



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

**PART MANUAL - 90870  
Rev. "F"**



# AIR STREAM SPRAY INJECTION PATCHER



Revised: 07/02

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# **CRAFCO AIR STREAM SPRAY INJECTION PATCHER**

This manual is furnished with each new **CRAFCO AIR STREAM 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 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 sealant and 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 the machine operations.

- Do not operate the equipment in closed buildings or confined areas.

- Shut-down the engine prior to refilling the diesel fuel tank and the diesel flush tank.

- Keep hands, feet, and clothing away from all moving parts.

- Do not remove the guards on the equipment unless the engine is off.

- Always keep a fire extinguisher near the unit. Maintain the fire extinguisher properly and be familiar with its use.

- 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 Air Stream Spray Injection Patcher should not be left unattended when running.

- For safety, tighten all bolts and screws after every 100 hours of operation.

- CRAFCO, Inc. assumes no liability for an accident or injury incurred through improper use of the machine.

# CRAFCO SPRAY INJECTION PATCHER LIMITED WARRANTY

Crafco, Inc., through its authorized distributor, 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. This warranty excludes engine or components, tires, and battery as these items are subject to warranties issued by their manufacturers.

Crafco, Inc., warrants for (2) years the machined venturi on Air Stream and Air Stream T-M models.

Crafco, Inc., warrants structural parts, blower and coupling, boom arm, emulsion heating system, and air-feed system, (excluding nozzle and rubber discharge hose and auger and housing tube on Magnum models) for a period of (1) one year from date of delivery. Excluded from this warranty are normal wear items i.e., hoses, belts, 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 provided herein extends only to the repair and/or replacement of those components on the equipment covered above and does not cover **labor** costs. 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 costs 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 distributor will advise you of the procedure to follow for a replacement.
4. The warranty is valid only for parts, which 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 the machine without all guards in place.
2. Do not open emulsion tank lid or open diesel flush tank fill port when either tank is under pressure. Relieve pressure on emulsion tank using psi relief valve. Relieve pressure on diesel flush tank using petcock on the side of the diesel flush tank. 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 the emulsion tank airtight when not in use.
5. Do not allow emulsion to freeze!
6. Do not put hands, feet, etc. near rear of truck screw conveyor (Magnum only and Airstream with hydraulics).
7. Do not fill flush tank more than 2/3 full.
8. Do not point the nozzle at another person or very serious injury may result.
9. Do not operate the equipment near an open flame.
10. Do not use any type of flame to unclog the emulsion hose or spray ring if they should become clogged.
11. Protective eye glasses must be worn when operating the patcher.
12. Do not operate the diesel engine above 1500 RPM MAX. (Air Stream model).
13. Do not place hand or fingers in the venturi eductor opening or injury may result.
14. Do not touch the silencer, as it can become very hot while the Air Stream is operating.
15. 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.

# **CRAFCO AIR STREAM SPRAY INJECTION PATCHER OPERATING INSTRUCTIONS**

## **START UP SERVICING**

The Air Stream 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:

### HYDRAULIC FLUID (Optional)

The AIR STREAM has an optional hydraulic system. If the AIR STREAM is purchased with a hydraulic system, the hydraulic fluid is contained in the hydraulic tank. Fill to level indicated on sight gauge. Use anti-wear type industrial hydraulic oils or automotive crankcase oils having letter designations SC, SD, SE or SF - SAE 10W meeting APF service classification MS.

### 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 the slide gate solenoid. The diesel fuel will cause damage to the slide gate solenoid.

### DIESEL ENGINE FUEL TANK

Fill diesel fuel tank located at the passenger side rear of Air Stream.

### BLOWER

Check oil level. See blower operating manual in the operators manual located on the engine cover box. Re-check weekly. Grease the blower often. See the blower operating manual.

### AIR COMPRESSOR

Check John Deere manual for the on-board compressor.

### ENGINE - (4045 D John Deere)

Check oil level. See engine operating manual in the operators manual box located on the engine cover. Re-check daily.

--8.5L crankcase oil with off-board compressor.

--13.5L crackcase oil with on-board compressor.

### ENGINE AIR FILTER

Remove and clean. See engine operating manual in the operators manual box located on the engine cover. 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 the heating element to raise the temperature to a minimum of 160° F.

### THERMOSTAT

Set the thermostat at 165°F. The thermostat is located on front of the emulsion tank. The temperature will rise about 10 degrees per hour.

### GRAVITY FEED TAILGATE

Cut a hole in the tailgate of the dump truck to allow the mounting, either bolted or welded, of the 5" gravity flow feeding system. After the gravity feed box has been mounted, attach the 5" hose to the gravity feed box outlet. The hose should be cut to a length that allows the hose to come to the middle of the aggregate hopper about 4" above the hopper safety grid.

If the Air Stream has a hydraulic tailgate, this step is not necessary.

# CRAFCO AIR STREAM 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 emulsion 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 holes 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 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 from 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 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 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 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.

# LUBRICATING AND MAINTENANCE INSTRUCTIONS

1. Engine - refer to separate manual in packet (John Deere Maintenance Manual). The manual is located in the manual box on the passenger side engine cover.
2. Blower - refer to separate manual in packet (Tuthill Blower Manual). The manual is located in the manual box on the passenger side engine cover.
3. Compressor - check separate manual in packet (John Deere Maintenance Manual). The manual is located in the manual box on the passenger side engine cover.
4. Lubricate bearings at each end of screw conveyor on truck approximately every 75 hours.
5. Check hydraulic oil level every day.
6. Check and tighten all bolts periodically, including axles (approximately 100 hours).
7. 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.
8. Lubricate bearings every 100 hours for boom. Boom has two bearings, an upper and a lower. Grease lightly.
9. The separate manuals are located in the manual box on the back of the engine cover.

# TROUBLE SHOOTING

## IF NO EMULSION IS PRESENT

### CHECK THE FOLLOWING:

1. Is the emulsion tank empty? To find out, remove tank pressure first, then open the pressurized lid on emulsion tank.
2. Is the emulsion line valve closed? To find out, the line is located at the rear of the machine on the tank.
3. Is the PSI low in the emulsion tank? Check the PSI gauge located in the middle of the emulsion tank.
4. Is the nozzle spray ring plugged? Remove the nozzle and clean.
5. Is the hose from the emulsion tank to the nozzle plugged? If equipped with a heated hose, start engine to allow heating, and turn the diesel flush on. Do not attempt to unplug the emulsion hose by applying an open flame to the emulsion hose or spray ring. The system is equipped with a heating system (standard). Start the engine and let it run to heat the emulsion hose.
6. Is the emulsion cold? Check the emulsion temperature gauge on the emulsion tank. Check to be sure the thermostat and the heating element are working.
7. Has the emulsion separated and become lumpy? Check the emulsion by placing a rod to the bottom to check for "bubble-gum-like" asphalt residue on the bottom. If the emulsion is separated, drain the tank and flush with the diesel fuel.

## HYDRAULIC SYSTEM MALFUNCTION (OPTIONAL)

### CHECK THE FOLLOWING:

1. Check the oil in the hydraulic reservoir located on the driver's side of the machine.
2. Check the hydraulic pump bolted to air compressor on John Deere engine. If needed, crack the hydraulic hose slightly to see if the fluid is pumping.
3. Check the stone switch for loose wires.
4. Check the solenoid for all loose wires. (To check, hold hand on solenoid and energize switch, you should be able to feel the impulse in the valve.)
5. Check for hydraulic system overload (PSI over 2,000 on hydraulic gauge) located in engine control panel.
  - A. Check the 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

5. A. turning. If either of these conditions exist, be sure to turn off the engine, then remove stone from the top of the augers (top of the auger should be visible) and loosen any packing or buildup under the augers.
- B. Check the 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 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 the John Deere Engine Manual located in the manual box on the back of the engine cover.

### AGGREGATE NOT COMING THROUGH HOSE

#### CHECK THE FOLLOWING:

1. Is the aggregate hopper empty?
2. Is the aggregate stone flowing down the dump body into the tailgate feeder hose? Check the gravity feed tailgate.
3. Check the hydraulic system (optional).
4. Check the engine R.P.M. - 1,500 MAX.
5. Is the aggregate hose plugged? Angle front section of hose and nozzle down and shake hose. If hose is still plugged, remove the hose from the 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. Is the nozzle plugged? Remove the nozzle and clean.
7. Check the venturi eductor to be sure an unusually large rock or can has not been wedged in the venturi eductor air flow.

# CRAFCO AIR STREAM SPRAY INJECTION PATCHER

## MATERIAL SPECIFICATIONS

Below are general specifications for the materials used in an AIR STREAM. 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.

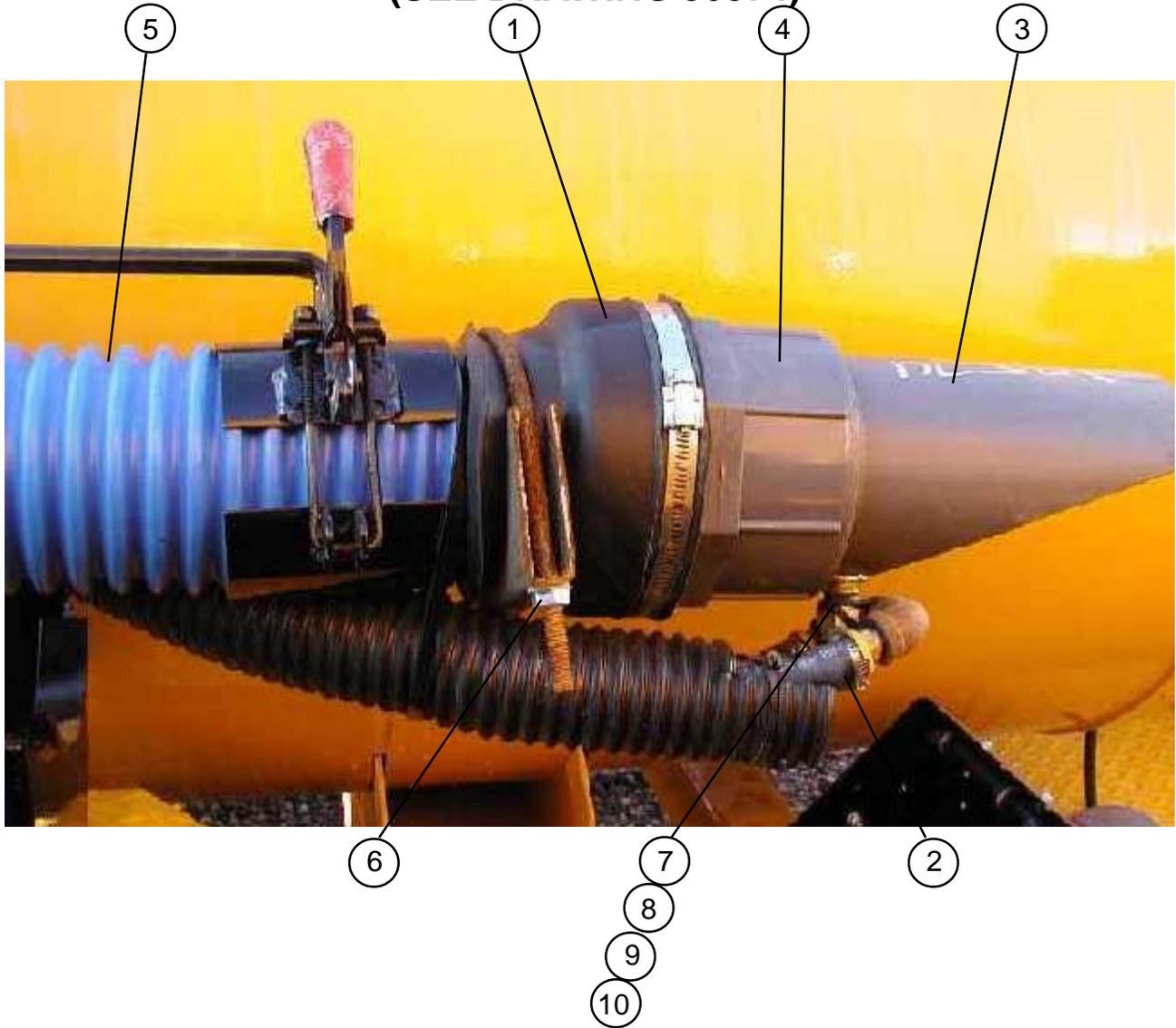
### SPECIFICATIONS

	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	

### 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

**SLANTED NOZZLE - BOOM  
(SEE DRAWING 90574)**



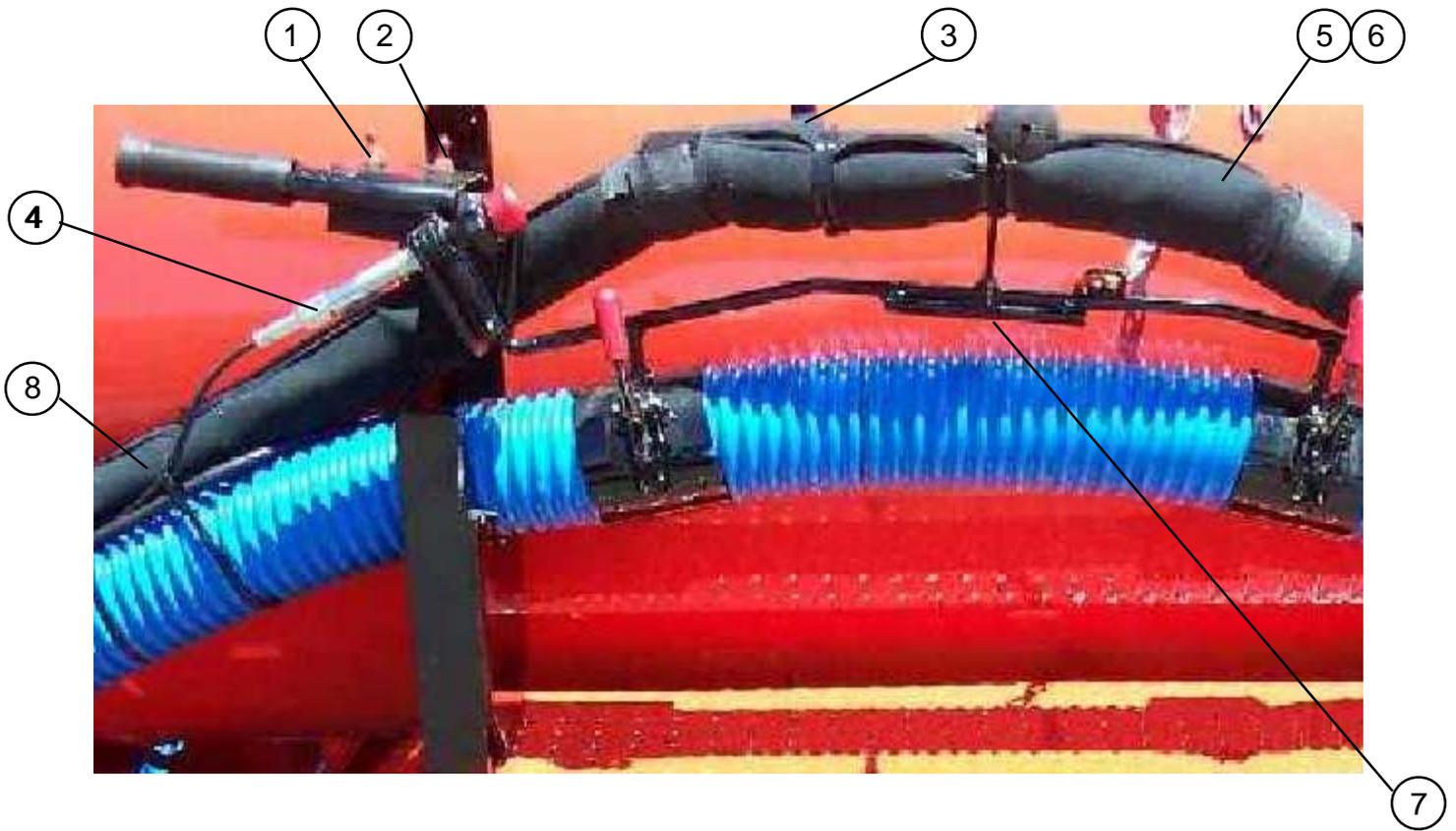
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90558	1	4-1/4" X 5-1/2" RUBBER COUPLER
2	90604	1	EMULSION HOSE RUBBER 2" ID X 20 FT.
3	90725	1	4" PVC SLANTED NOZZLE
4	90555	1	4" SCH 80 PVC FEMALE COUPLER
5	90746	1	3-1/2" X 20 FOOT AGGREGATE HOSE
6	25955	1	5" MUFFLER CLAMP
7	90517	1	1/16" COIN SLOT SPRAY TIP TAPPED
8	50281	1	1/2" LOCK NUT
9	27787	1	3/8" 90 DEGREE SWIVEL
10	26764	1	#8 - 6 MPT PUSH ON FITTING

## FRONT VIEW OF SLANTED NOZZLE - BOOM



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90552	1	1/16" COIN SLOT SPRAY TIP
2	27787	1	3/8" 90 DEGREE SWIVEL
3	50280	1	1/2" LOCK NUT

## OPERATOR BOOM CONTROLS



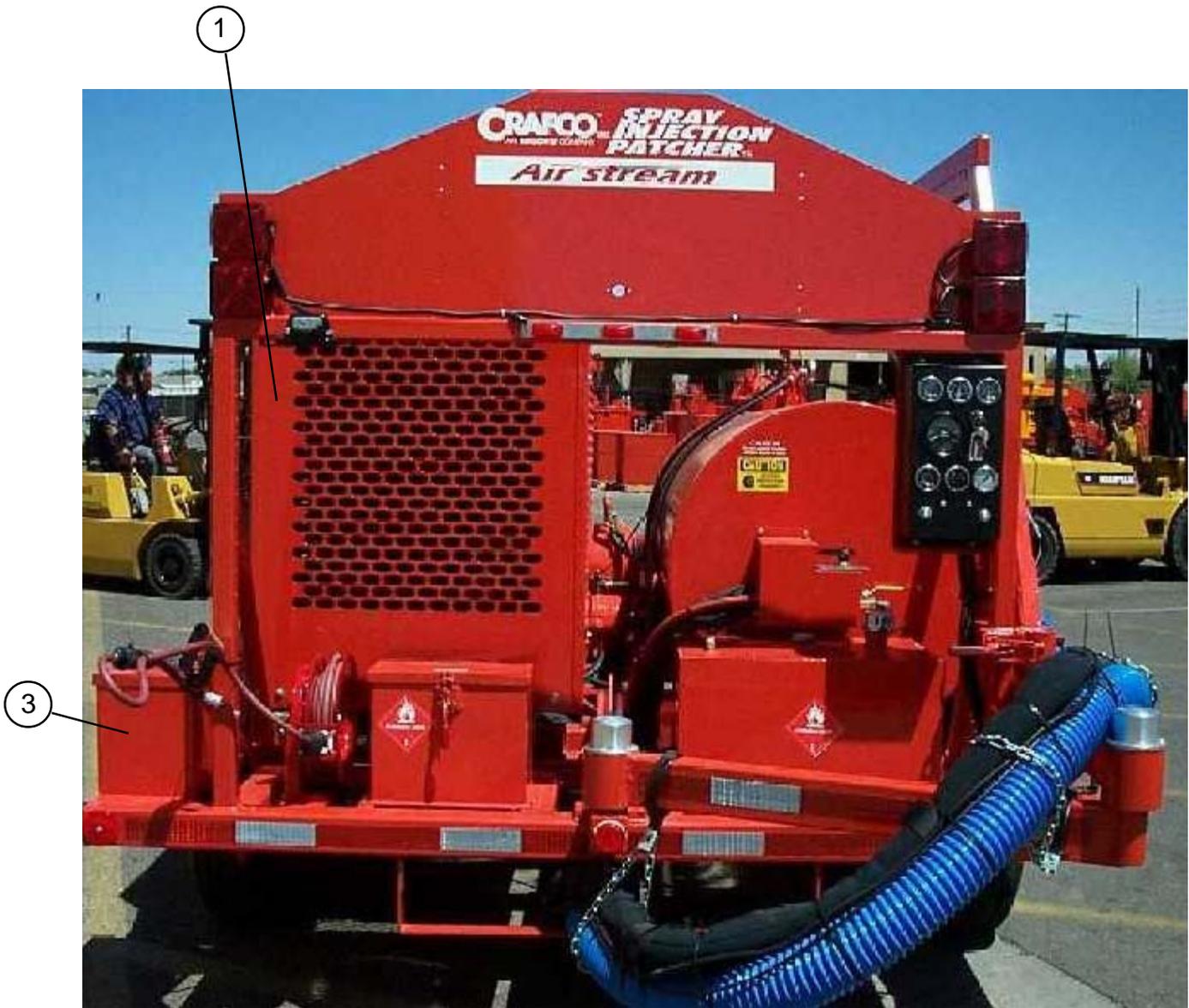
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	32513	1	HORN SWITCH - TOGGLE SWITCH
2	50719	1	STONE SWITCH - TOGGLE SWITCH
3	90732	1	3/8" CARBON STEEL BALL VALVE
4	91046	1	THROTTLE CABLE
5	90305	1	EMULSION LINE COVER 14'-6"
6	90302	6 pieces total	RUBBER EMULSION HOSE COVER (NOT SHOWN)(FOAM - 1.375 I.D. X 2.375 O.D.)
7	90704	1	4TH BOOM SECTION ASSEMBLY
8	90306	1	EMULSION LINE COVER 5'-0"

## CONTROLS AND BOOM STORAGE BRACKETS



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90745	20ft.	3-1/2" - 180 AR - BULK - AGGREGATE HOSE
2	90302	20 ft.	EMULSION HOSE RUBBER - BULK - INSIDE COVER (FOAM - 1.375 I.D. X 2.375 O.D.)
3	90930	1	HOSE BOOM STORAGE CLIP BRACKET ASSEMBLY (NOT SHOWN)
4	90929	1	HOSE BOOM STORAGE CLIP MOUNT ASSEMBLY
5	90305	1	EMULSION LINE COVER 14'6" AIRSTREAM

## ENGINE COVER AND BATTERY BOX



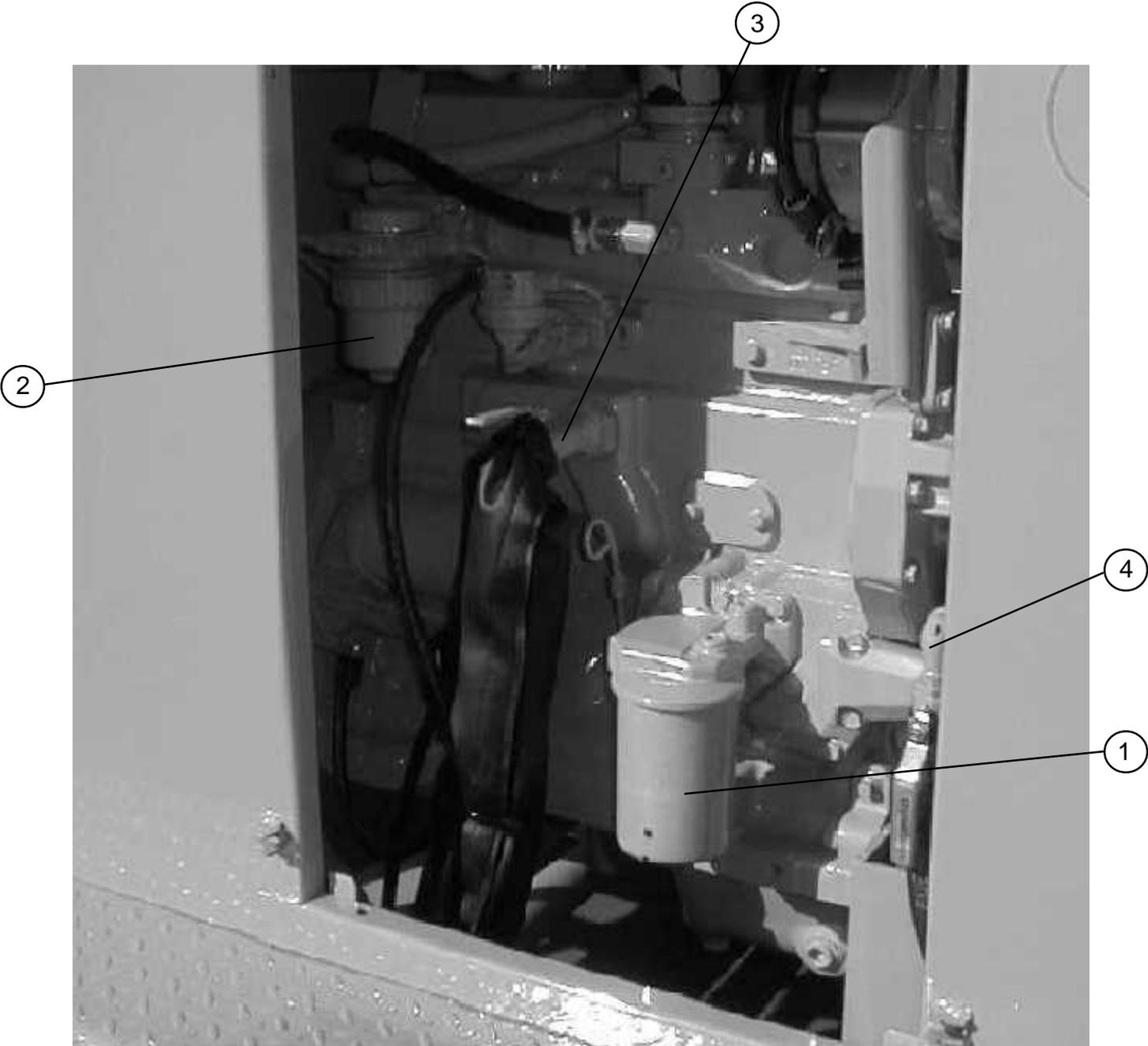
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91030	1	ENGINE COVER (JOHN DEERE TO4045D)
2	91048	1	MUFFLER EXHAUST JOHN DEERE (NOT SHOWN)
3	90200	1	BATTERY LOCK BOX ASSEMBLY

## BATTERY BOX AND BATTERY



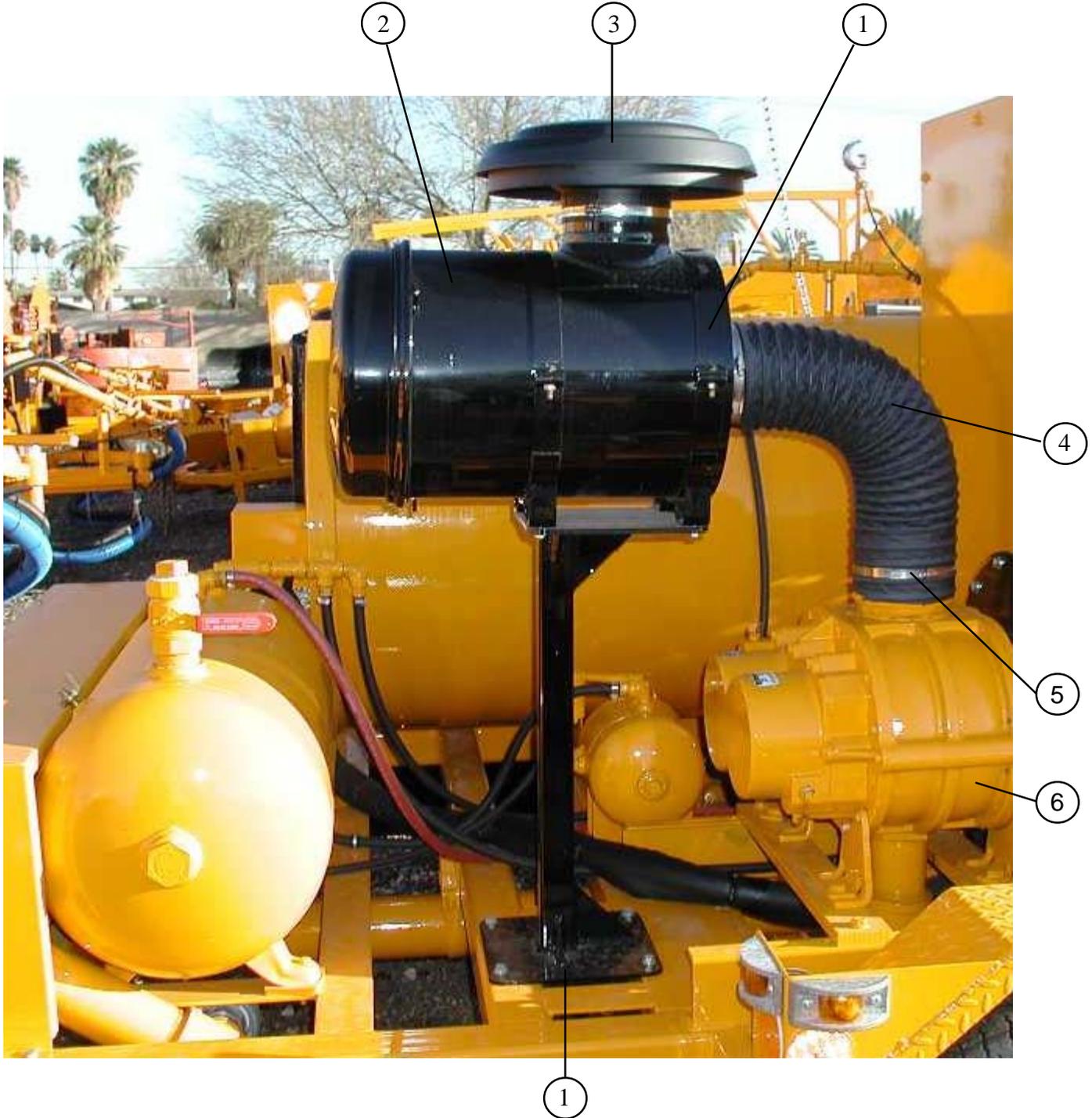
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	24001	1	1000 C.C.A. BATTERY
2	32030	1	BATTERY HOOK BOLTS
3	90200	1	BATTERY LOCK BOX ASSEMBLY
4	90905	1	BATTERY CABLE 93" LONG
5	90205	1	BATTERY HOLD DOWN CLAMP
6	91745	1	LONG BATTERY CABLE (+)

# ENGINE COMPONENTS



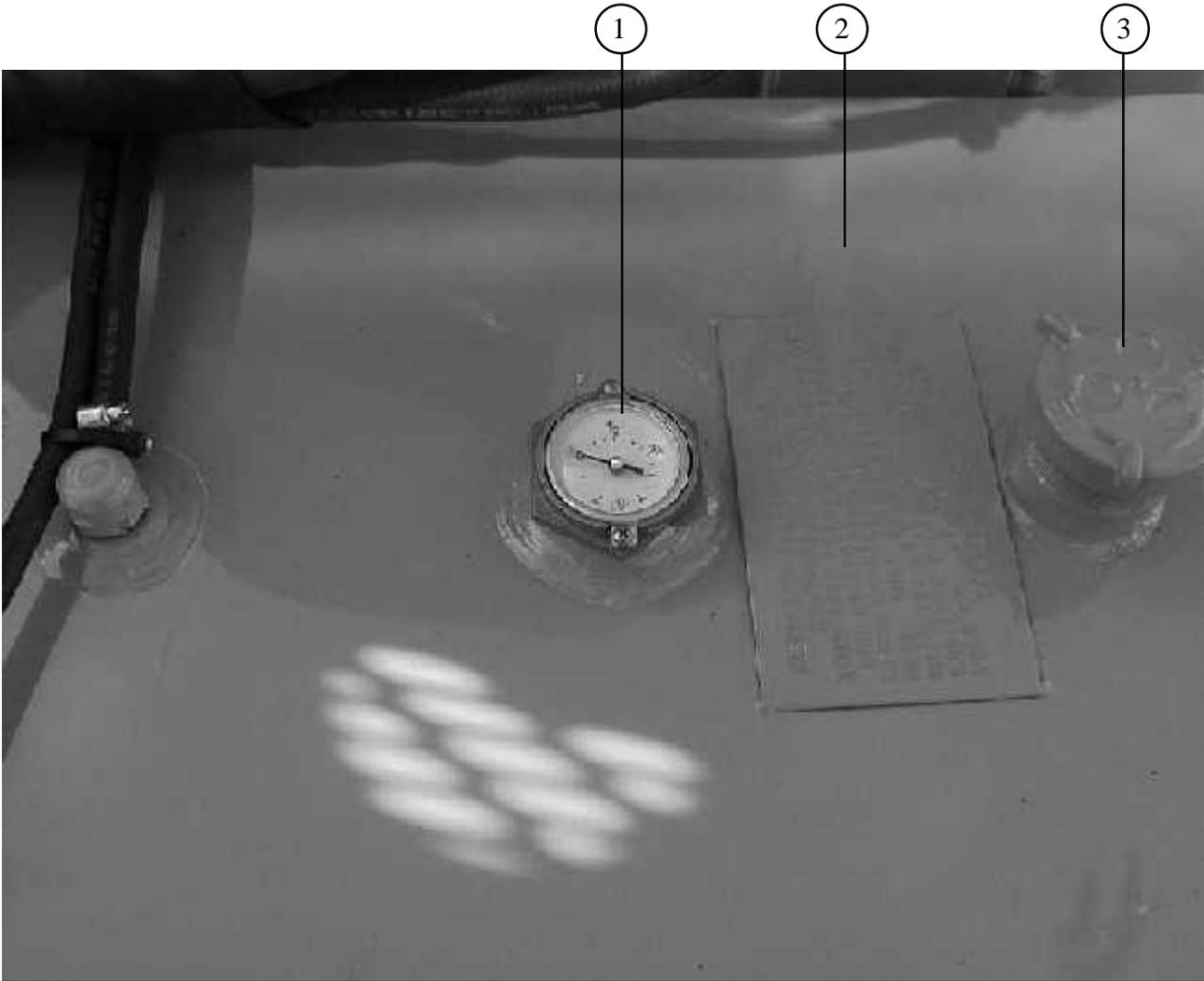
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91044	1	OIL FILTER
2	91042	1	ENGINE FUEL FILTER
3	90529	1	RETURN WATER HEATING VALVE ASSEMBLY COMPLETE
4	90530	1	WATER PUMP OUTLET VALVE ASSEMBLY COMPLETE

## AIR CLEANER AND BLOWER



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91707	1	AIR CLEANER STAND
2	91070	1	AIR CLEANER FOR BLOWER
3	90993	1	INLET HOOD - LARGE AIR CLEANER
4	91237	1	6" RUBBER CONNECT HOSE TO BLOWER X 24"
5	91843	1	6" HOSE CLAMP
6	90720	1	AIRSTREAM BLOWER

# FUEL TANK



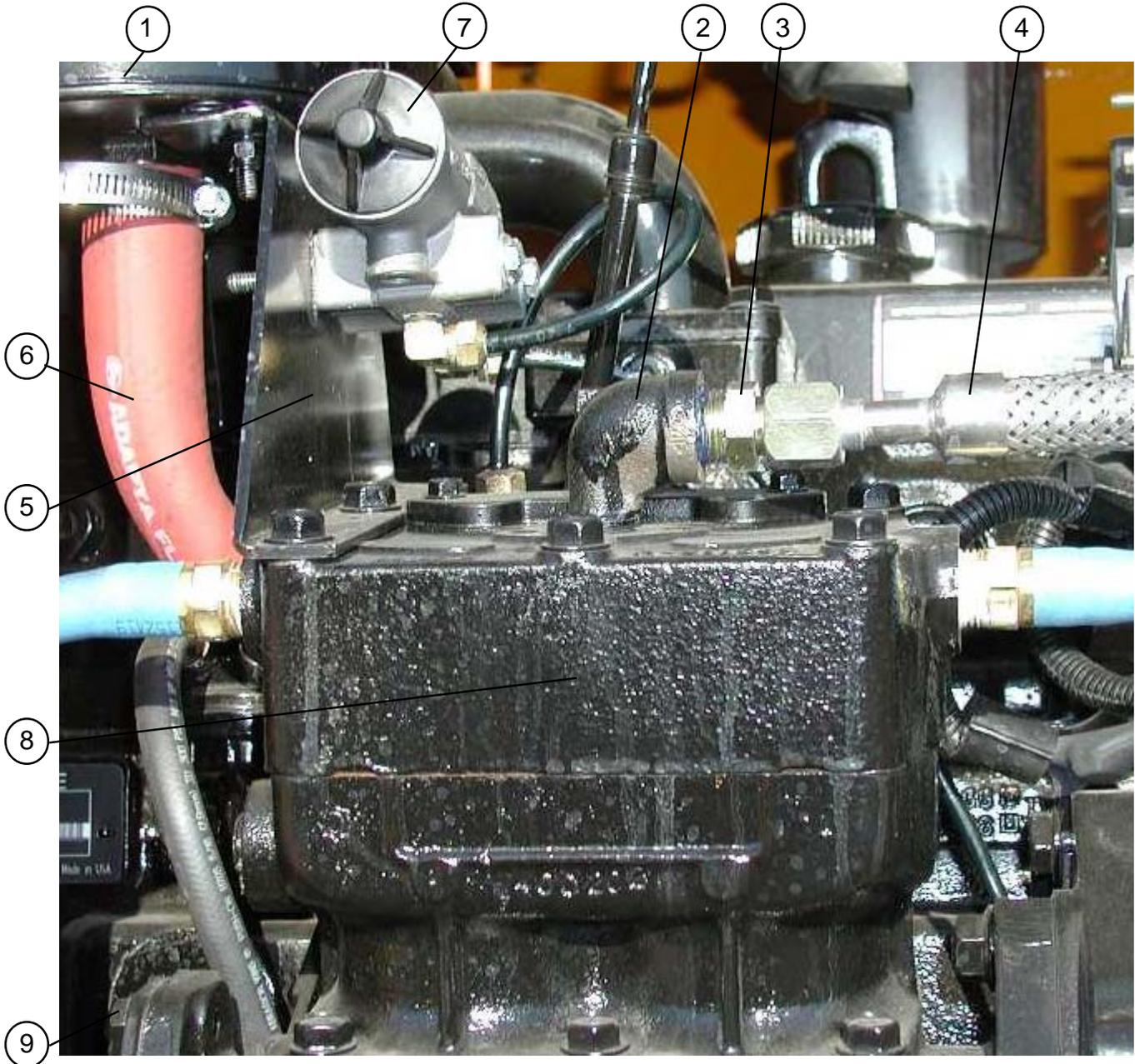
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90563	1	FUEL LEVEL GAUGE
2	91510	1	FUEL TANK COMPLETE
3	43579	1	PRESSURE FILLER BREATHER CAP

## GOVERNOR/ENGINE ON-BOARD COMPRESSOR



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

## GOVERNOR/ENGINE - ON-BOARD COMPRESSOR



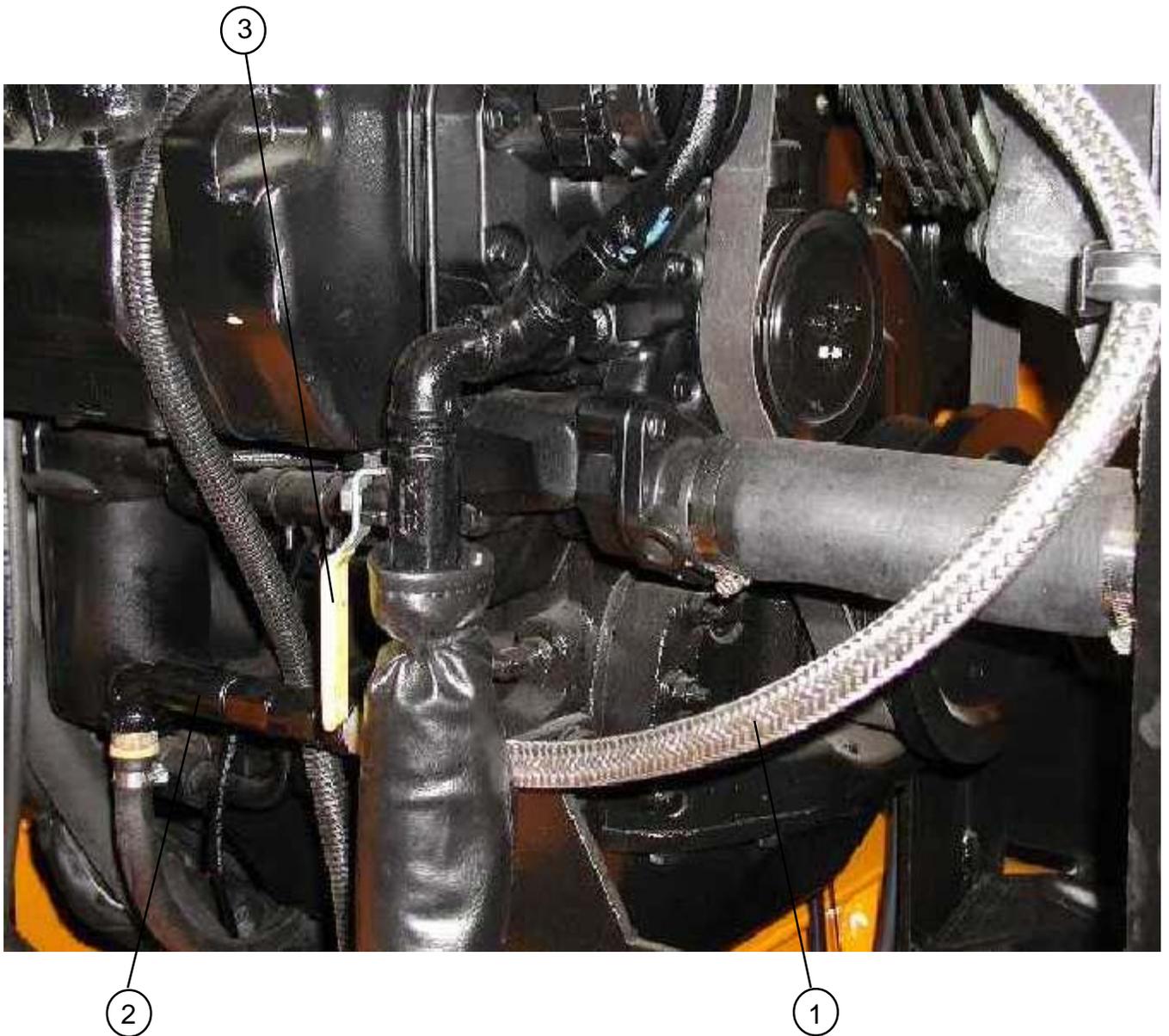
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	50109	1	AIR COMPRESSOR FILTER
2	28238	1	1/2" STREET ELBOW
3	29844	1	1/2" MPT X 1/2" 37° ADAPTER
4	41403	1	1/2" STAINLESS STEEL LINE
5	90890	1	BRACKET
6	90891	1	INTAKE AIR COMPRESSOR HOSE
7	90899K	1	GOVERNOR - COMPRESSOR UNLOADING
8	91022	1	ENGINE - BOLT ON AIR COMPRESSOR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

## RETURN WATER HEATING VALVE ASSEMBLY



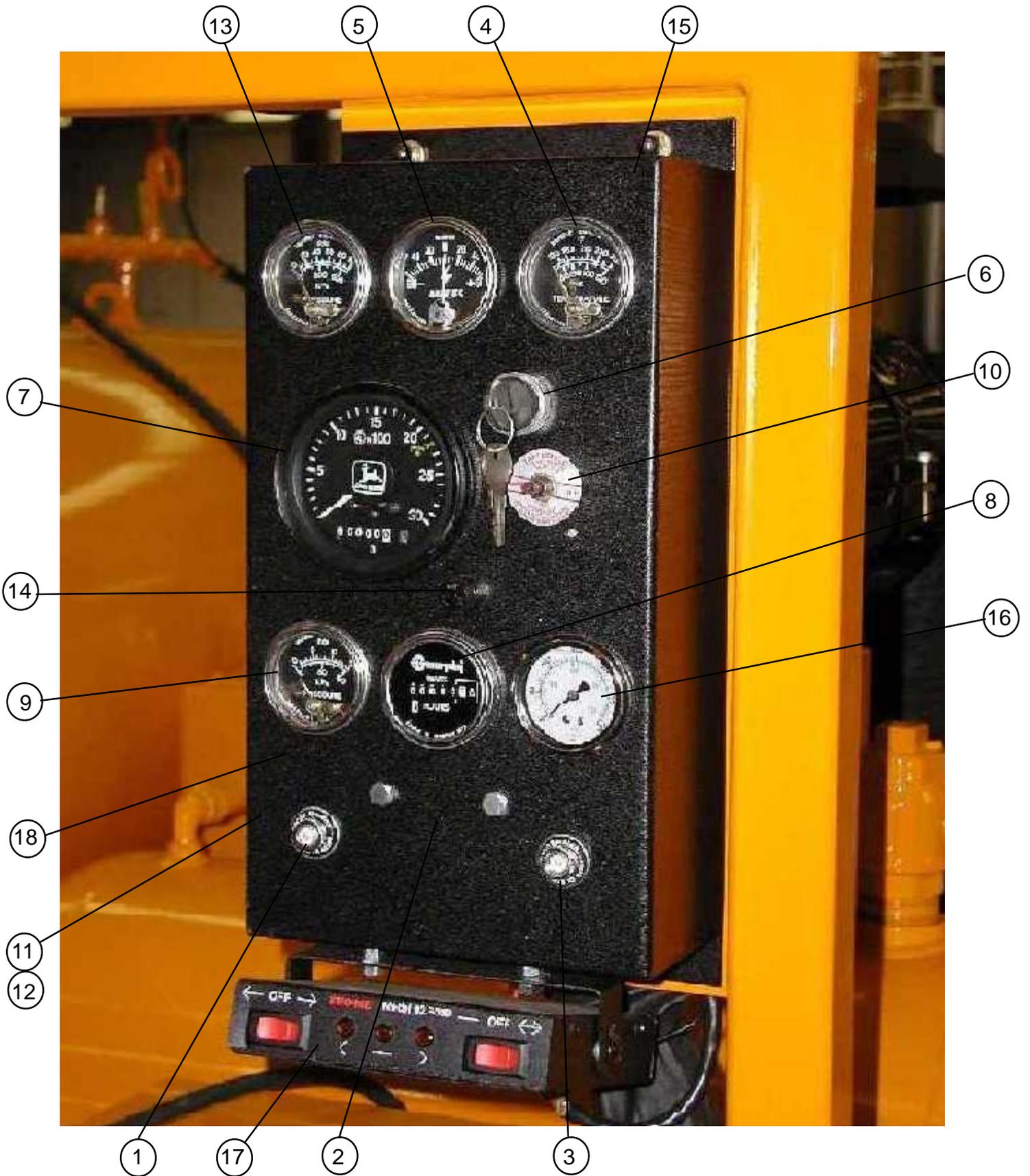
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90529	1	RETURN WATER HEATING VALVE ASSEMBLY

## WATER PUMP OUTLET HEATING 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

# ENGINE CONTROL PANEL



## ENGINE CONTROL PANEL

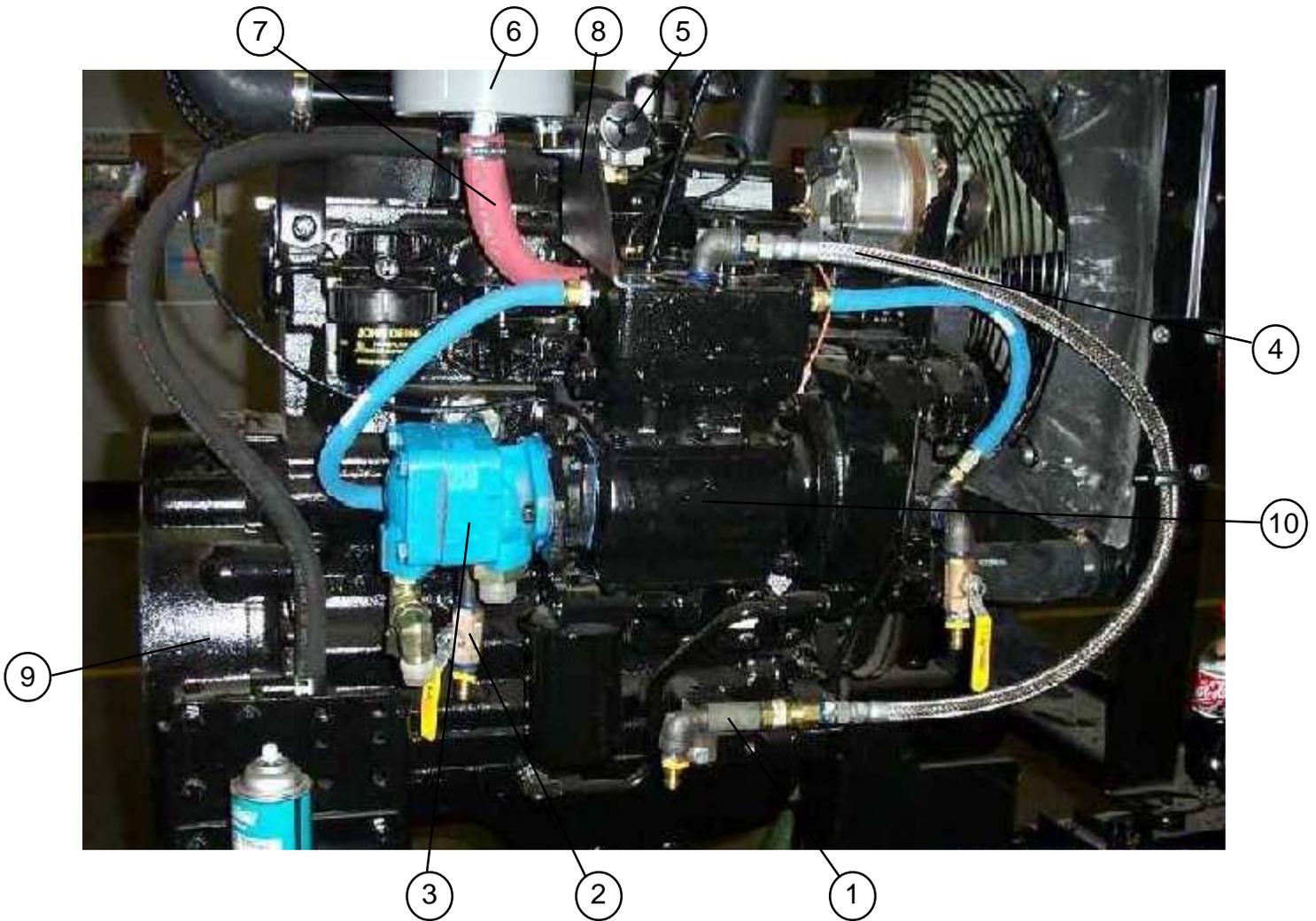
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	51695	1	CIRCUIT BREAKER 30 AMPS
2	50238	1	JUMPER
3	51694	1	CIRCUIT BREAKER 5 AMPS
4	91764	1	TEMPERATURE SWITCH GAUGE
5	91822	1	AMP METER
6	90537	1	SWITCH KEY
7	91854	1	TACHOMETER WITH HOUR METER
8	91780	1	HOUR METER
9	91837	1	COOLANT PRESSURE SWITCH GAUGE
10	91758	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 HYD PRESSURE GAUGE
17	90625	1	ARROW BOARD & CONTROL BOX
18	91032	1	ENGINE CONTROL PANEL - PURCHASED

## DIRECT DRIVE/ALIGNMENT BLOCK AND BLOWER



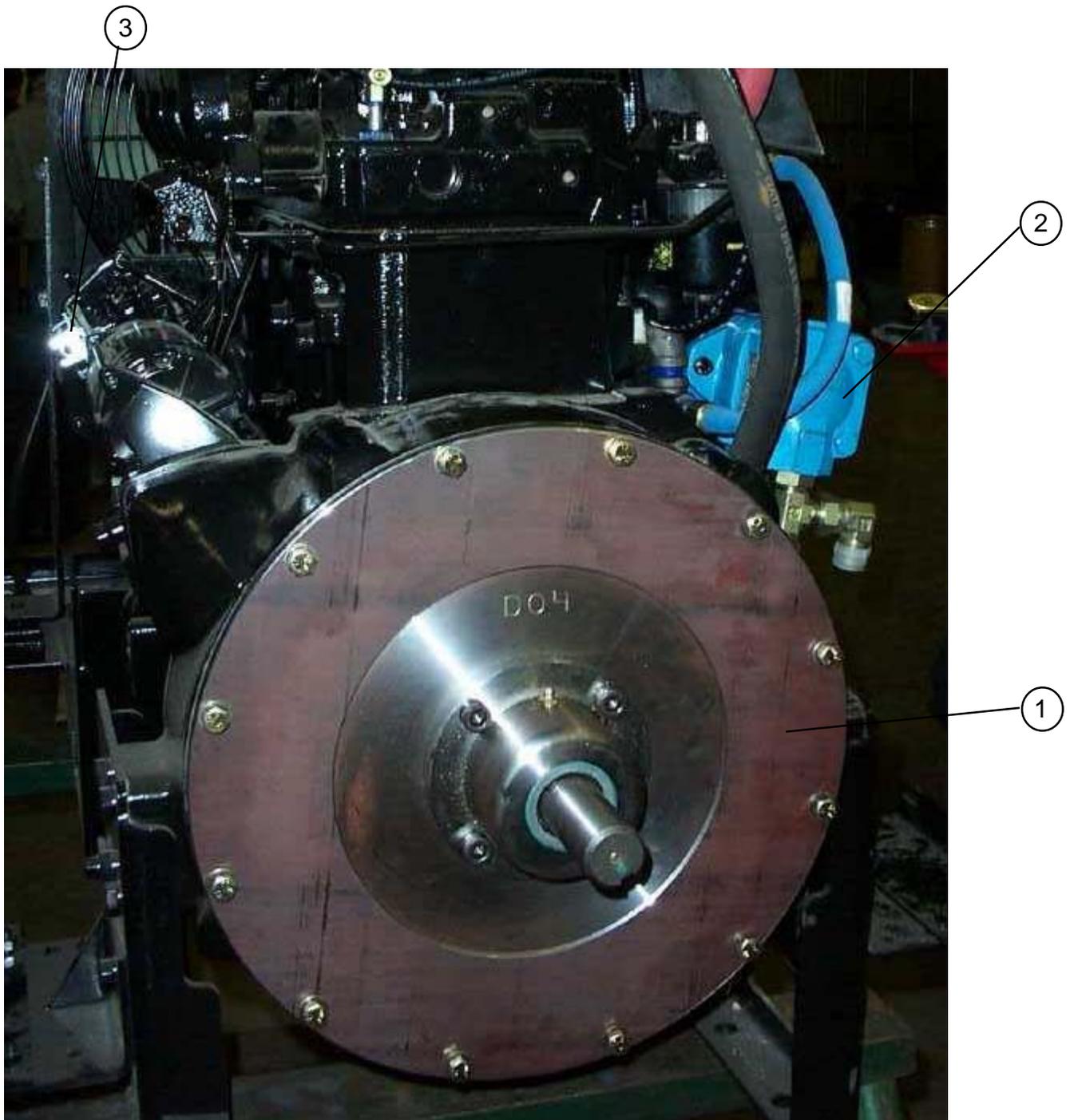
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90330	1	ALIGNMENT TOOL W/ON-BOARD COMPRESSOR
2	90720	1	AIRSTREAM BLOWER
3	90827	1	BLOWER MOUNTING TAB
4	90681	2	BLOWER MOUNTING BRACKET
5	90520	1	6" X 5" ADAPTER
6	90332	1	BELT GUARD ENGINE/BLOWER

## JOHN DEERE ENGINE AND COMPONENTS



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90895	1	ON-BOARD COMPRESSOR CHECK VALVE ASSEMBLY
2	90529	1	RETURN WATER HEATING VALVE ASSEMBLY
3	90800	1	HYDRAULIC PUMP JOHN DEERE WITH COMPRESSOR FITTING ASSEMBLY
4	41403	1	METAL HOSE ASSEMBLY
5	90899	1	GOVERNOR/COMPRESSOR
6	50109	1	FILTER, AIR COMPRESSOR
7	90891	1	INTAKE AIR COMPRESSOR HOSE
8	90889	1	AIR COMPRESSOR HOSE BRACKET
9	91015	1	JOHN DEERE ENGINE TO 4045D
10	91022	1	COMPRESSOR JOHN DEERE ENGINE 13 C.F.M.

## BEARING SUPPORT STUB SHAFT



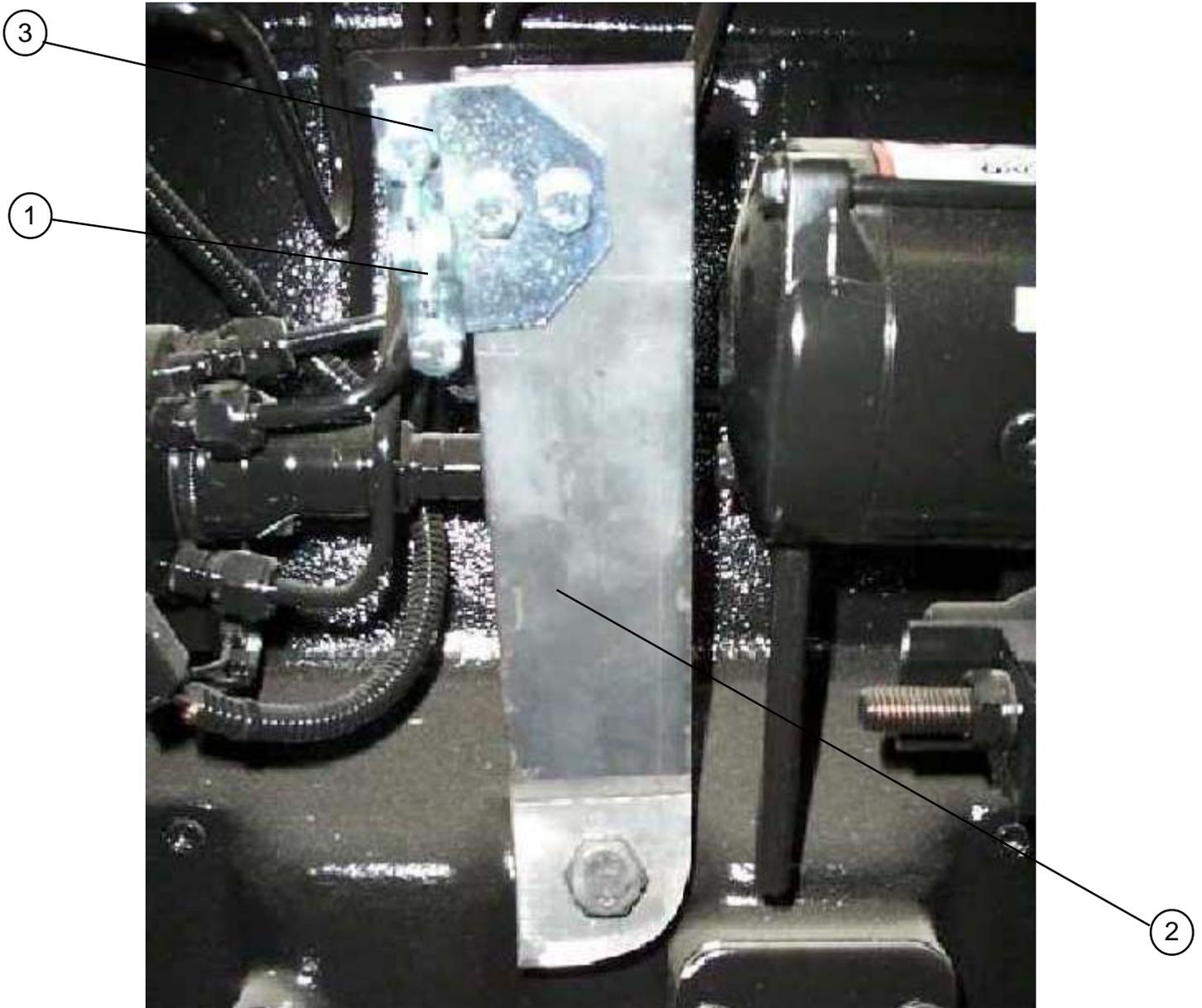
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91335	1	BEARING SUPPORT STUB SHAFT
2	90800	1	HYDRAULIC PUMP JOHN DEERE WITH COMPRESSOR FITTING ASSEMBLY
3	90915	1	THROTTLE CABLE CLAMP

## WATER PUMP OUTLET VALVE ASSEMBLY



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90530	1	WATER PUMP OUTLET VALVE ASSEMBLY

## ENGINE THROTTLE CABLE



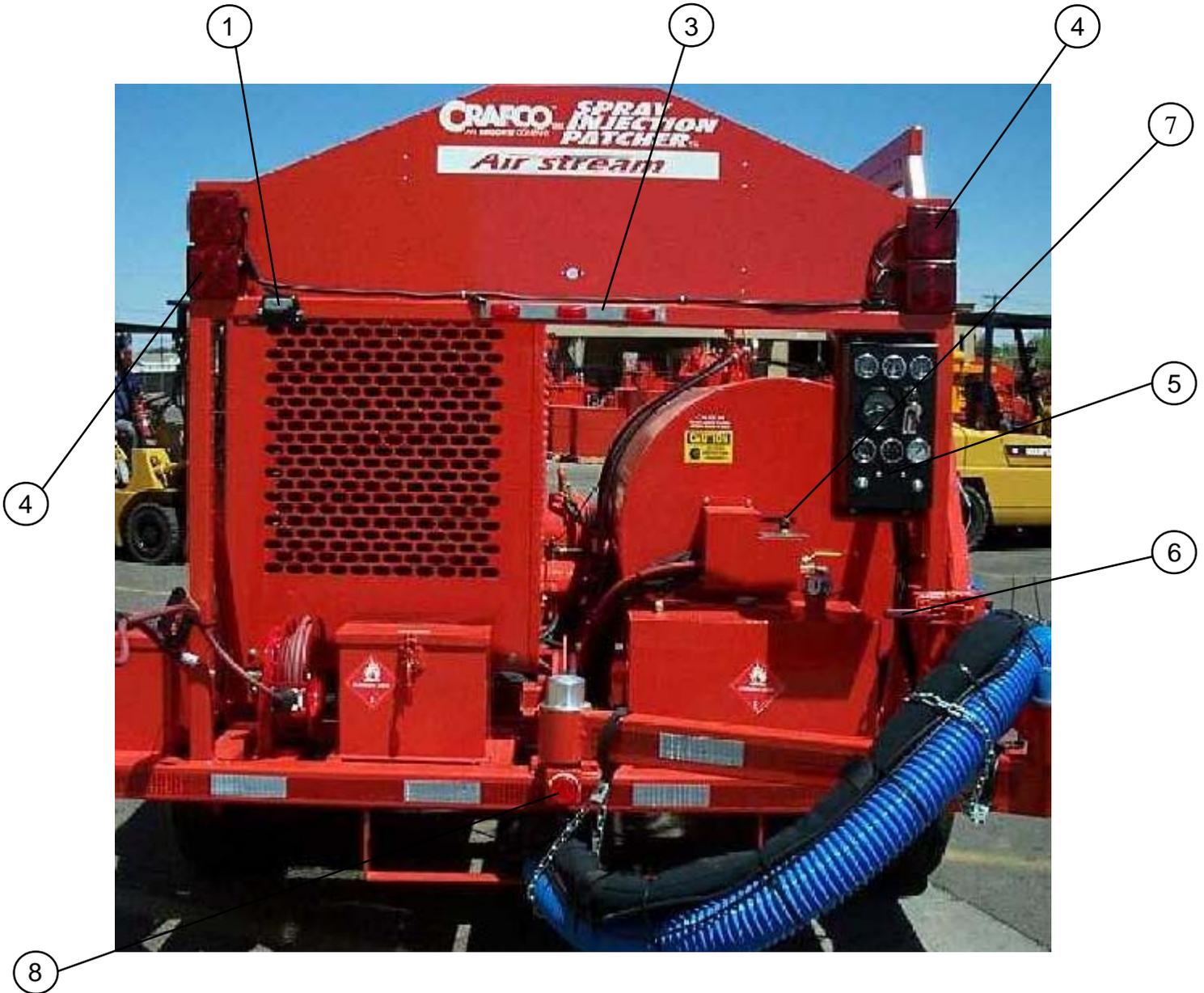
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91046	1	THROTTLE CABLE
2	90915	1	THROTTLE BRACKET
3	91036	1	THROTTLE CABLE CLAMP

# TIRE AND RIM ASSEMBLY



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	42515	4	TIRE & RIM ASSEMBLY

# ELECTRICAL - LIGHTS, TAIL LIGHT, AND RUNNING LIGHTS



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90544	1	LICENSE BRACKET W/LIGHT
2	24095	1	STROBE LIGHT (91216K-KIT) (NOT SHOWN)
3	90545	1	3 LENSEM ID LIGHT
4	90548	1	TAIL LIGHT WITH DOUBLE BULB
5	91032	1	ENGINE PANEL ASSEMBLY WITH ENGINE
6	90607	1	PULL CLAMP #2000
7	90628	1	EMULSION TANK REAR VALVE ASSEMBLY
8	91761	1	SMALL CYCLOPS TAIL LIGHT BOOM

## ELECTRICAL, RUNNING LIGHTS AND REFLECTORS



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90546	1	ARMORED CLEARANCE LIGHT
2	90547	1	3" ROUND AMBER REFLECTOR
3	90549	1	3" REFLEX REFLECTOR (RED) (REAR OF MACHINE) (NOT SHOWN)

# AGGREGATE HOPPER AND FRONT HITCH PLATE



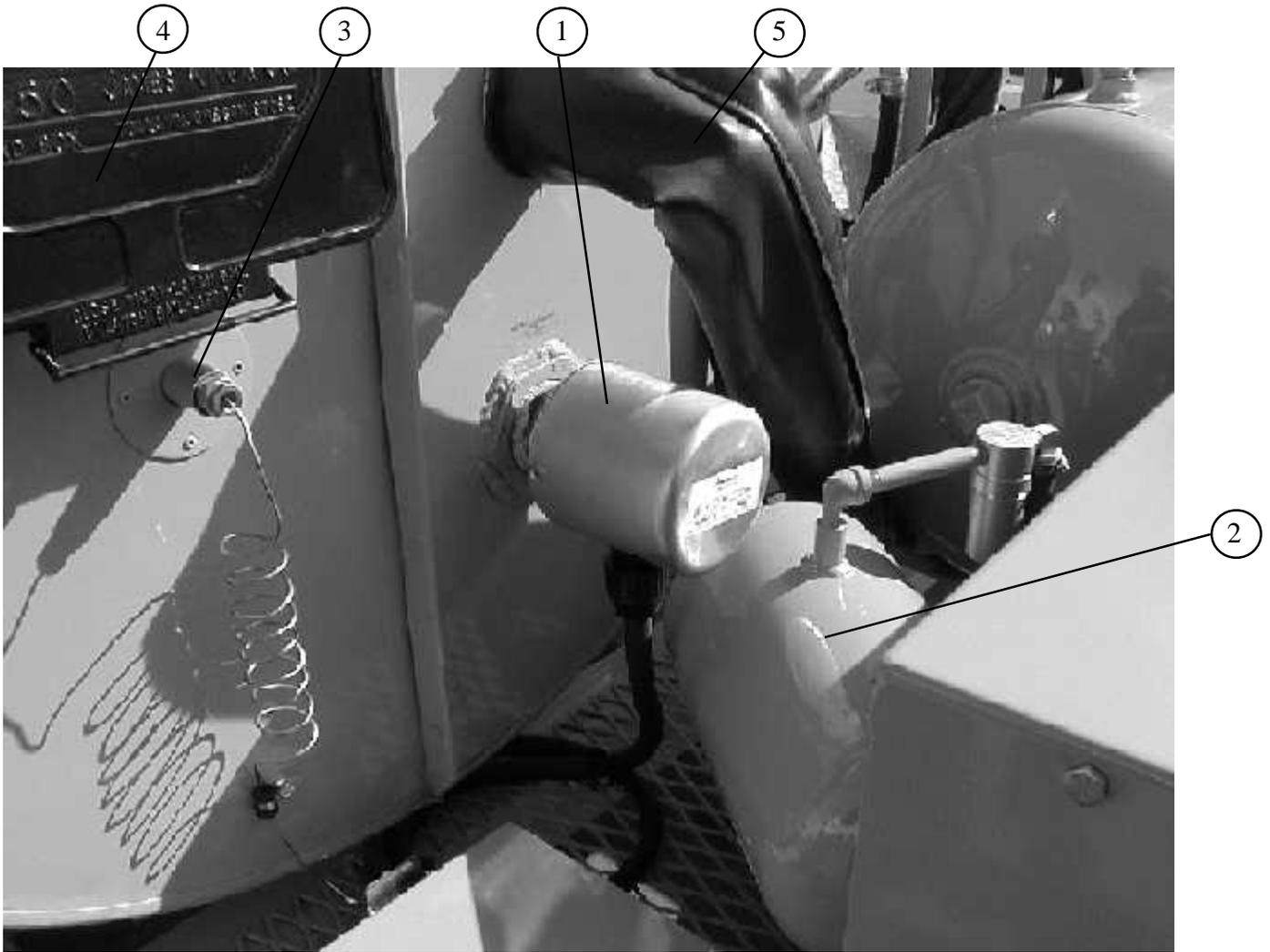
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90735	1	FRONT HITCH PLATE ASSEMBLY
2	90514	1	3/8" SAFETY CHAIN
3	91850	1	2-1/2" I.D. EYE DROP FORGED STL DRB
4	91171	1	BREAK-AWAY BRACKET ACT SWITCH
5	91781	1	3/8" SAFETY CHAIN HOOK
6	90550	1	AGGREGATE HOPPER
7	90085	1	SLIDE CHANNEL WITH SOLENOID WITH AIR CYLINDER

## EMULSION TANK REAR VALVE ASSEMBLY



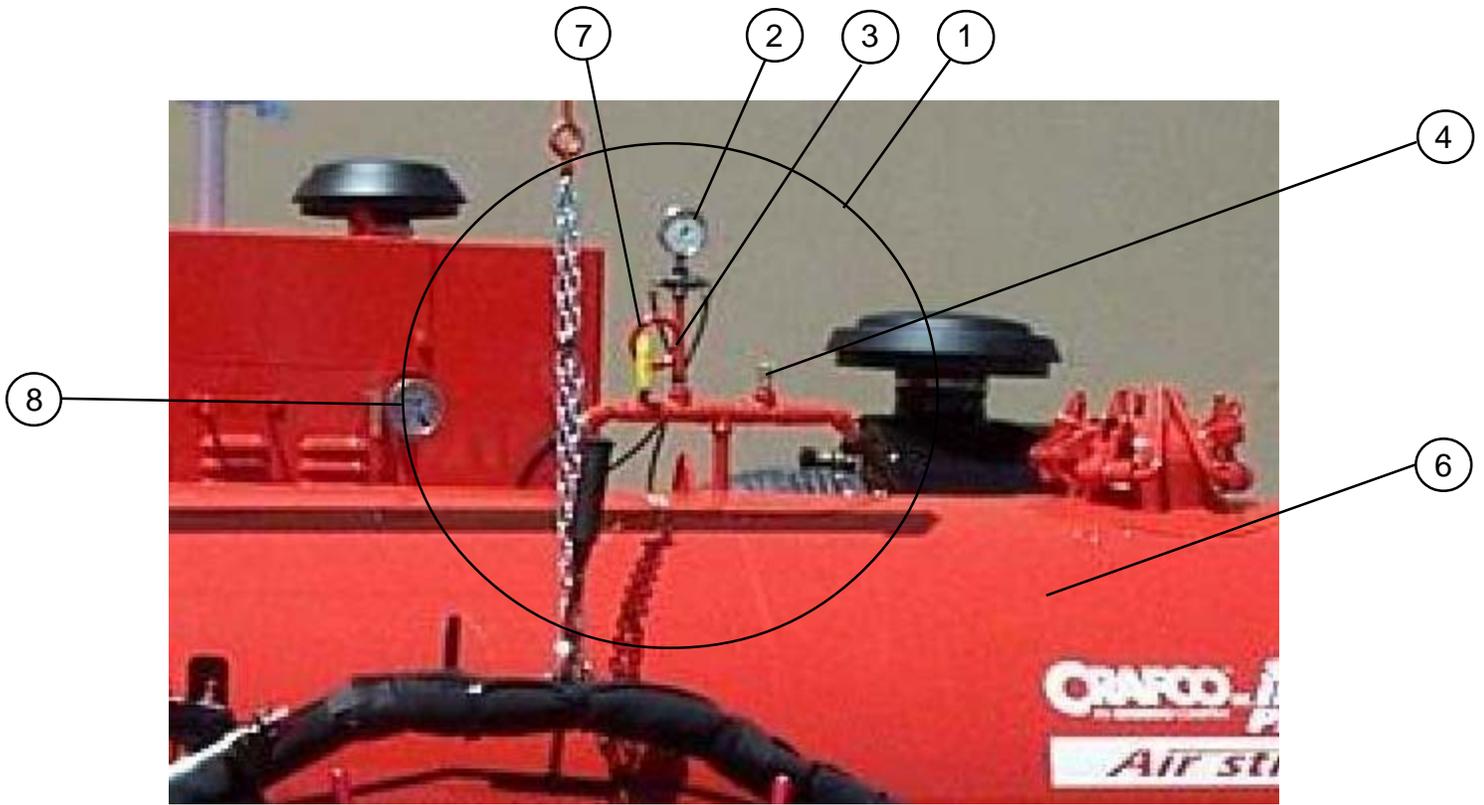
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91808	1	2-WAY BRASS VALVE
2	90569	1	VALVE POSITION INDICATOR PLATE
3	29214	1	BRONZE BALL VALVE - 1/2"
4	90628	1	EMULSION TANK REAR VALVE ASSEMBLY

## EMULSION TANK HEATER



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91799	1	EMULSION TANK HEATER
2	90124	1	AIR STORAGE TANK ASSEMBLY
3	25203	1	STUFFING BOX
4	25289	1	RECORD BOX
5	91207	2	EMULSION INSTALLATION HOSE COVER

## EMULSION TANK, HEATING AND FLUSH SYSTEM



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90629	1	EMULSION TANK TOP VALVE ASSEMBLY
2	29961	1	PRESURE GAUGE
3	91135	1	1/4" PIPE "PIG TAIL"
4	42629	1	SAFETY VALVE
5	90861	1	1/2" CHECK VALVE
6	90640	1	250 GALLON EMULSION TANK WITH INSULATION
7	29214	1	BRONZE BALL VALVE - 1/2"
8	41243	1	24" TEMP GAUGE BOTTOM MOUNT

## THERMOSTAT AND CONTROL BOX

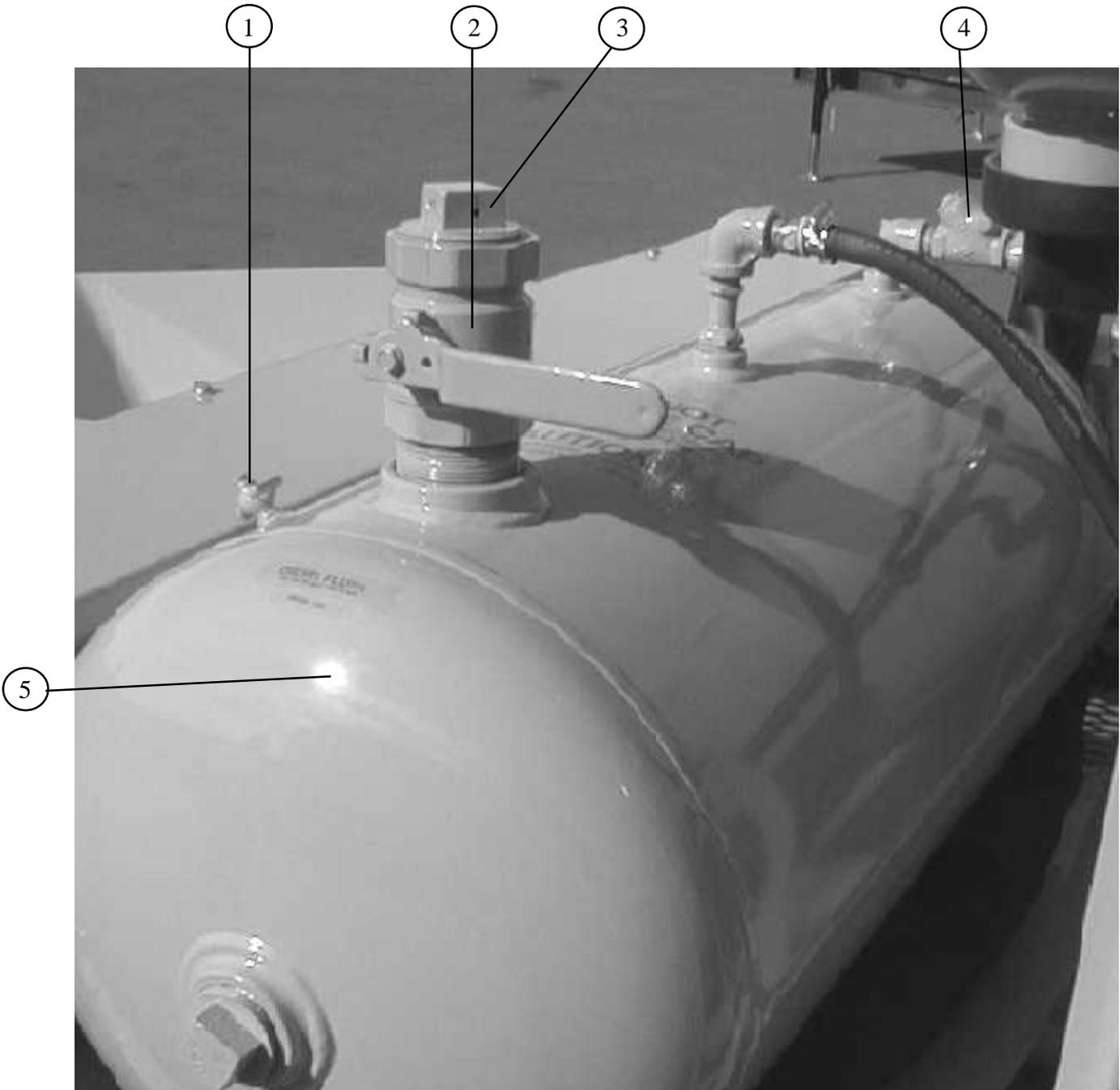


1

2

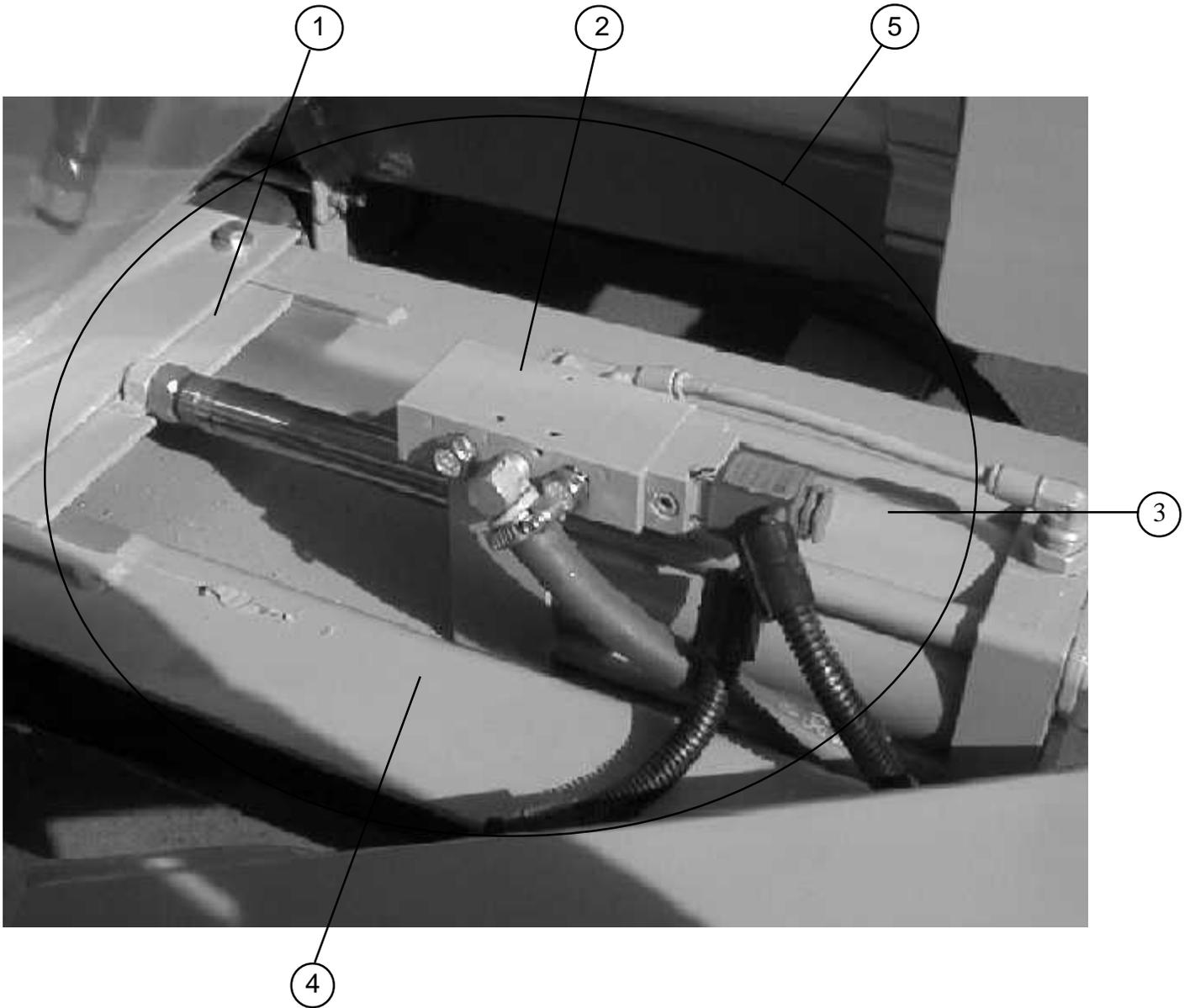
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91095	1	COMPLETE THERMOSTAT ASSEMBLY
2	91215	1	THERMOSTAT

## DIESEL FLUSH TANK



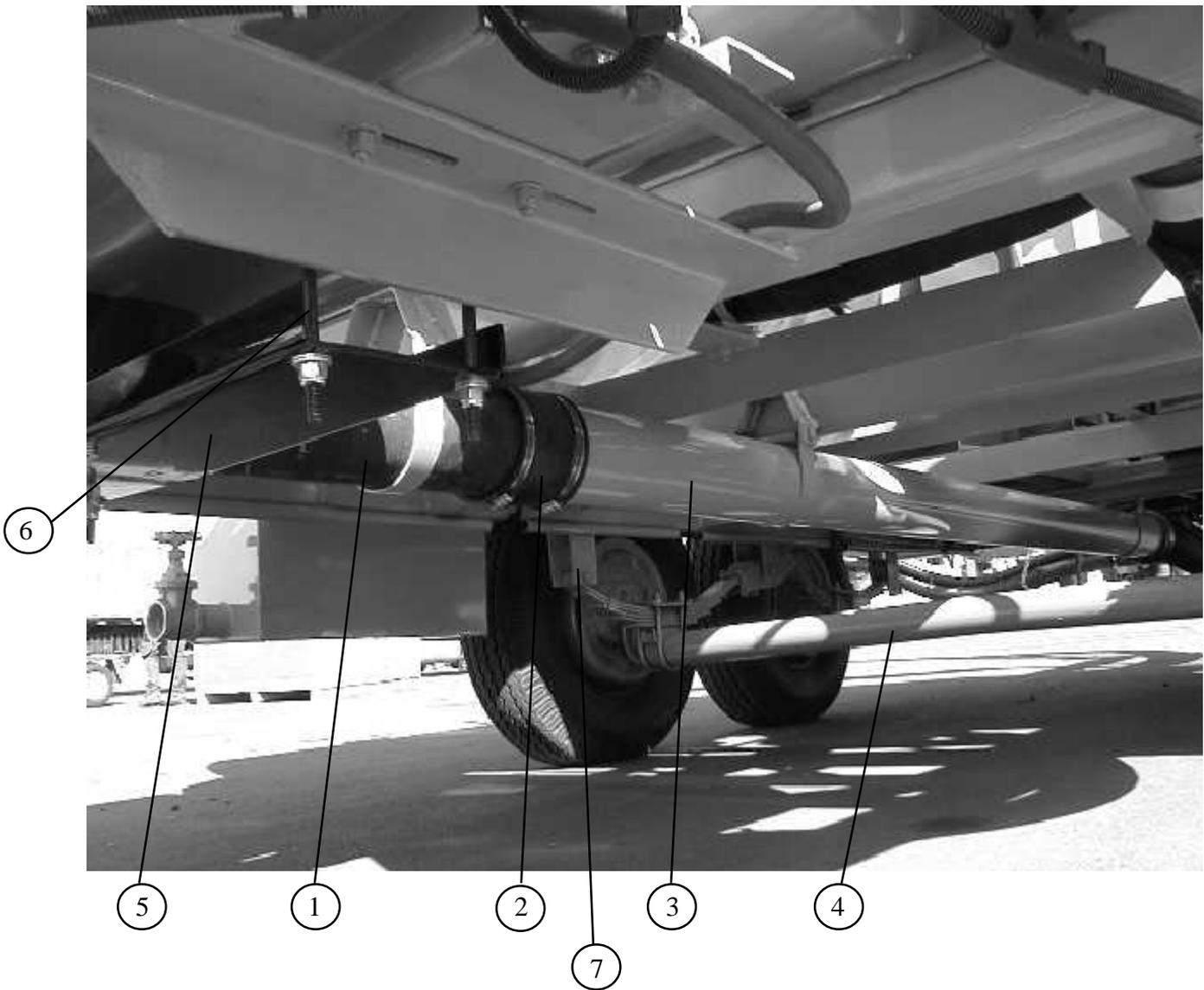
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91815	1	1/4" DRAIN PET COCK
2	29281	1	2" BRASS BALL VALVE
3	90703	1	2" PIPE PLUG WITH P.S.I. WITH RELIEF HOLE
4	91766	1	1/2" CHECK VALVE
5	90710	1	30 GALLON DIESEL TANK ASSEMBLY

# SLIDE CHANNEL WITH SOLENOID WITH AIR CYLINDER



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90089	1	SLIDE PLATE
2	90092	1	AIR CYLINDER ACT TAG SOLENOID VALVE
3	90091	1	AIR CYLINDER FOR SLIDE PLATE
4	90088	1	SLIDE GATE GUIDE - FORMED
5	90085	1	SLIDE CHANNEL WITH SOLENOID WITH AIR CYLINDER

## VENTURI/AIR FEED SYSTEM



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90140	1	VENTURI
2	90131	1	RUBBER COUPLER
3	90617	1	AGGREGATE DISCHARGE PIPE
4	90510	1	AXLE 6000# LEAFSPRNG WITH 4" DROP
5	90751	1	VENTURI HOLDING CHANNEL CLAMP
6	90141	4	VENTURI VERTICAL SPACER TUBE
7	90511	2	HANGER KIT - HANGER

## VENTURI/AIR FEED SYSTEM/COMPONENTS



3

1

2

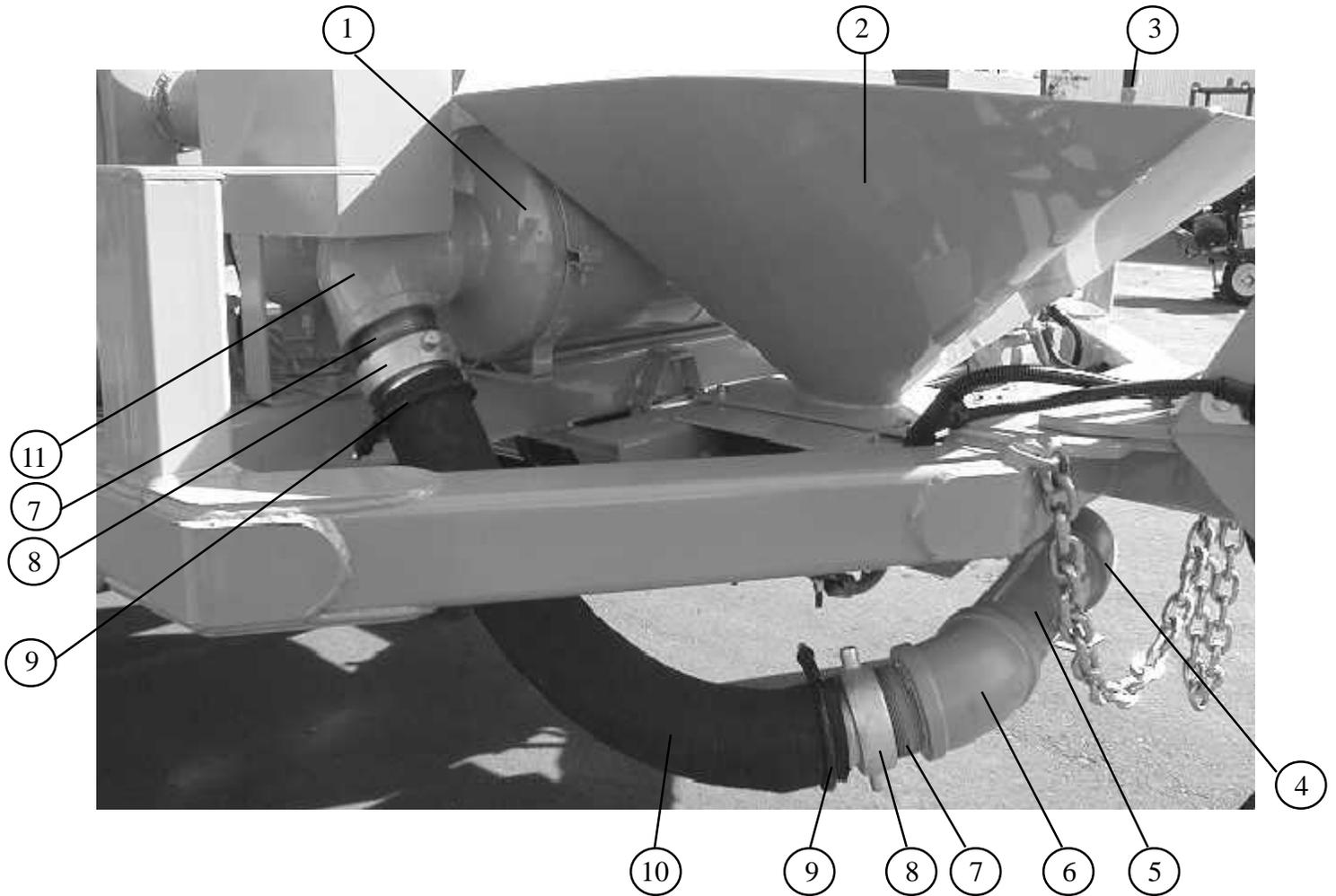
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90751	1	VENTURI HOLDING ANGLE CLAMP
2	90141	1	VENTURI VERTICAL SPACER TUBE
3	90140	1	VENTURI

## VENTURI/AIR FEED SYSTEM/COMPONENTS



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90554	1	PIN PLUG/3" FEMALE LUG COUPLER
2	25953	1	4" U-BOLT MUFFLER CLAMP
3	91155	1	HOSE 3" X 24" GUM RUBBER LINED
4	91281	1	FRONT HYDRAULIC HOSE STORAGE BRACKET

## VENTURI/AIR FEED SYSTEM/AGGREGATE HOPPER



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90691	1	SILENCER SD-4-AIRSTREAM
2	90550	1	AGGREGATE HOPPER
3	91576	1	JACK STAND
4	26802	1	3" X 2-1/2" SCH 40 REDUCER 90 DEGREE ELBOW
5	28122	1	3" PIPE X 9" THREADED ON BOTH ENDS
6	28200	1	3" 45 DEGREE THREAD ELBOW
7	28010	1	3" CLOSED NIPPLE
8	90554	1	PIN PLUG/3" FEMALE LUG COUPLER
9	25953	1	4" U-BOLT MUFFLER CLAMP
10	91155	1	HOSE 3" X 24" GUM RUBBER LINED
11	26801	1	4" X 3" SCH 40 REDUCER 90 DEGREE ELBOW

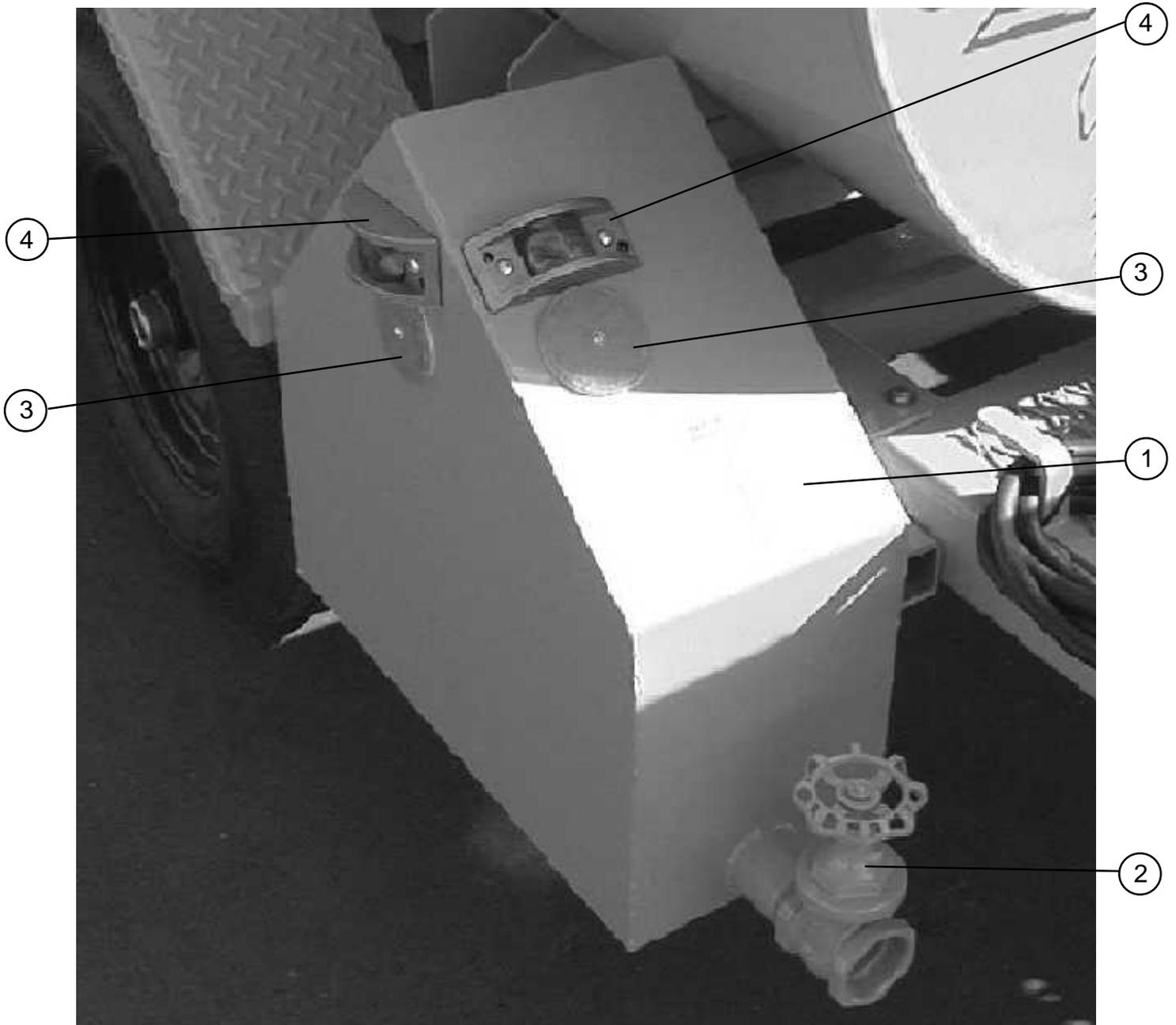
## NOZZLE STORAGE BOX



1

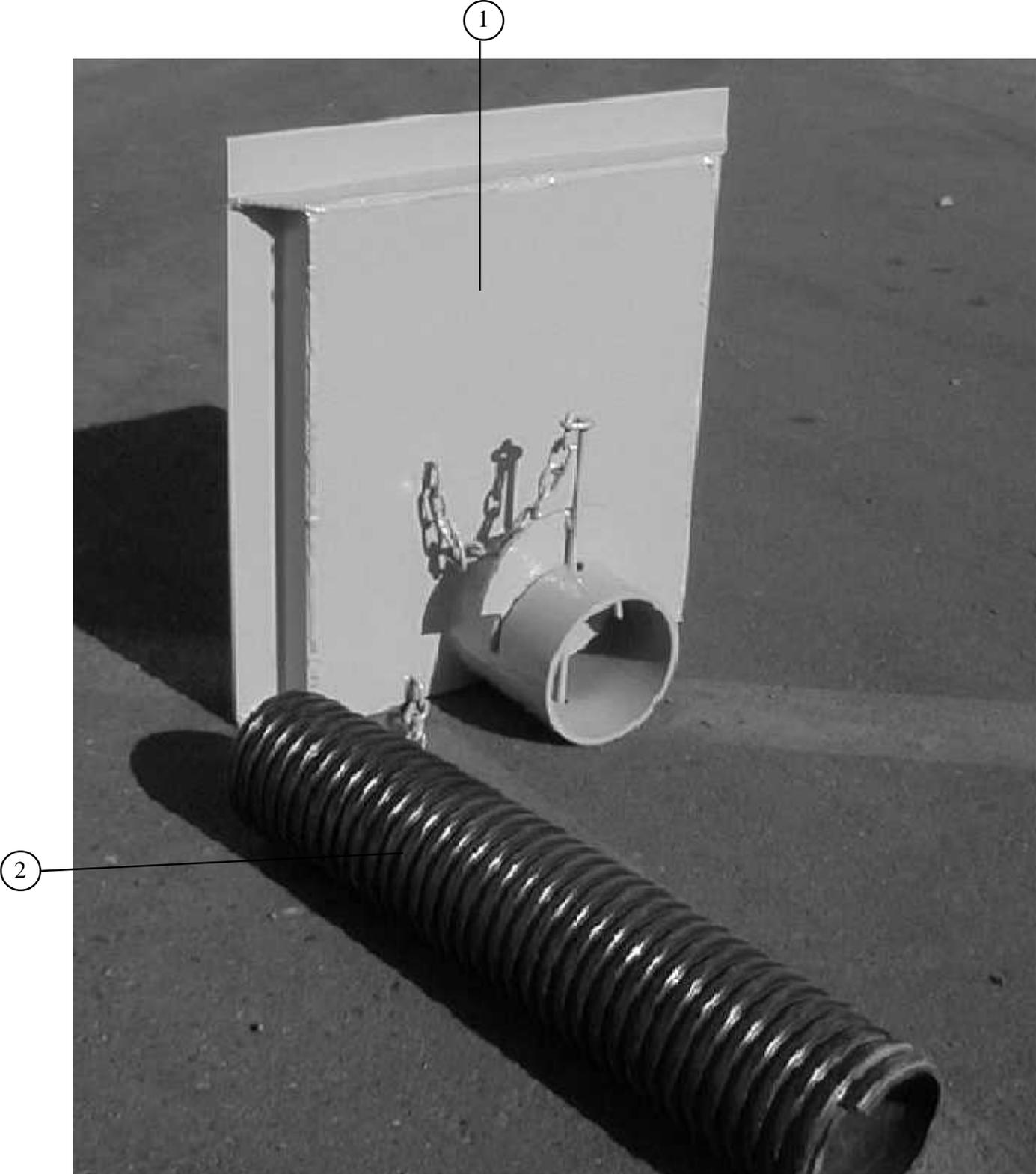
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91530	1	DEEP NOZZLE STORAGE & BOX

## AIR STREAM SPRAY INJECTION PATCHER FLUSH OUT BOX AND FRONT TRAILER LIGHTING



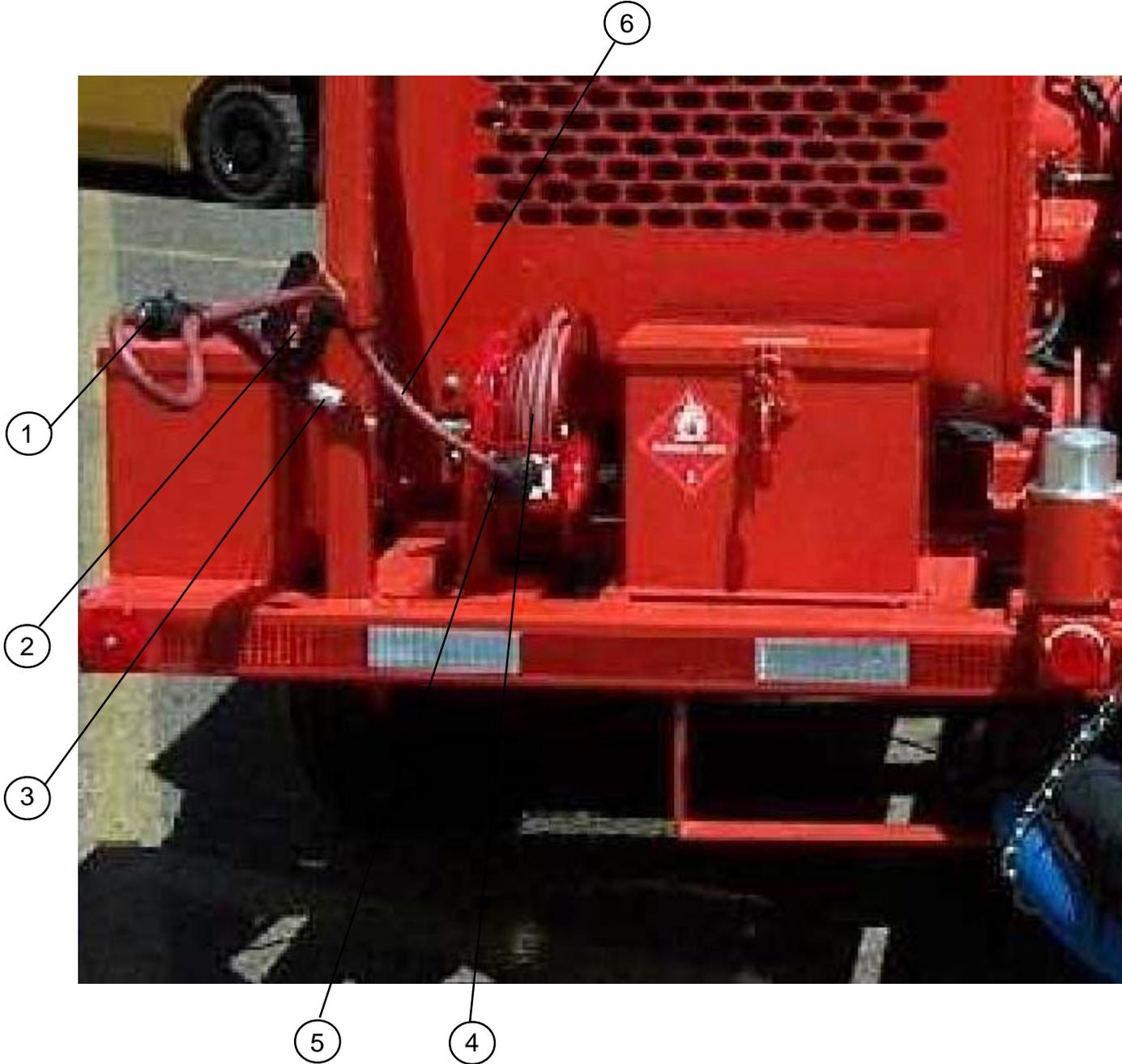
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90660	1	AIRSTREAM FLUSH OUT BOX
2	29270	1	BRONZE GATE VALVE - 2"
3	90547	2	3" ROUND AMBER REFLECTOR
4	90546	2	ARMORED CLEARANCE LIGHT

# STANDARD GRAVITY FEED TAILGATE



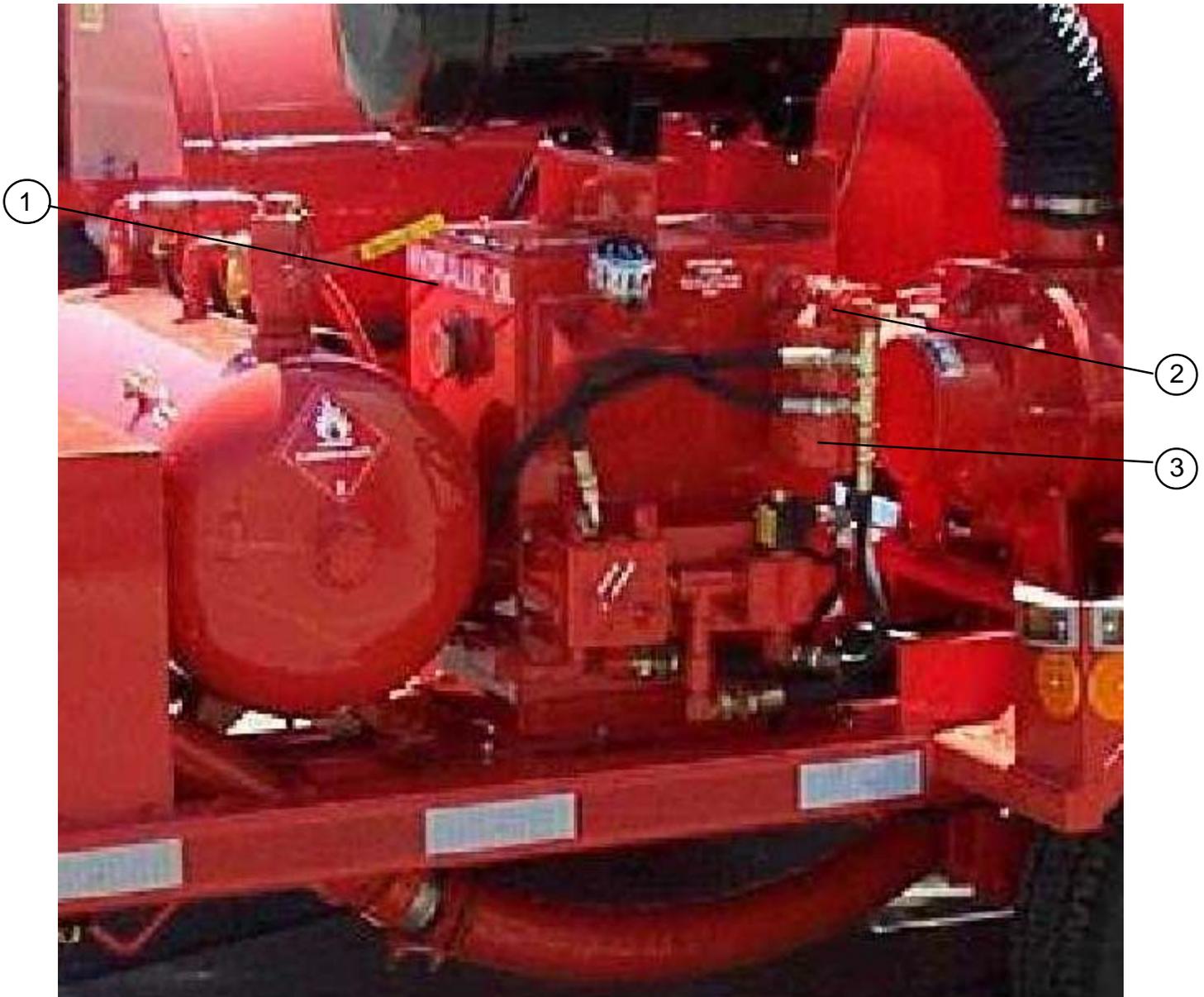
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90595	1	GRAVITY FEED TAILGATE
2	90876	1	AGGREGATE TAILGATE HOSE - 6" ID. X 24"

## CRACK FILLING ATTACHMENT - OPTION



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90782	1	TACK WAND COMPLETE ASSEMBLY
2	90772	1	TACK WAND GRIP HANDLE ASSEMBLY
3	91825	1	QUICK COUPLER 1/4" MPT X 1/4" FM AIR
4	90777	1	TACK WAND SUPPLY HOSE STOW REEL
5	90778	1	HOSE STOP-RUBBER-ORANGE
6	90771	1	TANK WAND SUPPLY HOSE 25 FEET

## OPTIONAL - HYDRAULICS FOR TAILGATE HYDRAULIC FILTER/HYDRAULIC TANK



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90815	1	HYDRAULIC TANK - COMPLETE ASSEMBLY
2	43872	1	HYDRAULIC OIL FILTER ASSEMBLY
3	43871	1	ELEMENT HYDRAULIC OIL

## HYDRAULIC TANK WITH HYDRAULICS FOR TAIL GATE (90760) HYDRAULIC FLOW CONTROL ASSEMBLY



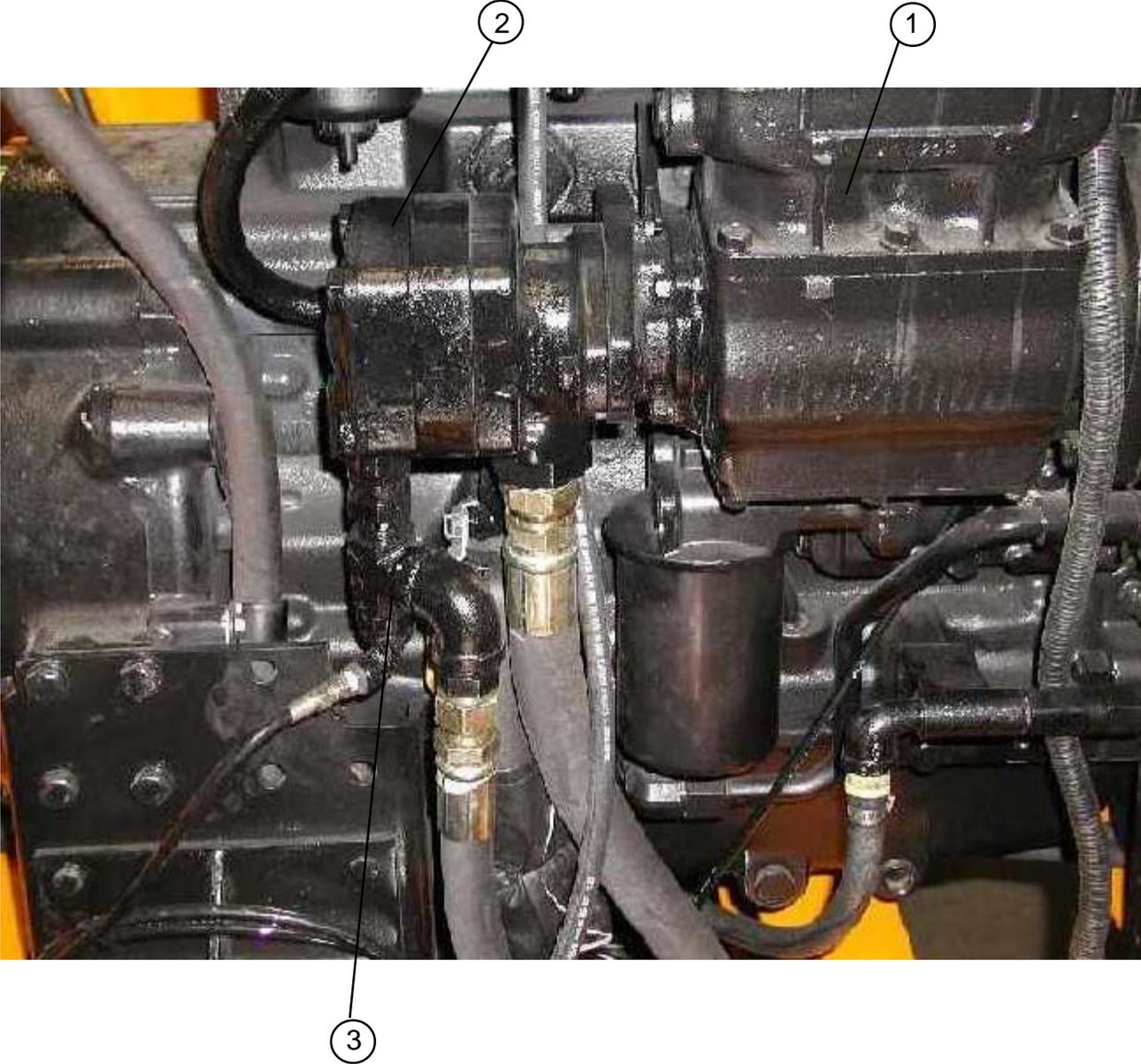
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90687	1	SINGLE HYDRAULIC VALVE SOLENOID
2	91778	1	SINGLE HYDRAULIC VALVE
3	90815	1	HYDRAULIC TANK - COMPLETE ASSEMBLY

# HYDRAULIC FLOW CONTROL VALVE AND HYDRAULIC TANK



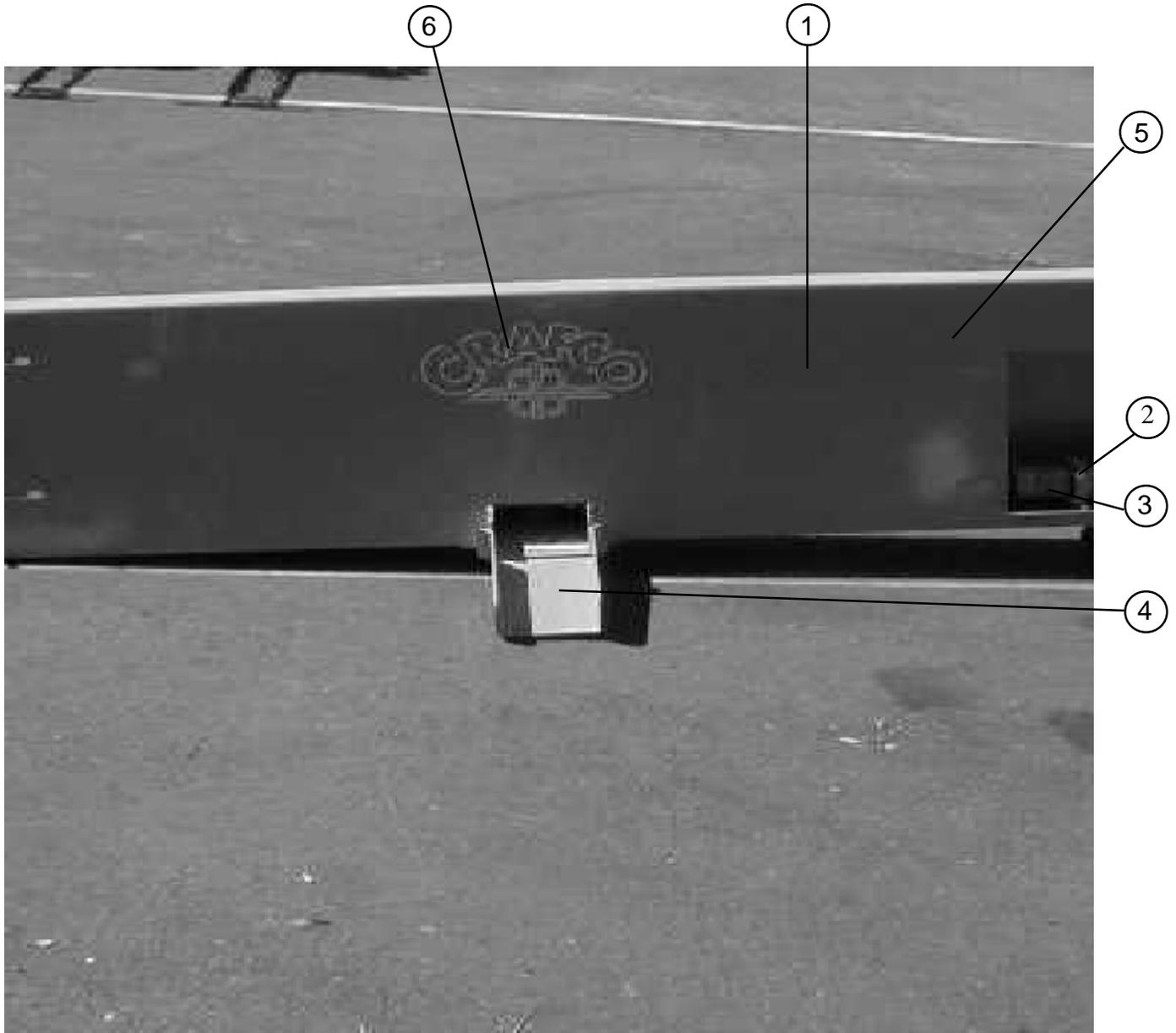
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90760	1	HYDRAULIC FLOW CONTROL ASSEMBLY
2	90815	1	HYDRAULIC TANK - COMPLETE ASSEMBLY
3	25289	1	RECORD BOX
4	91645	1	BACK-UP ALARM - HEAVY DUTY
5	23097	1	TONGUE JACK SIDE MOUNT
6	90860	1	30 GALLON DIESEL FLUSH TANK
7	90720	1	AIRSTREAM BLOWER
8	90690	1	SILENCER HEAT SHIELD
9	90885	1	SILENCE ASSEMBLY (NOT SHOWN)
10	91830	1	EMULSION HEIGHT GAUGE DIPSTICK
11	91237	1	6" RUBBER CONNECTION HOSE TO BLOWER
12	91070	1	AIR CLEANER - BLOWER
13	90993	1	INLET HOOD - LARGE AIR CLEAN

# HYDRAULIC PUMP JOHN DEERE ENGINE WITH COMPRESSOR



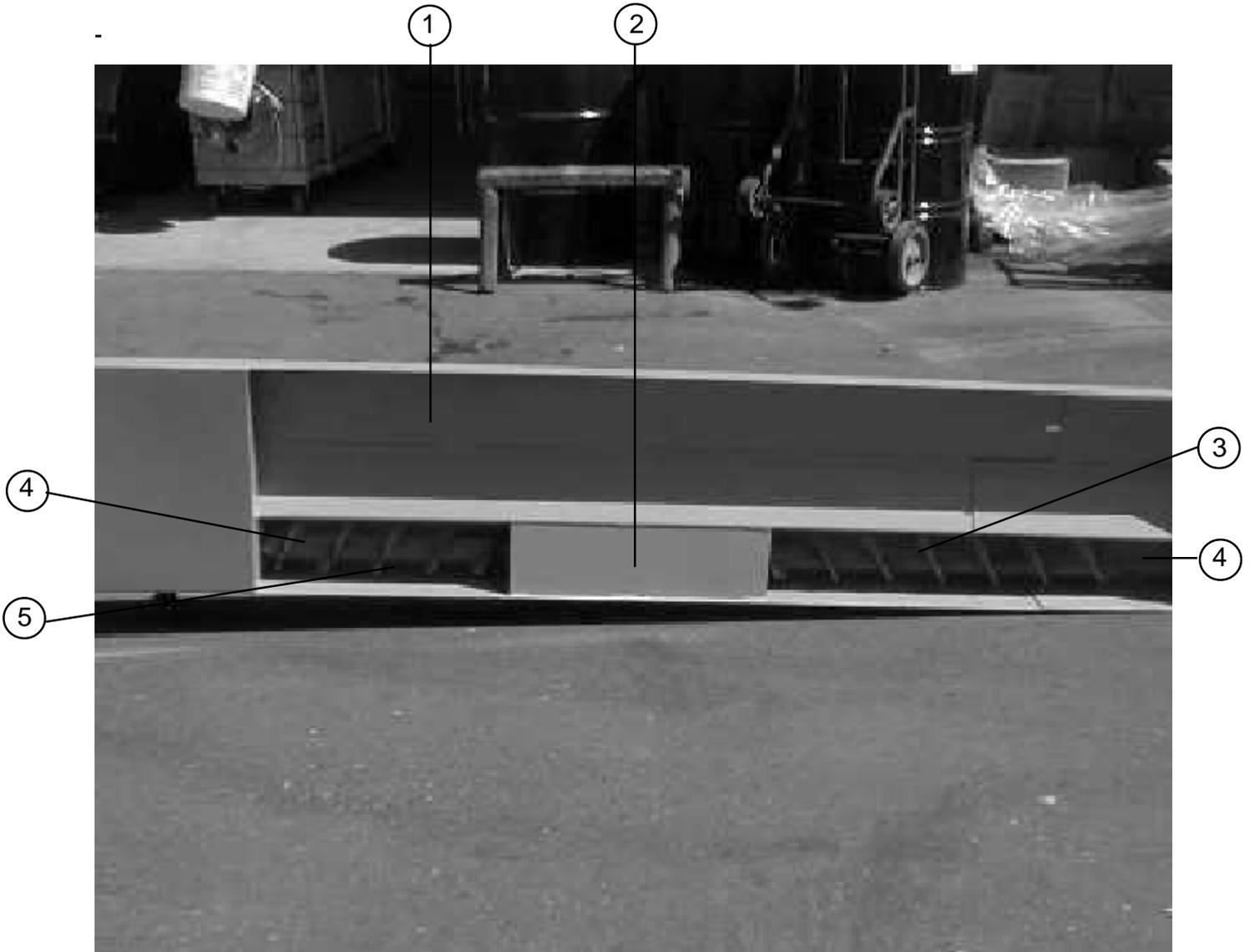
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91022	1	ENGINE BOLT ON 13 CFM COMPRESSOR - JOHN DEERE ENGINE
2	90800	1	HYDRAULIC PUMP JOHN DEERE ENGINE WITH COMPRESSOR

## OPTIONAL - HYDRAULIC TAILGATE TAILGATE KIT 91196K



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91196	1	TRUCK AUGER TAILGATE WITH MOTOR CHUTE
2	41102	1	HYDRAULIC MOTOR
3	90057	1	HYDRAULIC MOTOR COUPLER
4	90650	1	SHORT NEW TYPE ROCK CHUTE
5	91196K	1	OPTION - TRUCK AUGER TAILGATE SALES ORDER KIT
6	26150B	1	DECAL - CRAFCO - BLACK
6A	26150	1	DECAL - CRAFCO - WHITE

## OPTIONAL - HYDRAULIC TAILGATE TAILGATE KIT 91196K



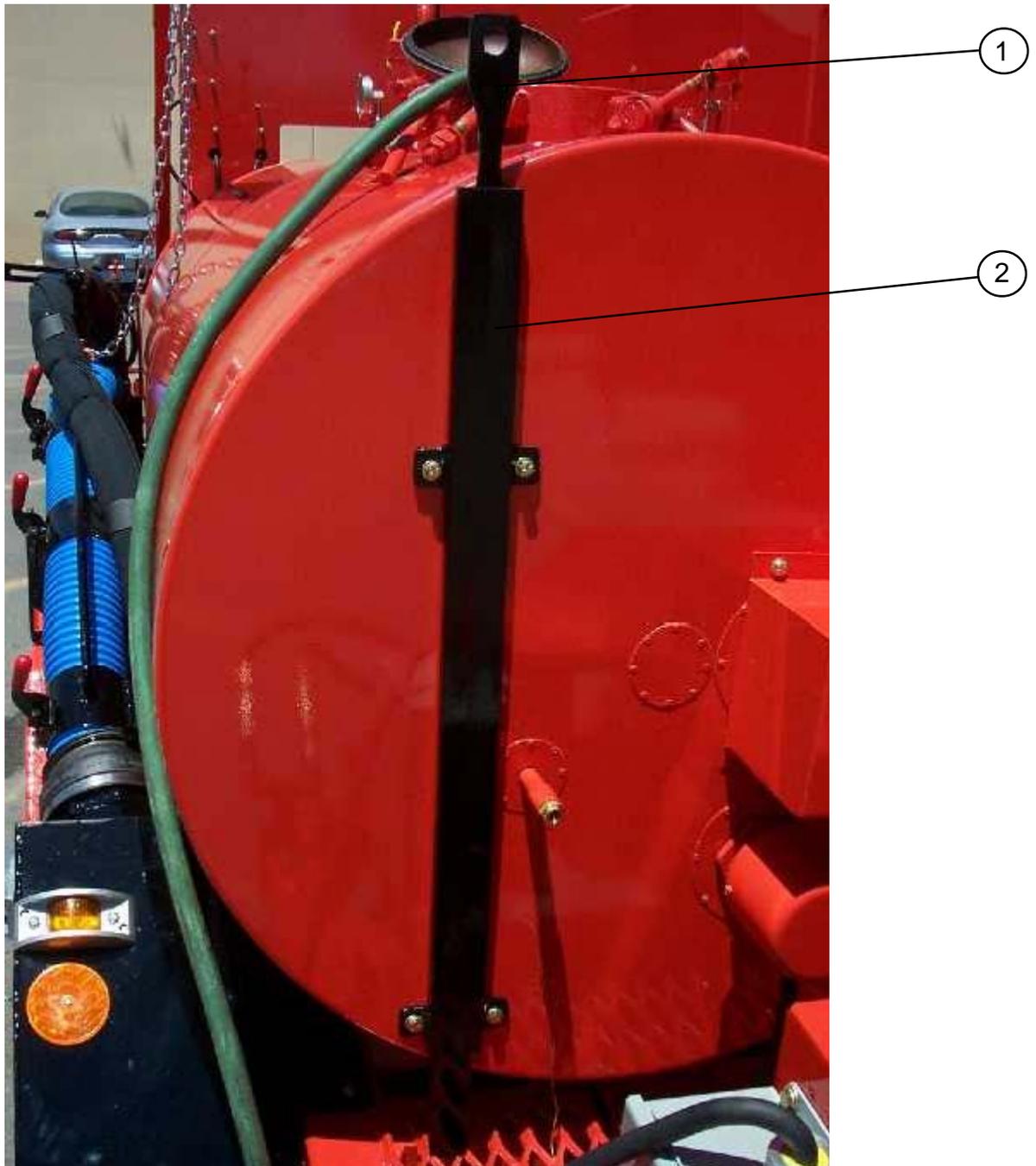
NUMBER	PART NUMBER	QTY	DESCRIPTION
1	91196	1	TRUCK AUGER TAILGATE WITH MOTOR CHUTE
2	90613	1	SCREW AUGER SHAFT @ PADDLES (NOT SHOWN)
3	90614	1	LONG SCREW AUGER
4	90578	2	TRUCK AUGER BEARING 2-BOLT FLANGE
5	90611	1	SHORT SCREW AUGER

**OPTIONAL - HYDRAULIC TAILGATE  
TAILGATE KIT 91196K**



<b>NUMBER</b>	<b>PART NUMBER</b>	<b>QTY</b>	<b>DESCRIPTION</b>
1	91268	1	TRUCK AUGER SCREEN GUARD

## EMULSION HEIGHT GAUGE



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

## EMULSION TANK LID O-RING



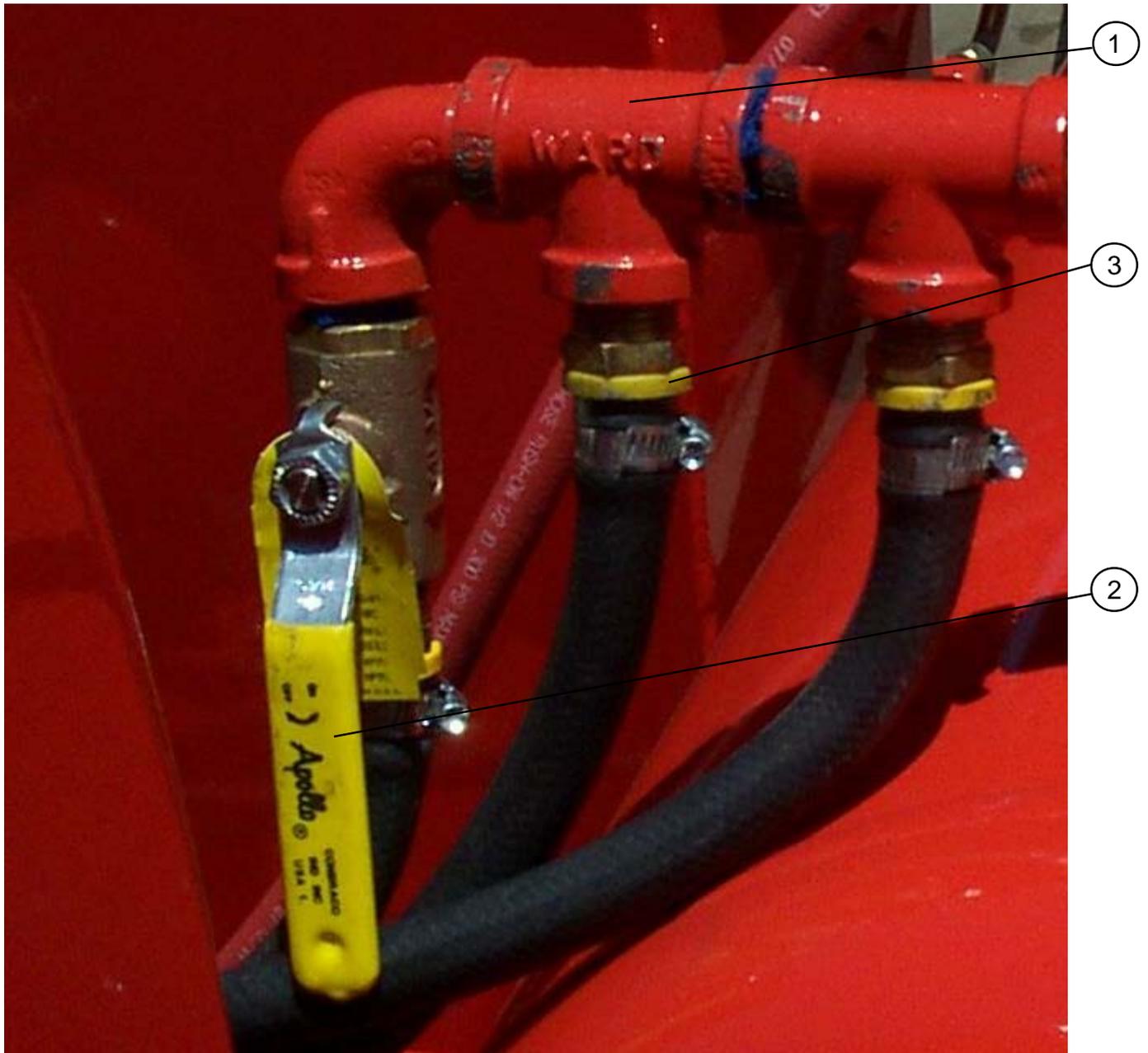
NUMBER	PART NUMBER	DESCRIPTION
1	90621	8" ENCLOSURE O-RING - EMULSION TANK

## REAR SUPPORT BOOM ARM



NUMBER	PART NUMBER	QTY	DESCRIPTION
1	90440	1	BOOM MOUNT SECTION - FRAME
2	90445	1	1ST SECTION BOOM ARM
3	90661	1	3" I.D. BEARING ASSEMBLY COVER
4	90577	2	LARGE TAPER BEARING RACE
5	90576	2	LARGE TAPER BEARING
6	90581	1	LARGE OIL SEAL
7	91722	1	LARGE CRENELLATED NUT
8	29641	1	1/8" X 2-1/2" COTTER PIN
9	91761	1	SMALL CYCLOPS TAIL LIGHT
10	90927	1	3/16" CHAIN X 5' FEET LONG

## DIESEL FLUSH TANK FITTING ASSEMBLY



NUMBER	PART NUMBER	DESCRIPTION
1	28253	1/2" PIPE TEE
2	29214	1/2" BALL VALVE - BRONZE
3	26765	#8 PUSH ON FITTING

## BOOM MOUNTING ARM



NUMBER	PART NUMBER	DESCRIPTION
1	90435	HORIZONTAL SUPPORT MOUNT TUBE ASSEMBLY - ANGLED
2	90449	2ND SECTION BOOM ARM
3	90430	3RD SECTION ANGLED BOOM
4	90607	PULL CLAMP #2000 WITH LOCK
5	90745	3-1/2" 180 AR AGGREGATE HOSE - (20 FEET LONG)

## DIRECT DRIVE COUPLER ASSEMBLY



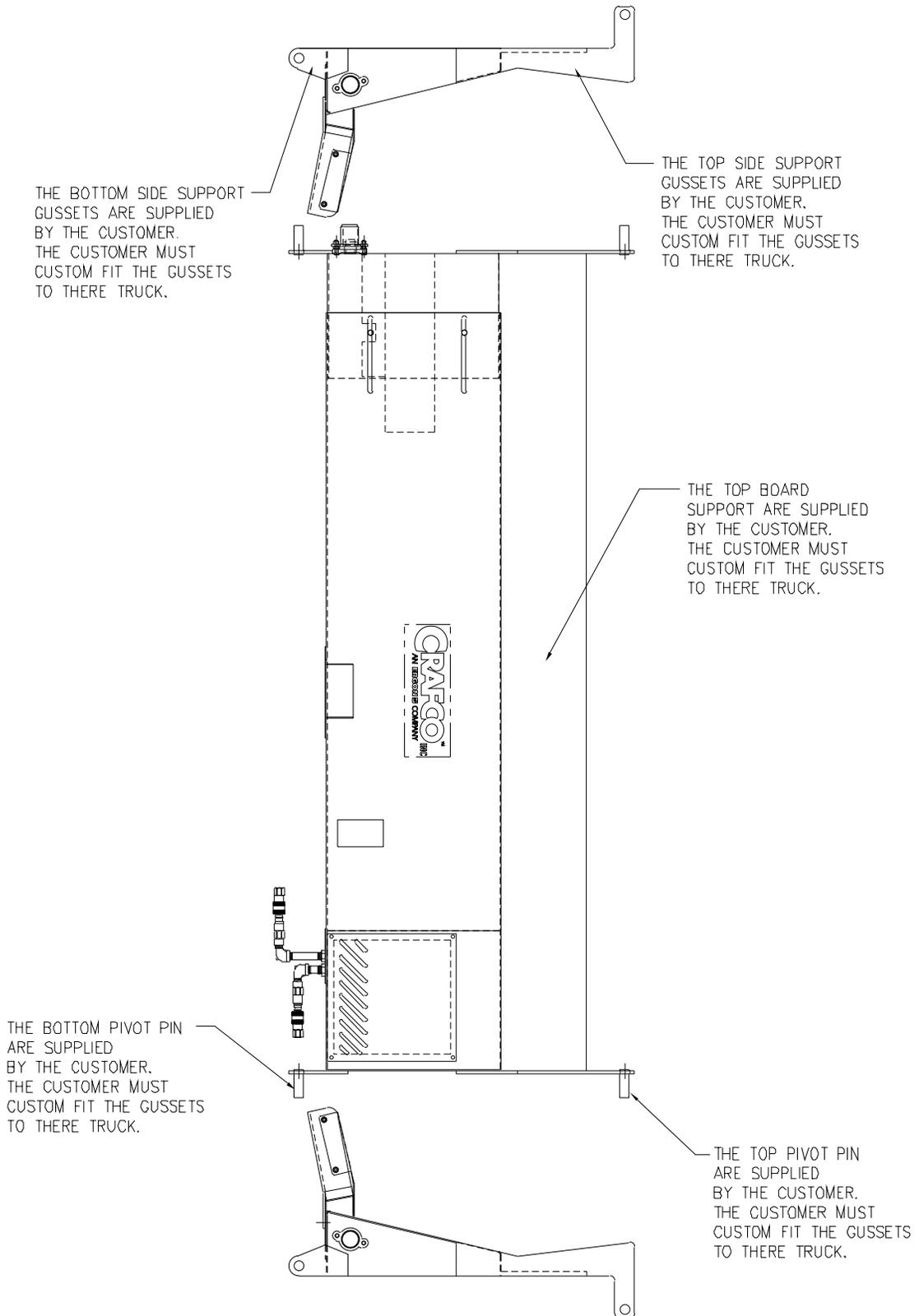
NUMBER	PART NUMBER	DESCRIPTION
1	90575	DIRECT DRIVE COUPLER
2	90330	ALIGNMENT TOOL WITH ON-BOARD COMPRESSOR
3	90720	AIR ROTARY BLOWER
4	90750	BACKING PLATE - FLEX PLATE

## AIR STORAGE TANK



NUMBER	PART NUMBER	DESCRIPTION
1	90124	AIR STORAGE TANK ASSEMBLY

# AIR STREAM SPRAY INJECTION PATCHER TAILGATE INSTALLATION CUSTOMER PROVIDES PARTS

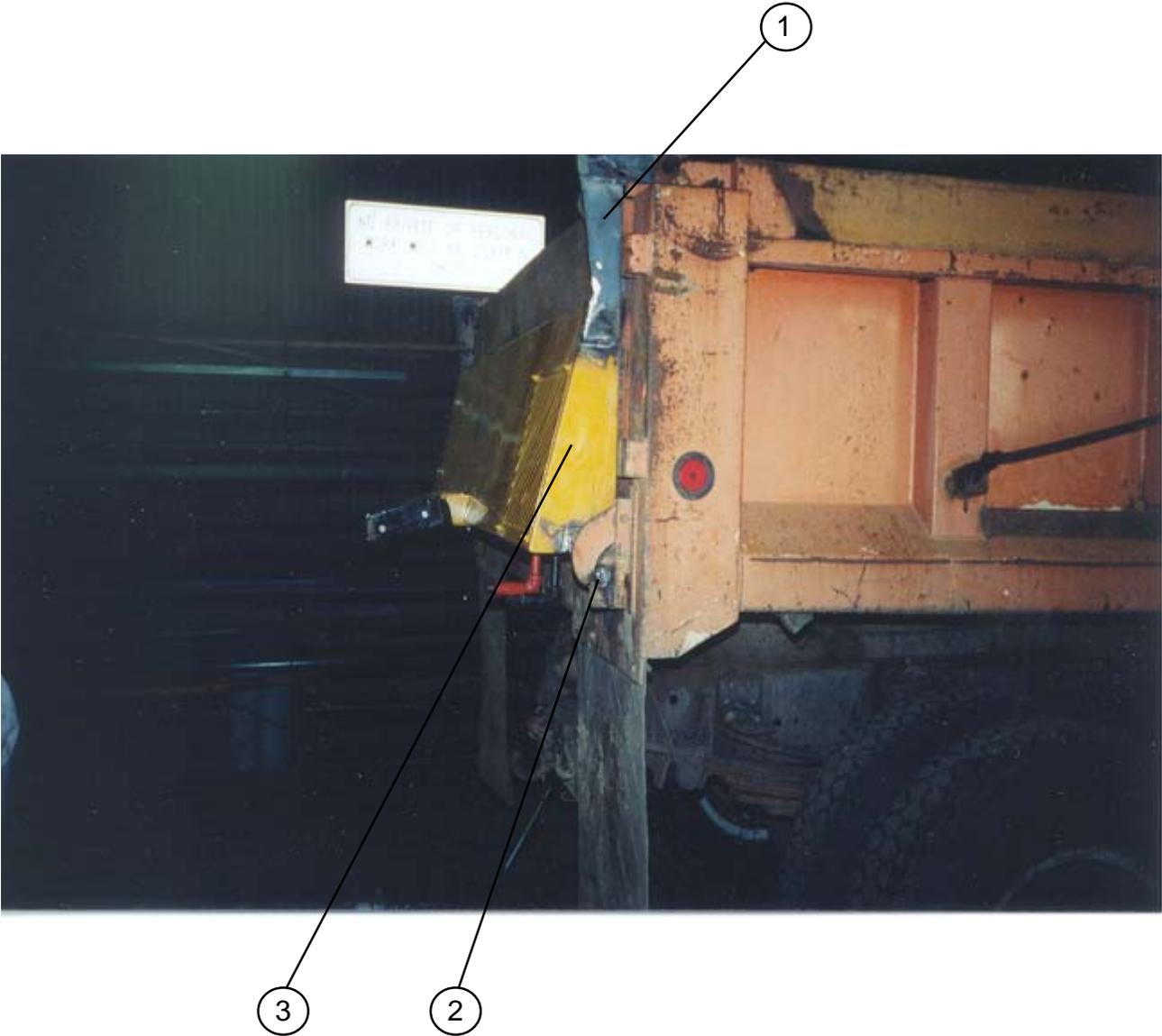


## STANDARD DUMP TRUCK WITH STANDARD TAILGATE



NUMBER	DESCRIPTION
1	DUMP TRUCK TOP PIVOT PIN (EXISTING TRUCK PARTS)
2	DUMP TRUCK BOTTOM PIVOT PIN (EXISTING TRUCK PARTS)
3	EXISTING DUMP TRUCK DOOR (EXISTING TRUCK PARTS)

# SIDEVIEW OF CRAFCO TAILGATE INSTALLED



NUMBER	PART NUMBER	DESCRIPTION
1	-	SUPPLIED BY THE CUSTOMER; THE TOP SIDE SUPPORT GUSSETS
2	-	SUPPLIED BY THE CUSTOMER; BOTTOM PIVOT PIN
3	91196K	PURCHASED CRAFCO TAILGATE

# BACK PASSENGER VIEW OF CRAFCO TAILGATE INSTALLED



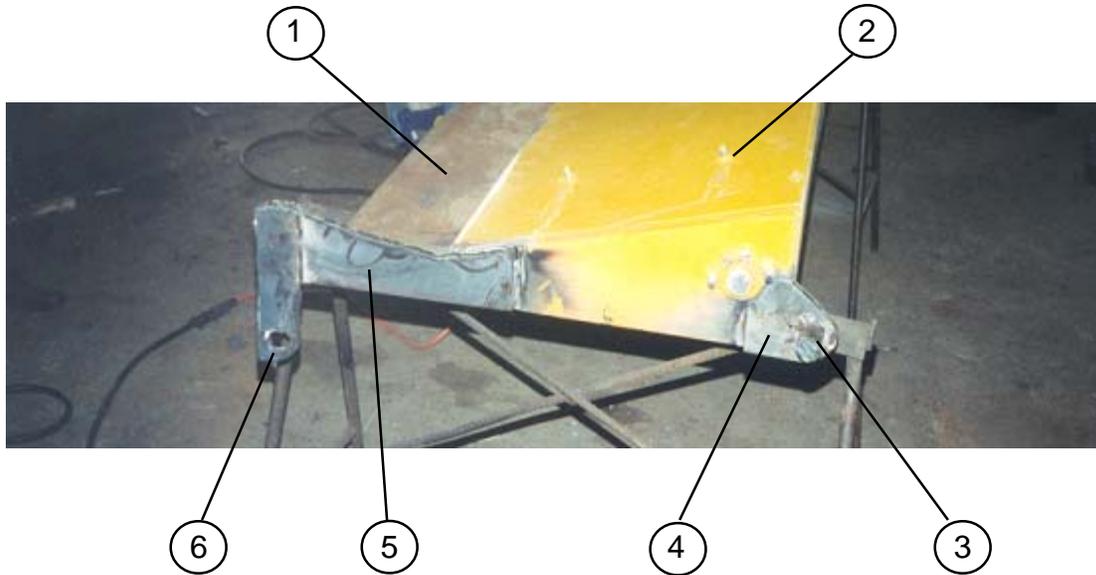
NUMBER	DESCRIPTION
1	SUPPLIED BY THE CUSTOMER; CUSTOM-FITTED TO THEIR TRUCK, TOP BOARD
2	SUPPLIED BY THE CUSTOMER; CUSTOM-FITTED TO THEIR TRUCK, TOP PIVOT PIN
3	SUPPLIED BY THE CUSTOMER; CUSTOM-FITTED TO THEIR TRUCK, BOTTOM PIVOT PIN

**TOP SIDE SUPPORT, BOTTOM SIDE SUPPORT,  
TOP BOARD INSTALLED BY CUSTOMER TO CRAFCO TAILGATE**



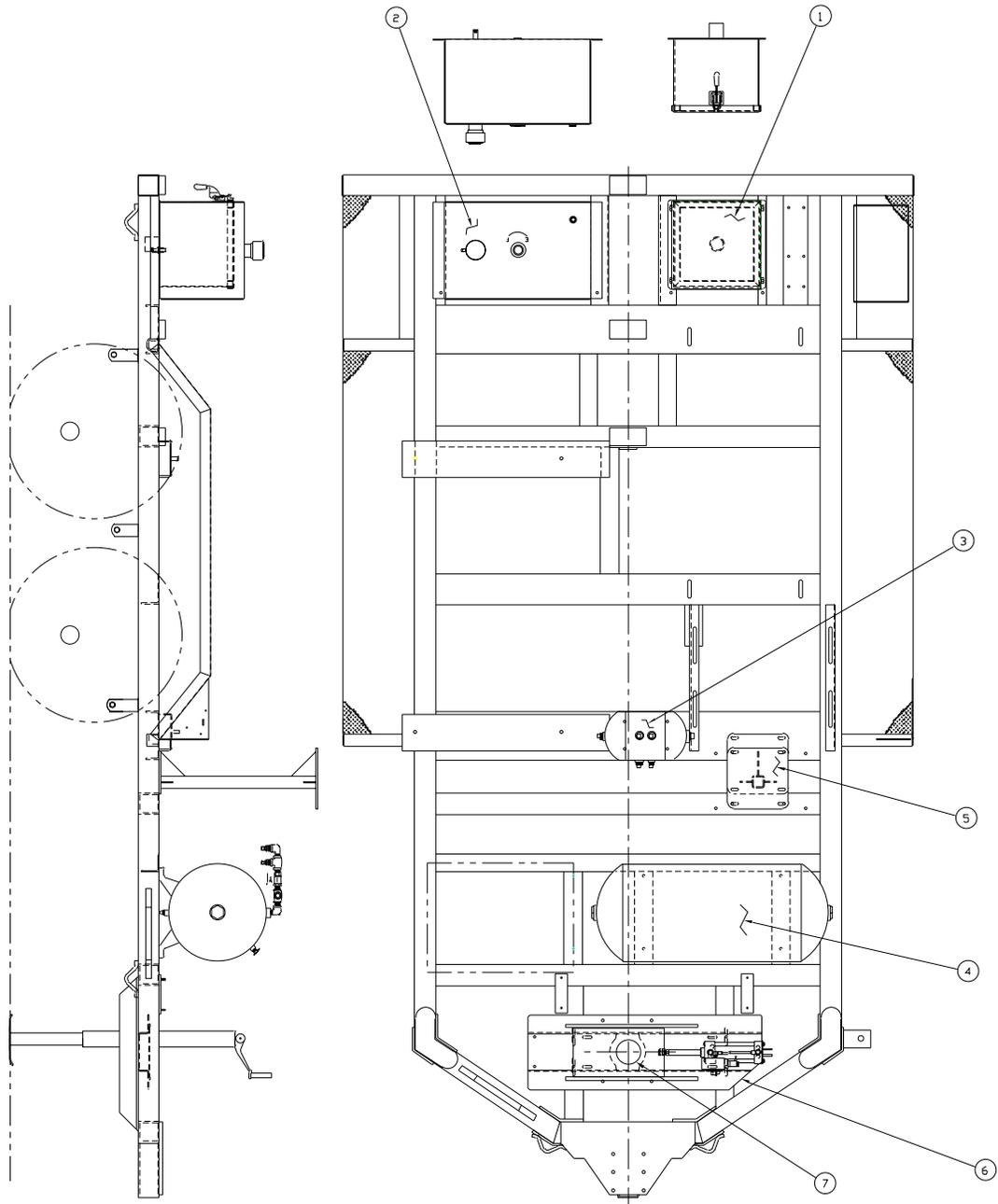
NUMBER	DESCRIPTION
1	TOP SIDE GUSSET
2	TOP PIVOT PIN
3	TOP BOARD
4	TAILGATE SUPPLIED BY CRAFCO, INC.
5	BOTTOM PIVOT PIN
6	BOTTOM SIDE GUSSET

# VIEW OF TOP PIN AND BOTTOM PIN SUPPLIED BY CUSTOMERS



NUMBER	DESCRIPTION
1	TOP BOARD
2	CRAFTCO TAILGATE
3	BOTTOM PIVOT PIN
4	BOTTOM SIDE SUPPORT GUSSET
5	TOP SIDE SUPPORT GUSSET
6	TOP PIVOT PIN

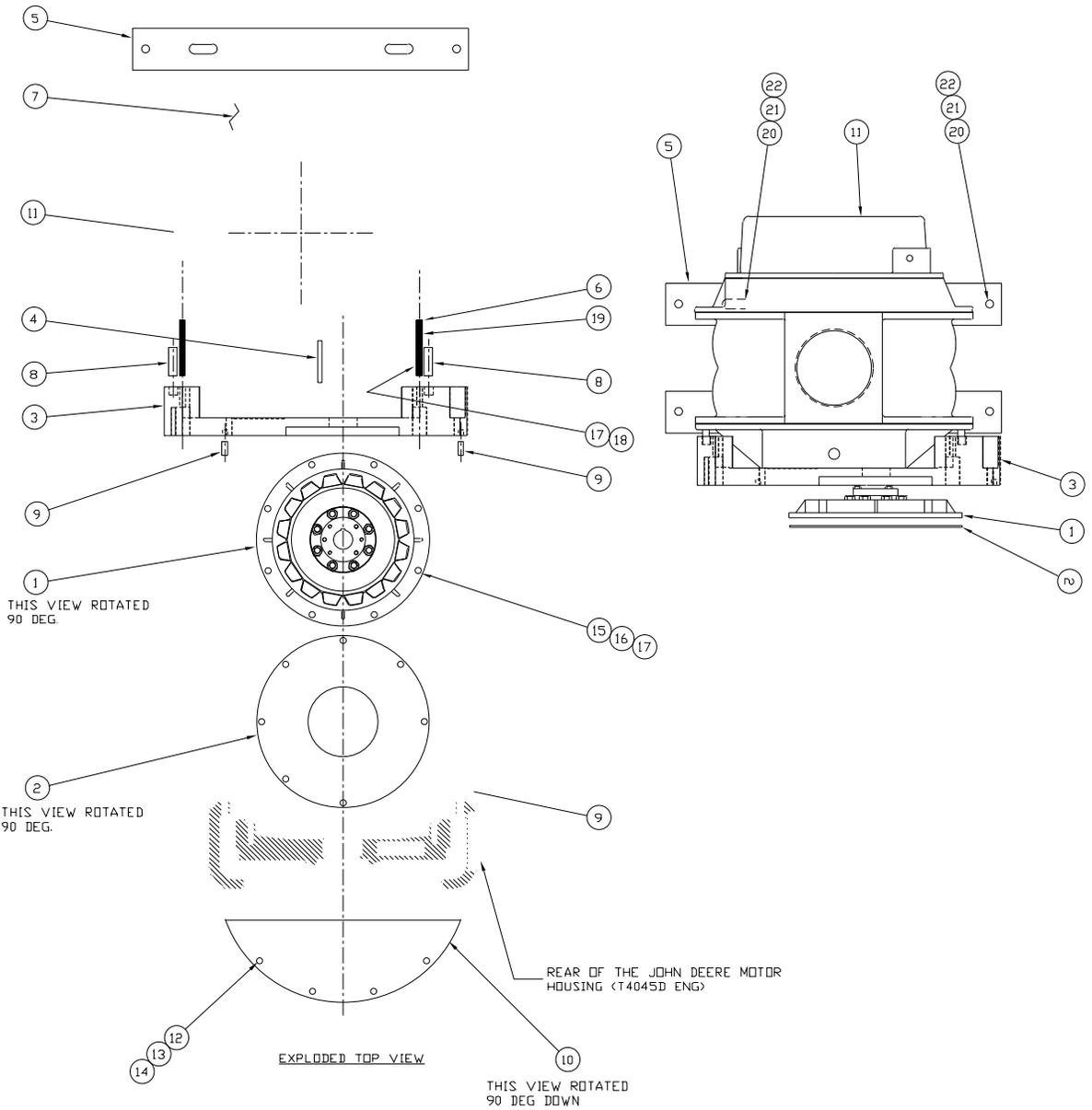
# AIR STREAM SPRAY INJECTION PATCHER PART NUMBERS 90501BPB



**AIR STREAM SPRAY INJECTION PATCHER  
PART NUMBERS 90501BPB**

<b>NUMBER</b>	<b>PART NUMBER</b>	<b>QTY</b>	<b>DESCRIPTION</b>
1	91530	1	DEEP NOZZLE STORAGE BOX
2	91510	1	FUEL TANK COMPLETE ASSEMBLY
3	90124	1	AIR STORAGE TANK ASSEMBLY
4	90860	1	30 GALLON DIESEL FLUSH TANK
5	91707	1	AIR CLEANER STAND
6	90085	1	SLIDE CHANNEL WITH SOLENOID AIR CYLINDER
7	90098	1	SLIDE PLATE

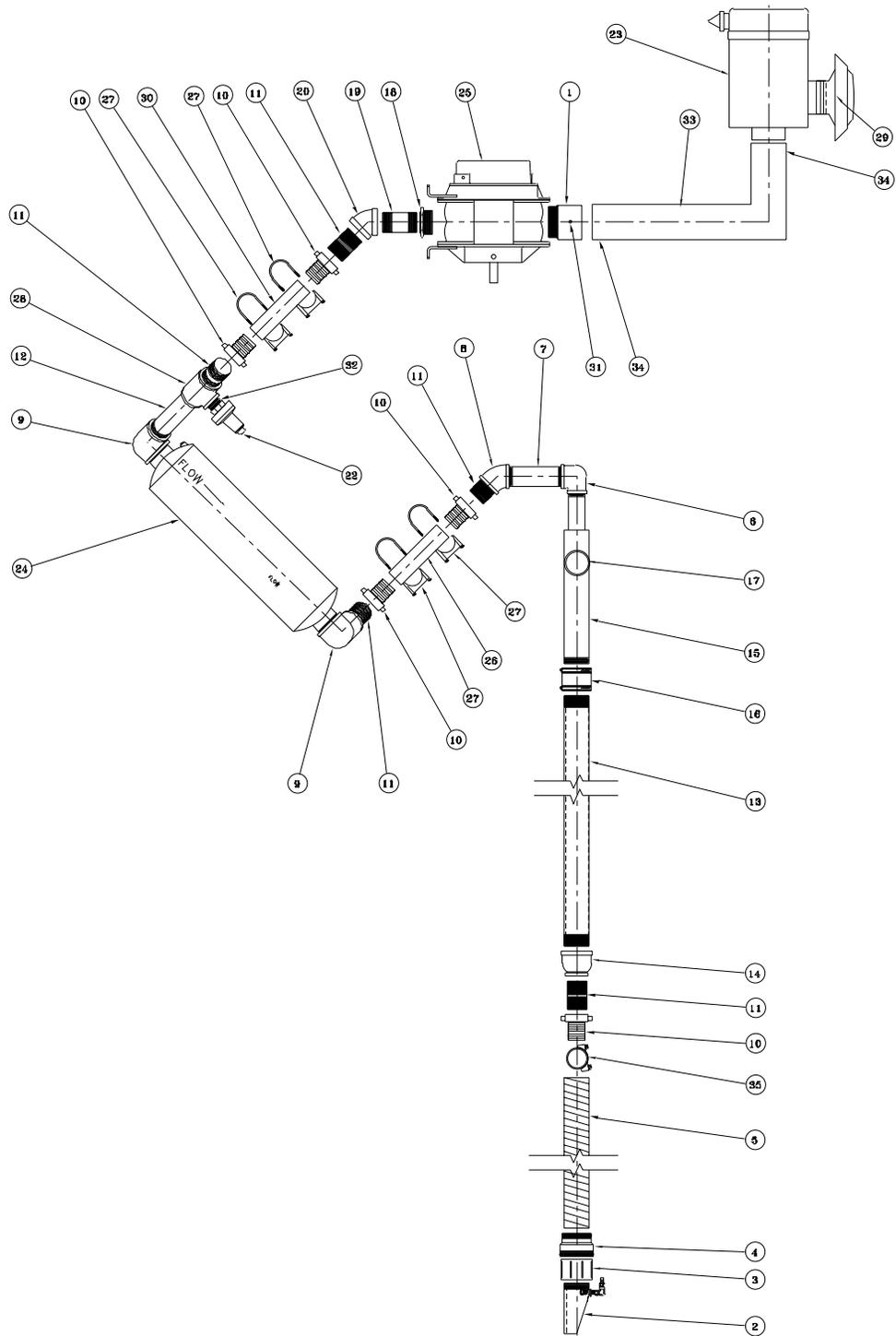
# AIR STREAM SPRAY INJECTION PATCHER PART NUMBERS 90501DBP



**AIR STREAM SPRAY INJECTION PATCHER  
PART NUMBERS 90501DBP**

<b>NUMBER</b>	<b>PART NUMBER</b>	<b>QTY</b>	<b>DESCRIPTION</b>
1	90575	1	DIRECT DRIVE COUPLER
2	90750	1	BACKING PLATE-FLEX PLATE
3	90330	1	ALIGNMENT TOOL WITH ON-BOARD COMPRESSOR
4	90609	1	BLOWER KEY 5/16"
5	90681	2	BLOWER MOUNTING BRACKET
6	90329	4	3/8"-16 X 4 GRADE 8 ALIGNMENT STUD
7	60191	0.02	OIL FOR ROTARY AIR BLOWER
8	29142	2	DOWEL PIN 5/8" X 2" LONG
9	29136	2	DOWEL PIN 3/8" X 1" LONG
10	90332	2	BELT GUARD ENGINE/BLOWER
11	90720	1	AIR ROTARY BLOWER
12	28731	8	3/8" X 1" HEX HEAD BOLT
13	28672	8	3/8" FLAT WASHER
14	28647	8	3/8" LOCK WASHER
15	28984	8	3/8" X 1-1/2" GRADE 8 HEX BOLT
16	28658	8	3/8" GRADE 8 LOCK WASHER
17	28641	12	3/8" GRADE 8 FLAT WASHER
18	28526	4	3/8"-16 NC ESNA LOCK NUT
19	28502	4	3/8"-16 NC NUT
20	29024	8	1/2" X 2-1/2" GRADE 8 HEX BOLT
21	28528	8	1/2"-13 NC ESNA LOCK-NUT
22	27984	16	1/2" GRADE 8 FLAT WASHER

# AIR STREAM SPRAY INJECTION PATCHER PART NUMBERS 90501EPB



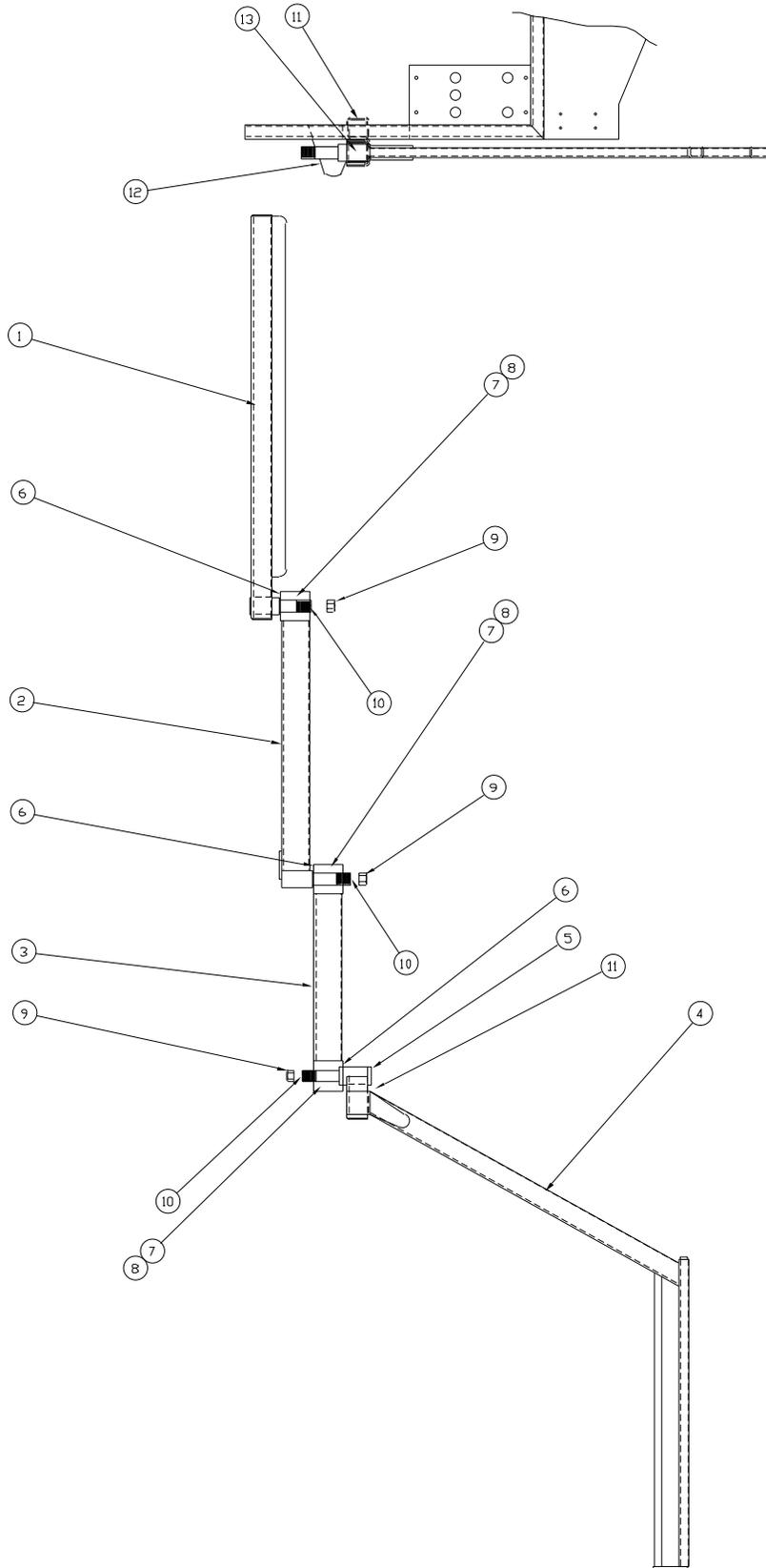
**AIR STREAM SPRAY INJECTION PATCHER  
PART NUMBERS 90501EPB**

<b>NUMBER</b>	<b>PART NUMBER</b>	<b>QTY</b>	<b>DESCRIPTION</b>
1	90520	1	6" X 5" BLOWER/AIR ADAPTER
2	90725	1	4 PVC SLANTED NOZZLE
3	90555	1	4 SCH 80 PVC FEMALE COUPLER
4	90558	1	4.25" X 5.5" RUBBER COUPLER
5	90745	20FT.	3-1/2" AGGREGATE HOSE
6	26802	1	2.5" TO 3" PIPE ELBOW
7	28122	1	3" X 9" NIPPLE
8	28200	1	3" 45 DEGREE ELBOW
9	26801	2	4" TO 3" PIPE ELBOW
10	90554	5	3" FEMALE LUG COUPLER
11	28010	4	3" CLOSED NIPPLE
12	28167	1	3" X 12" PIPE NIPPLE
13	90617	1	AGGREGATE DISCHARGE PIPE
14	27899	1	4" X 3" BELL REDUCER
15	90140	1	VENTURI
16	90131	1	4" RUBBER FEMALE COUPLER
17	90144	1	VENTURI SEALING RING
18	28387	1	5" X 3" HEX HEAD PIPE BUSHING
19	28077	2	3" X 6" BLACK PIPE NIPPLE
20	28200	1	3" 45 DEGREE ELBOW
21	91344	3	3" KING NIPPLE
22	90701	1	BLOWER PRESS RELIEF - 12 PSI
23	91070	1	AIR CLEANER BLOWER
24	90691	1	CHAMBER ABSORPTION SILENCER
25	90720	1	BLOWER 68U

**AIR STREAM SPRAY INJECTION PATCHER  
PART NUMBERS 90501EPB**

<b>NUMBER</b>	<b>PART NUMBER</b>	<b>QTY</b>	<b>DESCRIPTION</b>
26	90748	1	3" WILDCAT HOSE X 24 LONG
27	25952	4	3-1/2" U-BOLT MUFFLER CLAMP
28	90886	1	3" X 3" X 2" PIPE TEE-DRILL
29	90993	1	INLET HOOD - LARGE AIR CLEANER
30	90749	1	3" WILDCAT HOSE - X 36 LONG
31	90754	1	ELBOW OIL-HOLE COVER
32	28008	1	2" CLOSED NIPPLE
33	91237	1	RUBBER CONNECT HOSE TO BLOWER
34	91843	2	6" HOSE CLAMP
35	25953	1	4" U-BOLT MUFFLER CLAMP

# AIR STREAM SPRAY INJECTION PATCHER PART NUMBERS 90501GPB



**AIR STREAM SPRAY INJECTION PATCHER  
PART NUMBERS 90501GPB**

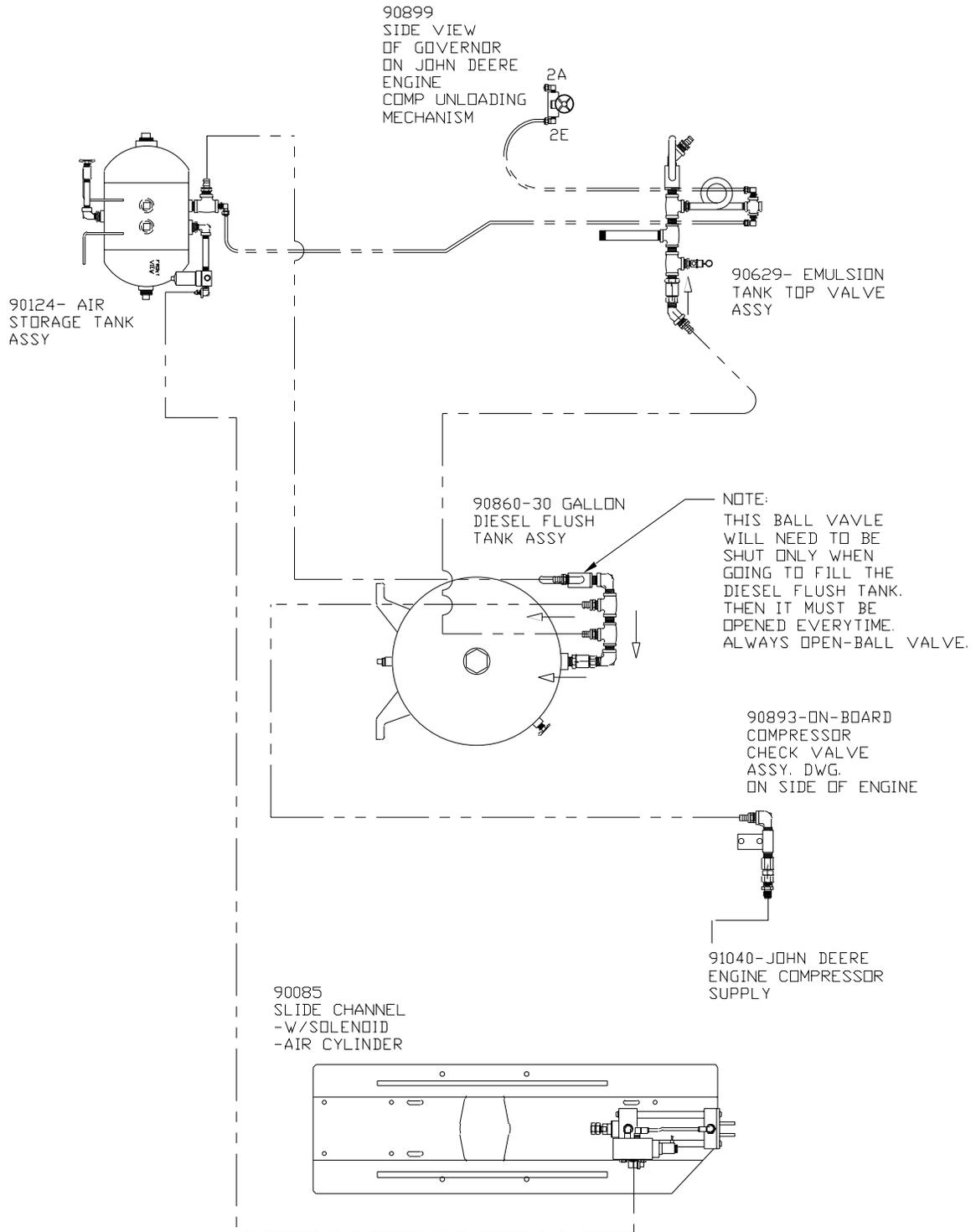
<b>NUMBER</b>	<b>PART NUMBER</b>	<b>QTY</b>	<b>DESCRIPTION</b>
1	90440	1	BOOM MOUNT SECTION - SHORT/FRAME
2	90449	1	2ND SECTION BOOM ARM
3	90445	1	BOOM 1ST SECTION
4	90430	1	3RD SECTION ANGLED BOOM
5	90435	1	HOSE SUPPORT MOUNT TUBE ASSEMBLY- ANGLE
6	90581	3	LARGE OIL SEAL
7	90577	6	LARGE TAPER BEARING RACE
8	90576	6	LARGE TAPER BEARING
9	91722	3	LARGE CRENELLATED NUT
10	29641	3	1/8" X 2-1/2" COTTER PIN
11	90819	1	BOOM MOUNT TUBE SUPPORT-BOTTOM
12	90848	1	POSITION BOTTOM STOW BRACKET
13	90607	2	PULL CLAMP #2000 WITH LOCK



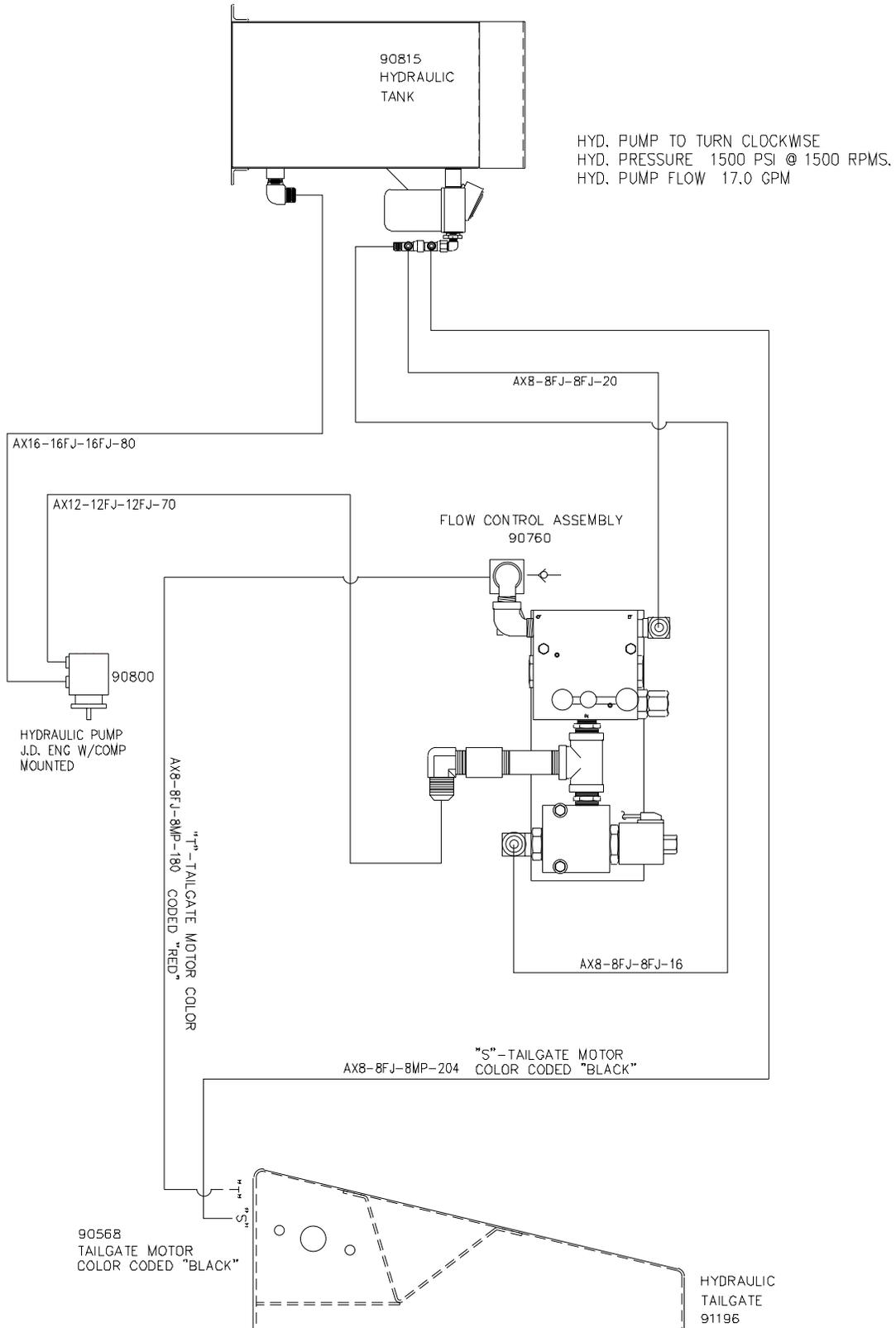
# AIR STREAM SPRAY INJECTION PATCHER

## AIR LINE SUPPLY LINE ROUTING

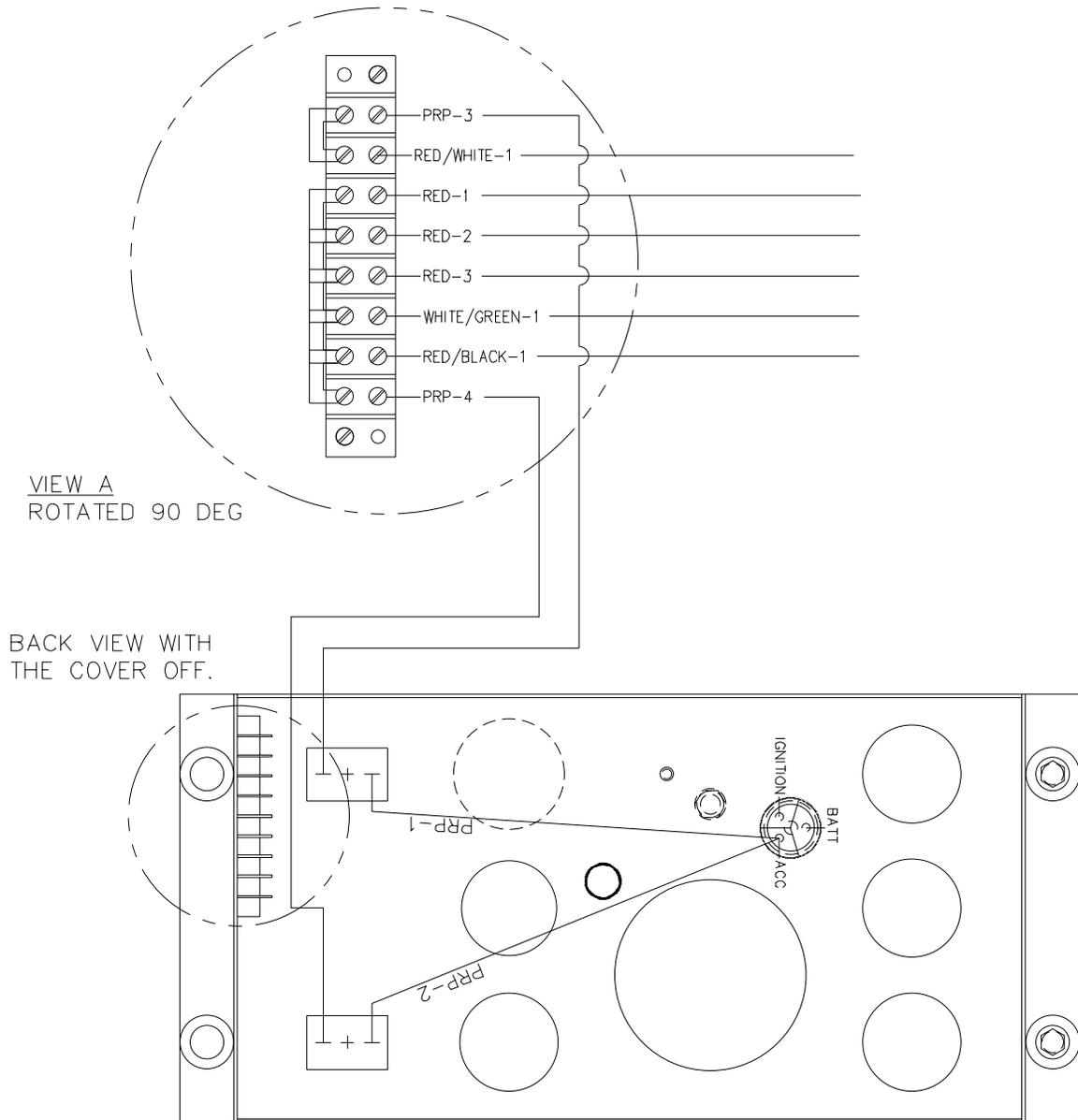
### PART NUMBER 90405



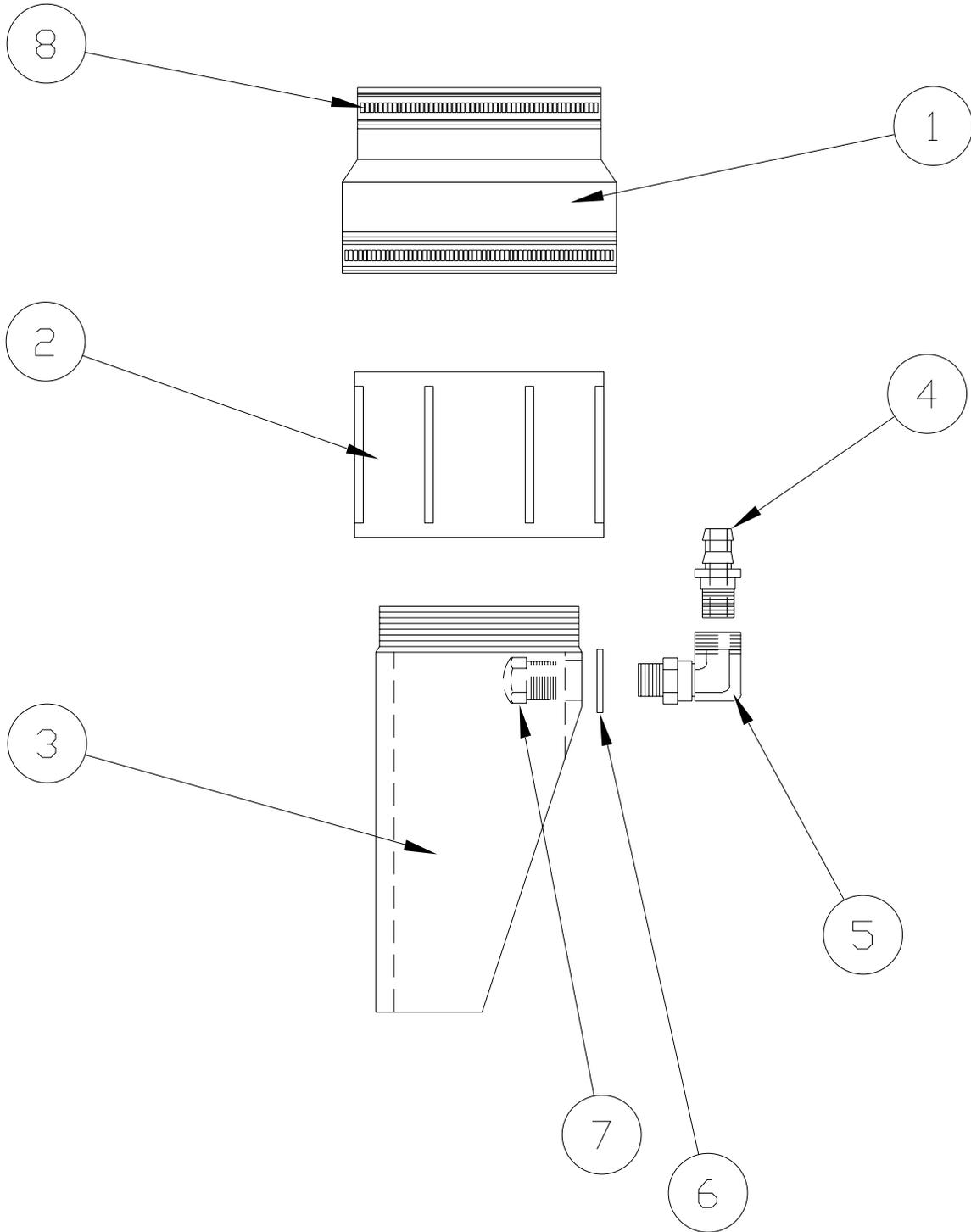
# AIR STREAM SPRAY INJECTION PATCHER HYDRAULIC SCHEMATIC PART NUMBER 90871



# AIR STREAM SPRAY INJECTION PATCHER ENGINE CONTROL PANEL SUB ASSEMBLY - 80 HP PART NUMBER 92252



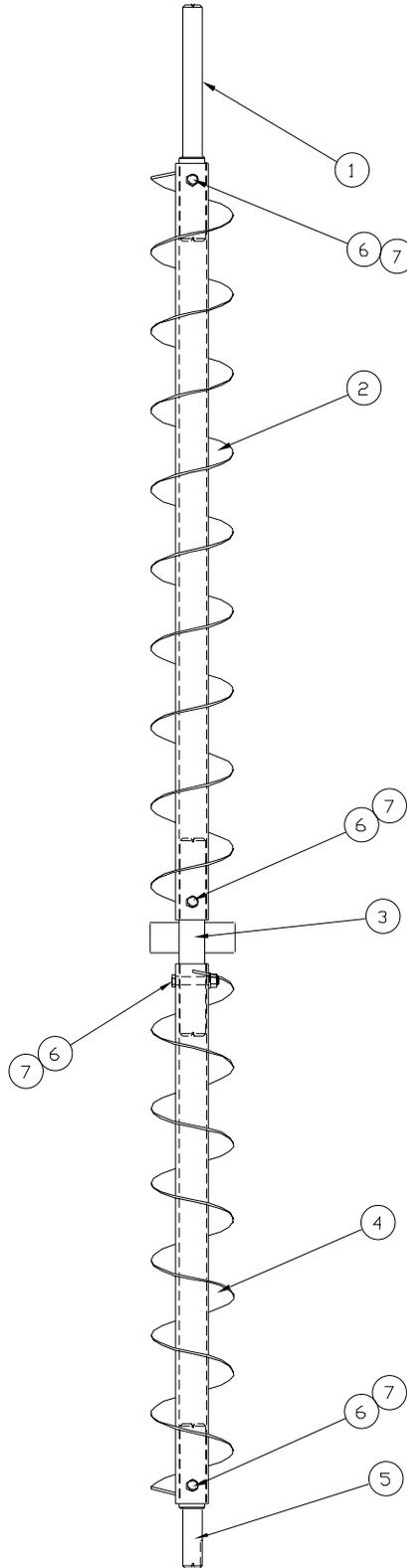
**AIR STREAM SPRAY INJECTION PATCHER  
NOZZLE ASSEMBLY  
PART NUMBER 90574**



**AIR STREAM SPRAY INJECTION PATCHER  
NOZZLE ASSEMBLY  
PART NUMBER 90574**

<b>NUMBER</b>	<b>PART NUMBER</b>	<b>QTY</b>	<b>DESCRIPTION</b>
1	90558	1	4.25" X 5.5" RUBBER COUPLER
2	90555	1	4" SCH80 PVC FEMALE COUPLER
3	90725	1	4" PVC SLANTED NOZZLE
4	26764	1	#8-6-MPT PUSH ON FITTING
5	27787	1	3/8" 90 DEGREE SWIVEL
6	50280	1	1/2" LOCK NUT
7	90517	1	1/16" COIN SLOT SPRAY TIP-TAP
8	25955	1	5" MUFFLER CLAMP

**TAILGATE SCREW AUGER ASSEMBLY  
SCREW AUGER COMPLETE  
PART NUMBER 90610**



**TAILGATE SCREW AUGER ASSEMBLY  
SCREW AUGER COMPLETE  
PART NUMBER 90610**

<b>NUMBER</b>	<b>PART NUMBER</b>	<b>QTY</b>	<b>DESCRIPTION</b>
1	90615	1	SCREW AUGER SHAFT
2	90614	1	LONG AUGER SCREW
3	90613	1	AGGER SHAFT WITH PADDLES
4	90611	1	SHORT AUGER SCREW
5	90612	1	AUGER SHAFT KEYED
6	28736	4	3/8"-16 X 2-1/2" BOLT
7	28526	4	3/8" ESNA NUT



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