

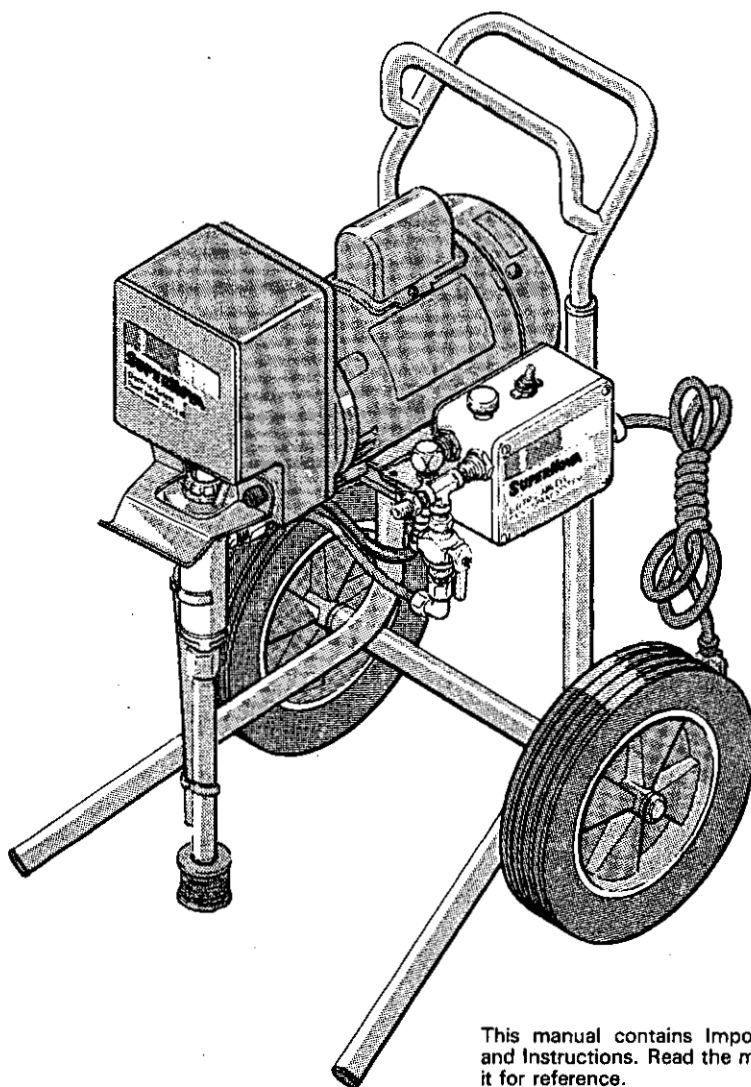


**OWNER'S MANUAL**  
**820-008 Rev. G**  
SUPERSEDES Rev. D

1/2 gpm, Portable, Electric **SUPERNOVA™** AIRLESS PAINT SPRAYER

Model 820-002 Series D  
Less hose, gun and filter  
2750 psi (190 bar) *MAXIMUM WORKING PRESSURE*

PATENT NO. 4,323,741



This manual contains Important Warnings and Instructions. Read the manual and keep it for reference.

**WARNING**

Never 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 bodily injury and/or substantial property damage.

Consult your fluid suppliers to ensure that the fluids being used are compatible with aluminum and zinc parts.

**The SHERWIN-WILLIAMS COMPANY, CLEVELAND, OHIO 44115**

# WARNING

**HIGH PRESSURE SPRAY CAN CAUSE SERIOUS INJURY.**

**FOR PROFESSIONAL USE ONLY. OBSERVE ALL WARNINGS.**

Read and understand all instruction manuals before operating equipment.

## FLUID INJECTION HAZARD

### General Safety

This equipment generates very high fluid pressure. Spray from the gun, leaks or ruptured components can inject fluid through your skin and into your body and cause extremely serious bodily injury, including the need for amputation. Also, fluid injected or splashed into the eyes can cause serious damage.

NEVER point the spray gun at anyone or at any part of the body. NEVER put hand or fingers over the spray tip. NEVER try to "blow back" paint; this is NOT an air spray system.

ALWAYS have the tip guard in place on the spray gun when spraying.

ALWAYS follow the **Pressure Relief Procedure**, below, before cleaning or removing the spray tip or servicing any system equipment.

NEVER try to stop or deflect leaks with your hand or body.

Be sure equipment safety devices are operating properly before each use.

### Medical Treatment

If any fluid appears to penetrate your skin, get **EMERGENCY MEDICAL CARE AT ONCE. DO NOT TREAT AS A SIMPLE CUT.**

Tell the doctor exactly what fluid was injected. For treatment instructions, have your doctor call the

**NATIONAL POISON CENTER NETWORK  
(412)681-6669**

### Spray Gun Safety Devices

Be sure all gun safety devices are operating properly before each use. Do not remove or modify any part of the gun; this can cause a malfunction and result in serious bodily injury.

### Safety Latch

Whenever you stop spraying, even for a moment, always set the gun safety latch in the closed or "safe" position, making the gun inoperative. Failure to set the safety latch can result in accidental triggering of the gun.

### Diffuser

The gun diffuser breaks up spray and reduces the risk of injection when the tip is not installed. Check diffuser operation regularly. Follow the **Pressure Relief Procedure**, below, then remove the spray tip. Aim the gun into a metal pail, holding the gun firmly to the pail. Using the lowest possible pressure, trigger the gun. If the fluid emitted is *not* diffused into an irregular stream, replace the diffuser immediately.

### Tip Guard

ALWAYS have the tip guard in place on the spray gun while spraying. The tip guard alerts you to the injection hazard and helps prevent accidentally placing your fingers or any part of your body close to the spray tip.

### Spray Tip Safety

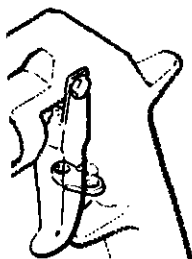
Use extreme caution when cleaning or changing spray tips. If the spray tip clogs while spraying, engage the gun safety latch immediately. ALWAYS follow the **Pressure Relief Procedure** and then remove the spray tip to clean it.

NEVER wipe off build-up around the spray tip until pressure is fully relieved and the gun safety latch is engaged.

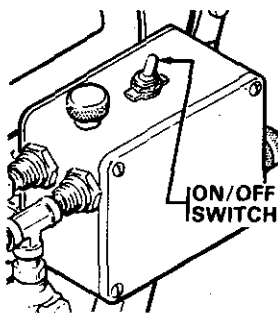
### Pressure Relief Procedure

To reduce the risk of serious bodily injury, including injection; splashing in the eyes; injury from moving parts or electric shock, always follow this procedure whenever you shut off the sprayer, when checking or servicing any part of the spray system, when installing, cleaning or changing spray tips, and whenever you stop spraying. (1) Engage the gun safety latch. (2) Turn the ON/OFF switch to OFF. (3) Unplug the power supply cord. (4) Disengage the gun safety latch. (5) Hold a metal part of the gun firmly to the side of a grounded metal pail, and trigger the gun to relieve pressure. (6) Engage the gun safety latch. (7) Open the drain valve, having a container ready to catch the drainage. (8) Leave the drain valve open until you are ready to spray again.

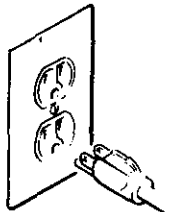
If you suspect that the spray tip or hose is completely clogged, or that pressure has not been fully relieved after following the steps above, VERY SLOWLY loosen the tip guard retaining nut or hose end coupling and relieve pressure gradually, then loosen completely. Now clear the tip or hose.



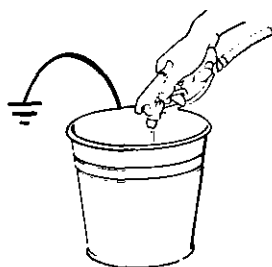
ENGAGE SAFETY



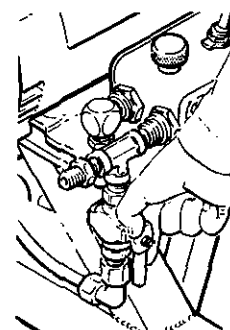
TURN SWITCH TO OFF



UNPLUG CORD



DISENGAGE SAFETY  
AND TRIGGER GUN;  
ENGAGE SAFETY AGAIN



OPEN DRAIN VALVE

## EQUIPMENT MISUSE HAZARD

### General Safety

Any misuse of the spray equipment or accessories, such as overpressurizing, modifying parts, using incompatible chemicals and fluids, or using worn or damaged parts, can cause them to rupture and result in injection or other serious bodily injury, fire, explosion or property damage.

NEVER alter or modify any part of this equipment; doing so could cause it to malfunction.

CHECK all spray equipment regularly and repair or replace worn or damaged parts immediately.

Read and follow the fluid and solvent manufacturer's literature regarding the use of protective clothing and equipment.

### System Pressure

This sprayer can develop **2750 psi (190 bar) MAXIMUM WORKING PRESSURE**. Be sure that all spray equipment and accessories are rated to withstand the maximum working pressure of this sprayer. DO NOT exceed the maximum working pressure of any component or accessory used in the system.

### Fluid Compatibility

BE SURE that all fluids and solvents used are chemically compatible with the wetted parts shown in the Technical Data on the back cover. Always read the fluid and solvent manufacturer's literature before using them in this sprayer.

## HOSE SAFETY

High pressure fluid in the hoses can be very dangerous. If the hose develops a pinhole leak, split or rupture due to any kind of wear, damage or misuse, the high pressure spray emitted from it can cause an injection injury or other serious bodily injury or property damage.

**ALL FLUID HOSES MUST HAVE SPRING GUARDS!** The spring guards help protect the hose from kinks or bends at or close to the coupling which can result in hose rupture.

TIGHTEN all fluid connections securely before each use. High pressure fluid can dislodge a loose coupling or allow high pressure spray to be emitted from the coupling.

NEVER use a damaged hose. Before each use, check entire hose for cuts, leaks, abrasion, bulging cover, or damage or movement of the hose couplings. If any of these conditions exist, replace the hose immediately. DO NOT try to recouple high pressure hose or mend it with tape or any other device. A repaired hose cannot contain the high pressure fluid.

HANDLE AND ROUTE HOSES CAREFULLY. Do not pull on hoses to move equipment. Do not use fluids or solvents which are not compatible with the inner tube and cover of the hose. DO NOT expose the hose to temperatures above 180°F (82°C) or below -40°F (-40°C).

### Hose Grounding Continuity

Proper hose grounding continuity is essential to maintaining a grounded spray system. Check the electrical resistance of your air and fluid hoses at least once a week. If your hose does not have a tag on it which specifies the maximum electrical resistance, contact the hose supplier or manufacturer for the maximum resistance limits. Use a resistance meter in the appropriate range for your hose to check the resistance. If the resistance exceeds the recommended limits, replace it immediately. An ungrounded or poorly grounded hose can make your system hazardous. Also read **FIRE OR EXPLOSION HAZARD**.

## FIRE OR EXPLOSION HAZARD

Static electricity is created by the high velocity flow of fluid through the pump and hose. If every part of the spray equipment is not properly grounded, sparking may occur, and the system may become hazardous. Sparking may also occur when plugging in or unplugging a power supply cord. Sparks can ignite fumes from solvents and the fluid being sprayed, dust particles and other flammable substances, whether you are spraying indoors or outdoors, and can cause a fire or explosion and serious bodily injury and property damage. Always plug the sprayer into an outlet at least 20 feet (6 m) away from the sprayer and the spray area. Do not plug in or unplug any power supply cords in the spray area when there is any chance of igniting fumes still in the air.

If you experience any static sparking or even a slight shock while using this equipment, **STOP SPRAYING IMMEDIATELY**. Check the entire system for positive grounding. Do not use the system again until the problem has been identified and corrected.

### Grounding

To reduce the risk of static sparking, ground the sprayer and all other spray equipment used or located in the spray area. CHECK your local electrical code for detailed grounding instructions for your area and type of equipment. BE SURE to ground all of this spray equipment:

1. *Sprayer*: plug the power supply cord, or extension cord, each equipped with an undamaged three-prong plug, into a properly grounded outlet. Do not use an adapter. All extension cords must have three wires and be rated for 15 amps.
2. *Fluid hoses*: use only grounded hoses with a maximum of 500 feet (150 m) combined hose length to ensure grounding continuity. Refer to **Hose Grounding Continuity**.
3. *Spray gun*: obtain grounding through connection to a properly grounded fluid hose and sprayer.
4. *Object being sprayed*: according to local code.
5. *All solvent pails* used when flushing, according to local code. Use only metal pails, which are conductive. Do not place the pail on a non-conductive surface, such as paper or cardboard, which interrupts the grounding continuity.
6. *To maintain grounding continuity when flushing or relieving pressure*, always hold a metal part of the gun firmly to the side of a grounded metal pail, then trigger the gun.

### Flushing Safety

Reduce the risk of injection injury, static sparking, or splashing by following the specific flushing procedure given on page 9 of this manual. Follow the **Pressure Relief Procedure** on page 2, and *remove the spray tip before flushing*. Hold a metal part of the gun firmly to the side of a metal pail and use the lowest possible fluid pressure during flushing.

## MOVING PARTS HAZARD

Moving parts can pinch or amputate your fingers or other body parts. KEEP CLEAR of moving parts when starting or operating the sprayer. Unplug the sprayer, and follow the **Pressure Relief Procedure** on page 2 to prevent it from starting accidentally.

## IMPORTANT

United States Government safety standards have been adopted under the Occupational Safety and Health Act. These standards—particularly the General Standards, Part 1910, and the Construction Standards, Part 1926—should be consulted.

# AVERTISSEMENT

**La pulvérisation à haute pression peut causer des blessures très graves.  
Réservé exclusivement à l'usage professionnel. Observer toutes les consignes de sécurité.  
Bien lire et bien comprendre tous les manuels d'instructions avant d'utiliser le matériel.**

## RISQUES D'INJECTION

### Consignes générales de sécurité

Cet appareil produit un fluide à très haute pression. Le fluide pulvérisé par le pistolet ou le fluide sous pression provenant de fuites ou de ruptures peut pénétrer sous la peau ou à l'intérieur du corps et entraîner des blessures très graves, voir même une amputation. Même sans être sous pression, le fluide éclaboussant ou entrant dans les yeux peut aussi entraîner des blessures graves.

NE JAMAIS pointer le pistolet vers quelqu'un ou vers une partie quelconque du corps. NE JAMAIS mettre la main ou les doigts sur l'ajutage du pulvérisateur. NE JAMAIS essayer de "refouler" la peinture. Cet appareil N'est PAS un compresseur pneumatique.

TOUJOURS garder la protection de l'ajutage en place sur le pistolet pendant la pulvérisation.

TOUJOURS observer la **Marche à Suivre pour Détendre la Pression** donnée plus loin, avant de nettoyer ou d'enlever l'ajutage du pulvérisateur, ou d'effectuer un travail quelconque sur une partie de l'appareil.

NE JAMAIS essayer d'arrêter ou de dévier les fuites avec la main ou le corps.

Avant chaque utilisation, bien s'assurer que les dispositifs de sécurité fonctionnent correctement.

### Soins médicaux

En cas de pénétration de fluide sous la peau:

**DEMANDER IMMEDIATEMENT DES SOINS  
MEDICAUX D'URGENCE.  
NE PAS SOIGNER CETTE BLESSURE COMME  
UNE SIMPLE COUPURE.**

Dire exactement au médecin quel type de liquide a été injecté. Pour avoir des instructions concernant le traitement approprié, dire au médecin d'appeler le

**CENTRE ANTI-POISON SUIVANT:  
NATIONAL POISON CENTER NETWORK  
(412)681-6669**

### Dispositifs de sécurité du pistolet

Avant chaque utilisation, bien s'assurer que tous les dispositifs de sécurité du pistolet fonctionnent correctement. Ne pas

enlever ni modifier une partie quelconque du pistolet; ceci risquerait d'entraîner un mauvais fonctionnement et des blessures graves.

### Verrou de sécurité

A chaque fois que l'on s'arrête de pulvériser, même s'il s'agit d'un court instant, toujours mettre le verrou de sécurité du pistolet sur la position "fermée" ou "sécurité" ("safe") pour empêcher le pistolet de fonctionner. Si le verrou de sécurité n'est pas mis, le pistolet peut se déclencher accidentellement.

### Diffuser

Le diffuseur du pistolet sert à diviser le jet et à réduire les risques d'injection accidentelle quand l'ajutage n'est pas en place. Vérifier le fonctionnement du diffuseur régulièrement. Pour cette vérification, détendre la pression en observant la **Marche à Suivre pour Détendre la Pression** donnée plus loin puis enlever l'ajutage du pulvérisateur. Pointer le pistolet dans un seau en métal, en le maintenant fermement contre le seau. Puis, en utilisant la pression la plus faible possible, appuyer sur la gachette du pistolet. Si le fluide projeté n'est pas diffusé sous forme de jet irrégulier, remplacer immédiatement le diffuseur.

### Protection de l'ajutage

TOUJOURS maintenir la protection de l'ajutage en place sur le pistolet du pulvérisateur pendant la pulvérisation. La protection de l'ajutage attire l'attention sur les risques d'injection et contribue à éviter que les doigts ou une partie quelconque du corps ne passe accidentellement à proximité immédiate de l'ajutage du pulvérisateur.

### Consignes de sécurité concernant l'ajutage du pulvérisateur

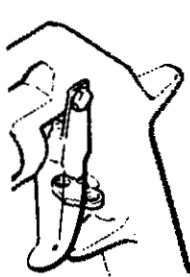
Faire extrêmement attention à l'occasion du nettoyage ou du remplacement des ajutages du pulvérisateur. Si l'ajutage se bouche pendant la pulvérisation, mettre immédiatement le verrou de sécurité du pistolet. TOUJOURS bien observer la **Marche à Suivre pour Détendre la Pression** puis enlever l'ajutage du pulvérisateur pour le nettoyer.

NE JAMAIS essayer ce qui s'est accumulé autour de l'ajutage du pulvérisateur avant que la pression ne soit complètement tombée et que le verrou de sécurité du pistolet ne soit engagé.

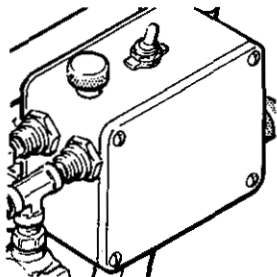
### Marche à Suivre pour Détendre la Pression

Pour réduire les risques de blessures graves, y compris les blessures par injection de fluide ou celles causées par des pièces en mouvement ou par électrocution, toujours bien observer cette marche à suivre à chaque fois que l'on arrête le pulvérisateur, à l'occasion de la vérification ou de la réparation d'une pièce de l'appareil de pulvérisation, à l'occasion de l'installation, du nettoyage ou du remplacement des ajutages et d'une manière générale à chaque arrêt. 1) Engager le verrou de sécurité du pistolet. 2) Mettre l'interrupteur Marche-Arrêt sur ARRET ("OFF"). 3) Débrancher le cordon d'alimentation. 4) Désengager le verrou de sécurité du pistolet. 5) En maintenant une partie métallique du pistolet fermement appuyée contre le côté d'un seau en métal, appuyer sur la gachette du pistolet pour libérer la pression. 6) Engager le verrou de sécurité du pistolet. 7) Ouvrir le robinet de purge en prenant soin d'avoir un récipient prêt à récupérer le liquide. 8) Laisser le robinet de purge ouvert jusqu'à ce que le pulvérisateur soit de nouveau prêt à être utilisé.

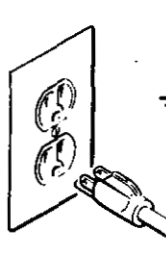
Si l'on soupçonne que l'ajutage du pulvérisateur ou le tuyau est complètement bouché, ou que la pression n'a pas été complètement libérée après avoir procédé aux opérations ci-dessus, desserrer TRES LENTEMENT l'écrou de retenue de la protection de l'ajutage ou le raccord du bout du tuyau et libérer progressivement la pression, puis terminer le desserrage. On peut maintenant déboucher l'ajutage ou le tuyau.



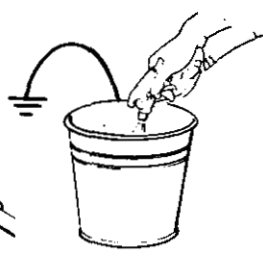
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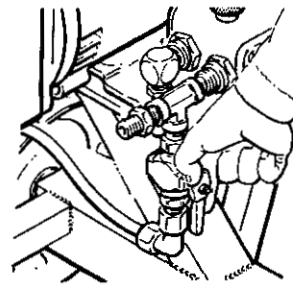
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## RISQUES EN CAS DE MAUVAISE UTILISATION DU MATERIEL

### Consignes générales de sécurité

Toute utilisation anormale de l'appareil de pulvérisation ou des accessoires comme, par exemple, la mise sous une pression excessive, les modifications de pièces, l'utilisation de produits chimiques et de matières incompatibles et l'utilisation de pièces usées ou abîmées peut causer des dégâts à l'appareil ou des ruptures de pièces et entraîner une injection de liquide ou d'autres blessures sérieuses, un incendie, une explosion ou d'autres dégâts.

NE JAMAIS altérer ou modifier une pièce de cet appareil; ceci risquerait d'entraîner son mauvais fonctionnement.

VERIFIER régulièrement tout l'appareil de pulvérisation et ses équipements et réparer ou remplacer immédiatement les pièces usées ou abîmées.

## MESURES DE SECURITE CONCERNANT LES TUYAUX FLEXIBLES

Le fluide à haute pression circulant dans les tuyaux peut être très dangereux. En cas de fuite sur le tuyau, même minuscule, de fissure, déchirure ou rupture à la suite de l'usure, de dégâts ou d'une mauvaise utilisation, les projections de fluide haute pression qui en proviennent peuvent entraîner des blessures graves par pénétration sous la peau ou par contact, ainsi que des dégâts matériels.

**TOUS LES TUYAUX FLEXIBLES DOIVENT AVOIR DES RESSORTS SPIRALE DE PROTECTION!** Les spirales de protection contribuent à éviter la formation de pliures, de boucles ou de nœuds sur les tuyaux qui pourraient entraîner la rupture du tuyau à l'endroit du raccord ou à son voisinage.

SERRER FERMEMENT tous les raccords avant chaque utilisation. Le fluide sous pression peut faire sauter un raccord desserré ou produire un jet à haute pression s'échappant par le raccord.

NE JAMAIS utiliser un tuyau endommagé. Avant chaque utilisation, vérifier entièrement chaque tuyau pour déceler les coupures, fuites, abrasions, boursofflures de l'enveloppe ou toute autre détérioration ou jeu des raccords. Si l'on constate l'une de ces détériorations, il faut remplacer le tuyau immédiatement. NE PAS essayer de refaire le raccord d'un tuyau haute pression ni de réparer le tuyau avec du ruban adhésif ou

## RISQUES D'INCENDIE OU D'EXPLOSION

De l'électricité statique est produite par le passage du fluide à grande vitesse dans la pompe et dans les tuyaux. Si toutes les pièces de l'appareil de pulvérisation ne sont pas convenablement reliées à la masse ou à la terre, des étincelles peuvent se produire et l'appareil risque d'être dangereux. Des étincelles peuvent également se produire à l'occasion du branchement ou du débranchement du cordon d'alimentation. Les étincelles sont suffisantes pour allumer les vapeurs de solvants et le fluide pulvérisé, les fines particules de poussière ainsi que d'autres substances inflammables, quand on pulvérise à l'intérieur ou à l'extérieur, et elles peuvent causer un incendie ou une explosion, ainsi que des blessures graves et des dégâts matériels. Toujours brancher le pulvérisateur dans une prise se trouvant à au moins 6 m (20 pieds) de l'appareil et de l'endroit où se fait la pulvérisation. Ne pas brancher ou débrancher un cordon d'alimentation quel qu'il soit dans la zone où se fait la pulvérisation quand il y a le moindre risque que des vapeurs encore présentes dans l'air prennent feu.

S'il se produit des étincelles d'électricité statique, ou si vous ressentez la moindre décharge, **ARRETEZ IMMEDIATEMENT LA PULVERISATION.** Vérifiez que le système entier est bien mis à la terre. Ne vous servez pas du système avant que le problème soit identifié et corrigé.

### Mise à la terre ou à la masse

Pour réduire les risques de production d'étincelles d'électricité statique, le pulvérisateur et tous les équipements utilisés ou se trouvant dans la zone de pulvérisation doivent être reliés à la terre ou à la masse. Pour connaître le détail des instructions de mise à la terre dans la région et le type particulier d'équipement, **CONSULTER** le code ou les réglementations électriques locales. **S'ASSURER** que tous les équipements de pulvérisation suivants sont bien reliés à la terre:

1. **Pulvérisateur:** Brancher le cordon d'alimentation ou la rallonge qui doivent être équipés d'une prise à 3 fiches en bon état, dans une prise de courant convenablement mise à la

### Pression

Ce pulvérisateur peut produire une **PRESSION MAXIMUM DE TRAVAIL 190 bar (2750 lb/po.<sup>2</sup>)**. S'assurer que tous les éléments du pulvérisateur et ses accessoires sont conçus pour résister à la pression maximum de travail de ce pulvérisateur. **NE PAS** dépasser la pression maximum de travail d'aucun des éléments ou accessoires utilisés avec cet appareil.

### Compatibilité chimique des corps

**BIEN S'ASSURER** que tous les corps des solvants utilisés sont chimiquement compatibles avec les parties mouillées indiquées dans les "Données techniques", au dos de la couverture. Toujours lire soigneusement les documents et brochures du fabricant des matières et solvants utilisés avant de s'en servir dans ce pulvérisateur.

par tout autre moyen. Un tuyau réparé ne peut pas résister au fluide sous pression.

**MANIPULER LES TUYAUX AVEC PRECAUTION ET CHOISIR SOIGNEUSEMENT LEUR CHEMIN.** Ne pas déplacer le matériel en tirant sur le tuyau. Ne pas utiliser de matières ou de solvants qui ne sont pas compatibles avec l'enveloppe intérieure ou extérieure du tuyau. **NE PAS** exposer le tuyau à des températures supérieures à 82°C (180°F) ou inférieures à -40°C (-40°F).

### Continuité de la mise à la terre des tuyaux

Une bonne continuité de la mise à la terre des tuyaux est essentielle pour maintenir la mise à la terre de l'ensemble de vaporisation. Vérifiez la résistance électrique de vos tuyaux à fluides et à air, au moins une fois par semaine. Si votre tuyau ne comporte pas d'étiquette qui précise la résistance électrique, prenez contact avec le fournisseur de tuyaux ou la fabricant pour avoir les limites de résistance. Utilisez un mètre de résistance de la gamme appropriée pour votre tuyau et vérifiez la résistance. Si celle-ci dépasse les limites recommandées, remplacez le tuyau immédiatement. Un tuyau sans mise à la terre ou avec une mise à la terre incorrecte peut entraîner des risques pour votre système. Lisez aussi **LES RISQUES D'INCENDIE OU D'EXPLOSION** ci-dessus.

terre. Ne pas utiliser d'adaptateur. Toutes les rallonges doivent avoir 3 fils et être prévues pour 15 ampères.

2. **Tuyaux flexibles:** Afin d'assurer la continuité de la mise à la terre, n'utiliser que des tuyaux comportant une mise à la terre et ayant une longueur maximum combinée de 150 m (1500 pieds). Se reporter également au paragraphe "Continuité du circuit de mise à la terre des tuyaux".

3. **Pistolet:** Réaliser la mise à la terre en le raccordant à un tuyau flexible et à un pulvérisateur déjà convenablement reliés à la terre.

4. **Objets, matériel ou surfaces recevant la pulvérisation:** observer le code ou les réglementations locales.

5. **Tous les seaux de solvants** utilisés pour le rincage: observer le code ou les réglementations locales. **N'utiliser que des seaux métalliques** conducteurs de l'électricité. Ne pas mettre le seau sur une surface non conductrice comme sur du papier ou du carton car cela interromprait la continuité de la mise à la terre.

6. **Pour conserver la continuité de la mise à la terre quand on rince le matériel ou quand on libère la pression,** toujours maintenir une partie métallique du pistolet fermement appuyée contre le côté d'un seau *en métal* puis appuyer sur la détente du pistolet.

### Mesures de Sécurité concernant le Rincage

Pour réduire les risques de blessures par pénétration de la peau et les risques dus aux étincelles d'électricité statique ou aux éclaboussures, observer la marche à suivre pour le rincage donnée à la page 9 de ce manuel. Observer la "Marche à Suivre pour Détendre la Pression" donnée à la page 4 en enlever l'ajutage du pulvérisateur avant le rincage. Maintenir une partie métallique du pistolet fermement appuyée contre le côté d'un seau *en métal* et utiliser la pression la plus faible possible pendant le rincage.

# ADVERTENCIA

**EL ROCIADO A ALTA PRESION PUEDE CAUSAR GRAVES LESIONES.  
SOLO PARA USO PROFESIONAL. RESPETE LOS AVISOS DE ADVERTENCIA.**

**Lea y entienda todo el manual de instrucciones antes de manejar el equipo.**

## PELIGRO DE INYECCION DE FLUIDO

### Seguridad general

Este equipo genera un fluido a una presión muy alta. El rociado de la pistola, los escapes de fluido o roturas de los componentes pueden inyectar fluido en la piel y el cuerpo y causar lesiones extremadamente graves, incluyendo a veces la necesidad de amputación. También, el fluido inyectado o salpicado en los ojos puede causar graves daños.

**NUNCA** apuntar la pistola hacia alguien o alguna parte del cuerpo. **NUNCA** colocar la mano o los dedos encima de la boquilla. **NUNCA** tratar de "hacer retornar la pintura"; este **NO** es un sistema de rociado de aire.

**SIEMPRE** tener colocado el protector de la boquilla en la pistola mientras se está pulverizando.

**SIEMPRE** seguir el procedimiento de descarga de presión, dado más abajo, antes de limpiar o sacar la boquilla o de dar servicio a cualquier equipo del sistema.

**NUNCA** tratar de parar o desviar los escapes con la mano o el cuerpo.

Asegurar que todos los aparatos de seguridad del equipo están funcionando bien antes de cada uso.

### Tratamiento médico

Si pareciera que un poco de fluido penetró la piel, conseguir **TRATAMIENTO MEDICO DE URGENCIA DE INMEDIATO.**

**NO TRATAR LA HERIDA COMO UN SIMPLE CORTE.**

Decir al médico exactamente cual fluido fue. Para instrucciones de tratamiento, pedir al médico que llame a la

**CADENA DEL CENTRO NACIONAL DE  
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**(412)681-6669**

### Aparatos de seguridad de la pistola pulverizadora

Asegurar que todos los aparatos protectores de la pistola están funcionando bien antes de cada uso. No sacar ni modificar ninguna pieza de la pistola pues podría causar el malfuncionamiento de la misma con las consiguientes lesiones personales.

### Pestillo de seguridad

Cada vez que se deje de pulverizar, aunque sea por un breve momento, siempre colocar el pestillo de seguridad en la posición "cerrada", lo que deja la pistola inoperante. El no hacerlo puede llevar al disparo imprevisto de la pistola.

### Difusor

El difusor de la pistola dispersa el chorro pulverizado y reduce el riesgo de inyección cuando no está instalada la boquilla. Revisar con regularidad el funcionamiento del difusor. Seguir el procedimiento de descarga de presión, dado más abajo, y después sacar la boquilla. Apuntar la pistola a un balde metálico, sosteniéndola bien firme contra él. Utilizando la presión más bajo posible, disparar la pistola. Si el fluido emitido *no sale disperso* en un chorro irregular, reemplazar de inmediato el difusor.

### Protector de la boquilla

**SIEMPRE** tener el protector de la boquilla colocado en la pistola mientras se está pulverizando. Este protector llama la atención contra el peligro de inyección y ayuda a prevenir la colocación accidental de los dedos o cualquier otra parte del cuerpo cerca de la boquilla.

### Seguridad de la boquilla pulverizadora

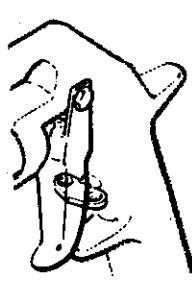
Tener mucho cuidado al limpiar o cambiar las boquillas. Si llegara a obstruirse mientras está pulverizando, enganchar el pestillo de la pistola de inmediato. **SIEMPRE** seguir el procedimiento de descarga de presión y después sacar la boquilla para limpiarla.

**NUNCA** limpiar la acumulación de pintura alrededor de la boquilla antes de que se haya descargado por completo la presión y el pestillo esté enganchado.

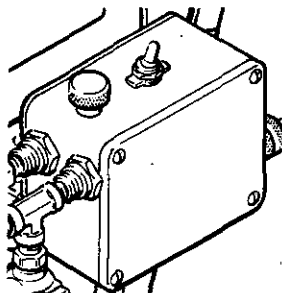
### Procedimiento de descarga de presión

Para reducir el riesgo de sufrir graves lesiones corporales, incluyendo inyección o lesiones causadas por piezas en movimiento o choque eléctrico, siempre seguir este procedimiento al apagar la máquina pulverizadora, al revisar o dar servicio a cualquier parte del sistema de pulverización, al instalar, limpiar o cambiar las boquillas, y cada vez que se deja de pulverizar. (1) Enganchar el pestillo de la pistola. (2) Mover el interruptor eléctrico (ON/OFF) a la posición OFF (apagado). (3) Desenchufar el cordón eléctrico. (4) Desenganchar el pestillo de la pistola. (5) Sujetar una parte metálica de la pistola bien firme contra un balde de metal, y disparar la pistola para descargar la presión. (6) Enganchar el pestillo de la pistola. (7) Abrir la válvula de drenaje y tener listo un recipiente para recibir la pintura. (8) Dejar la válvula de drenaje abierta hasta que se esté nuevamente listo para pulverizar.

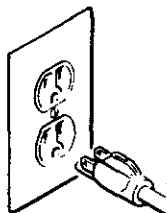
Si se sospecha que la boquilla o la manguera está completamente obstruida, o que no se ha descargado por completo la presión después de haber seguido el procedimiento anterior, aflojar **MUY LENTAMENTE** la tuerca de retención del protector de la boquilla o acoplamiento de la punta de la manguera y descargar gradualmente la presión, después, aflojarlo por completo. Luego, despejar la boquilla o la manguera.



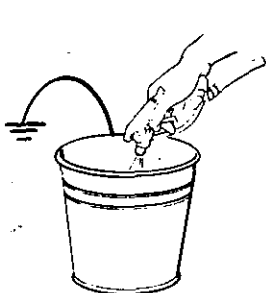
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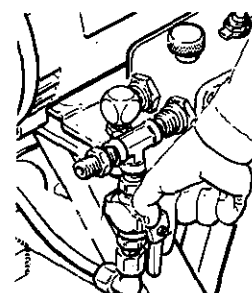
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4,5,6



7

## PELIGRO POR MAL USO DEL EQUIPO

### Seguridad general

Cualquier mal uso del equipo pulverizador o los accesorios, tal como sobrepresurización, modificación de piezas, uso de materiales y productos químicos incompatibles, o utilización de piezas dañadas o desgastadas, puede hacer que se rompan y causen la inyección de fluido u otras lesiones corporales graves, incendio, explosión o daño a la propiedad.

NUNCA alterar o modificar ninguna pieza de este equipo; el hacerlo podría causar una avería.

REVISAR con regularidad el equipo pulverizador y reparar o reemplazar de inmediato las piezas dañadas o desgastadas.

### Presión del sistema

Esta pulverizadora puede desarrollar 190 barlas (2750 psi) de **PRESION DE TRABAJO MAXIMA**. Asegurar que todo el equipo pulverizador y sus accesorios tienen la capacidad para aguantar la presión máxima de trabajo de esta pulverizadora. NO exceder la presión máxima de trabajo de ningún componente o accesorio de este sistema.

### Compatibilidad de material

ASEGURAR que todos los materiales y solventes usados son químicamente compatibles con las piezas mojadas ilustradas en la hoja de datos técnicos en la contratapa. Siempre leer las instrucciones del fabricante del material y solvente antes de usarlos en esta pulverizadora.

## SEGURIDAD EN EL USO DE LAS MANGUERAS

El fluido que pasa a alta presión por las mangueras puede ser muy peligroso. Si en la manguera se desarrolla un escape pequeño, una rotura o rajadura debido a cualquier tipo de desgaste, daño o maltrato, el chorro a alta presión emitido por allí puede causar una lesión por inyección u otras lesiones corporales graves o daño a la propiedad.

**¡TODAS LAS MANGUERAS PARA FLUIDOS TIENEN QUE TENER GUARDAS DE RESORTE!** Estas protegen las mangueras contra dobleces o retorcidas en los acoplamientos o cerca de ellos, los que podrían traducirse en roturas de la manguera.

Antes de usarlas, APRETAR bien firmes todas las conexiones. El fluido a alta presión puede desalojar un acoplamiento suelto o dejar que por él escape un chorro a alta presión.

NUNCA usar una manguera que está dañada. Siempre, revisarla en busca de cortaduras, escapes, abrasión, cubierta abultada, o acoplamientos sueltos o dañados. Si llegara a encontrarse cualquiera de estas condiciones, reemplazar de inmediato la manguera. NO intentar reacoplar una manguera de alta presión o enmendarla con cinta adhesiva u otro material similar. Una manguera que ha sido remendada no aguante el fluido a alta presión.

MANEJAR Y PASAR CUIDADOSAMENTE LAS MANGUERAS. No tirar de las mangueras para mover el equipo. No usar materiales o solventes que sean incompatibles con el tubo interno y la cubierta de la manguera. NO exponer las mangueras a temperaturas sobre 82°C (180°F) o bajo -40°C (-40°F).

### Continuidad del circuito de puesta a tierra de la manguera

La continuidad del circuito de puesta a tierra apropiado es esencial para mantener conectado a tierra el sistema pulverizador. Es indispensable revisar la resistencia eléctrica de las mangueras de aire y de fluido por lo menos una vez a la semana. Si la manguera no tiene una etiqueta en la cual se especifica la resistencia eléctrica, ponerse en contacto con el proveedor o fabricante de la manguera para la información sobre los límites de resistencia. Usar un metro de resistencia en la gama apropiada para comprobar la resistencia; si excede los límites recomendados, reemplazarla de inmediato. Es muy arriesgado tener una manguera sin puesta a tierra o con la puesta a tierra en malas condiciones. Leer también la información sobre RIESGO DE INCENDIO O EXPLOSION, más arriba.

## PELIGRO DE INCENDIO O EXPLOSION

El flujo a alta velocidad del fluido al pasar por la bomba y manguera crea electricidad estática. Si todas las partes del equipo pulverizador no tienen buena tierra, pueden ocurrir chispas, convirtiendo al sistema en algo peligroso. También, pueden producirse chispas al enchufar o desenchufar el cordón eléctrico. Estas chispas pueden inflamar los vapores de los solventes y el chorro de fluido pulverizado, partículas de polvo y otras sustancias inflamables, sea al aire libre o bajo techo, lo que podría causar una explosión o incendio y graves lesiones corporales y daños a la propiedad. Enchufar siempre la pulverizadora a un tomacorriente que se encuentre a por lo menos 6 m (20 pies) de la máquina y del área que se va a rociar. No enchufar o desenchufar ningún cordón eléctrico en el lugar donde se está rociando cuando todavía exista la posibilidad de que queden vapores inflamables en el aire.

Si se observa alguna chispa estática, o se siente el más leve choque eléctrico, APAGAR DE INMEDIATO LA PULVERIZADORA. Revisar todo el sistema en busca de conexión a tierra positiva. No usar nuevamente el sistema hasta haber ubicado y corregido el problema.

### Puesta a tierra

Para reducir el riesgo de chispas estáticas, conectar a tierra la pulverizadora y todo el otro equipo de pulverizar que se use o se encuentre en el lugar que se va a rociar. CONSULTAR el código eléctrico de la localidad para las instrucciones sobre las conexiones a tierra exigidas para la zona y tipo de equipo. ASEGURAR de conectar a tierra todo este equipo pulverizador:

1. *Pulverizadora:* enchufar el cordón eléctrico, o cable extensor, cada uno con un enchuf de tres patas en buen estado, a un tomacorriente con puesta a tierra apropiado. No usar un adaptador. Todos los cables extensores tienen que tener tres hilos y una capacidad de 15 amperios.
2. *Mangueras para fluidos:* usar solamente mangueras con puesta a tierra de una longitud combinada de 150 m (500 pies), para asegurar buena continuidad a tierra. Referirse también al párrafo sobre continuidad a tierra de la manguera.
3. *Pistola:* hacer la puesta a tierra conectándola a una manguera de fluido y pulverizadora bien conectadas a tierra.
4. *Objeto que se está rociando:* de conformidad con el código local.
5. *Todos los baldes de solvente* usados durante el lavado, de conformidad con el código local. Usar *solamente baldes de metal*, que sean conductivos. No colocar el balde en una superficie no conductiva, como papel o cartón, que interrumpe la continuidad a tierra.
6. *Para mantener la continuidad a tierra durante el lavado o descarga de presión,* siempre apoyar una parte metálica de la pistola bien firme contra el costado del *balde de metal*, después apretar el gatillo.

### Seguridad durante el lavado

Reducir el riesgo de lesiones por inyección, chispas eléctricas o salpicaduras, siguiendo el procedimiento de lavado específico dado en la página 9 de este manual. Seguir el **procedimiento de descarga de presión** en la página 6, y quitar la *boquilla rociadora antes de lavar*. Apoyar una parte metálica de la pistola bien firme contra el costado de un *balde de metal* y usar la presión más baja posible de fluido durante el lavado.

## PELIGRO DE LAS PIEZAS MOVILES

Las piezas en movimiento pueden pinchar o amputar dedos u otras partes del cuerpo. MANTENERSE ALEJADO de las piezas en movimiento durante el arranque o funcionamiento de la pulverizadora. Desenchufar la pulverizadora y descargar la presión antes de revisarla o darle servicio, para impedir que arranque inesperadamente.

### IMPORTANT

Se han adoptado las normas de seguridad del gobierno de los Estados Unidos de Norteamérica bajo el Acta de Seguridad y Salud Ocupacional. Deberán consultarse estas normas, en especial las Generales, Parte 1910, y las Normas de Construcción, Parte 1926.

## SETUP

### Connect Hose and Gun

Connect a 50 ft (15 m) (minimum length) fluid hose to the 1/4 npsm(m) outlet nipple in the pressure control. Connect the other end of the hose to the spray gun's inlet connection. Don't use thread sealant, and don't install the spray tip yet!

### CAUTION

To avoid damaging the pressure control, which may result in poor equipment performance and component damage, follow these precautions:

1. Always use a minimum of 50 ft (15.2 m) nylon spray hose.
2. Never use a wire braid hose as it is too rigid to act as a pulsation dampener.
3. Never install any shutoff device between the outlet of the pressure control and the main hose.
4. Never allow flushing water or water base paint to freeze in the system.

### Fill Packing Nut/Wet Cup

Fill the packing nut/wet cup 1/3 full with throat seal liquid, supplied. Keep the wet cup filled to help protect and prolong the life of the pump's throat packings.

### Check Electrical Service and Plug In

Be sure the electrical service is 120 V, 60 HzAC, 15 Amp (minimum) and that the outlet you use is properly grounded.

Be sure the ON/OFF switch is OFF.

Plug the power supply cord into a grounded electrical outlet that is at least 20 ft (6 m) away from the spray area to reduce the chance of a spark igniting the spray vapors.

Do not remove the third prong of the power supply cord plug, which is the grounding prong, and do not use an adapter.

Use a grounded extension cord which has 3 wires of a minimum 12 gauge size, and a maximum of 100 ft (30 m) long. Longer lengths may affect sprayer performance.

### Set Pressure Control

Turn the pressure control knob to the lowest setting.

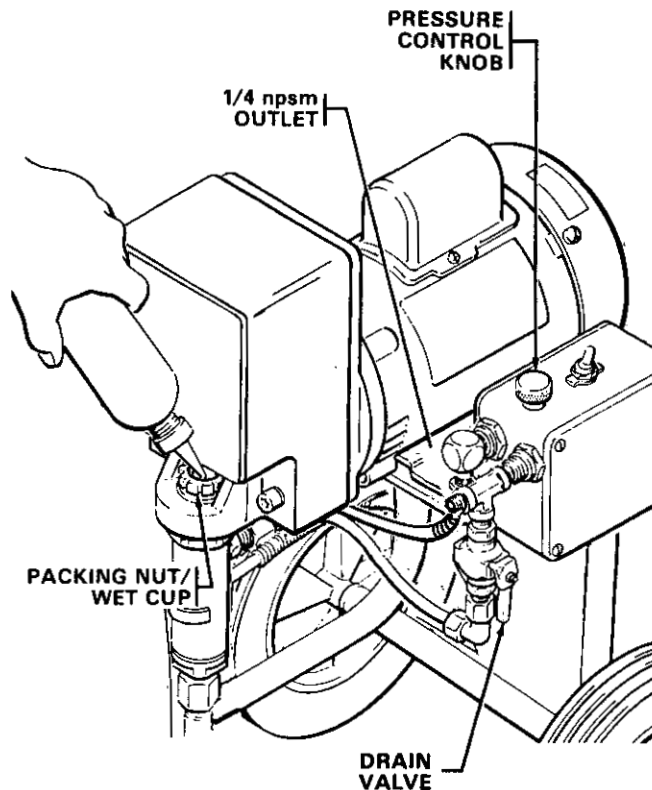
### Flush the Pump

An important part of the care and maintenance of your Nova is proper flushing. See "Flushing Guidelines" on page 9 for "When to Flush" and "How to Flush".

### CAUTION

Never operate the sprayer without the drain valve in place. The drain valve is used to help relieve system pressure and to help prime the sprayer.

Do not attach a spray hose to the drain valve; doing so could result in costly damage to the pressure control.



### Prepare the Paint

Prepare the paint as instructed by the manufacturer. Remove any skin that may have formed. Stir the paint to dissolve pigments. Strain the paint through a fine, nylon-mesh bag (available at most paint dealers) to remove particles that might clog the spray tip. *This is probably the most important step toward trouble-free spray painting.*

New paint seldom needs thinning. Add solvent to old and remixed paints to replace the solvent lost through evaporation. Do not add too much solvent as thin paint is hard to control and doesn't cover very well. Follow the paint manufacturer's recommendations on thinning.

### Prime the Sprayer

Close the drain valve. Don't install the spray tip yet! Put the suction tube into the paint container. Turn the pressure adjusting knob all the way counterclockwise to lower the pressure setting. Disengage the gun safety latch. Hold a metal part of the gun firmly against and aimed into a grounded metal waste container. Squeeze the trigger and hold it open, turn the ON/OFF switch to ON, and slowly increase the pressure setting until the sprayer starts. Keep the gun triggered until all air is forced out of the system and the paint flows freely from the gun. Release the trigger and engage the safety.

**NOTE:** If the pump is hard to prime, place a container under the drain and open it. Let the sprayer run until paint is running through the drain tube. Close the drain valve. This method bleeds the air from the pump. Then release the gun safety latch and trigger the gun to prime the hose as instructed previously, under **Prime the Sprayer**.

Check all fluid connections for leaks. If any are found, follow the **Pressure Relief Procedure**, page 2, before tightening connections.



## FLUSHING GUIDELINES

### When To Flush

1. **Before using your new sprayer.** Your new SuperNova was factory tested with motor oil and the oil was left in it to protect the pump parts. *Before Using Water-Based Paint*, flush out the oil with mineral spirits, followed by soapy water, and then with clean water. *Before Using Oil-Based Paint*, flush out the oil with mineral spirits only.
2. **Whenever you change the color of your paint supply.** Flush with a compatible solvent such as mineral spirits or water.
3. **Whenever you change from water-based to oil-based paint.** Flush with soapy water, then with mineral spirits.
4. **Whenever you change from oil-based to water-based paint.** Flush with mineral spirits, followed by soapy water, then with clean water.
5. **Before you store your sprayer.**  
*When using water-based paint:* Flush with water, then mineral spirits. Leave the pump, hose and gun filled with mineral spirits. Shut off and unplug the sprayer, open the drain valve to relieve pressure and leave it open.  
*When using oil-based paint:* Flush with mineral spirits. Leave the pump, hose and gun filled with mineral spirits. Shutoff and unplug the sprayer, open the drain valve to relieve pressure and leave it open.
6. **Before you use your sprayer after storage.**  
*Before using water-based paint:* Flush out mineral spirits with soapy water and then with clean water.  
*Before using oil-based paint:* Flush out mineral spirits with the fluid to be sprayed.

### How To Flush

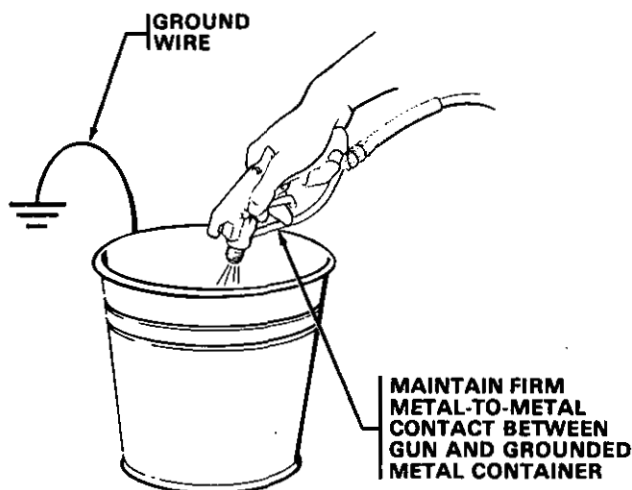
1. Follow the **Pressure Relief Procedure** on page 2.
2. Pour 1/2 gallon (2 liters) of compatible solvent (see "When to Flush") into a bare metal pail. Put the pump suction tube in the pail.
3. Be sure the pressure control knob is set at minimum, and the drain valve is closed.
4. Remove the spray tip from the gun.
5. Disengage the gun safety latch.

#### WARNING

To reduce the risk of static sparking and splashing, always remove the spray tip from the gun, and hold a metal part of the gun firmly to the side of a grounded metal pail when flushing.

6. Point the spray gun into a grounded metal pail, and with a metal part of the gun firmly touching the metal container, squeeze the gun trigger. **This procedure helps avoid static sparking and reduce splashing.** With the gun triggered, turn the ON/OFF switch to ON and slowly turn the pressure adjusting knob clockwise **just until** the sprayer starts. Keep the gun triggered until clean solvent comes from the nozzle.
7. Release the trigger. Then open the drain valve, which is connected to a drain tube, and flush again to remove paint from the drain tube.

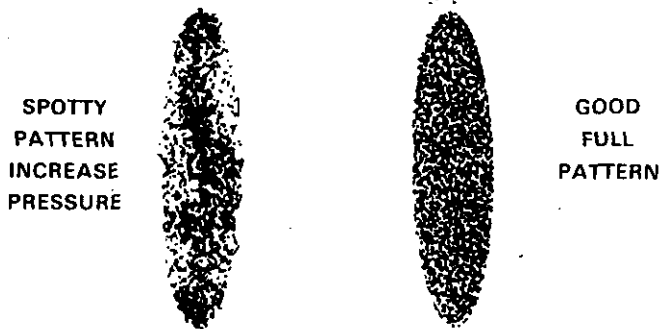
8. Release the trigger and engage the gun safety latch. Close the drain valve.
9. Check all fluid connections for leaks. If there are any leaks, follow the **Pressure Relief Procedure**, on page 2. Tighten the connections, start the sprayer, and check to be sure the leaking has stopped.
10. Remove the suction tube from the pail. Disengage the gun safety latch and trigger the gun into a grounded metal pail to force solvent from the hose. **Do not let the pump run dry for more than 30 seconds to avoid damaging the pump packings!**
11. Engage the gun safety latch, turn the sprayer to OFF, and unplug the sprayer. Open the drain valve.
12. If you flushed with mineral spirits and are going to use a water-based paint, flush again with soapy water, and then with clean water. Then follow the **Pressure Relief Procedure** on page 2.



## ADJUST THE SPRAY PATTERN

Increase the pressure adjusting knob setting just until spray from the gun is completely atomized. To avoid excessive overspray and fogging, and to decrease tip wear and extend the life of the sprayer, always use the lowest possible pressure needed to get the desired results. If more coverage is needed, use a larger tip rather than increasing the pressure.

Test the spray pattern on a piece of light colored paper. The tip position determines the direction of the pattern width. *Before adjusting the pattern* always follow the **Pressure Relief Procedure** on page 11.



## Cleaning and Clearing the Spray Tip

### WARNING

To reduce the risk of injection injury, **DO NOT** hold your hand, body, or a rag in front of the spray tip when cleaning or checking a clogged tip. Always point the gun toward the ground or into a waste container when checking to see if the tip is clear.

**DO NOT** try to "blow back" paint; this is **NOT** air spray equipment.

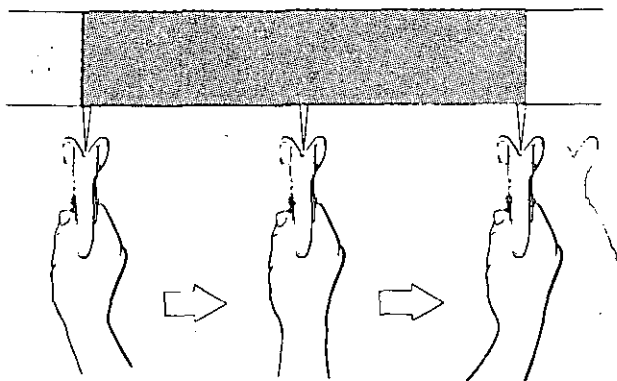
If the spray tip clogs while spraying, engage the gun safety latch *immediately*. **DO NOT** wipe build up off the gun or tip until pressure is fully relieved. See the **Pressure Relief Procedure** on page 11.

Clean out the front of the spray tip frequently during daily operation. *First*, follow the **Pressure Relief Procedure** page 11. Then use a solvent soaked brush to clean the spray tip and to keep build up from drying and clogging the spray tip.

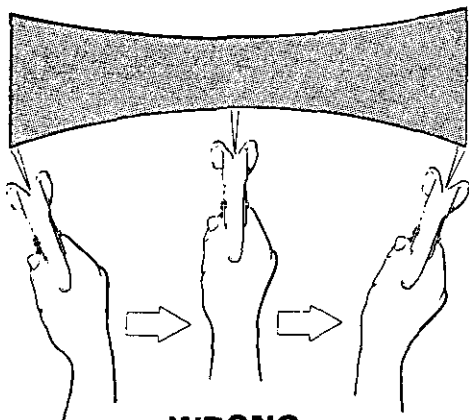
## APPLICATION METHODS

Always hold the gun perpendicular to the surface and keep the gun at an even 12 to 14 in. (300–356 mm) from the surface you are spraying.

Begin moving the gun in a horizontal direction at a steady rate. Start the spray stroke off the target surface and pull the trigger *as the gun is moving*. Then, while the gun is still moving, and as you approach the other edge, release the trigger. This method avoids excess paint build-up at the end of each stroke.



**RIGHT**

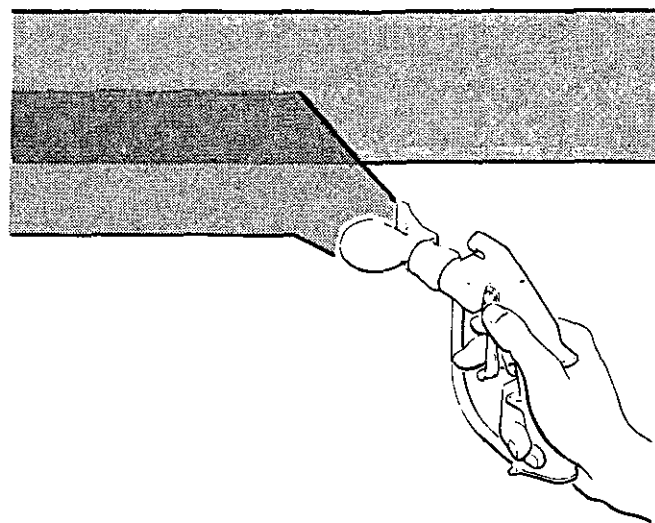


**WRONG**

The correct speed for moving the gun will allow a full, wet coating to be applied without runs or sags. Lapping each stroke about 50% over the previous stroke produces uniform paint thickness. And spraying in a uniform pattern alternately from right to left, then left to right, provides a professional finish.

*The best way to control the rate of coverage is with the gun tip size.* A small tip orifice applies less paint and a narrower pattern. A larger tip orifice applies more paint and a wider pattern.

Do not try to increase coverage by increasing the fluid pressure! Using the lowest pressure necessary to get the desired results will help prolong the life of your sprayer and minimize paint lost by overspray.



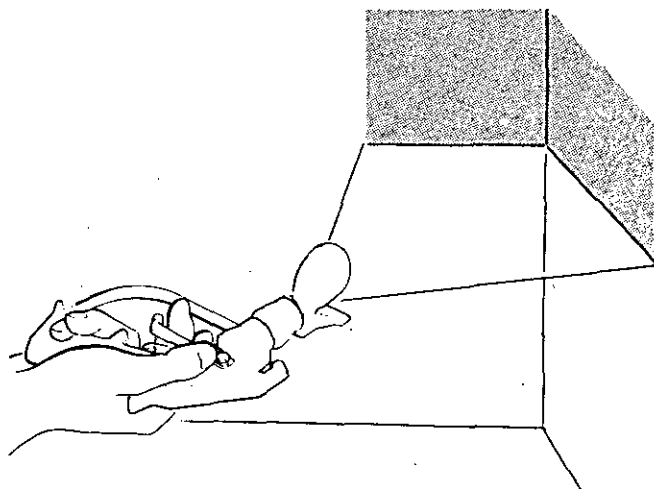
For interior corners, such as on a bookcase or inside a cabinet, aim the gun toward the center of the corner to spray. By dividing the spray pattern this way, the edges on both sides are sprayed evenly.

If there is a wind, angle the spray pattern into the wind to minimize drifting. Paint from the ground to the roof.

**Shrubs.** When next to the house, tie back shrubs from the surface to be painted with rope and stakes. Then cover them with a canvas dropcloth as the painter approaches the area. Remove the canvas dropcloth as soon as the area is painted, to prevent possible damage to the shrubs.

**Concrete walks.** If the walkways will be walked on, cover them with a canvas dropcloth to avoid slipping. Otherwise a plastic cloth is all that is needed.

**Electrical outlets and lamps.** Protect electrical outlets with masking tape. Cover lamps with plastic bags secured with masking tape.



**Nearby objects.** Move objects such as automobiles, picnic tables, lawn furniture, etc. up-wind of the surface to be sprayed. In the case of a nearby home, make a protective barrier by hanging plastic between two long poles.

## SHUTDOWN AND CARE

### WARNING

#### Pressure Relief Procedure

To reduce the risk of serious bodily injury, including injection; splashing in the eyes; injury from moving parts or electric shock, always follow this procedure whenever you shut off the sprayer, when checking or servicing any part of the spray system, when installing, cleaning or changing spray tips, and whenever you stop spraying.

1. Engage the gun safety latch.
2. Turn the ON/OFF switch to OFF.
3. Unplug the power supply cord.
4. Disengage the gun safety latch.
5. Hold a metal part of the gun firmly to the side of a grounded metal pail, and trigger the gun to relieve pressure.
6. Engage the gun safety latch.
7. Open the drain valve, having a container ready to catch the drainage.
8. Leave the drain valve open until you are ready to spray again.

If you suspect that the spray tip or hose is completely clogged, or that pressure has not been fully relieved after following the steps above, VERY SLOWLY loosen the tip guard retaining nut or hose end coupling and relieve pressure gradually, then loosen completely. Now clear the tip or hose obstruction.

**Check the packing nut/wet cup daily.** First, follow the Pressure Relief Procedure, above. The packing nut should be tight enough to stop leakage—no tighter. Use a screwdriver and a light hammer to adjust the nut. Don't overtighten! Overtightening may cause binding and excessive packing wear.

### CAUTION

Be very careful when adjusting the packing nut not to nick the threads of the displacement pump which may extend above the bearing housing. A nick in the threads can strip the threads in the bearing housing when installing or removing the displacement pump.

Flush the sprayer at the end of each work day and fill it with mineral spirits to help prevent pump corrosion and freezing. See "Flushing Guidelines" on page 9.

### CAUTION

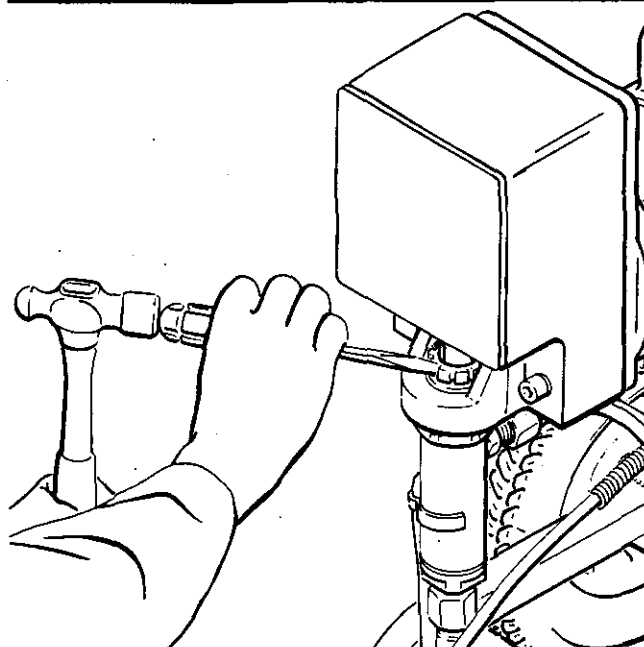
Never leave water or water-based paint in the sprayer overnight to prevent (1) pump corrosion; (2) freezing in the pressure control or pump, during cold weather, which can seriously damage the sprayer.

For very short shutoff periods, leave the suction tube in the paint follow the Pressure Relief Procedure to the left, and clean the spray tip.

Wrap the hose around the sprayer when storing it, even if only overnight, to help protect the hose from damage.

### WARNING

Refer to the warning section HOSE SAFETY on page 3 for information on the hazard of using damaged hoses.



## TROUBLESHOOTING GUIDE

This guide will help you identify the causes and solutions to sprayer problems. If you cannot identify and resolve the problem, or if "Return for repair" is indicated, contact your nearest authorized service agency for instructions on where and how to return the sprayer for repair.

### WARNING

#### Pressure Relief Procedure

To reduce the risk of serious bodily injury, including injection; splashing in the eyes; injury from moving parts or electric shock, always follow this procedure whenever you shut off the sprayer, when checking or servicing any part of the spray system, when installing, cleaning or changing spray tips, and whenever you stop spraying.

1. Engage the gun safety latch.
2. Turn the ON/OFF switch to OFF.
3. Unplug the power supply cord.
4. Disengage the gun safety latch.
5. Hold a grounded metal part of the gun firmly to the side of a metal pail, and trigger the gun to relieve pressure.
6. Engage the gun safety latch.
7. Open the drain valve, having a container ready to catch the drainage.
8. Leave the drain valve open until you are ready to spray again.

*If you suspect that the spray tip or hose is completely clogged, or that pressure has not been fully relieved after following the steps above, VERY SLOWLY loosen the tip guard retaining nut or hose end coupling and relieve pressure gradually, then loosen completely. Now clear the tip or hose obstruction.*

## TROUBLESHOOTING CHART

PROBLEM	CAUSE	SOLUTION
Electric motor won't run	Power or extension cord is unplugged or damaged, or building circuit fuse is blown Overload switch* has opened  Pressure setting too low Pressure control frozen or damaged by over pressurization	Check, reset or replace  Unplug cord, relieve pressure, allow to cool, decrease pressure Increase Thaw**, change, remove or clean***, replace, see page 18
Electric motor stops while spraying	Power or extension cord is unplugged or damaged, or building circuit fuse is blown Overload switch* has opened  Pressure setting is too low Spray tip plugged Wrong type extension cord	Check, reset or replace  Unplug cord, relieve pressure, allow to cool, decrease pressure Increase Remove and clean Use maximum 100 ft (30 m), 3 wires 12 gauge minimum, grounded extension cord
Electric motor runs but no output or low output (See PROBLEM "Not enough paint pressure", on page 13, also.)	Piston ball check not seating Piston packings worn or damaged Intake valve ball check not seating Displacement pump frozen or gear train damage Pressure control frozen or damaged by over pressurization Sprayer not primed	Service, see page 14 Replace, see page 14 Service, see page 14 Thaw**, replace Thaw**, change, remove or clean***, replace, see page 18 Prime, see page 8
Electric motor labors when starting; blowing fuses	Capacitor failure Circuit board failure	Replace capacitor, see page 17 Replace circuit board, see page 18
Paint leaks into wet-cup	Throat packings worn or damaged	Replace, see page 15

Troubleshooting continued on page 13.

**TROUBLESHOOTING CHART Continued**

PROBLEM	CAUSE	SOLUTION
Electric motor hums but will not run	Circuit board failure Low Voltage Capacitor failure Drive assembly damaged	Replace circuit board, see page 18 Never use more than 100 feet (30 m) of 12 ga extension cord (use longer fluid hose); check power supply—should be 110 Volt minimum Replace capacitor, see page 17 Replace drive assembly, see page 16
Excessive surge at spray gun	Spray tip is plugged Spray tip too big or worn Pressure control frozen or damaged by over pressurization Wrong type of hose Paint too viscous	Remove and clean Change spray tip Thaw**, change, remove or clean***, replace, see page 18 Use minimum 50 ft (15.2 m) static free nylon hose only (wire braid hose unacceptable) Thin
Not enough paint pressure	Pressure setting too low Spray tip too big or worn Pressure control frozen or damaged by over pressurization Worn pump parts	Increase Change spray tip Thaw**, change, remove or clean***, replace-see page 18 Service, see page 14
Tails or fingers in spray pattern	Pressure setting too low Outlet line dirty or plugged Spray tip too big or worn Paint supply is low or pail empty Paint too viscous Wrong type of hose	Increase Clean Change spray tip Fill Thin Use minimum 50 ft (15.2 m) static free nylon hose only (wire braid hose unacceptable)
Paint runs or sags	Spray tip too big or worn	Change spray tip.
Spitting from spray gun	Paint supply low or pail empty Sprayer sucking air or gun needle not seating	Fill Tighten fittings, service gun
Static sparking from spray gun	Sprayer or work not grounded	Check conductivity of hose, electrical outlet, ground, etc.; ground

\* The electric motor has an overheating protector switch which automatically resets on cooling. If it opens and the electric motor shuts itself off, unplug the sprayer and let it cool for 30 to 60 minutes. Also try to correct the cause of overheating. Always use the lowest pressure setting needed.

\*\* Freezing results from failure to replace water-base paint or flushing water with mineral spirits solvent.

\*\*\* Over pressurization results from (1) using less than 50 ft (15.2 m) of nylon spray hose, (2) using a wire braid spray hose, (3) adding a shutoff device between the pump outlet and the spray gun, or (4) attaching a spray hose to the filter drain valve.

## REMOVING AND REPLACING PUMP

### WARNING

To reduce the risk of serious bodily injury, including injection; splashing in the eyes; injury from moving parts or electric shock, always follow the **Pressure Relief Procedure** on page 12 before continuing.

Flush the sprayer if possible.

Remove the hose clamps (87, 88) and move the drain tube (90) away from the pump.

Unscrew and remove the suction tube (52). See Fig 1.

Disconnect the hose (20) from the nipple (22). See Fig 1.

Use a screwdriver to push the retaining spring (55) aside and push out the pin (57).

Loosen the cylinder locknut (103) and unscrew the pump cylinder (46) from the drive assembly (65).

To reinstall the pump, rotate the crankshaft so that the connecting rod (64) is in its lowest position. Pull the pump piston rod (47) about 1-1/2 inches out of the cylinder (46), and turn the rod so the pin hole is about 90° from the outlet nipple (22). Screw the cylinder locknut (103) all the way down.

Screw the pump cylinder (46) into the drive assembly (65) until the holes in the piston rod and the connecting rod are aligned. Insert the pin (57) and push the retaining spring (55) down over the pin.

Continue screwing the pump cylinder *completely* into the drive assembly; you will feel some resistance from the packings. Now turn the cylinder back until the outlet nipple (22) faces back. Screw the hose (20) onto the nipple; tighten it securely. Torque the cylinder locknut (103) to 70 ft-lb (95 N·m) to avoid having it loosen from vibration.

Reassemble remaining parts reverse from disassembly.

## SERVICING THE PUMP

### WARNING

To reduce the risk of serious bodily injury, including injection; splashing in the eyes; injury from moving parts or electric shock, always follow the **Pressure Relief Procedure** on page 12 before continuing.

Use repair kit no. 820-038 to repair the pump. See page 22. Use all the parts in the kit, even if the old ones look good. Old and new parts do not seal well together, and the pump may leak.

Remove the pump from the sprayer as described above.

### Disassembling the Pump

Unscrew the intake valve (48) from the cylinder (46). If the valve is seized in the housing, squirt penetrating oil around the threads and *gently* tap around the housing with a light hammer to loosen. See Fig 2 and 4. Remove the ball guide (40), the stop pin (39) and the ball (28). Clean and inspect the parts for wear or damage.

**NOTE:** Test the intake valve by filling it with solvent and seeing if any solvent leaks past the ball. It shouldn't leak. The valve must be clean for this test; any dirt will hold the ball off the seat and let the solvent leak past.

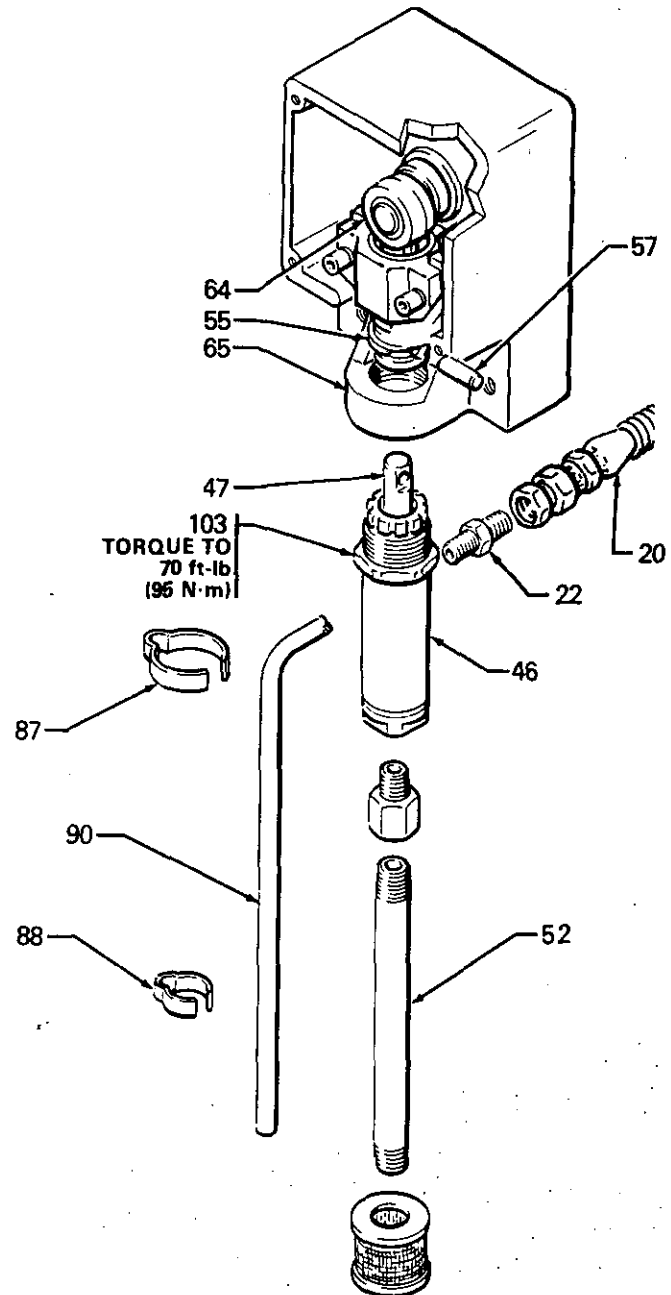


Fig 1

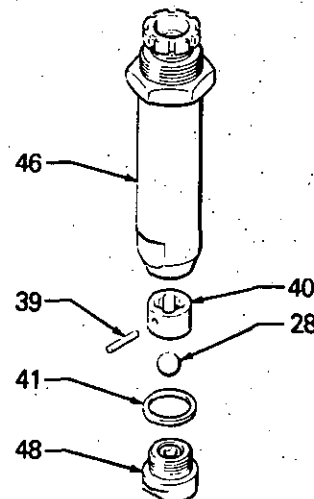


Fig 2

Unscrew and remove the packing nut (38). Using a rubber mallet, tap the piston rod (47) down and pull it out through the bottom of the cylinder (46). See Fig 3 and 4.

Remove the glands (34 & 37) and the packings (35 & 36).

Clean and inspect the piston rod and the inside of the cylinder for nicks, scratches or scoring which could cause leaking or premature wear of the packings.

Clamp the flats of the piston rod in a vise. Use a wrench to loosen the nut (33) and unscrew the piston valve (49) from the piston rod. Remove the ball (27), nut (33), glands (30 & 32), packings (31 & 43), seal (29), and washer (45).

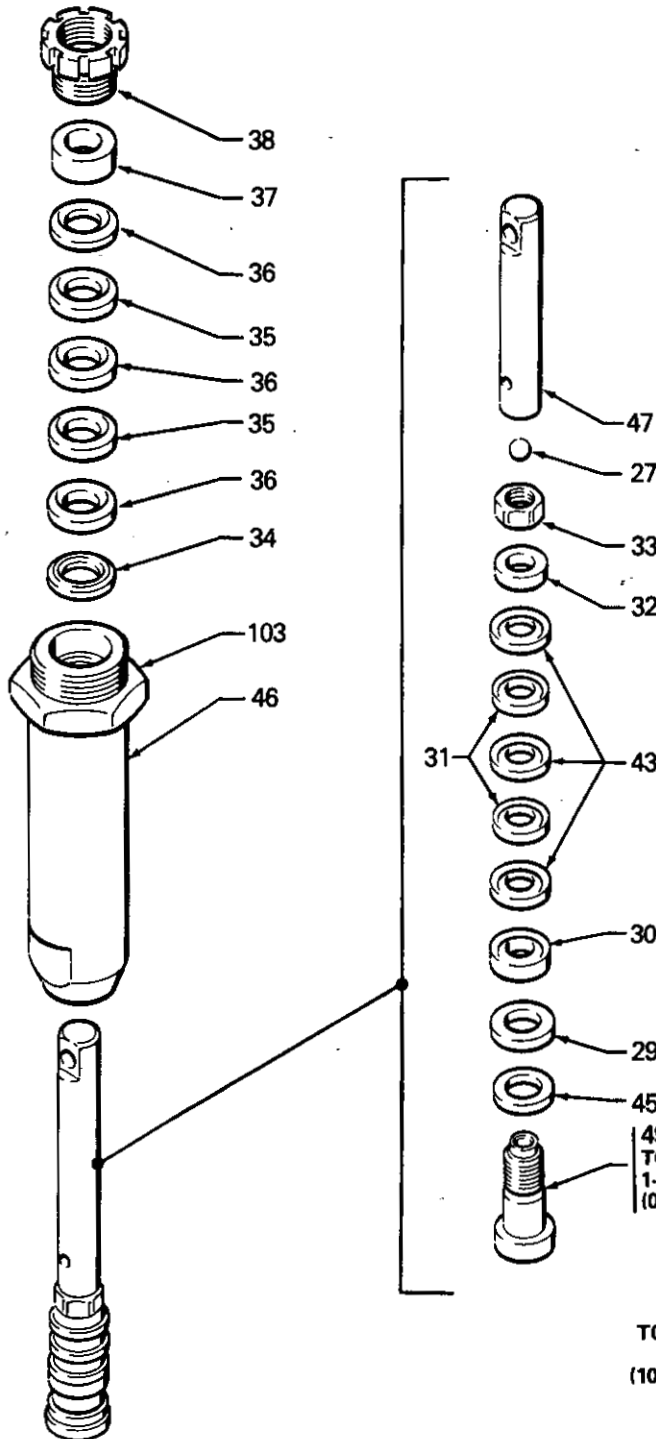


Fig 3

### Assembling the Pump

When assembling the pump, coat the packings, the piston rod and the inside of the cylinder with hydraulic oil.

When reassembling the piston, install the new glands and packings in the correct order, alternating the leather and plastic packings. See Fig 3. The "V" of the packings must face up against the fluid pressure. See Fig 4. Tighten the nut (33) to 10.5 in-lb (1.2 N·m) to seat the packings, then back off the nut and hand tighten it.

Place a new ball (27) in the piston rod (47). Apply locking compound to the threads of the piston valve (49) and screw it into the rod hand tight, 1-2 in-lbs (0.11-0.22 N·m) torque. Tighten the nut against the piston rod to 18-20 ft-lb (24-27 N·m) torque, *without* changing the tightness of the nut against the packings.

Install the throat packings, glands and packing nut, leaving the packing nut loose. The "V" of the packings must face down against the fluid pressure. Put the plastic packing (36) on top of the leather packings (35).

Insert the piston rod (47) through the bottom of the pump cylinder (46).

Assemble and install the intake valve (48); torque it to 75-85 ft-lb (100-115 N·m). Tighten the packing nut just enough to stop leakage—no tighter.

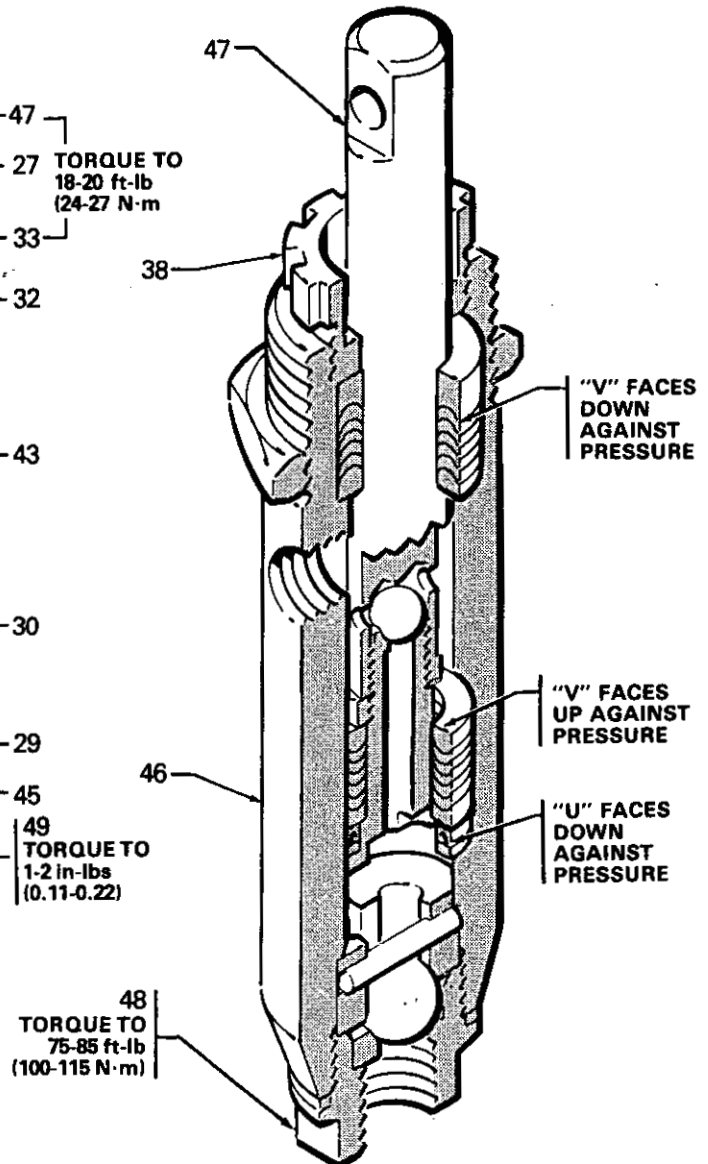


Fig 4

## REMOVING AND REPLACING CONNECTING ROD AND BEARING

### WARNING

To reduce the risk of serious bodily injury, including injection; splashing in the eyes; injury from moving parts or electric shock, always follow the **Pressure Relief Procedure** on page 12 before continuing.

Remove the pump as described on page 14. Remove the four screws (58) and the cover (59). Remove the two capscrews (61) and lockwashers (9). Remove the bearing (63) and the connecting rod (64), sliding the connecting rod off the crankshaft (J). See Fig 5.

Use a screwdriver to push the retaining spring (55) aside and remove the pin (57) from the coupling (56). Remove the coupling from the connecting rod (64).

Pull the connecting rod (64) out of the bearing (63). Wipe it clean (don't use solvent) and inspect the surfaces of the bearing and the connecting rod link (K) for wear or damage. If either needs replacing, you should replace both of them. When installing the rod and the bearing, coat the surfaces with SAE 10 non-detergent motor oil.

Clean and inspect the crankshaft (J). Wipe it clean with a rag; do not use solvent. If the crankshaft is badly worn, replace the drive assembly.

Clean and inspect the connecting rod needle bearing (L). Repack bearing with industrial, heavy-duty, extreme-pressure, lithium-soap grease.

**NOTE:** After every 100 hours of operation, or whenever servicing the pump (whichever comes first), fill the cavity in connecting rod (64) with SAE 10 non-detergent motor oil.

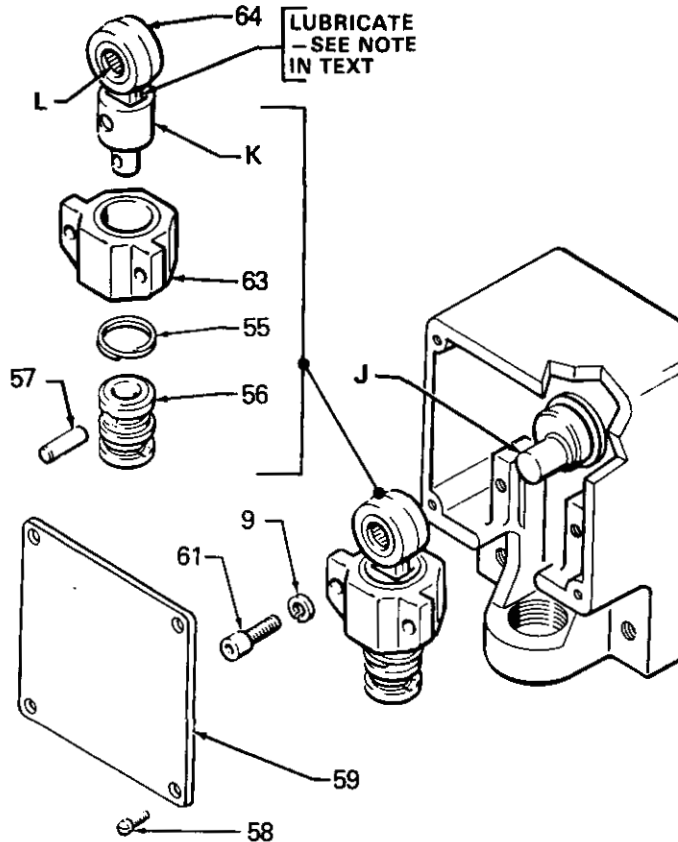


Fig 5

Assemble new rod and bearing, being sure to push the spring (55) down in place over the pin (57) ends, and install it in reverse order of removal.

## REMOVING AND REPLACING DRIVE ASSEMBLY

### WARNING

To reduce the risk of serious bodily injury, including injection; splashing in the eyes; injury from moving parts or electric shock, always follow the **Pressure Relief Procedure** on page 12 before continuing.

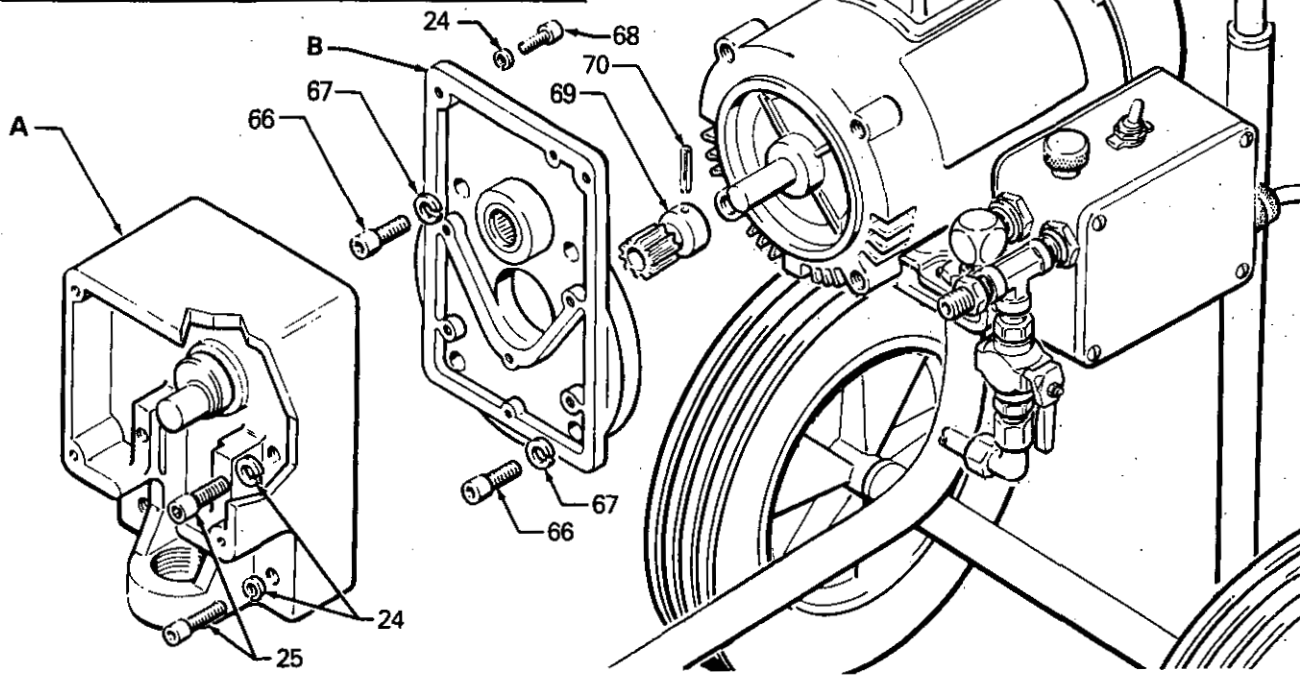


Fig 6



Remove the pump, connecting rod and bearing as described on pages 14 and 16.

Remove the capscrews (25 & 68), lockwashers (24), and drive housing (A). Remove the screws (66), lockwashers (67), and motor housing (B). See Fig 6.

## REPLACING CAPACITOR

### WARNING

To reduce the risk of serious bodily injury, including injection; splashing in the eyes; injury from moving parts or electric shock, always follow the **Pressure Relief Procedure** on page 12 before continuing.

## REMOVING AND REPLACING ELECTRIC MOTOR

### WARNING

To reduce the risk of serious bodily injury, including injection; splashing in the eyes; injury from moving parts or electric shock, always follow the **Pressure Relief Procedure** on page 12 before continuing.

Disconnect the hose (20) from the nipple (22). See Fig 1.

Remove the drive assembly as described above. You can leave the pump, connecting rod, and bearing assembled to the drive assembly.

Drive out the pin (70) and remove the gear (69). See Fig 7.

Remove the screws (78) and the cover (79) from the pressure control (74). See Fig 8.

Clean and inspect the gear (69) for wear or damage. Replace it if necessary. To remove the gear, drive out the pin (70), and pull it off the motor shaft. Apply molybdenum disulfide spray lubricant to the gear, allow to dry, then apply industrial, heavy-duty extreme-pressure, lithium-soap grease.

Install new drive assembly in reverse order of removal.

Unplug the sprayer. Remove the cover of the capacitor (5). See Fig 7. Remove the flag connectors from the old capacitor. Connect the flag connectors of the new capacitor and replace the cover.

**NOTE:** The replacement capacitor includes a new resistor already installed.

Disconnect the red, pink and brown motor leads from the circuit board (81). Disconnect the green and yellow motor leads from the grounding screw (C) and the black motor lead from the top of the pressure control (D).

Unscrew the nuts on both ends of the conduit (76) from the connectors. Remove the screws (8), nuts (18) and lockwashers (9). See Fig 7. Remove the motor (1) from the frame while carefully guiding the wires through the connector in the control box. Remove the conduit (76) from the wires.

Loosen the locknut and unscrew the connector (75) from the motor, being careful to avoid twisting the wires.

Install the new motor in the reverse order of removal.

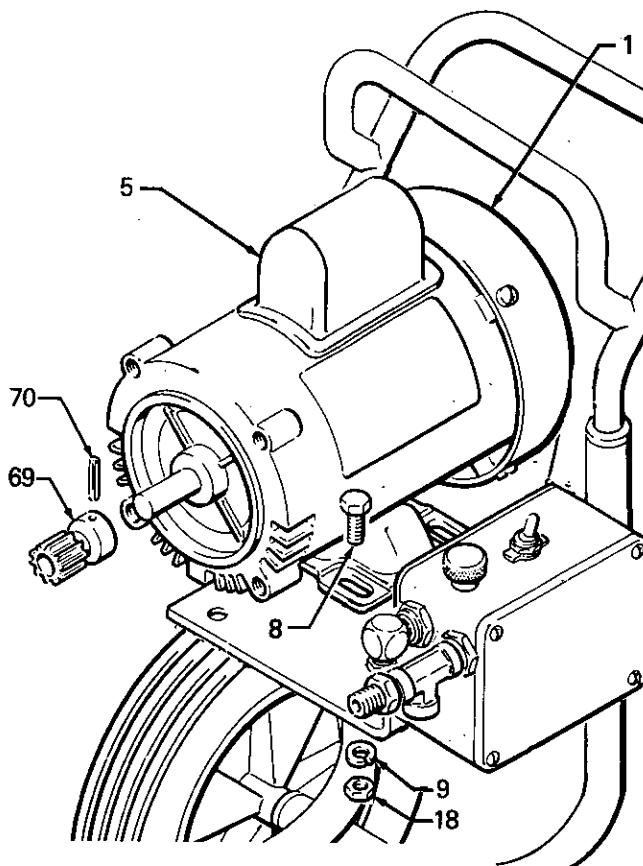


Fig 7

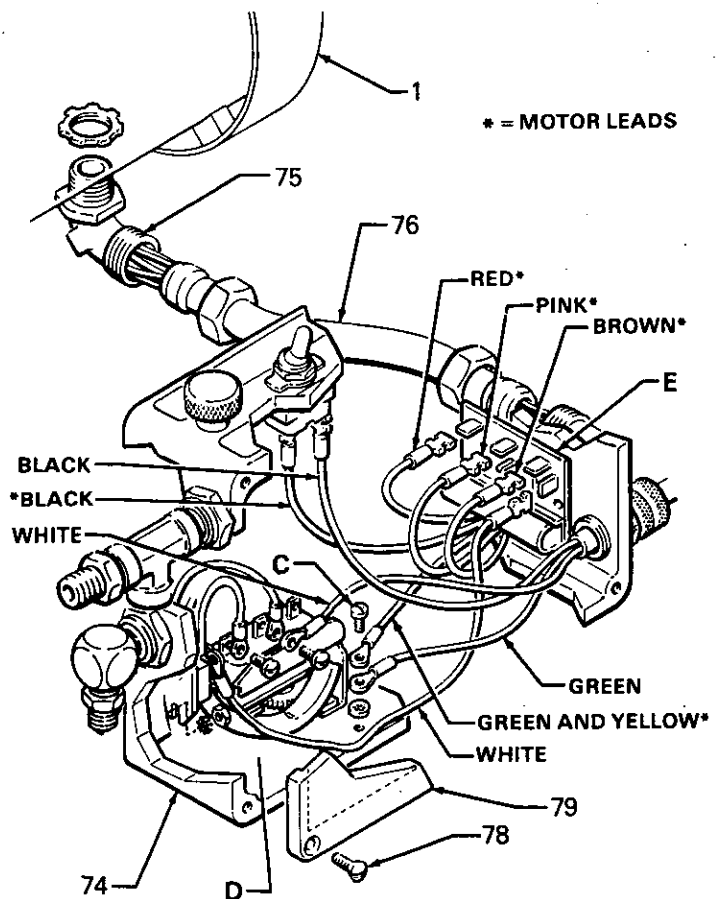


Fig 8

## REMOVING AND REPLACING THE PRESSURE CONTROL AND CIRCUIT BOARD

### WARNING

To reduce the risk of serious bodily injury, including injection; splashing in the eyes; injury from moving parts or electric shock, always follow the **Pressure Relief Procedure** on page 12 before continuing.

Disconnect the spray hose from the tee (94). See Fig 9. Disconnect the hose (20) from the elbow (93).

Remove the screws (8), lockwashers (9), nuts (18), and pressure control (74) from the frame. Remove the screws (78) and cover (79) from the pressure control (74). See Fig 10.

Disconnect the red, pink and brown motor leads from the circuit board (81). Disconnect the green and yellow motor leads from the grounding screw (C), and the black motor leads from the top of the pressure control (D). See Fig 10.

**NOTE:** A circuit board (81) is not included with the pressure control (74) replacement. Order the board separately if a new one is needed.

Unscrew the nut on the end of the conduit (76) from the connector (75). See Fig 10. Pull the pressure control (74) away from the conduit while carefully guiding the wires through the connector (75).

Loosen the knurled part of the power cord strain relief (H), and unscrew it from the pressure control. Slide the strain relief up on the power cord to provide clearance, and unscrew the conduit connector (75). See Fig 10.

Replace in the reverse order of removal and then calibrate the pressure control. See page 19.

### CAUTION

Failure to observe the following may cause poor performance or excessive pressure and permanent damage to the pressure control:

- (1) Always use nylon spray hose at 50 ft (15.2 m) minimum length.
- (2) Never use a wire braid spray hose.
- (3) Never add any type of shut off device between the pump outlet and the spray gun.
- (4) Never allow flushing water or water base paint to freeze in the system.

### WARNING

The pressure control **MUST** be calibrated whenever a microswitch or pressure control assembly is removed and reinstalled or replaced to be sure the control is properly calibrated. Failure to properly calibrate the pressure control can cause the sprayer to overpressurize and result in component rupture, fire or explosion. It may also prevent the sprayer from obtaining the maximum working pressure which would result in poor sprayer performance.

### Circuit Board Removal and Replacement

If only the circuit board (81) needs to be replaced in the pressure control, remove the screws (78) and the front cover (79). See Fig 10. Pull the board out carefully, just far enough to reach the wire terminals. Unsnap the wires and finish removing the board.

Position the new card at the control so the wire connectors are at the top. Following the color coded diagram in Fig 10, snap the wires onto the board. Carefully guide the wires back into the control, making sure they don't catch on anything, then slide the new board into place. Check the pressure control calibration. See page 19.

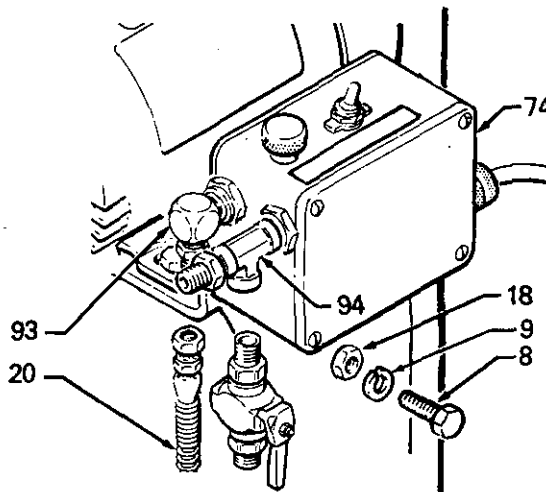


Fig 9

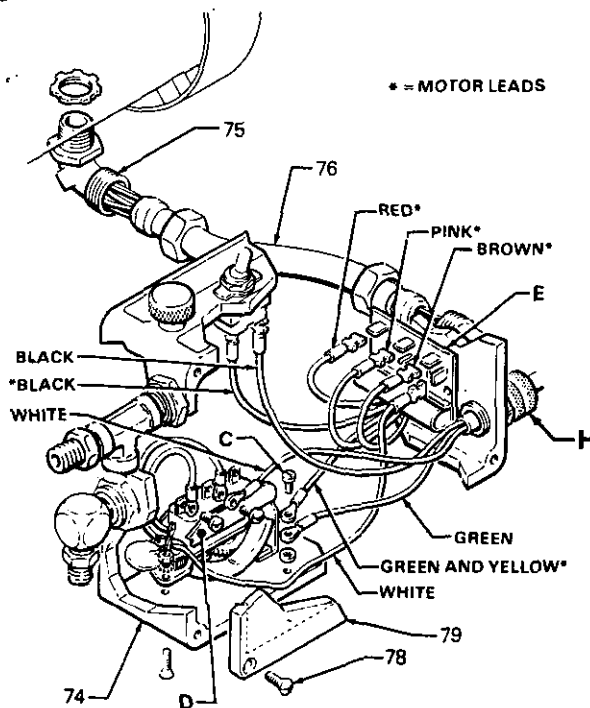


Fig 10

## WARNING

**USE EXTREME CAUTION WHEN PERFORMING THIS CALIBRATION PROCEDURE** to reduce the risk of an injection injury or other serious bodily injury which can result from component rupture, electric shock, fire, explosion, or moving parts.

This procedure sets the sprayer to 2750 psi (190 bar) **MAXIMUM WORKING PRESSURE**.

This procedure must be performed whenever microswitch or pressure control assembly is removed and reinstalled or replaced to be sure the sprayer is properly calibrated.

Improper calibration can cause the sprayer to over-pressurize and result in component rupture, fire or explosion. It may also prevent the sprayer from obtaining the maximum working pressure which would result in poor sprayer performance.

**NEVER** attempt to increase the fluid outlet pressure by performing these calibrations in any other way. **NEVER EXCEED 2750 psi (190 bar) MAXIMUM WORKING PRESSURE.** Normal operation of the sprayer at higher pressures could result in component rupture, fire or explosion.

**ALWAYS** use a *new* 50 foot (15.2 m) spray hose rated for 3000 psi (210 bar) **MAXIMUM WORKING PRESSURE** when performing this procedure. A used, under-rated hose could develop a high pressure leak or rupture.

**AVOID** touching the wire in the pressure control assembly when the control box cover is removed to reduce the risk of electric shock.

### Tools Needed:

- NEW 50 ft (15.2 m) 3000 psi (210 bar) airless spray hose
- Needle Valve, Part No. 820-454
- 3/8" open end wrench
- Fluid-Filled Pressure Gauge, Part No. 820-455
- 5 gallon pail and water
- Mineral Spirits (for flushing after test)

1. Follow the **Pressure Relief Procedure** on page 12. Install a new 50 ft (15.2 m) spray hose to the sprayer outlet. On the other end of the hose install a needle valve. Install a fluid-filled pressure gauge in the top port of the fluid filter.
2. Open the needle valve *slightly*. Turn the pressure control knob (M) to the minimum setting. Plug in the sprayer and turn the switch ON. Increase the pressure setting just enough to start the sprayer. Prime the hose, being sure to eliminate all air from the system.
3. Open the needle valve a little more—enough to allow the pump to run continuously—and turn the pressure control knob to maximum. Now, *very slowly* start to close the needle valve, but don't close it all the way. Observe the pressure at which the pump stalls, which should be approximately 2750 psi (190 bar).

**NOTE:** The slower the pressure is brought up, the easier it is to note the exact stall pressure. Closing the needle valve quickly causes the pressure to rise too fast which gives a false reading.

*If the pressure is lower:* unplug the sprayer and relieve pressure. Use a 3/8" open end wrench to turn the pressure adjustment nut, at the bottom of the pressure control knob shaft (R), *counterclockwise* 1/8 turn or less, then repeat steps 2 and 3.

*If the pressure is higher:* unplug the sprayer and relieve pressure. Turn the pressure adjustment nut *clockwise* 1/8 turn or less and repeat steps 2 and 3. Repeat until the proper stall pressure is obtained.

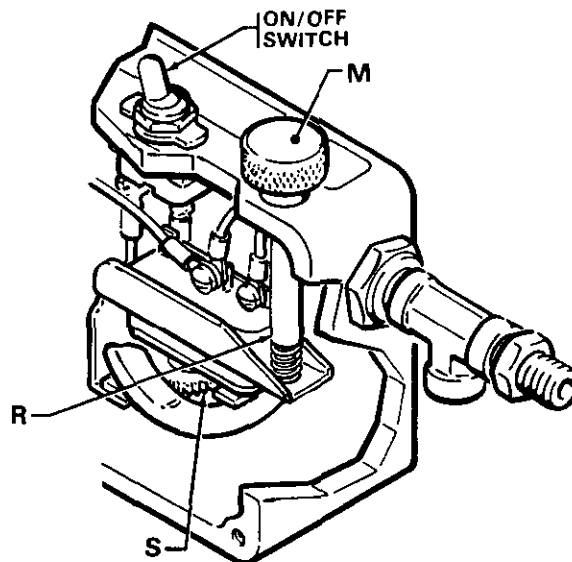


Fig 11

4. Now check to see at what pressure the sprayer starts to run again after stalling. Plug in the sprayer, turn it on, close the needle valve, and set the pressure at maximum. Allow the sprayer to run until it stalls.
5. Now open the needle valve very slowly while observing the pressure gauge. Check to see if the pressure drops to approximately 2350 psi (164 bar) before starting again.

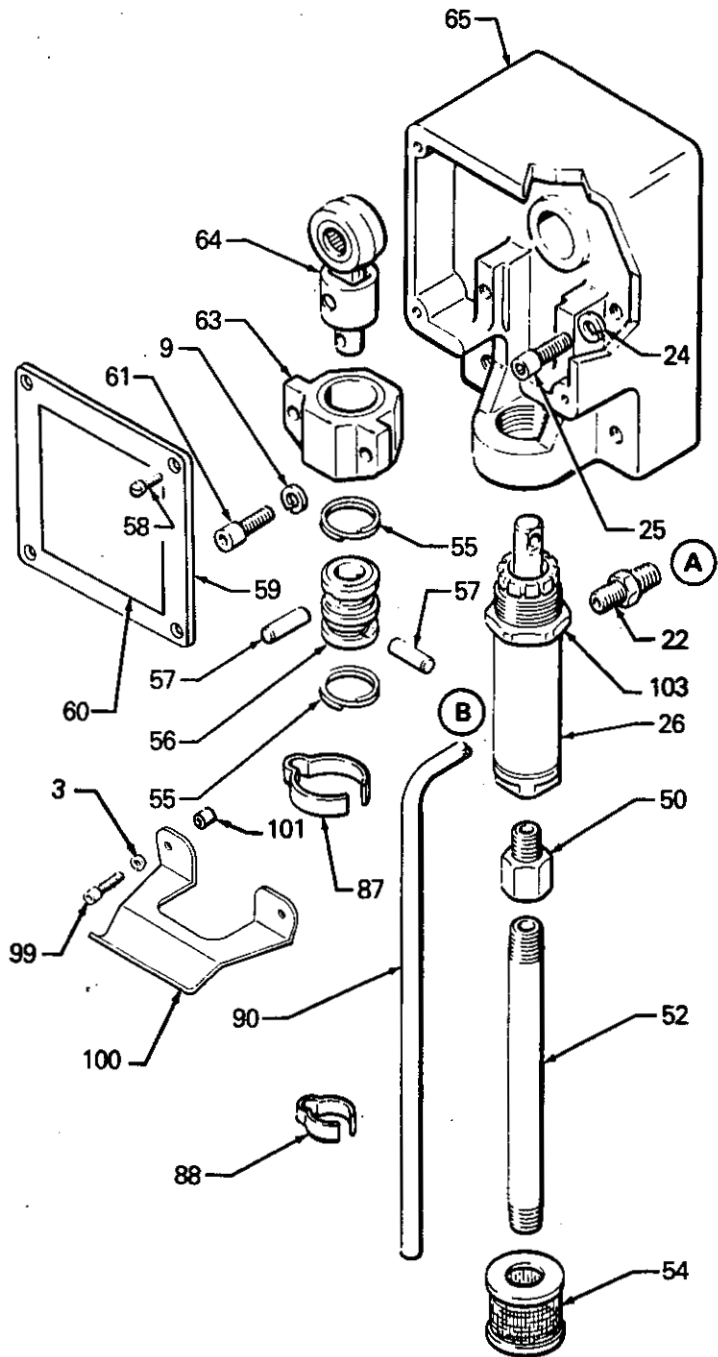
*If the pressure is lower:* shut off and unplug the sprayer, but do not relieve pressure. Turn the differential wheel (S) *counterclockwise* just one notch and repeat Steps 4 and 5. Check the pressure drop again, and repeat if necessary.

**NOTE:** If you adjust the differential wheel, recheck the stall pressure (steps 2 and 3) to be sure the stall pressure has not changed.

6. Follow the **Pressure Relief Procedure** on page 12, flush the water out with mineral spirits, relieve pressure again, then remove the test hose, needle valve and pressure gauge.

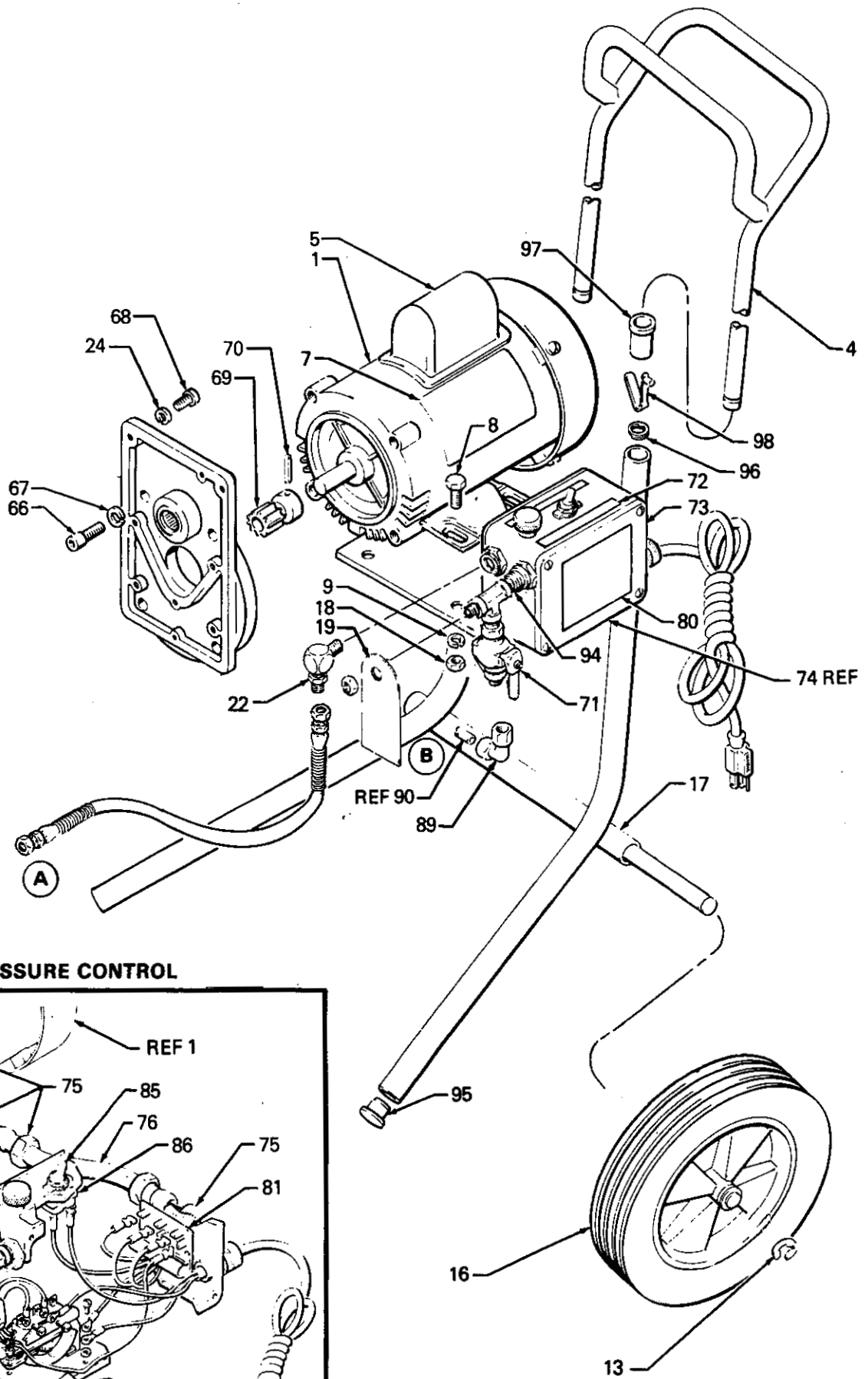
# PARTS LIST

REF NO.	PART NO.	DESCRIPTION	QTY
1	820-250	MOTOR, electric; 0.75 HP; includes replacement items 5, 81	1
3	820-252	LOCKWASHER	2
4	820-468	HANDLE, frame	1
5	820-339	CAPACITOR	1
7	*820-256	LABEL, warning	1
8	820-257	CAPSCREW, hex hd; 5/16-18 x 7/8"	6
9	820-258	LOCKWASHER, spring; 3/8"	8
13	820-469	RING, retaining, ext.	2
16	820-483	WHEEL	2
17	820-470	FRAME	1
18	820-267	NUT, hex; 6-32	6
19	820-268	VALVE, ball	1
20	820-378	HOSE, nylon; 1/4" ID; cpd 1/4 npsm(fbe); 29" (740 mm); spring guards both ends	1
22	820-421	NIPPLE	3
24	820-273	LOCKWASHER	5
25	820-274	CAPSCREW	3
26	820-377	DISPLACEMENT PUMP	1
	Series B	Includes ref. no. 27-49; See page 22	
50	820-350	ADAPTER, increase; 3/8(m) x 1/2 npt(f)	1
52	820-481	TUBE, suction	1
54	820-303	STRAINER	1
55	820-304	SPRING, retaining	2
56	820-305	COUPLING, pump	1
57	820-306	PIN, str, hdls; 0.3125" dia. x 1.023" lg	2
58	820-307	SCREW	4
59	820-308	COVER, gearcase	1
60	820-004	LABEL, identification	1
61	820-309	CAPSCREW, socket head; 5/16-18 x 7/8"	2
63	820-311	BEARING	1
64	820-312	CONNECTING ROD	1
65	820-313	DRIVE ASSEMBLY Includes replacement items 24, 25, 66-68	1
66	820-314	CAPSCREW, socket head; 3/8-16 x 1" (part of Ref No. 65)	4
67	820-315	LOCKWASHER (part of Ref No. 65)	4
68	820-316	CAPSCREW (part of Ref No. 65)	2
69	820-317	GEAR, pinion	1
70	820-318	PIN	1
71	820-319	TAG (part of Ref No. 74)	1
72	820-320	LABEL, caution (part of Ref No. 74)	1
73	820-006	LABEL, identification	1
74	820-321	PRESSURE CONTROL ASSEMBLY Includes replacement items 71, 72, 75(1), 85, 86	1
75	820-322	CONNECTOR, conduit, 90°	2
76	820-473	CONDUIT, electrical	1
77	820-324	BRACKET, mounting	1
78	820-325	SCREW	8
79	820-326	COVER, pressure control	1
80	820-327	LABEL, identification	1
81	820-328	BOARD, circuit (part of Ref No. 1)	1
82	820-329	PLATE, serial	1
83	820-330	RIVET, blind	2
84	820-331	LABEL, warning	1
85	820-341	BOOT, switch	1
86	820-342	SWITCH, toggle	1
87	820-343	CLIP, spring	1
88	820-344	CLIP, spring	1
89	820-345	ELBOW, 90° female, 3/8" OD tube x 1/4 npt(f)	1
90	820-346	TUBE, drain, 3/8" OD	1
92	820-014	THROAT SEAL LIQUID (TSL); 8 oz.	1
93	820-471	ELBOW, street; 1/4 npt(f x m)	1
94	820-472	TEE, street; 1/4 npt(fbe), male run	2
95	820-474	PLUG, tubing	2

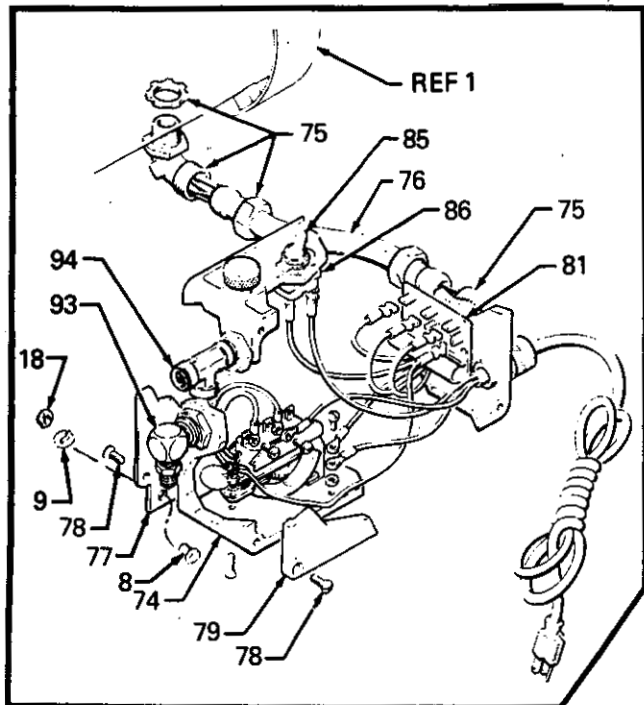


REF NO.	PART NO.	DESCRIPTION	QTY
	96	820-475 RING, retaining	2
	97	820-476 SLEEVE, axle	2
	98	820-477 BUTTON-SNAP	2
	99	820-478 SCREW, mach, hex hd; 1/4-20 x 2-3/4"	2
	100	820-479 HOOK, pail	1
	101	820-480 SPACER	2
	103	820-291 NUT, hex; 1/2-18	1

Order parts by name and series letter of the assembly for which you are ordering.



**REF NO. 74 PRESSURE CONTROL**



**Ref No. 26 Displacement Pump**  
Includes items 27-50

REF NO.	PART NO.	DESCRIPTION	QTY
27	**820-276	. BALL; stainless steel, 0.3125"	1
28	**820-277	. BALL; stainless steel, 0.5"	1
29	**820-278	. SEAL, "U" cup; polyurethane	1
30	**820-463	. GLAND, female	1
31	**820-280	. PACKING, "V"; leather	2
32	**820-281	. GLAND, male	1
33	820-282	. NUT, hex; 1/2-20	1
34	**820-283	. GLAND, male	1
35	**820-284	. PACKING, "V"; leather	2
36	**820-285	. PACKING, "V"; PTFE	3
37	**820-286	. GLAND, female	1
38	820-287	. NUT, packing	1
39	**820-288	. PIN, stop, ball	1
40	820-289	. GUIDE, ball	1
41	820-290	. GASKET; copper	1
43	**820-292	. PACKING, "V"; polyethylene	3
45	**820-464	. WASHER, backup	1
46	820-466	. CYLINDER, pump	1
47	820-465	. ROD, piston	1
48	820-297	. VALVE, intake	1
49	820-484	. VALVE, piston	1
50	820-485	. PLUG, button	1

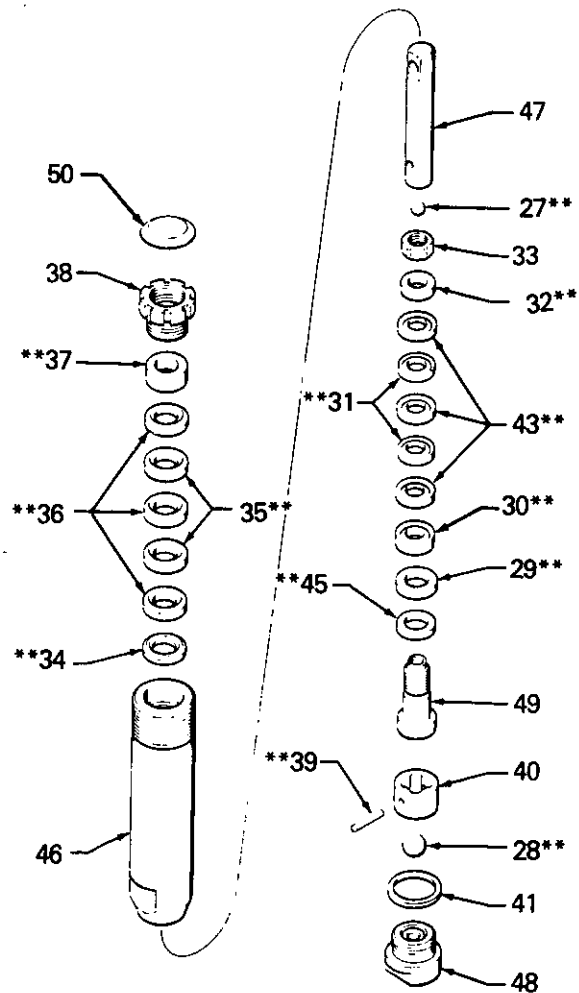
\*\*Supplied in repair kit 820-038.

**820-038 REPAIR KIT**

(Order separately)

Includes:

Ref No.	Qty
27	1
28	1
29	1
30	1
31	2
32	1
34	1
35	2
36	3
37	2
39	2
43	3
45	2



**SERVICE INFORMATION**

Listed below by the assembly changed is the DELETED and ADDED part numbers.

ASSEMBLY CHANGED	PART STATUS	REF. PART NO.	PART NO.	NAME	ASSEMBLY CHANGED	PART STATUS	REF. PART NO.	PART NO.	NAME
820-002 Sprayer Series to D	DELETED	2	820-251	Nut	ADDED	22	820-421	Nipple	
	ADDED (1)	3	820-252	Lockwasher*	DELETED	23	820-272	Connector	
	DELETED	4	820-253	Handle	DELETED (2)	24	820-273	Lockwasher*	
	ADDED	4	820-468	Handle	DELETED (2)	25	820-274	Capscrew*	
	DELETED	6	820-255	Thumbscrew	DELETED	26	820-275	Disp. Pump	
	DELETED	11	820-260	Washer	ADDED	26	820-377	Disp. Pump	
	DELETED	12	820-261	Axle	DELETED	52	820-349	Tube	
	DELETED	13	820-347	Clip	ADDED	52	820-481	Tube	
	ADDED	13	820-469	Ring	DELETED	76	820-323	Conduit	
	DELETED	14	820-263	Cap	ADDED	77	820-473	Conduit	
	DELETED	15	820-264	Washer	DELETED	91	820-254	Plug	
	DELETED	16	820-265	Wheel	ADDED	95	820-474	Plug	
	ADDED	16	820-483	Wheel	ADDED	96	820-475	Ring	
	DELETED	17	820-266	Frame	ADDED	97	820-476	Sleeve	
	ADDED	17	820-470	Frame	ADDED	98	820-477	Button-snap	
	DELETED	20	820-269	Tube	ADDED	99	820-478	Screw	
	ADDED	20	820-378	Hose	ADDED	100	820-479	Hook	
	DELETED	21	820-270	Nut	ADDED	101	820-480	Spacer	
	DELETED	22	820-271	Ferrule	ADDED	103	820-291	Nut	

INTERCHANGEABILITY NOTE: ADDED parts are not interchangeable with DELETED parts.

\*Numbers in parentheses have been added/deleted to/from the quantity.

## TECHNICAL DATA

- Electric motor : 0.75 hp, 1725 rpm, 115 V, 60 HzAc, single phase with automatic reset thermal overload switch. UL listed.
- Electric cord : No. 14 gauge, 3-wire, use 12 ga (min) 3-wire extension cord.
- Paint Pump : 2750 psi (190 bar) maximum working pressure; 0.50 gpm output.
- Wetted parts : Delrin<sup>PTFE</sup>, Leather, Stainless Steel, Polyethylene, Tungsten Carbide, Polyurethane, Nylon, Aluminum, Nitralloy.
- Operating weight : 75 lb (34 kg) approximately
- Electrical requirements : 120 V, 15 amp circuit

## ONE YEAR LIMITED WARRANTY

The Sherwin-Williams Company warrants to the original purchaser for a period of 12 months from the date of purchase that such unit is free from defective material and workmanship when the unit is installed and operated in accordance with the recommendations and instructions of The Sherwin-Williams Company.

This one year limited warranty does not apply to damage or wear caused by abrasion, corrosion or misuse, negligence, accident, faulty installation or tampering in a manner to impair normal operation.

In the event of breach of this warranty The Sherwin-Williams Company will repair or replace such defective parts free of charge if such parts are returned to an authorized Sherwin-Williams sales/service outlet. All transportation costs under this warranty, including return to the factory, if necessary, are to be borne by the purchaser (and prepaid by him).

**There is no other express warranty. The Sherwin-Williams Company hereby disclaims any and all implied warranties, including but not limited to, those of merchantability and fitness for a particular purpose, to the extent permitted by law. The duration of any implied warranties which cannot be disclaimed is limited to the time period (one year) as specified in the express warranty. Liability for consequential, incidental or special damages under any and all warranties is excluded to the extent permitted by law.**