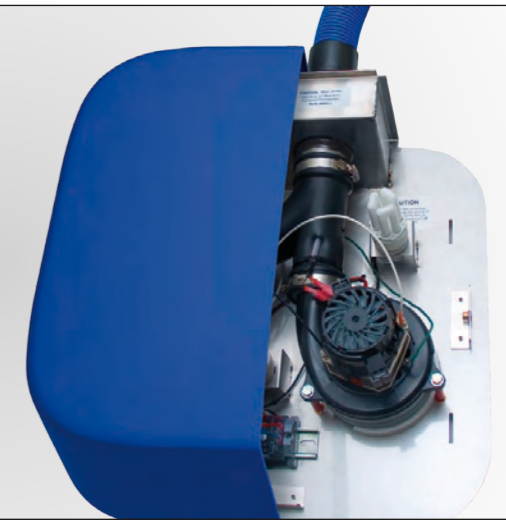




SB Trocknungsanlage
Self service drying system

DRY



BEDIENUNGSANLEITUNG OWNER'S MANUAL 230V VERSION



MOSMATIC AG
Oberhelfenschwilerstrasse 6
CH-9126 Necker, Switzerland
Tel. +41 (0)71 375-6464
Fax +41 (0)71 375-6460
Email sales@mosmatic.com

Internet www.mosmatic.com

© 2009 MOSMATIC AG
Alle Rechte vorbehalten. Nachdruck, auch auszugsweise, nur mit Genehmigung von MOSMATIC AG.

THE BASICS OF DRYING VEHICLES

In car washing there are two drying processes that occur

1. Stripping or a mechanical movement of the water from the surface of the vehicle.
2. Evaporation or a change in state of the moisture from a liquid to a gas (water vapor).

The MOSMATIC-DRY uses the stripping process as the primary means of removing the water from the surface of the vehicle. There is only a slight and incidental action of heating that takes place due to the action of the fan and acceleration of the air molecules within the system. This heating occurs after a brief period of use and is generally less than a 5°C rise from ambient temperature levels. The main action of the air stream that dries the vehicle is the impact (impingement) of air molecules on the vehicle surface and the water that is located thereon. To maximize this stripping action, we utilize a specially designed nozzle matched with properly sized flow producers (blowers) that are based on air knife technology. A brief description of air knives and their application to this product follows.

What is an air knife?

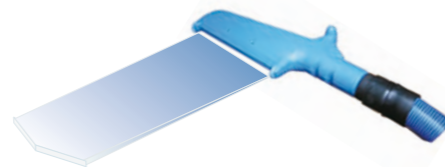
Air Knives have been used for decades as solutions to tackle tough industrial drying and stripping jobs. Air knives provide rapid drying performance for bottling, food processing, building materials, machining and stamping operations and many other industrial applications that require high drying speed and "bone-dry" results! One or more air knives are usually positioned adjacent to a processing "line" to dry the items or parts as they pass through the 'curtain of air' at high speeds.

Why are these Devices so effective?

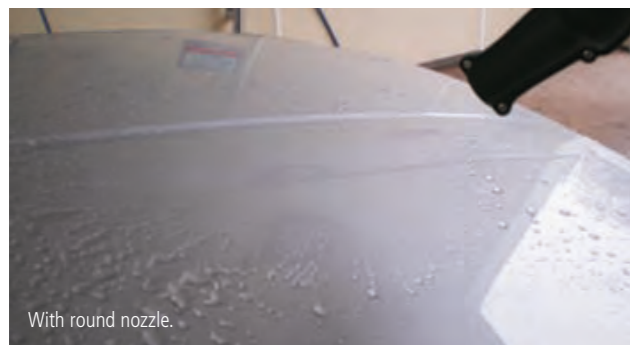
The drying power of the air knife is based in the aerodynamic properties of fluids (like air or water) under certain flow conditions - laminar flow (streamline flow) vs. turbulent flow. The orifice shape of the air knife promotes laminar flow which maintains the original direction of the air stream. In the case of our dryer, this results in maintaining a much higher portion of the initial force and energy that was imparted by the blower system for water stripping power as the air stream impacts the vehicle surface. Air flow from a typical round nozzled (orifice) dryer produces turbulent air flow that quickly devolves into eddies - power-robbing vortices that also cause erratic flow patterns on the vehicle surface and re-wetting of previously dried areas. Additionally, since the nozzle shape creates a sheet-shaped flow, the MOSMATIC-DRY nozzle can be positioned much closer to the vehicle and still provide "wide-track" drying.



Flow produced by other dryers



Flow produced by MOSMATIC-DRY



With round nozzle.



With MOSMATIC-DRY nozzle.

How does all of this relate to drying cars?

Take a look at the photos below. Both photos were taken on the same day, same conditions, same vehicle - with much different results.

Notice the difference in water droplet movement patterns. The dryer with round nozzle (photo on the bottom left) spreads the water droplets in a circular pattern - the water is moving in all directions.

The MOSMATIC-DRY nozzle (photo on the bottom right) produces a laminar flow across the vehicle surface that causes the water droplets to be moved in a uniform direction.

Also take note of the distance between the nozzle and the vehicle surface. The dryer with the round orifice must be held at a considerably longer distance from the vehicle in order to produce a comparable drying track compared with the MOSMATIC-DRY results. This greatly reduces the energy or force of the air stream as it impinges on the water droplets. In fact, as the nozzle to surface distance increases; the power of the air stream impacting the surface is reduced by the square of the change in distance (inverse squares relationship). This attribute of MOSMATIC-DRY allows your customers to move the tool more rapidly over the vehicle surfaces - and because MOSMATIC-DRY doesn't cause a re-wetting of the surface; they will enjoy a totally dry car - or motorcycle.

LIMITED WARRANTY

MOSMATIC AG, (MOSMATIC) warrants this equipment against defects in workmanship and material and will remedy any defect to the terms of this Limited Warranty.

MOSMATIC will repair or replace at its option, any defective part(s) or component(s) for a period of one (1) year from the date of purchase. This Limited Warranty extends to the original purchaser only.

To make a request or claim for service under the terms of this warranty, the original purchaser must contact MOSMATIC and provide the product serial number a description of the problem (including some indication of the parts or components felt to be defective), and the date of purchase. No parts, components or the equipment should be returned without authorization number (RMA) from us.

The original purchaser shall be responsible for all shipping charges. Any item authorized by MOSMATIC for return under the terms of this Limited Warranty must be shipped prepaid, in the original shipping container or equivalent to MOSMATIC or to a local service center as authorized and determined by MOSMATIC. The purchaser assumes the risk of loss or damage in transit. (Please refer to your owner's manual or contact MOSMATIC if you need further information about proper shipping instructions.)

REPLACEMENT OR REPAIR OF PARTS OR COMPONENTS IN ACCORDANCE WITH THE ABOVE LIMITED WARRANTY SHALL BE THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY AGAINST MOSMATIC.

This Limited Warranty does not cover equipment that has been damaged due to misuse, mis-application, attempted theft, vandalism, accident connection to an improper voltage supply or as a result of modification by other than MOSMATIC. Components such as gaskets, electrical components, hose, rubber, plastic parts, or similar items are subject to wear and tear or consumption during normal operation and this normal disintegration is not covered by the Limited Warranty.

MOSMATIC makes no warranty concerning the compliance of the equipment with any local, state or federal/national/international laws or regulations. The purchaser agrees to accept full responsibility for complying with such laws.

THERE ARE NO WARRANTIES OTHER THAN THOSE ON THE FACE HEREOF DESCRIBED ABOVE AND THEY ARE IN LIEU OF ALL OTHER WARRANTIES WHETHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE.

MOSMATIC SHALL NOT BE LIABLE FOR INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES INCLUDING WITHOUT LIMITATION DAMAGES RESULTING FROM PERSONAL, BODILY INJURY OR DEATH OR DAMAGES TO OR LOSS OF USE OF PROPERTY.

Grafic Part



Part Nr.	QTY.	Description
902.877	1	Sign, Bay instructional

INDEX

The Basics of Drying Vehicles	2	Start-up / Operation Guide	11
<ul style="list-style-type: none"> • In car washing there are two drying processes that occur. • What is an air knife? • Why are these Devices so effective? • How does all of this relate to drying cars? 		Initial Start-up	11
		<ul style="list-style-type: none"> • Installation Completion Checklist • Start Up Test • Replace Power Pack Cabinet Cover 	
Index	3	Operation	12
		<ul style="list-style-type: none"> • Nozzle Use - Drying Technique 	
Important safety instructions	4	Maintenance Guide	13
<ul style="list-style-type: none"> • Grounding Instructions • MOSMATIC-DRY 		Periodic Maintenance	13
		<ul style="list-style-type: none"> • Weekly • Periodically • Replace Power Pack Cabinet Cover • No lubrication required 	
Product Guide	5	NeoGlide (TM)	14
Product Selection Operation Basics	5	Insert Replacement	14
<ul style="list-style-type: none"> • Typical "Full-Wall" Installation • Product Selection: MOSMATIC Flexibility • MOSMATIC-DRY System Basics 		<ul style="list-style-type: none"> • Removing the Insert • Installing new Inserts • Secure Inserts 	
Installation Guide	6	Part Sheet	15
General Installation Instructions	6	Cabinet Parts	15
<ul style="list-style-type: none"> • STOP! Read before proceeding • General Installation Instructions 		Accessories for Air-System	15
		Electrical Parts	16
Positioning in the Wash Bay	6	Plenum & Hose Parts	17
<ul style="list-style-type: none"> • Location on the Wall - Horizontal Positioning • MOSMATIC-DRY Dimensions 		Grafic Part	18
		Limited Warranty	19
LU Air Boom Installation Details	7		
<ul style="list-style-type: none"> • Mounting Details for MOSMATIC LU Air Boom 			
Power Pack Installation Details	8		
<ul style="list-style-type: none"> • Unpack Power Pack • Locate and install the hanger bracket on the bay wall • Prepare Dryer for Wall Mounting • Install MOSMATIC-DRY Power Pack on wall bracket • Install Light Bulbs • Connect the Power Pack to the Connector Hose • Connect the Nozzle Control Switch Leads • Final Hose Connection 			
Electrical Connections	9		
<ul style="list-style-type: none"> • Important safety instructions • Electrical Connection 			
Electrical Connections (Detail)	10		

IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic precautions should always be followed, including the following:

READ ALL INSTRUCTIONS BEFORE USING THIS APPLIANCE.



Caution

This appliance has more than one connection to the source of supply. To reduce the risk of electric shock, disconnect all such connections before servicing.

Warning - to reduce the risk of fire, electrical shock or injury

For Commercial Use Only. Use only as described in the manual. Use only manufacturer's options and attachments. Do not put any objects into openings. Do not use with any opening blocked; keep free of dust, lint, hair and anything that may reduce air flow. Keep hair, loose clothing, fingers and all parts of body away from openings and moving parts. Do not use on anything that is burning or smoking such as cigarettes, matches or hot ashes. Do not use on flammable or combustible liquids such as gasoline or use in areas where they may be present.

Grounding Instructions

This appliance must be grounded to a grounded metal, permanent wiring system, or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment grounding terminal or lead on the appliance. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock.

Warning

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the appliance is properly grounded.

Danger

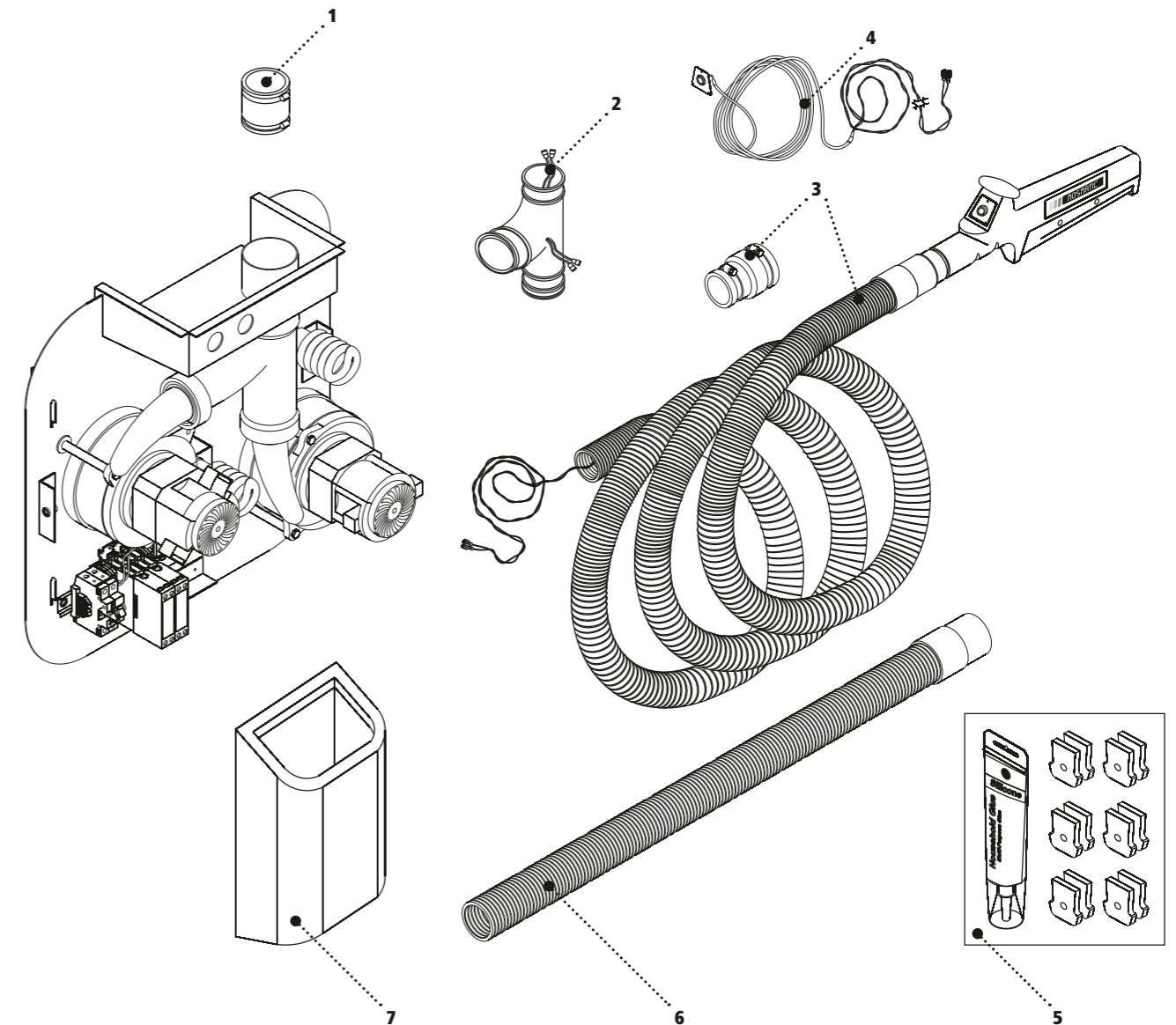
This equipment incorporates parts such as switches, motors, and the like that tend to produce arcs or sparks which can cause an explosion. When located in gasoline dispensing and service stations, install and use at least 6m horizontally from the exterior enclosure of any pump and at least 0.5m above driveway or ground level.

MOSMATIC-DRY

should not be used on any application other than specified in our catalog.

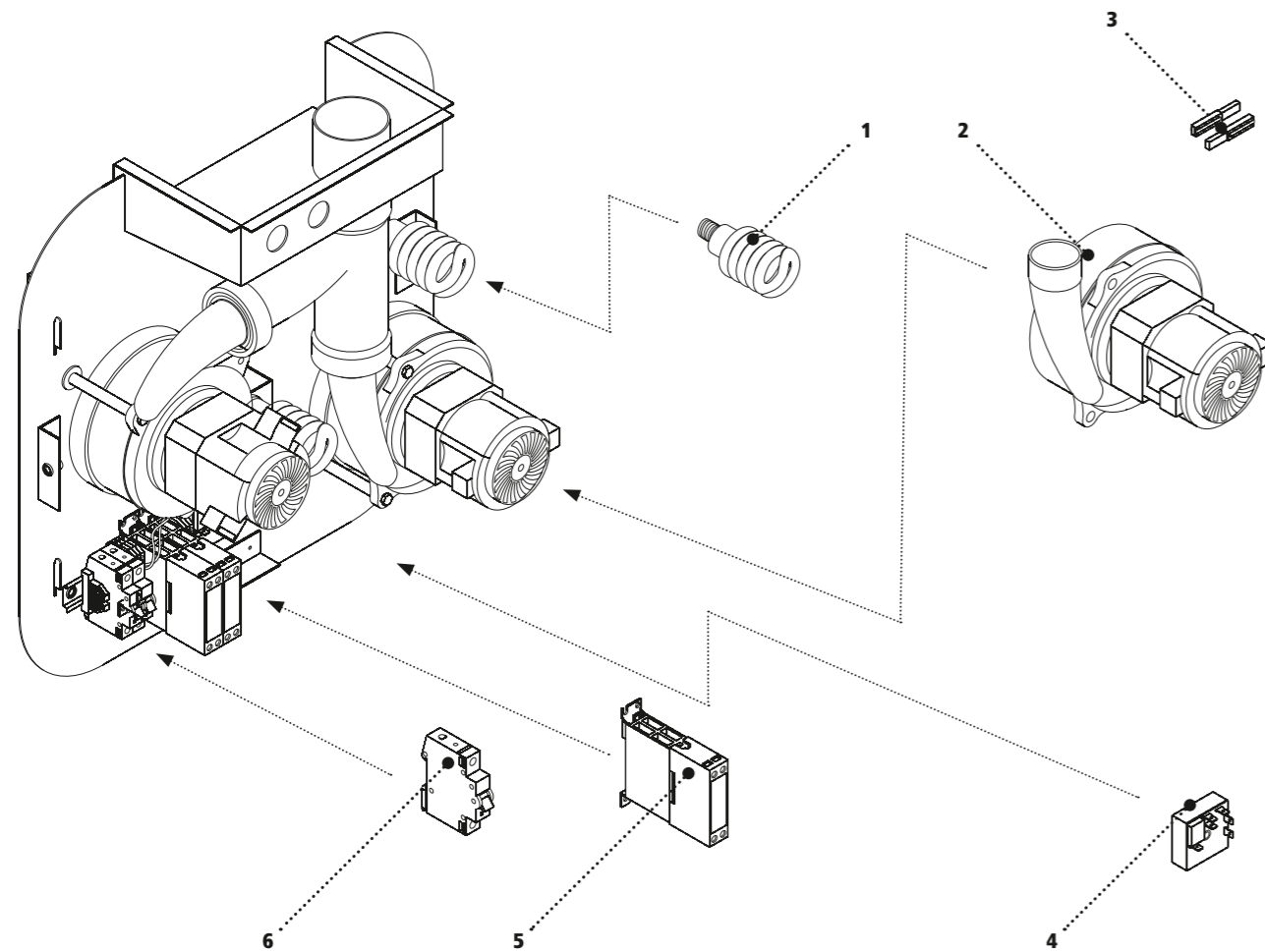
Please contact Mosmatic for further Assistance. Warranty, Terms and Conditions of Sale are not extended or modified by these instructions.

Plenum & Hose Parts



Item Nr.	Part Nr.	QTY.	Description
1	60.953	1	Coupler, 2x2 with clamp bands
2	60.939	1	Assembly, plenum with control leads
3	60.940	1	Kit, hose assembly W/ nozzle & wire - complete
4	60.941	1	Wire and pressure switch
5	60.942	1	Kit enough for 6 nozzle treatments
6	60.954	1	Hose, connector - blower cabinet to boom inkl.: 30 Inch hose, swivel cuff and ring clamp
7	60.938	1	Bracket, poly nozzle holder

Electrical Parts

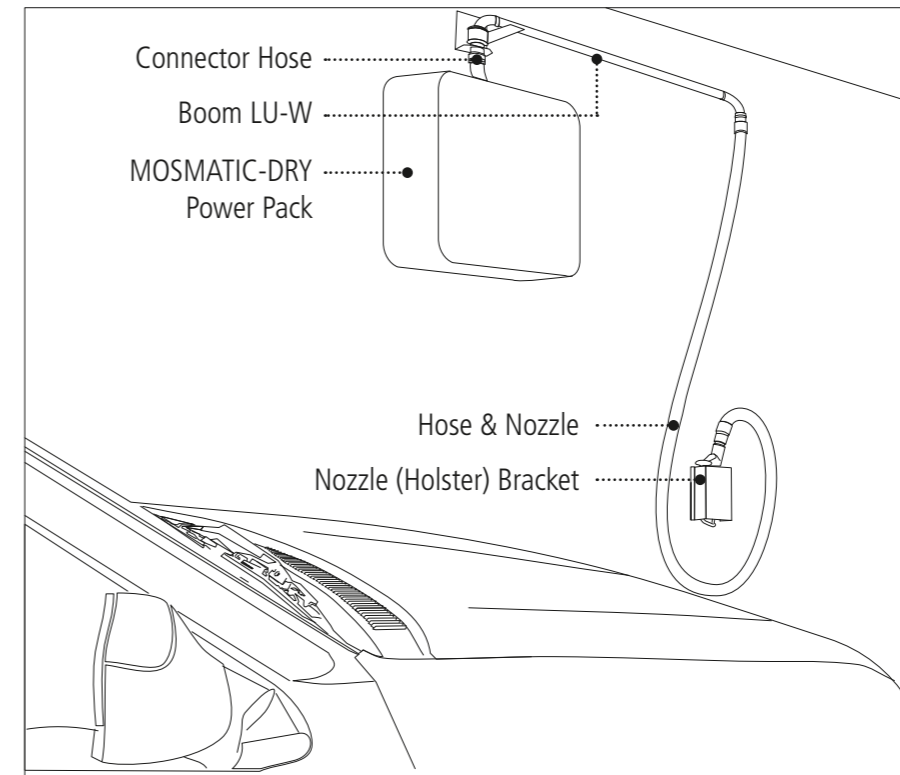


Item Nr.	Part Nr.	QTY.	Description
1	60.936	2	Lamp, CF 230 Vac, 23 Watt
2	60.932	2	Blower, W/Motor, 230 Vac 50-60Hz
3	60.934	2	Kit, Motor brush (2) W/ tool - for one 230 Vac Motor
4	60.948	1	Relay, solid state - toggle type
5	60.950	2	Relay, solid state power, 230 Vac - 50A(R)
6	60.951	2	Internal circuit breaker, for 230 Vac unit - 8 Amp

PRODUCT GUIDE

Product Selection Operation Basics

Typical "Full-Wall" Installation (showing major system components)



Product Selection: MOSMATIC Flexibility

The MOSMATIC-DRY is designed to be installed as a system including the Power Pack unit and a MOSMATIC "LU" series boom to support the hose and hand-held nozzle.

The Power Pack is best installed close to the boom and is connected to the boom with a flex hose that is supplied with the system. A bracket for storing the nozzle (holster type) is also supplied and its positioning on a wall or post as part of this installation process. The illustration below shows the major components and their positions in a typical wall-mount set up.

MOSMATIC-DRY System Basics

The MOSMATIC-DRY vehicle dryer is designed to be used for "in-bay" applications such as installed on a post or a wall surface. It can also be installed in the attic or mezzanine of the building. This flexibility is afforded by using MOSMATIC-DRY in combination with the appropriate LU series boom.

MOSMATIC LU booms are available for installation on walls, ceilings or even free-standing when combined with the post of column support brackets. Consult the latest MOSMATIC catalogs or your dealer for more information.

INSTALLATION GUIDE

General Installation Instructions

STOP! Read before proceeding

The wall must be vertically plumb and capable of carrying the weight of the dryer and the load of any booms.

The operating weight of the MOSMATIC-DRY is 35kg. MOSMATIC requires that the boom system be fastened with four anchors capable of supporting a 30,000 N load.

General Installation Instructions

1. The MOSMATIC-DRY wall-mounting Power Pack and MOSMATIC LU Series boom brackets are designed for use on a masonry or concrete walls. For use on a metal or wood or metal stud walls OR walls other than masonry construction, contact the factory before proceeding.

2. Be sure that the fasteners used are capable of supporting the weight of the MOSMATIC-DRY Power Pack and the load requirements for the LU Series Air Boom Systems.

3. Refer to these instructions, including all procedures given on the following pages and read the instructions for installing any wall or ceiling mounted booms.

4. Determine the location of the electrical service entrance. For wall mount installations, two choices are available - back entrance and top entrance. See electrical connection instructions for details.

5. The MOSMATIC-DRY Power Pack is heavy. Use caution not to drop the dryer or cause bodily injury while lifting and handling. Verify that the dryer is securely attached to prevent the possibility of dryer falling after installation.

6. Mount the MOSMATIC-DRY Power Pack bracket on the wall following the instructions, - Power Pack Installation Details. Perform all procedures given in the installation instructions in that section before mounting the MOSMATIC-DRY Power Pack.

7. Failure to comply with above could result in severe personal injury, death or substantial property damage.

Positioning in the Wash Bay

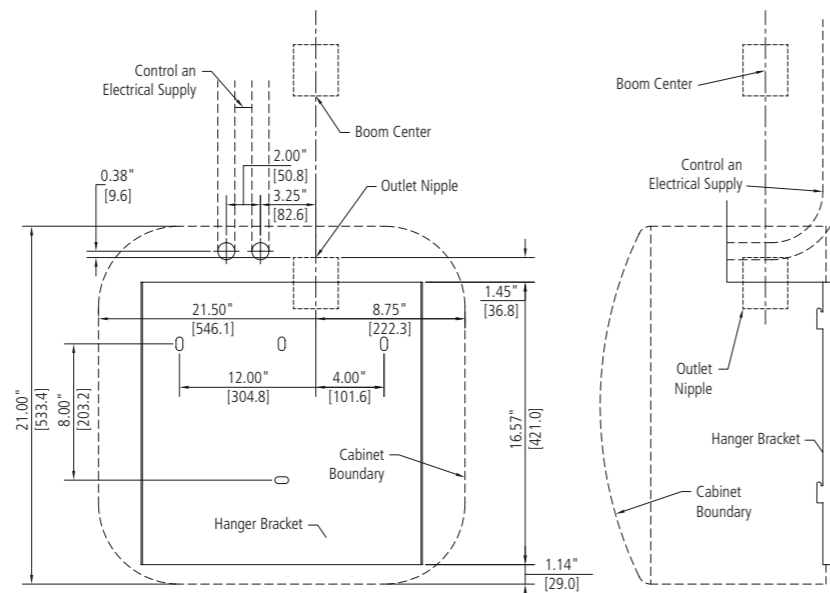
Location on the Wall - Horizontal Positioning

Positioning the MOSMATIC-DRY system begins with a determination of the location for the MOSMATIC LU airboom. The boom should be located so that it will swing clearly - without interference. Consult the table below for dimensions of the various MOSMATIC LU series air booms. The boom is attached to the wall, ceiling or post by means of a bracket. The boom should generally be located as close to the bay ceiling as possible without interfering with bay lighting, other booms, or fixtures. This will provide maximum clearance for vehicles and in the case of wall or post installations will also offer the best headroom clearance for pedestrians. Locating the swing axis of the boom as close to the center of the bay wall is preferable to allow easy coverage to the entire area of the bay. The Power Pack should be mounted as close as possible to the boom bracket for maximum airflow and best performance.

Part Nr.	Description	Length	Total Length
60.310	LU-D Series Ceiling Boom side inlet	1600mm/63"	1600mm/63"
60.311	LU-W Series Wall Boom	1600mm/63"	1600mm/63"
60.312	LU-B Series Floor mounted Boom	1600mm/63"	1600mm/63"
60.313	LU-D Series Ceiling Boom top inlet	1600mm/63"	1600mm/63"
60.314	Endpiece, Elbow 90°	150mm/6"	1750mm/69"
60.315	Endpiece, Extension	1000mm/39"	2600mm/102"
60.324	LU-DZ Series Ceiling Boom side inlet	1550mm/61"	1550mm/61"
60.326	LU-DZ Series Ceiling Boom top inlet	1550mm/61"	1550mm/61"

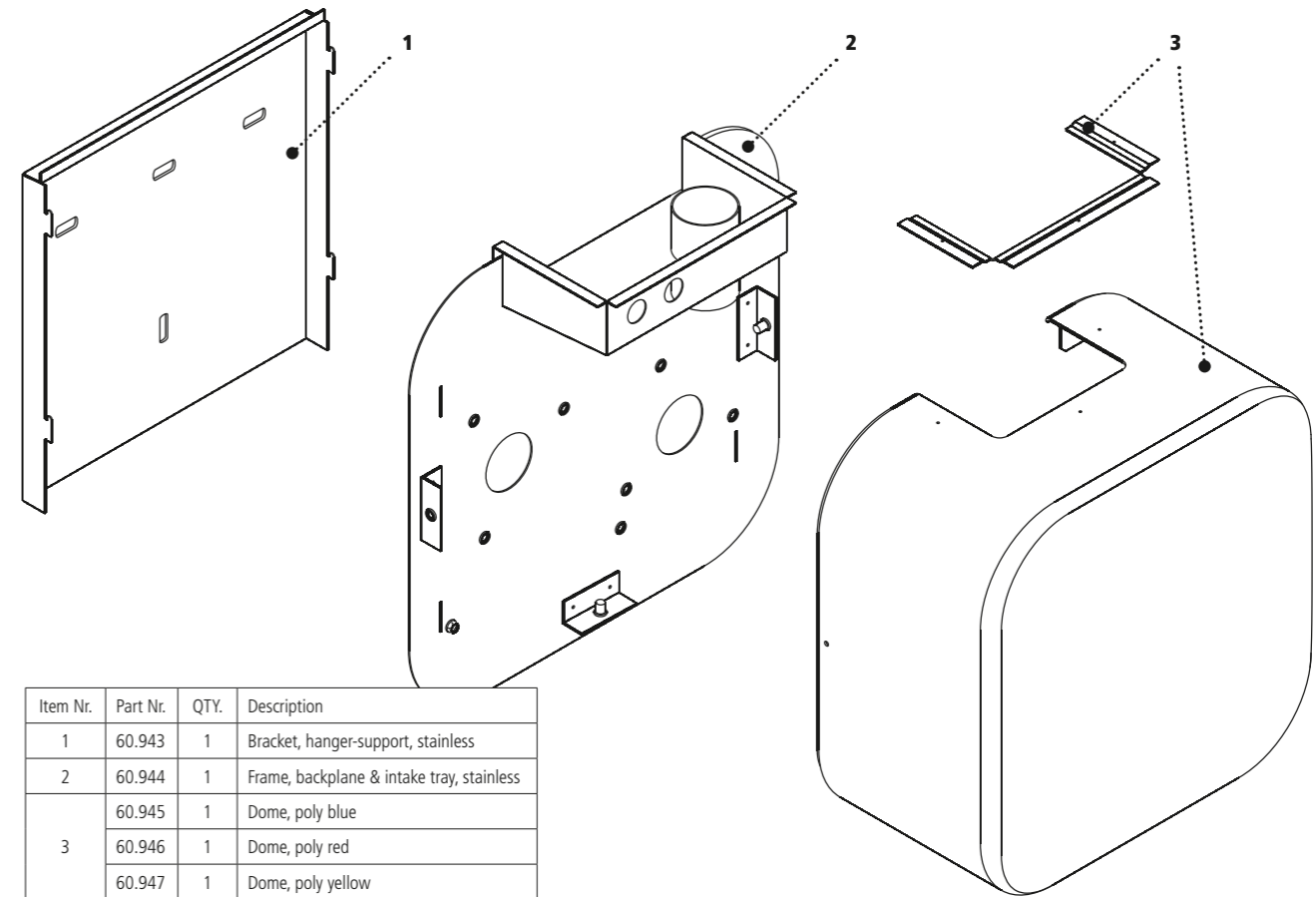
MOSMATIC-DRY Dimensions

The diagram below shows the dimensions of the MOSMATIC-DRY cabinet referenced from the center line of the outlet nipple. It is usually best to locate the dryer power pack so that the outlet nipple is in line with the center line of the boom system bracket.



PART SHEET

Cabinet Parts



Item Nr.	Part Nr.	QTY.	Description
1	60.943	1	Bracket, hanger-support, stainless
2	60.944	1	Frame, backplane & intake tray, stainless
3	60.945	1	Dome, poly blue
	60.946	1	Dome, poly red
	60.947	1	Dome, poly yellow

Accessories for Air-System



90° Pipe

1x Pipe clamp included

Part No.	ø	Weight
60.314	50	0.4kg



Extension

1x Pipe clamp included

Part No.	ø	L	Weight
60.315	50	1000	1.9kg



Swivel Coupling

INOX, 1x Pipe clamp included

Part No.	ø	Weight
60.323	50	0.5kg



Bracket

with Bumpers, for LU

Part No.	Weight
60.319	2.9kg



Pulley

Pipe clamp included

Part No.	ø	L	Weight
60.320	50	1500	0.8kg

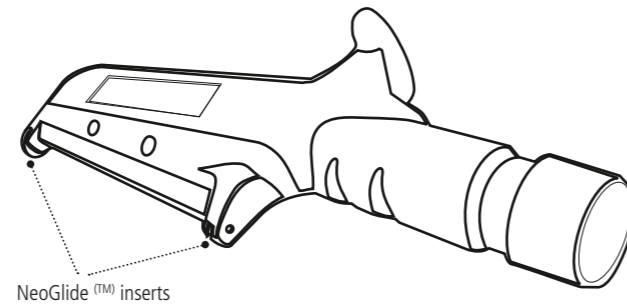
pulling force up to 3kg (adjustable)

NEOGLIDE (TM)

Insert Replacement

The MOSMATIC-DRY nozzle assembly consists of two foam glides (NeoGlide (TM)) materials that are designed to be easily replaceable. If the foam material has been worn to the level of the surrounding polyethylene (base) material, simply replace the inserts to renew the nozzle.

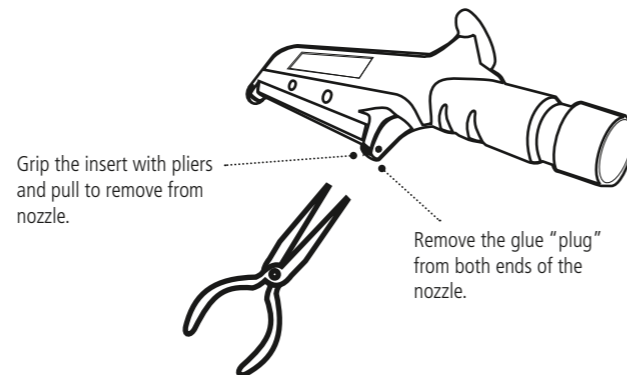
The location of the NeoGlide (TM) inserts is shown in the illustration to the right.



Removing the Insert

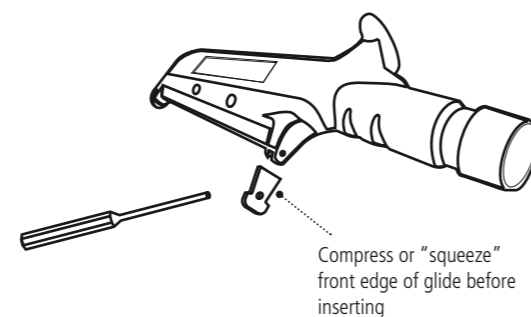
Remove the old inserts by grasping the foam material with needle or long-nosed pliers and pulling the foam out of the slots in the nozzle. It is only necessary to remove enough foam material and glue to clean the slot area of the nozzle sufficiently to allow insertion of the new foamglide piece.

Repeat the process with the other insert.



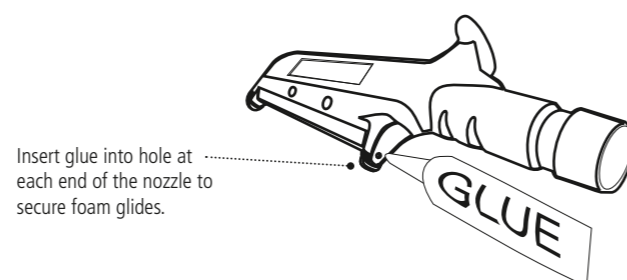
Installing new Inserts

After the old inserts are removed and the slots in the nozzle are sufficiently cleaned out, including removal of the silicone glue "plug" from the holes located at each end of the nozzle; the new foam glides can be installed. Compress the glide to fit the "squared" end into the slot. A blunted nail (grind off the point on a 10p. nail or larger) or drift pin is useful to aid in the insertion process. Work the glide into the slot until the inside corners of the glide fit into the outer edges of the nozzle slots.



Secure Inserts

After the new inserts are securely in place and the hole in the insert is aligned with the hole at the ends of the nozzle, apply glue to secure the glide in place. Use the hole in the nozzle to apply the glue. Inspect by viewing the process through the nozzle slot to be sure that glue is penetrating the glide hole.



LU Air Boom Installation Details

Mounting Details for MOSMATIC LU Air Boom

Prepare the MOSMATIC LU Air Boom System by assembling the boom, extensions (if used), and elbow. Be sure that the fitting clamp rings are securely tightened.

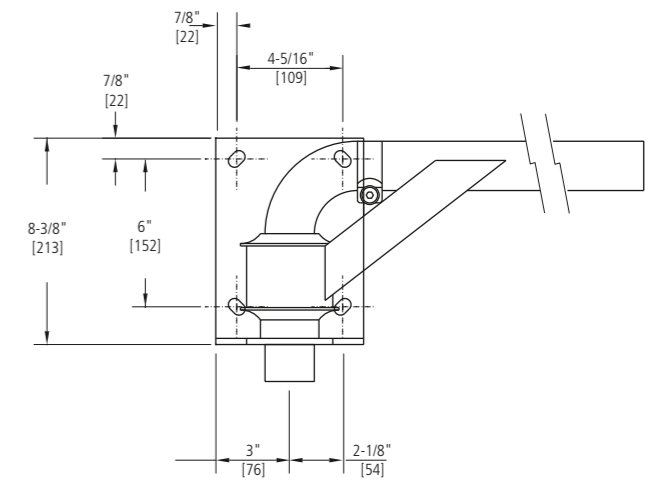
HINT: Before attaching the boom to the wall or post, feed a pull wire or string through the boom tube from swivel to hose attachment end. This will facilitate feeding the nozzle switch control leads.

1. MOSMATIC requires that the boom be attached to the wall using (4) 1/2" fasteners. Be sure that the fasteners used are each capable of bearing a 30,000N load. Mark and drill holes according to the drawing below and following the fastener manufacturer's instructions.

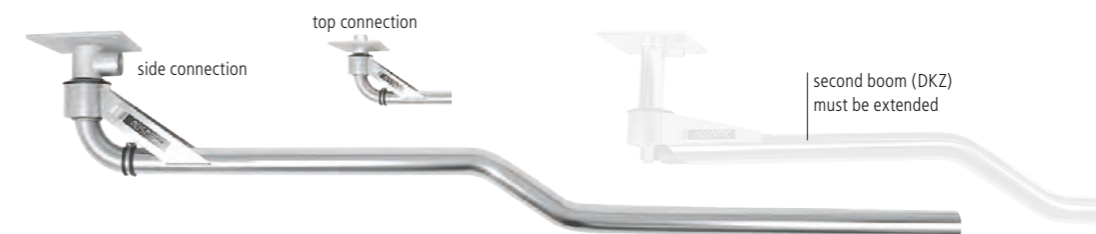
2. Use the pull string to feed the nozzle-mounted flow switch leads (red and black) through the boom.

3. Attach the delivery hose (15 ft - 4.5M) to the end of the boom using the cuff provided. Clamp securely.

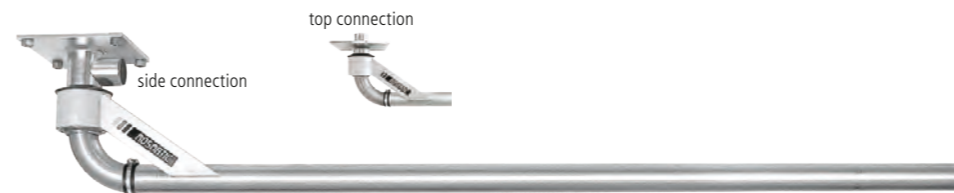
4. Adjust the boom "rest" position by rotating the boom bracket as provided by the angled slots. Do Not attach the connector hose (Power Pack to Boom) until the Power Pack is installed.



LU-2"DZ (Air-boom «Z» for Ceiling installation)



LU-D (Air-boom straight, ceiling mounted)



LU-W (Air-boom straight, wall mounted)



Power Pack Installation Details

Unpack Power Pack

1. Remove the Power Pack assembly from the packaging board by removing the retaining screw located at the bottom of the back frame. This screw may be discarded.
2. Remove the plastic cabinet cover. Remove the two phillips retaining screws at the center of the cover sides.
3. Slide the cover forward - away from the stainless hanger bracket and main assembly back plane.
4. Remove the light bulb packages and set aside.

Locate and install the hanger bracket on the bay wall

1. Locate the hanger bracket on plumb line as made in "Positioning Instructions".
2. Place the wall-mount bracket on the wall, using a level to align correctly. Use the two center holes to properly locate the attachment points on the plumb line.
3. Mark the two outer holes - these will be used to fasten the hanger bracket to the wall. The center holes are not used for wall mounting the bracket.
4. Drill the appropriate diameter holes (follow the anchor/fasteners manufacturer's instructions exactly).
5. Insert the anchors and fasten the wall bracket per the manufacturer's instructions.
6. Level the bracket and tighten the screws securely.

Prepare Dryer for Wall Mounting

1. If the electrical connection will be routed to the top of the Power Pack, remove the plastic seal cap on the top of the unit. (Refer to diagram on page "Electrical Connections" for location.)
2. To route the electrical connection through the back of the unit:
 - a. Prepare a suitable watertight connection in accordance with local and national electrical codes. Contact a qualified electrician if you are unsure of these procedures.
 - b. Leave the plastic plug on top of the unit in place. DO NOT REMOVE.

Install MOSMATIC-DRY Power Pack on wall bracket

1. Measure 38cm below the bottom edge of the inlet nipple of the wall boom for the location of the top most hole(s) for installing the hanger bracket on the support wall or post. (For wall installations, use the two outer holes, for posts and pole installations use the center hole(s).)
2. Remove the plastic cabinet cover and lift the main assembly from the hanger bracket.
3. Install the hanger bracket using the holes drilled in step 1. Use a suitable fastener to support 35kg of weight.
4. Hang the main assembly of the of the MOSMATIC-DRY on the hanger bracket using the four hooks built into the edges of the bracket. Secure the main assembly to the hanger bracket by bending the hooks to the side to prevent separation.

Install Light Bulbs

Remove the light bulbs from the container. 23 watt CF bulbs are recommended. Do not use incandescent bulbs. Do not handle the bulb by glass portion but use the ceramic base (ballast) to insert the bulb into the fixture of the Power Pack.

Connect the Power Pack to the Connector Hose

Loosen the upper band clamp on the black rubber air outlet coupler on the Power Pack. Do not remove the clamp. Insert the "uncuffed" end of the connector hose into the coupler and push the hose well into the coupler and the stainless tube of the Power Pack. (This will facilitate positioning the hose cuff onto the boom inlet fitting after the next step.)

Connect the Nozzle Control Switch Leads

Before making the final hose connection to the boom, connect the red and black leads from Power Pack with the red and black leads from the Hose/Nozzle (which were lead through the boom during that installation process).

Final Hose Connection

Slip the "cuff" end of the connection hose on the boom inlet fitting and secure with the clamp ring.

MAINTENANCE GUIDE

Periodic Maintenance

Weekly

1. Inspect Boom for Operation - easy 'swing' motion.
2. Check for lamp operation.
3. Check nozzle for wear, dirt, etc. Wipe clean, if needed.
4. Test operation:
 - A. Start car wash service cycle.
 - B. Select "Air Dry" service (single motor should operate).
 - C. Press Nozzle Switch .
 - D. MOSMATIC-DRY should be fully operational.
5. Check inlet port (lower rear of Power Pack cabinet) to be sure that it is clear of any debris.

DANGER: DO NOT PUT FINGERS OR ANY OTHER BODY PART, OR CLOTHING INTO THIS OPENING.

Periodically

1. Start car wash service cycle.
2. Select "Air Dry" service (single motor should operate).
3. Press Nozzle Switch .
4. MOSMATIC-DRY should be fully operational.
5. Remove the Power Pack cover to check the unit controls (below).
6. Check both solid state relays - located in the center of the Power Pack control module - the small green LED coil activity lights will be illuminated. Cycle the unit ON-OFF-ON using the nozzle switch. One motor will operate with nozzle switch. The other motor will operate with car wash service cycle switch. Power pack "auto" resets to OFF position if the bay switch function is changed, times out, or switched to OFF position.
7. Check operation of each motor by independently 'opening' (turning to "OFF" position) each Circuit Breaker. Perform this test on circuit breaker #1:
 - A. Switch to "OFF" - check that Motor 1 - "powers down"
 - B. Switch back to "ON" - check that Motor 1 starts
 - C. Repeat with circuit breaker #2.
8. Inspect motor brush area for excessive arcing of brush/commutator contact zone.

CAUTION: ELECTRIC SHOCK HAZARD. DO NOT TOUCH LIVE ELECTRICAL PARTS. ELECTRICAL SHOCK CAN RESULT IN SEVERE INJURY OR DEATH.

Replace Power Pack Cabinet Cover

1. Insert the upper edge of the cabinet cover underneath the top 'cap' of the Power Pack frame. The cover should be inserted between the outer edge of the cap and an internal guide bracket.
2. Slide the cover upward and rock the lower portion of the cover backward to fit the curved slots (lower right and left sides) over the 1/4"-20 phillips head screws located at the lower rear of the Power Pack frame. The cover should drop into place on the screws.
3. Insert the two 1/4"-20 phillips head retaining screws into the sides and tighten securely.

No lubrication required

The motor and blower bearings are lubricated for life and SHOULD NOT be lubricated.

Operation

Controls

A. Bay timer must be in 'active' state and "Air Dry" or "Dryer" function selected.

B. MOSMATIC-DRY function will "start" when the above conditions are met, however only one blower is operational at this time giving the customer a "signs of life" indication. The dryer will not offer drying performance until the airflow activation switch button located on the nozzle is pressed.

NOTE: This switch is a momentary contact type switch and does not need to be depressed continuously. The switch just requires a quick touch to activate. The purpose of the Nozzle Control Switch is to ensure that the user has the nozzle gripped in their hand prior to airflow commencing.

C. The airflow is stopped by pressing the Nozzle Switch again (momentary contact) or when the timed cycle elapses or another wash function is selected. The airflow may be toggled ON-OFF-ON ... throughout the dryer service cycle for convenience.

Nozzle Use - Drying Technique

A. MOSMATIC-DRY features unique nozzle design that is based on industrial air knife technology. The nozzle produces a curtain or blade shaped airstream that is most effective at stripping water and moisture from surfaces and vehicle 'detail' areas such as grills, louvers, windshield wiper arms and blades, wheels, and mirrors.

B. The MOSMATIC-DRY nozzle is easy to use and other than the obvious all-in-one-direction general approach (top-to-bottom, front-to-back, right-to-left), there are only two basic methods:

1. On solid surfaces, tilt the nozzle toward the area to be dried and sweep the nozzle along the surface to 'push' the water and moisture away. The nozzle is designed with two NeoGlide (TM) guides adjacent to the air slot to provide a gage for nozzle to vehicle surface distance and position. The entire nozzle is molded of non-marking polyethylene and the NeoGlide guides provide a soft nozzle to vehicle contact that will not mark or damage vehicle finishes.

2. To use on 'open' areas such trim, grills, louvers, mirrors and wheels; aim the nozzle air slot directly at the area to be dried (more perpendicular than solid surfaces) and MOSMATIC-DRY will simply atomize any moisture from the vehicle.

The MOSMATIC-DRY system is designed to provide the customer with a usage 'tempo' that is similar in duration with other wash services such as washing, rinsing, and waxing. In other words, the drying activity should consume about as much time as these other services. The user motion of sweeping or gliding the MOSMATIC-DRY nozzle over the vehicle surface is much like the arm/hand motion speed that they would use when cleaning, rinsing or waxing with the bay wand. It is recommended that wash operators demonstrate or show customers how to properly use the MOSMATIC-DRY product to provide a great wash experience and improve operating revenues.

Electrical Connections

Important safety instructions

READ ALL INSTRUCTIONS BEFORE USING THIS APPLIANCE.

Connect to electrical service. This unit requires a single 20 AMPS, 230 VAC circuit. Check local codes and requirements and refer to „IMPORTANT SAFETY INSTRUCTIONS" sheet in this manual.

CAUTION ELECTRICAL SHOCK HAZARD. DISCONNECT POWER PRIOR TO BEGINNING AND SERVICE OR INSTALLATION WORK. GET ASSISTANCE IF YOU ARE UNSURE OF THESE PROCEDURES.

Electrical Connection

See illustration below for electrical inlet. Be sure to properly ground the unit using the ground stud located on the Power Pack back plane. Always check and follow local, regional and national electrical codes. See illustration below for location details.

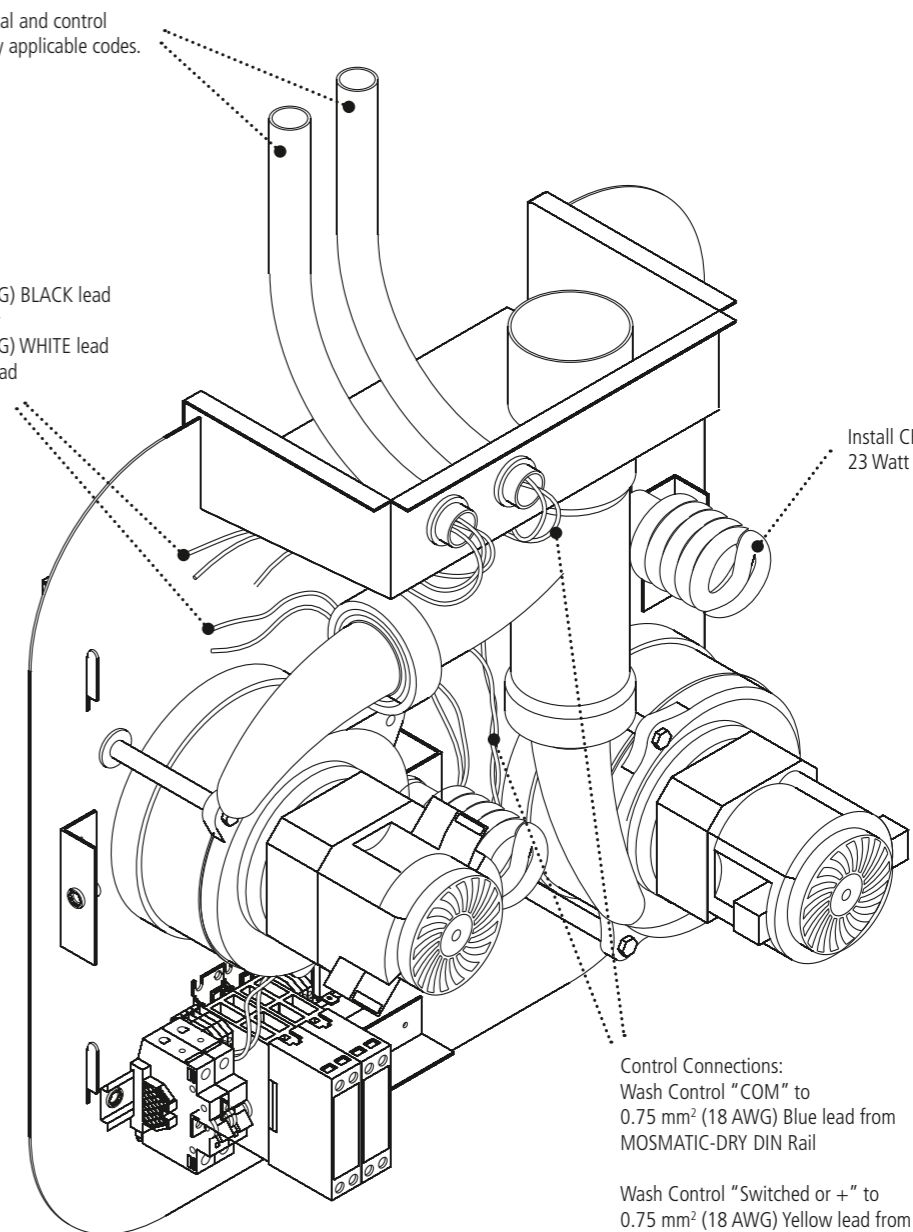
Caution

This appliance has more than one connection to the source of supply. To reduce the risk of electric shock, disconnect all such connections before servicing.

Installer supplied electrical and control conduits - as specified by applicable codes.

Connect:
 "HOT" Line power
 lead to 2.5 mm² (14 AWG) BLACK lead
 "COMMON" Line power
 lead to 2.5 mm² (14 AWG) WHITE lead
 "GROUND or EARTH" lead
 to Ground Lug.

Install CF Lamps.
 23 Watt Max.

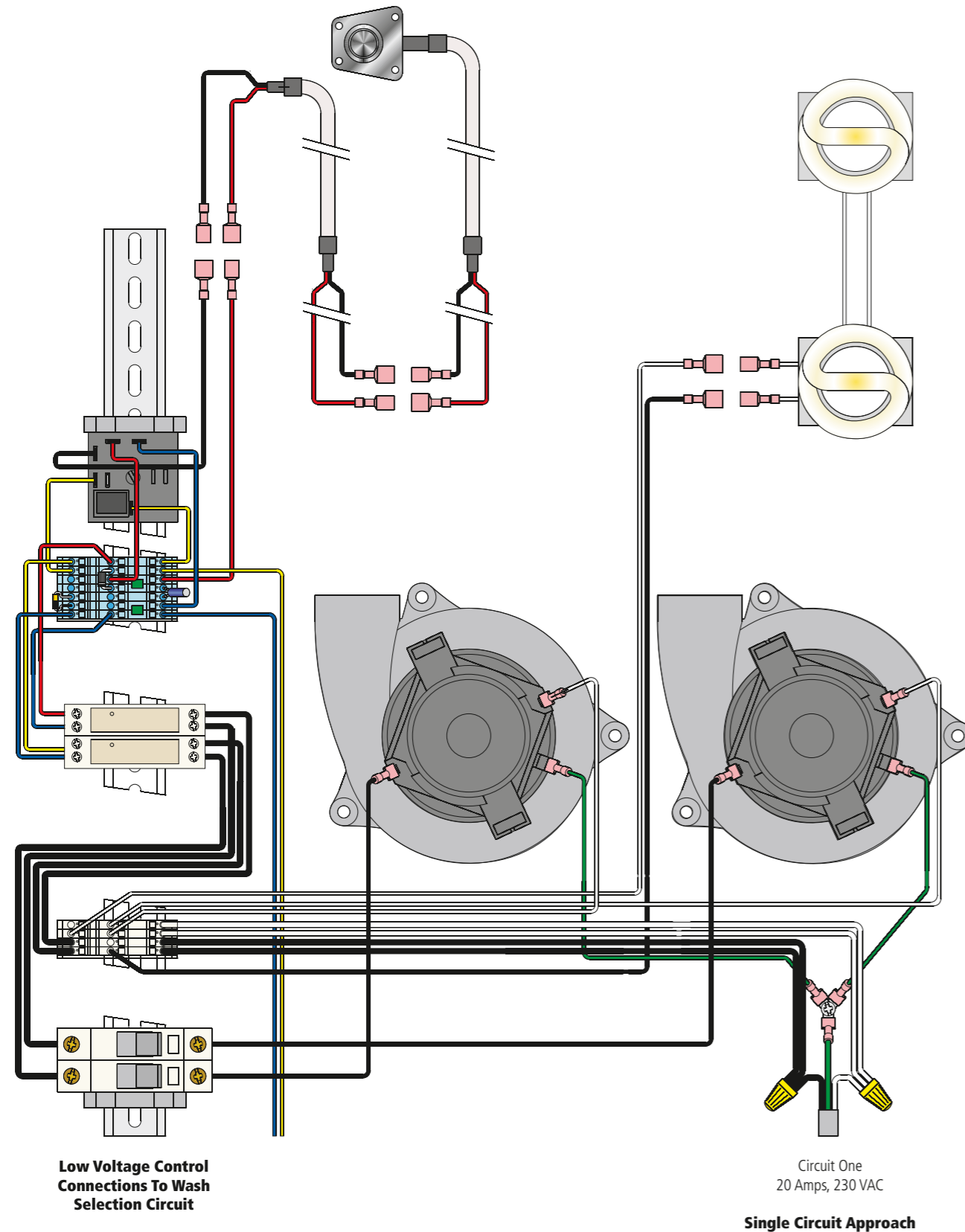


Control Connections:
 Wash Control "COM" to
 0.75 mm² (18 AWG) Blue lead from
 MOSMATIC-DRY DIN Rail

Wash Control "Switched or +" to
 0.75 mm² (18 AWG) Yellow lead from
 MOSMATIC-DRY DIN Rail

START-UP / OPERATION GUIDE

Electrical Connections (Detail)



Initial Start-up

Installation Completion Checklist (start with power pack cover off)

1. Be sure that the boom is correctly installed and all of the fittings are secure.
2. Make sure that the hose and nozzle assembly is securely attached to boom.
3. Check that the Nozzle Switch wires lead through delivery hose, boom, connector hose and a proper connection is made with leads inside Power Pack cabinet.
4. Check that the light bulbs are installed. Do not handle the lamp by the bulb glass.
5. Inspect electrical connections - both circuits - to be sure that they are made to proper leads from control rail module.
6. Make sure that ground leads from supply circuits are properly connected to the ground post.
7. Inspect the 24 VAC control leads to be sure that they are connected from car wash bay service switch to blue (hot) and yellow leads from Power Pack control module (DIN rail).
8. Make sure the Power Pack circuit breakers (on DIN rail control module - left side) are switched "ON".
9. Be sure the Power Pack cut off switches (on DIN rail control module - left end) are closed (ON).
10. Turn power "ON" for both 230 VAC circuits at car wash power panel.
11. The Power Pack unit is now ready for testing.

Start Up Test

CAUTION: ELECTRIC SHOCK HAZARD. DO NOT TOUCH LIVE ELECTRICAL PARTS. ELECTRICAL SHOCK CAN RESULT IN SEVERE INJURY OR DEATH.

1. Start car wash service cycle.
2. Select "Air Dry" service. This will cause blower #1 to operate.
3. Press Nozzle Switch.
4. This will operate blower #2 and MOSMATIC-DRY should be fully operational.
5. Remove the Power Pack cover to check the unit controls (below).
6. Check both solid state relays - located in the center of the Power Pack control module - the small green LED coil activity lights will be illuminated. Cycle the unit ON-OFF-ON using the nozzle switch. Power pack "auto" resets to OFF position if the bay switch function is changed, times out, or switched to OFF position. Blower #1 will operate at all times that "Dry" service circuit is active.
7. Check operation of each motor by independently 'opening' (turning to "OFF" position) each Circuit Breaker. Perform this test on circuit breaker #1:
 - A. Switch to "OFF" - check that Motor 1 - "powers down"
 - B. Switch back to "ON" - check that Motor 1 starts
 - C. Repeat with circuit breaker #2.

Replace Power Pack Cabinet Cover

1. Insert the internal clips of the cabinet cover underneath the top flanges of the Power Pack "intake tray". The "intake tray" flanges should slide into place between the outer wall of the plastic dome and the internal stainless retaining clips.
2. Slide the cover backward onto the main assembly panel until the dome base flange engages the panel securely.
3. Insert the two 1/4"-20 phillips head retaining screws located on the sides of the plastic dome and tighten securely. The dome may have to be flexed upward slightly to allow for insertion the retaining screws into the threaded inserts located on the main assembly.