

20864- Series

GC-1303E

Material Pump (Part List)

For use with Polyesters, Resin, and Gel-Coat

Maximum fluid working pressure:
1300 psi. (9 MPa, 90 bar)

Maximum air pressure:
100 psi. (0.7 MPa, 7 bar)



Important Safety Instructions

Read all warnings and instructions in this manual. Save these instructions.



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N/A = Non Applicable






Warnings

The following warnings are for the setup, use, grounding, maintenance, and repair of this equipment. The exclamation point symbol alerts you to a general warning and the hazard symbol refers to procedure-specific risk. Refer back to these warnings. Additional, product-specific warnings may be found throughout the body of this manual where applicable.

- See Important Safety Information - MEKP, Polyester Resins and Gel-Coats and Spraying and Lamination Operations section of this manual.

 WARNING	
	<p>FIRE AND EXPLOSION HAZARD</p> <p>Flammable fumes, such as solvent and paint fumes, in work area can ignite or explode. To help prevent fire and explosion:</p> <ul style="list-style-type: none"> • Use equipment only in well ventilated area. • Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static arc). • Keep work area free of debris, including solvent, rags and gasoline. • Do not plug or unplug power cords, or turn power or light switches on or off when flammable fumes are present. • Ground all equipment in the work area. See Grounding instructions. • Use only grounded hoses. • Hold gun firmly to side of grounded pail when triggering into pail. • If there is static sparking or you feel a shock, stop operation immediately. Do not use equipment until you identify and correct the problem. • Keep a working fire extinguisher in the work area.
	<p>PERSONAL PROTECTIVE EQUIPMENT</p> <p>You must wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect you from serious injury, including eye injury, inhalation of toxic fumes, burns, and hearing loss. This equipment includes but is not limited to:</p> <ul style="list-style-type: none"> • Protective eyewear • Clothing and respirator as recommended by the fluid and solvent manufacturer • Gloves • Hearing protection
	<p>TOXIC FLUID OR FUMES HAZARD</p> <p>Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed.</p> <ul style="list-style-type: none"> • Read MSDS's to know the specific hazards of the fluids you are using. • Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines. • Always wear impervious gloves when spraying or cleaning equipment.

Warnings

 WARNING	
	<p>SKIN INJECTION HAZARD High-pressure fluid from gun, hose leaks, or ruptured components will pierce skin. This may look like just a cut, but it is a serious injury that can result in amputation. Get immediate surgical treatment.</p> <ul style="list-style-type: none"> • Do not point gun at anyone or at any part of the body. • Do not put your hand over the dispense outlet. • Do not stop or deflect leaks with your hand, body, glove, or rag. • Engage trigger lock when not spraying. • Follow Pressure Relief Procedure in this manual, when you stop spraying and before cleaning, checking, or servicing equipment.
	<p>MOVING PARTS HAZARD Moving parts can pinch or amputate fingers and other body parts.</p> <ul style="list-style-type: none"> • Keep clear of moving parts. • Do not operate equipment with protective guards or covers removed. • Pressurized equipment can start without warning. Before checking, moving, or servicing equipment, follow the Pressure Relief Procedure in this manual. Disconnect power or air supply.
	<p>EQUIPMENT MISUSE HAZARD Misuse can cause death or serious injury.</p> <ul style="list-style-type: none"> • Do not operate the unit when fatigued or under the influence of drugs or alcohol. • Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See Technical Data in all equipment manuals. • Use fluids and solvents that are compatible with equipment wetted parts. See Technical Data in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request MSDS forms from distributor or retailer. • Check equipment daily. Repair or replace worn or damaged parts immediately with genuine manufacturer's replacement parts only. • Do not alter or modify equipment. • Use equipment only for its intended purpose. Call your distributor for information. • Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces. • Do not kink or over bend hoses or use hoses to pull equipment. • Keep children and animals away from work area. • Comply with all applicable safety regulations.
	<p>PRESSURIZED ALUMINUM PARTS HAZARD Do not use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents in pressurized aluminum equipment. Such use can cause serious chemical reaction and equipment rupture, and result in death, serious injury, and property damage.</p>

Important Safety Information

Methyl Ethyl Ketone Peroxide (MEKP)

MEKP is among the more hazardous materials found in commercial channels. Proper handling of the “unstable (reactive)” chemicals presents a definite challenge to the plastics industry. The highly reactive property which makes MEKP valuable to the plastics industry in producing the curing reaction of polyester resins and gel-coats also produces the hazards which require great care and caution in its storage, transportation, handling, processing and disposal.

Workers must be thoroughly informed of the hazards that may result from improper handling of MEKP, especially in regards to contamination and heat. They must be thoroughly instructed regarding the proper action to be taken in the storage, use and disposal of MEKP and other hazardous materials used in the laminating operation.



MEKP is flammable and potentially explosive, as well as potentially damaging to the eyes and skin.

Read material manufacturer’s warnings and material MSDS to know specific hazards and precautions related to MEKP.

Contaminated MEKP can become explosive. Prevent contamination of MEKP with other materials, which includes, but is not limited to polyester overspray, polymerization accelerators and promoters, and non-stainless metals. Even small amounts of contaminants can make MEKP explosive. This reaction may start slowly, and gradually build-up heat, which can accelerate until fire or an explosion result. This process can take from seconds to days.

Heat applied to MEKP, or heat build-up from contamination reactions can cause it to reach what is called its Self-Accelerating Decomposition Temperature (SADT), which can cause fire or explosion.

Spills should be promptly removed, so no residues remain. Spillage can heat up to the point of self-ignition. Dispose in accordance with manufacture’s recommendation.

Store MEKP in a cool, dry and well-ventilated area in the original containers away from direct sunlight and away from other chemicals. It is strongly recommended that the storage temperature remain below 86° F (30° C). Heat will increase the potential for explosive decomposition. Refer to NFPA 432. Keep MEKP away from heat, sparks and open flames.

Current catalysts are premixed and do not require any diluents. GlasCraft strongly recommends that diluents not be used. Diluents add to the possibility of contaminants entering the catalyst system. Never dilute MEKP with acetone or any solvent since this can produce an extremely shock-sensitive compound which can explode.

Use only original equipment or equivalent parts from GlasCraft in the catalyst system (i.e.: hoses, fittings, etc.) because a hazardous chemical reaction may result between substituted parts and MEKP.

To prevent contact with MEKP, appropriate personal protective equipment, including chemically impermeable gloves, boots, aprons and goggles are required for everyone in the work area.

Polyester Resins and Gel-Coats



Spraying materials containing polyester resin and gel-coats creates potentially harmful mist, vapors and atomized particulates. Prevent inhalation by providing sufficient ventilation and the use of respirators in the work area.

Read the material manufacturer’s warnings and material MSDS to know specific hazards and precautions related to polyester resins and gel-coats.


To prevent contact with polyester resins and gel-coats, appropriate personal protective equipment, including chemically impermeable gloves, boots, aprons and goggles are required for everyone in the work area.

Spraying and Lamination Operations



Remove all accumulations of overspray, FRP sandings, etc. from the building as they occur. If this waste is allowed to build up, spillage of catalyst is more likely to start a fire.

If cleaning solvents are required, read material manufacturer’s warnings and material MSDS to know specific hazards and precautions. (GlasCraft recommends that clean-up solvents be nonflammable.)

 **GlasCraft** recommends that you consult OSHA Sections 1910.94, 1910.106, 1910.107 and NFPA No. 33, Chapter 16,17, and NFPA No. 91 for further guidance.

Grounding



This equipment needs to be grounded.

Ground the dispense gun through connection to a GlasCraft approved grounded fluid supply hose.

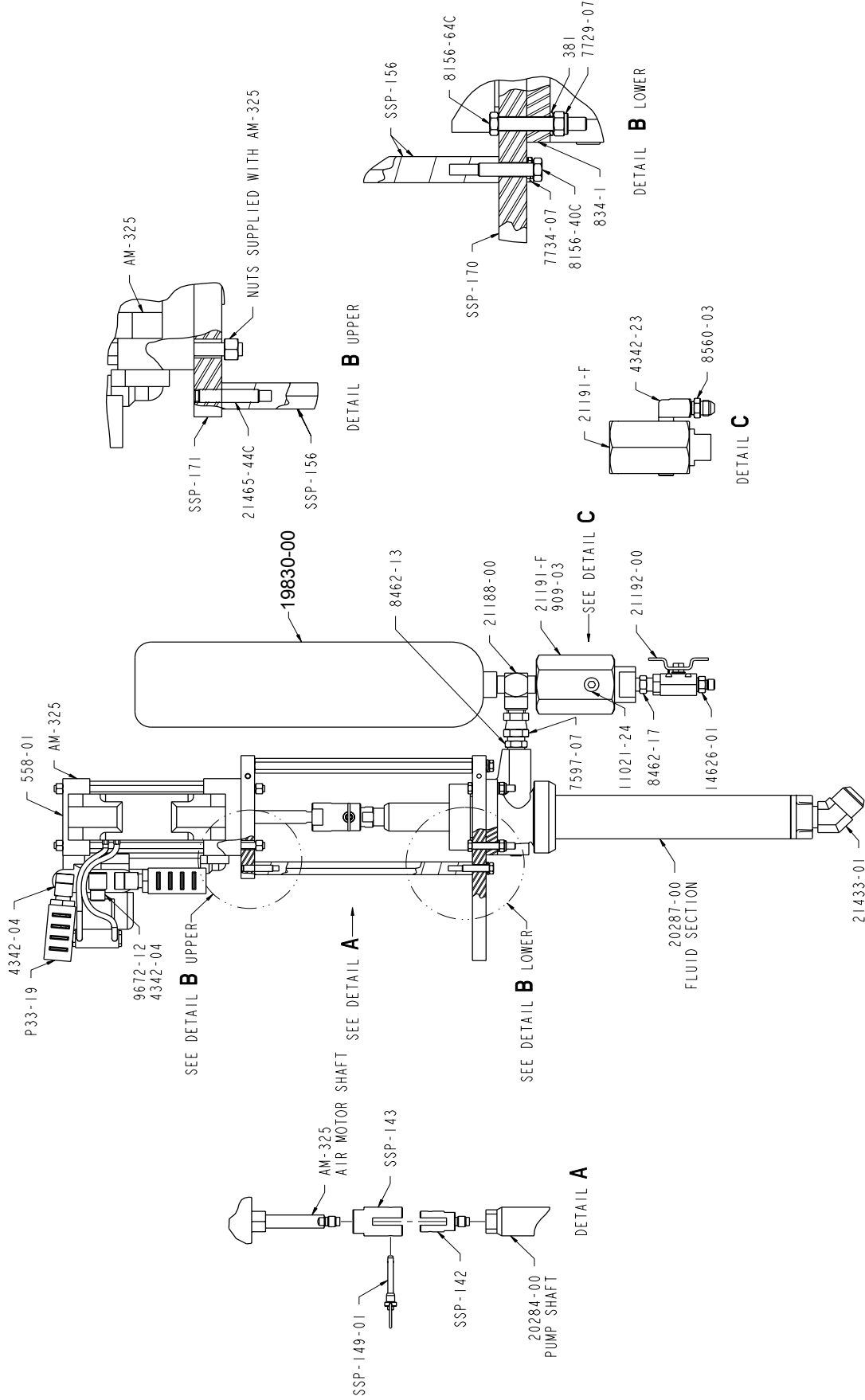
Check your local electrical code and related manuals for detailed grounding instructions of all equipment in the work area.



A grounding wire and clamp are provided, assembly p/n 17440-00 with all FRP equipment.

Assembly Drawings

20864-04



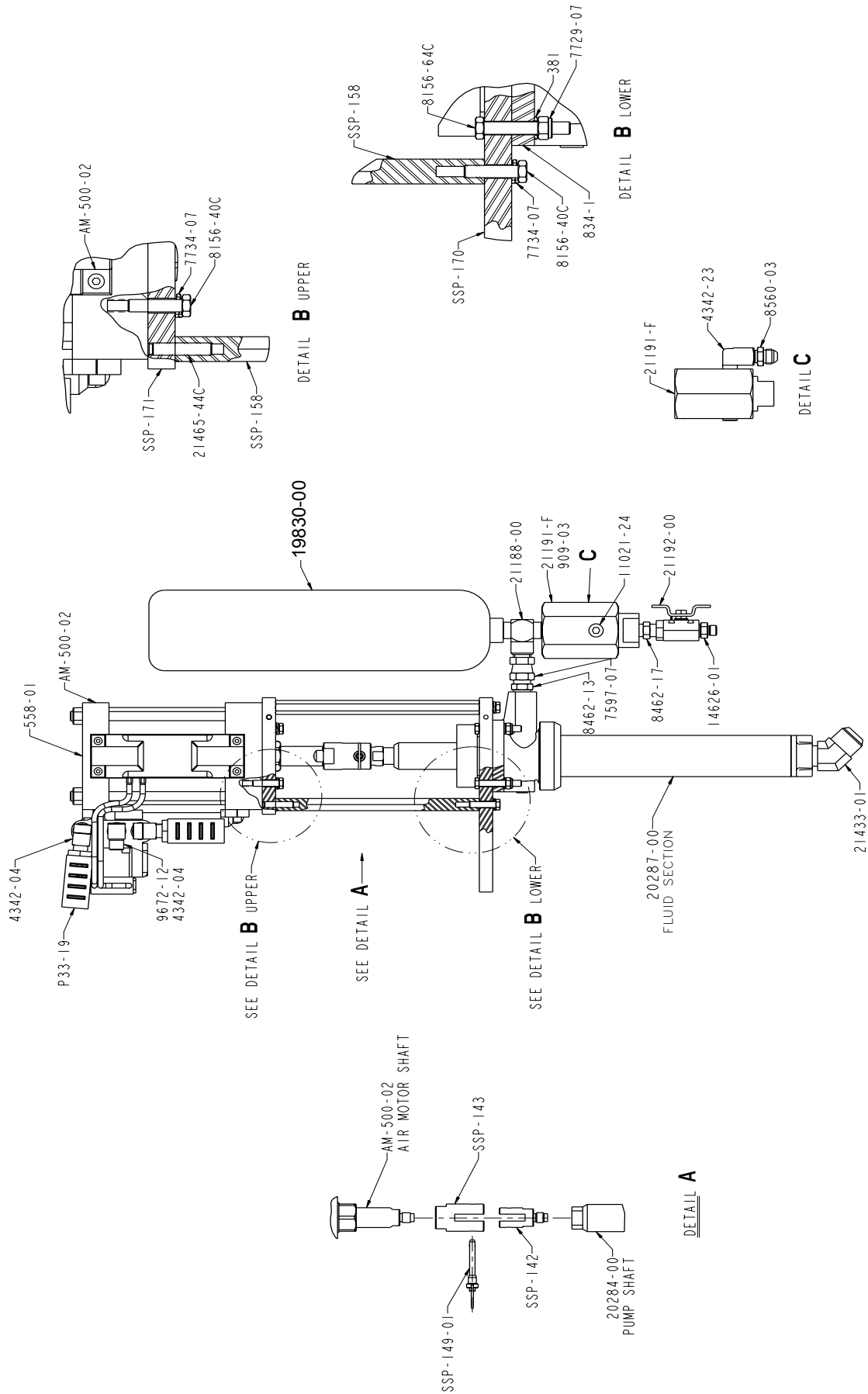
Assembly Drawings

20864-04

Part Number	Description	Qty
11021-24	PIPE PLUG	1
14626-01	FITTING	1
19605-00	PUMP TAG	1
20260-00	BLEED HOSE ASSEMBLY	1
20287-00	FLUID SECTION ASSEMBLY	1
21188-00	PIPE TEE	1
21191-F	FILTER ASSEMBLY	1
21192-00	BALL VALVE	1
21433-01	ELBOW FITTING	1
21465-44C	STUD	4
19830-00	SURGE BOTTLE	1
381	WASHER	4
4342-04	ELBOW FITTING	3
4342-23	ELBOW FITTING	1
558-01	NAMEPLATE	1
563	OSHA TAG	1
7597-07	SWIVEL FITTING	1
7729-07	NUT	4
7734-07	LOCK WASHER	4
8156-40C	SCREW	4
8156-64C	SCREW	4
8462-13	FITTING	1
8462-17	FITTING	1
8560-03	FITTING	1
909-03	50 MESH SCREEN FILTER	1
9672-12	FITTING	1
AM-325	AIR MOTOR	1
GC-1303	PARTS LIST	1
P33-19	EXHAUST SILENCER	2
SSP-142	SHAFT INSERT	1
SSP-143	SHAFT ADAPTER	1
SSP-149-01	DETENT PIN	1
SSP-156	STANDOFF	4
SSP-170	PUMP PLATE	1
SSP-171	AIR MOTOR PLATE	1

Assembly Drawings

20864-05



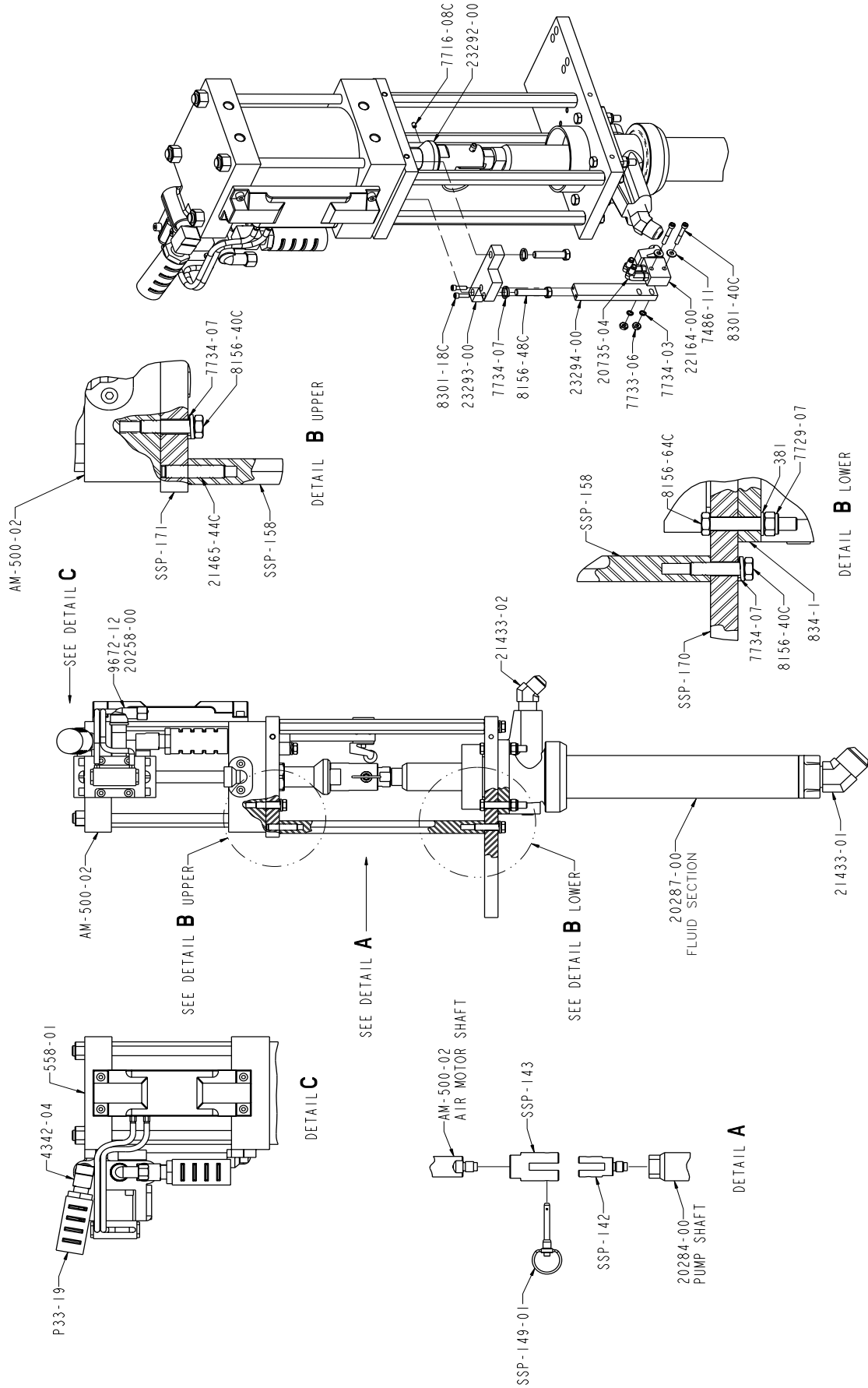
Assembly Drawings

20864-05

Part Numbers	Description	Qty
11021-24	PIPE PLUG	1
14626-01	FITTING	1
19605-00	PUMP TAG	1
20260-00	BLEED HOSE ASSEMBLY	1
20287-00	FLUID SECTION ASSEMBLY	1
21188-00	PIPE TEE	1
21191-F	FILTER ASSEMBLY	1
21192-00	BALL VALVE	1
21433-01	ELBOW FITTING	1
21465-44C	STUD	4
19830-00	SURGE BOTTLE	1
381	WASHER	4
4342-04	ELBOW FITTING	3
4342-23	ELBOW FITTING	1
558-01	NAMEPLATE	1
563	OSHA TAG	1
7597-07	SWIVEL FITTING	1
7729-07	NUT	4
7734-07	LOCK WASHER	8
8156-40C	SCREW	8
8156-64C	SCREW	4
8462-13	FITTING	1
8462-17	FITTING	1
8560-03	FITTING	1
909-03	50 MESH SCREEN FILTER	1
9672-12	FITTING	1
AM-500-02	AIR MOTOR	1
GC-1303	PARTS LIST	1
P33-19	EXHAUST SILENCER	2
SSP-142	SHAFT INSERT	1
SSP-143	SHAFT ADAPTER	1
SSP-158	STANDOFF	4
SSP-170	PUMP PLATE	1
SSP-171	AIR MOTOR PLATE	1

Assembly Drawings

20864-06



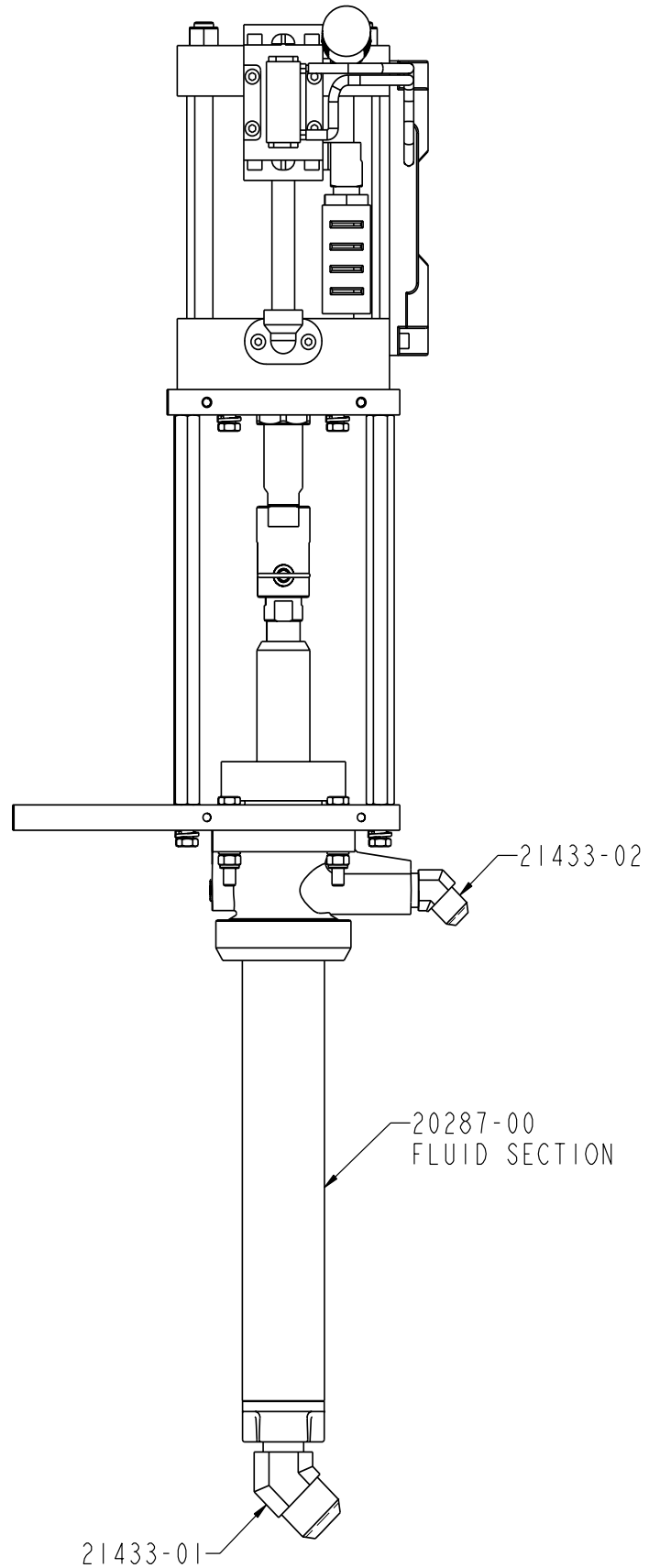
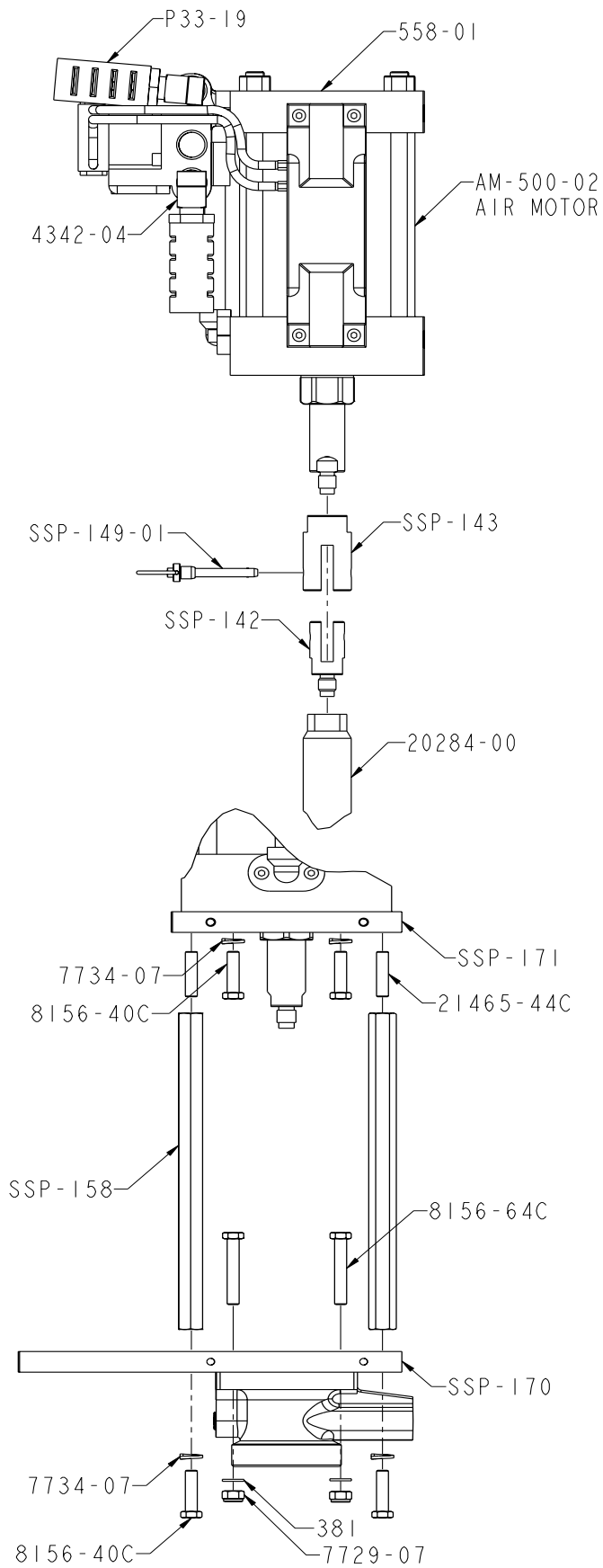
Assembly Drawings

20864-06

Part Number	Description	Qty
19605-00	PUMP TAG	1
20258-00	ELBOW FITTING	1
20287-00	FLUID SECTION ASSEMBLY	1
20735-04	ELBOW FITTING	2
21433-01	ELBOW FITTING	1
21433-02	ELBOW FITTING	1
21465-44C	STUD	4
22164-00	CONTROL VALVE	1
23292-00	COUNTER BEARING	1
23293-00	COUNTER BRACKET	1
23294-00	COUNTER EXTENSION	1
381	WASHER	4
4342-04	ELBOW FITTING	2
558-01	NAMEPLATE	1
563	OSHA TAG	1
7486-11	WASHER	2
7716-08C	SCREW	1
7729-07	NUT	4
7733-06	NUT	2
7734-03	LOCK WASHER	2
7734-07	LOCK WASHER	8
8156-40C	SCREW	6
8156-48C	SCREW	2
8156-64C	SCREW	4
8301-18C	SCREW	2
8301-40C	SCREW	2
9672-12	FITTING	1
AM-500-02	AIR MOTOR	1
GC-1303	PARTS LIST	1
P33-19	EXHAUST SILENCER	2
SSP-142	SHAFT INSERT	1
SSP-143	SHAFT ADAPTER	1
SSP-149-01	DETENT PIN	1
SSP-158	STANDOFF	4
SSP-170	PUMP PLATE	1
SSP-171	AIR MOTOR PLATE	1

Assembly Drawings

20864-07



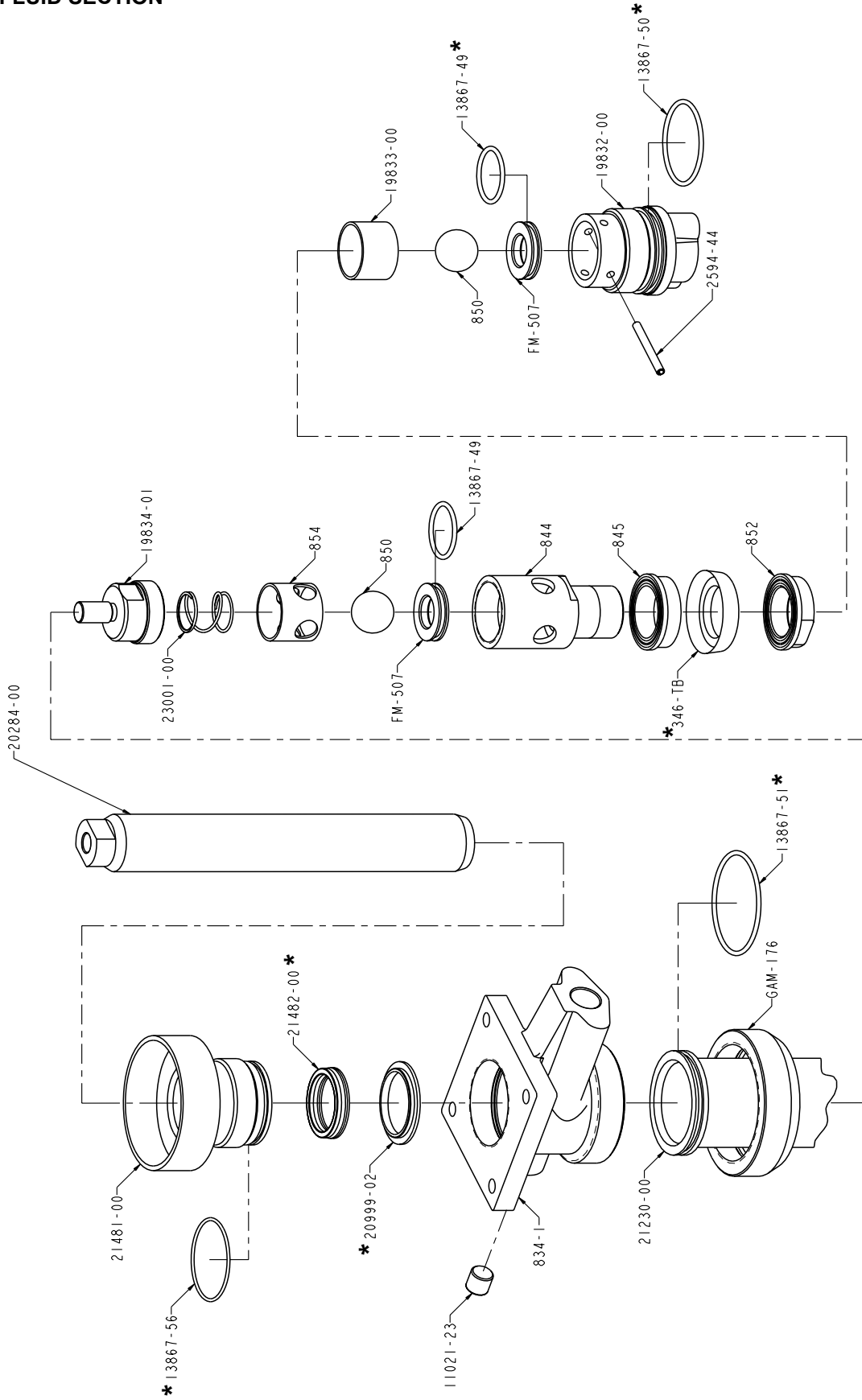
Assembly Drawings

20864-07

Part Number	Description	Qty.
19605-00	PUMP TAG	1
20260-00	BLEED HOSE ASSEMBLY	1
20287-00	FLUID SECTION ASSEMBLY	1
21433-01	ELBOW FITTING	1
21433-02	ELBOW FITTING	1
21465-44C	STUD	4
381	WASHER	4
4342-04	ELBOW FITTING	2
558-01	GLASCRAFT NAMEPLATE	1
563	OSHA TAG	1
7729-07	NUT	4
7734-07	WASHER	8
8156-40C	SCREW	8
8156-64C	SCREW	4
AM-500-02	AIR MOTOR	1
GC-1303	PARTS LIST	1
P33-19	EXHAUST SILENCER	2
SSP-142	SHAFT INSERT	1
SSP-143	SHAFT ADAPTER	1
SSP-149-01	DETENT PIN	1
SSP-158	STANDOFF	4
SSP-170	PUMP PLATE	1
SSP-171	AIR MOTOR PLATE	1

Sub-Assembly Drawings

20287-00 FLUID SECTION



REPAIR KIT: 21570-00
 *Parts included in repair kit (included, but not shown: 21044-04 and 909)

Sub-Assembly Drawings

20287-00 FLUID SECTION

Part Number	Description	Qty
11021-23	PIPE PLUG	1
13867-49	O-RING	2
13867-50	O-RING	1
13867-51	O-RING	1
13867-56	O-RING	1
19832-00	FOOT VALVE HOUSING	1
19833-00	FOOT VALVE SPACER	1
19834-01	VALVE BODY ADAPTER	1
20284-00	PUMP SHAFT	1
20999-02	WASHER	1
21230-00	LOWER CYLINDER	1
21481-00	FLUSH CUP SEAL	1
21482-00	HIGH VISCOSITY SEAL	1
23001-00	SPRING	1
2594-44	ROLL PIN	1
346-TB	MATERIAL CUP	1
834-1	CYLINDER ADAPTER	1
844	VALVE BODY	1
845	CUP SPACER	1
850	BALL VALVE	2
852	RETAINER NUT	1
854	VALVE BODY SPACER	1
FM-507	VALVE SEAT	2
GAM-176	RETAINING RING	1

Sub-Assembly Drawings

AM-325 and AM-500-02 AIR MOTORS

See manual 3A0393 for assembly drawings with part and kit numbers that are available for purchase. Manuals are available at www.graco.com.

Technical Data

Category	Data
Maximum Fluid Working Pressure (20864-05)	1300 psi (9 MPa, 90 bar)
Maximum Air Inlet Pressure	100 psi (0.7 MPa, 7 bar)
Typical Flow Rate of Pattern Guns	Refer to gun manual
Maximum Fluid Temperature	100° F (38° C)
Sound Pressure (20864-05)	84.83 dB(A)
Sound Power, measured per ISO 9614-2 (20864-05)	87.04 dB(A)
Dimensions	43 L X 18 W X 12 H (2235.2 X 812.8 X 457.2 mm)
Weight	85 Lbs. (98 kg)
Wetted Parts	Resin- Carbon steel, carbide, chemically resistant o-rings.

Graco Ohio Standard Warranty

Graco warrants all equipment referenced in this document which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

GRACO MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN CONNECTION WITH ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY GRACO. These items sold, but not manufactured by Graco (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties. In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco, or otherwise.

FOR GRACO CANADA CUSTOMERS

The Parties acknowledge that they have required that the present document, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English. Les parties reconnaissent avoir convenu que la rédaction du présente document sera en Anglais, ainsi que tous documents, avis et procédures judiciaires exécutés, donnés ou intentés, à la suite de ou en rapport, directement ou indirectement, avec les procédures concernées.

Graco Ohio Information

TO PLACE AN ORDER, contact your Graco distributor or call to identify the nearest distributor.

Phone: 1-800-746-1334 **or Fax:** 1-330-966-3006

All written and visual data contained in this document reflects the latest product information available at the time of publication. Graco reserves the right to make changes at any time without notice.

This manual contains English. GC-1369

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