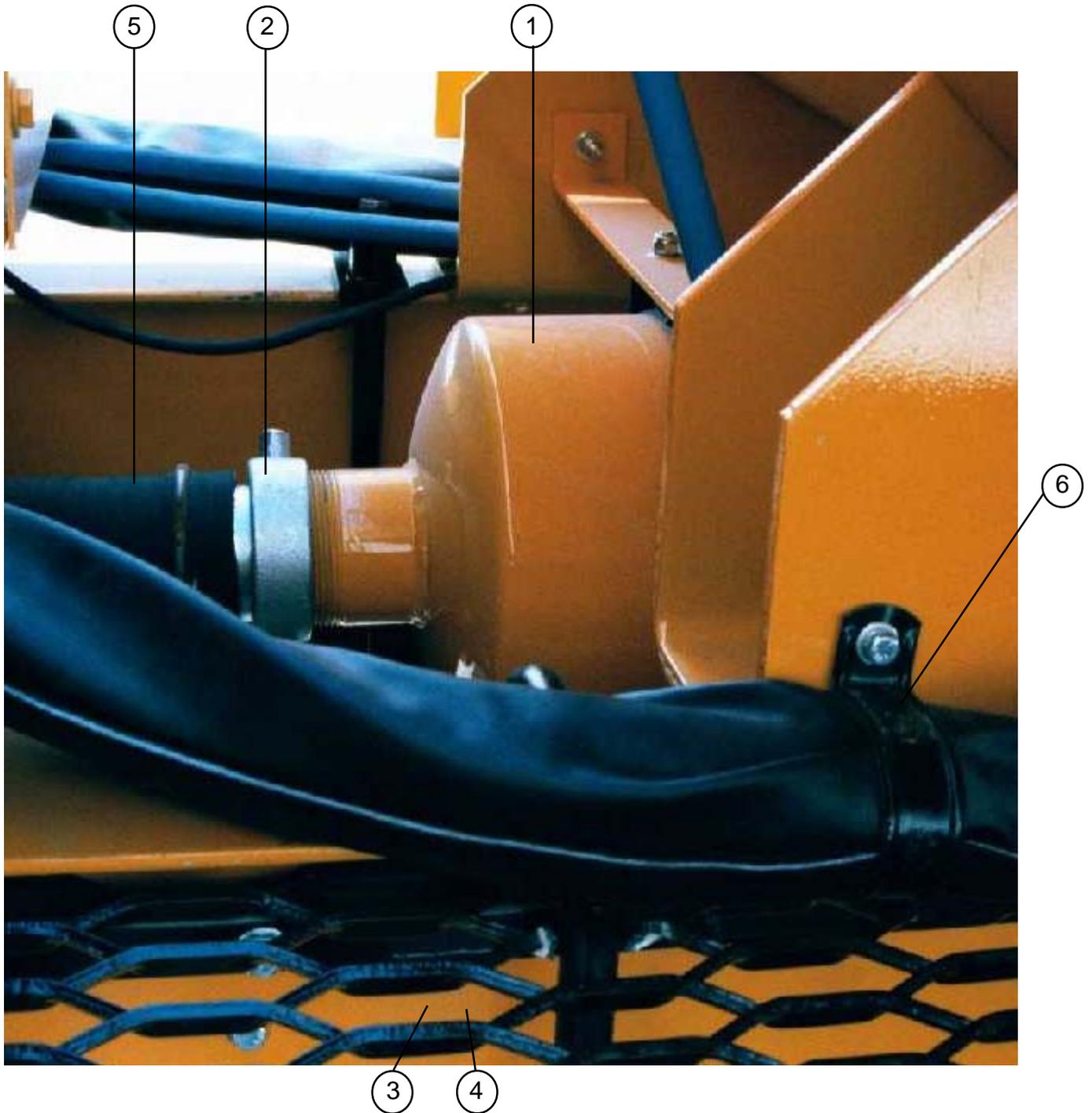
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91661	1	BLOWER RELIEF VALVE - 10 PSI

INSIDE BASE FRAME TO SILENCER - PLUMBING



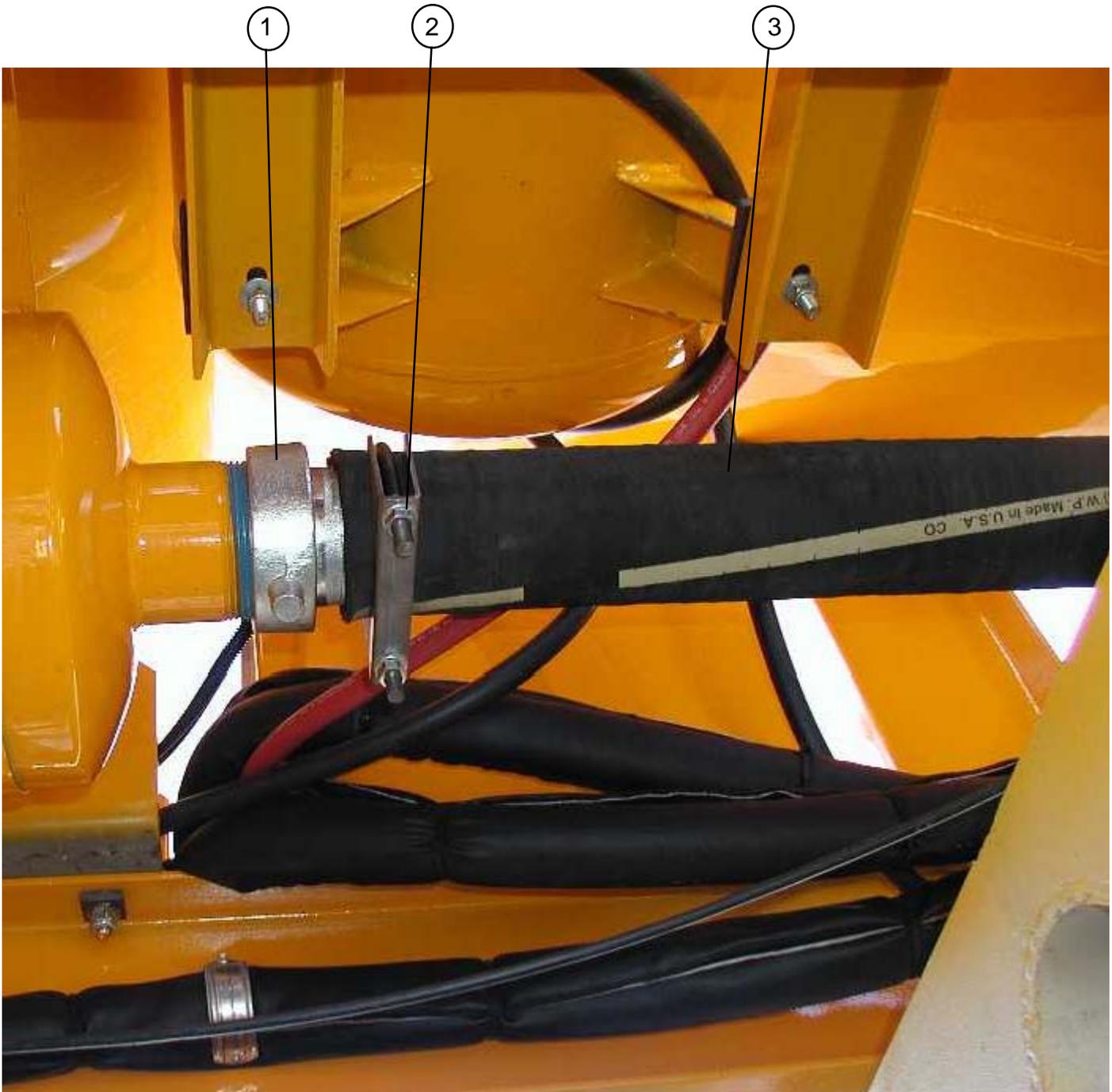
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	28077	1	3" X 6" NIPPLE
2	25952	1	MUFFLER CLAMP
3	91339	1	3" WILDCAT HOSE X 8.5"
4	91344	1	3" KING NIPPLE
5	91656	1	3" WILDCAT HOSE X 18.5"
6	90554	1	3" FEMALE COUPLER
7	28259	1	3" X 2" X 3" TEE

SILENCER AND PLUMBING - AIR SYSTEM



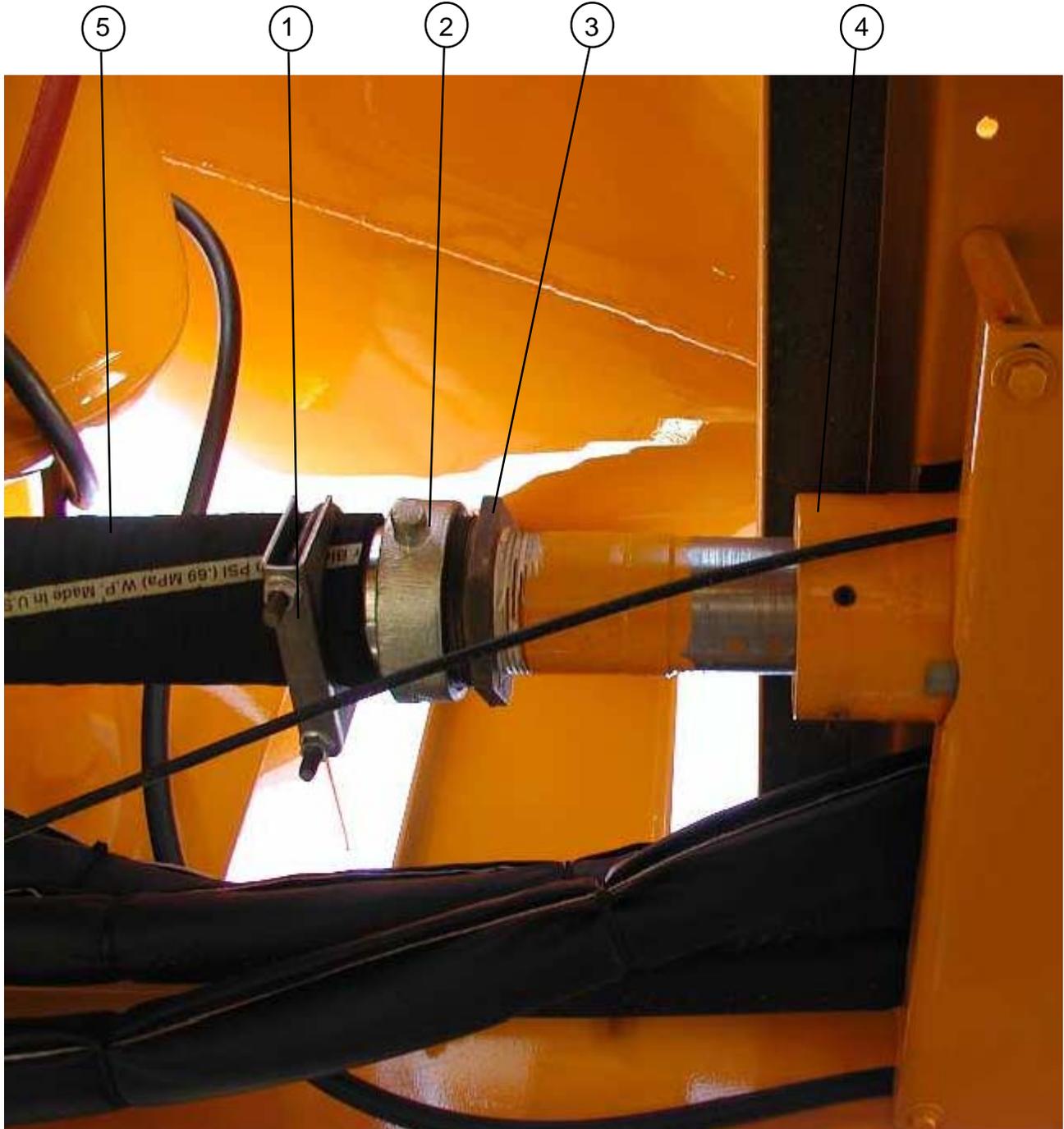
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	60116	1	CHAMBER ABSORPTION SILENCER
2	90554	1	PIN PLUG/3" FEMALE COUPLER
3	91465	1	ACCESS PLATFORM STEP
4	91475	1	ACCESS PLATFORM EXTENSION LADDER (NOT SHOWN)
5	91658	1	3" WILDCAT AIR HOSE X 20" LONG
6	91857	1	2" EMT CONDUIT CLAMP

SILENCER AND PLUMBING - AIR SYSTEM



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90554	1	3" FEMALE LUG COUPLER
2	25952	1	3-1/2" U-BOLT MUFFLER CLAMP
3	91657	1	3" WILDCAT HOSE X 21.0"

SILENCER PLUMBING TO VENTURI - AIR SYSTEM



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	25952	1	3-1/2" U-BOLT MUFFLER CLAMP
2	90554	1	3" FEMALE LUG COUPLER
3	28369	1	3" X 2-1/2" REDUCER BUSHING
4	90140	1	VENTURI
5	91657	1	3" WILDCAT HOSE X 21.0" LONG

VENTURI PLUMBING TO AGGREGATE FEED HOSE



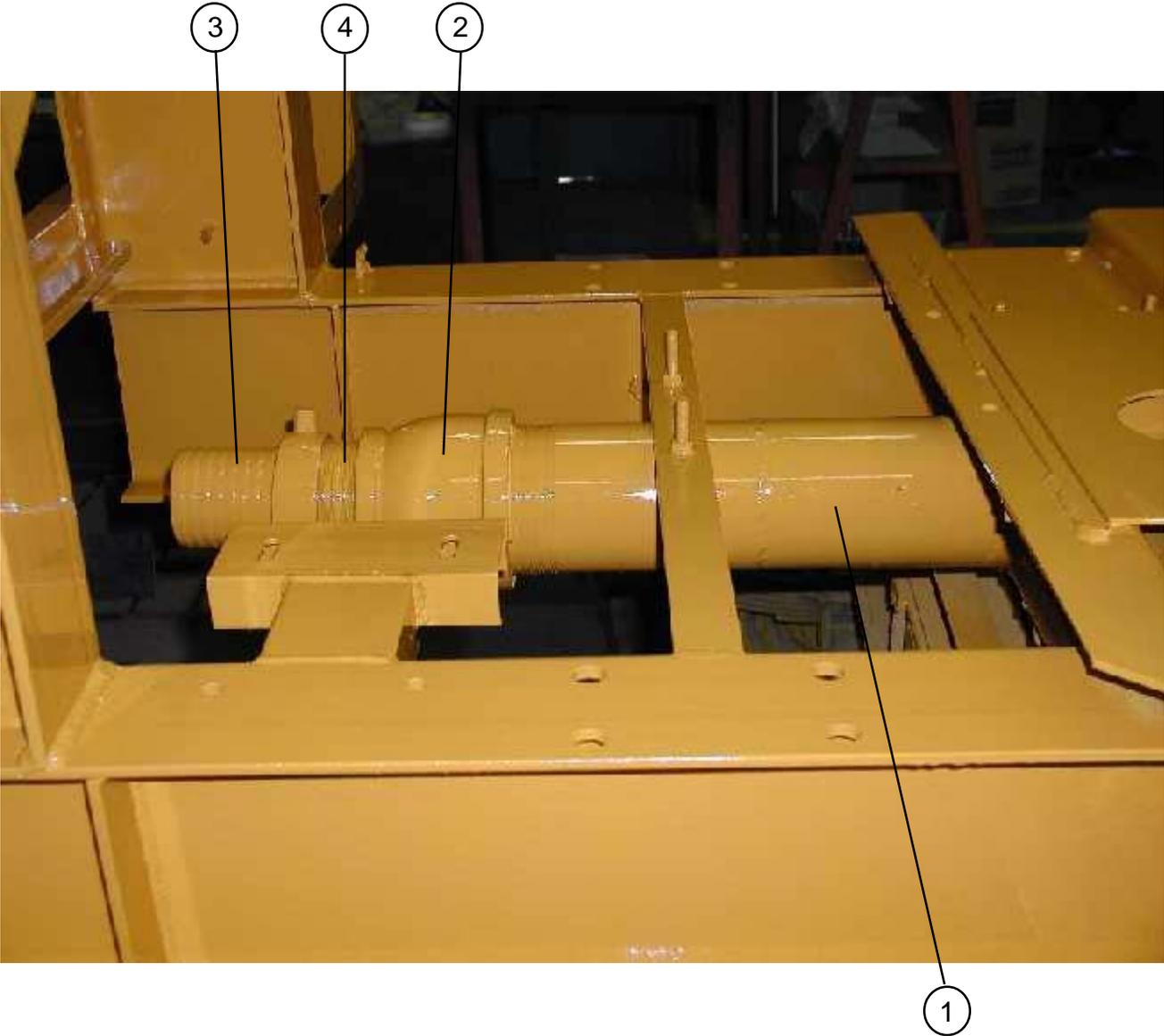
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	27899	1	4-1/2" X 3" BELL REDUCER
2	28010	1	3" CLOSED NIPPLE
3	90554	1	3" FEMALE LUG COUPLER
4	91855	1	HOSE CLAMP 3" TIGER CLAMP
5	91157	1	3" AGGREGATE HOSE

BLOWER TO THE BASE FRAME PLUMBING - AIR SYSTEM



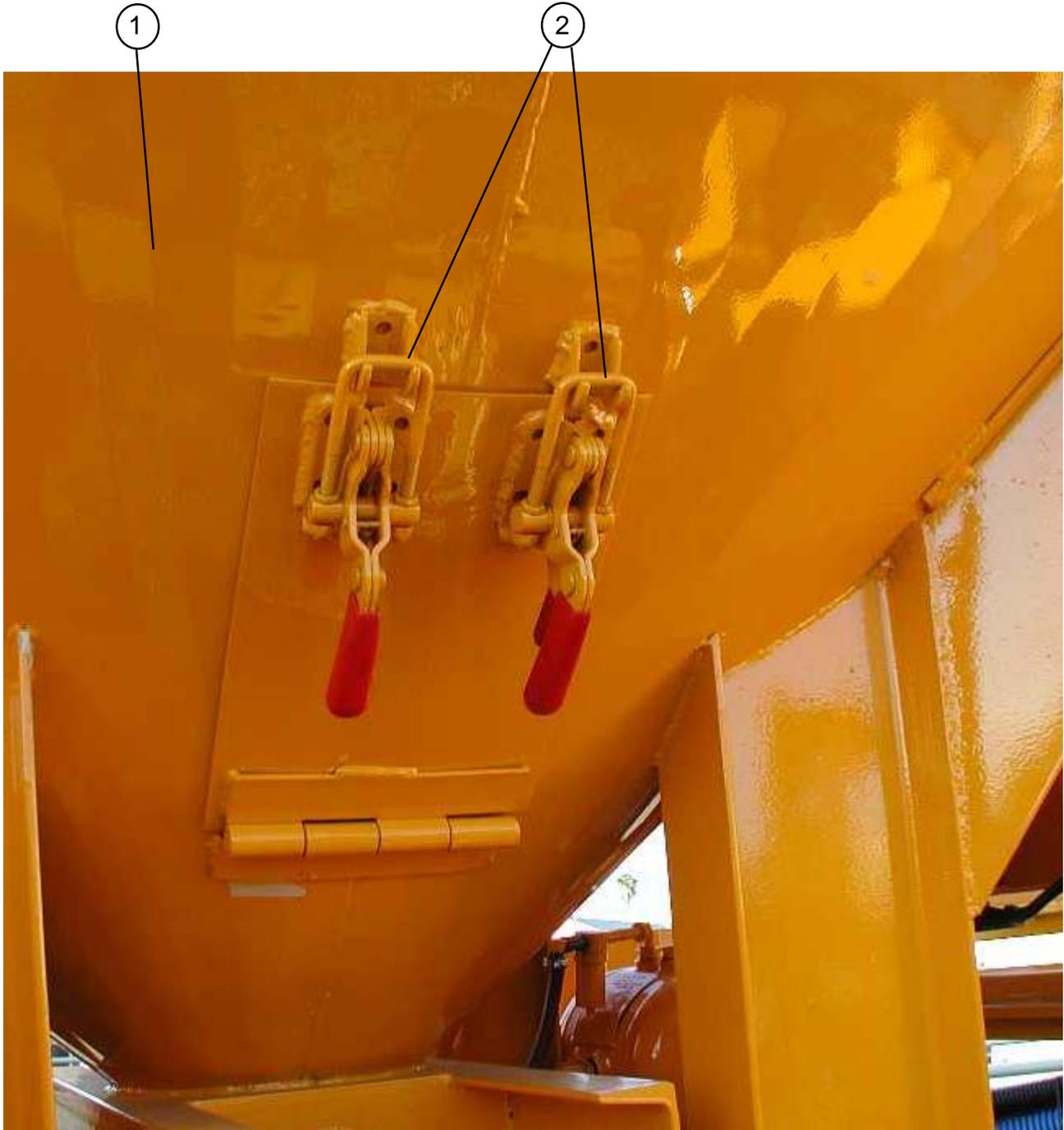
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	28077	1	3" X 6" BLACK PIPE NIPPLE
2	28215	1	3" 90° DEG ELBOW
3	91345	1	3" KING NIPPLE
4	91662	1	3" WILDCAT HOSE X 10.5" LONG
5	25952	2	3-1/2" U-BOLT MUFFLER CLAMP

VENTURI PLUMBING TO AGGREGATE HOSE - AIR SYSTEM



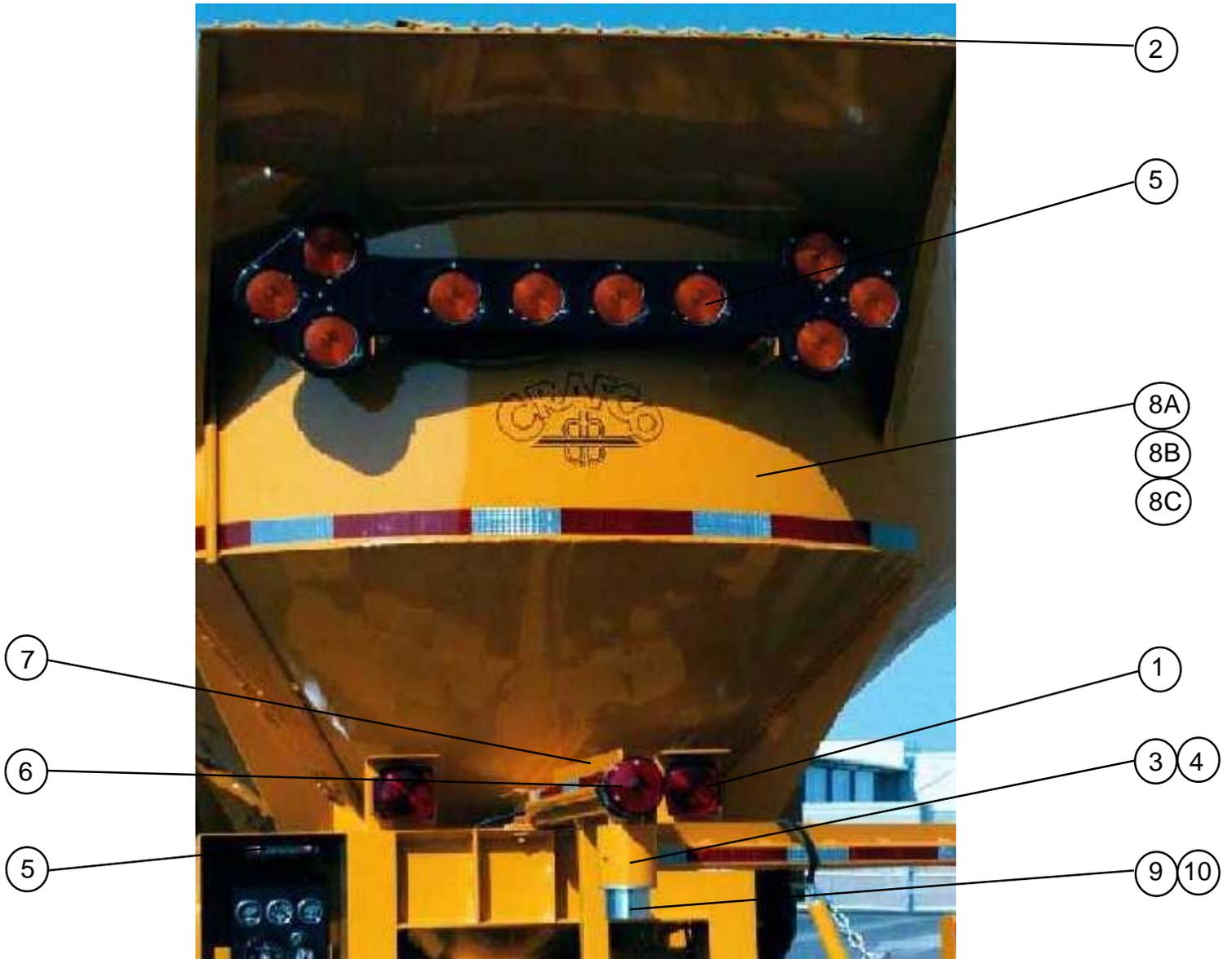
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90140	1	VENTURI
2	27899	1	4" X 3" REDUCER
3	90554	1	3" FEMALE LUG COUPLER
4	28010	1	3" CLOSED NIPPLE

AGGREGATE HOPPER - DRIVER'S SIDE



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91610	1	6.5 CUBIC YARD HOPPER
2	90607	1	2000 LBS. PULL CLAMP WITH LOCK

AGGREGATE HOPPER & COMPONENT - REAR



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90548	1	TAIL LIGHT WITH DOUBLE BULB
2	90561	1	AGGREGATE HOPPER 2" WIRE CLOTH
3	90576	1	LARGE TAPER BEARING
4	90577	1	LARGE TAPER BEARING RACE
5	90625	1	ARROW BOARD AND CONTROL BOX
6	91134	1	CYCLOPS TAIL LIGHT (BOOM)
7	91540	1	SECTION BOOM - BOLT ON
8A	91560	1	AGGREGATE HOPPER 6 CUBIC YARDS
8B	91612	1	AGGREGATE HOPPER 5 CUBIC YARDS
8C	91585	1	AGGREGATE HOPPER 4 CUBIC YARDS
9	90581	1	OIL SEAL - LARGE
10	90661	1	3" I.D. BEARING ASSEMBLY COVER

FUEL TANK - DRIVER'S SIDE



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	43594	1	26 GALLON DIESEL TANK ASSEMBLY
2	91015	1	ENGINE COVER PURCHASED

DIESEL FLUSHING TANK



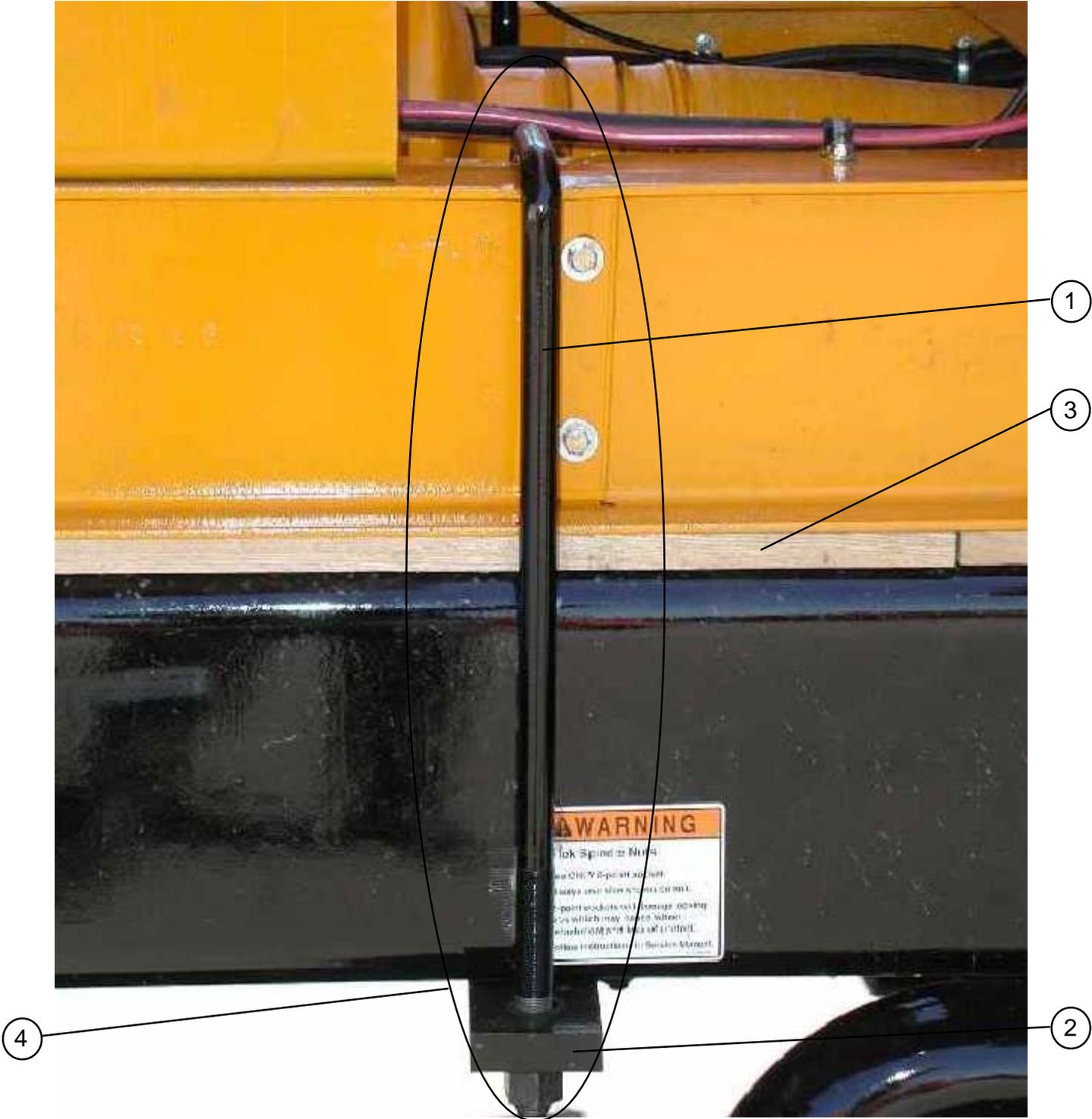
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90860	1	30 GALLON DIESEL FLUSH TANK

VIBRATOR KIT - VIBRATOR



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91431	1	AIR-POWERED VIBRATOR
1A	91430	1	AIR-POWEREC VIBRATOR KIT - REFERENCE ONLY

FRAME TO TRUCK (MOUNTING KIT) - "U" BOLTS



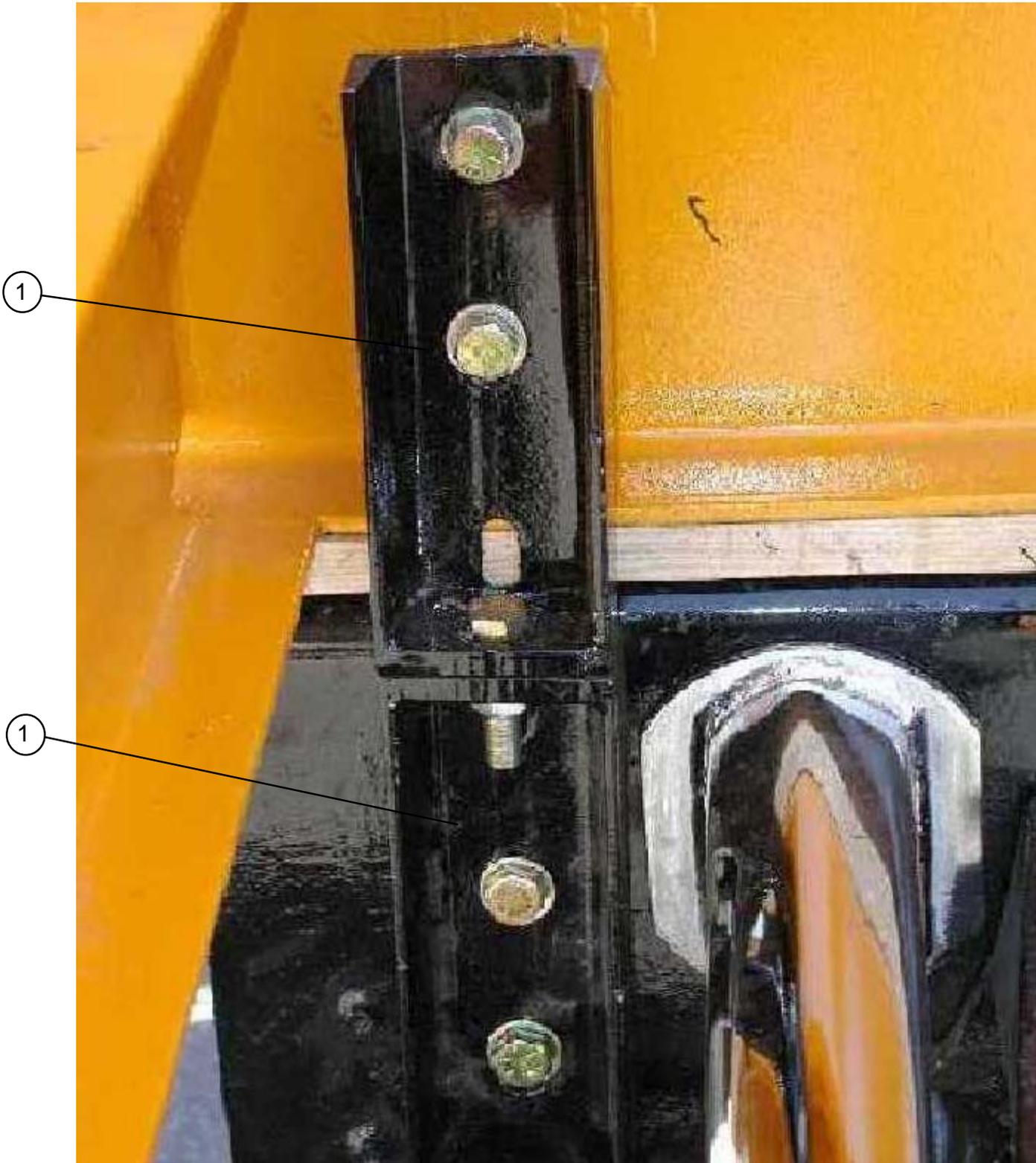
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91695	6	TRUCK TIE DOWN U-BOLT
2	91688	6	"U"-BOLT TIE DOWN PLATE
3	91689	2	OAK SLAT 1" X 4"
4	91695K	1	TRUCK TIE DOWN MOUNTING KIT

FRAME TO TRUCK (MOUNTING KIT) - OAK SLAT



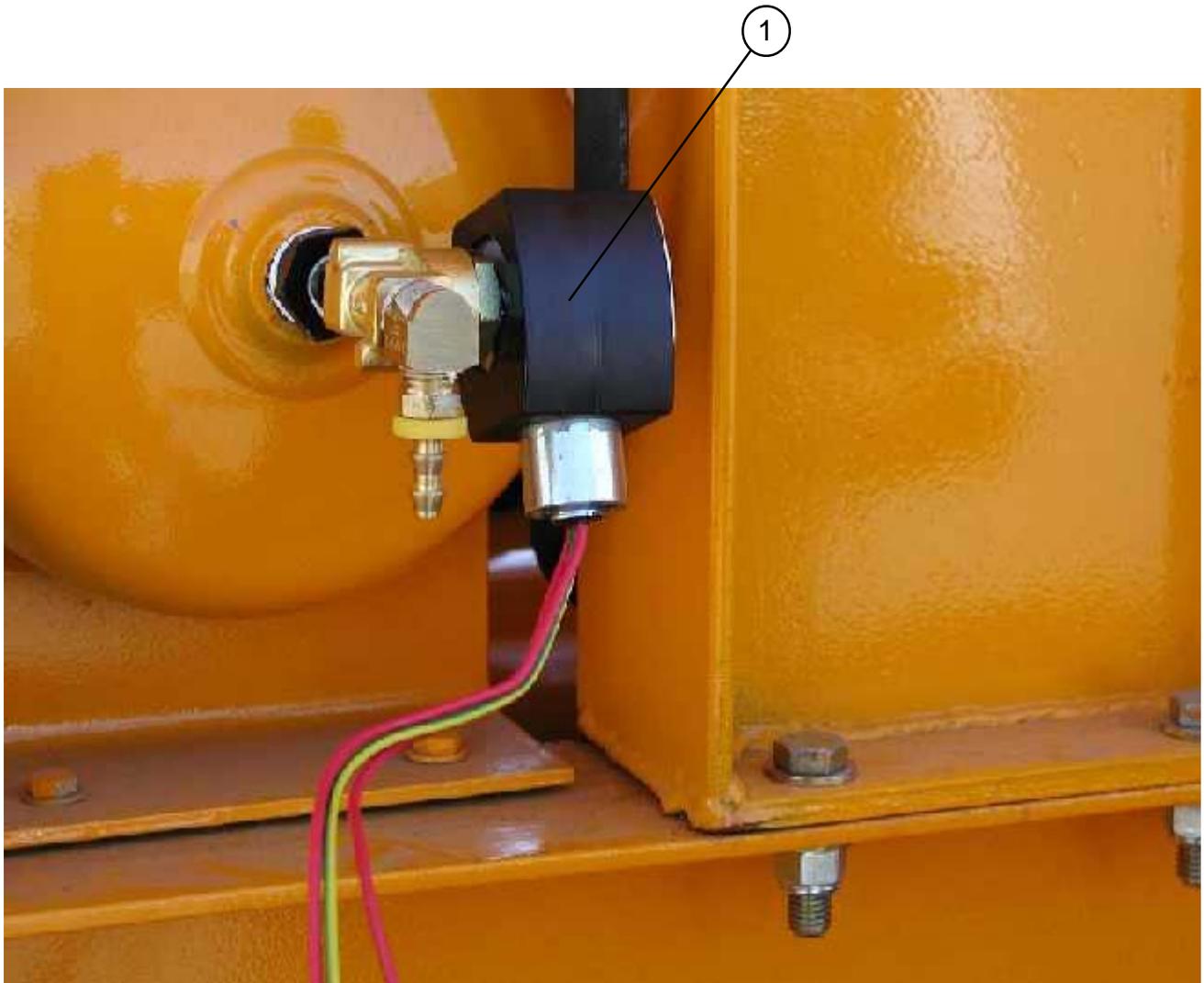
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91695	6	TRUCK TIE DOWN U-BOLT
2	91688	6	"U"-BOLT TIE DOWN PLATE
3	91689	2	OAK SLAT 1" X 4"

TRUCK MOUNT (FRAME TO TRUCK) - REAR TIE DOWNS



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91698	4	VERTICAL CHANNEL SUPPORT LEG
2	91696	4	MOUNTING BRACKET PLATE (NOT SHOWN)

VIBRATOR KIT - SOLENOID - SLIDE CYLINDER AIR TANK



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91434	1	SOLENOID ELECTRIC 1/4" 2-WAY - 12 VOLT

EMULSION TANK GAUGE HOLDER



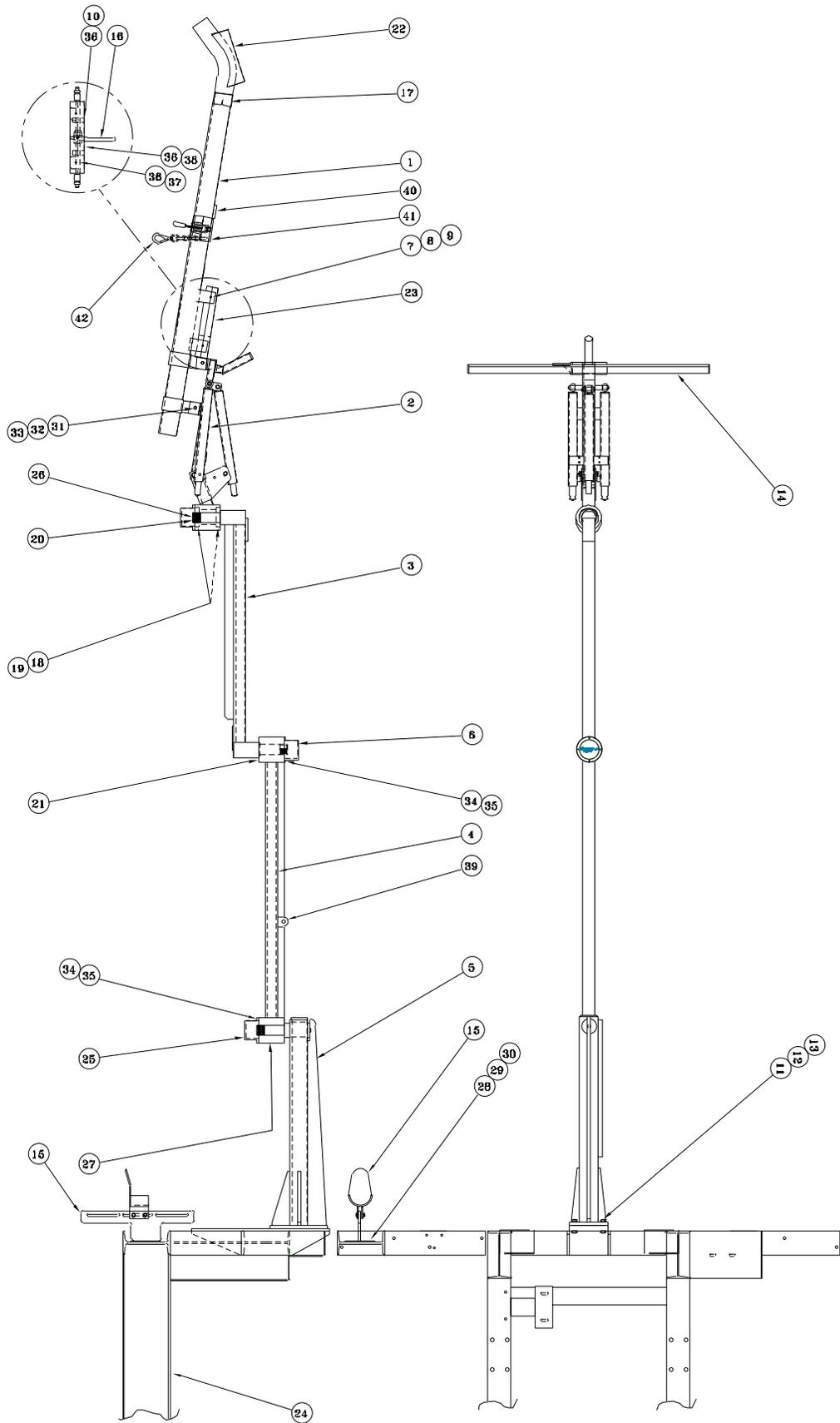
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91830	1	EMULSION TANK GAUGE DIPSTICK
2	90235	1	DIPSTICK HEIGHT GAUGE HOLDER

EMULSION TANK GAUGE



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91830	1	EMULSION TANK GAUGE DIPSTICK (REFERENCE - SEE DECAL ON FRONT OF EMULSION TANK)

AIR STREAM T-M SPRAY INJECTION PATCHER COBRA BOOM OUT OF THE REAR - PART NUMBERS 91501APB



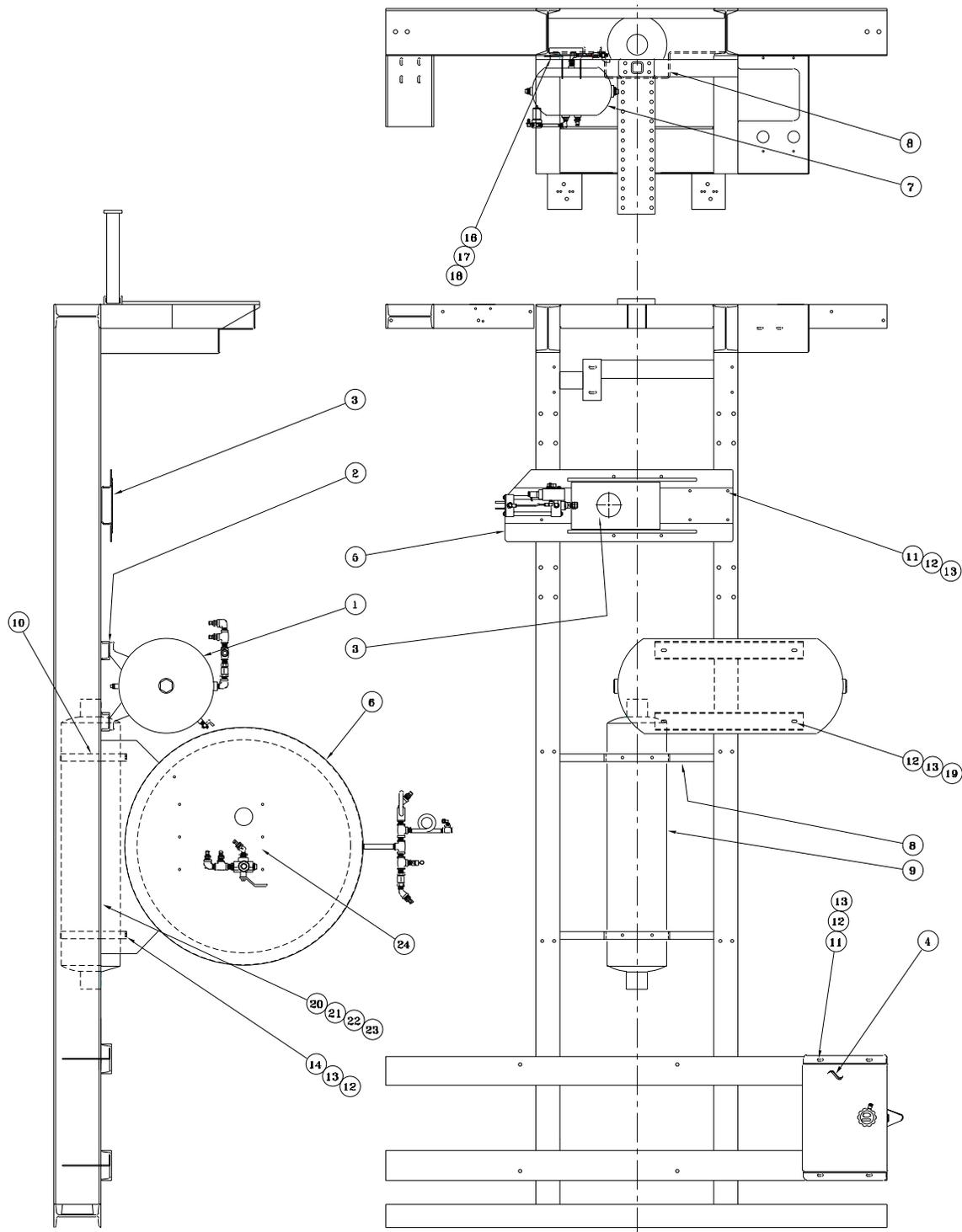
AIR STREAM T-M SPRAY INJECTION PATCHER COBRA BOOM OUT OF THE REAR - PART NUMBERS 91501APB

NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91073	1	3" PIPE WELDING ASSEMBLY
2	91350	1	SPRING ARM ASSEMBLY
3	91545	1	BOOM SECTION 2ND COMPLETE
4	91535	1	1ST BOOM SECTION
5	91540	1	SECTION BOOM - BOLT-ON
6	90661	2	3" ID BEARING COVER
7	28702	2	1/4" X 1" HEX HEAD BOLT
8	28670	4	1/4" FLAT WASHER
9	28524	2	1/4" ESNA LOCK NUT
10	32513	1	TOGGLE SWITCH
11	28649	6	1/2" LOCK WASHER
12	27984	12	1/2" GR8 FLAT WASHER
13	27957	8	1/2" X 1-3/4" HEX HEAD BT GRADE 8
14	91396	1	HANDLE ASSEMBLY
15	91578	1	2ND SECTION SUPPORT BOOM ASSEMBLY
16	91700	1	EMULSION REGULATION VALVE
17	25953	1	4" MUFFLER CLAMP
18	90576	6	LARGE TAPER BEARING
19	90577	6	LARGE TAPER BEARING RACE
20	91722	3	LARGE CRENELLATED NUT
21	90581	3	LARGE OIL SEAL
22	91220	1	3" BOX 45 DEGREE ELBOW
23	91230	1	COMPLETE ASSEMBLY CONTROL CONSOLE
24	91505	1	AIR STREAM T-M FRAME
25	90508	1	LARGE GREASE CAP-STEEL

**AIR STREAM T-M SPRAY INJECTION PATCHER COBRA BOOM
OUT OF THE REAR - PART NUMBERS 91501APB**

NUMBER	PART NUMBER	QTY	DESCRIPTION
26	29641	3	1/8" X 2-1/2" COTTER PIN
27	32026	3	1/8" NPT GREASE ZERK
28	28717	4	5/16" X 1-1/4" HEX HEAD BOLT
29	28525	4	5/16" ESNA LOCK NUT
30	28671	8	5/16" FLAT WASHER
31	28732	2	3/8" 1-1/4" HEX HOLD BOLT
32	28526	2	3/8" ESNA LOCK NUT
33	28634	4	3/8" FLAT WASHER
34	28630	6	#8 STAR LOCK WASHER
35	28826	6	8-32 X 1/2" ROUND HEAD SCREW
36	91723	2	SWTCH COVER BOOT
37	50719	1	TOGGLE SWITCH
38	32513	1	TOGGLE SWITCH
39	31131	1	ACTUATOR LUG
40	37032	1	1/4" X 1-1/8" KEY
41	91312	1	AGGREGATE BOOM CLAMP ASSEMBLY
42	91648	2	BOTTOM STOW SAFETY CHAIN ASSEMBLY

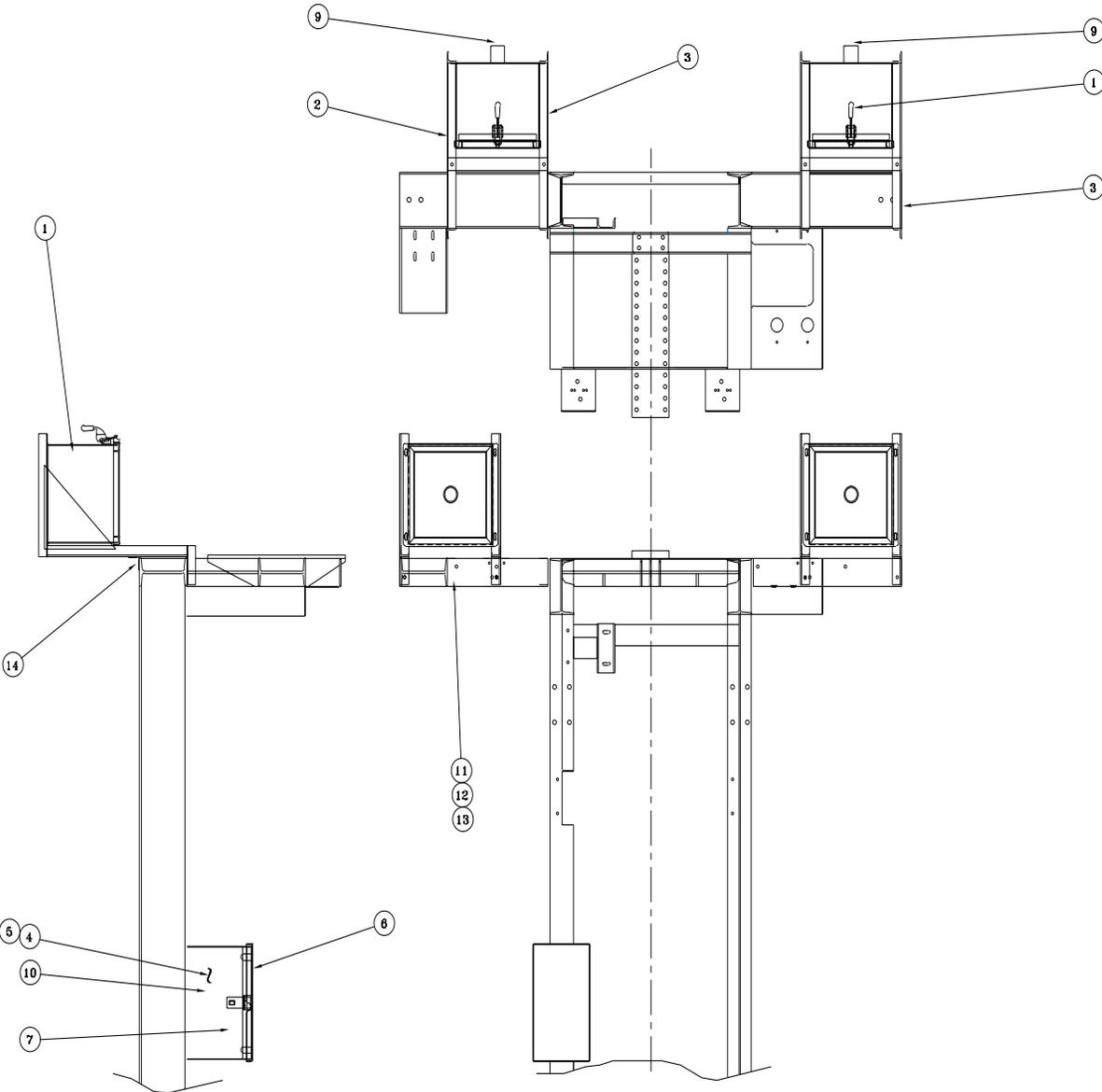
AIR STREAM T-M SPRAY INJECTION PATCHER BASE FRAME & COMPONENTS - PART NUMBERS 91501BPB



AIR STREAM T-M SPRAY INJECTION PATCHER BASE FRAME & COMPONENTS - PART NUMBERS 91501BPB

NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90860	1	30 GALLON DIESEL FLUSH TANK
2	43876	4	MOUNTING PAD
3	90089	1	SLIDE PLATE
4	43594	1	26 GALLON DIESEL TANK ASSEMBLY
5	90085	1	SLIDE CHANNEL WITH SOLENOID
6	91615	1	250 GALLON FATBOY WITH INSTALLATION
7	90124	1	AIR STORAGE TANK ASSEMBLY
8	91638	2	SILENCER SUPPORT BRACKET
9	60116	1	CHAMBER ABSORPTION SILENCER
10	91708	2	MOUNTING RING CLAMP
11	28732	12	3/8" X 1-1/4" HEX HEAD BOLT
12	28634	34	3/8" FLAT WASHER
13	28526	18	3/8" ESNA LOCK NUT
14	28731	4	3/8" X 1" HEX HEAD BOLT
15	N/A	N/A	N/A
16	28716	4	5/16" X 1" HEX HEAD BOLT
17	28671	8	5/16" FLAT WASHER
18	28525	4	5/16" ESNA LOCK NUT
19	28736	4	3/8" X 2-1/2" HEX HEAD BOLT
20	29023	4	1/2" X 2" GRADE 8 HEX HEAD BOLT
21	27984	8	1/2" GRADE 8 FLAT WASHER
22	27983	4	5/8" GRADE 8 FLAT WASHER
23	28528	4	1/2" ESNA LOCK NUT
24	91460	1	LARGE EMULSION TANK HEAT SHIELD

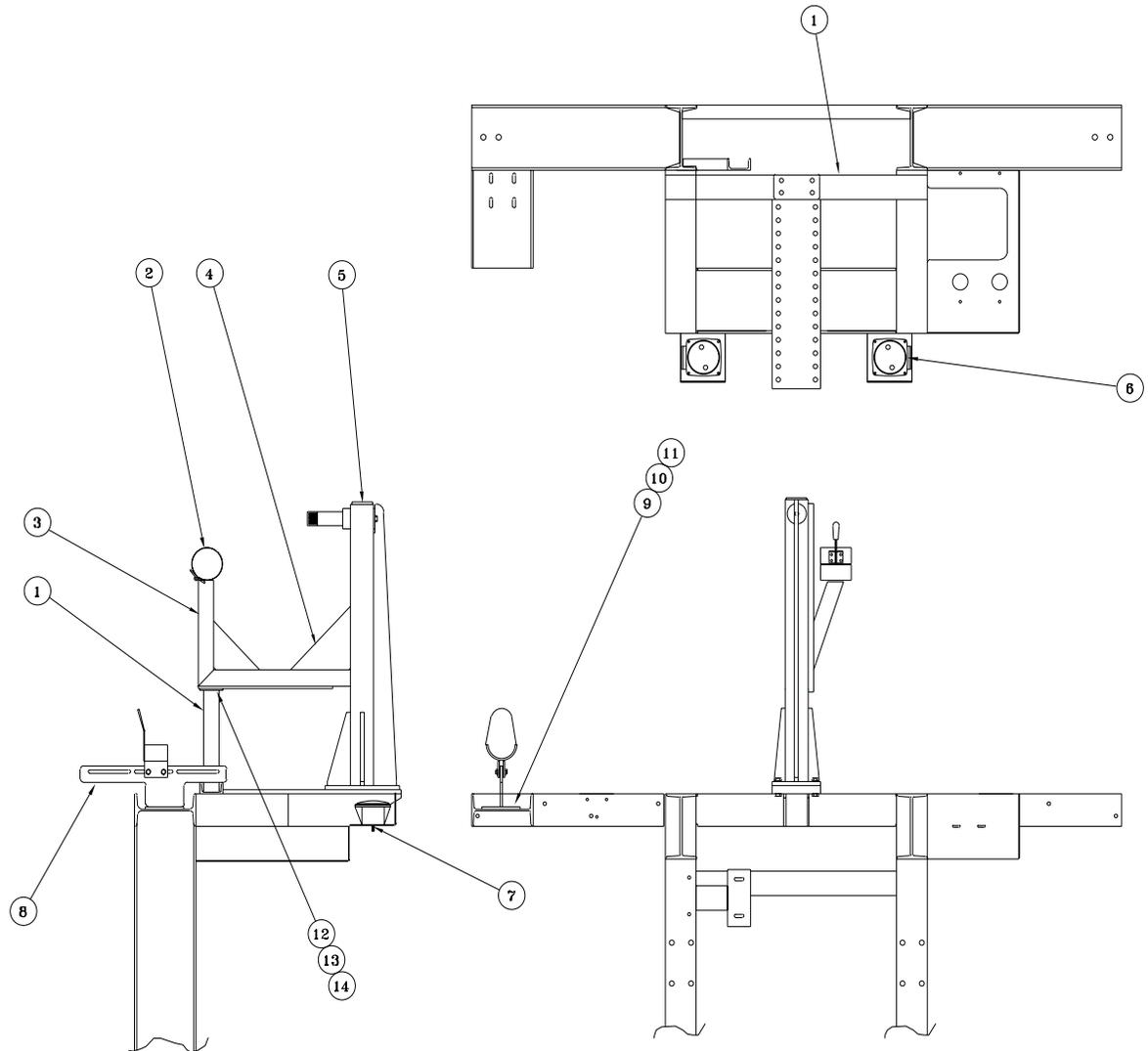
**AIR STREAM T-M SPRAY INJECTION PATCHER DEEP STORAGE
NOZZLE BOX AND COMPONENTS
PART NUMBERS 91501CPB**



**AIR STREAM T-M SPRAY INJECTION PATCHER DEEP STORAGE
NOZZLE BOX AND COMPONENTS
PART NUMBERS 91501CPB**

NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91530	2	DEEP NOZZLE STORAGE BOX
2	91666	2	L.H. NOZZLE TANK BRACKET ASSEMBLY
3	91665	2	R.H. NOZZLE TANK BRACKET ASSEMBLY
4	24001	1	1000 CCA BATTERY
5	24005	1	BATTERY HOLD DOWN FRAME
6	90200	1	BATTERY LOCK BOX ASSEMBLY
7	32602	1	20" BATTERY CABLE FOUND INSIDE BOX
8	90905	1	93" BATTERY CABLE (NOT SHOWN)
9	29270	2	BRONZE GATE VALVE - 2"
10	32030	1	BATTERY HOOK BOLTS
11	28526	4	3/8" ESNA LOCK NUT
12	28634	8	3/8" FLAT WASHER
13	28732	4	3/8" X 1-1/4" HEX HEAD BOLT
14	91671	2	TOOL BOX FRAME MOUNT ANGLE

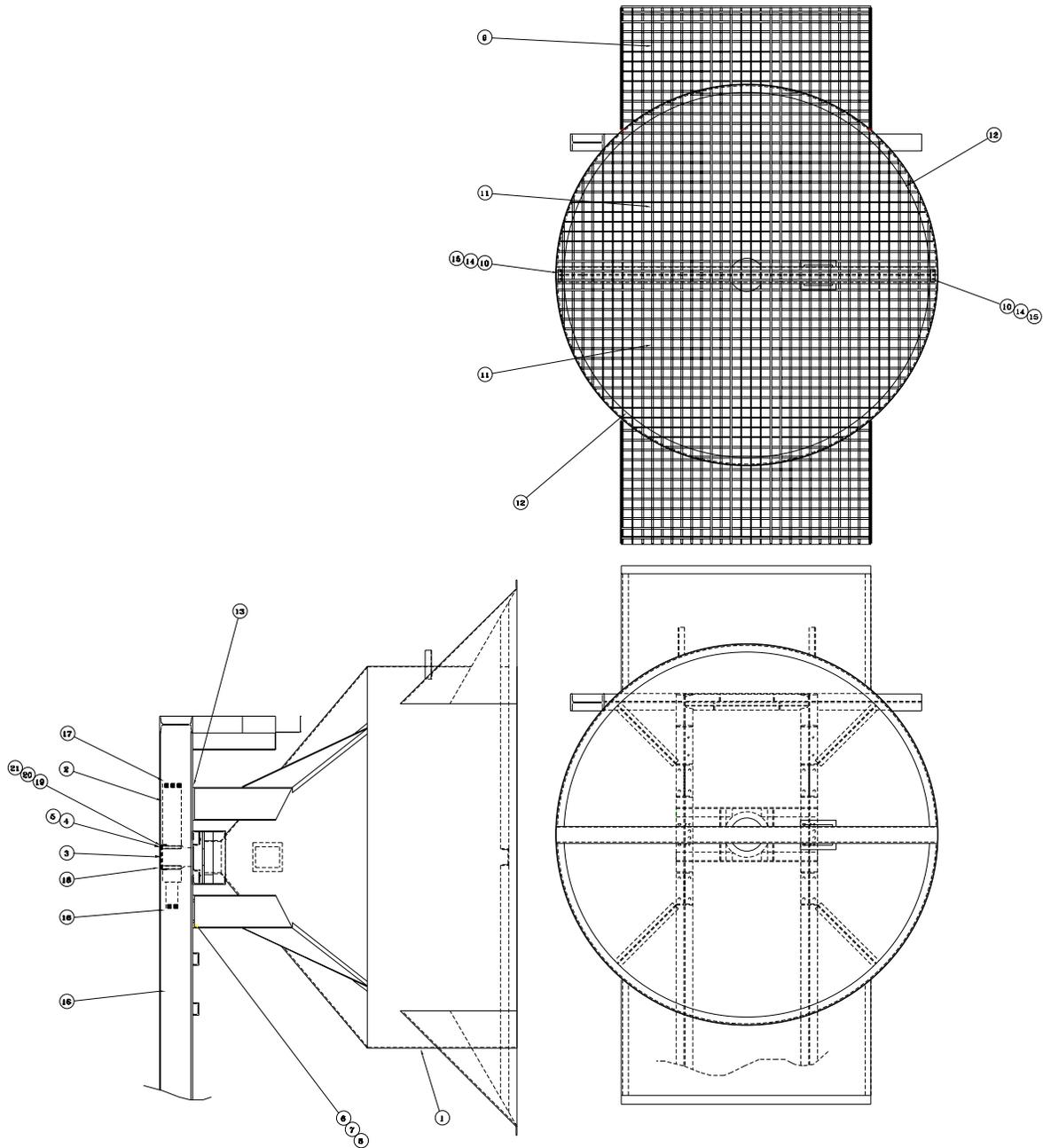
AIR STREAM T-M SPRAY INJECTION PATCHER ADJUSTABLE BOOM AND COMPONENTS PART NUMBERS 91501DPB



**AIR STREAM T-M SPRAY INJECTION PATCHER
ADJUSTABLE BOOM AND COMPONENTS
PART NUMBERS 91501DPB**

NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91476	1	BACK SUPPORT REAR BRACE ASSEMBLY
2	91312	1	AGGREGATE BOOM CLAMP ASSEMBLY
3	91380	1	JIB SUPPORT ASSEMBLY
4	91482	1	INNER UPPER BOOM SUPPORT GUSSETT
5	91134	1	CYCLOPS TAIL LIGHT BOOM
6	90548	2	TAIL LIGHT WITH DOUBLE BULB
7	-	4	NUT (NOT SHOWN)
8	91578	1	2ND SECTION SUPPORT BOOM ASSEMBLY
9	28717	4	5/16"-18" X 1-1/4" BOLT HEX HEAD BOLT
10	28633	8	5/16" FLAT WASHER
11	28525	4	5/16"-18" ESNA LOCK NUT
12	28763	4	1/2"-13" X 1-1/2" BOLT
13	28528	4	1/2"-13" ESNA LOCK NUT
14	28636	8	1/2" LOCK WASHER

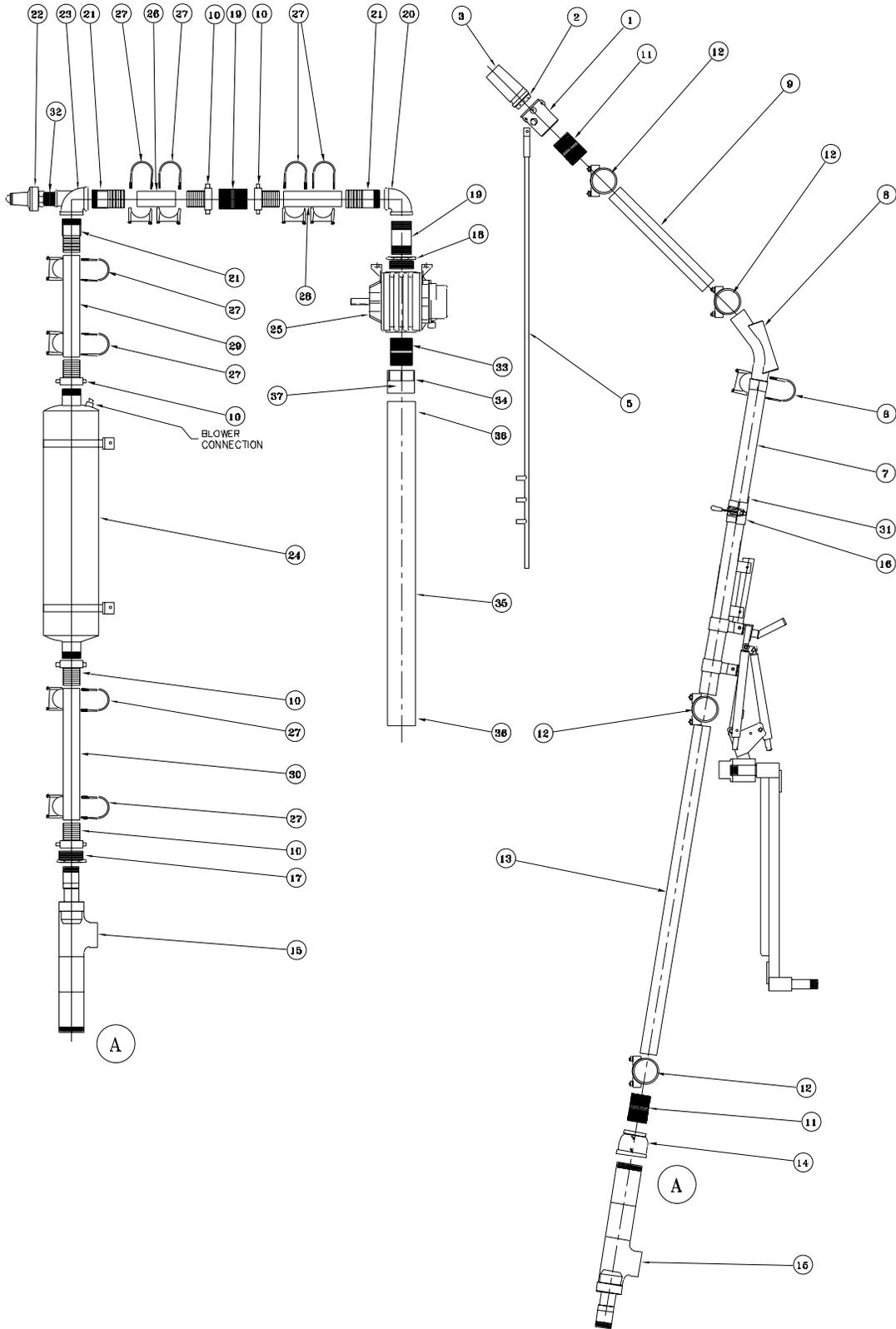
**AIR STREAM T-M SPRAY INJECTION PATCHER
AGGREGATE HOPPER AND COMPONENTS
PART NUMBERS 91501EPB**



**AIR STREAM T-M SPRAY INJECTION PATCHER
AGGREGATE HOPPER AND COMPONENTS
PART NUMBERS 91501EPB**

NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91610	1	AGGREGATE HOPPER 6 CUBIC YARDS
2	90140	1	VENTURI
3	90751	1	VENTURI HOLDING ANGLE CLAMP
4	90141	4	VENTURI VERTICAL SPACER TUBE
5	91824	8	1/2" BEVEL WASHER
6	28528	16	1/2" ESNA LOCK NUT
7	27984	32	1/2" GRADE 8 FLAT WASHER
8	29023	16	1/2" X 2" GRADE 8 HEX HEAD BOLT
9	91634	1	2" WIRE CLOTH-REAR
10	91633	20	WIRE CLOTH MOUNTING TAB
11	91632	2	SEMICIRCULAR INSIDE WIRE CLOTH
12	91608	2	HOPPER CLOTH INSIDE MOUNT
13	91497	4	HOPPER SPACER PLATE
14	28733	44	3/8" X 1-1/2" HEX HEAD BOLT
15	28526	44	3/8" ESNA LOCK NUT
16	25952	2	3-1/2" MUFFLER CLAMP
17	25955	2	5" U-BOLT MUFFLER CLAMP
18	25954	1	4-1/4" U-BOLT MUFFLER CLAMP
19	28740	4	3/8"-16 X 6" HEX HEAD BOLT
20	28647	8	3/8" SPLIT WASHER
21	28526	4	3/8"-16 ESNA LOCK-NUT

AIR STREAM T-M SPRAY INJECTION PATCHER BLOWER AND COMPONENTS AIR SYSTEM PART NUMBERS 91501FPB



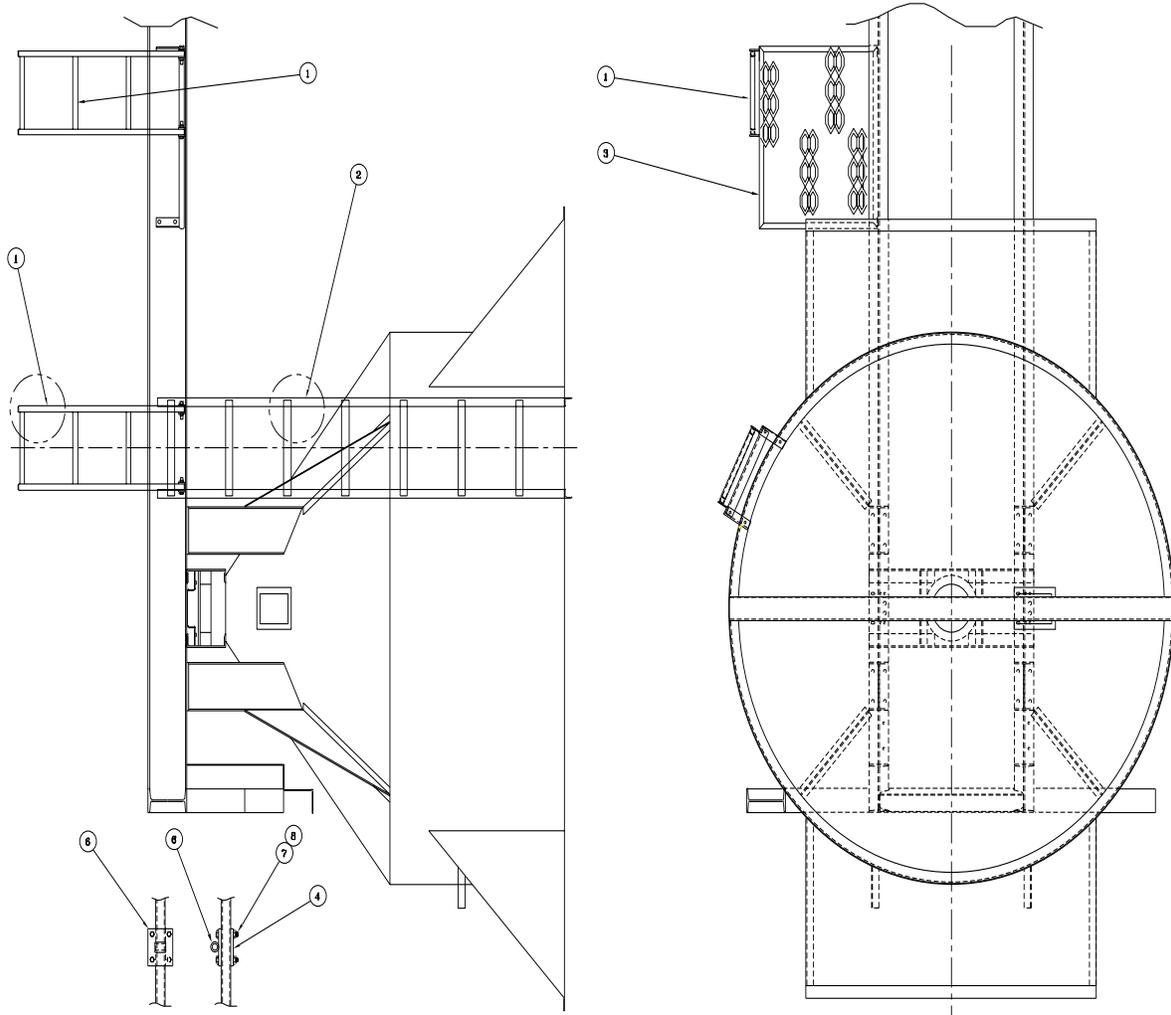
**AIR STREAM T-M SPRAY INJECTION PATCHER
BLOWER AND COMPONENTS AIR SYSTEM
PART NUMBERS 91501FPB**

NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91103	1	3" ALUMINUM NOZZLE HOUSING
2	91099	1	3" O-RING
3	91555	1	3" NOZZLE NO-TAPER
4	91344	1	3" KING NIPPLE
5	91162	1	NOZZLE POSITION HANDLE
6	25952	2	3-1/2" MUFFLER CLAMP
7	91073	1	3" PIPE WELD ASSEMBLY
8	91220	1	3" BOXED 45 DEGREE ELBOW
9	91155	1	3" X 24" GUM RUBBER HOSE
10	90554	6	3" FEMALE LUG COUPLER
11	28010	1	3" CLOSED NIPPLE
12	91855	4	HOSE CLAMP 3" TIGER
13	91157	13FT	3"-BULK AGGREGATE HOSE-TIGERFLEX
14	27899	1	4" X 3" BELL REDUCER
15	90140	1	VENTURI
16	91312	1	AGGREGATE BOOM CLAMP ASSEMBLY
17	28369	1	3" X 2-1/2" REDUCER BUSHING
18	28364	1	4" X 3" BUSHING
19	28077	2	3" X 6" BLACK PIPE NIPPLE
20	28215	1	3" 90 DEGREE ELBOW
21	91344	3	3" KING NIPPLE
22	91661	1	BLOWER PRESSURE RELIEF - 10 PSI
23	28259	1	3" X 2" X 3" BLACK MI TEE
24	60116	1	CHAMBER ABSORPTION SILENCER
25	91660	1	T-M BLOWER

**AIR STREAM T-M SPRAY INJECTION PATCHER
BLOWER AND COMPONENTS AIR SYSTEM
PART NUMBERS 91501FPB**

NUMBER	PART NUMBER	QTY	DESCRIPTION
26	91339	1	3" WILDCAT HOSE X 8.5" LONG
27	25952	8	3-1/2" U-BOLT MUFFLER CLAMP
28	91662	1	3" WILDCAT HOSE - X 10.5" LONG
29	91656	1	3" WILDCAT HOSE - X 18.5" LONG
30	91657	1	3" WILDCAT HOSE - X 21.0" LONG
31	37032	1	1/4" X 1-1/8" KEY
32	28008	1	2" CLOSED NIPPLE
33	27979	1	4" CLOSED NIPPLE
34	91332	1	4" SCH 40 FEMALE AD-DRILL
35	91235	1	RUBBER CONNECTOR HOSE TO BLOW
36	-	2	(NOT SHOWN)
37	90754	1	ELBOW OIL - HOLE COVER

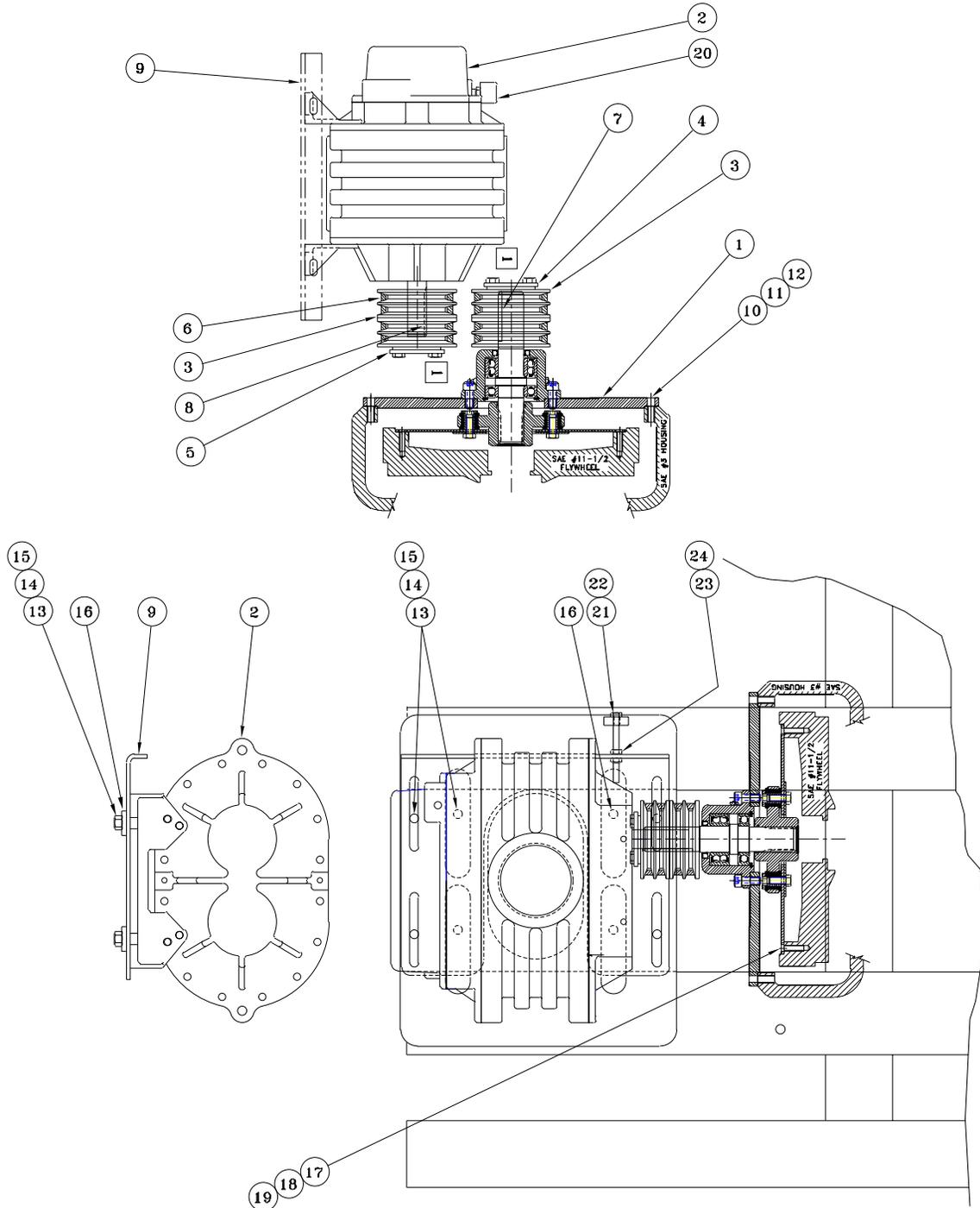
**AIR STREAM T-M SPRAY INJECTION PATCHER
PLATFORM AND ACCESS LADDERS
PART NUMBERS 91501GPB**



**AIR STREAM T-M SPRAY INJECTION PATCHER
PLATFORM AND ACCESS LADDERS
PART NUMBERS 91501GPB**

NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91475	2	ACCESS PLATFORM EXTEND LADDER
2	91605	1	HOPPER ACCESS LADDER ASSEMBLY
3	91465	1	ACCESS PLATFORM STEP
4	9153	1	LADDER WEAR TUBE MOUNTING PLATE
5	42262	1	QUICK RELEASE PIN (NOT SHOWN)
6	91687	1	LADDER WEAR TUBE ASSEMBLY
7	28526	4	3/8"-16 ESNA LOCK NUT
8	28735	4	3/8"-16 X 2" HEX HEAD BOLT

AIR STREAM T-M SPRAY INJECTION PATCHER BLOWER/ENGINE 4-BELT DRIVE SYSTEM PART NUMBERS 91501HPB



**AIR STREAM T-M SPRAY INJECTION PATCHER
BLOWER/ENGINE 4-BELT DRIVE SYSTEM
PART NUMBERS 91501HPB**

NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91335	1	BEARING SUPPORT STUB SHAFT
2	91660	1	T-M BLOWER
3	91412	2	ENGINE/BLOWER 4 GROOVE SHEAVE
4	91411	1	1-1/2" SDS BUSHING - ENGINE
5	91410	1	1-1/8" SDS BUSHING - BLOWER
6	91409	4	ENGINE BLOWER BELT
7	91326	1	ENGINE SHFT KEY 3/8" X 3/8"
8	91327	1	BLOWER KEY 3/16" X 1-7/8"
9	91448	1	BLOWER SLIDE PLATE
10	28641	20	3/8" FLAT HARDENED WASHER
11	28658	20	3/8" LOCK WASHER GRADE 8
12	27955	12	3/8"-16 X 1-1/4" GRADE 8 HEX HEAD BOLT
13	28528	8	1/2"-13 ESNA LOCK-NUT
14	28659	8	1/2" LOCK WASHER GRADE 8
15	29026	8	1/2"-13 X 1-1/2" GRADE 9 BOLT
16	90827	8	BLOWER MOUNTING TAB
17	27953	8	3/8"-16 NC X 1" GRADE 8 HEX HEAD BOLT
18	28641	20	3/8" FLAT HARDENED WASHER
19	28658	20	3/8" LOCK WASHER GRADE 8
20	60191	0.02	OIL-ROTARY AIR BLOWER
21	90858	2	3/8"-16 X 4" FULL THREADED BOLT
22	28526	2	3/8"-16 ESNA LOCK NUT
23	27986	2	3/8" FLAT WASHER GRADE 8
24	27964	2	3/8"-16NC GRADE 8 NUT

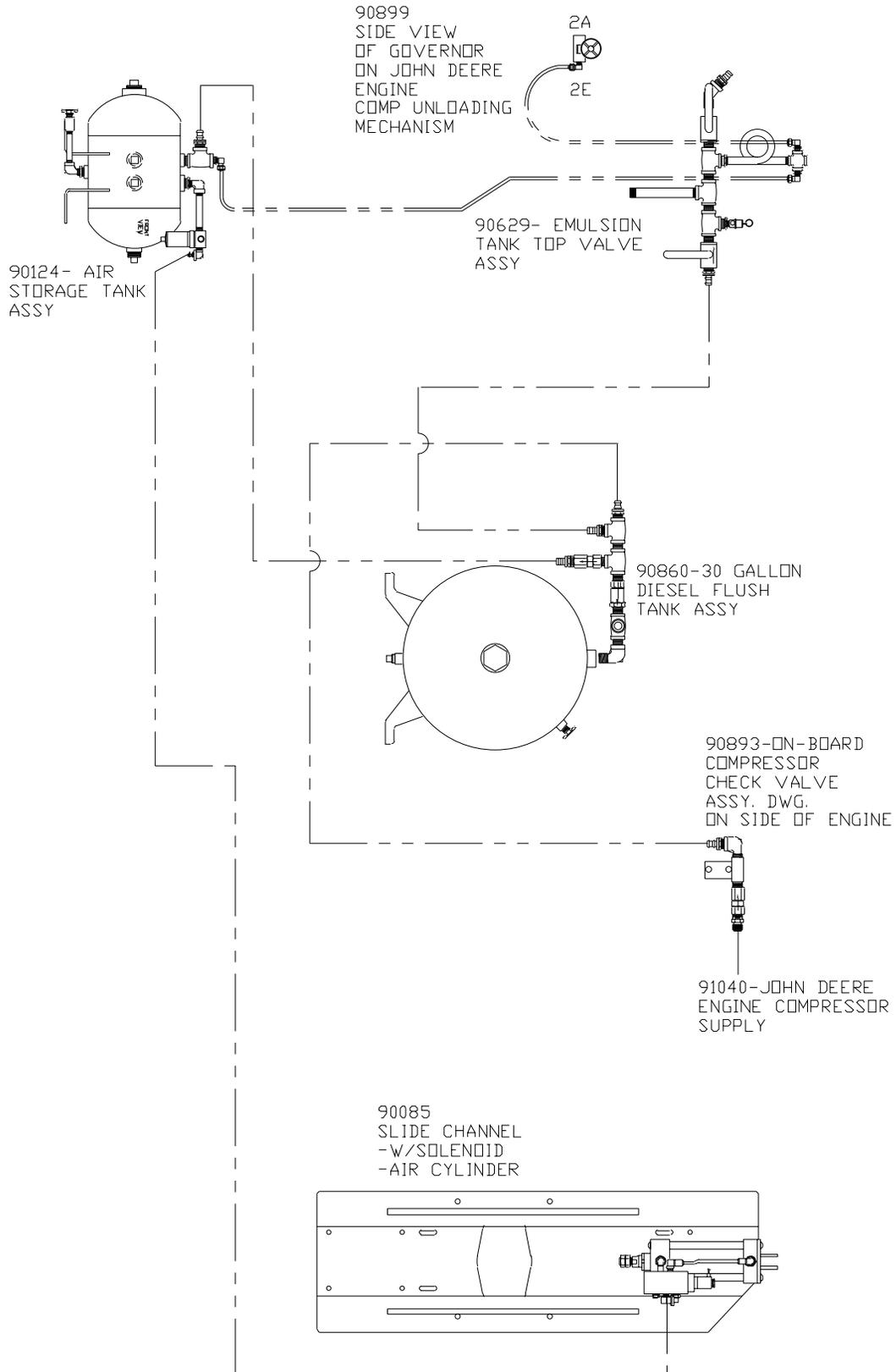
**AIR STREAM T-M SPRAY INJECTION PATCHER
FUEL TANK AND FRONT ACCESS LADDER
PART NUMBERS 91501JPB**

NUMBER	PART NUMBER	QTY	DESCRIPTION
1	43897	1	3/16" CHAIN, 1 LINK
2	37032	1	1/4" X 1/8" KEY
3	91648	1	BOOM STOW SAFETY CHAIN
4	44462	1	HITCH PIN
5	91687	2	LADDER WEAR TUBE ASSEMBLY
6	91641	1	HITCH PIN ALIGNMENT TUBE - LARGE
7	43594	1	26 GALLON DIESEL TANK ASSEMBLY
8	91475	1	ACCESS PLATFORM EXTENSION LADDER
9	91553	2	LADDER WEAR TUBE MOUNT PLATE
10	28526	4	3/8"-16 ESNA LOCK NUT
11	28735	4	3/8"-16 X 2" HEX HEAD BOLT

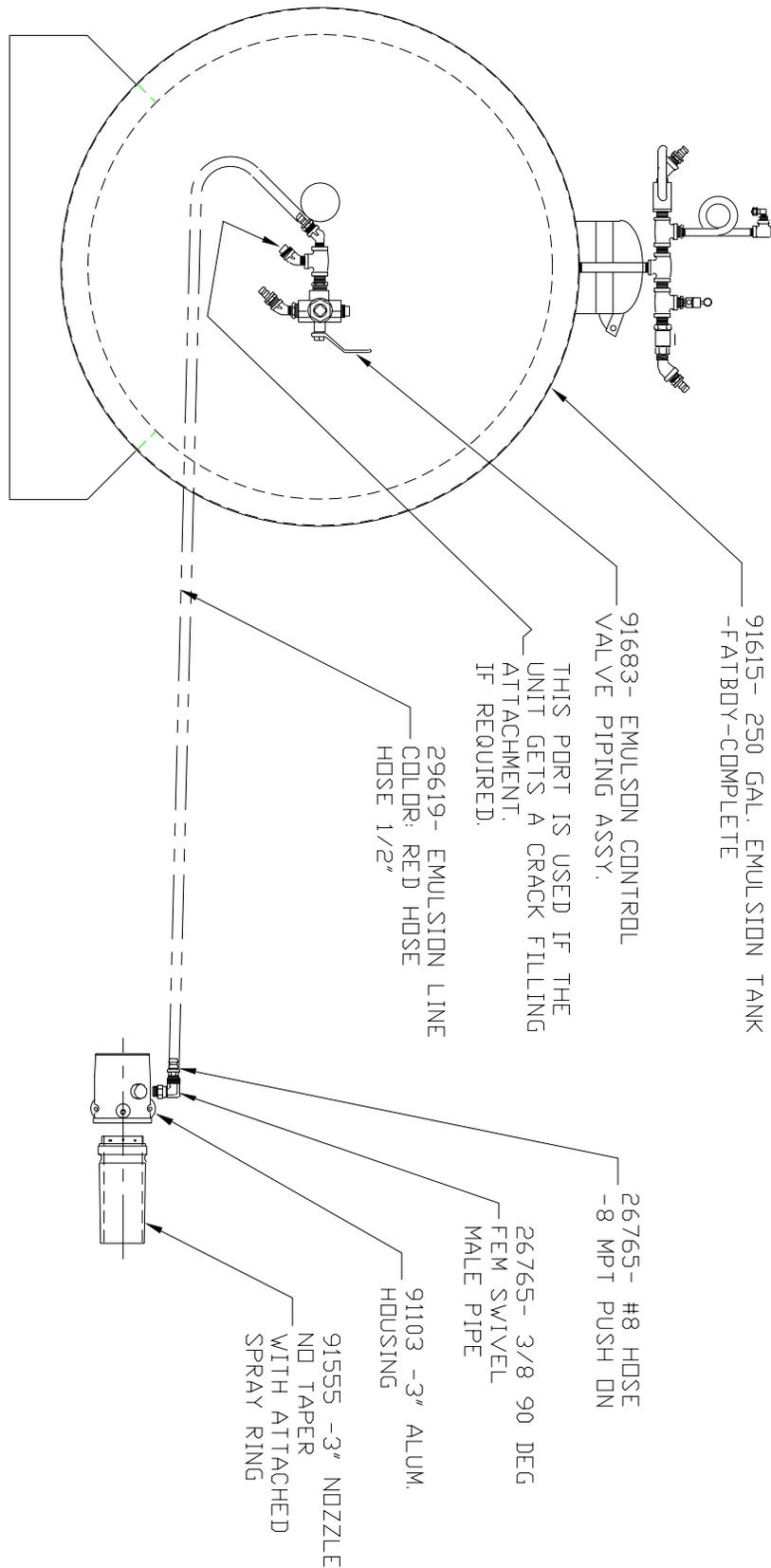
AIR STREAM T-M SPRAY INJECTION PATCHER

AIR LINE SUPPLY LINE ROUTING

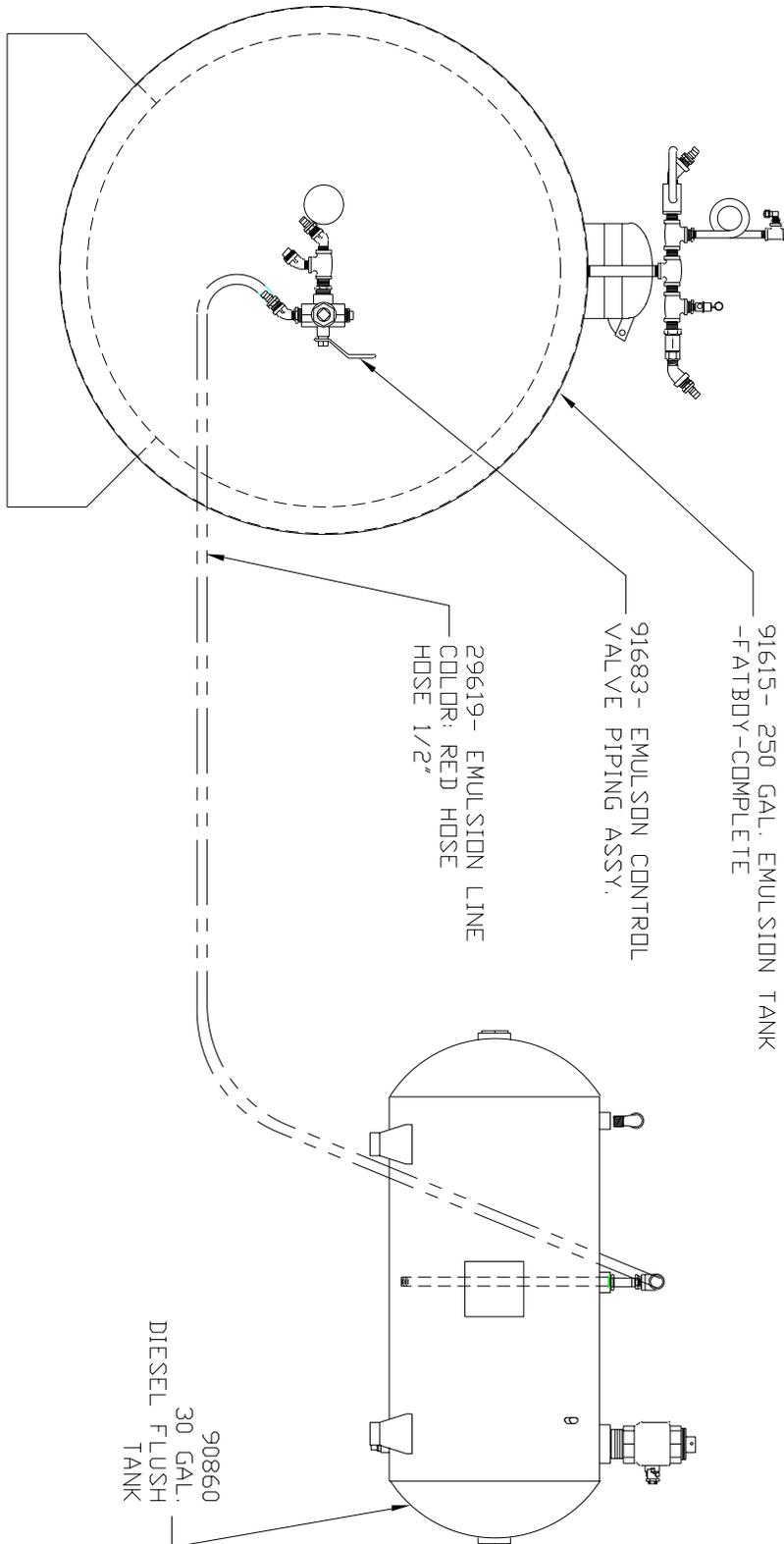
PART NUMBER 91550



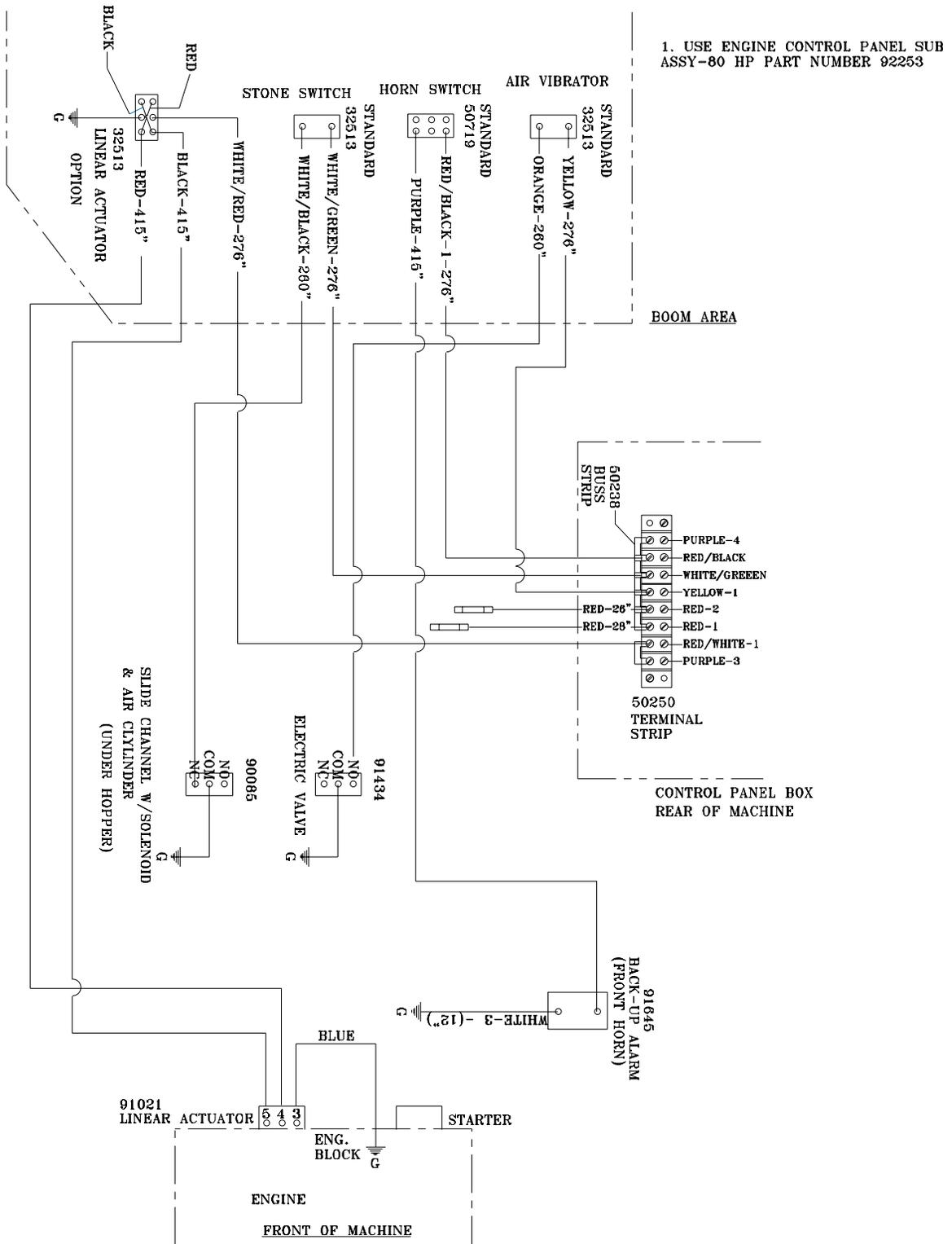
AIR STREAM T-M SPRAY INJECTION PATCHER EMULSION SUPPLY LINE ROUTING PART NUMBER 91552



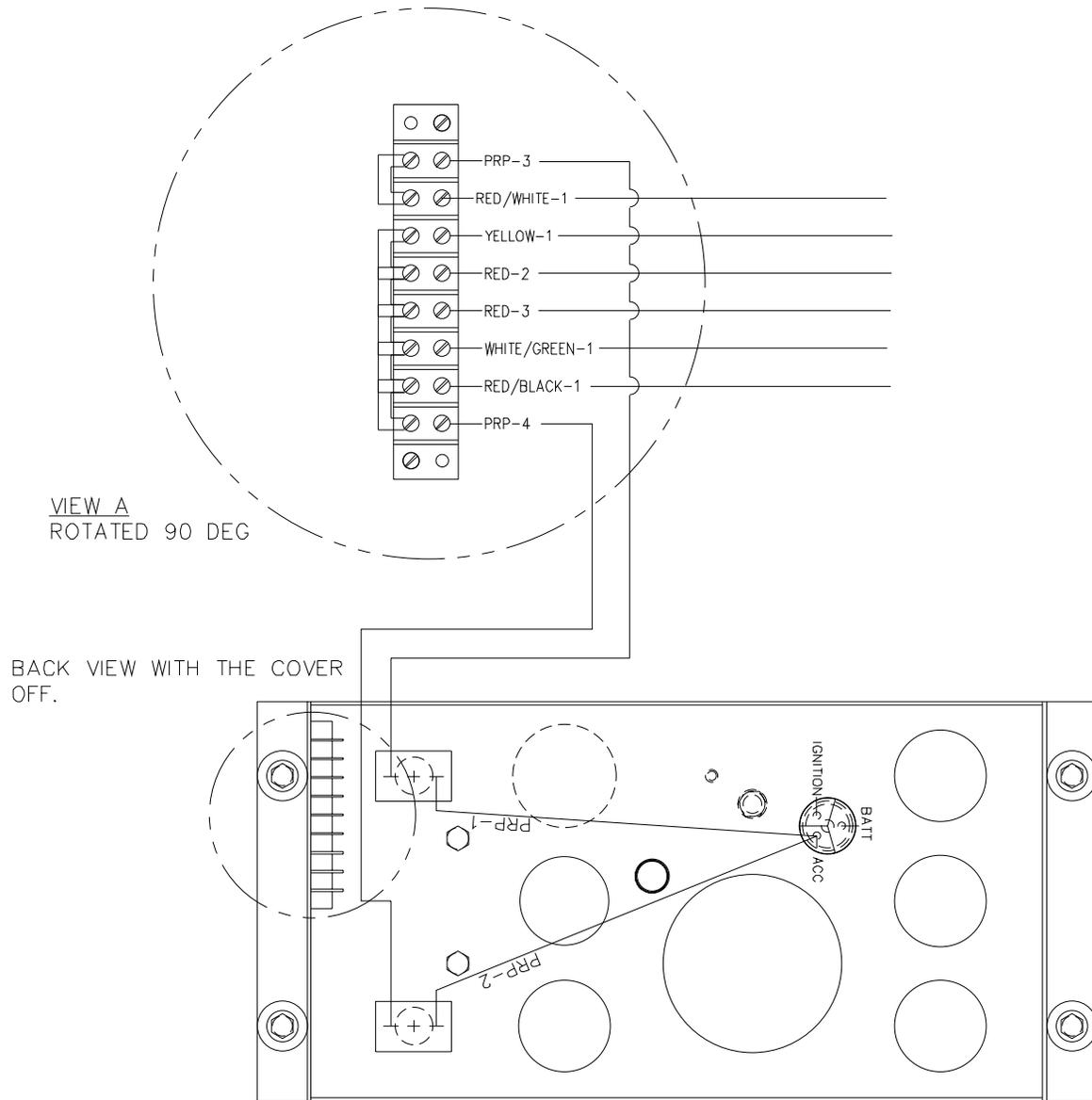
AIR STREAM T-M SPRAY INJECTION PATCHER EMULSION SUPPLY LINE ROUTING PART NUMBER 91552A



AIR STREAM T-M SPRAY INJECTION PATCHER WIRING SCHEMATIC PART NUMBER 91600



AIR STREAM T-M SPRAY INJECTION PATCHER EMULSION SUPPLY LINE ROUTING PART NUMBER 92253



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