

# Repair Instructions and Parts List 309885G

**ALLPRO**® Manufactured by  
**ASM**®

## Mustang 3800 Airless Paint Sprayers

*– For portable spray application of architectural paints and coatings –*



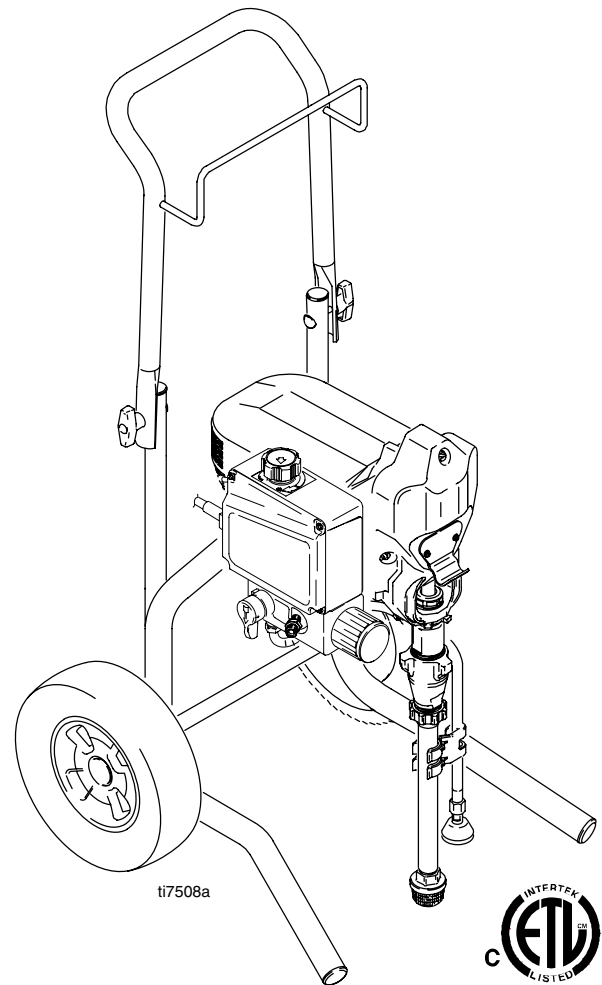
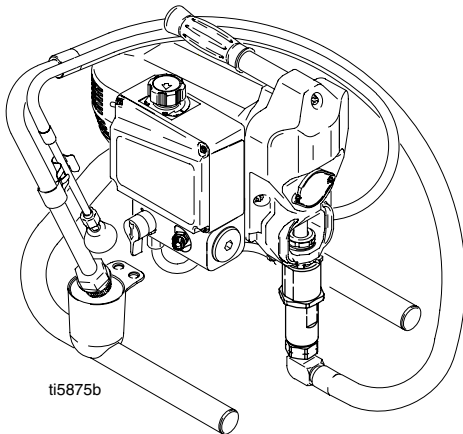
### Important Safety Instructions

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

**Model 246793, A, B, C, D (stand)**

**Model 246794, A, B, C, D, E (cart)**

*3000 psi (207 bar, 20.7 MPa) Maximum Working Pressure*



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## Specifications

This equipment is not intended for use with flammable or combustible materials used in places such as cabinet shops or other “factory” or fixed locations. If you intend to use this equipment in this type of application, you must comply with NFPA 33 and OSHA requirements for the use of flammable and combustible materials.



### Related Manuals



..... **309888**



..... **309971**



..... **309889**

Model 246793 (Series A, B, C, D)  
Model 246794 (Series A)

..... **311062**

Model 246794 (Series B, C, D, E)

# Warnings

The following are general warnings related to the setup, use, grounding, maintenance and repair of this equipment. Additional, more specific warnings may be found throughout the body of this manual where applicable. Symbols appearing in the body of the manual refer to these general warnings. When these symbols appear through the manual, refer back to these pages for a description of the specific hazard.

## WARNING



### FIRE AND EXPLOSION HAZARD

Flammable fumes, such as solvent and paint fumes, in work area can ignite or explode. To help prevent fire and explosion:

- Use equipment only in well ventilated area.
- When flammable liquid is sprayed or used for flushing or cleaning, keep sprayer at least 20 feet (6 m) away from explosive vapors.
- Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric lamps, and plastic drop clothes (potential static arc).
- Sprayer generates sparks. When flammable liquid is used in or near sprayer or for flushing or cleaning, keep sprayer at least 20 ft (6 m) away from explosive vapors.
- Keep work area free of debris, including solvent, rags and gasoline.
- Do not plug or unplug power cords or turn lights on or off when flammable fumes are present.
- Ground equipment and conductive objects in work area. Read Grounding instructions.
- If there is static sparking or you feel a shock, stop operating immediately. Do not use equipment until you identify and correct the problem.
- Keep a fire extinguisher in the work area.



### ELECTRIC SHOCK HAZARD

Improper grounding, setup, or usage of the system can cause electric shock.

- Turn off and disconnect power cord before servicing equipment.
- Use only grounded electrical outlets.
- Use only 3–wire extension cords.
- Ensure ground prongs are intact on sprayer and extension cords.
- Do not expose to rain. Store indoors.



### 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 attention.**

- Do not point gun at anyone or any part of the body.
- Do not put your hand over the spray tip.
- 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.

# WARNING



INSTRUCTIONS

## EQUIPMENT MISUSE HAZARD

Misuse can cause death or serious injury.

- Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. Read **Technical Data** in all equipment manuals.
- Use fluids and solvents that are compatible with equipment wetted parts. Read **Technical Data** in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request MSDS from distributor or retailer.
- Check equipment daily. Repair or replace worn or damaged parts immediately with genuine ASM replacement parts only.
- Do not alter or modify equipment.
- Use equipment only for its intended purpose. Call your ASM distributor for information.
- Route hoses and cables away from traffic areas, sharp edges, moving parts and hot surfaces.
- Do not kink or overbend hoses or use hoses to pull equipment.
- Keep children and animals away from work area.
- Do not operate the unit when fatigued or under the influence of drugs or alcohol.
- Comply with all applicable safety regulations.



## PRESSURIZED ALUMINUM PARTS HAZARD

Do not use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents in this equipment. Such use could result in a serious chemical reaction, with the possibility of explosion, which could cause death, serious injury and/or substantial property damage.



## TOXIC FLUID HAZARD

Toxic fluid or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed.

- 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 all applicable guidelines.



## PERSONAL PROTECTIVE EQUIPMENT

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:

- Protective eye wear.
- Clothing and respirator as recommended by the fluid and solvent manufacturer.
- Gloves.
- Hearing protection.

# Component Identification and Function

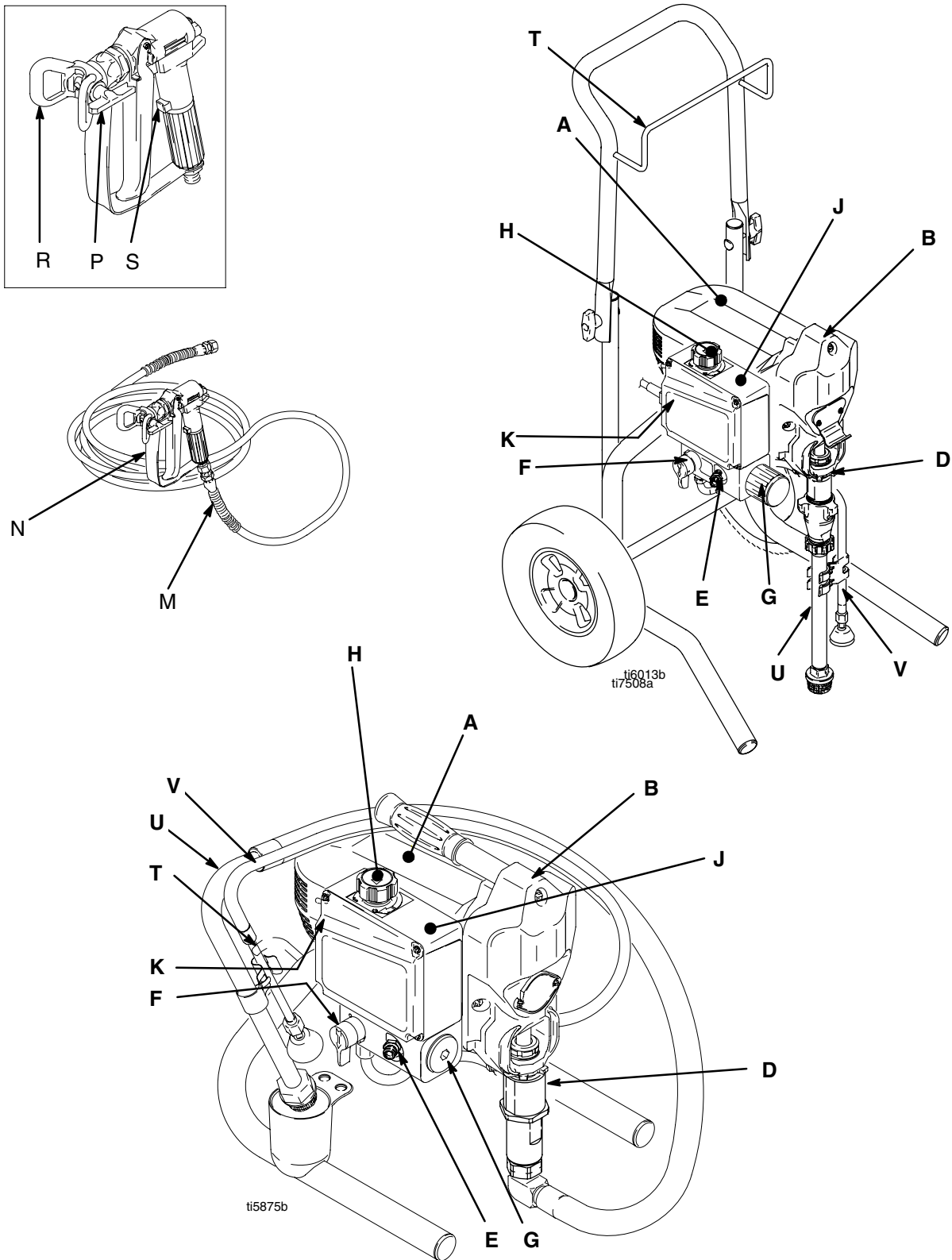


Fig. 1

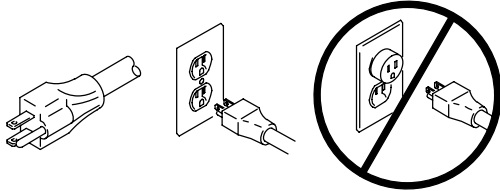
# Component Identification and Function

<b>A</b>	Motor	DC motor, permanent magnet, fan cooled
<b>B</b>	Drive Assembly	Transfers power from DC motor to displacement pump
<b>D</b>	Displacement Pump	Transfers fluid to be sprayed from source through spray gun
<b>E</b>	Fluid Outlet	Spray gun is connected here
<b>F</b>	Prime Valve	Used to prime and drain sprayer (also relieves fluid outlet pressure) when open
<b>G</b>	Fluid Filter (optional)	Final filter of fluid to spray gun
<b>H</b>	Pressure Adjusting Knob	Controls fluid outlet pressure
<b>J</b>	Pressure Control	Controls motor speed to maintain fluid outlet pressure at displacement pump outlet. Works with pressure adjusting knob.
<b>K</b>	ON/OFF Switch	Power switch that controls main power to sprayer
<b>M</b>	50 ft (15 m) Main Hose	1/4 in. ID, grounded, nylon hose with spring guards on both ends
<b>N</b>	Spray Gun	High pressure spray gun with gun safety latch
<b>P</b>	Spray Tip	Uses high pressure fluid to clear tip clogs without removing tip from spray gun
<b>R</b>	Tip Guard	Tip guard reduces risk of injection injury
<b>S</b>	Thumb Lock Safety	Gun safety latch inhibits accidental triggering of spray gun
<b>T</b>	Power Cord Rack	Holds wrapped power cord for storage
<b>U</b>	Suction Hose	Transfers fluid to be sprayed from source to pump
<b>V</b>	Drain Tube	Fluid outlet used to drain and prime the sprayer

# Grounding and Electric Requirements

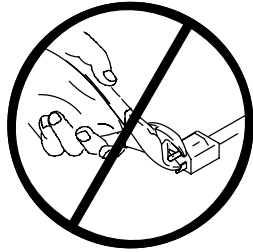


The sprayer must be grounded. Grounding reduces the risk of static and electric shock by providing an escape wire for the electrical current due to static build up or in the event of a short circuit.



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- **The sprayer requires** a 120V AC, 60 Hz, 15A circuit with grounding receptacle. Never use an outlet that is not grounded or an adapter.



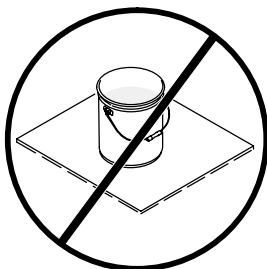
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- Do not use the sprayer if the electrical cord has a damaged ground prong. Only use a 3-wire **extension cord** with an undamaged, 3-prong plug.
- **Recommended extension cords** for use with this sprayer:
  - 25 ft (7.6 m) 18 AWG
  - 50 ft (15.2 m) 16 AWG
  - 100 ft (30.5 m) 14 AWG
  - 150 ft. (45.7 m) 12 AWG

Smaller gauge or longer extension cords may reduce sprayer performance.

- **Ground sprayer gun** through connection to a properly grounded fluid hose and pump.

- **Ground fluid supply container.** Follow local code.

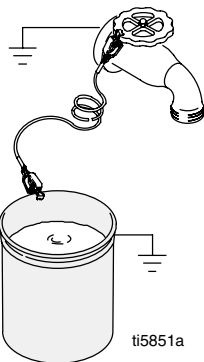


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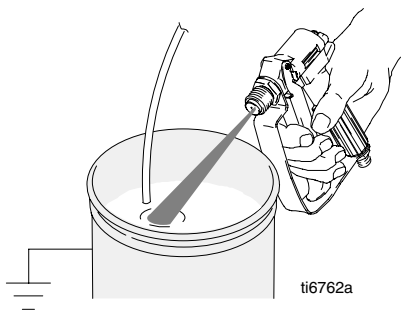
- **Ground solvent pails used when flushing.** Follow local code. Use only conductive, metal pails, placed on a grounded surface such as concrete. Do not place the pail on a non-conductive surface such as paper or cardboard, which interrupts the grounding continuity.

# Grounding and Electric Requirements

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- **Ground the metal pail** by clamping one end of ground wire to pail and the other end to ground, such as a water pipe.



- **Maintain grounding continuity** when flushing or relieving pressure by holding metal part of spray gun firmly to side of a grounded metal pail, then trigger gun.

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## Thermal Overload

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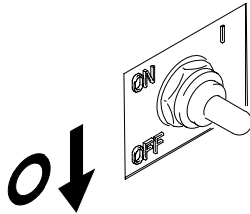
- Motor has a thermal overload switch to shut itself down if overheated.
- To reduce risk of injury from motor starting unexpectedly when it cools, always turn power switch OFF if motor shuts down.



# Pressure Relief Procedure



Follow Pressure Relief Procedure when you stop spraying and before cleaning, checking, servicing or transporting equipment.

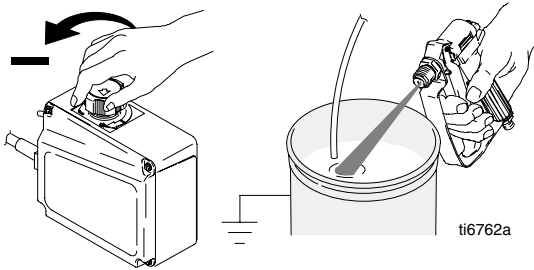


1. Turn power switch OFF and unplug power cord.

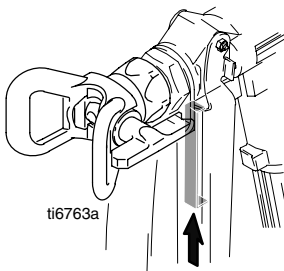


PRIME

2. Turn Spray-Prime/Drain valve to PRIME/DRAIN to relieve pressure.



3. Turn pressure to lowest setting. Hold metal part of gun firmly to a grounded metal pail. Trigger gun to relieve pressure.



4. Engage trigger lock.



PRIME

- Leave Spray-Prime/Drain valve in PRIME/DRAIN position until you are ready to spray again.
- *If you suspect the spray tip is clogged or that pressure has not been fully relieved after following the above steps, VERY SLOWLY loosen tip guard retaining nut or hose end coupling to relieve pressure gradually. Then loosen completely. Clear hose or tip obstruction.*

# General Repair Information

## WARNING



Read **Electric Shock Warning** and **Burn Hazard Warning**.

## WARNING



Flammable materials spilled on hot, bare, motor could cause fire or explosion. To reduce risk of burns, fire or explosion, do not operate sprayer with cover removed.

- Keep all screws, nuts, washers, gaskets, and electrical fittings removed during repair procedures. These parts usually are not provided with replacement kits.
- Test repairs after problems are corrected.
- If sprayer does not operate properly, review repair procedure to verify you did it correctly. See Troubleshooting, page 11.
- Overspray may build up in the air passages. Remove any overspray and residue from air passages and openings in the enclosures whenever you service sprayer.
- Do not operate the sprayer without the motor shroud in place. replace if damaged. Motor shroud directs cooling air around motor to prevent overheating and insulate the control board from accidental electric shock.

## WARNING



To reduce risk of serious injury, including electric shock:

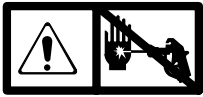
- Do not touch moving or electric parts with fingers or tools while testing repair
- Unplug sprayer when power is not required for testing
- Install all covers, gaskets, screws and washers before you operate sprayer



## CAUTION

- Do not run sprayer dry for more than 30 seconds. Doing so could damage pump packings.
- Protect the internal drive parts of this sprayer from water. openings in the cover allow for air cooling of the mechanical parts and electronics inside. If water gets in these openings, sprayer could malfunction or be permanently damaged.
- Prevent pump corrosion and damage from freezing. Never leave water or water-base paint in sprayer when it is not in use in cold weather. Freezing fluids can seriously damage sprayer. Store sprayer with Pump armour to protect sprayer during storage.
- Do not operate the sprayer without the motor shroud or control box cover in place. Replace if damaged. Motor shroud directs cooling air around motor to prevent overheating and the control box cover insulates the control board from accidental electric shock.

# Troubleshooting



Relieve pressure; page 9.

## MOTOR WON'T OPERATE

TYPE OF PROBLEM	WHAT TO CHECK <i>If check is OK, go to next check</i>	WHAT TO DO <i>When check is not OK refer to this column</i>
Basic Fluid Pressure Problems	1. Pressure control knob setting. Motor will not run if at minimum setting (fully counterclockwise).	1. Slowly increase pressure setting to see if motor starts.
	2. Spray tip or fluid filter may be clogged.	2. Relieve pressure and clear clog or clean filter; refer to separate gun or tip instruction manual.
Basic Mechanical Problems	1. Pump (13) frozen or hardened paint.	1. Thaw sprayer if water or water-based paint has frozen in sprayer. Place sprayer in warm area to thaw. Do not start sprayer until thawed completely. If paint hardened (dried) in sprayer, replace pump packings. See page 25 ( <b>Displacement Pump Replacement</b> ).
	2. Displacement pump connecting rod pin (9a). Pin must be completely pushed into connecting rod (9) and retaining spring (9b) must be firmly in groove of pump pin. See Fig. 11.	2. Push pin into place and secure with spring retainer.
	3. Motor (1). Remove drive housing assembly (10). See page 23. Try to rotate fan by hand.	3. Replace motor (1) if fan won't turn. See page 24.
Basic Electrical Problems See Wiring Diagram, page 17.	1. Motor control board. Board shuts down and displays error code on some models.	1. See <b>Motor Control Board Diagnostics</b> , page 18.
	2. Electrical supply. Meter must read 100–130 VAC for 110–120 VAC models and 210–255 VAC for 240 VAC models.	2. Reset building circuit breaker; replace building fuses. Try another outlet.
	3. Extension cord. Check extension cord continuity with volt meter.	3. Replace extension cord.
	4. Sprayer power supply cord. Inspect for damage such as broken insulation or wires.	4. Replace power supply cord.
	5. Fuse. Check replaceable fuse on control board.	5. Replace fuse after motor inspection.
	6. Motor leads are securely fastened and properly connected to control board.	6. Replace loose terminals; crimp to leads. Be sure terminals are firmly connected. Clean circuit board terminals. Securely reconnect leads.
	7. Motor thermal switch. Yellow motor leads must have continuity through thermal switch.	7. Replace motor. See page 24, Motor Replacement.
	8. Brush cap missing or loose brush lead connections.	8. Install brush cap or replace brushes if leads are damaged. See page 14, Motor Brush Replacement.
	9. Brush length which must be 1/4 in. (6 mm) minimum. NOTE: Brushes do not wear at the same rate on both sides of motor. Check both brushes.	9. Replace brushes. See page 14, Motor Brush Replacement.
	10. Motor armature commutator for burn spots, gouges and extreme roughness.	10. Remove motor and have motor shop resurface commutator if possible. See page 24, Motor Replacement.
11. Motor armature for shorts using armature tester (growler) or perform spin test, page 14.	11. Replace motor. See page 24, Motor Replacement.	
12. Pressure control not plugged in to control board.	12. Insert pressure control connector into control board.	

# Troubleshooting

## LOW OR FLUCTUATING OUTPUT

TYPE OF PROBLEM	WHAT TO CHECK <i>If check is OK, go to next check</i>	WHAT TO DO <i>When check is not OK refer to this column</i>
Low Output	1. For worn spray tip.	1. Follow <b>Pressure Relief Procedure Warning</b> , then replace tip. See your separate gun or tip manual.
	2. Verify pump does not continue to stroke when gun trigger is released.	2. Service pump. See page 25.
	3. Filter clogged (If optional filter is installed).	3. Relieve pressure. Check and clean filter.
	4. Prime valve leaking.	4. Relieve pressure. Repair prime valve.
	5. Suction hose connections.	5. Tighten any loose connections.
	6. Electrical supply with volt meter. Meter must read: 210–255 Vac for 220–240 Vac models. 85–130 Vac for 100–120 Vac models. Low volt-ages reduce sprayer performance.	6. Reset building circuit breaker; replace building fuse. Repair electrical outlet or try another outlet.
	7. Extension cord size and length; must be at least 12 gauge wire and no longer than 300 ft. Longer cord lengths reduce sprayer performance.	7. Replace with a correct, grounded extension cord.
	8. Leads from motor to pressure control circuit board (35) for damaged or loose wires or connectors. Inspect wiring insulation and terminals for signs of overheating.	8. Be sure male terminal blades are centered and firmly connected to female terminals. Replace any loose terminal or damaged wiring. Securely reconnect terminals.
	9. For loose motor brush leads and terminals. See page 14.	9. Tighten terminal screws. Replace brushes if leads are damaged. See page 14.
	10. For worn motor brushes which must be 1/4 in. (6 mm) minimum. See page 14.	10. Replace brushes. See page 14.
	11. For broken or missing motor brush caps.	11. Replace brushcap if broken. Realign spring with brush. See page 14.
	12. Motor brushes for binding in brush holders. See page 14.	12. Clean brush holders, remove carbon dust with small cleaning brush. Align brush lead with slot in brush holder to assure free vertical brush movement.
	13. Low stall pressure.	13. Do either or both:  a. Turn pressure control knob fully clockwise. Make sure pressure control knob is properly installed to allow full clockwise position.  b. Try a new transducer.
	14. Motor armature for shorts by using an armature tester (growler) or perform spin test. See page 14.	14. Replace motor. See page 24.

# Troubleshooting

## LOW OR FLUCTUATING OUTPUT

TYPE OF PROBLEM	WHAT TO CHECK <i>If check is OK, go to next check</i>	WHAT TO DO <i>When check is not OK refer to this column</i>
Motor runs and pump strokes	1. Paint supply.	1. Refill and reprime pump.
	2. Intake strainer clogged.	2. Remove and clean, then reinstall.
	3. Suction tube or fittings loose.	3. Tighten; use thread sealant or sealing tape on threads if necessary.
	4. To see if intake valve ball and piston ball are seating properly. See page 25.	4. Remove intake valve and clean. Check balls and seats for nicks; replace if necessary, page 25. Strain paint before using to remove particles that could clog pump.
	5. Leaking around throat packing nut which may indicate worn or damaged packings. See page 25.	5. Replace packings, page 25. Also check piston valve seat for hardened paint or nicks and replace if necessary. Tighten packing nut/wet-cup.
	6. Pump rod damage.	6. Repair pump, page 25.
	7. Capacitor failure. Visually inspect capacitor near terminals. Ensure that orange safety relief plug is intact.	7. Replace capacitor.
Motor runs but pump does not stroke	1. Displacement pump pin (9a) (damaged or missing), page 25.	1. Replace pump pin if missing. Be sure retainer spring (9b) is fully in groove all around connecting rod, page 25.
	2. Connecting rod assembly (9) for damage, page 23.	2. Replace connecting rod assembly, page 23.
	3. Gears or drive housing, page 23.	3. Inspect drive housing assembly and gears for damage and replace if necessary, page 23.
Motor is hot and runs intermittently	1. Be sure ambient temperature where sprayer is located is not more than 115 °F (46 °C) and sprayer is not located in direct sun.	1. Move sprayer to shaded, cooler area if possible.
	2. Motor has burned windings indicated by removing positive (red) brush and seeing burned adjacent commutator bars.	2. Replace motor. See page 24, <b>Motor Replacement</b> .
	3. Tightness of pump packing nut. Overtightening tightens packings on rod, restricts pump action and damages packings.	3. Loosen packing nut. Check for leaking around throat. Replace pump packings if necessary. See pump manual 311062.

# Spin Test

## Setup



**Electric Shock Hazard;** page 3.

To check armature, motor winding and brush electrical continuity:

1.  Relieve pressure; page 9.

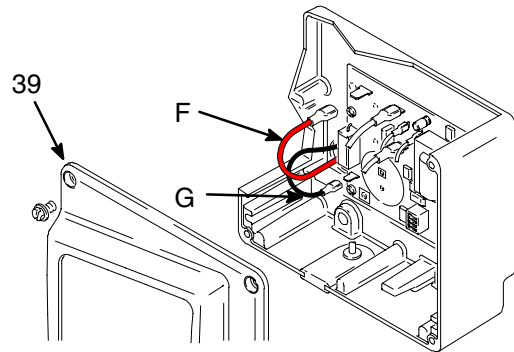
2. Remove drive housing; page 23.
3. Fig. 2. Remove pressure control cover (39). Disconnect red and black motor leads from control board.
4. Fig. 3. Remove motor shroud (74).

## Armature Short Circuit Test

Quickly turn motor fan by hand. If no electrical shorts, motor coasts two or three revolutions before complete stop. If motor does not spin freely, armature is shorted. Replace motor; page 24.

## Armature, Brushes, and Motor Wiring Open Circuit Test (Continuity)

1. Connect red and black motor leads together with test lead. Turn motor fan by hand at about two revolutions per second.
2. If uneven or no resistance, check for: broken brush springs, brush leads, motor leads; loose brush terminal screws, motor lead terminals; worn brushes. Repair as needed; page 14.
3. If still uneven or no resistance, replace motor; page 24.



**Fig. 2**

9578A

# Motor Brush Replacement

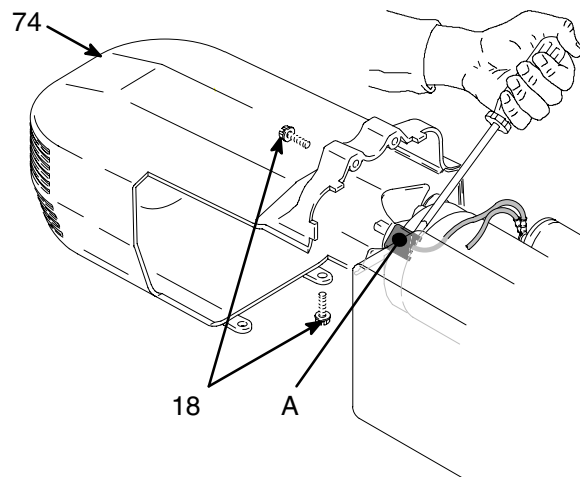
## Motor Brush Removal

Replace brushes worn to less than 1/4 in. (6 mm). Check both sides. See Parts List pages 26 – 39 for correct brush kit for your series of sprayer.

1. Read **General Repair Information;** page 10.

2.  Relieve pressure; page 9.

3. Fig. 3. Remove four screws (18) and motor shroud (74).
4. Pry off two brush caps (A). Tag locations of red (+) and black (-) motor leads. Cut tie wrap.
5. Fig. 5. Remove screw (C) and discard brush (B) for motor with capacitor attached. Remove brush leads from control box for motor without capacitor attached.



**Fig. 3**

T10053

*(Continued on page 15)*

# Motor Brush Replacement

- Fig. 4. Insert brush (B). Push cap (A) into place over brush. Orient each cap with the 2 projections on either side of the brush lead. You will hear a “snap” when cap is securely in place.

## **CAUTION**

When installing brushes, follow all steps carefully to avoid damaging parts.

- Fig. 4. Install red (+) and black (-) motor leads according to tags. Install brush lead end with screw (C) to motor-mounted capacitor or route lead into control box and connect to board.

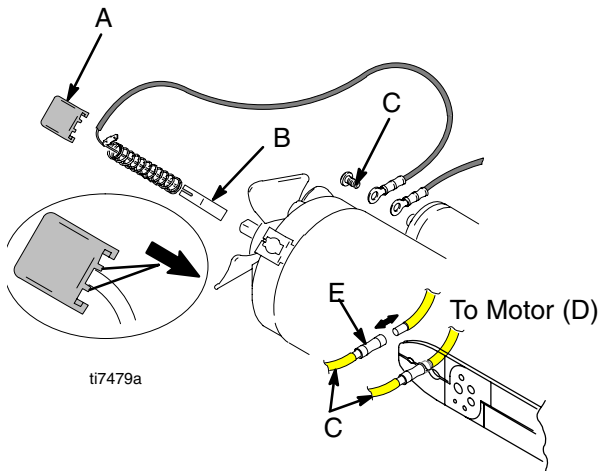


Fig. 4

T10053

- If replacement brush harness has 2 yellow wires (C), cut, strip, and crimp the 2 yellow wires (D) from the motor and butt splice (E) on the replacement harness.
- Inspect commutator for excessive pitting, burning or gouging. A black color on commutator is normal. Have commutator resurfaced by a motor repair shop if brushes wear too fast.
- Test brushes.
  - Remove pump (13); **Displacement Pump Replacement**, page 25.
  - With sprayer OFF, turn pressure control knob fully counterclockwise to minimum pressure. Plug in sprayer.
  - Turn sprayer ON. Slowly increase pressure until motor is at full speed.
- Break in brushes.
  - Operate sprayer 1 hour with no load.
  - Install pump (13); **Displacement Pump Replacement**, page 25.

# On/Off Switch Replacement

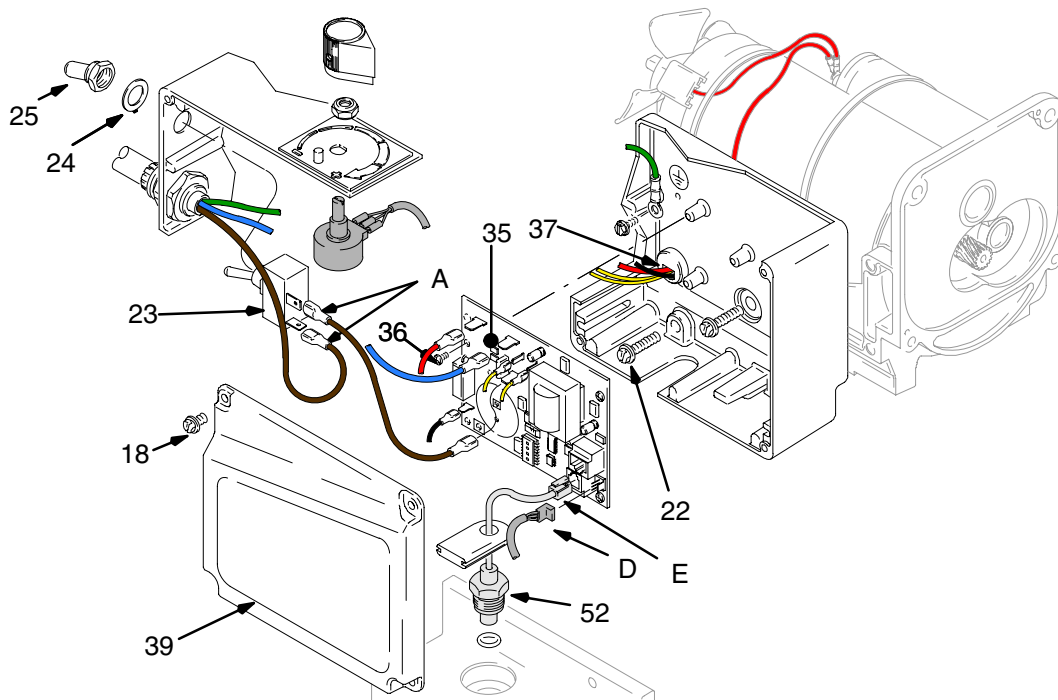
## Removal



1. Relieve pressure; page 9.
2. Fig. 5. Remove four screws (18) and pressure control cover (39).
3. Disconnect two wires (A) from ON/OFF switch (23).
4. Remove toggle boot (25) and locking ring (24). Remove ON/OFF switch (23).

## Installation

1. Install new ON/OFF switch (23). Install locking ring (24) and toggle boot (25).
2. Connect two wires (A) to ON/OFF switch.
3. Install pressure control cover (39) with four screws (18).



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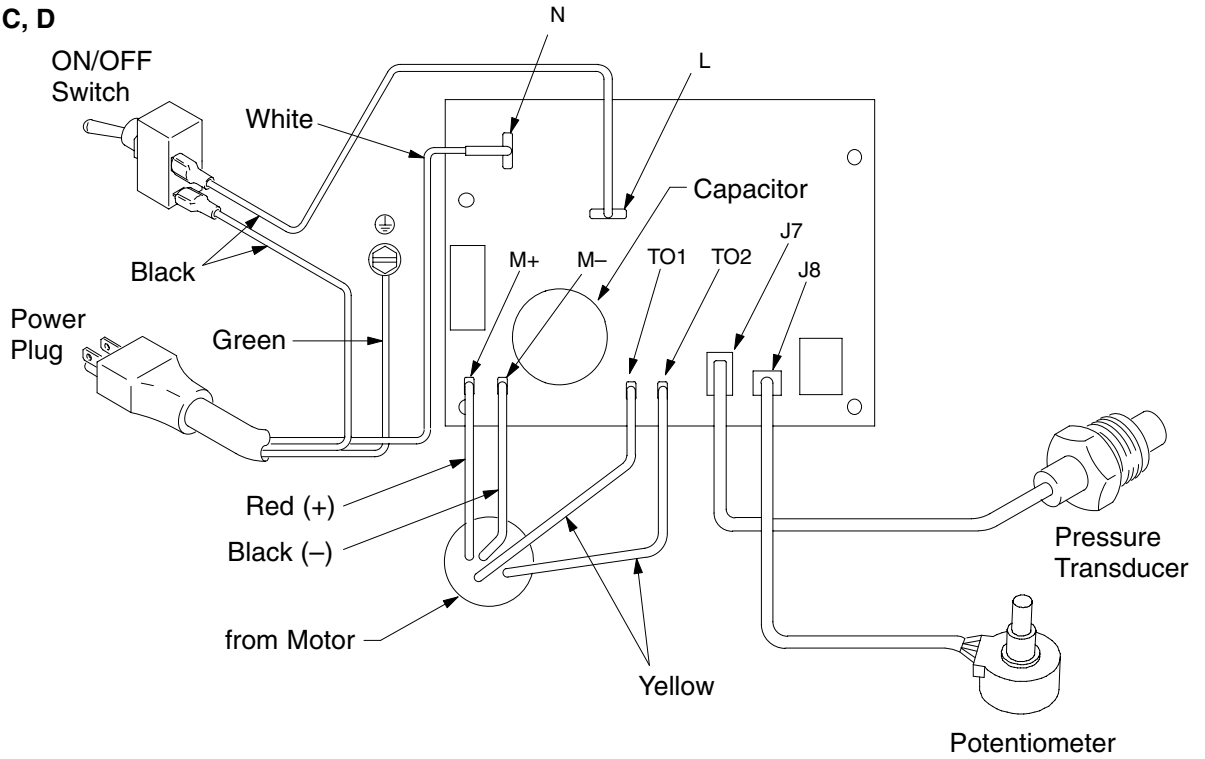
Fig. 5



# Wiring Diagram

120 Vac

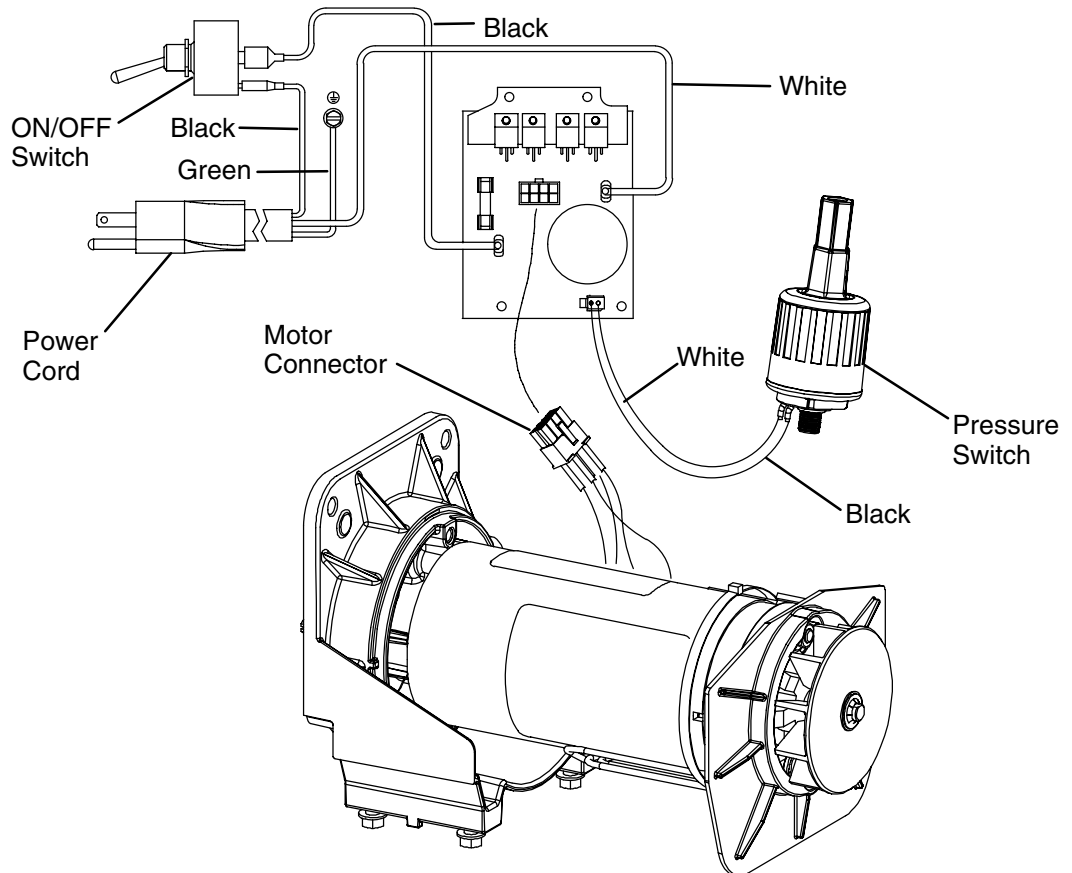
246793: A, B, C  
246794: A, B, C, D



ti2159a

Fig. 6

246793: D  
246794: E



ti7415a

Fig. 7

# Pressure Control Repair

## Motor Control Board Diagnostics

**For these Models and Series ONLY:**

**246793: A, B, C**

**246794: A, B, C, D**

**Note:** Keep a new transducer on hand to use for test.

### CAUTION

Do not allow sprayer to develop fluid pressure without transducer installed. Leave drain valve open if test transducer is used.

1. Remove four screws (18) and cover (39).
2. Turn ON/OFF switch ON.
3. Observe LED operation and reference following table:



4. Relieve pressure and unplug sprayer before servicing control board; page 9.

LED BLINKS	SPRAYER OPERATION	INDICATES	WHAT TO DO
Once	Sprayer runs	Normal operation	Do nothing
Once and stays ON	Sprayer shuts down and LED stays ON	Motor open circuit or bad control board	Check motor brushes and armature. If OK, replace motor control board.
Two times repeatedly	Sprayer shuts down and LED continues to blink two times repeatedly	Run away pressure. Pressure greater than 4500 psi (310 bar, 31 MPa).	Replace motor control board. See following <b>Motor Control Board</b> procedure.
Three times repeatedly	Sprayer shuts down and LED continues to blink three times repeatedly	Pressure transducer is faulty or missing	Check transducer connection. Open drain valve. Substitute new transducer for transducer in sprayer. If sprayer runs, replace transducer.
Four times repeatedly	Sprayer shuts down and LED continues to blink four times repeatedly	Line voltage is too high	Check for voltage supply problems
Five times repeatedly	Sprayer shuts down and LED continues to blink five times repeatedly	Too much current	Check for locked rotor, shorted wiring or motor. Repair or replace failed parts.
Six times repeatedly	Sprayer shuts down and LED continues to blink six times repeatedly	Motor thermal switch open circuit	Check for binding in pump or drive. Check for bad motor.

# Pressure Control Repair

## Motor Control Board

**For these Models and Series ONLY:**

**246793: A, B, C**

**246794: A, B, C, D**

### Removal

Refer to Fig. 5 and 6.



1. Relieve pressure; page 9.
2. Remove four screws (18) and cover (39).
3. Disconnect at motor control board (35):
  - Four motor leads: two yellow, black (–) and red (+).
  - Two line voltage leads.
  - Lead (D) from potentiometer.
  - Lead (E) from transducer.
4. Remove five screws (36) and circuit board (35).

### Installation

1. Clean pad on rear of motor control board. Apply small amount of thermal compound 073019 to pad.
2. Fig. 5. Install motor control board (35) with five screws (36).
3. Connect to motor control board (35):
  - Lead (E) to transducer.
  - Lead (D) to potentiometer.
  - Two line voltage leads.
  - Four motor leads: two yellow, black (–) and red (+).
4. Install cover (39) with four screws (18).

# Pressure Control Repair

**For these Models and Series ONLY:**

**246793: A, B, C**

**246794: A, B, C, D**

## Pressure Control Transducer

### Removal

Refer to Fig. 5 and 6.



1. Relieve pressure; page 9.
2. Remove four screws (18) and cover (39).
3. Disconnect lead (E) from motor control board (35).
4. Remove two screws (22) and filter housing (45).
5. Thread transducer lead plastic connector down through transducer grommet (28).
6. Remove pressure control transducer (52) and packing o-ring (51) from filter housing.

### Installation

1. Install packing o-ring (51) and pressure control transducer (52) in filter housing (45). Torque to 30–35 ft-lb.
2. Thread transducer lead plastic connector up through transducer grommet (28).
3. Install filter housing (45) with two screws (22).
4. Connect lead (E) to motor control board (35).
5. Install cover (39) with four screws (18).

## Pressure Adjust Potentiometer

### Removal

Refer to Fig. 5 and 6.



1. Relieve pressure; page 9.
2. Remove four screws (18) and cover (39).
3. Disconnect all leads from motor control board (35).
4. Remove five screws (36) and board (35)
5. Remove potentiometer knob (27), sealing shaft nut (33) and pressure adjust potentiometer (26).

### Installation

1. Install pressure adjust potentiometer (26), sealing shaft nut (33) and potentiometer knob (27).
  - a. Turn potentiometer fully clockwise.
  - b. Install knob at full clockwise position.
2. Install board (35) with five screws (36).
3. Connect all leads to motor control board (35).
4. Install cover (39) with four screws (18).

# Pressure Control Repair


For these Models and Series ONLY:

246793: D

246794: E

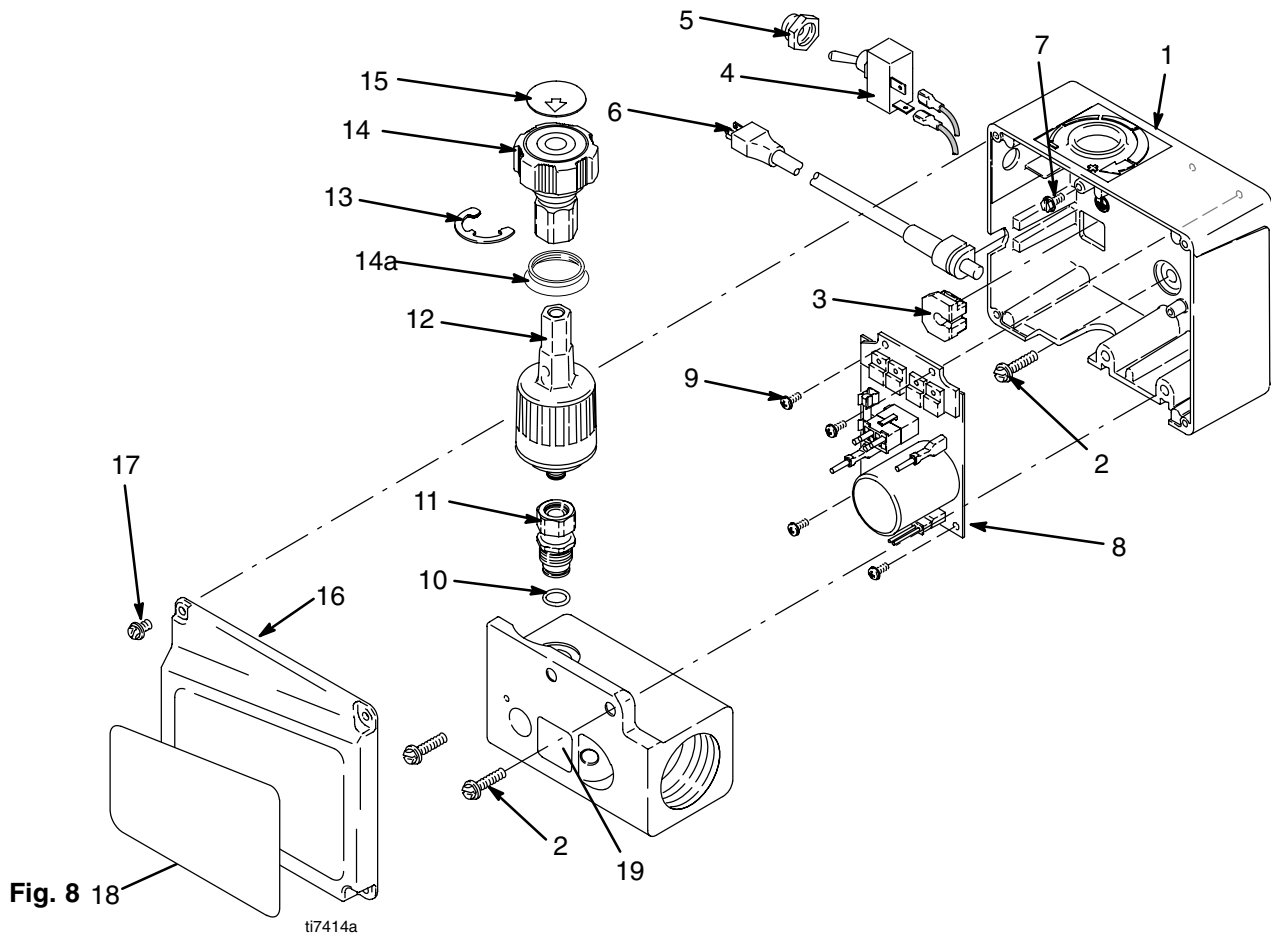
## Motor Control Board

### Removal

1.  Relieve pressure; page 9.
2. Remove 4 screws (17) and control cover (16).
3. Disconnect motor connector, pressure control connector, white wire to control board (8) and black wire to switch (4).
4. Remove 4 screws (9) and control board (8).

### Installation

1. Assemble control board (8) with 4 screws (9).
2. Connect motor connector, pressure control connector, white wire to control board (8) and black wire to switch (4).
3. Install cover (16) with 4 screws (17).



# Pressure Control Repair


For these Models and Series ONLY:

246793: D

246794: E

## Pressure Control

### Removal (See Fig. 8, page 21)

1.  Relieve pressure; page 9.
2. Remove 4 screws (17) and control cover (16).
3. Disconnect pressure control connector from control board (8).
4. Remove clip (13) from control knob (14). Slide knob (14) off of pressure control (12) and remove knob (14) and baffle (14a) from control box (1).
5. Disconnect high pressure hose at pump.
6. Remove 2 screws (2) from fluid manifold and remove manifold from sprayer.
7. Remove pressure control (12) from fitting (11).

### Installation (See Fig. 8, Page 21)

**NOTE:** The pressure control has been preset at the factory to the design stall pressure.

1. Apply red thread locking adhesive (provided in kit) to the brass threads of the pressure control (12).
2. Assemble pressure control (12) into fitting (11) and torque to 140 in. lbs (12 ft. lbs). Do not pinch or damage the wires on the pressure control.
3. Assemble the fluid manifold to the control box with 2 screws (2).
4. Connect the high-pressure hose at pump.
5. Turn pressure control (12) fully clockwise to maximum pressure.
6. Slide knob (14) and baffle (14a) onto stem of pressure control (12). Install clip 13.
7. Install label (15) on knob (14) with indicator pointing at “+” on the control box (1).
8. Attach pressure control connector to control board (8).
9. Install cover (16) with 4 screws (17).

# Drive Housing Replacement

## CAUTION

Do not drop gear cluster (7) when removing drive housing (10). Gear cluster may stay engaged in motor front end bell or drive housing.

### Disassembly



1. Relieve pressure; page 9.
2. Remove pump (13), Displacement Pump Replacement, page 25.
3. Fig. 9. Remove two screws (18a). Tip sprayer up. Remove two screws (18b) and remove shroud (74).

4. Remove two front screws (22).
5. Remove two back screws (22).
6. Pull drive housing (10) off of motor (1).

### Assembly

1. Push drive housing (10) onto motor (1)
2. Install two front screws (22).
3. Install two back screws (22).
4. Fig. 9. Install shroud (74) with two screw (18a). Tip sprayer up. Install two screws (18b).
5. Install pump (13) Displacement Pump Replacement, page 25.
6. Install new access cover (10a) with two screws (10b).

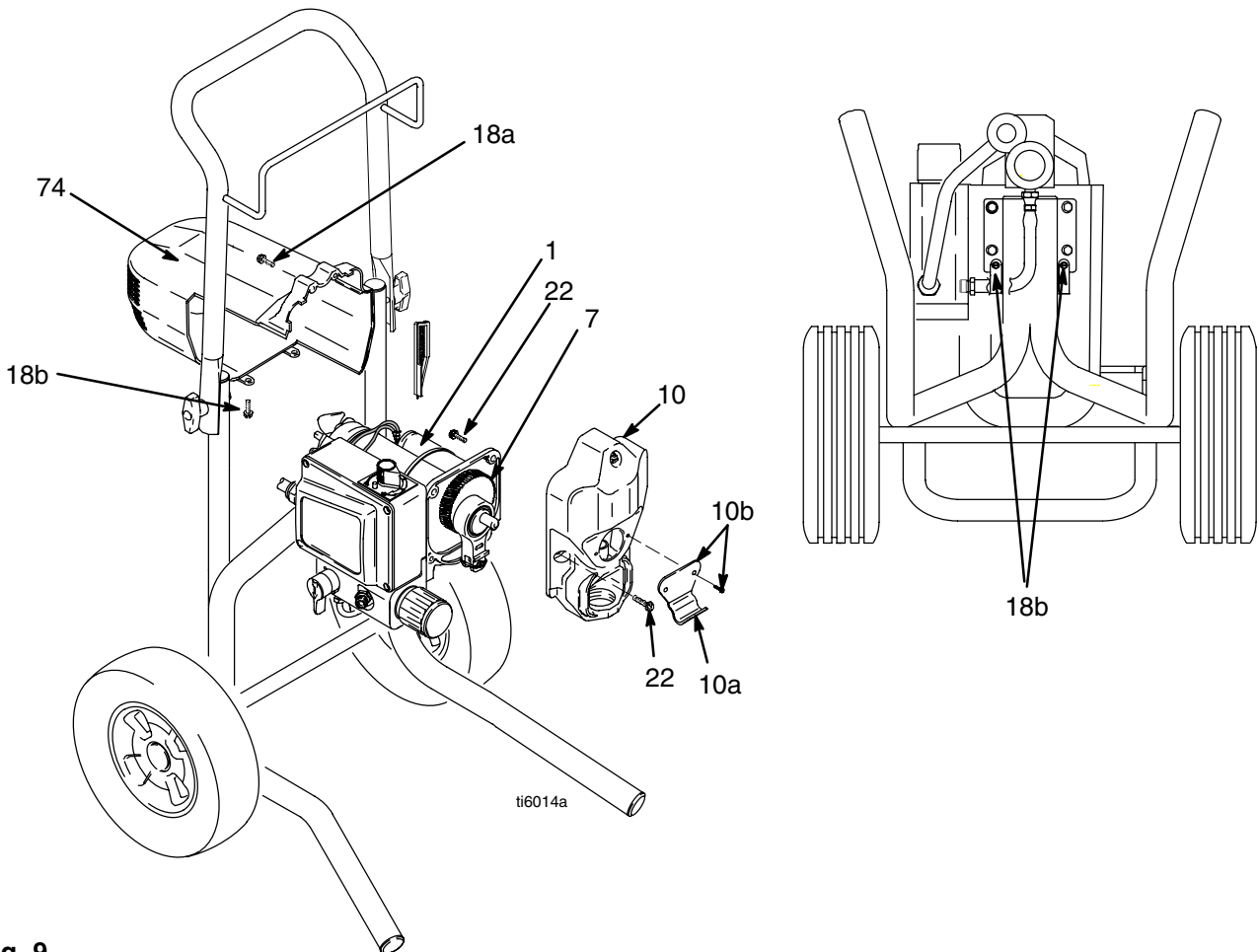


Fig. 9

# Motor Replacement

## Disassembly



1. Relieve pressure; page 9.
2. Remove pump (13), Displacement Pump Replacement, page 25.

### CAUTION

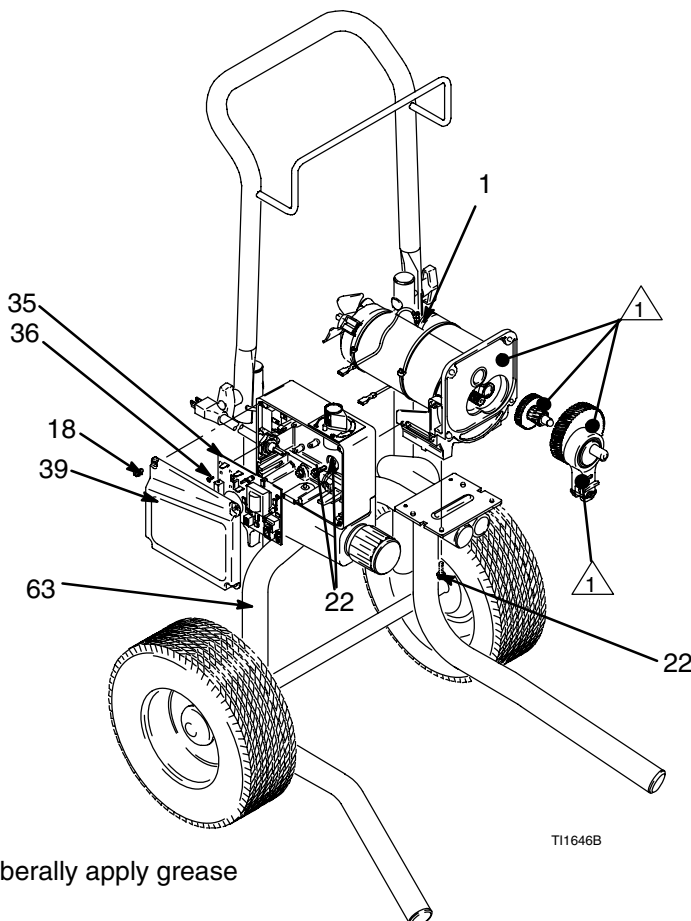
Do not drop gear cluster (7) when removing drive housing (10). Gear cluster may stay engaged in motor front end bell or drive housing.


3. Remove drive housing (10), **Drive Housing Replacement**, page 23.
4. Remove fluid manifold; **Pressure Control Replacement**, page 20 or 22.
5. Remove control board; **Control Board Replacement**, page 19 or 21.
6. Remove strain relief and motor fan (2).

7. Remove three screws (22) behind board and remove control housing (21).
8. Remove four screws (22) and motor (1) from frame (63).

## Assembly

1. Install new motor (1) on frame (63) with four screws (22).
2. Install control housing (21) with three screws (22).
3. Install strain relief and motor fan (2).
4. Install fluid manifold; **Pressure Control Replacement**, page 20 or 22.
5. Install control board; **Control Board Replacement**, page 19 or 21.
6. Install drive housing (10); **Drive Housing Replacement**, page 23.
7. Install pump (13); **Displacement Pump Replacement**, page 25.



 1 Liberally apply grease

T11646B

Fig. 10



# Displacement Pump Replacement

## Removal

1. Flush pump (13).



2. Relieve pressure; page 9.
3. Fig. 11. Remove two screws (10b) and cover (10a).

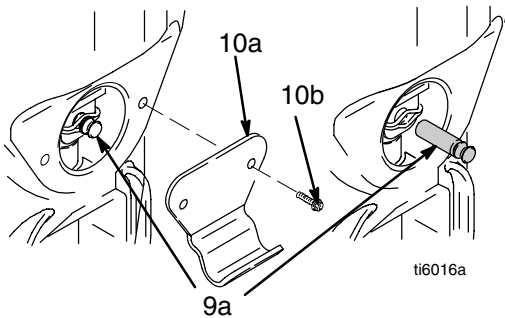


Fig. 11

4. Cycle pump until pump pin (9a) is in position to be removed. Remove pump pin (9a).
5. Fig. 12. Remove suction tube (78) and hose (19).
6. Loosen pump jam nut (12). Unscrew pump.

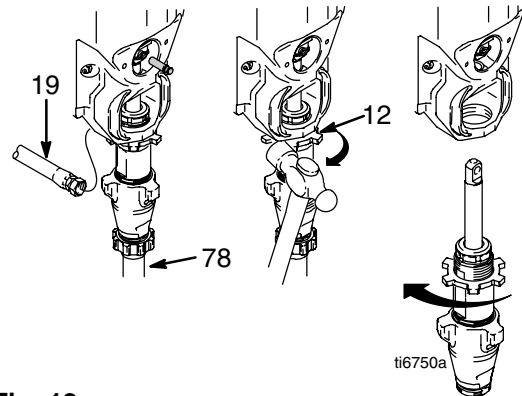


Fig. 12

## Installation



If pin works loose, parts could break off due to force of pumping action. Parts could project through the air and result in serious injury or property damage.

### CAUTION

If the pump locknut loosens during operation, the threads of the drive housing will be damaged.

1. Fig. 13. Extend pump piston rod fully. Apply grease to top of pump rod at (A) or inside connecting rod.

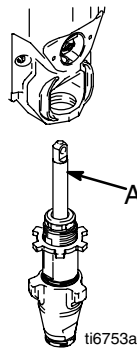


Fig. 13

4. Screw in pump until threads are flush with drive housing opening. Align pump outlet to back.
5. Fig. 12. Install suction tube (78) and hose (19).
6. Fig. 14. Screw jam nut (12) up onto pump until nut stops. Tighten jam nut by hand, then tap 1/8 to 1/4 turn with a 20 oz (maximum) hammer to approximately 75 +/- 5 ft-lb (102 N·m).

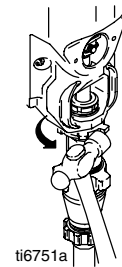


Fig. 14

7. Fig. 15. Fill packing nut with ASM TSL until fluid flows onto top of seal.

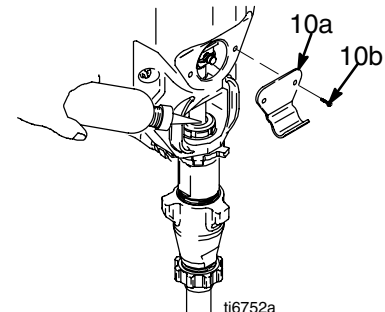


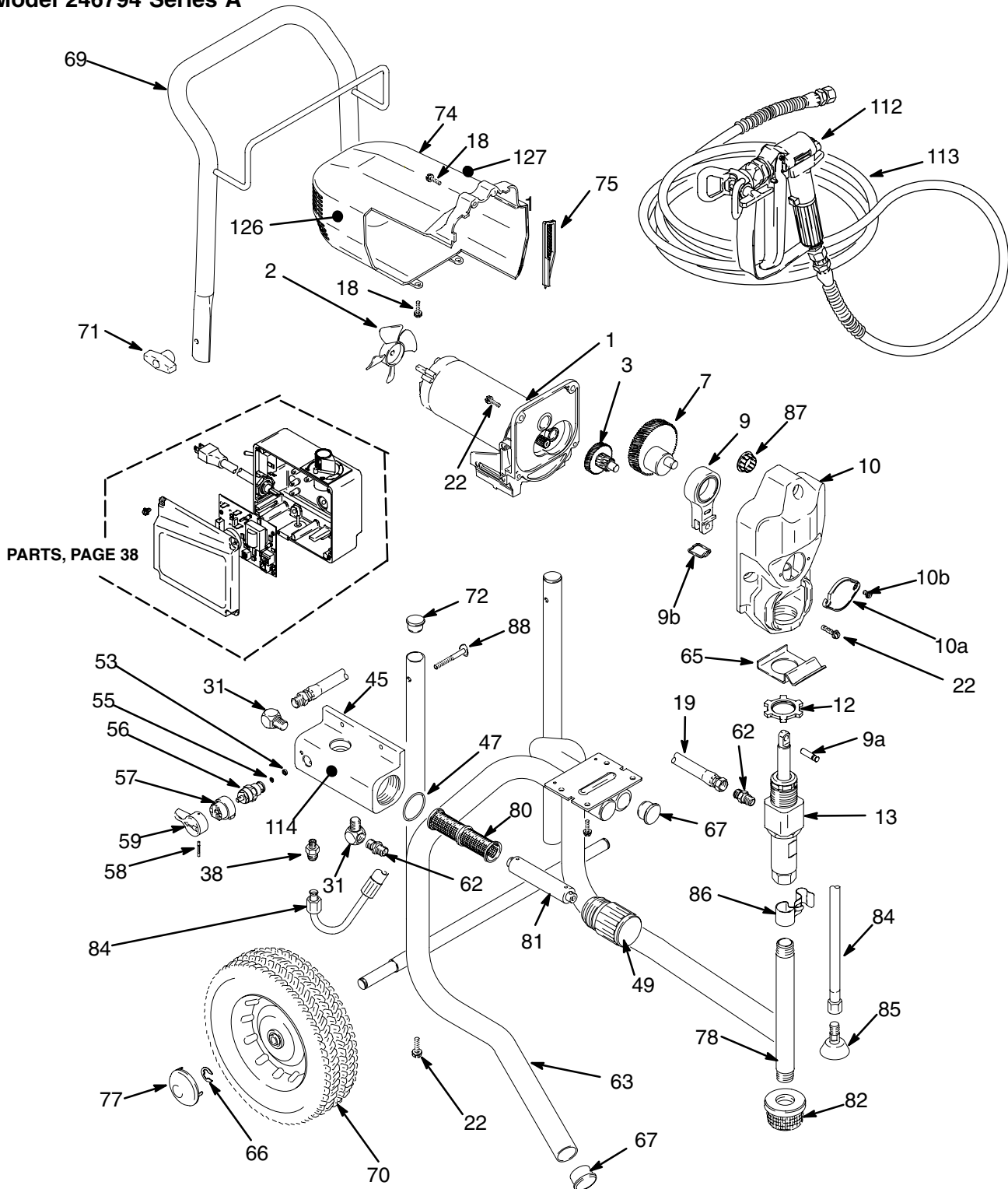
Fig. 15

2. Fig. 11. Install pump pin (9a). Verify retainer spring is in groove of pump pin.
3. Push pump up until pump threads engage.

8. Fig. 11. Install cover (10a); with screws (10b).

# Parts Drawing

Mustang 3800  
Model 246794 Series A



ti1634e

# Parts List

## Mustang 3800

### Model 246794 Series A

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
1	<b>245893</b>	KIT, MOTOR, 120 Vac		63	245541	FRAME, cart	1
2	15A430	BLADE, fan motor	1	65	15A344	HOOK, pail	1
3	245547	KIT, GEAR, combination	1	66	15A416	RING, retaining, external	2
7	245546	KIT, CRANK SHAFT	1	67	15A422	PLUG, tubing	4
9	245549	KIT, CONNECTING ROD includes 9a and 9b	1	69	15A542	HANDLE, cart	1
9a	15A343	PIN, pump	1	70	15A421	WHEEL, semi-pneumatic	2
9b	15A345	RETAINER, pin	1	71	15A426	KNOB, t-handle	2
10	245548	KIT, DRIVE HOUSING includes 10a and 10b	1	72	15A420	PLUG, tubing	4
10a	15A339	COVER	1	74	245439	SHROUD, motor,kit includes 18, 75, 126, 127	1
10b	15A428	SCREW	2	75	198933	VENT, side	1
12	15A341	NUT, jam, pump	1	77	15A419	CAP, hub	2
13	245544	PUMP Manual 309428	1	78	15A354	TUBE, suction	1
18	15A428	SCREW, mach slot hex, washer hd	4	80	245527	FILTER, fluid	1
19	245540	HOSE, coupled, high pressure	1	81	15A353	FILTER, insert	1
22	15A429	SCREW, slot hd, hex, washer hd	8	82	245530	STRAINER, kit	1
31	15A350	ADAPTER, pipe, hex	2	84	245551	KIT, RETURN line	1
38	15A434	FITTING, adapter	1	85	245536	DEFLECTOR, threaded	1
45	15A342	HOUSING, filter	1	86	15A346	CLIP, spring	1
47	15A418	O-RING	1	87	15A433	PLUG	1
49	15A340	CAP, filter	1	88	15A425	SCREW	1
53	15A424	GASKET, seat, valve	1	112	246841	GUN	1
55	15A337	VALVE, seat	1	113	277201	HOSE, 1/4 in. x 50 ft (15 m)	1
56	245529	KIT, DRAIN VALVE includes 53 and 55	1	114	15A347	LABEL, instruction	1
57	245538	ASSY, cam, drain valve	1	126	15A348▲	LABEL, WARNING	1
58	15A423	PIN, grooved	1	127	15A349▲	LABEL, DANGER	1
59	15A338	HANDLE, valve, drain	1				
62	15A336	NIPPLE, 1/4 npt(m) x 1/4 npsm	2				

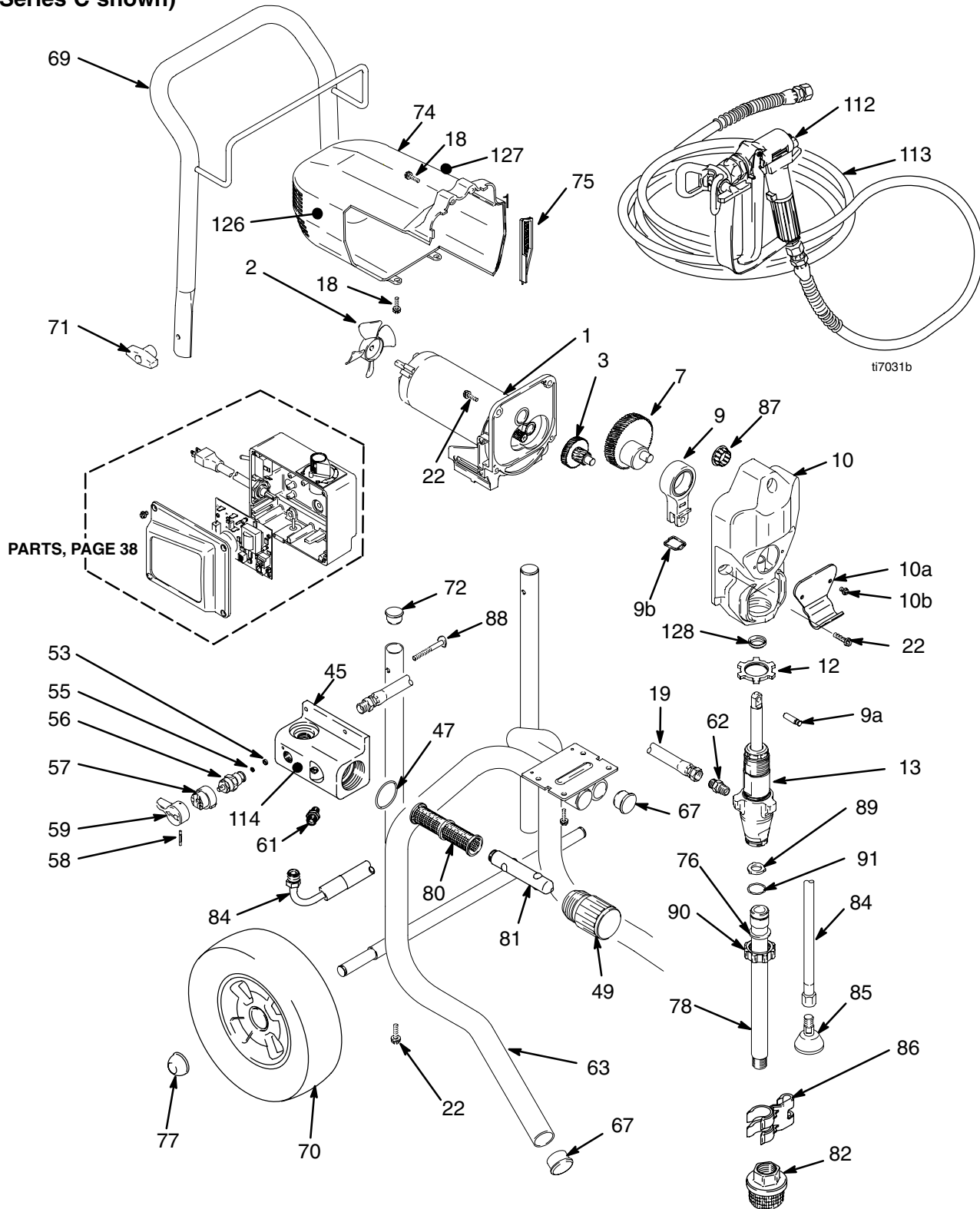
▲ Replacement Danger and Warning labels, tags, and cards are available at no cost.

† Motor Brush Kit 245894 is available

# Parts Drawing

Mustang 3800

Model 246794 Series B, C, D  
(Series C shown)



# Parts List

## Mustang 3800

### Model 246794 Series B, C, D

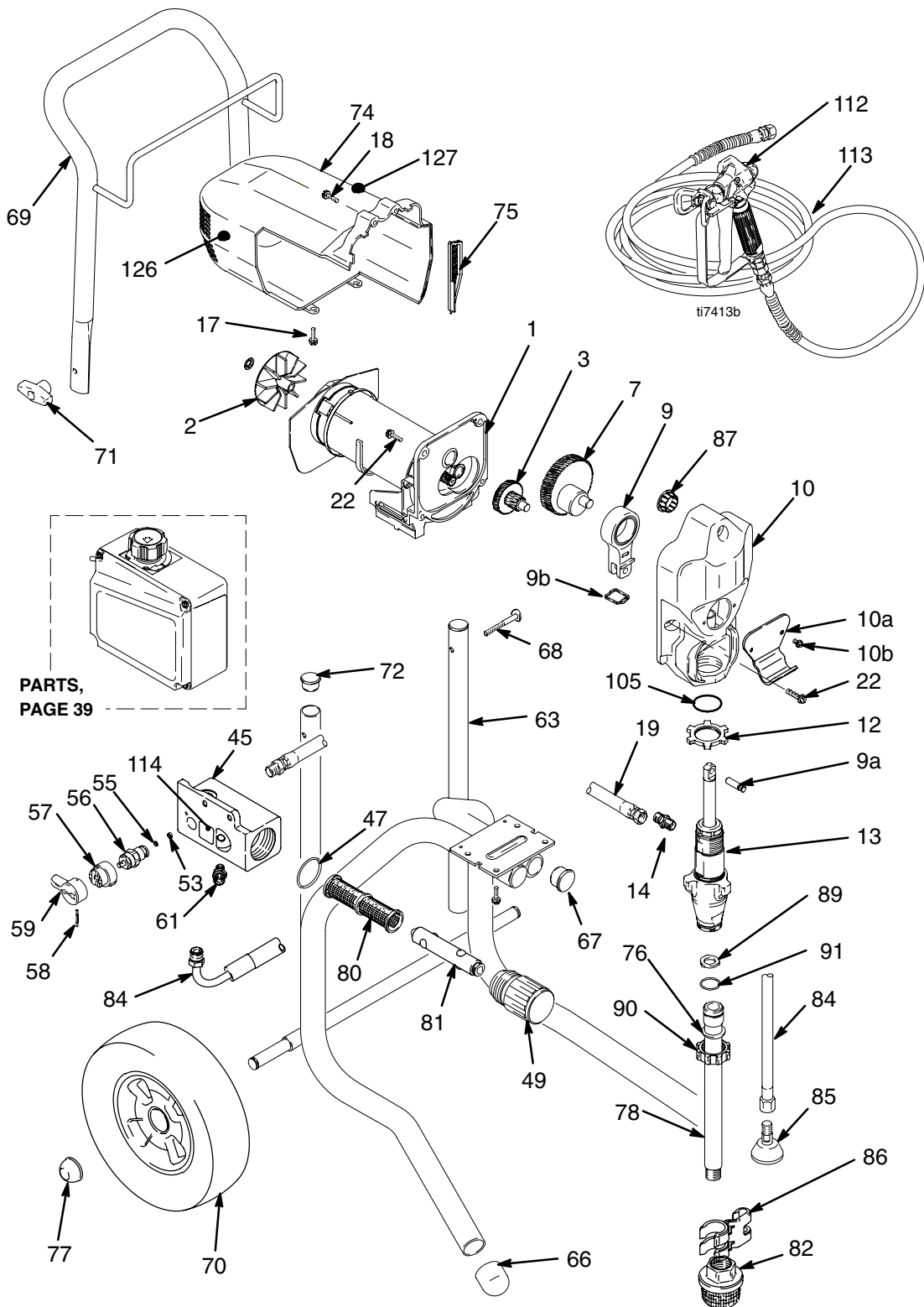
REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
1		KIT, MOTOR, 120 Vac		69	15A542	HANDLE, cart	1
	245893†	Model 246794 B, C	1	70	119451	WHEEL, semi-pneumatic	2
	249610†	Model 249794 D	1	71	15A426	KNOB, t-handle	2
2	15A430	BLADE, fan motor	1	72	15A420	PLUG, tubing	4
3	245547	KIT, GEAR, combination	1	74	245439	SHROUD, motor,kit	1
7	245546	KIT, CRANK SHAFT	1			includes 18, 75, 126, 127	
9	245549	KIT, CONNECTING ROD	1	75	198933	VENT, side	1
		includes 9a and 9b		76	15B652	WASHER, suction (series C)	1
9a	15A343	PIN, pump	1	77	119452	CAP, hub	2
9b	15A345	RETAINER, pin	1	78		TUBE, suction	1
10	245548	KIT, DRIVE HOUSING	1		15E290	Series B	
		includes 10a and 10b			15F551	Series C	
10a	15E286	HOOK, pail	1	80	245527	FILTER, fluid	1
10b	15A428	SCREW	2	81	15E288	FILTER, insert	1
12	15A341	NUT, jam, pump	1	82	246385	STRAINER, kit	1
13		PUMP	1	84	245551	KIT, RETURN line	1
	245544	Series B (manual 309428)		85	245536	DEFLECTOR, threaded	1
	287658	Series C (manual 311062)		86	195696	CLIP, spring	1
18	15A428	SCREW, mach slot hex, washer hd	4	87	15A433	PLUG	1
19	15C709	HOSE, coupled, high pressure	1	88	15A425	SCREW	1
22	15A429	SCREW, slot hd, hex, washer hd	8	89	115099	WASHER, garden hose (series C)	1
45	15E180	HOUSING, filter	1	90	15E813	NUT, intake tube (series C)	1
47	15A418	O-RING	1	91	103413	O-RING (series C)	1
49	15E289	CAP, filter	1	112	246841	GUN	1
53	15A424	GASKET, seat, valve	1	113	277201	HOSE, 1/4 in. x 50 ft (15 m)	1
55	15A337	VALVE, seat	1	114	15A347	LABEL, instruction	1
56	245529	KIT, DRAIN VALVE	1	126	15A348▲	LABEL, WARNING	1
		includes 53 and 55		127	15A349▲	LABEL, DANGER	1
57	245538	ASSY, cam, drain valve	1	128	115491	WIPER, rod (series C)	1
58	15A423	PIN, grooved	1				
59	15A338	HANDLE, valve, drain	1				
62	15E539	NIPPLE, 1/4 npsm x 1/8 npt	1				
63	245541	FRAME, cart	1				
67	15A422	PLUG, tubing	4				

▲ Replacement Danger and Warning labels, tags, and cards are available at no cost.

† Motor Brush Kit 245894 is available

# Parts Drawing

Mustang 3800  
Model 246794 Series E



# Parts List

## Mustang 3800

### Model 246794 Series E

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
1	249826‡	KIT, MOTOR, 120 vac	1	69	241938	HANDLE, cart	1
2	249947†	BLADE, fan motor	1	70	119451	WHEEL, semi-pneumatic	2
3	243219	GEAR, combination	1	71	115480	KNOB, t-handle	2
7	243218	CRANK SHAFT	1	72	105521	PLUG, tubing	2
9	243221	CONNECTING ROD	1	74	253275	SHROUD, motor,kit	1
		includes 9a and 9b				includes 18, 75, 126, 127	
9a	195175	PIN, pump	1	75	15G971	VENT, side	1
9b	195512	RETAINER, pin	1	76	15B652	WASHER, suction	1
10	243220	DRIVE HOUSING	1	77	119452	CAP, hub	2
10a	15E286	HOOK, pail	1	78	15F551	TUBE, suction	1
10b	117501	SCREW	2	80	245527	FILTER, 60 mesh	1
12	195150	NUT, jam, pump	1		245528	FILTER, 100 mesh	1
13	287658	PUMP	1		245526	FILTER, 200 mesh	1
		Manual 311062		81	15E288	FILTER, insert	1
14	162453	NIPPLE, 1/4 npt(m) x 1/4 npsm	1	82	246385	KIT, strainer	1
17	115723	SCREW, mach, pnhd, self drill	2	84	244240	HOSE, drain, includes 85	1
18	117501	SCREW, mach slot hex, washer hd	2	85	241920	DEFLECTOR, threaded	1
19	277140	HOSE, coupled, high pressure	1	86	276888	CLIP, spring	1
22	115495	SCREW, slot hd, hex, washer hd	8	87	115979	PLUG	1
45	15G326	HOUSING, filter	1	89	115099	WASHER, garden hose	1
47	104361	O-RING	1	90	15E813	NUT, intake tube	1
49	15E289	CAP, filter	1	91	103413	O-RING	1
53	111699	GASKET, seat, valve	1	105	115491	WIPER, rod	1
55	15E022	VALVE, seat	1	112	246841	GUN, (Manual 309971)	1
56	235014	ASSY, drain valve	1	113	277201	HOSE, 1/4 in. x 50 ft (15 m)	1
		includes 53 and 55		114	195811	LABEL, instruction	1
57	224807	ASSY, cam, drain valve	1	126	195833▲	LABEL, WARNING	1
58	111600	PIN, grooved	1	127	15D523▲	LABEL, DANGER	1
59	187625	HANDLE, valve, drain	1				
61	15E539	NIPPLE, 1/4 npsm x 1/8 npsm	1				
63	241934	FRAME, cart	1				
66	15B197	CAP, leg	2				
67	107310	PLUG, tubing	2				
68	115097	SCREW, curved head	2				

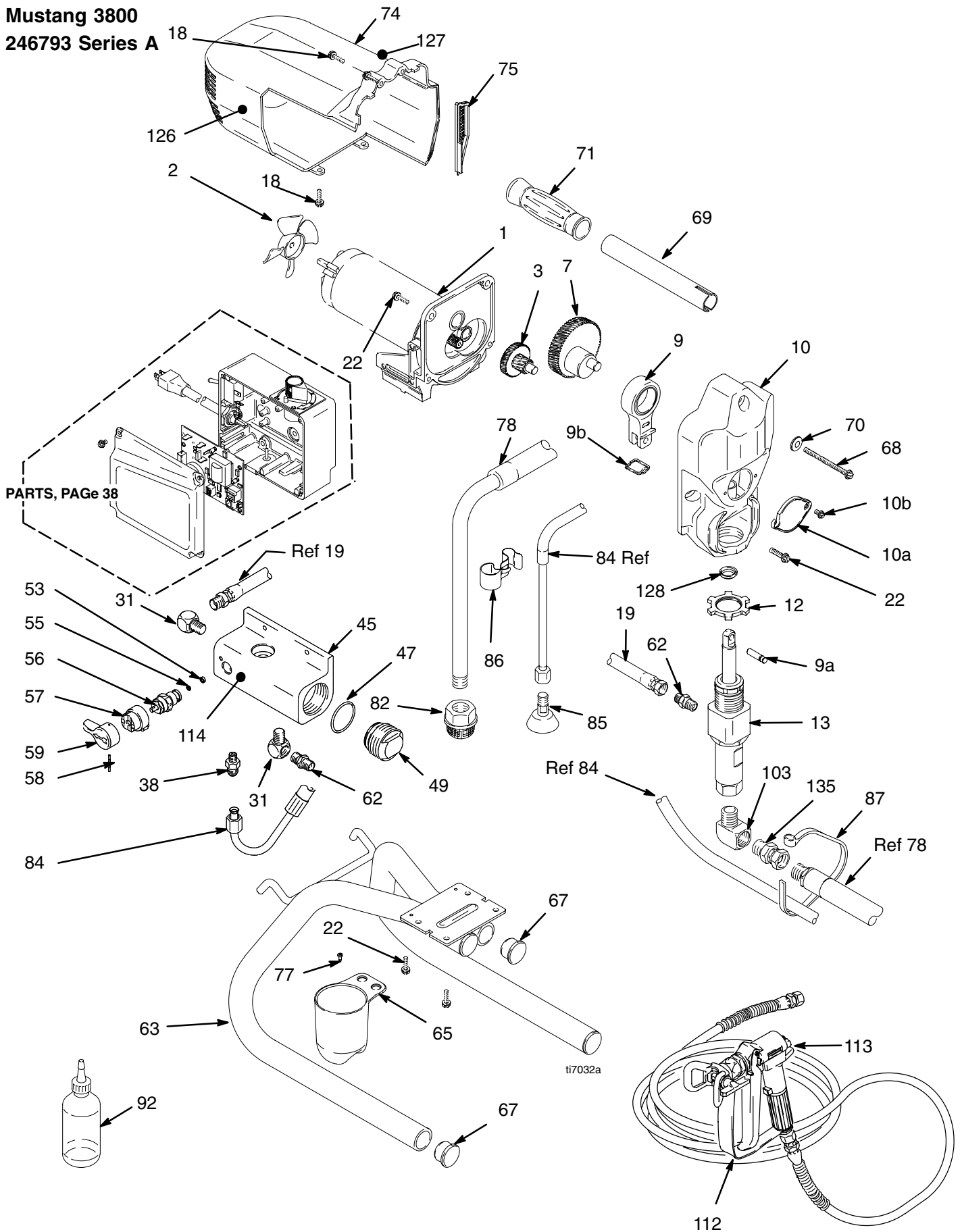
▲ Extra Danger and Warning tags and labels available free.

‡ Motor Brush Kit 249946 is available

† New fan included in motor kit 249826

# Parts Drawing

Mustang 3800  
246793 Series A





# Parts List

## Mustang 3800

### Model 246793 Series A

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
1	245893‡	<b>MOTOR, 120 Vac</b>	1	63	241858	FRAME, stand mount	1
2	115525	BLADE, fan motor	1	65	195177	HOLDER, suction tube	1
3	243219	<b>GEAR, combination</b>	1	67	107310	PLUG, tubing	4
7	243218	<b>CRANK SHAFT</b>	1	68	115506	SCREW, slot hd, hex, washer hd	1
9	243221	<b>CONNECTING ROD</b>	1	69	195425	HANDLE, sprayer	1
		includes 9a and 9b		70	100016	WASHER, lock	1
9a	195175	PIN, pump	1	71	108063	GRIP, handle	1
9b	195512	RETAINER, pin	1	74	245439	SHROUD, motor	1
10	243220	<b>DRIVE HOUSING</b>	1			includes 18, 126, 127	
		includes 10a and 10b		75	198933	VENT, side	1
10a	195099	COVER	1	77	115509	SCREW, mach, pnhd, self-drill	1
10b	115492	SCREW	2	78	244354	HOSE, suction, flexible	1
12	195150	NUT, jam, pump	1	82	187651	STRAINER	1
13	243187	<b>PUMP</b>	1	84	244040	HOSE, drain, includes 85, 86	1
		Manual 309889		85	241920	DEFLECTOR, threaded	1
18	115492	SCREW, mach slot hex, washer hd	4	86	195186	CLIP, spring	1
19	241926	HOSE, coupled, high pressure	1	87	114958	STRAP, tie	1
22	115495	SCREW, slot hd, hex, washer hd	8	92	206994	FLUID, TSL, 8 oz	1
31	195847	ADAPTER, pipe, hex	2	103	115764	FITTING, elbow, 90°	1
38	116150	FITTING, adapter	1	112	246841	GUN,	1
45	195157	HOUSING, filter	1	113	277201	HOSE, coupled, 1/4 in. x 50 ft (15 m)	1
47	104361	O-RING	1	114	195811	LABEL, instruction	1
49	195372	CAP, filter	1	126	195833▲	LABEL, WARNING	1
53	111699	GASKET, seat, valve	1	127	195838▲	LABEL, DANGER	1
55	187615	VALVE, seat	1	128	115491	WIPER, rod	1
56	235014	ASSY, drain valve	1	135	156684	UNION, adapter (swivel)	1
		includes 53 and 55					
57	224807	ASSY, cam, drain valve	1				
58	111600	PIN, grooved	1				
59	187625	HANDLE, valve, drain	1				
62	162453	NIPPLE, 1/4 npt(m) x 1/4 npsm	2				

▲ Replacement Danger and Warning labels, tags, and cards are available at no cost.

‡ Motor Brush Kit 245894 is available



# Parts List

## Mustang 3800

### Model 246793 Series B, C, D

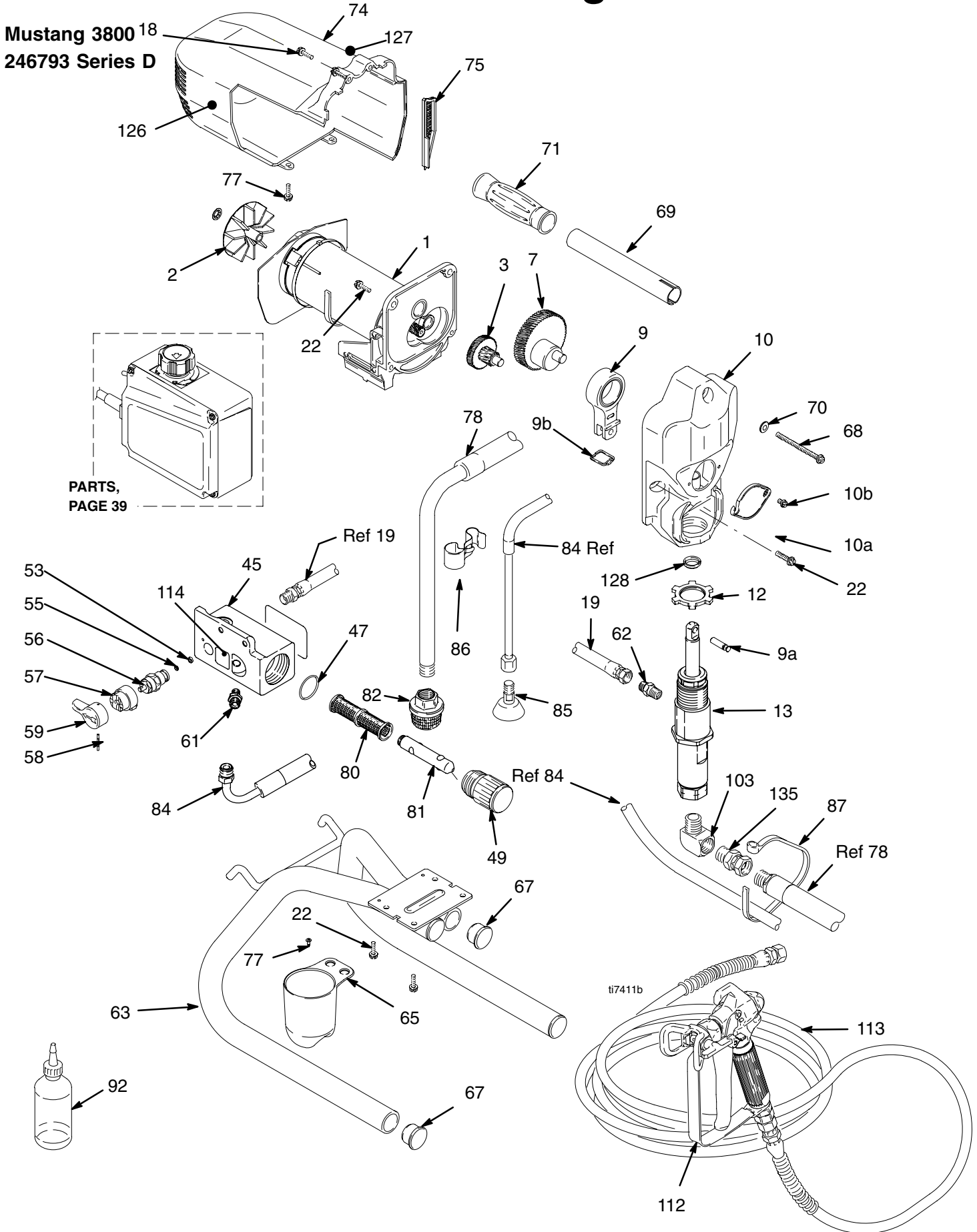
REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
1		KIT, MOTOR, 120 Vac		65	195177	HOLDER, suction tube	1
	245893†	Model 246793 B, C	1	67	107310	PLUG, tubing	4
	249610†	Model 249793 D	1	68	115506	SCREW, slot hd, hex, washer hd	1
2	115525	BLADE, fan motor	1	69	195425	HANDLE, sprayer	1
3	<b>243219</b>	<b>GEAR, combination</b>	<b>1</b>	70	100016	WASHER, lock	1
7	<b>243218</b>	<b>CRANK SHAFT</b>	<b>1</b>	71	108063	GRIP, handle	1
9	<b>243221</b>	<b>CONNECTING ROD</b>	<b>1</b>	74	245439	SHROUD, motor	1
		includes 9a and 9b				includes 18, 126, 127	
9a	195175	PIN, pump	1	75	198933	VENT, side	1
9b	195512	RETAINER, pin	1	77	115509	SCREW, mach, pnhd, self-drill	1
10	<b>243220</b>	<b>DRIVE HOUSING</b>	<b>1</b>	78	244354	HOSE, suction, flexible	1
		includes 10a and 10b		80	245527	FILTER, fluid	1
10a	195099	COVER	1	81	15E288	FILTER, insert	1
10b	115492	SCREW	2	82	187651	STRAINER	1
12	195150	NUT, jam, pump	1	84	244240	HOSE, drain, includes 85, 86	1
13	<b>243187</b>	<b>PUMP</b>	<b>1</b>	85	241920	DEFLECTOR, threaded	1
		Manual 309889		86	195696	CLIP, spring	1
18	115492	SCREW, mach slot hex, washer hd	4	87	114958	STRAP, tie	1
19	15C709	HOSE, coupled, high pressure	1	92	206994	FLUID, TSL, 8 oz	1
22	115495	SCREW, slot hd, hex, washer hd	8	103	115764	FITTING, elbow, 90°	1
45	15E180	HOUSING, filter	1	112	246841	GUN,	1
47	104361	O-RING	1	113	277201	HOSE, coupled, 1/4 in. x 50 ft (15 m)	1
49	15E289	CAP, filter	1	114	195811	LABEL, instruction	1
53	111699	GASKET, seat, valve	1	126	195833▲	LABEL, WARNING	1
55	187615	VALVE, seat	1	127	195838▲	LABEL, DANGER	1
56	235014	ASSY, drain valve	1	128	115491	WIPER, rod	1
		includes 53 and 55		135	156684	UNION, adapter (swivel)	1
57	224807	ASSY, cam, drain valve	1				
58	111600	PIN, grooved	1				
59	187625	HANDLE, valve, drain	1				
61	15E539	NIPPLE, 1/4 npsm x 1/8 npt	1				
62	162453	NIPPLE, 1/4 npt(m) x 1/4 npsm	1				
63	241858	FRAME, stand mount	1				

▲ Replacement Danger and Warning labels, tags, and cards are available at no cost.

† Motor Brush Kit 245894 is available

# Parts Drawing

Mustang 3800 18  
246793 Series D



# Parts List – Sprayer

## Mustang 3800

### Model 246793, Series D

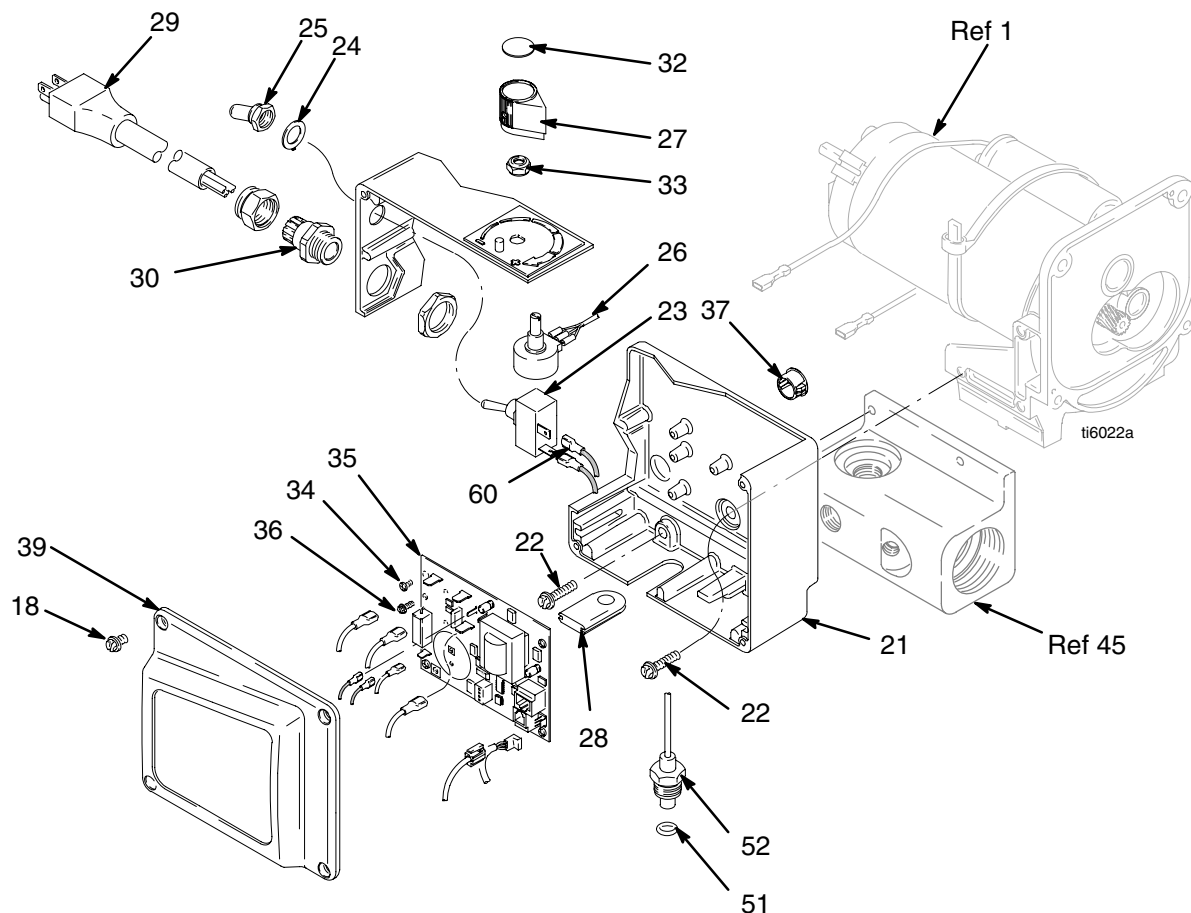
REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
1	249826‡	<b>KIT, MOTOR, 120 vac</b>	1	67	107310	PLUG, tubing	4
2	249947†	KIT, repair, fan	1	68	115506	SCREW, slot hd, hex, washer hd	1
3	243219	<b>GEAR, combination</b>	1	69	195425	HANDLE, sprayer	1
7	243218	<b>CRANK SHAFT</b>	1	70	100016	WASHER, lock	1
9	243221	<b>CONNECTING ROD</b>	1	71	108063	GRIP, handle	1
		includes 9a and 9b		74	253275	SHROUD, motor	1
9a	195175	PIN, pump	1			includes 18, 126, 127	
9b	195512	RETAINER, pin	1	75	15G971	VENT, side	1
10	243220	<b>DRIVE HOUSING</b>	1	77	115723	SCREW, mach, pnhd, self-drill	3
		includes 10a and 10b		78	244354	HOSE, suction, flexible	1
10a	195099	COVER	1	80	245527	FILTER, 60 mesh	1
10b	115495	SCREW	2		245528	FILTER, 100 mesh	1
12	195150	NUT, jam, pump	1		245526	FILTER, 200 mesh	1
13	243187	<b>PUMP</b>	1	81	15E288	FILTER, insert	1
		Manual 309060		82	187651	STRAINER	1
18	117501	SCREW, mach slot hex, washer hd	2	84	248217	HOSE, drain, includes 85	1
19	277140	HOSE, coupled, high pressure	1	85	241920	DEFLECTOR, threaded	1
22	115495	SCREW, slot hd, hex, washer hd	8	86	195186	CLIP, spring	1
45	15G326	HOUSING, filter	1	87	114958	STRAP, tie	1
47	104361	O-RING	1	92	206994	FLUID, TSL, 8 oz	1
49	15E289	CAP, filter	1	103	115764	FITTING, elbow, 90°	1
53	111699	GASKET, seat, valve	1	112	246841	GUN (Manual 309971)	1
55	15E022	VALVE, seat	1	113	277201	HOSE, coupled, 1/4 in. x 50 ft (15 m)	1
56	235014	ASSY, drain valve	1	114	195811	LABEL, instruction	1
		includes 53 and 55		126	195833▲	LABEL, WARNING	1
57	224807	ASSY, cam, drain valve	1	127	15D523▲	LABEL, DANGER	1
58	111600	PIN, grooved	1	128	115491	WIPER, rod	1
59	187625	HANDLE, valve, drain	1	135	156684	UNION, adapter (swivel)	1
61	15E539	NIPPLE, 1/4 npsm x 1/8 npsm	1				
62	162453	NIPPLE, 1/4 npt(m) x 1/4 npsm	1				
63	241858	FRAME, stand mount	1				
65	195177	HOLDER, suction tube	1				

▲ Extra Danger and Warning tags and labels available free.

‡ Motor Brush Kit 249946 is available

† New fan included in Motor Kit 249826

# Parts Drawing



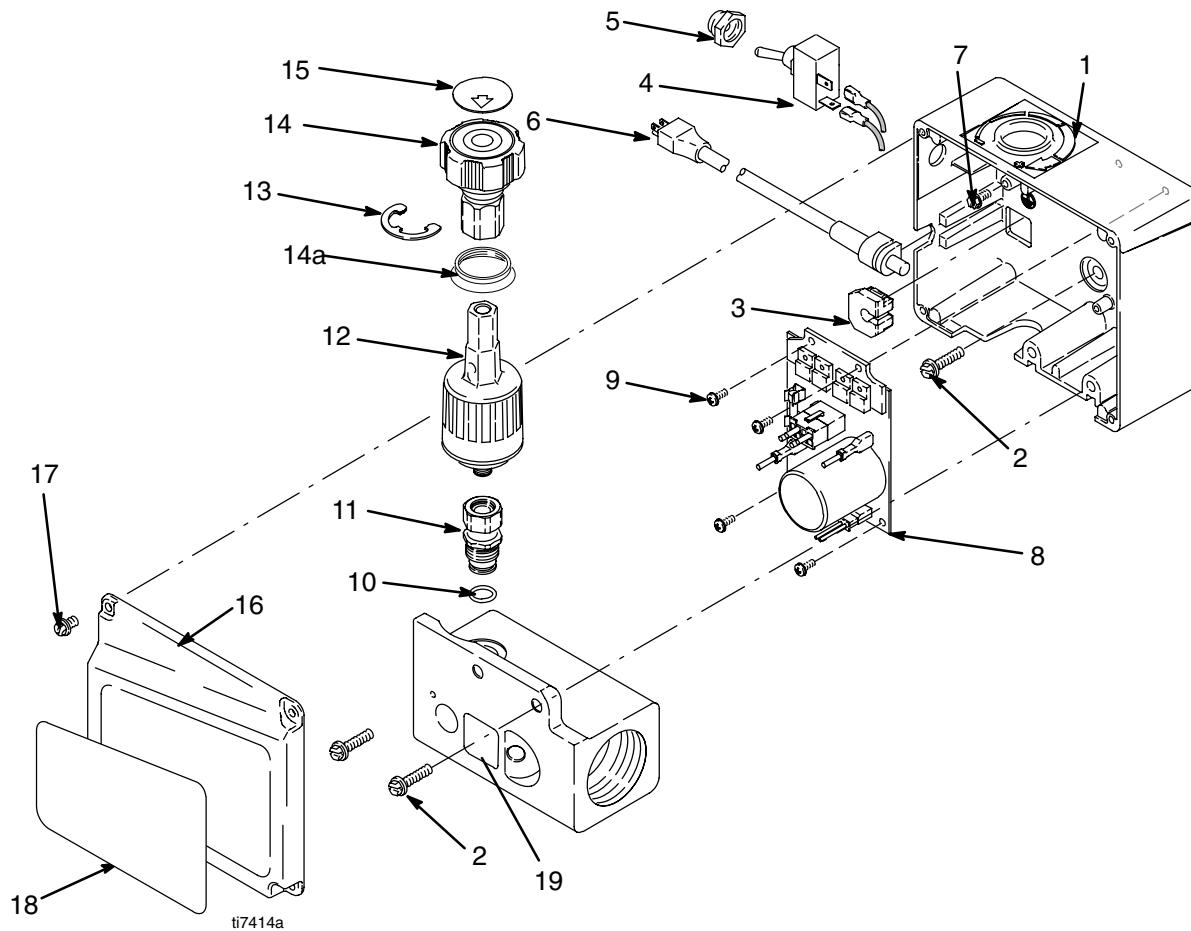
## Parts List

**Mustang 3800**  
**Model 246793 Series A, B, C**  
**Model 246794 Series A, B, C, D**

See Wiring Diagram – Page 17.

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
18	15A428	SCREW, slot hd, hex, washer hd	4	32	15A356	LABEL, control	1
21	245557	HOUSING, control	1	33	15A437	NUT, shaft, sealing	1
22	15A429	SCREW, slot hd, hex, washer hd	5	34	15A440	SCREW, slot hd, hex, washer hd	1
23	15A359	SWITCH, toggle	1	35	245937	BOARD, control	1
24	15A435	RING, locking	1	36	15A439	SCREW, 6-32 X 1/2, TAPTITE	5
25	15A358	BOOT, toggle	1	37	15A442	BUSHING, strain relief	1
26	245553	POTENTIOMETER, adjust, pressure	1	39	198935	CONTROL, cover	1
27	15A443	KNOB, potentiometer	1	51	15A436	O-RING	1
28	15A357	GROMMET, transducer	1	52	245556	TRANSDUCER, pressure control	1
29	245554	CORD SET, power	1			includes 51	
30	15A438	BUSHING, strain relief	1	60	15A360	WIRE, jumper	1

# Parts List – Sprayer



**Mustang 3800**  
**Model 246793 Series D**  
**Model 246794 Series E**

See Wiring Diagram – Page 17.

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
1	277210	BOX, control, 190	1	12	253117	CONTROL, pressure, 190, 120V, includes 15	1
2	115495	SCREW, mach, hex washer hd	5	13	107146	RING, retaining, ext.	1
3	15B118	BUSHING, motor wire	1	14	15G484	KNOB, control, plastic	1
4	195429	SWITCH, toggle	1	14a	15H147	BAFFLE, knob, pressure	1
5	195428	BOOT, toggle	1	15	15G475	LABEL, instructions	1
6	15G388	CORD, power	1	16	15G970	COVER, control, 190	1
7	115498	SCREW, mch, slot, hex, wash hd	1	17	115492	SCREW, mach, slot hex wash hd	4
8	253118	CONTROL, board, 190ES (LC)	1	18	15C595	LABEL, identification	1
9	115494	SCREW, mach, phillips, pan hd	4	19	195811	LABEL, instruction	1
10	103338	PACKING, o-ring	1				
11	15G424	ADAPTER, extension, switch, pressure	1				

# Technical Data

100–120V, Ø, A, Hz	Generator Minimum W	Motor HP (W)	Cycles per gallon (liter)	Maximum Delivery gpm (lpm)	Maximum Tip size	Fluid Outlet npsm
1, 15, 50/60	3000	7/8 (653)	680 (180)	0.38 (1.25)	0.019	1/4 in.

Basic Sprayer Wetted Parts: .....  
 zinc-plated carbon steel, polyurethane, polyethylene,  
 stainless steel, PTFE, Acetal, chrome plating, leather,  
 V-Max™ UHMWPE, aluminum, stainless steel,  
 tungsten carbide

**NOTE:** Acetal is a registered trademark of the DuPont Co.

## Dimensions

	Weight lb (kg) with Hose and Gun	Height in. (cm)	Length in. (cm)	Width in. (cm)
<b>Cart</b>	59 (26.8)	40 (101.6)	21.5 (54.6)	21 (53.3)
<b>Stand</b>	47 (21.3)	18 (45.7)	17 (43.2)	14.5 (36.8)



# Notes

# ASM Standard Warranty

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

This warranty does not cover, and ASM 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-ASM component parts. Nor shall ASM be liable for malfunction, damage or wear caused by the incompatibility of ASM equipment with structures, accessories, equipment or materials not supplied by ASM, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by ASM.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized ASM distributor for verification of the claimed defect. If the claimed defect is verified, ASM 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.

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In no event will ASM be liable for indirect, incidental, special or consequential damages resulting from ASM 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 ASM, or otherwise.

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or call **1-800-854-4025** to identify the nearest distributor.

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**www.asmcompany.com**

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