

Landa MHC

Hot Water - Gasoline Powered - Diesel/Oil Heated

LANDA®

Operator's Manual

Pressure Washer



MODELS:	MHC3-24324 1.110-087.0
	MHC3-30324 1.110-038.0
	MHC4-30324 1.110-039.0
	MHC4-30324E 1.110-040.0
	MHC4-30324E/S 1.110-041.0
	MHC4-35324E 1.110-042.0
	MHC4-35324E CAL 1.110-084.0
	MHC4-35324E/B 1.110-077.0
	MHC4-35324E/B CAL 1.110-081.0

For the Landa Dealer nearest you, consult our web page at www.landa.com



Machine Data Label

Model: _____

Date of Purchase: _____

Serial Number: _____

Dealer: _____

Address: _____

Phone Number: _____

Sales Representative: _____

Machine Data Label	2	Pump - 8.918-611.0	49
Table of Contents	3	Pump - 8.928-783.0	50
How To Use This Manual	4	Pump - 8.929-914.0 - MCH324324.....	52
 		LPP Series Pump	54
Safety		LS.3 Series Pump	56
Introduction & Safety Information	5	LM.3 Series Pump	58
Important Safety Information.....	5	Wayne Burner	60
Operations			
Component Identification	10		
Assembly Instructions	12		
Operation Instructions	13		
Detergents And General Operating Techniques. . .	14		
Thermal Pump Protection	14		
Shutdown Instructions	15		
Maintenance			
Storage	16		
After Extended Storage	16		
Engine Maintenance	16		
Maintenance And Service	17		
Unloader Valves	17		
Winterizing Procedure	17		
High Limit Hot Water Thermostat	17		
Pumps	17		
Cleaning of Coils	17		
Rupture Disk	17		
Fuel	17		
Burner Nozzle	18		
Landa MHC Oil Burner	18		
Landa MHC Burner Air Adjustment	18		
Removal of Soot and Heating Coil	19		
Coil Re-installation	19		
Troubleshooting	20		
Preventative Maintenance	23		
Parts			
Landa MHC	26		
Landa MHC4-35324E/B	27		
Landa MHC3-24324	28		
Landa MHC Coil	29		
Labels MCH3-24324	35		
Control Panel	36		
Control Panel MCH3-24324	38		
Downstream Injector	39		
Hose & Spray Gun	40		
Unloader - 4-35324E/B	41		
VBT Unloader Valve	42		
VBA 35 Unloader Valve	44		
VRT3 Unloader	46		
Pump - 8.915-321.0	48		

How To Use This Manual

This manual contains the following sections:

- How to Use This Manual
- Safety
- Operations
- Maintenance
- Parts List

The HOW TO USE THIS MANUAL section will tell you how to find important information for ordering correct repair parts.

Parts may be ordered from authorized dealers. When placing an order for parts, the machine model and machine serial number are important. Refer to the MACHINE DATA box which is filled out during the installation of your machine. The MACHINE DATA box is located on the inside of the front cover of this manual.

Model: _____
Date of Purchase: _____
Serial Number: _____
Dealer: _____
Address: _____
Phone Number: _____
Sales Representative: _____

The model and serial number of your machine is located on a decal attached to the pressure washer.

The SAFETY section contains important information regarding hazardous or unsafe practices of the machine. Levels of hazards are identified that could result in product damage, personal injury, or severe injury resulting in death.

The OPERATIONS section is to familiarize the operator with the operation and function of the machine.

The MAINTENANCE section contains preventive maintenance to keep the machine and its components in good working condition. They are listed in this general order:

- Storage
- Engine Maintenance
- Maintenance And Service
- Unloader Valves
- Winterizing Procedure
- High Limit Hot Water Thermostat
- Pump
- Cleaning of Coils
- Rupture Disk
- Fuel
- Burner Nozzle
- Landa MHC Oil Burner
- Landa MHC Burner Air Adjustment
- Fuel Pressure Adjustment
- Removal of Soot and Heating Coil
- Coil Reinstallation
- Troubleshooting
- Preventative Maintenance

The PARTS LIST section contains assembled parts illustrations and corresponding parts list. The parts lists include a number of columns of information:

- **REF** – column refers to the reference number on the parts illustration.
- **PART NO.** – column lists the part number for the part.
- **QTY** – column lists the quantity of the part used in that area of the machine.
- **DESCRIPTION** – column is a brief description of the part.
- **NOTES** – column for information not noted by the other columns.

NOTE: If a service or option kit is installed on your machine, be sure to keep the KIT INSTRUCTIONS which came with the kit. It contains replacement parts numbers needed for ordering future parts.

NOTE: The manual part number is located on the lower right corner of the front cover.

Introduction & Safety Information

Thank you for purchasing this Pressure Washer.

We reserve the right to make changes at any time without incurring any obligation.

Owner/User Responsibility:

The owner and/or user must have an understanding of the manufacturer's operating instructions and warnings before using this pressure washer. Warning information should be emphasized and understood. If the operator is not fluent in English, the manufacturer's instructions and warnings shall be read to and discussed with the operator in the operator's native language by the purchaser/owner, making sure that the operator comprehends its contents.

Owner and/or user must study and maintain for future reference the manufacturers' instructions.

The operator must know how to stop the machine quickly and understand the operation of all controls. Never permit anyone to operate the engine without proper instructions.

SAVE THESE INSTRUCTIONS

This manual should be considered a permanent part of the machine and should remain with it if machine is resold.

When ordering parts, please specify model and serial number. Use only identical replacement parts.

This machine is to be used only by trained operators.

Important Safety Information



WARNING: To reduce the risk of injury, read operating instructions carefully before using.

AVERTISSEMENT: Pour réduire le risque de blessures, lire attentivement les instructions de fonctionnement avant l'utilisation.

ADVERTENCIA: Para reducir el riesgo de lesiones, lea cuidadosamente las instrucciones de operación antes de usar.

1. Read the owner's manual thoroughly. Failure to follow instructions could cause malfunction of the machine and result in death, serious bodily injury and/or property damage.



2. Know how to stop the machine and bleed pressure quickly. Be thoroughly familiar with the controls.

3. Stay alert — watch what you are doing.

DANGER: Keep wand, hose, and water spray away from electric wiring or fatal electric shock may result.

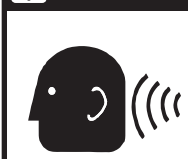
AVERTISSEMENT: Garder la lance, le boyau et le jet d'eau à l'écart de tout câblage électrique ou des chocs électriques mortels pourraient survenir.

ADVERTENCIA: Mantenga la varilla, la manguera y el rocío de agua lejos del cableado eléctrico, ya que podrían producirse descargas eléctricas fatales.

4. All installations must comply with local codes. Contact your electrician, plumber, utility company or the selling dealer for specific details

Safety.

WARNING



EAR PROTECTION
MUST BE WORN

WARNING: This machine exceeds 85 db appropriate ear protection must be worn.

AVERTISSEMENT: Cette machine excède 85 dB et une protection de l'ouïe appropriée doit être portée.

ADVERTENCIA: Esta máquina supera los 85 dB, se debe usar protección auditiva adecuada.

WARNING



USE PROTECTIVE
EYE WEAR
AND CLOTHING
WHEN OPERATING
THIS EQUIPMENT.

WARNING: High pressure spray can cause paint chips or other particles to become airborne and fly at high speeds. To avoid personal injury, eye, face, hand and foot safety devices must be worn.

AVERTISSEMENT: Un jet haute pression peut écailler la peinture

ou provoquer l'émission d'autres particules dans l'air et leur projection à hautes vitesses. Pour éviter les lésions corporelles, une protection des yeux, du visage, des mains et des pieds doit être portée lors de l'utilisation de cet équipement.

ADVERTENCIA: El rociado a alta presión puede hacer que las partículas de pintura u otras partículas se transporten por aire y vuelen a altas velocidades. Para evitar lesiones personales, se deben usar dispositivos de seguridad para ojos, manos y pies.

- Always wear properly rated eye protection such as safety goggles or face shield while spraying. (Safety glasses do not provide full protection.)
- Keep operating area clear of all persons.

WARNING: Flammable liquids can create fumes which can ignite, causing property damage or severe injury.

AVERTISSEMENT: Des liquides inflammables peuvent produire des vapeurs qui peuvent s'enflammer, causant ainsi des dommages à la propriété ou des blessures graves.

ADVERTENCIA: Los líquidos inflamables pueden generar vapores que pueden encenderse y causar daños a la propiedad o lesiones graves.

WARNING: Risk of explosion — Operate only where open flame or torch is permitted.

WARNING



RISK OF EXPLOSION:
OPERATE ONLY WHERE
OPEN FLAME OR TORCH
IS PERMITTED

AVERTISSEMENT: Risque d'explosion-Utiliser uniquement dans des endroits où l'utilisation d'une flamme nue ou d'une torche est permise.

ADVERTENCIA: Riesgo de explosión. Opere sólo donde se permitan llamas abiertas o soplete.

WARNING



RISK OF FIRE.
DO NOT ADD FUEL
WHEN OPERATING
MACHINE.

WARNING: Risk of fire — Do not add fuel when the product is operating or still hot.

AVERTISSEMENT: Risque d'incendie-Ne pas ajouter de carburant pendant que la machine fonctionne ou est encore chaude.

ADVERTENCIA: Riesgo de incendio — No agregue combustible cuando el producto está en funcionamiento o aún está caliente.

WARNING: Do not use gasoline crankcase drainings or oil containing gasoline, solvents or alcohol. Doing so will result in fire and/or explosion.

AVERTISSEMENT: Ne pas utiliser d'essence, de drainage du carter de moteur ou d'essence contenant de l'huile, de solvants ou de l'alcool.

ADVERTENCIA: No utilice el drenaje del cárter de gasolina ni aceite que contenga gasolina, solventes o alcohol. Hacerlo resultará en incendio y/o explosión.

WARNING



RISK OF FIRE.
DO NOT SPRAY
FLAMMABLE LIQUIDS

WARNING: Risk of fire — Do not Spray flammable liquids.

AVERTISSEMENT: Risque d'incendie-Ne pas pulvériser de liquides inflammables.

ADVERTENCIA: Riesgo de incendio — No rocíe líquidos inflamables.

- Allow engine to cool for 2 minutes before refueling. If any fuel is spilled, make sure the area is dry before testing the spark plug or starting the engine. (Fire and/or explosion may occur if this is not done.)

Gasoline engines on mobile or portable equipment shall be refueled:

- outdoors;
- with the engine on the equipment stopped;

- c. with no source of ignition within 10 feet of the dispensing point; and
- d. with an allowance made for expansion of the fuel should the equipment be exposed to a higher ambient temperature.

In an overfilling situation, additional precautions are necessary to ensure that the situation is handled in a safe manner.

WARNING: Risk of injury. Disconnect battery ground terminal before servicing.

AVERTISSEMENT: Risque de blessures. Débrancher la borne de mise à la terre de la batterie avant de procéder à des opérations d'entretien.

ADVERTENCIA: Riesgo de lesion. Desconecte la terminal de tierra de la batería, antes de realizar servicio.

- 8. When in use, do not place machine near flammable objects as the engine is hot.
- 9. Oil burning appliances shall be installed only in locations where combustible dusts and flammable gases or vapors are not present. Do not store or use gasoline near this machine.

Use heating oil or diesel. If diesel is used, it is recommended to add a soot remover to every tankful to reduce soot build up on the heating coil.

- 10. Use No. 1 or No. 2 heating oil (ASTM D306) only. **NEVER** use gasoline in your fuel oil tank. Gasoline is more combustible than fuel oil and could result in a serious explosion. **NEVER** use crankcase or waste oil in your burner. Fuel unit malfunction could result from contamination.
- 11. Do not confuse gasoline and fuel oil tanks. Keep proper fuel in proper tank.



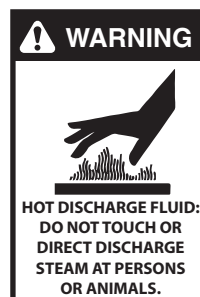
WARNING: Risk of injury. Hot surfaces can cause burns. Use only designated gripping areas of spray gun and wand. Do not place hands or feet on non-insulated areas of the pressure washer.

AVERTISSEMENT: Risque de blessures. Les surfaces chaudes peuvent causer des brûlures.

Utiliser uniquement les zones de prise désignées du pistolet pulvérisateur et de la lance. Ne pas placer les mains ou les pieds sur des endroits non isolés de la laveuse à pression.

ADVERTENCIA: Riesgo de lesiones. Las superficies calientes pueden causar quemaduras. Use sólo las áreas de agarre designadas de la pistola rociadora y la varilla. No coloque las manos o los pies en áreas sin aislamiento de la lavadora a presión.

- 12. Transport/Repair with fuel tank EMPTY or with fuel shut-off valve OFF.



WARNING: Hot discharge fluid. Do not touch or direct discharge stream at persons or animals or severe injury or death will result.

AVERTISSEMENT: Liquide de décharge chaud. Ne pas toucher ou décharger directement le jet vers des personnes ou des animaux, car cela risquerait de

causer des blessures graves ou même la mort. ADVERTENCIA: Fluido de descarga caliente. No toque ni dirija el flujo de descarga a las personas. WARNING: This machine produces hot water and must have insulated components attached to protect the operator.

AVERTISSEMENT: Cette machine produit de l'eau chaude et doit comporter des composants isolés attachés pour protéger l'opérateur.

ADVERTENCIA: Esta máquina produce agua caliente y se deben tener componentes aislados para proteger al operador.

- 13. To reduce the risk of injury, close supervision is necessary when a machine is used near children. Do not allow children to operate the pressure washer. **This machine must be attended during operation.**

Safety



WARNING: Grip cleaning wand securely with both hands before starting. Failure to do this could result in injury from a whipping wand.

AVERTISSEMENT: Agripper la lance de nettoyage avec les deux mains avant de commencer. Le non-respect de cette consigne pourrait mener à des blessures

causées par le mouvement violent de la lance.

ADVERTENCIA: Sujete la lanza de limpieza firmemente con ambas manos antes de comenzar. De lo contrario, podría sufrir lesiones a partir de un latigazo de la lanza.

14. Never make adjustments on machine while in operation.

15. Be certain all quick coupler fittings are secured before using pressure washer.



WARNING: High pressure developed by these machines will cause personal injury or equipment damage. Keep clear of nozzle. Use caution when operating. Do not direct discharge stream at people or animals, or severe injury or death will result.

AVERTISSEMENT: La haute pression générée par ces machines causera

des lésions corporelles ou des dommages à l'équipement. Se tenir à l'écart de la buse. Faire preuve de prudence lors de l'utilisation. Ne pas décharger directement le jet vers des personnes ou des animaux, car cela risquerait de causer des blessures graves ou même la mort.

ADVERTENCIA: La alta presión desarrollada por estas máquinas causará lesiones personales o daños al equipo. Manténgase alejado de la boquilla. Tenga cuidado al operar. No dirija el flujo de descarga a las personas, ya que se producirán lesiones graves o la muerte



WARNING: Protect machine from freezing.

AVERTISSEMENT: Protéger la machine contre le gel.

ADVERTENCIA: Proteja la máquina contra congelamiento.

16. To keep machine in best operating conditions, it is important you protect machine from freezing. Failure to protect machine from freezing could cause malfunction of the machine and result in death, serious bodily injury, and/or property damage. Follow storage instructions specified in this manual.

17. Inlet water must be clean fresh water and no hotter than 90°F.



DANGER: Risk of asphyxiation. Use this product only in a well ventilated area.

DANGER: Risque d'asphyxie. Utiliser ce produit uniquement dans un endroit bien ventilé.

ADVERTENCIA: Riesgo de asfixia. Use este producto sólo en un área bien ventilada.

18. Avoid installing machines in small areas or near exhaust fans. Adequate oxygen is needed for combustion or dangerous carbon monoxide will result.

19. Manufacturer will not be liable for any changes made to our standard machines or any components not purchased from us.

20. The best insurance against an accident is precaution and knowledge of the machine.



WARNING: Be extremely careful when using a ladder, scaffolding or any other relatively unstable location. The cleaning area should have adequate slopes and drainage to reduce the possibility of a fall due to slippery surfaces.

AVERTISSEMENT: Faire preuve d'une extrême prudence au moment d'utiliser une échelle, des

échafaudages ou toute autre surface relativement instable. La zone de nettoyage doit avoir une pente et un drainage adéquats pour réduire la possibilité d'une chute due à une surface glissante.

ADVERTENCIA: Tenga mucho cuidado al usar una escalera, andamios o cualquier otra ubicación relativamente inestable. El área de limpieza debe tener pendientes y drenaje adecuados para reducir la posibilidad de una caída debido a las superficies resbaladizas.

21. Do not allow acids, caustic or abrasive fluids to pass through the pump.

22. Never run pump dry or leave spray gun closed longer than 1-2 minutes.
23. Machines with shut-off spray gun should not be operated with the spray gun in the off position for extensive periods of time as this may cause damage to the pump.
24. Protect discharge hose from vehicle traffic and sharp objects. Inspect condition of high pressure hose before using or bodily injury may result.
25. Before disconnecting discharge hose from water outlet, turn burner off and open spray gun to allow water to cool below 100°F before stopping the machine. Then open the spray gun to relieve pressure. Failure to properly cool down or maintain the heating coil may result in a steam explosion.
26. Do not overreach or stand on unstable support. Keep good footing and balance at all times.
27. Do not operate this machine when fatigued or under the influence of alcohol, prescription medications, or drugs.
28. Use only kerosene, No. 1 home heating fuel, or diesel in burner fuel tank. If diesel is used, add a soot remover to every tankful.



WARNING: Do not spray machine or any people, animals or electrical parts.

AVERTISSEMENT: Ne pas vaporiser sur la machine ou les gens, les animaux ou les pièces électriques.

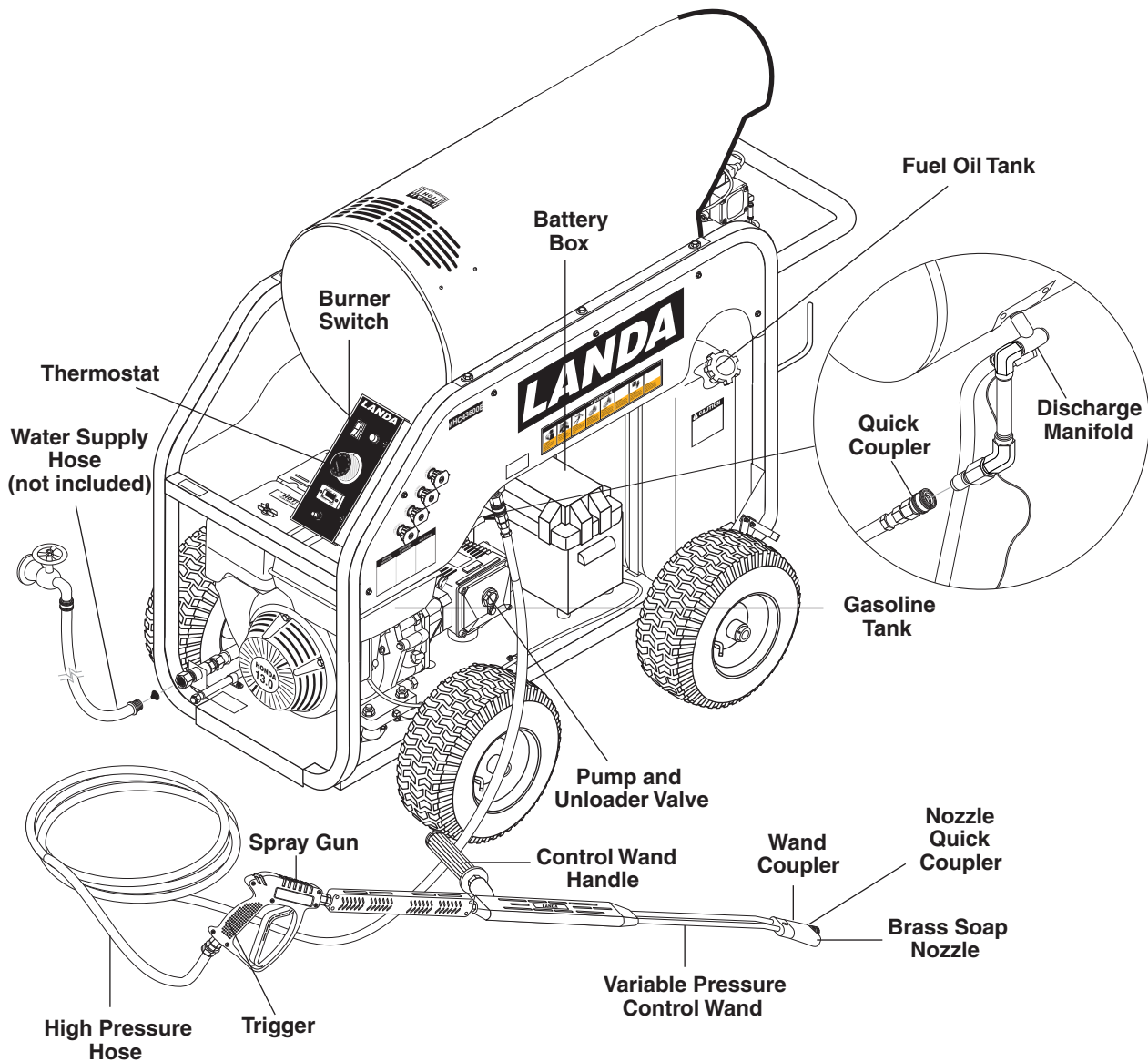
ADVERTENCIA: No rocíe la máquina ni a las personas, animales o partes eléctricas.



Follow the maintenance instructions specified in the manual.

Operations

Component Identification



Pump — Delivers a specific gpm to the high pressure nozzle which develops pressure.

Spray Gun — Controls the application of water and detergent onto cleaning surface with trigger device. Includes safety latch.

Detergent Injector — Allows you to siphon and mix detergents.

Wand — Must be connected to the spray gun.

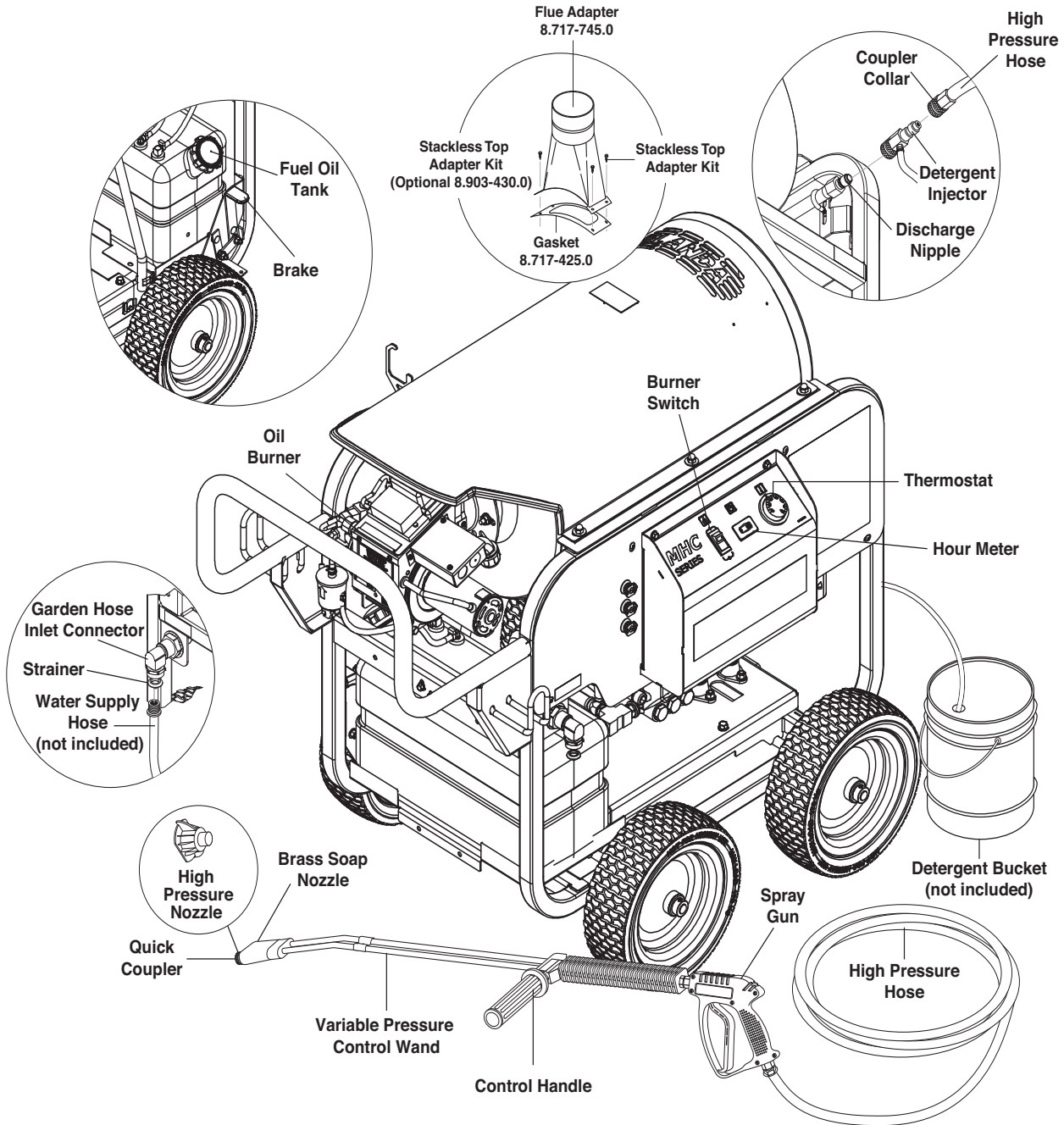
High Pressure Hose — Connect one end to water pump high pressure discharge nipple and the other end to spray gun.

Rupture Disk — Secondary pressure release in the unlikely event the unloader valve fails.

Unloader Valve — Safety device which, when the spray gun closes, prevents over pressurization (not shown).

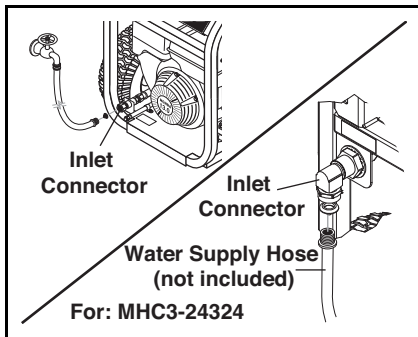
NOTE: If trigger on spray gun is released for more than 2 minutes, water will leak from the pump protector. Warm water will discharge from pump protector onto floor. This system prevents internal pump damage

Component Identification - MHC3-24324

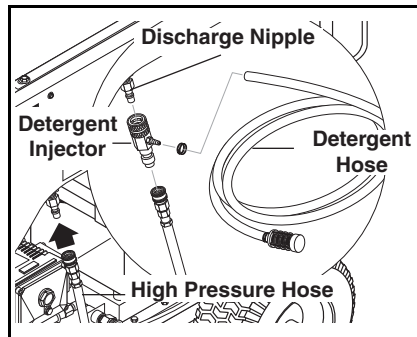


Operations

Assembly Instructions

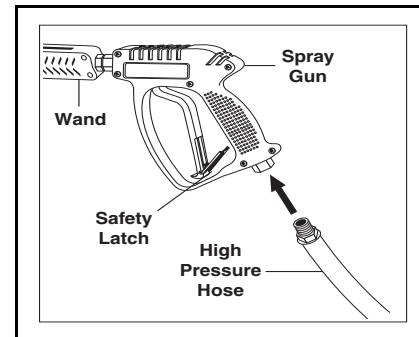


STEP 1: Attach a 3/4" garden hose to inlet connector. Minimum flow should be 5 gpm.

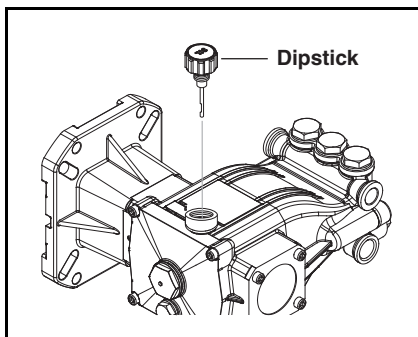


STEP 2: Attach high pressure hose to discharge nipple using quick coupler. Lock coupler securely into place by pulling back coupler collar and inserting it onto discharge nipple, then pushing collar forward to lock in place.

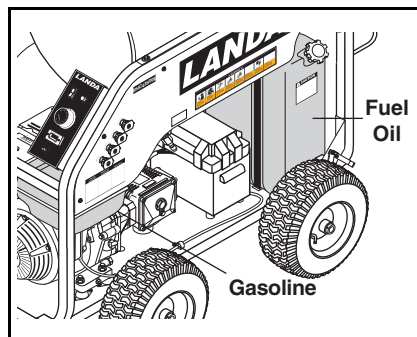
NOTE: If using detergent injector, attach detergent injector to discharge nipple using quick coupler. Attach high pressure hose to other end of detergent injector.



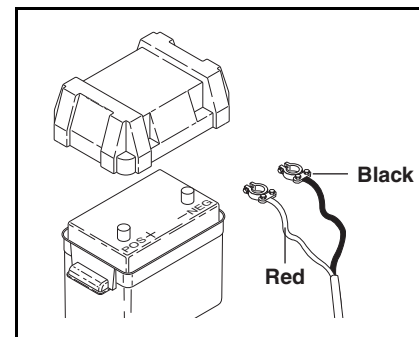
STEP 3: Attach wand to spray gun using teflon tape on threads to prevent leakage. Attach swivel connector on discharge hose to spray gun using teflon tape on threads. Attach swivel connector on high pressure hose to spray gun using teflon tape on threads. Engage safety latch to prevent from triggering gun.



STEP 4: Check oil level on sight glass on side of pump. Oil should be visible one-half way up sight glass (SAE 10W-40 non-foaming). The oil level can also be checked by using the dipstick on the top of the pump.



STEP 5: Fill gasoline tank and check engine oil. Fill fuel tank. Do not confuse gasoline and fuel oil (diesel) tanks. Keep proper fuel in proper tanks.

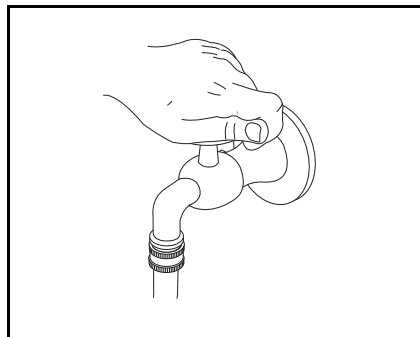


STEP 6: On electric start models only, you will need to install a battery making sure that the red cable is attached to the positive terminal. Use a Group U1 garden tractor style type of battery rated for 300 CCA (battery not included).

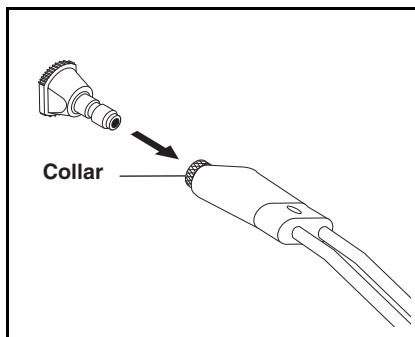
CAUTION: These machines are intended to be protected from outside environments.

ATTENTION: Ces machines sont conçues pour être protégées contre l'environnement extérieur.

Operation Instructions

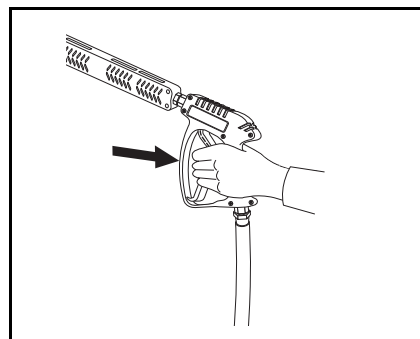


STEP 1: Turn on water at faucet and pull trigger on spray gun allowing water to flow until all air has discharged from system. Check for water leaks; tighten as needed.

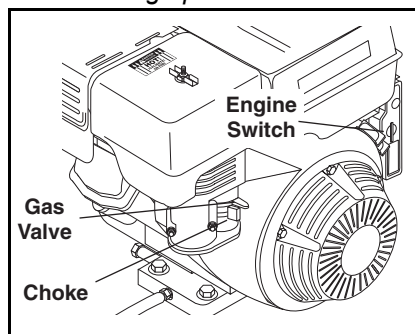


STEP 2: Before installing nozzle, turn on water supply and run machine allowing water to flush through the system until clear. Pull wand coupler collar back and insert desired pressure nozzle into coupler then secure by pushing coupler collar forward.

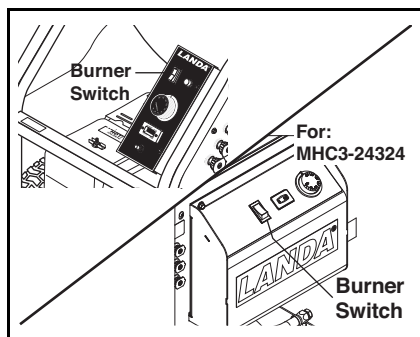
NOTE: Variable pressure control wand handle must be turned clockwise to enable water to flow out of the high pressure nozzle.



STEP 4: With spray nozzle pointed away from you or anyone else, press trigger on spray gun to obtain pressurized cold water spray.



STEP 3: Read engine manual, turn on gas valve and choke. Turn the engine switch to the START position and hold it there until the engine starts.



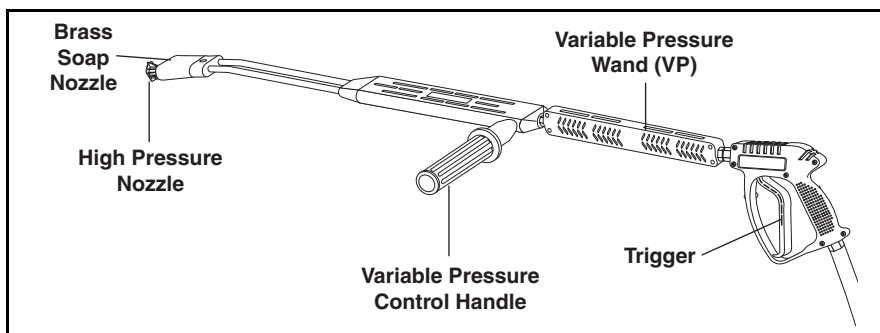
STEP 5: For hot water, turn burner switch ON when a steady stream of water flows out of the spray gun. Burner will light automatically.

NOTE: Do not start machine with burner switch on.

NOTE: Do not use the electric starter for more than five seconds at a time. If the engine fails to start, release the switch and wait ten seconds before operating the starter again. When the engine starts, allow the engine switch to return to the ON position. If the engine is to be started without the battery, turn switch to start position and pull rope to start. Turn off choke.

WARNING: Starter cord kickback (rapid retraction) can result in bodily injury. Kickback will pull hand and arm toward engine faster than you can let go. ALWAYS relieve spray gun pressure before pulling starter cord. Pull starter cord slowly until resistance is felt, then pull rapidly.

AVERTISSEMENT: Le retour du cordon de lancement (rétraction rapide) peut causer des lésions corporelles. La rétraction rapide de la corde du démarreur (recul) attire la main et le bras vers le moteur plus vite qu'il n'est possible de lâcher la corde. Toujours retenir la charge solidement en place avant de conduire. Tirer lentement sur le cordon de lancement jusqu'à ce qu'une résistance soit sentie, puis tirer rapidement.



Selection of high or low pressure is accompanied by turning the handle. **NOTE:** High pressure nozzle must be inserted at end of wand to obtain high pressure. To apply soap read Detergents and General Operating Techniques section.

Operations

Detergents And General Operating Techniques

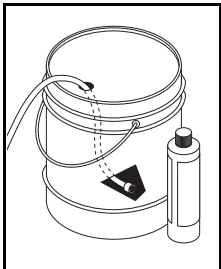


WARNING: Some detergents may be harmful if inhaled or ingested, causing severe nausea, fainting or poisoning. The harmful elements may cause property damage or severe injury.

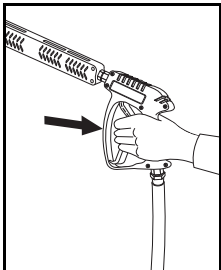
AVERTISSEMENT: Certains détergents peuvent être dangereux s'ils sont inhalés ou ingérés, provoquant de fortes

nausées, des évanouissements et l'empoisonnement. Les éléments dangereux peuvent causer des dommages à la propriété ou des blessures graves.

STEP 1: Use detergent designed specifically for pressure washers. Household detergents could damage the pump. Prepare detergent solution as required by the manufacturer. Fill a container with pressure washer detergent. Place the filter end of detergent suction tube into the detergent container.



STEP 2: Apply safety latch to spray gun trigger. Secure black detergent nozzle into quick coupler. **NOTE:** Detergent cannot be applied using the Yellow nozzle.



STEP 3: With the motor running, pull trigger to operate machine. Liquid detergent is drawn into the machine and mixed with water. Apply detergent to work area. Do not allow detergent to dry on surface.

IMPORTANT: You must flush the detergent injection system after each use by placing the suction tube into a bucket of clean water, then run the pressure washer in low pressure for 1-2 minutes.

Thermal Pump Protection

If you run your pressure washer for 3-5 minutes without pressing the trigger on the spray gun, circulating water in the pump can reach high temperatures. When the water reaches this temperature, the pump protector engages and cools the pump by discharging the warm water onto the ground. This thermal device prevents internal damage to the pump.

Cleaning Tips

Pre-rinse cleaning surface with fresh water. Place detergent suction tube directly into cleaning solution and apply to surface at low pressure (for best results, limit your

work area to sections approximately 6 feet square and always apply detergent from bottom to top). Allow detergent to remain on surface 1-3 minutes. Do not allow detergent to dry on surface. If surface appears to be drying, simply wet down surface with fresh water. If needed, use brush to remove stubborn dirt. Rinse at high pressure from top to bottom in an even sweeping motion keeping the spray nozzle approximately 1 foot from cleaning surface. Use overlapping strokes as you clean and rinse any surface. For best surface cleaning action spray at a slight angle.

Recommendations:

- Before cleaning any surface, an inconspicuous area should be cleaned to test spray pattern and distance for maximum cleaning results.
- If painted surfaces are peeling or chipping, use extreme caution as pressure washer may remove the loose paint from the surface.
- Keep the spray nozzle a safe distance from the surface you plan to clean. High pressure wash a small area, then check the surface for damage. If no damage is found, continue to pressure washing.

CAUTION - Never use:

- Bleach, chlorine products and other corrosive chemicals
- Liquids containing solvents (i.e., paint thinner, gasoline, oils)
- Tri-sodium phosphate products
- Ammonia products or acid-based products

These chemicals will harm the machine and will damage the surface being cleaned.

ATTENTION: Ne jamais utiliser:

- Eau de Javel, produits à base de chlore et autres produits chimiques corrosifs
- Liquides contenant des solvants (c.-à-d. diluant à peinture, essence, huiles, etc.)
- Produits à base de tripolyphosphate de sodium
- Ammoniac ou produits à base d'acide

Ces produits chimiques endommageront la machine et endommageront la surface étant nettoyée.

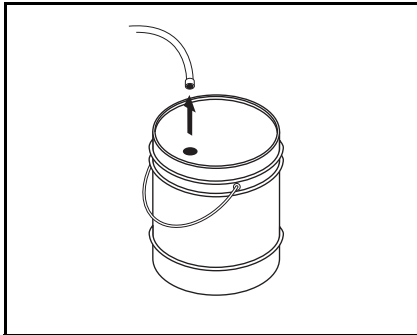
PRECAUCIÓN: Nunca utilice:

- Blanqueadores, productos con cloro u otros químicos corrosivos.
- Solventes (por ejemplo: diluyente de pintura, gasolina, aceites).
- Productos de fosfato trisódico.
- Productos de amoníaco.
- Productos a base de ácido.
- Estos químicos provocarán daño en la máquina y dañarán superficie que se está limpiando.

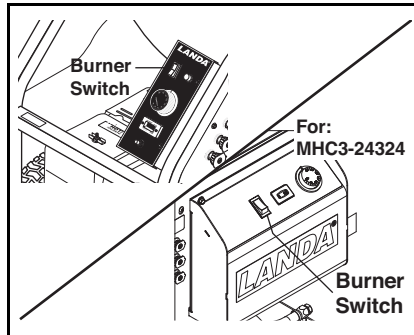
Rinsing

It will take a few seconds for the detergent to clear. Apply safety latch to spray gun. Remove black soap nozzle from the quick coupler. Select and install the desired high pressure nozzle. **NOTE:** You can also stop detergent from flowing by simply removing detergent siphon tube from

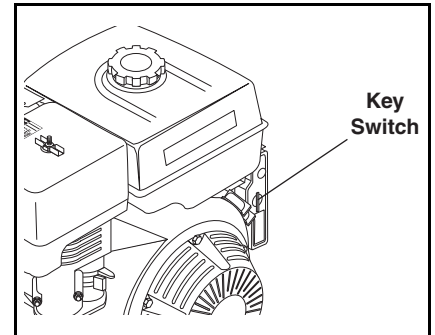
Shutdown Instructions



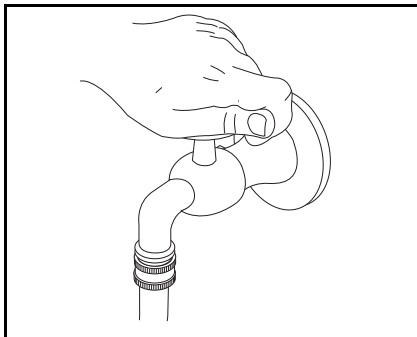
STEP 1: Remove detergent suction tube from container and insert into one (1) gallon of fresh water. Pull trigger on spray gun and siphon water for one minute.



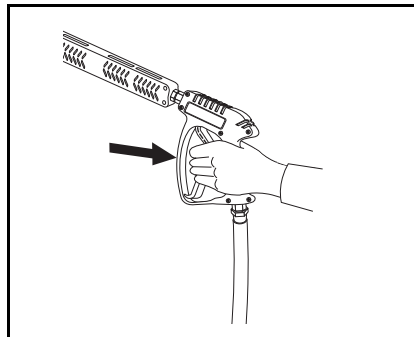
STEP 2: Turn burner switch off and continue spraying, allowing the water to cool below 100° F.



STEP 3: Turn engine off.



STEP 4: Turn off water supply.



STEP 5: Open spray gun to relieve remaining pressure.

Maintenance

Storage

CAUTION: Always store your pressure washer in a location where the temperature will not fall below 32°F (0°C). The pump in this machine is susceptible to permanent damage if frozen. **FREEZE DAMAGE IS NOT COVERED BY WARRANTY.**

ATTENTION: Toujours entreposer la laveuse à pression dans un endroit où la température ne sera pas inférieure à 32°C (0 °F). La pompe sur cette machine est susceptible de subir des dommages si elle est exposée au gel. **LES DOMMAGES DUS AU GEL NE SONT PAS COUVERTS PAR LA GARANTIE**

PRECAUCIÓN: Siempre almacene la hidrolavadora en una ubicación donde la temperatura no llegue a ser menor que 32°F (0°C). La bomba en esta máquina es susceptible a daño irreversible si se congela. **DAÑOS POR CONGELAMIENTO NO ESTAN CUBIERTOS POR GARANTÍA.**

1. Stop the pressure washer, squeeze spray gun trigger to release pressure.
2. Detach water supply hose and high pressure hose.
3. Turn on the machine for a few seconds, until remaining water exits. Turn engine off immediately.
4. Drain the gas and oil from the engine.
5. Do not allow high pressure hose to become kinked.
6. Store the machine and accessories in a room which does not reach freezing temperatures.

CAUTION: Failure to follow the above directions will result in damage to your pressure washer.

ATTENTION: Le non-respect des directives ci-dessus entraînera des dommages à la laveuse à pression.

PRECAUCIÓN: No seguir las instrucciones anteriores pueden resultar en daños de tu hidrolavadora.

When the pressure washer is not being operated or is being stored for more than one month, follow these instructions:

1. Replenish engine oil to upper level.
2. Drain gasoline from fuel tank, fuel line, fuel valve and carburetor.
3. Pour about one teaspoon of engine oil through the spark plug hole, pull the starter grip several times and replace the plug. Then pull the starter grip slowly until you feel increased pressure which indicates the piston is on its compression stroke and leave it in that position. This closes both the intake and exhaust valves to prevent rusting of cylinder.

4. Cover the pressure washer and store in a clean, dry place that is well ventilated away from open flame or sparks. **NOTE:** The use of a fuel additive, such as STA-BIL[®], or an equivalent, will minimize the formulation of fuel deposits during shortage. Such additives may be added to the gasoline in the fuel tank of the engine, or to the gasoline in a storage container.

After Extended Storage



CAUTION: Prior to restarting, thaw out any possible ice from pressure washer hoses, spray gun or wand.

ATTENTION: Avant de redémarrer, faire fondre la glace se trouvant sur les boyaux, le pistolet pulvérisateur ou la lance de la laveuse à pression. **PRECAUCIÓN:** Antes de reiniciar, descongele cualquier posible hielo en las mangueras, pistola pulverizadora o lanza.

Engine Maintenance

During the winter months, rare atmospheric conditions may develop which will cause an icing condition in the carburetor. If this develops, the engine may run rough, lose power and may stall. This temporary condition can be overcome by deflecting some of the hot air from the engine over the carburetor area. **NOTE:** Refer to the engine manufacturer's manual for service and maintenance of the engine.

Preventative Maintenance

1. Check to see that the water pump is properly lubricated.
2. Follow *Winterizing Procedures* to prevent freeze damage to the pump and coils.
3. Always neutralize and flush detergent from system after use.
4. If water is known to be high in mineral content, use a water softener in your water system or de-scale as needed.
5. Do not allow acidic, caustic or abrasive fluids to be pumped through system.
6. Always use high grade quality Landa cleaning products.
7. Never run pump dry for extended periods of time.
8. Use clean fuel-kerosene, No. 1 fuel oil or diesel. Replace fuel filter every 100 hours of operation. Avoid water contaminated fuel as it will seize up

the fuel pump. Desoot coils monthly or use an additive if diesel is being used.

9. If machine is operated with smoking or eye burning exhaust, coils will soot up, not letting water reach maximum operating temperature. (See section on Air Adjustments.)
10. Never allow water to be sprayed on or near engine or burner assembly or any electrical component.
11. Periodically delime coils as per instructions.
12. Check to see that engine is properly lubricated.

It is advisable, periodically, to visually inspect the burner. Check air inlet to make sure it is not clogged or blocked. Wipe off any oil spills and keep this equipment clean and dry.

The areas around the pressure washer should be kept clean and free of combustible materials, gasoline and other flammable vapors and liquids.

The flow of combustion and ventilating air to the burner must not be blocked or obstructed in any manner.

Maintenance And Service

Unloader Valves

WARNING: *The unloader valve on this pressure washer has been factory set and sealed and is a field nonadjustable part. Tampering with the factory setting may cause personal injury and/or property damage, and will void the manufacturer warranty.*

AVERTISSEMENT: *La soupape de décompression sur cette laveuse à pression a été réglée en usine, puis scellée, et est une pièce non réglable. L'altération du paramètre de l'usine pourrait causer des lésions corporelles et/ou des dommages à la propriété, et annulera la garantie du fabricant.*

Winterizing Procedure

Damage due to freezing is not covered by warranty. Adhere to the following cold weather procedures whenever the washer must be stored or operated outdoors under freezing conditions.

During winter months, when temperatures drop below 32°F, protecting your machine against freezing is necessary. Store the machine in a heated room. If this is not possible then mix a 50/50 solution of anti-freeze/water into a 5 gallon bucket. Place a short section of garden hose into the bucket and connect it to the machine. Elevate the bucket and turn the pump on to siphon the anti-freeze through the machine. If compressed air is available, an air fitting can be

screwed into the inlet connector and, by injecting compressed air, all water will be blown out of the system.

High Limit Hot Water Thermostat

For safety, each machine is equipped with a high limit control switch. In the event that the temperature of the water should exceed its operating temperature, the high limit control will turn the burner off until the water cools.

Pumps

Use only SAE 10W-40 non-detergent oil. Change oil after the first 50 hours of use. Thereafter, change the oil every three months or at 500 hour intervals. Oil level should be checked by using the dipstick found on top of the pump or the red dot visible through the oil gauge window. Oil should be maintained at that level.

Cleaning of Coils

In alkaline water areas, lime deposits can accumulate rapidly inside the coil pipes. This growth is increased by the extreme heat build up in the coil. The best prevention for liming conditions is to use high quality cleaning detergents. In areas where alkaline water is an extreme problem, periodic use of Landa Coil Descaler (part #8.914-296.0) will remove lime and other deposits before coil becomes plugged.

Periodic descaling of the heating coil is recommended so please consult your local Landa Dealer for instructions.

Rupture Disk

If pressure from pump or thermal expansion should exceed safe limits, the rupture disk will burst allowing high pressure to be discharged through hose to ground. When disk ruptures it will need to be replaced.

Torque the replacement rupture disk to 35 foot pounds.

Fuel

Use clean fuel oil that is not contaminated with water and debris. Replace fuel filter and drain tank every 100 hours of operation.

Use No. 1 or No. 2 Heating Oil (ASTM D306) only. **NEVER** use gasoline in your burner tank. Gasoline is more combustible than fuel oil and a serious explosion could result. **NEVER** use crankcase or waste oil in your burner. Fuel unit malfunction could result from contamination.

Fuel Control System

These machines utilize a fuel solenoid valve located on the fuel pump to control the flow of fuel to the combustion chamber. This solenoid valve, which is normally closed, is activated by a flow switch when water is flowing through it. When an operator releases the trigger on the spray gun, the flow of water through the flow switch stops, turning off the current to the fuel solenoid. The solenoid then closes, shutting off the supply of fuel to the combustion chamber. Controlling the flow of fuel in this way allows for an instantaneous burn or no burn situation, thereby eliminating high and low water temperatures, and combustion smoke normally associated with machines incorporating a spray gun.

CAUTION: Periodic inspection is recommended to insure that the fuel solenoid valve functions properly. This can be done by operating the machine and checking to see that when the trigger on the spray gun is in the off position, the burner is not firing.

ATTENTION: Une inspection périodique est recommandée pour assurer que l'électrovalve d'alimentation en carburant fonctionne correctement. Cela peut être effectué en utilisant la machine et en s'assurant que le brûleur n'est pas allumé lorsque le pistolet pulvérisateur se trouve en position d'arrêt.

PRECAUCION. Es recomendado realizar una inspección periódica para asegurar que la válvula solenoide de combustible funciona adecuadamente. Esto se puede realizar operando la máquina y revisar si al momento de estar el gatillo de la pistola pulverizadora en posición de apagado, el quemador no está encendido.

Burner Nozzle

The oil burner on this machine is preset for operation at altitudes below 500 feet. If operated at higher altitudes, it may be necessary to adjust the air band for a #1 or #2 smoke spot on the Bacharach scale.

To adjust, start machine and turn burner ON. Loosen two locking screws found on the air band and close air band until black smoke appears from burner exhaust vent. Note air band position. Next, slowly open the air band until white smoke just starts to appear. Turn air band halfway back to the previously noted position. Tighten locking screws.

For higher altitudes, the air band opening may need to be increased; for lower altitude, the air band may need to be decreased.

For higher humidity, the air band opening may need to be increased; for lower relative humidity, the air band may need to be decreased.

For higher ambient temperatures the air band opening may need to be increased; for lower ambient temperatures, the air band opening may need to be decreased.

Adjust to your operating location's environment as needed for best smoke spot and performance compliant with local, state, and federal regulations.

Landa MHC Oil Burner

Burner Air Adjustment: To adjust fuel pressure, First install a pressure gage into the port just after the pump fuel exit. Turn the adjusting screw (located at the regulator port) clockwise to increase, and counterclockwise to decrease. Do not exceed 200 psi or lower the pressure below 130 PSI, when checked at the post-pump pressure port.

The fuel pressure may need to be adjusted due to altitude. For every 500 ft altitude above sea level, the boiling point of water goes down 1 °F. At high altitude environments, this boiling point change may require the heat input to be lowered so the water input does not turn to steam earlier than at the factory settings and activate the pressure sensors and pressure relief equipment when the unit is operated and much higher altitudes from factory settings or local dealer site settings. Check with your dealer before making local site fuel pressure adjustments.

Also, as ambient temperature changes seasonally, the fuel temperature in the feed tank and air temperature inlet can impact fuel flow. In more extreme temperatures, this local-site adjustment may also require different fuel nozzles for fuel inlet temperatures that are at seasonal extremes (higher or lower) in locations where the temperature changes are beyond moderate temperatures of between 40°F and 90°F. Colder temperatures will make for a thicker flow and less fine a fuel spray while hotter temperatures will make for a thinner flow a more fine spray with the same nozzle. Consider alternate nozzle configurations from the baseline factory-supplied nozzle for operating in such temperature extremes if performance is not meeting needs with air band and fuel pressure settings alone.

NOTE: When changing fuel pump, a by-pass plug must be installed in return line port or fuel pump will not prime.

Landa MHC Burner Air Adjustment

CAUTION: *If white smoke appears from burner exhaust vent during start-up or operation, discontinue use and readjust air bands.*

ATTENTION: *Si de la fumée blanche s'échappe de l'évacuation du brûleur pendant le démarrage ou le fonctionnement, cesser d'utiliser et réajuster les bandes d'air.*

PRECAUCIÓN: *Si se presenta humo blanco del escape del quemador durante el arranque u operación, detenga la operación y reajuste las bandas de aire.*

NOTE: If a flue is installed, have a professional serviceman adjust your burner for a #1 or #2 smoke spot on the Bacharach scale.

Removal of Soot and Heating Coil

In the heating process, fuel residue in the form of soot deposits may develop on the heating coil and block air flow which will affect burner combustion. When soot has been detected on visual observation, the soot on the coil must be washed off after following the coil removal steps.

1. Disconnect hose from pump/unloader to inlet side of the coil.
2. Remove thermostat sensor.
3. Remove the tank head assembly by unscrewing six screws and lifting the top wrap off.
4. Fold back insulation blanket.
5. Remove the two pipe nipples and associated fittings.
6. Remove bolt Item 75, , that hold down coil to bottom wrap.
7. Lift the coil out of the bottom wrap.

CAUTION: *The coil weighs about 80 lbs. Use proper lifting techniques.*

ATTENTION: *La bobine pèse environ 36.3 kg (80lb). Utiliser des techniques de levage appropriées.*

PRECAUCION. *El peso del intercambiador de calor es aprox. 36.3 kg (80 lbs). Utilice técnicas apropiadas para el levantamiento.*

8. Replace or repair any insulation found to be torn or broken.
9. Clean, repair and replace the coil by reversing the above steps.

Coil Re-installation

Reinstall by reversing the above steps 9 through 1.

Final Note

The 12 VDC burner systems can draw as much as 18 amps! For such motors to run properly, the battery and engine charging system must be kept in good condition, and the engine must run fast enough to adequately charge the battery. Do not throttle down the engine for any length of time.

Maintenance

Troubleshooting

PROBLEM	POSSIBLE CAUSE	SOLUTION
LOW OPERATING PRESSURE	Water supply is insufficient	Use larger supply hose; clean filter at water inlet.
	Spray nozzle is old, worn or incorrect	Match the nozzle number to the machine and/or replace with new nozzle.
	Belt slips	Tighten or replace belt; use correct belt.
	Plumbing or hose is leaking	Check plumbing system for leaks. Re-tape leaks with teflon tape.
	Unloader is faulty or mis-adjusted	Adjust unloader for proper pressure. Install repair kit when necessary or replace.
	Packing in pump is worn	Install new packing kit.
	Discharge valve in pump or inlet is fouled or dirty	Check inlet and discharge valve.
	Discharge valve or inlet is worn	Replace with valve kit.
	Spray nozzle has obstruction	Remove obstruction.
	Steam pressure control valve is leaking (where applicable)	Rebuild or replace as necessary.
	Engine RPM is slow	Set engine speed at proper specifications. See serial plate. The gasoline engine is preset for operation at altitudes below 1000 feet above sea level. If operated at higher altitudes, it may be necessary to install a high altitude main jet in the carburetor. Contact your local authorized engine sales and service center for details.
BURNER WILL NOT LIGHT	There is little or no fuel	Fill tank with fuel.
	Improper fuel or water in fuel	Drain fuel tank and fill with proper fuel.
	Fuel line is clogged	Clean or replace fuel line.
	Fuel filter is plugged	Replace fuel filter as needed.
	Burner air bands are mis-adjusted	Readjust air bands for clean burn.
	Little or no fuel pressure from fuel pump	Increase fuel pressure to specification and/or replace fuel pump.
	Burner transformer is faulty	Test transformer for proper arc between contacts. Replace as needed.
	Electrical wiring is disconnected or has short in it	All wire contacts should be clean and tight with no breaks in wire.
	Flex coupling is slipping on fuel pump shaft or burner motor shaft	Replace if needed.
	ON-OFF switch is defective	Check for electrical current reaching burner assembly with burner switch on. Replace switch if needed.
	Heavy sooting on coil and burner can cause interruption of air flow and shorting of electrodes	Clean as required.
	Electrode setting is improper	Check and reset according to diagram in manual.
	30 amp circuit breaker tripped	Push in reset button.
	Bridge rectifier defective	Test and replace.
	12V DC relay defective	Test and replace.
Fuel is not reaching combustion chamber	Check fuel pump for proper flow. Check solenoid flow switch on machines with spray gun control for proper on-off flow control.	

PROBLEM	POSSIBLE CAUSE	SOLUTION
BURNER WILL NOT LIGHT	Burner nozzle is clogged	Clean as required.
	Thermostat has malfunctioned	Test and replace if needed.
	Fuel solenoid has malfunctioned	Test and replace if needed.
MACHINE SMOKES WHILE BURNER UNIT IS RUNNING OR UNIT SMOKES AT COLD-START ONLY WHEN BURNER IS OFF	Fuel is improper or water is in fuel	Drain tank and replace contaminated fuel.
	Air adjustment is improper	Readjust air bands on burner assembly.
	Fuel pressure is low 140 psi for burner	Adjust fuel pump pressure to specifications.
	Burner nozzle is plugged or dirty	Replace nozzle. Check parts breakdown for nozzle size.
	Burner nozzle spray pattern is faulty	Replace nozzle. Check parts breakdown for nozzle size.
	Coil and burner assembly have heavy accumulation of soot	Remove coils and burner assembly, clean thoroughly. Call local dealer.
	Electrode setting is misaligned	Realign electrodes to specifications.
	Smoke stack has obstruction	Check for blockage or other foreign objects.
	Engine RPM is low	Increase RPM to correct specs. See serial plate.
Fuel Pressure is too high for clean burn (fuel PSI above 140 and below 200) and smokes when burner is off	Reduce fuel pressure PSI/Increase air band set for cleaner without max water heat loss	
LOW WATER TEMPERATURE	Fuel is improper or has water in it	Replace with clean and proper fuel.
	Fuel pressure is low	Increase fuel pressure.
	Fuel pump is weak	Check fuel pump pressure. Replace pump if needed.
	Fuel filter is partially clogged	Replace as needed.
	Soot buildup on coils is not allowing heat transfer	Clean coils.
	Burner nozzle is improper	Call your local dealer for proper nozzle.
WATER TEMPERATURE TOO HOT	Incoming water to machine is warm or hot	Lower incoming water temperature.
	Fuel pump pressure is too high	Call your local dealer for proper fuel pressure.
	Fuel pump is defective	Replace fuel pump.
	Fuel nozzle is incorrect size	See parts breakdown or serial plate for proper size.
	Water supplied is insufficient	Check water GPM to machine.
	Water flow is restricted	Check nozzle for obstruction and proper size. Check serial plate for correct size.
PRESENCE OF WATER IN OIL	Oil seal is worn	Check and replace if necessary.
	Air humidity is high	Check and change oil twice as often.
	Packing is worn or bad	Check and replace if necessary.
DETERGENT NOT DRAWING	Air is leaking	Tighten all clamps. Check detergent lines for holes.
	Filter screen on detergent suction hose is plugged	Clean or replace.
	Detergent has high viscosity	Dilute detergent to specifications.

Maintenance

PROBLEM	POSSIBLE CAUSE	SOLUTION
DETERGENT NOT DRAWING CONT.	Injector head may be blocked, dirty or damaged.	Clean and make sure ball and spring behind detergent hose barb or injector body are working properly.
	Not using soap nozzle	Insert soap nozzle into wand coupler.
	Detergent level is low	Add detergent if needed.
PUMP RUNNING NORMALLY BUT PRESSURE LOW ON INSTALLATION	Pump is sucking air	Check water supply and possibility of air seepage.
	Valves are sticking	Check and clean or replace if necessary.
	Unloader valve seat is faulty	Check and replace if necessary.
	Nozzle sized incorrectly	Check and replace if necessary (see serial plate for proper size).
	Packing piston is worn	Check and replace if necessary.
FLUCTUATING PRESSURE	Valves are worn	Check and replace if necessary.
	Valve has a blockage	Check and replace if necessary.
	Pump is sucking air	Check water supply and air seepage at joint in suction line.
	Packing piston is worn	Check and replace if necessary.
	Gasoline Engine Altitude	The gasoline engine is preset for operation at altitudes below 1000 feet above sea level. If operated at higher altitudes, it may be necessary to install a high altitude main jet in the carburetor. Contact your local authorized engines sales and service center for details.
PUMP NOISY	Air is in suction line	Check water supply and connections on suction line.
	Inlet or discharge valve springs are weak or broken	Check and replace if necessary.
	Excessive matter is in valves	Check and replace if necessary.
	Bearings are worn	Check and replace if necessary.
WATER DRIPPING FROM UNDER PUMP	Piston packing is worn	Check and replace if necessary.
	O-Ring plunger retainer is worn	Check and replace if necessary.
	Piston is cracked	Check and replace if necessary.
	Pump protector is worn	Lower water supply pressure. Do not run the spray gun closed longer than 5 minutes.
OIL DRIPPING	Oil seal is worn	Check and replace if necessary.
EXCESSIVE VIBRATION IN DELIVERY LINE	Valves are functioning irregularly	Check and replace if necessary.
BURNER MOTOR WILL NOT RUN	Fuel pump has seized	Replace fuel pump.
	Burner fan loose or misaligned	Position correctly and tighten set screw.
	Control switch is defective	Replace switch.
	There is a loose wire	Check and replace or tighten wiring.
	Burner motor is defective	Replace motor.
RELIEF VALVE LEAKS WATER	Relief valve is defective	Replace or repair relief valve.

Parts

LANDA MHC

MHC3-24324

1.110-087.0

MHC3-30324

1.110-038.0

MHC4-30324

1.110-039.0

MHC4-30324E

1.110-040.0

MHC4-30324E/S

1.110-041.0

MHC4-35324E

1.110-042.0

MHC4-35324E CAL

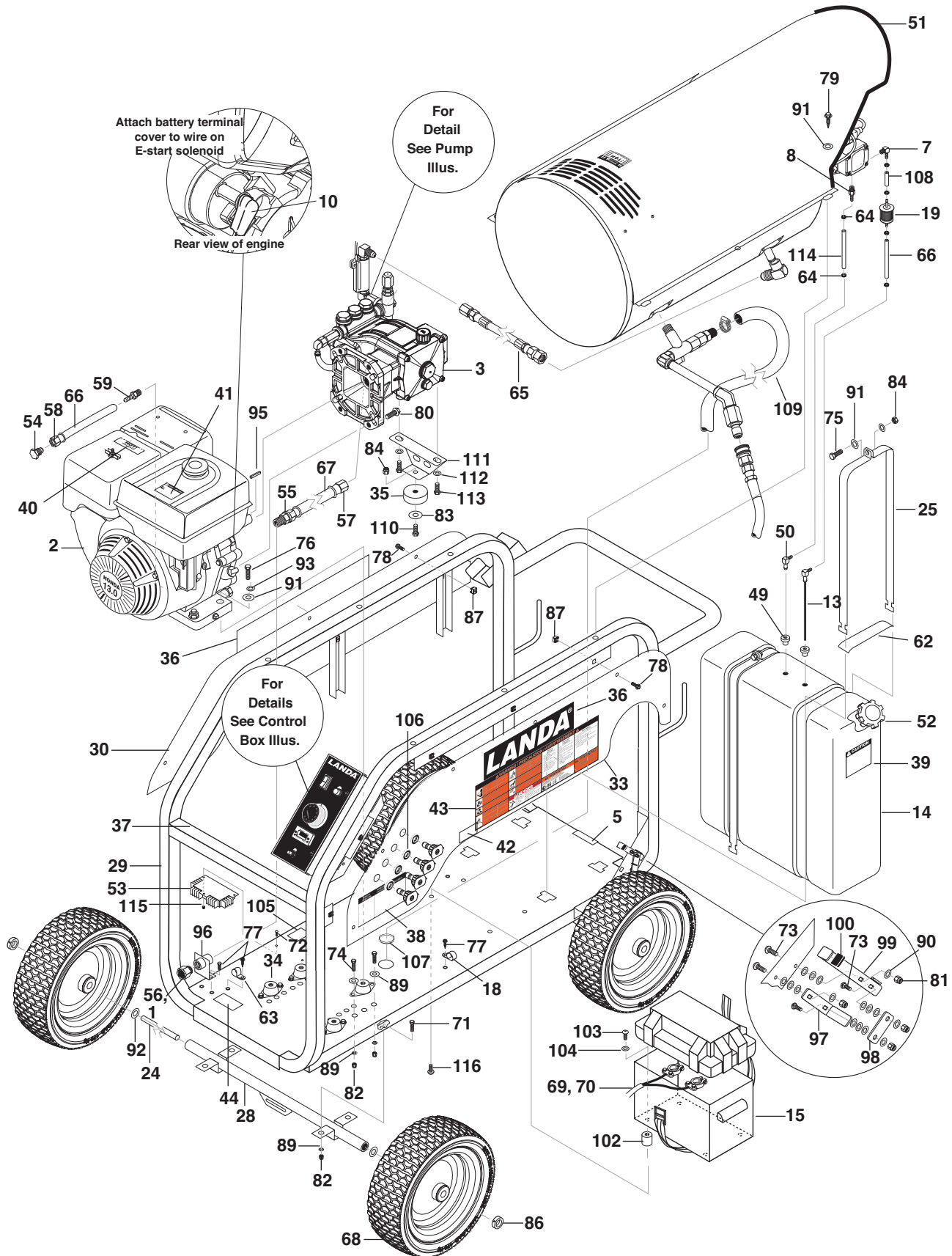
1.110-084.0

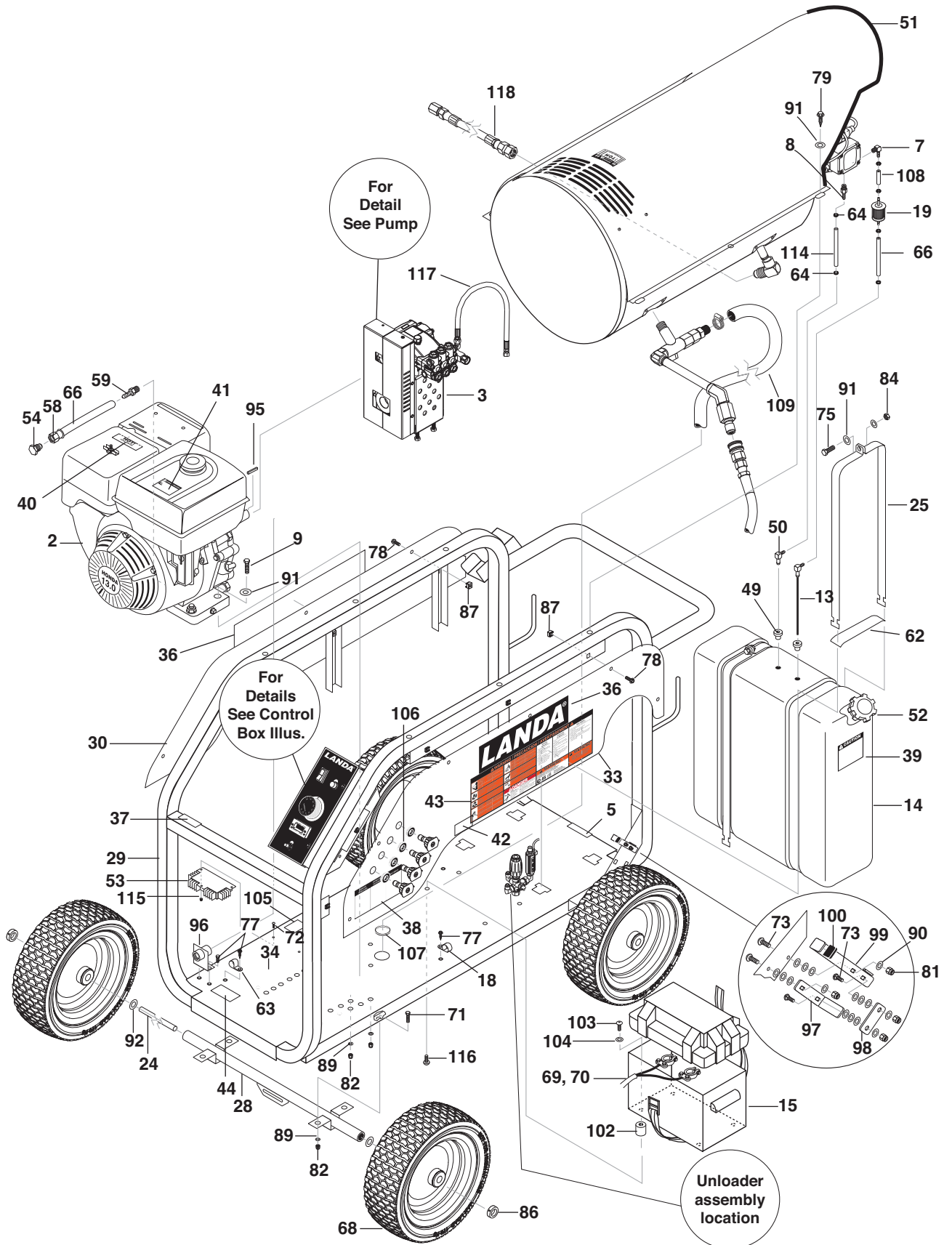
MHC4-35324E/B

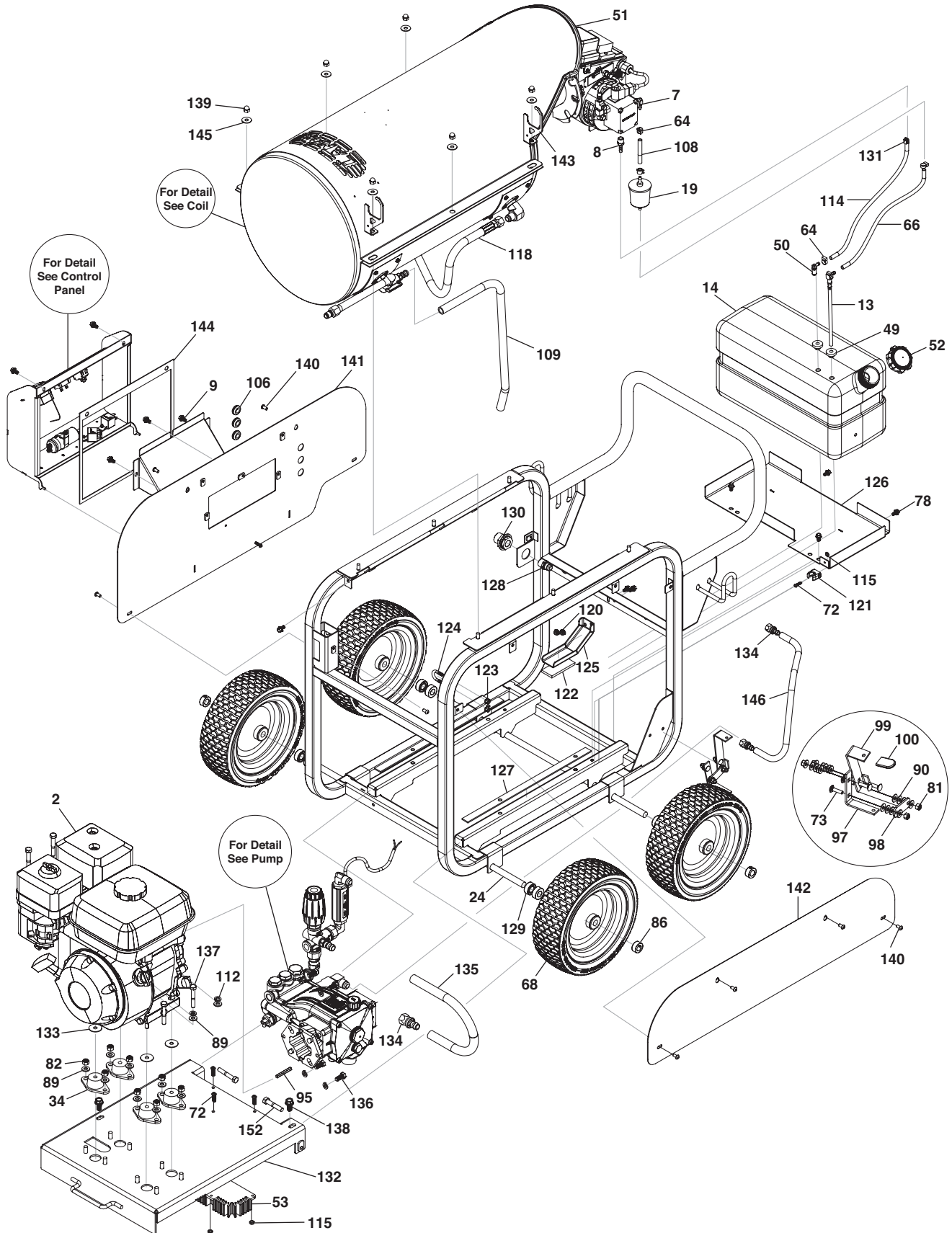
1.110-077.0

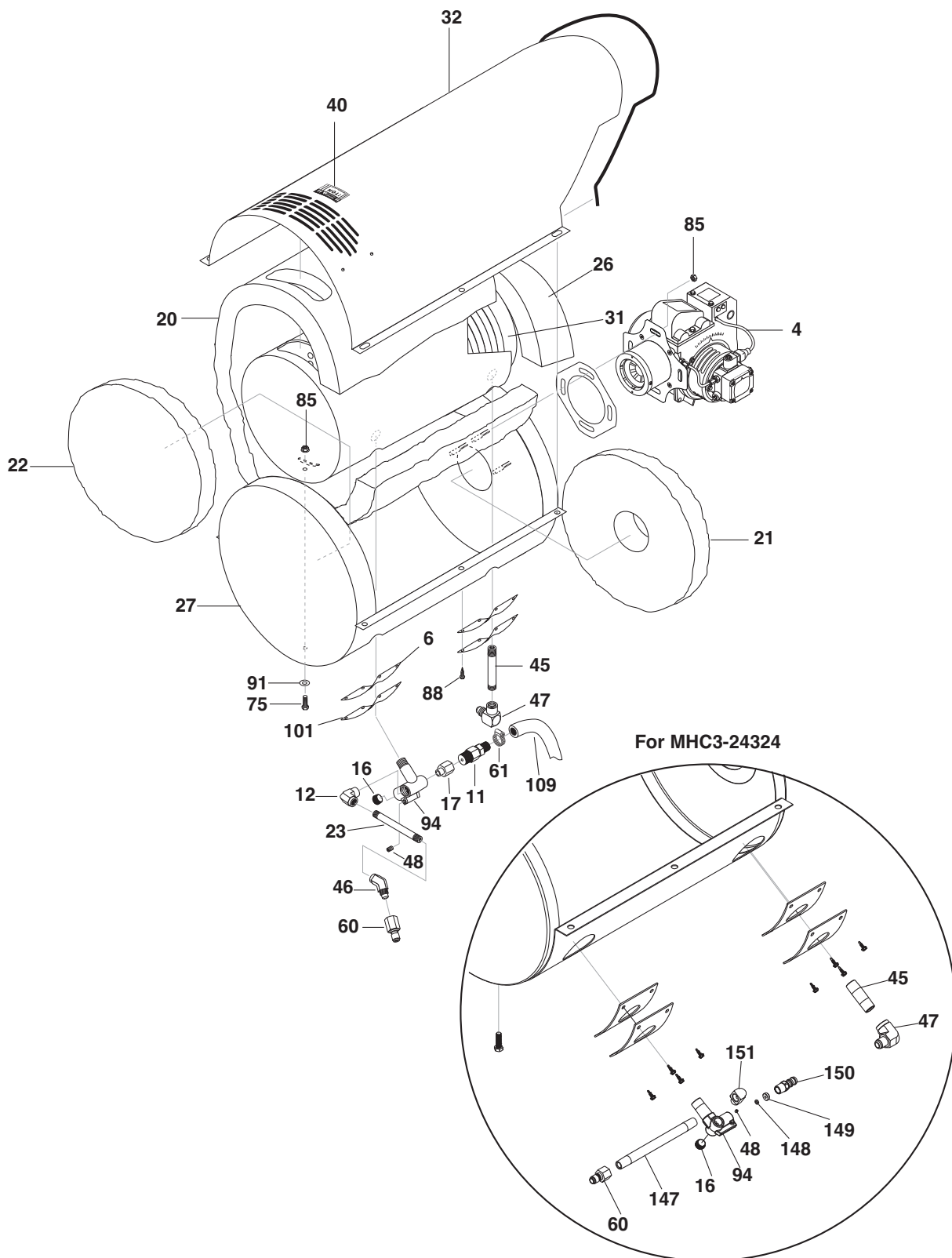
MHC4-35324E/B CAL

1.110-081.0









Landa MHC Coil

REF	PART NO.	QTY	DESCRIPTION	NOTES
1	9.804-016.0	1	FILTER SCREEN WASHER, GARDEN HOSE/ 30MESH	
2	8.758-904.0	1	GASOLINE ENGINE GX200 CHARGING SYSTEM	(196 CC), (3-24324)
-	8.759-215.0	1	ENGINE HONDA GX270 E/S 18A 2021 NONCARB	(270 CC), (3-30324)
-	8.759-216.0	1	ENGINE HONDA GX340 18A 2021 NONCARB	(389 CC), (4-30324)
-	8.759-217.0	1	ENGINE GX340 E/S 18A 2021 NONCARB	(389 CC)(4-30324E)
-	8.759-118.0	1	ENGINE VANGUARD 14HP E/S 20A	(MHC4-35324E/B CAL, MHC4-35324E CAL)
-	8.759-122.0	1	ENGINE HONDA GX390 E/S 18A 2021 NONCARB	(389 CC), (4-35324E/B) (4-30324E/S, 4-35324E)
3	8.929-914.0	1	PUMP ASSEMBLY MHC GX200	(3-24324)
-	8.915-321.0	1	PUMP ASSY, HORIZ	(3-30324)
-	8.918-611.0	1	PUMP ASSY, HORIZ	(4-30324 4-30324E, 4-30324E/S, 4-35324E)
-	8.928-783.0	1	PUMP ASSY, BELT DRIVE	(4-35324E/B)
4	8.756-412.0	1	BURNER, MSR 13.5VDC 2T 12VDC S	
-	8.756-699.0	1	FUEL NOZZLE, 1.75 X 80 B 100PSI CHECK VALVE	NOT SHOWN
-	8.756-412.0	1	FUEL NOZZLE, 1.50 X 80 BZ	3-24324, NOT SHOWN
-	9.802-428.0	6 FT	S CORD, ELECTRIC 12/3 SJOWA COLEMAN	NOT SHOWN
-	9.802-515.0	1	S STRAIN RELIEF, STRT, LQ TITE 3200	NOT SHOWN
-	9.802-525.0	1	S LOCKNUT 1/2	NOT SHOWN
-	8.756-409.0	4	CONNECTOR, LEVER NUT, 2-WIRES	NOT SHOWN
-	8.756-410.0	2	CONNECTOR, LEVER NUT, 3-WIRES	NOT SHOWN
-	8.756-411.0	1	CONNECTOR, LEVER NUT, 5-WIRES	NOT SHOWN
5	9.800-018.0	1	LABEL, TIP HAZARD	
6	8.933-009.0	2	GASKET, BURNER PLATE	
7	8.757-205.0	1	HOSE BARB, 1/4" BARB X 1/4" M-NPTF, 90°	
8	8.757-199.0	1	HOSE BARB, 1/4" BARB X 1/4" M-NPTF, BRASS	
9	9.802-728.0	4	BOLT, 3/8-16 X 2", HH ZINC	
10	9.804-615.0	1	COVER, BATTERY TERMINAL, RED	(ELECTRIC START ONLY)
11	8.707-381.0	1	RUPTURE DISC ASSY, 8500#	
12	8.757-340.0	1	ELBOW 3/8", STREET 90 DEG, STEEL, W/SLNT	
13	8.706-496.0	1	DIPTUBE ASSY, PLASTIC, 17.75"L	
-	9.802-055.0	1	DIPTUBE ASSY, PLASTIC, 9.125"	(3-24324)
14	8.931-758.0	1	TANK FUEL 10 GALLON POLY YELLOW	
-	8.931-759.0	1	TANK FUEL 5 GALLON YELLOW	(3-24324)
15	8.706-652.0	1	BATTERY BOX, SMALL	(ELECTRIC START ONLY)
-	9.802-091.0	1	S PLATE, BATTERY BOX, SMALL POLYPRO	NOT SHOWN (ELECTRIC START ONLY)
16	8.757-241.0	1	PLUG, 3/8" ALLEN COUNTER SUNK, W/TAG	

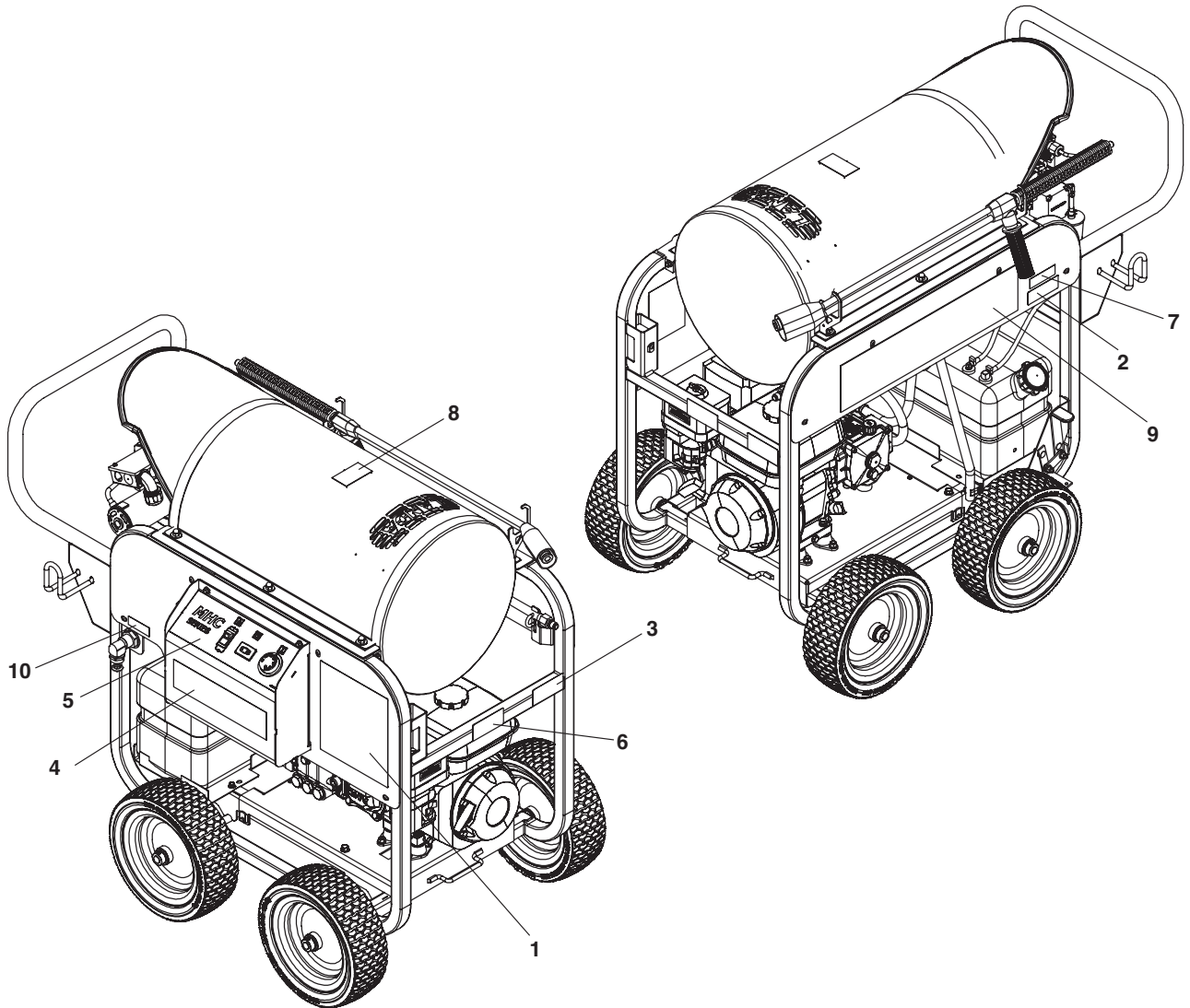
REF	PART NO.	QTY	DESCRIPTION	NOTES
15	8.706-652.0	1	BATTERY BOX, SMALL	(ELECTRIC START ONLY)
-	9.802-091.0	1	S PLATE, BATTERY BOX, SMALL POLYPRO	NOT SHOWN (ELECTRIC START ONLY)
16	8.757-241.0	1	PLUG, 3/8" ALLEN COUNTER SUNK, W/TAG	
17	8.757-548.0	1	ADAPTER STEEL 1/2 (F) X 3/8 (M)	
18	8.709-090.0	1	CLIP, .75 ID ROUND	(ELEC. START)
19	8.709-152.0	1	FILTER, FUEL, DISPOSABLE	
20	9.802-896.0	1	INSULATION, BLANKET, NO FOIL 24" X 57"	
21	8.731-284.0	1	FIBER, DISK DONUT, HORZ MHC	
22	8.735-002.0	1	FIBER, DISK, HORIZ MHC	
23	8.757-346.0	1	NIPPLE, 3/8" X 4", W/SLNT	
24	8.911-227.0	2	AXLE, 5/8" X 28.5"L	
-	8.918-837.0	2	AXLE, ROUND MS SOLID 5/8" X 30"	(3-24324)
25	8.912-699.0	4	STRAP, FUEL TANK W/HOLE	
26	8.755-626.0	1	INSULATION, BLANKET-NO FOIL	
27	8.914-946.0	1	BOTTOM WRAP ASSEMBLY	
28	8.914-947.0	2	ASSEMBLY, AXLE	
29	8.914-952.0	2	ASSY, HORIZ MHC FRAME, -07	
30	8.914-960.0	1	PANEL, SIDE COVER	
31	8.925-222.0	1	SPARE COIL DURO 14.5 DIA SCH 80	
32	8.919-730.0	1	WRAP, TOP SS, HORZ MHC 16GA	
-	8.930-802.0	1	COVERING COIL SS LANDA	(3-24324)
33	8.914-972.0	1	PANEL, CONTROL SIDE, HORZ. MHC -07	
34	8.932-992.0	4	MOUNT, RUBBER VIBRATION 3/8", 70 DURO	
-	9.803-308.0	4	MOUNT, RUBBER VIBRATION 5/16", 70 DURO	(3-24324)
35	9.802-066.0	1	PAD, SOFT RUBBER	
36	8.758-297.0	2	LABEL LANDA LOGO 11" X 2.82"	
37	8.900-282.0	1	LABEL, RPM FACTORY SET	
38	8.940-051.0	1	LABEL, SKID OP INSTRUCTIONS	
39	9.800-002.0	1	LABEL, USE ONLY KEROSENE	
40	9.800-006.0	2	LABEL, "HOT/CALIENTE" W/ARROWS WARNING	
41	9.800-008.0	1	LABEL, DANGER COOL ENGINE	
42	9.800-021.0	1	LABEL, HOT WATER OUTLET	
43	9.803-475.0	1	LABEL, OP INSTRUCTION, MT	
44	9.800-049.0	1	LABEL, MANF CLEANING	
45	8.757-405.0	1	NIPPLE, 1/2" X 2-1/2", W/SLNT	
46	8.757-551.0	1	ELBOW 1/4" FUEL TANK PLASTIC	
47	8.757-363.0	1	ELBOW, 90°, 3/4-16 JIC X 1/2 NPTF (F) 90	
48	9.196-012.0	1	SCREW, 10-24 X 1/4"	
49	9.802-053.0	2	BUSHING, RUBBER, NITRILE	
50	8.758-150.0	1	ELBOW 1/4" FUEL TANK PLASTIC	

Landa MHC

REF	PART NO.	QTY	DESCRIPTION	NOTES
51	9.802-071.0	33"	TRIM, 750B2 X 1/16, BLACK	
52	9.802-089.0	1	CAP, FUEL TANK, PLASTIC H60-AV	
53	9.802-531.0	1	REGULATOR, VOLTAGE, 15V	(PULL START)
-	9.803-835.0	1	REGULATOR/RECTIFIER 18 AMP	(ELECTRIC START)
54	9.802-125.0	1	PLUG, 1/4" JIC	
55	8.757-505.0	1	HOSE BARB BRASS 3/4" BARB X 1/2"	
56	8.757-203.0	1	SWIVEL, 1/2" M-NPTF x 3/4" GHF	
57	9.802-152.0	1	SWIVEL, 3/4" JIC FEM, PUSH-ON	
58	9.802-153.0	1	SWIVEL, 1/4" JIC FEM, PUSH-ON	
59	9.802-154.0	1	PLUG, PUSH-ON, OIL DRAIN, HONDA	
60	8.707-144.0	1	NIPPLE, 3/8", FEMALE, SSTEEL	
61	9.803-559.0	1	CLAMP,SCREW, 9/16"W, 1-1/4"D, SS	
62	9.802-193.0	15"	GASKET, NEOPRENE,	
63	9.802-207.0	1	CLAMP, ROUND, 0.687 DIA	
64	8.750-933.0	6	BAND HOSE CLAMP, HOSE ID 1/8" - 5/16"	
65	8.918-424.0	1	HOSE, 3/8" X 25", 2 WIRE, PRESSURE LOOP	
66	9.802-254.0	12 in	HOSE, 1/4" PUSH-ON, FUEL LINE	
-	9.802-254.0	17.5 in	HOSE, 1/4" PUSH-ON, FUEL LINE	(3-24324)
67	9.802-261.0	16 in	HOSE, 3/4" PUSH-ON	(3-3000)
-	9.802-261.0	19.5 in	HOSE, 3/4" PUSH-ON	(4-3000, 4-3500)
68	8.758-460.0	4	WHEEL 12 In. RIM STEEL	
69	9.802-503.0	1	CABLE, BATTERY, 32" RED, 4 GA.	(ELECTRIC START ONLY)
70	9.802-504.0	1	CABLE, BATTERY, 36" BLACK, 4 GA.	(ELECTRIC START ONLY)
71	8.718-625.0	8	BOLT, 5/16"-18 X 3/4", NC CRRGE ZNC	
72	9.802-762.0	2	SCREW, 10/32 X 1-1/4 RH BLACK	(ELEC START)
-	9.802-771.0	3	SCREW, 10/32 X 3/4, BH SOC	(PULL START)
73	9.802-705.0	4	BOLT, CARRIAGE, ZINC, 1/4-20 X 1"	
74	9.802-710.0	8	BOLT, 5/16" X 1", NC HH	
75	9.802-727.0	3	BOLT, 3/8" X 1-3/4", TAP	
76	9.802-727.0	4	BOLT, 3/8" X 1-3/4", TAP	
77	9.802-753.0	4	SCREW, 1/4" X 3/4" WHIZ LOC	
78	9.802-754.0	12	SCREW, 1/4" X 1/2" HH NC, WHIZ LOC	
-	9.802-754.0	6	SCREW, 1/4" X 1/2" HH NC, WHIZ LOC	(3-24324)
79	9.802-766.0	6	SCREW, 3/8 X 1 HX WASH HEAD SHEET METAL ZN	
80	9.802-768.0	4	SCREW, 3/8" X 1-1/4" WHIZ LOC	
81	9.802-773.0	4	NUT, 1/4" ESNA, NC	
82	9.802-776.0	16	NUT, 5/16" ESNA, NC	
-	9.802-776.0	8	NUT, 5/16" ESNA, NC	(3-24324)
83	9.802-817.0	1	WASHER, 3/4 X 1"	
84	9.802-779.0	3	NUT, 3/8", ESNA, NC	
85	9.802-781.0	4	NUT, 3/8", WHIZ LOC, NC	
86	9.802-782.0	4	COLLAR, 5/8" BORE SHAFT 3010	

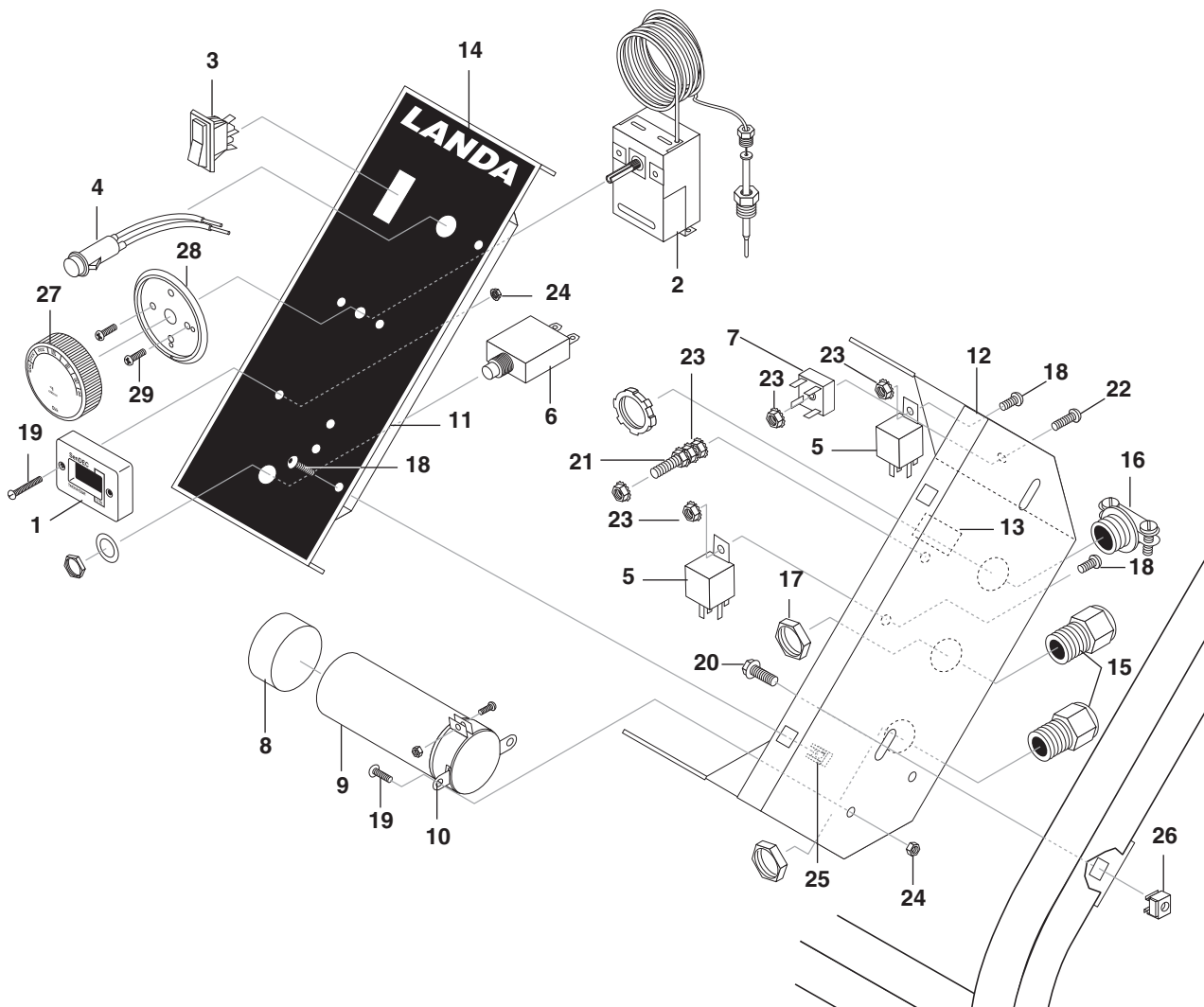
REF	PART NO.	QTY	DESCRIPTION	NOTES
87	9.802-794.0	12	NUT, CAGE, 1/4" X 12 GA.	
88	9.802-797.0	8	SCREW, SS #10 X 1/2", TEK	
89	8.718-980.0	24	WASHER, 5/16" FLAT	
-	8.718-980.0	12	WASHER, 5/16" FLAT, SAE (780452)	(3-24324)
90	9.802-802.0	16	WASHER, 1/4" SAE, FLAT	
91	9.802-807.0	15	WASHER, 3/8" SAE, FLAT	
92	9.802-810.0	4	WASHER, 5/8" SAE, FLAT	
93	9.802-814.0	4	WASHER, 3/8" LOCK, SPLIT RING	
94	8.757-240.0	1	MANIFOLD, COIL OUTLET DISCHARGE, W/TAG	
95	9.802-959.0	1	KEY, 0.247 SQR X 2.125"	
-	9.802-958.0	1	KEY, 0.185 SQR X 1.75'	(3-24324)
96	9.802-961.0	1	HOSE, CONNECTION BRACKET	
97	9.802-996.0	1	BRACKET, BRAKE PAD, BLACK	
98	9.802-997.0	1	LINKAGE, BRAKE, BLACK	
99	9.802-966.0	1	LEVER, BRAKE BLACK	
100	9.804-608.0	1	CAP, VINYL FLAT (YELLOW)	
101	9.803-132.0	2	INSULATION RETAINER PLATE	
102	9.803-532.0	4	ISOLATOR, 5/16" THRD, FEM X FEM 1" X 1"	(ELECTRIC START ONLY)
103	9.803-541.0	4	SCREW, 5/16-18 X 1/2 CS,SOC, BH,NC,ZN	(ELECTRIC START ONLY)
104	8.752-817.0	4	WASHER, 5/16", STAR, EXTERNAL	(ELECTRIC START ONLY)
105	8.932-968.0	1	LABEL, OUTDOOR USE	
106	9.802-064.0	4	GROMMET, RUBBER NOZZLE HOLDER	
107	8.706-546.0	1	GROMMET, 1-3/8" X 2-1/8" X 3/8"	
108	9.802-254.0	4 in	HOSE, 1/4" PUSH-ON	
109	8.759-952.0	36 in	HOSE 5/8" BULK	
-	9.802-259.0	28.5 in	HOSE, 1/2" PUSH-ON, /FT	(3-24324)
110	9.802-722.0	1	BOLT, 3/8 X 1-1/4	
111	8.924-335.0	1	RAIL, PUMP SUPPORT, HONDA 11 HP, 13 HP, STAINLESS	
-	9.804-533.0	1	RAIL, PUMP SUPPORT, HONDA 9 HP	
112	9.802-816.0	2	WASHER, 7/16 LOCK, HONDA 11 HP, 13 HP	
-	9.802-813.0	2	WASHER, 5/16" LOCK, HONDA 9 HP	
-	9.802-813.0	8	WASHER, 5/16" LOCK, HONDA 6.5 HP	(3-24324)
113	9.802-744.0	2	BOLT, 10MM X 20MM HONDA 11 HP, 13 HP	
-	9.802-741.0	2	BOLT, 8MM X 16MM HONDA 9 HP	
114	9.802-254.0	14 in	HOSE, 1/4" PUSH-ON	
-	9.802-254.0	20in	HOSE 1/4" PUSH-ON	(3-24324)
115	9.802-695.0	2	NUT, 10/32 KEPS	(ELEC. START)
-	-	3	NUT, 10/32 KEPS	(PULL START)
116	9.803-277.0	4	SCREW, 5/16" X 1/2", WHIZ LOC	
117	8.918-425.0	1	HOSE, 3/8" x 29", 2 WIRE, PRESSURE LOOP	

REF	PART NO.	QTY	DESCRIPTION	NOTES
118	8.918-210.0	1	HOSE, 3/8" X 16", 2 WIRE, PRESSURE LOOP	
-	8.918-423.0	1	HOSE, 3/8" X 22", 2 WIRE, PRESSURE LO	(3-24324)
119	8.757-230.0	1	NIPPLE STEEL 3/8 NPTF X 8 W/SLNT	
120	9.802-775.0	2	NUT, 1/4" FLANGE, ZN	
121	9.802-203.0	1	Clamp Plastic Routing 1/2	
122	9.802-193.0	3.75in	GASKET, NEOPRENE, SC41-W/PSA	
123	9.197-010.0	2	1/4-20" NYLON INSERT LOCK NUT WITH FLANGE	
124	9.804-373.0	1	U-Bolt, 1/4"-20MS Plates	
125	8.929-975.0	1	BRACKET DIESEL TANK PAINTED	
126	8.929-934.0	1	SUPPORT TANK DIESEL PAINTED	
127	8.759-481.0	2	SLIDER BAR	
128	8.757-200.0	1	ADAPTER BRASS 1/2 SAE (M) X 1/2 NPTF (M)	
129	8.751-374.0	8	SPACER 5/8" X 1.25 BLACK	
130	8.707-000.0	1	CONNECTOR, 1/2" ANCHOR	
131	6.390-126.0	1	CLAMP HOSE 0.46 - 0.54 ST	
132	8.929-911.0	1	Plate engine pump MHC GX200 painted	
133	9.198-014.0	4	WASHER 21/64 X 1"	
134	9.802-151.0	3	SWIVEL, 1/2" BARB x 1/2" JIC, FEM/BRASS	
135	9.802-259.0	16.5 in	HOSE, 1/2" PUSH-ON	
136	9.802-707.0	4	BOLT, 5/16-24 X 3/4" NF HH	
137	9.802-716.0	4	BOLT, 5/16 X 2", NC HH	
138	9.803-551.0	2	SCREW, 5/16" X 3/4" WHIZ LOC FLANGE	
139	9.802-787.0	6	*NUT, 5/16" "" "", CAP(799362)	
140	9.196-059.0	10	BUTTON HEAD SCREW, SS 1/4"-20 X 1/2"	
141	8.929-954.0	1	Panel Side Cover Right Painted 5 HP	
142	8.929-952.0	1	Panel Side Cover Left Painted 5 HP	
143	8.917-729.0	2	BRACKET, WAND HOLDER	
144	8.759-482.0	1	ELECTRIC BOX GASKET	
145	7.312-289.0	6	WASHER 8 -A2 ISO 7093-1	
146	9.802-259.0	30 in	HOSE, 1/2" PUSH-ON	
147	8.757-230.0	1	NIPPLE STEEL 3/8 NPTF X 8 W/SLNT	
148	9.151-014.0	1	RUPTURE DISK, 5000 PSI, BLUE	
149	9.184-030.0	1	SPACER, RUPTURE DISC	
150	8.757-487.0	1	HOSE BARB BRASS 1/2" BARB X 3/8"	
151	8.757-191.0	1	ELBOW, 3/8" STREET, BRASS	
152	8.751-855.0	2	BOLT 5/16-18 X 2 1/4 ZINC PLATED	



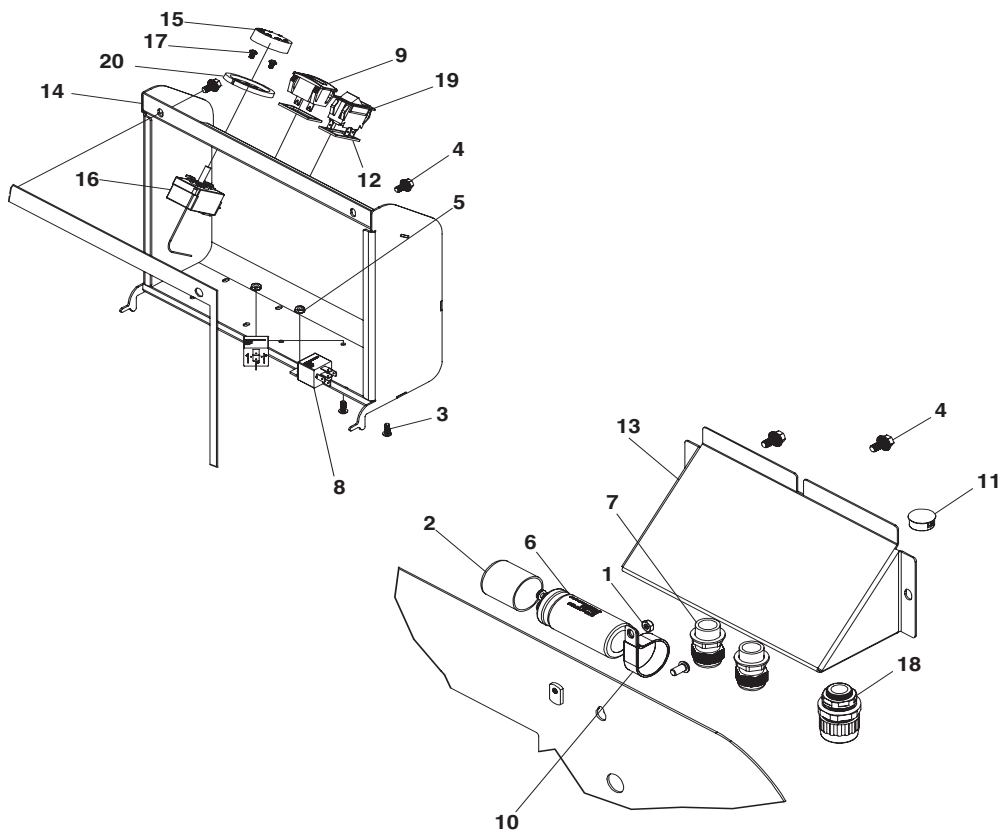
1	8.757-731.0	1	LABEL WARNING SYMBOL INJURIES	
2	8.757-732.0	1	LABEL CAUTION DIESEL TYPE	
3	8.757-733.0	1	LABEL CAUTION HOT FLUID	
4	8.758-297.0	1	LABEL LANDA LOGO 11" X 2.82"	
5	8.759-764.0	1	LABEL CONTROL PANEL MHC	
6	8.765-870.0	1	LABEL CAUTION HANDS AWAY	
7	8.932-960.0	1	LABEL, DIESEL, BLACK ON YELLOW	
8	9.800-006.0	1	LABEL, HOT/CALIENTE W/ARROWS	
9	9.800-975.0	1	LABEL, LANDA LOGO, 21" X 4.75"	
10	9.800-020.0	1	LABEL, COLD WATER INLET	

Control Panel

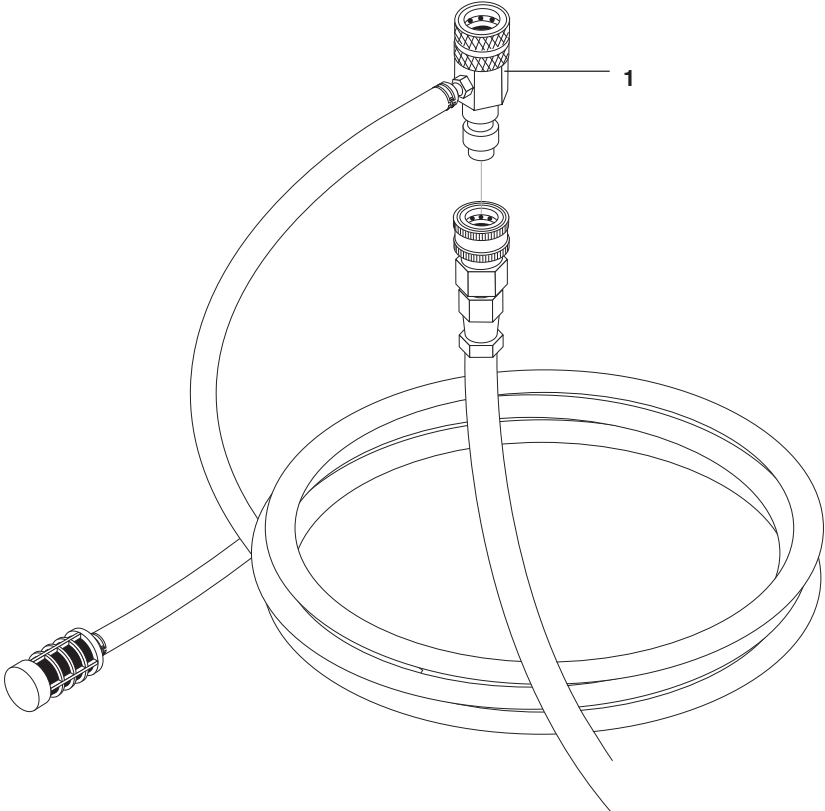


REF	PART NO.	QTY	DESCRIPTION	NOTES
1	8.904-540.0	1	METER, TACH/HR, 12VDC	
2	8.750-095.0	1	THERMOSTAT, ADJ., 240°F	
3	9.802-453.0	1	SWITCH, CURVETTE	
4	9.802-456.0	1	LIGHT, INDICATOR, GREEN 14V	
5	9.802-470.0	2	RELAY, 12V	
6	9.802-485.0	1	BREAKER, 1658-G41-02-P10-25A	
7	9.802-530.0	1	RECTIFIER, BRIDGE	(ELECTRIC START)
8	9.803-048.0	1	CAP, CAPCITR, 1.37 X 1.50 X .060 BLK, W/O HOLE	(PULL START)
9	9.802-528.0	1	CAPACITOR	(PULL START)
10	9.802-529.0	1	BRACKET, CAPACITOR	(PULL START)
11	8.914-973.0	1	ELECTRICAL BOX LID	
12	8.914-974.0	1	ELECTRICAL BOX	
13	9.800-040.0	1	LABEL, GROUND SYMBOL	
14	8.915-329.0	1	LABEL, HORZ MHC, CONTROL PANEL	
15	9.802-515.0	2	STRAIN RELIEF, STRT, LQ TITE 3200	
16	9.802-519.0	1	STRAIN RELIEF, 1/2" METAL, TWO SCREW	
17	9.802-525.0	2	LOCKNUT, 1/2"	
18	9.802-759.0	5	SCREW, 10/32 X 1/2 BLK	
19	9.802-748.0	2	SCREW, 6/32" X 3/8", RND HD MCH	(ELEC START)
-	-	4	SCREW, 6/32" X 3/8", RND HD MCH	(PULL START)
20	9.802-754.0	2	SCREW, 1/4" X 1/2" HH NC, WHIZ LOC	
21	9.802-762.0	1	SCREW, 10/32" X 1-1/4" RH SL, BLK	
22	9.802-771.0	1	SCREW, 10/32" X 3/4" BH SOC CS	
23	9.802-695.0	7	NUT, 10/32" KEPS	
24	9.802-784.0	2	NUT, 6-32 KEPS	(ELEC START)
-	-	4	NUT, 6-32 KEPS	(PULL START)
25	9.802-791.0	3	NUT, CAGE, 10/32" X 16 GA.	
26	9.802-794.0	2	NUT, CAGE, 1/4" X 12 GA	
27	8.750-097.0	1	KNOB, THERMOSTAT, 120°C/240°F	
28	8.712-190.0	1	BEZEL, THERMOSTAT	
29	8.718-779.0	2	SCREW, 4MM X 6MM	

Control Panel - MHC3-24324

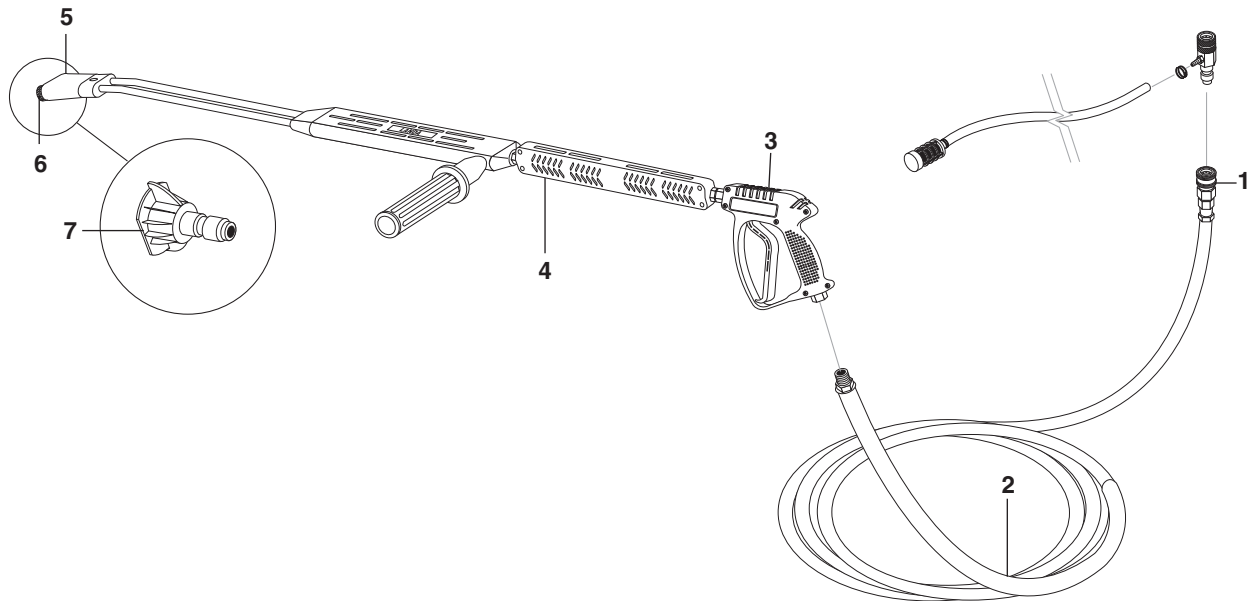


REF	PART NO.	QTY	DESCRIPTION	NOTES
1	9.804-567.0	1	*NUT, 10/32', ESNA	
2	9.803-048.0	1	CAP,CAPCITR,1.37X1.50X.060 BLK,W/O HOLE	
3	9.802-759.0	2	SCREW 10/32 X 1/2 BLCK	
4	9.802-754.0	5	SCREW, 1/4" x 1/2" NC, WHIZ LOC FLANGE	
5	9.802-695.0	5	NUT, 10/32" KEPS	
6	9.802-528.0	1	CAPACITOR	
7	9.802-514.0	2	STRAIN RELIEF, LT, Str, 1/2 NPT, .23-.45D	
8	9.802-470.0	2	RELAY, 12V	
9	9.802-283.0	1	HOUR METER, 24-240VAC 50/60HZ	
10	9.802-206.0	1	CLAMP, WIRE/TUBE, 1.312 DIA	
11	8.706-745.0	1	PLUG, PLASTIC 0.812	
12	8.623-803.0	2	SEAL GASKET FOR CARLING SWITCH	
13	8.929-926.0	1	SUPPORT ELECTRICAL BOX CONNECTORS PAINT	
14	8.929-921.0	1	ASSEMBLY ELECTRICAL BOX PAINTED	
15	8.750-097.0	1	KNOB, THERMOSTAT 120C/248F	
16	8.750-095.0	1	THERMOSTAT, 120C/240F, 2 METER CAPILLARY	
17	8.718-779.0	2	SCREW, 4MM X 6 MM, PAN HEAD	
18	8.716-547.0	1	CONNECTOR, 1/2" L/T, STRAIGHT, BLACK	
19	8.716-036.0	1	SWITCH, ROCKER, 15A/12V, LT(875465)	
20	8.712-190.0	1	BEZEL, PLASTIC, THERMOSTAT (915390)	



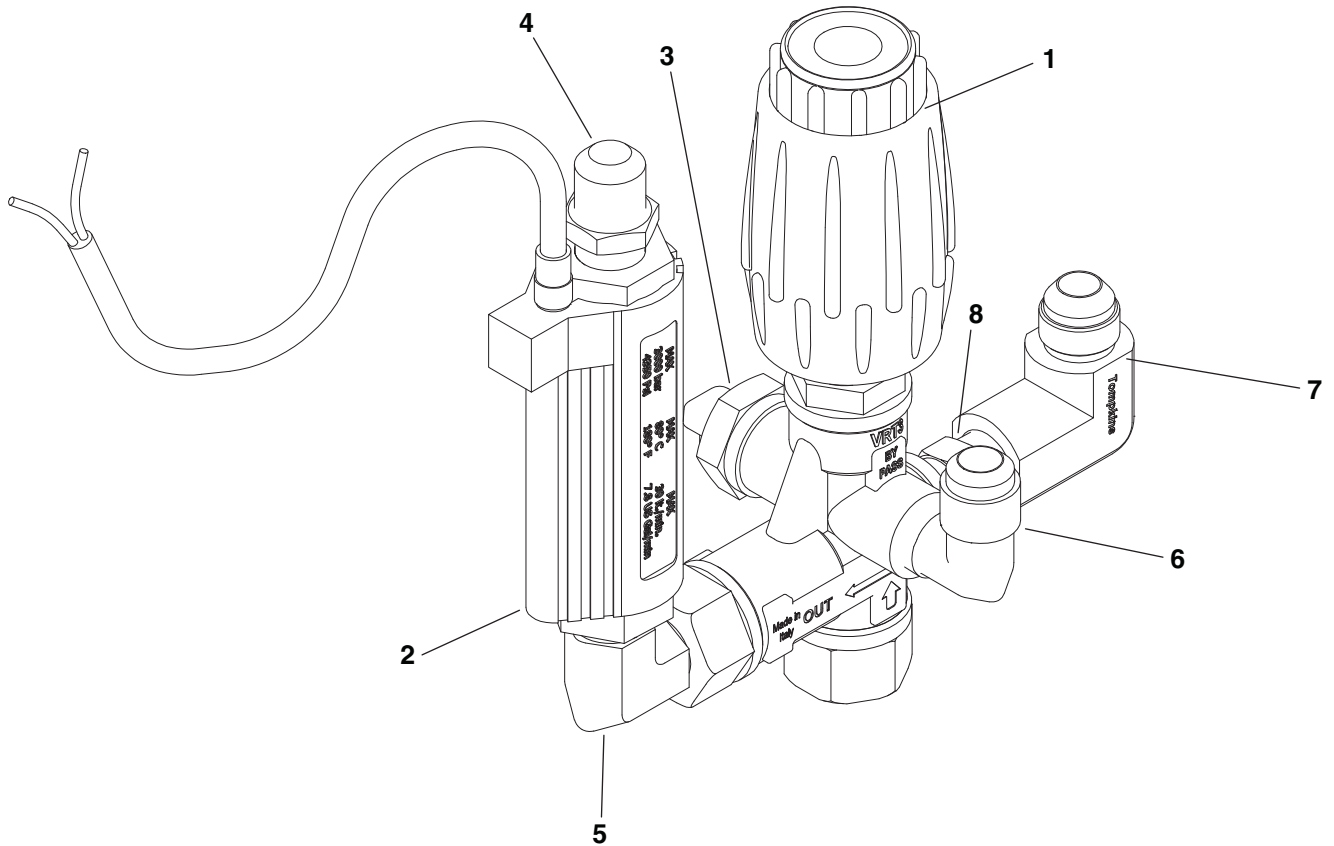
REF	PART NO.	QTY	DESCRIPTION	NOTES
1	8.756-797.0	1	INJECTOR, CHEMICAL, NON ADJ 0.083(2.1MM)	
-	8.756-796.0	1	INJECTOR, CHEMICAL, NON ADJ 0.070(1.8MM)	For MHC3-24324

Hose & Spray Gun



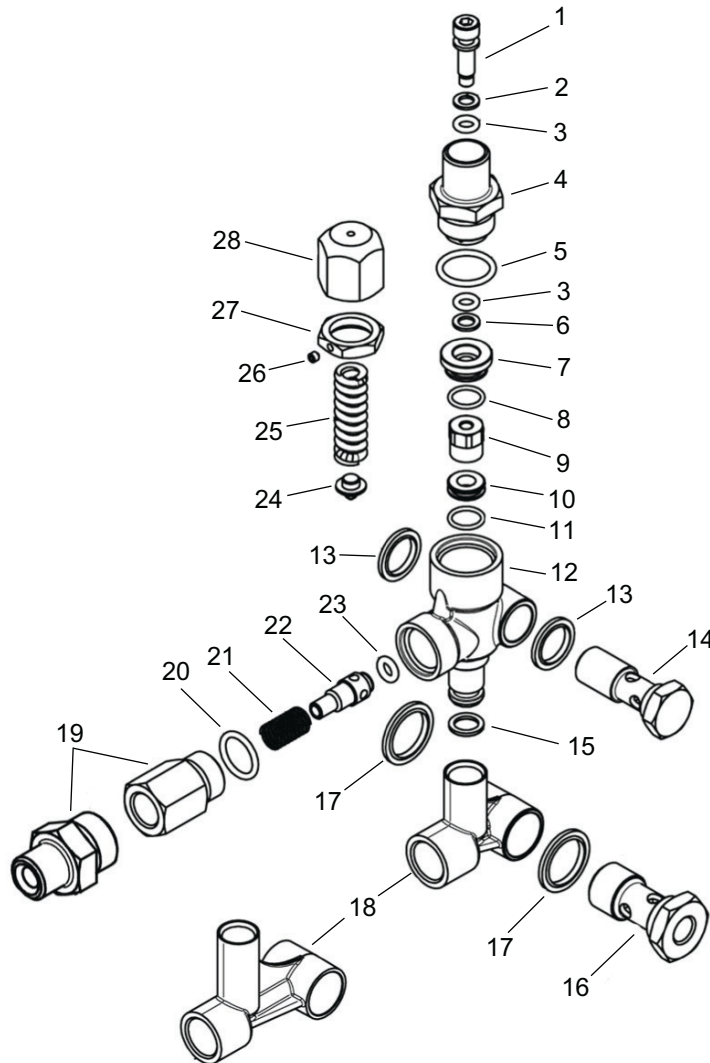
REF	PART NO.	QTY	DESCRIPTION	NOTES
1	9.802-166.0	1	COUPLER, 3/8" FEMALE	
-	9.802-100.0	1	QUICK COUPLER O-RING LG	NOT SHOWN
2	8.925-130.0	1	HOSE, 3/8" X 50' 1W 4000PSI SW/SO/CPL	(2.7-2400,3-3000, 4-3000)
-	8.925-132.0	1	HOSE, 3/8" X 50' 2W 6000PSI SW/SO/CPL	(4-3500)
3	8.751-234.0	1	GUN, LANDA, L1050, 5000 PSI, 10.4 GPM	
4	8.711-293.0	1	WAND, V.P. ZINC 1/4" (AL344) W/COUPLER W/SOAP NOZZLE	
-	9.802-222.0	1	WAND, V.P. W/CPLR & NOZZLE X-SERIES	(2.7-2400)
5	9.802-286.0	1	BRASS SOAP NOZZLE ONLY, 1/8"	
6	9.802-165.0	1	COUPLER, 1/4" MALE	
-	9.802-096.0	1	QUICK COUPLER O-RING SM	NOT SHOWN
7	8.712-346.0	1	NOZZLE, SAQCMEG 1504, YELLOW	(4-3000)
-	8.712-347.0	1	NOZZLE, SAQCMEG 2504, GREEN	(4-3000)
-	8.712-348.0	1	NOZZLE, SAQCMEG 4004, WHITE	(4-3000)
-	8.712-338.0	1	NOZZLE, SAQCMEG 1535, YELLOW	(2.7-2400, 4-3500)
-	8.712-339.0	1	NOZZLE, SAQCMEG 2503.5, GREEN	(2.7-2400, 4-3500)
-	8.712-340.0	1	NOZZLE, SAQCMEG 4003.5, WHITE	(2.7-2400, 4-3500)
-	8.712-333.0	1	NOZZLE, SAQCMEG 1530, YELLOW	(3-3000)
-	8.712-334.0	1	NOZZLE, SAQCMEG 2503, GREEN	(3-3000)
-	8.712-335.0	1	NOZZLE, SAQCMEG 4003, WHITE	(3-3000)
8	8.707-139.0	1	COUPLER, 1/4"PLUG, MALE, STEEL/ZINC	NOT SHOWN
9	9.802-164.0	1	COUPLER, 1/4"SOCKET, FEMALE, BRASS	NOT SHOWN

8.928-784.0
MHC4-35324E/B



REF	PART NO.	QTY	DESCRIPTION	NOTES
1	8.750-299.0	1	UNLOADER, VRT3, 8 GPM @4500 PSI	
2	8.933-006.0	1	SWITCH, FLOW MV60	
3	8.758-203.0	1	PROTECTION PUMP 3/8" 145 DEG W/SLNT	
4	9.802-036.0	1	NIPPLE, 1/2" JIC x 3/8" NPT, STEEL	
5	8.757-511.0	1	ELBOW, 3/8", STEEL	
6	9.802-129.0	1	ELBOW, 1/2" MSAE X 3/8" MPT, BRASS	
7	8.757-935.0	1	Adapter steel 1/2 JIC x 3/8 NPTF (F) 90°	
8	8.705-974.0	1	NIPPLE, 3/8" HEX STEEL-P/N-C3069X6	

VBT Unloader Valve



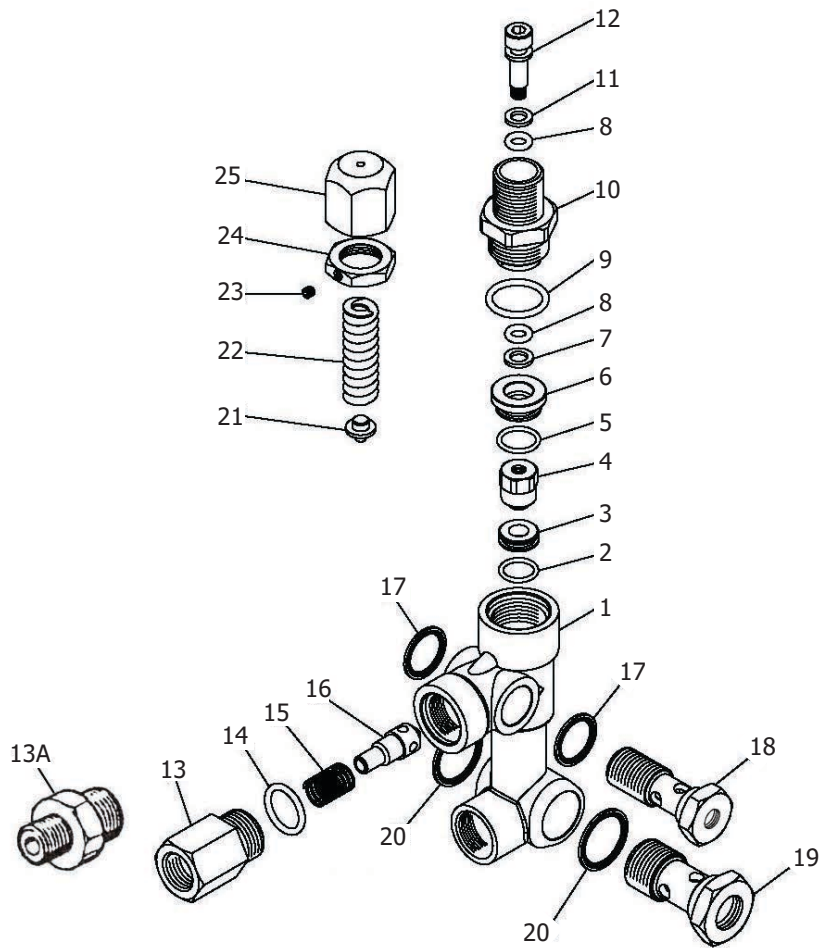
REF	PART NO.	QTY	DESCRIPTION	NOTES
1	8.754-929.0	1	STEM	SEE KITS TABLE
2	9.803-912.0	1	BACKUP RING	SEE KITS TABLE
3	8.754-930.0	2	O-RING, Ø2.62 X 6.02	SEE KITS TABLE
4	8.730-882.0	1	STEM CONNECTOR	(696.0, 703.0)
-	9.803-911.0	1	STEM CONNECTOR	(700.0, 701.0, 702.0)
5	9.803-193.0	1	O-RING, Ø2.62 X 20.24	SEE KITS TABLE
6	9.803-908.0	1	BACKUP RING	SEE KITS TABLE
7	9.803-907.0	1	GUIDE BUSHING	
8	9.803-906.0	1	O-RING, Ø1.78 X 14	SEE KITS TABLE
9	8.754-959.0	1	BALL SUBASSEMBLY	(696.0, 703.0) SEE KITS TABLE
-	8.754-932.0	1	BALL SUBASSEMBLY	(700.0, 701.0, 702.0)
10	8.754-933.0	1	SEAT	SEE KITS TABLE
11	8.754-934.0	1	O-RING, Ø1.78 X 12.42	SEE KITS TABLE
12	8.754-935.0	1	VALVE BODY	

REF	PART NO.	QTY	DESCRIPTION	NOTES
13	9.802-893.0	1	SEAL WASHER 3/8	
14	9.803-919.0	1	BANJO BOLT 3/8	
15	8.754-936.0	1	O-RING, Ø2.62 X 10.78	SEE KITS TABLE
16	9.803-920.0	1	BANJO BOLT, 1/2, W/1/4" PORT	
-	9.803-920.0	1	BANJO BOLT, 3/8 W/1/4" PORT	(703.0)
17	9.803-914.0	1	SEAL WASHER 1/2	(696.0, 700.0, 701.0, 702.0)
-	9.802-893.0	1	SEAL WASHER, 3/8	(703.0)
18	8.754-937.0	1	BYPASS MANIFOLD	(696.0, 700.0, 702.0)
-	8.754-938.0	1	BYPASS MANIFOLD	(701.0)
-	8.754-958.0	1	BYPASS MANIFOLD	(703.0)
19	9.802-892.0	1	OUTLET CONNECTOR 3/8 MPT	(696.0, 700.0, 703.0)
-	9.803-914.0	1	OUTLET CONNECTOR 3/8 FPT	(701.0, 702.0)
20	9.803-191.0	1	O-RING, Ø2.62 X 17.13	SEE KITS TABLE
21	8.933-017.0	1	POPPET SPRING	SEE KITS TABLE
22	8.754-939.0	1	POPPET	SEE KITS TABLE
23	8.754-940.0	1	O-RING, Ø3 X 6	SEE KITS TABLE
24	8.754-961.0	1	PLATE	(696.0, 703.0) SEE KITS TABLE
-	9.803-922.0	1	PLATE	(700.0, 701.0, 702.0)
25	8.730-870.0	1	SPRING 1500-3000 PSI	(700.0, 701.0 702.0) SEE KITS TABLE
-	8.933-018.0	1	SPRING 1500-4000 PSI	(696.0, 703.0)
26	8.933-021.0	1	SET SCREW	
27	9.803-925.0	1	NUT	
28	9.803-926.0	1	KNOB, BRASS, UNLOADER	

KIT NUMBERS	8.754-941.0	8.754-954.0	8.754-942.0	8.754-955.0	8.754-957.0	8.750-019.0	8.754-956.0
DESCRIPTION	O-Ring Repair Kit	O-Ring Repair Kit	Outlet Repair Kit	Outlet Repair Kit	Stem Repair Kit	Stem Repair Kit	Stem Repair Kit
ITEM NUMBERS INCLUDED	2, 3, 5, 6, 8, 11, 15, 20, 23	2, 3, 5, 6, 8, 11, 15, 20, 23	20, 21, 22, 23	20, 21, 22, 23	1, 9, 10, 11, 24, 25	1, 9, 10, 11, 24, 25	1, 9, 10, 11, 24, 25
FITS UNLOADER	696.0, 700.0, 701.0, 702.0	703.0	696.0, 700.0, 701.0, 702.0	703.0	696.0	700.0, 701.0, 702.0	703.0

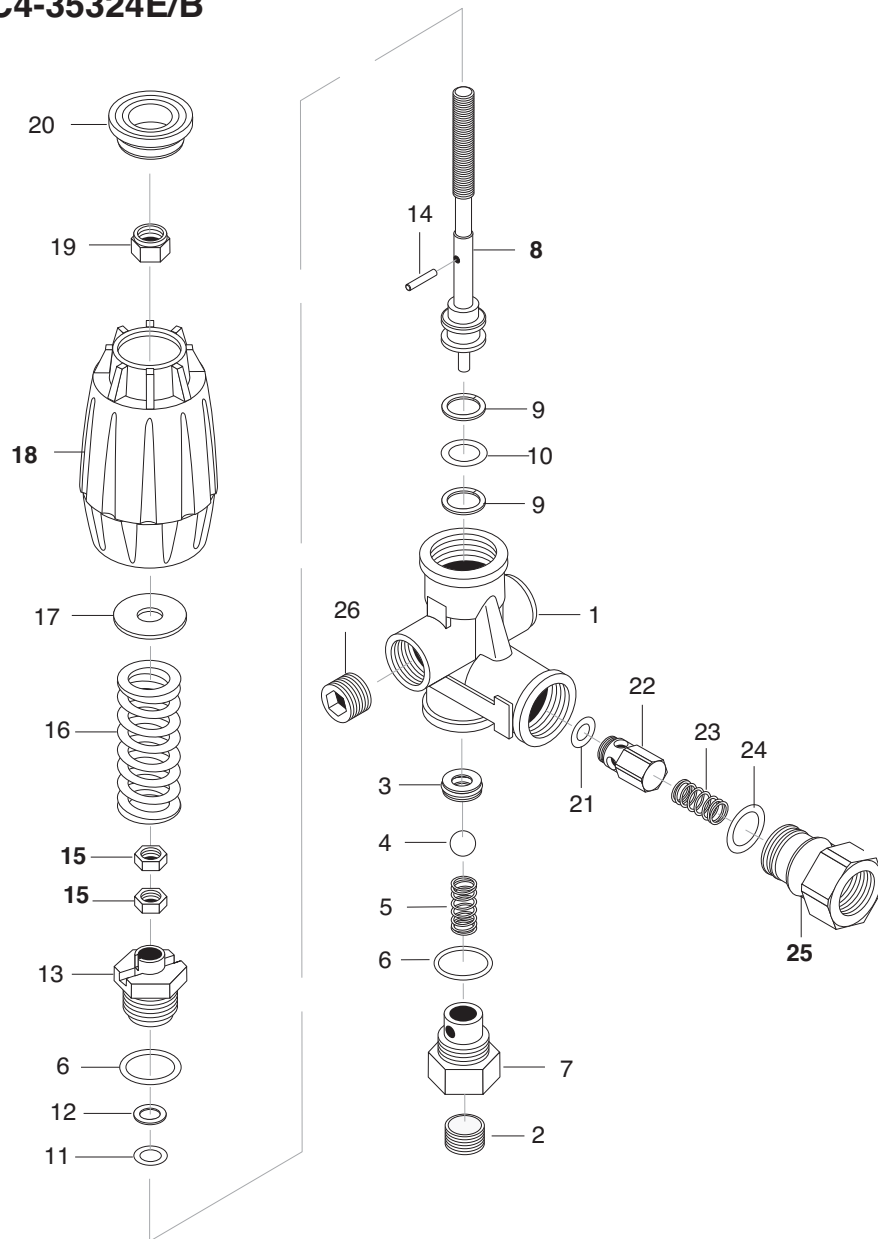
VBA 35 Unloader Valve

9.803-900.0



REF	PART NO.	QTY	DESCRIPTION	NOTES
1	-	1	BODY VALVE	
-	-	1	BODY VALVE	
2	-	1	O-RING	KIT A,C
3	-	1	SEAT	KIT C
4	-	1	BALL, SUB-ASSY	KIT C
5	-	1	O-RING	KIT A
6	9.803-907.0	1	GUIDE BUSHING	
7	-	1	TEFLON RING	
8	-	2	O-RING	KIT A
9	-	1	O-RING	KIT A
10	9.803-911.0	1	CONNECTOR	
11	-	1	TEFLON RING	KIT A
12	-	1	STEM	KIT C
13	9.803-914.0	1	CONNECTOR, FEMALE	
13A	9.802-892.0		CONNECTOR, MALE	
14	-	1	O-RING	KIT A,B
15	-	1	SPRING	KIT B
16	-	1	POPPET	KIT B
17	9.802-893.0	2	SEAL WASHER 3/8	
18	9.803-915.0	1	BANJO BOLT 3/8" W/ 1/8" PILOT	
-	9.803-919.0		BANJO BOLT 3/8" (SOLID CAP)	
19	9.803-920.0		BANJO BOLT 1/2" W/ 1/4" PILOT	
-	8.750-105.0		BANJO BOLT 1/2" (SOLID CAP)	
-	9.803-919.0		BANJO BOLT 3/8" (SOLID CAP)	
20	9.803-921.0	2	SEAL WASHER 1/2	
21	-	1	PLATE	KIT C
22	-	1	SPRING	KIT C
23	8.933-021.0	1	SET SCREW	
24	9.803-925.0	1	NUT	
25	9.803-926.0	1	BRASS HANDLE	
KIT A	8.717-672.0	-	O-RING REPAIR KIT	
KIT B	8.717-673.0	-	OUTLET KIT	
KIT C	8.717-674.0	-	STEM REPAIR KIT	

**8.750-299.0
MHC3-24324
MHC4-35324E/B**



REF	PART NO.	QTY	DESCRIPTION	NOTES
25	8.750-713.0	1	OUTLET FITTING	
18	8.750-712.0	1	KNOB, UNLOADER	
-	8.750-710.0	-	KIT, UNLOADER REPAIR, VRT3 4500 PSI	
-	-	-	(KIT ITEMS: 3, 4, 6, 9-12, 21, 24)	

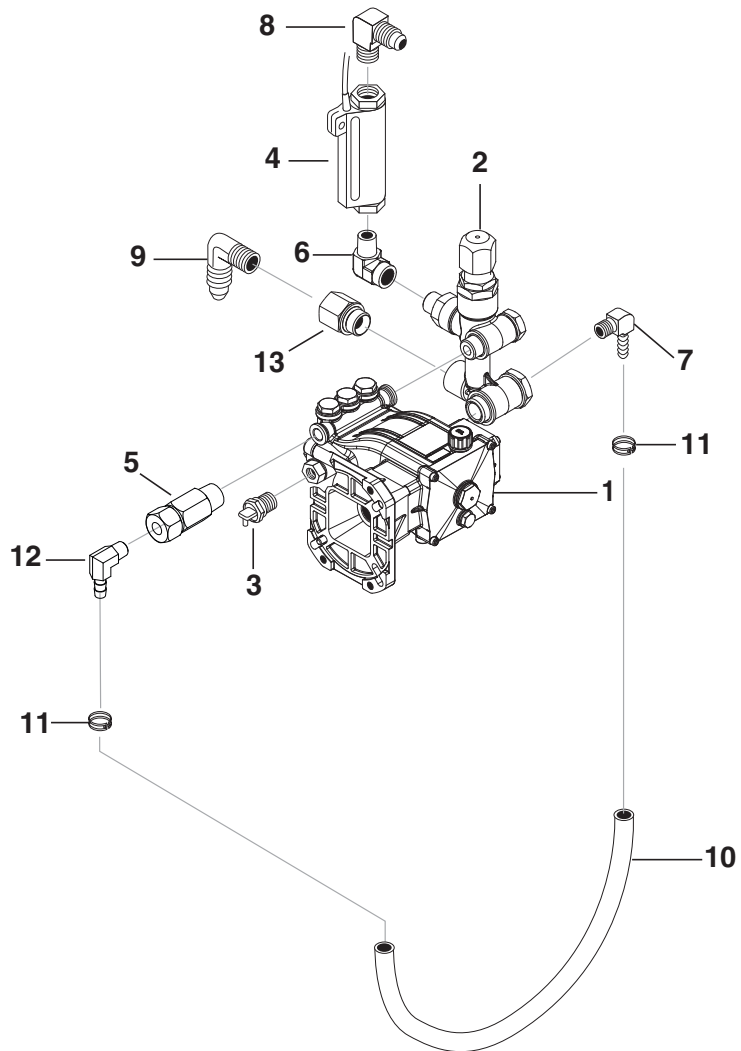
VRT3 Unloader Adjustment Procedures

1. Remove lock nut (Item 19).
2. Remove adjustment knob (Item 18).
3. Loosen the two (2) nuts (Item 15), move them upward on stem (Item 8) until you see 4 or more threads below the nut.
4. Re-attach adjusting knob (Item 18).
5. Start machine. Open the trigger of the spray gun. Increase pressure by turning adjustment knob (Item 18) clockwise until pressure is at the desired operating pressure.
6. Remove the adjustment knob (Item 18), tighten the lower nut (Item 15) tightly against the upper nut (Item 15). Re-attach adjustment knob (Item 18) and screw down until contact is made with the nuts (Items 15). Screw down lock nut (Item 19) onto the stem (Item 8) until the threads cut into the nylon insert of the lock nut (Item 19).

*If adjustment knob (Item 18) **DOES NOT** make contact with upper nut (Items 15), remove adjusting knob (Item 18), re-adjust (raise) nuts (Items 15) on stem (Item 8) and re-attach adjustment knob (Item 18), then repeat step #6.

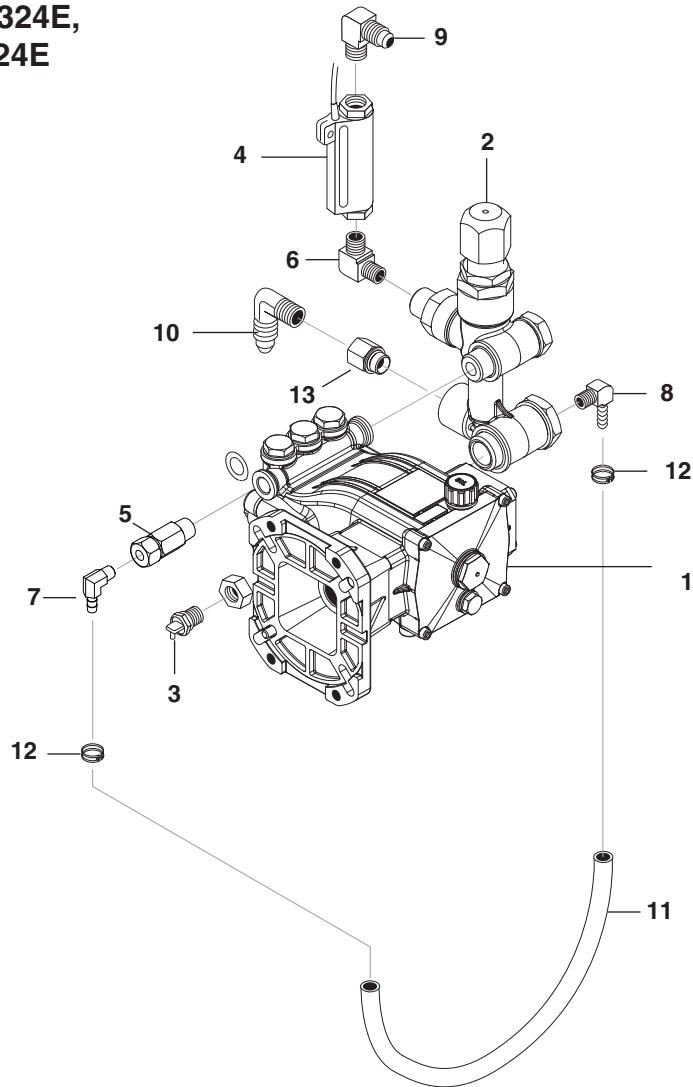
If adjustment knob (Item 18) **DOES make contact with upper nut; release the trigger of the spray gun and watch the pressure gauge for the pressure increase (“spike”). This “spike” **SHOULD NOT** exceed 500 psi above the operating pressure. If “spike” pressure exceeds the 500 psi limit, remove the adjusting knob (Item 18) and re-adjust (lower) the nuts (Items 15) on the stem (Item 8). Re-attach the adjusting knob (Item 18), then repeat step #6.

**8.915-321.0
MHC3-30324**



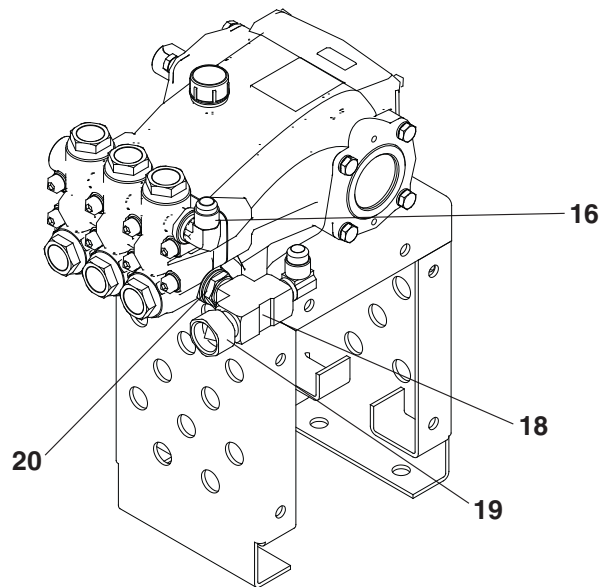
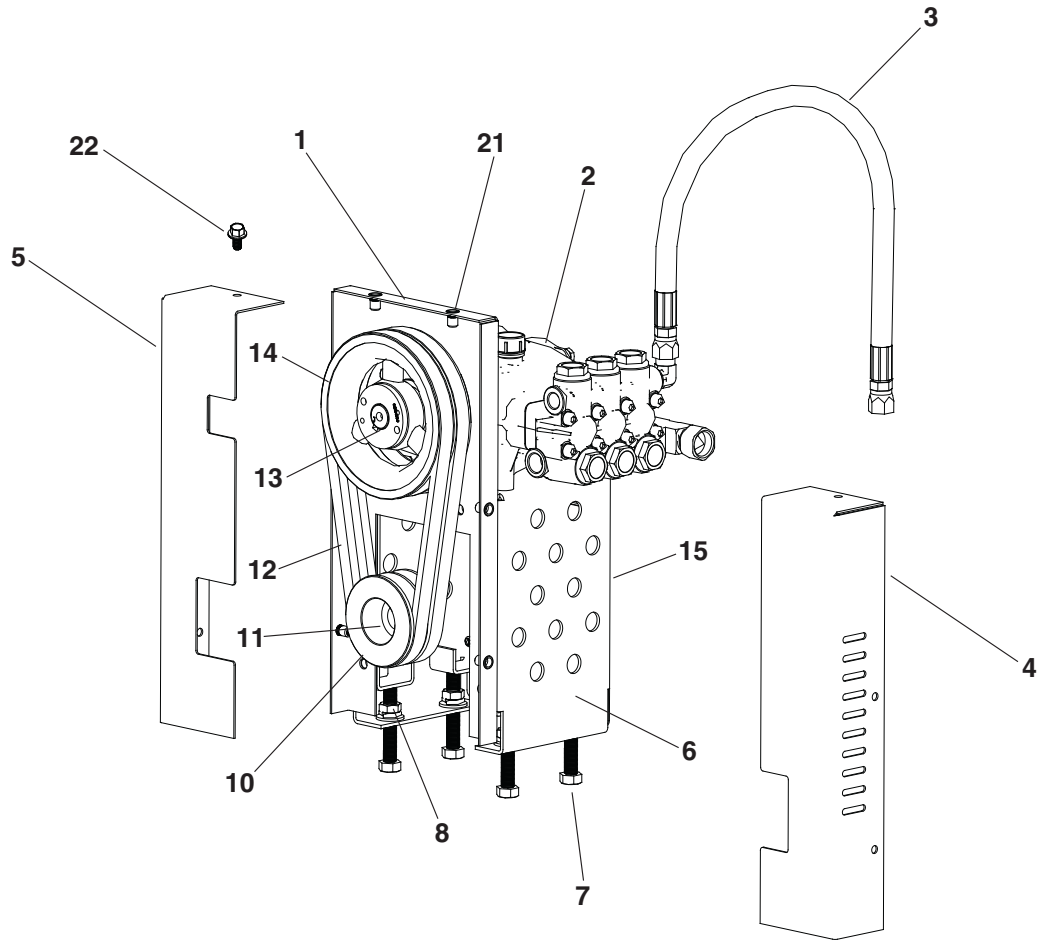
REF	PART NO.	QTY	DESCRIPTION	NOTES
1	8.929-263.0	1	PUMP LANDA LPP3035G1, 3.0@3500, 3400 RPM	
2	8.754-700.0	1	UNLOADER, VBT BANJO, 4000PSI	
3	8.757-549.0	1	PUMP PROTECTOR 1/2 140°	
4	8.933-006.0	1	SWITCH, FLOW MV60	
5	9.802-190.0	1	VALVE, EZ START, 3/8 MPT X 1/8 FPT	
6	8.757-340.0	1	ELBOW 3/8", STREET 90 DEG, STEEL, W/SLNT	
7	8.757-205.0	1	HOSE BARB, 1/4" BARB x 1/4" M-NPTF, 90°	
8	8.757-616.0	1	ADAPTER 1/2 JIC (M) X 3/8 BSPP (M) 90°	
9	8.757-202.0	1	ELBOW, 3/4" 45° SAE X 1/2" M-NPTF, BRASS	
10	9.802-254.0	14.5 in	HOSE, 1/4"	
11	6.390-126.0	2	HOSE CLAMP	
12	8.757-204.0	1	HOSE BARB, 1/4" BARB X 1/8" M-NPTF, 90°	
13	8.756-874.0	1	ADAPTER, G 1/2-14 X 1/2-14 NPTF	

8.918-611.0
MHC4-30324, 4-30324E,
4-30324E/S, 4-35324E



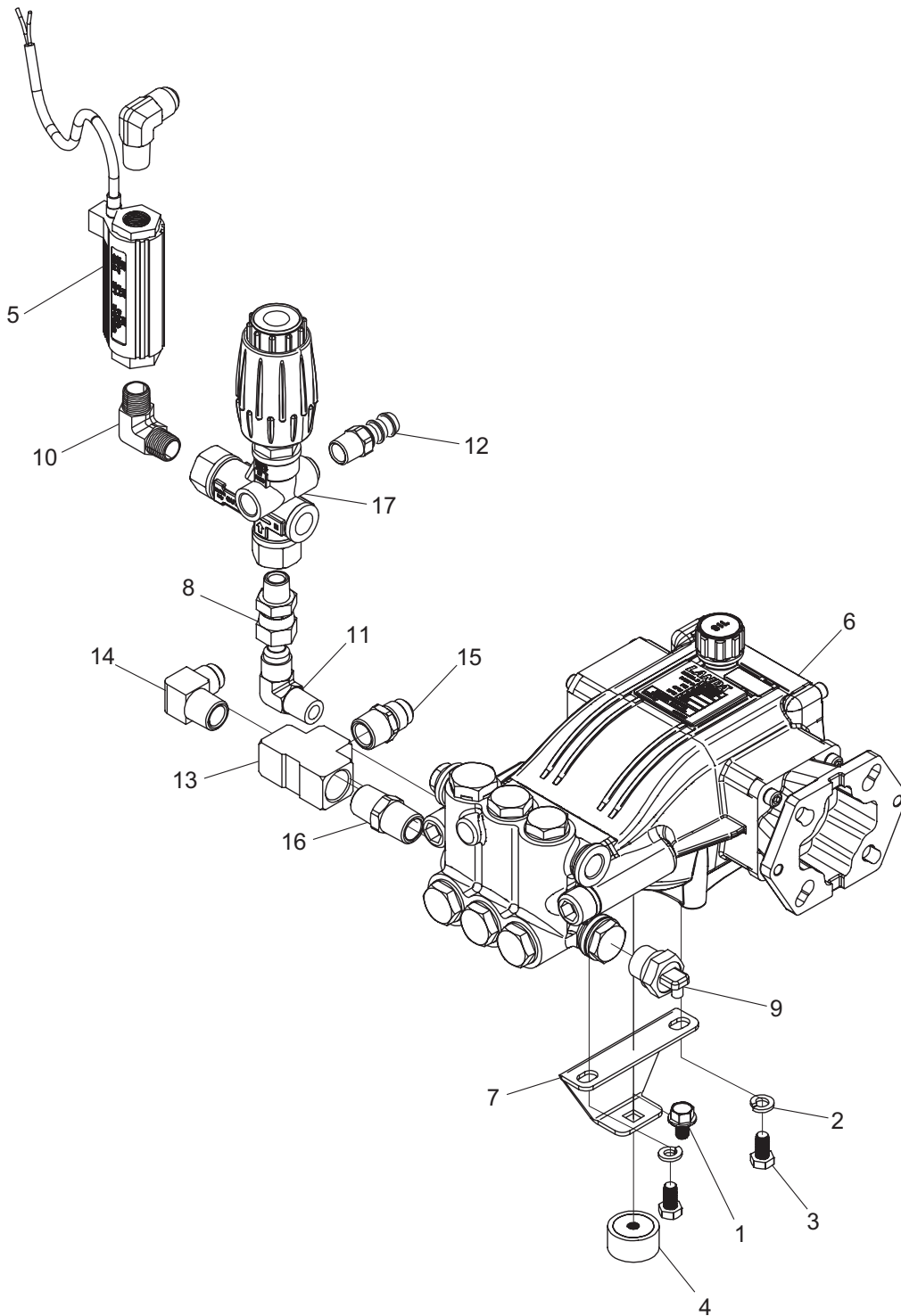
REF	PART NO.	QTY	DESCRIPTION	NOTES
1	8.751-176.0	1	PUMP, LANDA LS3540G, 3.5 @ 4000, 3400 RPM	
2	9.803-900.0	1	UNLOADER	
3	8.707-256.0	1	PUMP PROTECTOR, 140°	
4	8.933-006.0	1	SWITCH, FLOW MV60	
5	9.802-190.0	1	VALVE, EZ START, 3/8 MPT X 1/8 FPT	
6	8.757-511.0	1	ELBOW, 3/8", STEEL	
7	8.757-204.0	1	HOSE BARB, 1/4" BARB X 1/8" M-NPTF, 90°	
8	8.757-205.0	1	HOSE BARB, 1/4" BARB x 1/4" M-NPTF, 90°	
9	8.757-616.0	1	ADAPTER 1/2 JIC (M) X 3/8 BSPP (M) 90°	
10	8.757-202.0	1	ELBOW, 3/4" 45° SAE X 1/2" M-NPTF, BRASS	
11	9.802-254.0	14 in	HOSE, 1/4"	
12	6.390-126.0	2	HOSE CLAMP	
13	8.756-874.0	1	ADAPTER, G 1/2-14 X 1/2-14 NPTF	

Pump - 8.928-783.0



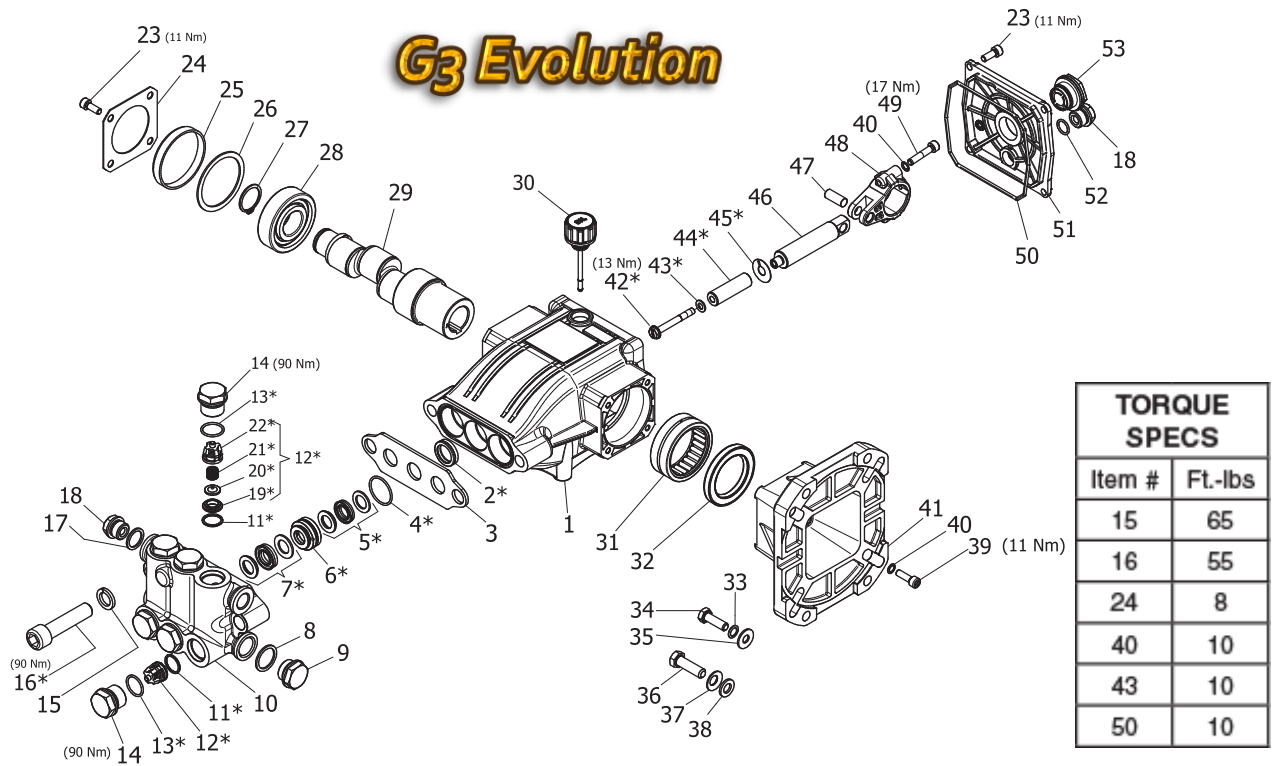
REF	PART NO.	QTY	DESCRIPTION	NOTES
1	8.928-782.0	1	SUPPORT, BELT GUARD, MHC	
2	8.928-224.0	1	PUMP, LANDA LM3540L.3, 3.5@4000 1850 RPM	
3	8.918-425.0	1	HOSE, 3/8"X 29",2 WIRE, PRESSURE LOOP	
4	8.928-779.0	1	GUARD, BELT RIGHT, MHC	
5	8.928-780.0	1	GUARD, BELT LEFT, MHC	
6	8.928-776.0	1	SUPPORT, PUMP MHC	
7	8.757-419.0	4	BOLT, 1/2-20 X 3 TAP HEX G8 ZINC	
8	8.757-420.0	4	NUT, 1/2-20 THIN HEX ZINC	
9	9.803-517.0	4	WASHER, 1/2", SPLIT RING LOCK, ZINC	
10	9.802-382.0	1	PULLEY, 2BK 34H-S	
11	9.802-399.0	1	BUSHING, H X 1	
12	8.755-652.0	2	BELT, BX30	
13	9.802-402.0	1	BUSHING, H X 24MM	
14	9.802-388.0	1	PULLEY, 2BK 67 H	
15	8.928-781.0	1	PLATE, PULLEY GUARD, MHC	
16	9.802-039.0	1	ELBOW 1/2" JIC x 3/8" MPT STEEL	
17	9.802-131.0	1	ELBOW, 1/2" MSAE x 1/2" MPT, BRASS	
18	8.706-844.0	1	TEE, 1/2" FEMALE, PIPE	
19	9.802-146.0	2	SWIVEL, 1/2" MP x 3/4" GHF W/STRAINER	
20	8.757-196.0	1	NIPPLE, 1/2" HEX, BRASS	
21	8.755-010.0	14	RIVNUT, RIB FLG HD, 1/4"-20	
22	9.802-754.0	14	SCREW, 1/4" x 1/2" NC, WHIZ LOC FLANGE	

Pump - 8.929-914.0 - MCH3-24324



REF	PART NO.	QTY	DESCRIPTION	NOTES
1	9.803-277.0	1	SCREW, 5/16" x 1/2", WHIZ LOC FLANGE	
2	9.802-813.0	2	WASHER, 5/16" SPLIT RING LOCK, ZINC	
3	9.802-741.0	2	BOLT, 8MM X 16MM HEX HEAD	
4	9.183-409.0	1	RUBBER DAMPENER 5/16"-18FEMALE 2001	
5	8.933-006.0	1	SWITCH, FLOW MV60	
6	8.929-264.0	1	Pump LANDA LPP2535G, 2.5@3500, 3400 RPM	
7	8.917-977.0	1	PUMP SUPPORT LG FAB BLACK WRINKLE	
8	8.757-656.0	1	Swivel steel 1/2 JIC (F) x 3/8 NPTF (M)	
9	8.757-549.0	1	Pump protector 1/2 140°	
10	8.757-511.0	1	ELBOW, 3/8", STEEL	
11	8.757-509.0	2	Elbow steel 1/2 SAE (M) x 3/8 NPTF (M)	
12	8.757-487.0	1	Hose barb brass 1/2" barb x 3/8"	
13	8.757-485.0	1	TEE, 1/2", BRASS	
14	8.757-391.0	1	Elbow brass 1/2 SAE (M) x 1/2 NPTF (M)	
15	8.757-200.0	1	Adapter brass 1/2 SAE (M) x 1/2 NPTF (M)	
16	8.757-196.0	1	NIPPLE, 1/2" HEX, BRASS	
17	8.750-299.0	1	UNLOADER, VRT3, 8 GPM @4500 PSI	

LPP Series Pump



TORQUE SPECS	
Item #	Ft.-lbs
15	65
16	55
24	8
40	10
43	10
50	10

REF	PART NO.	QTY	DESCRIPTION	NOTES
1	8.754-841.0	1	CRANKCASE	
2	-	3	PLUNGER OIL SEAL	SEE KITS TABLE
3	8.758-216.0	1	SPACER	
4	-	3	O RING 1.78X26.7	SEE KITS TABLE
5	-	3	U-SEAL, 14 MM	SEE KITS TABLE
6	-	3	PRESSURE RING, 14 MM	SEE KITS TABLE
7	-	3	U-SEAL, 14 MM	SEE KITS TABLE
8	9.803-199.0	1	WASHER, COPPER G1/2	
9	9.802-926.0	1	PLUG, BRASS G1/2	
10	8.759-027.0	1	MANIFOLD	
11	8.717-233.0	6	O-RING Ø1.78 X 15.6	
12	-	6	VALVE ASSEMBLY	SEE KITS TABLE
13	9.803-948.0	6	O-RING Ø1.78 X 18.77	
14	9.803-949.0	6	VALVE PLUG	
15	8.754-850.0	2	LOCK WASHER	
16	8.758-217.0	2	BOLT, MANIFOLD M14X60	
17	9.803-198.0	1	WASHER, LOCK	
18	8.707-262.0	2	WASHER, COPPER G3/8	
19	-	6	PLUG, BRASS G3/8	SEE KITS TABLE
20	-	6	VALVE SEAT	SEE KITS TABLE
20	-	6	Valve Plate	SEE KITS TABLE
21	-	6	Valve Spring	SEE KITS TABLE

REF	PART NO.	QTY	DESCRIPTION	NOTES
22	-	6	VALVE CAGE	SEE KITS TABLE
23	9.802-939.0	8	SCREW, M6 X 16	
24	8.717-137.0	2	BEARING COVER	
25	9.803-954.0	1	BEARING SEAL	
26	8.754-843.0	1	SEAL SPACER, CRANKSHAFT	
27	9.802-914.0	1	SNAP RING, 25 MM	
28	9.803-955.0	1	BEARING, BALL	
29	8.754-828.0	1	SHAFT, 1" HOLLOW 3035G1	
-	8.754-832.0	1	SHAFT, 1" HOLLOW 3535G1	
-	8.754-833.0	1	SHAFT, 1" HOLLOW 4035G1	
30	8.754-219.0	1	OIL DIPSTICK	
31	8.754-840.0	1	BEARING NEEDLE	
32	8.754-826.0	1	SEAL, CRANKSHAFT	
33	9.802-889.0	4	WASHER	
34	9.803-243.0	4	WASHER	
35	9.803-215.0	4	WASHER 6MM	
36	9.803-244.0	4	SCREW	
37	9.803-217.0	4	WASHER	
38	9.803-217.0	4	WASHER	
39	8.752-824.0	4	SCREW, M6 X 20	
40	9.803-218.0	10	WASHER 6MM	
41	8.754-864.0	3	FLANGE, ENGINE	
42	8.754-855.0	3	BOLT, PLUNGER	
43	8.754-092.0	3	SPACER, COPPER	
44	8.754-849.0	3	PLUNGER, 14 MM	
45	9.803-962.0	3	SPACER, COPPER	
46	8.759-032.0	3	PLUNGER ROD	
47	9.803-965.0	3	CONNECTING ROD PIN	
48	9.803-966.0	3	CONNECTING ROD	
49	8.933-020.0	6	SCREW, CONNECTING ROD	
50	8.754-847.0	1	O-RING Ø2.62 X 111.62	
51	8.754-842.0	1	COVER, CRANKCASE	
52	9.803-906.0	1	O-RING Ø1.78 X 14	
53	9.803-202.0	1	SIGHT GLASS, G3/4	

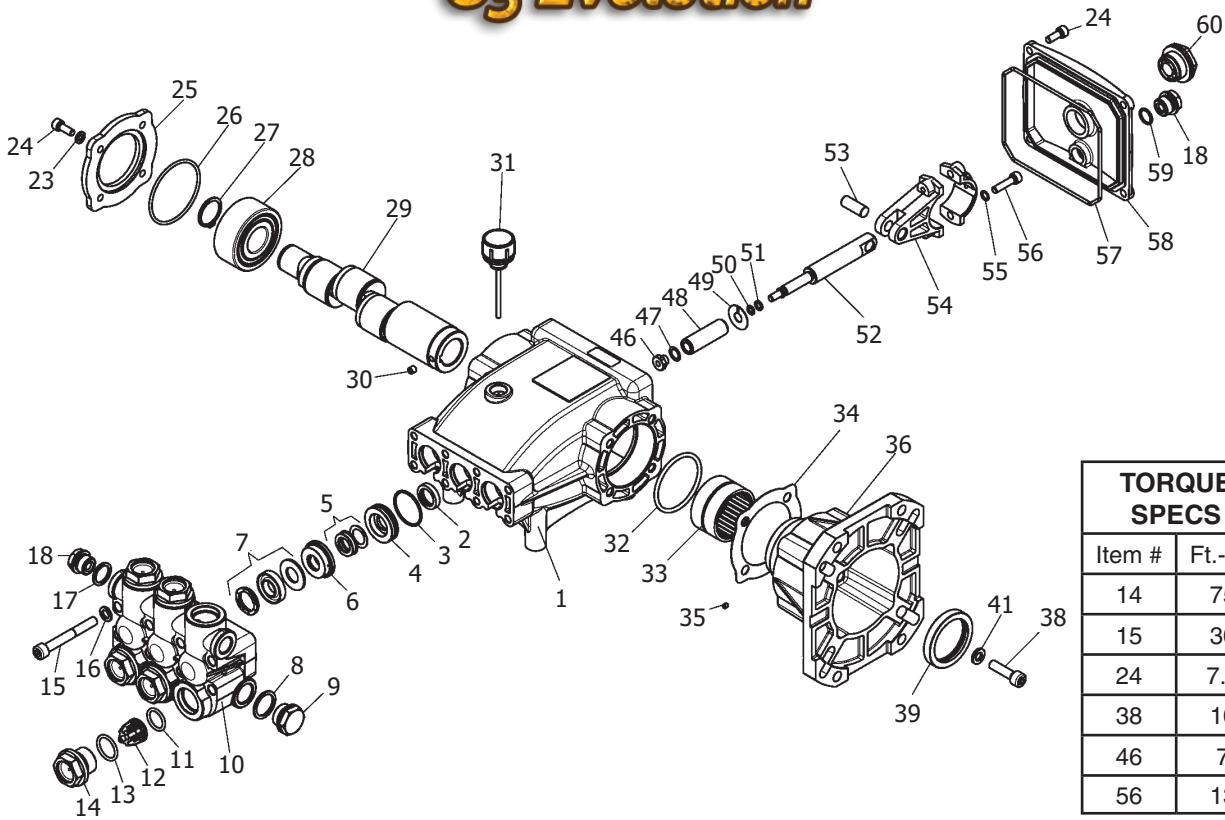
* Available in kit (See below)

KIT NUMBERS	8.759-031.0	8.758-218.0	8.754-862.0	8.754-859.0	9.803-937.0
KIT DESCRIPTION	Plunger Seals 14 mm	Seal Packing 14 mm	Plunger 14 mm	Complete Valve	Plunger Oil Seals
ITEM NUMBERS INCLUDED	4, 5, 7, 16	4, 5, 6, 7, 16	43, 44, 45, 46	12, 13, 14	2
NUMBER OF CYLINDERS KIT WILL SERVICE	3	3	1	6	3

LS.3 Series Pump

8.751-176.0 LS3540G.3

G3 Evolution



TORQUE SPECS	
Item #	Ft.-lbs
14	75
15	30
24	7.6
38	10
46	7
56	13

REF	PART NO.	QTY	DESCRIPTION	NOTES
1	8.751-217.0	1	CRANKCASE	
2	-	3	PLUNGER OIL SEAL	SEE KITS TABLE
3	-	3	O-RING Ø1.78 X 31.47	SEE KITS TABLE
4	-	3	PRESSURE RING	SEE KITS TABLE
5	-	3	U-SEAL, 15MM	SEE KITS TABLE
6	-	3	INTERMED. RING 15MM	SEE KITS TABLE
7	-	3	U-SEAL, 15MM	SEE KITS TABLE
8	9.803-199.0	1	COPPER WASHER 1/2"	
9	9.802-926.0	1	BRASS PLUG, 1/2"	
10	8.751-218.0	1	MANIFOLD HOUSING	
11	9.803-191.0	6	O-RING Ø2.62 X 17.13	SEE KITS TABLE
12	-	6	VALVE ASSEMBLY	SEE KITS TABLE
13	9.803-193.0	6	O-RING Ø2.62 X 20.29	SEE KITS TABLE
14	9.802-928.0	6	VALVE PLUG	
15	9.802-938.0	8	MANIFOLD STUD BOLT	
16	9.802-884.0	8	WASHER	
17	9.803-198.0	1	COPPER WASHER 3/8"	
18	9.802-925.0	2	BRASS PLUG 3/8"	
23	9.803-210.0	4	WASHER, M6 X 16	
24	9.802-939.0	9	HEXAGONAL SCREW	

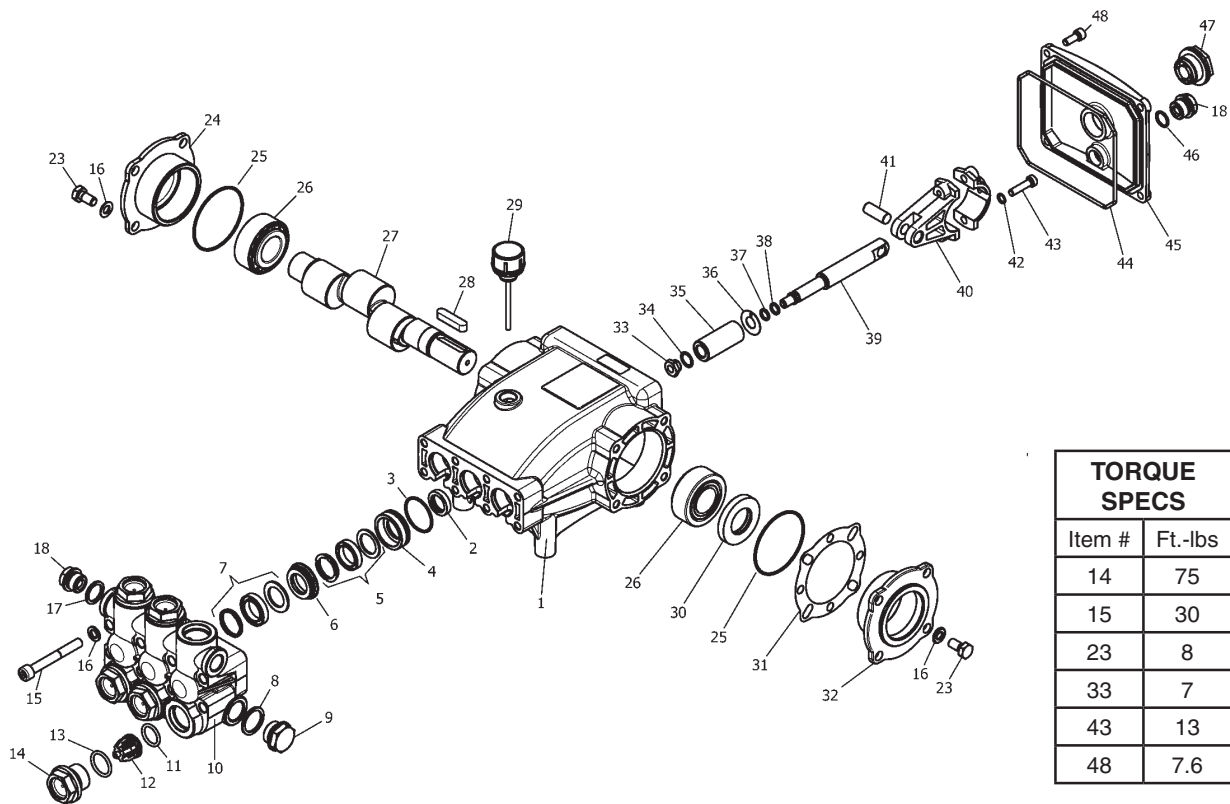
REF	PART NO.	QTY	DESCRIPTION	NOTES
25	9.803-184.0	1	CLOSED BEARING HOUSING	
26	8.717-225.0	1	O-RING Ø 2.62 X61.6	
27	9.802-914.0	1	SNAP RING	
28	9.803-168.0	1	DOUBLE ROW BALL BEARING	
29	9.803-150.0	1	CRANKSHAFT	(3040G.3)
-	9.803-151.0	1	CRANKSHAFT	(3540G.3)
-	9.803-152.0	1	CRANKSHAFT	(4040G.3)
-	9.803-153.0	1	CRANKSHAFT	(5030G.3)
30	9.802-945.0	1	SET SCREW	
31	9.802-921.0	1	OIL DIP STICK	
32	9.804-581.0	1	O-RING Ø 3.53 X 55.56	
33	9.803-161.0	1	NEEDLE ROLLER BEARING	
34	8.751-230.0	1	GASKET	
35	8.717-544.0	1	SCREW, SET	
36	9.803-183.0	1	ENGINE FLANGE	
38	9.803-240.0	4	FLANGE SCREW	
39	9.803-142.0	1	CRANKSHAFT SEAL	
41	9.803-221.0	4	SPRING WASHER	
46	-	3	PLUNGER NUT, M6	SEE KITS TABLE
47	-	3	WASHER, COPPER, 9.2 X 13.5	SEE KITS TABLE
48	-	3	PLUNGER, 15MM	SEE KITS TABLE
49	-	3	COPPER SPACER	SEE KITS TABLE
50	-	3	O-RING Ø1.78X5.28	SEE KITS TABLE
51	-	3	TEFLON RING	SEE KITS TABLE
52	8.751-225.0	3	PLUNGER ROD	
53	8.751-228.0	3	CONNECTING ROD PIN	
54	9.803-158.0	3	CONNECTING ROD	
55	9.803-218.0	6	SPRING WASHER	
56	9.803-238.0	6	CONNECTING ROD SCREW	
57	8.933-016.0	1	O-RING 2.62 X 126.67	
58	8.751-229.0	1	CRANKCASE COVER	
59	9.803-197.0	1	O-RING, Ø 1.78 X 14	
60	9.803-202.0	1	SIGHT GLASS, G3/4	

KIT NUMBERS	8.725-358.0	8.725-359.0	8.933-023.0	9.802-603.0	9.802-609.0
KIT DESCRIPTION	Plunger U-Seals 15 mm	Complete U-Seal Packing 15 mm	Plunger 15 mm	Complete Valve	Plunger Oil Seals
ITEM NUMBERS INCLUDED	3, 5, 7	3, 4, 5, 6, 7,	46, 47, 48, 49, 50, 51	11, 12, 13	2
NUMBER OF CYLINDERS KIT WILL SERVICE	3	1	1	6	3

LM.3 Series Pump

8.928-224.0 LM3540L.3

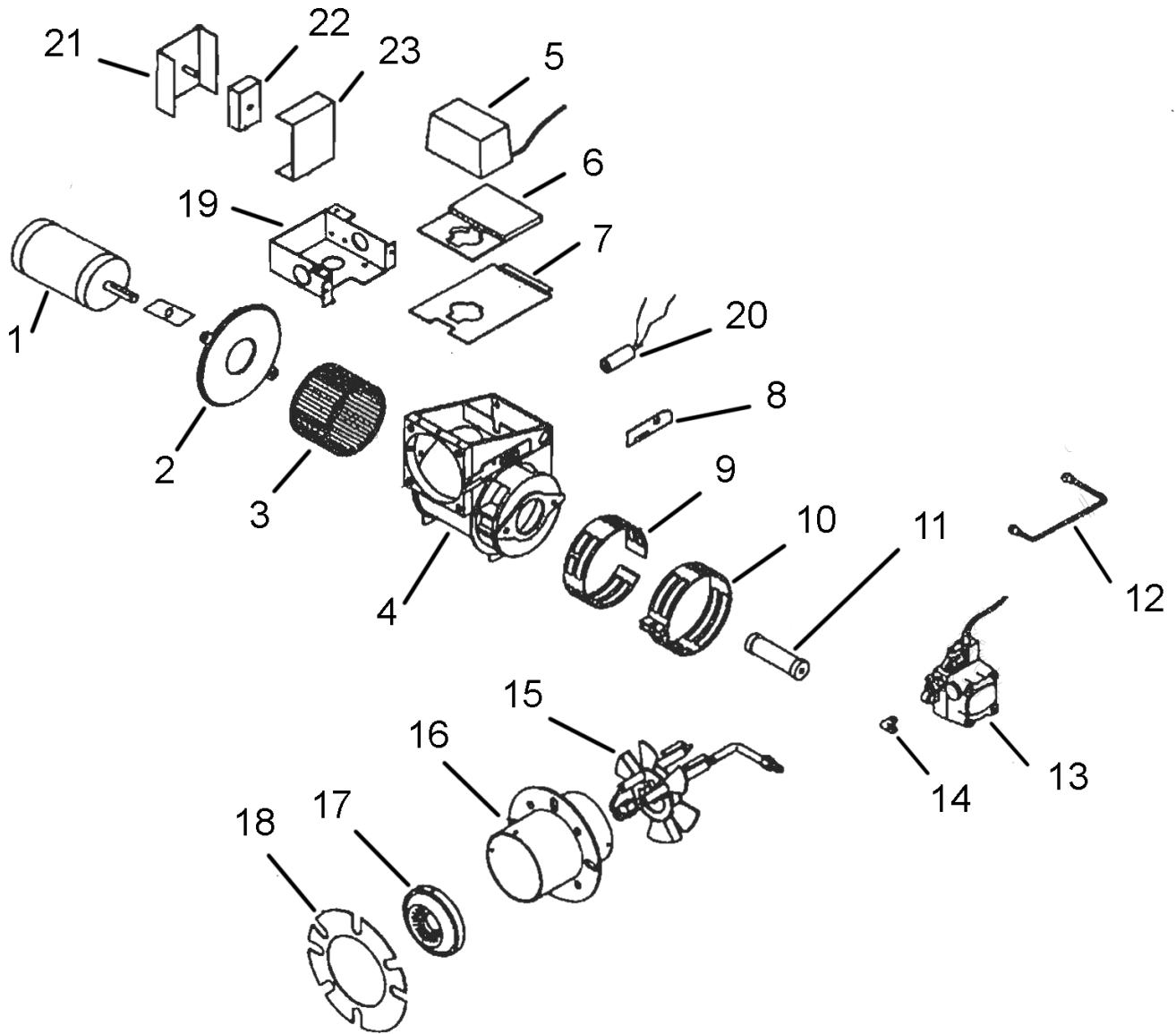
G3 Evolution



REF	PART NO.	QTY	DESCRIPTION	NOTES
1	8.751-216.0	1	CRANKCASE	
2	-	3	PLUNGER OIL SEAL	SEE TABLE KITS
3	-	3	O-RING Ø1.78 X 31.47	SEE TABLE KITS
4	-	3	SEE KITS BELOW PRESSURE RING	SEE TABLE KITS
5	-	3	U-SEAL	SEE TABLE KITS
6	-	3	INTERMEDIATE RING	SEE TABLE KITS
7	-	3	U-SEAL	SEE TABLE KITS
8	9.803-199.0	1	WASHER, COPPER	
9	9.802-926.0	1	PLUG, BRASS 1/2	
10	8.751-218.0	1	MANIFOLD HEAD	
11	-	6	O-RING Ø2.62 X 17.13	SEE TABLE KITS
12	-	6	VALVE ASSEMBLY	SEE TABLE KITS
13	-	6	O-RING Ø2.62 X 20.29	SEE TABLE KITS
14	9.802-928.0	6	VALVE PLUG	
15	9.802-938.0	8	MANIFOLD STUD BOLT	
16	9.802-884.0	16	WASHER	
17	9.803-198.0	1	COPPER WASHER 3/8	
18	9.802-925.0	1	BRASS PLUG 3/8	
23	9.802-944.0	8	SCREW, HEX, 8MM X18MM	

REF	PART NO.	QTY	DESCRIPTION	NOTES
24	8.717-210.0	1	CLOSED BEARING HOUSING	
25	9.803-192.0	2	O-RING Ø1.78 X 60.05	
26	8.933-011.0	2	TAPERED ROLLER BEARING	
27	8.751-222.0	1	CRANKSHAFT	
28	9.803-167.0	1	CRANKSHAFT KEY	
29	9.802-921.0	1	OIL DIP STICK	
30	9.803-140.0	1	CRANKSHAFT SEAL	
31	9.803-178.0	2	SHIM	
32	8.717-209.0	1	BEARING HOUSING	
33	-	3	PLUNGER NUT, M*	SEE TABLE KITS
34	-	3	COPPER SPACER	SEE TABLE KITS
35	-	3	PLUNGER	SEE TABLE KITS
36	-	3	COPPER SPACER	SEE TABLE KITS
37	-	3	O-RING Ø1.78 X 7.66	SEE TABLE KITS
38	-	3	TEFLON RING	SEE TABLE KITS
39	8.751-224.0	3	PLUNGER ROD	
40	9.803-158.0	3	CONNECTING ROD	
41	8.751-228.0	3	CONNECTING ROD PIN	
42	9.803-218.0	6	SPRING WASHER	
43	9.803-238.0	6	CONNECTING ROD SCREW	
44	8.933-016.0	1	O-RING, Ø2.62 X 126.67	
45	8.751-229.0	1	CRANKCASE COVER	
46	9.803-197.0	1	O-RING, Ø1.78 X 14	
47	9.803-202.0	1	SIGHT GLASS 3/4	
48	9.802-939.0	5	COVER SCREW	

KIT NUMBERS	8.725-358.0	8.751-238.0	8.933-023.0	9.802-603.0	9.802-609.0
KIT DESCRIPTION	Plunger U-Seals 15 mm	Complete U-Seals Packing 15 mm	Plunger 15 mm	Complete Valve	Plunger Oil Seals
ITEM NUMBERS INCLUDED	3, 5, 7	3, 4, 5, 6, 7	46, 47, 48, 49, 50, 51	11, 12, 13,	2
NUMBER OF CYLINDERS KIT WILL SERVICE	3	1	1	6	3



REF	PART NO.	QTY	DESCRIPTION	NOTES
1	8.700-739.0	1	BURNER MOT 12V-WH MSR DC FASCO	
2	100761-001	1	MOTOR ADAPTOR	
3	8.756-660.0	1	FAN, 2.44" X 4.53" X 5/16" BORE	
4	8.717-939.0	1	FAN HOUSING, MODEL M (UNPAINTED)	
5	9.107-507.0	1	IGNITOR 12VDC LOW AMP	
6	100730-001	1	MOUNTING BASE	
7	21723-002	1	HOUSING COVER	
8	13392	1	SLOT COVER BASE	
9	8.700-707.0	1	AIR BAND INNER MSR/MSRDC	
10	8.700-708.0	1	AIR BAND OUTER MSR/MSRDC	
11	8.700-721.0	1	COUPLING FOR 079021X	
12	8.700-704.0	1	OIL LINE, 6'	
13	8.756-437.0	1	PUMP - COMBO/W SOLENOID 12V/24V	
14	13494	1	ELBOW	USE WITH #13
15	8.756-451.0	1	GUN ASSEMBLY, GUN-RG/*CST/*1 1/4"BB3	
16	8.756-658.0	1	WLMT, AIR TUBE FLANGE 1.63" "M"	
17	8.756-659.0	1	AIR CONE #4A8	
18	8.700-692.0	2	GASKET, E & M SERIES BURNERS	
19	8.756-739.0	1	JUNCTION BOX, MSR, BLACK COVER	NOT SHOWN
-	8.756-740.0	1	JUNCTION BOX, MSR, BLACK BODY	
-	8.756-743.0	3	PLUG, HOLE, JUNCTION BOX, M&E	NOT SHOWN
20	8.700-819.0	1	CAD CELL F/HS & M SERIES BURNE	
21	63355-001	1	CONTROL BOX	
22	8.756-661.0	1	TIMER, BURNER DROP-OUT	
23	62899	1	COVER, CONTROL BOX	

LANDA[®]

9.800-950.0 • Printed in U.S.A.