Dynablast®

OPERATOR'S MANUAL

HOT WATER PRESSURE WASHERS

BEF SERIES

Dynablast Inc.
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1-877-52BLAST (25278) www.dynablast.com

MAN-BEF

1. Read all safety and operating instructions before using the unit.
2. Read all electrical hook up instructions.
3. Read warnings on additive containers.
4. DO NOT CHANGE NOZZLE size. The incorrect nozzle could cause excessive pressure resulting in pump damage and possible personal injury. Refer to parts list for correct nozzle size.
5. The water discharge from this pressure cleaner is under extremely high pressure. DO NOT point it where damage or injury could result. E.g. Eyes, Skin, People, Animals.
6. DO NOT point gun toward an electrical outlet as you risk severe shock and personal injury.
7. Look for loose couplings or damage to high-pressure hose. These areas may indicate possible rupture points.
8. Read WARNINGS on additive containers.
9. BE CAREFUL OF SLIPPERY FLOORS. Some additives make a normally safe area extremely slippery and dangerous.
10. KEEP CHILDREN AWAY from the machine and wash area.
11. VENTILATE work area when using toxic or pungent additives to reduce your exposure to the noxious fumes.
12. Use PROTECTIVE WEAR, especially for the eyes and skin.
13. Whenever you stop spraying, always engage the safety latch on the trigger gun.
14. Whenever changing nozzles, always turn the electric motor off and always relieve the pressure by triggering the gun. Always engage the safety latch on the trigger gun. Always change the nozzle with the gun and wand pointed away from you, and never pointed at any person or animal.
15. **DO NOT use gasoline, crankcase drainings or oil containing gasoline or solvents.**
16. Exhaust fumes are poisonous. Never run the unit in an enclosed area or inside a building **UNLESS** your machine has been properly vented in accordance with local regulating authorities and/or CSA standard B139.

    WARNING- Risk of injection or severe injury. Keep clear of nozzle. Do not direct discharge stream at persons. This equipment is to be used only by trained operators.

If you find any damage due to shipping when unpacking the machine, contact your dealer.

ELECTRICAL SUPPLY

Arrange with an electrician to install a properly grounded, three-wire receptacle. To protect the receptacle from splashes, the recommended height above the ground level is a minimum of four feet. For safest operation, a ground fault interrupter (GFI) outlet should be installed.

-DO NOT CHANGE THE AC PLUG ON THE PRESSURE CLEANER TO A DIFFERENT TYPE.
-DO NOT CUT OFF THE GROUND PIN OR THE OPERATOR WILL BE EXPOSE EXPOSED TO SEVERE SHOCK.
-KEEP ELECTRICAL CORDS AND CONNECTIONS DRY AT ALL TIMES.

Make sure the supply voltage is correct. The voltage is shown on the rating plate on the front of the machine.

WATER SUPPLY

Connect a garden hose to the water inlet. The water supply must be able to deliver a 5 to 8 gallon per minutes at a minimum pressure of 5 psi, at the flow rates given in the previous chart. (see specifications)

PUMP - OIL

Check the oil level. The oil should be level with the dot on the sight gauge. Use #20 or #30W non-detergent heavy-duty oil. You can also use the dipstick part of the cap to check the oil level. Also ensure that the vent hole in the cap/dipstick is clear of dirt.

BURNER - FUEL

Fill the burner fuel tank with no. 1 or no. 2 fuel oil

BURNER START-UP

(in the event that the burner has been replaced)

1. Set the thermostat substantially above water temperature.
2. Close the line switch to start the burner. If the burner does not start immediately reset the manual overload switch on the motor, if so equipped, and the safety switch of the burner primary control.
3. Bleed the fuel pump as soon as the burner motor starts rotating. To bleed the fuel pump, attach a clear plastic hose over the vent plug. Loosen the plug and catch the oil in an empty container. Tighten the plug when all the air appears to be purged.
4. If the burner stops during bleeding, wait three to five minutes for the control Safety Switch to cool, then reset it manually.
5. If the burner stops after flame is established, additional venting is probably required. Repeat the bleeding procedure.

   CAUTION - Do not attempt to start the burner when excess oil has accumulated, when the furnace or boiler is full of vapour, or when the combustion chamber is hot.

ADJUSTING THE BURNER

Allow sufficient air to obtain a clean looking flame by loosening the lock screws and moving the air shutter, and if necessary, the bulk air band. Reduce the air supply until the flame tips appear slightly smoky, then increase the air just enough to cause the flame tips to appear absolutely clean.

DRAFT CONTROL ADJUSTMENTS

The unit is set up in the factory to burn cleanly into atmospheric conditions. Therefore if a chimney is fitted to the machine, an "O" draft would be the optimum condition.

FINAL AIR-ADJUSTMENTS

Allow at least ten minutes for warm-up, and longer if the unit is new, in order to burn off the oil deposits on the heat exchanger and other surfaces. Check and adjust all controls. (See Manufacturer's Instructions sheets.) Test the primary control Safety Switch to insure a safety shutdown will occur in the event of equipment malfunction

NOTE - These settings have already been completed for the machine and only apply if a new burner or coil is installed.

OPERATION

STARTING THE MACHINE

1. Make sure all switches are in the "OFF" position.
2. Connect the electrical supply cable. (Plug the unit into the electrical receptacle.)
3. In "SETTING UP INSTRUCTIONS" you have already been asked to connect the unit to the water supply. Turn on the water.
4. Pick up the spray gun and hold it firmly, and pull the trigger to evacuate all air in the system. Release gun trigger.
5. Now turn Pump Switch to "ON". The pumping unit will start.
6. Hold the spray gun firmly and squeeze the trigger on the gun, and when the spray is constant, turn the Burner Switch to "ON". The oil burner will ignite. Then turn "THERMOSTAT" to the desired temperature.

   CAUTION - The force of the water leaving the nozzle causes a kickback or recoil at the trigger gun.

CHANGING PRESSURE:

The variable unloader valve is already set to full pressure. Do not adjust the unloader past the maximum pressure, as this will not increase the performance and the excessive shut-off pressure will damage the machine.

CLEANING CHEMICALS

Consult with your dealer for detergent recommendation.

STOPPING THE MACHINE

1. Pump cold water through spray gun for two minutes.
2. Shut off the pump and activate the spray gun to release pressure in the line.

   WARNING - DO NOT use gasoline, crankcase oil, any oil-containing gasoline, or any other volatile substance for fuel.

   CAUTION - DO NOT run the fuel pump dry. Always check the fuel level in the tank before running the machine.

SAFETY COMPONENTS

FLOW SWITCH

The flow switch prevents the burner from being turned on if there is insufficient water. Proper water flow causes the magnetic core to be pushed up, closing the reed contact. This contact is interlocked with the fuel solenoid valve in the oil pump.

UNLOADER

The unloader allows all of the water delivered by the pump to return to the pump suction side. If the trigger gun is closed (shut) the valve goes into the bypass mode. The pump runs without pressure. The pump may be SEVERELY DAMAGED, due to excessive overheating, if left running in the "Gun-Off" situation for more than 6 minutes.

SAFETY RELIEF VALVE

The relief valve prevents the machine from being subjected to abnormally high pressures. If this situation occurs, the valve will blow off, relieving the pressure in the coil. This valve may also operate if the unloader is adjusted too high.

THERMOSTAT

The built-in thermostat allows temperature adjustment up to 212°F.

HIGH TEMPERATURE LIMIT SWITCH

The High Temperature Limit Switch is a thermostat which is set at 230°F. This switch is not adjustable and will only operate when the other controls fail to keep the water temperature within the normal operating range. This switch cuts power to the fuel solenoid.

1. Check that the Soap metering valve is adjusted to the ratio you want.
2. Turn the Soap Induction metering valve to "on".
3. Start the Pressure Cleaner.
4. When the work area is covered, allow enough "dwell" time to maximize the effectiveness of the additive.
5. Turn the Soap metering valve to "off".
6. Rinse off soap.
7. Clean work area thoroughly with high pressure water, rinsing from bottom to top and then top to bottom.

NOTE - Most detergents and many additives are corrosive in full strength. It is good practice to remove tubing from additive jug after use and place it in clear water. Open the pump additive valve and draw the clear water into the line. Leave this tubing in clear water rather than the additive, if leaving for extended periods.

NOTE - After many hours of operation, the hardened stainless steel nozzles supplied may wear and give reduced pressure. Be sure to replace with the same size, or order from the dealer.

THINGS TO CHECK REGULARLY

1. Check for SYSTEM LEAKS. Leaks in the pressure side of the system can cause premature wear (or even failure) of the pump. The WARNING signal for this kind of leak is "frequent" cycling of the unloader. ("FREQUENT" means more than once every 2 minutes in the "Gun-Off" position.) Check the gun and swivel joints for leaks.
2. Check the OIL LEVEL at least once a week. Add ONLY the type and grade of oil specified for this pump. (See "Specifications and Features" sheet.)
3. CHANGE OIL as recommended.
4. After you use chemical additives, thoroughly FLUSH the system with clean water.
5. Inspect the POWER CORD regularly. Also check the POWER OUTLET SOCKET. For safety, replace worn or damaged parts immediately.
6. Never run the washer without water. TURN WATER ON FIRST.
7. PROTECT FROM FREEZING! When transporting your washer in temperatures below 32°F (0°C), WINTERIZE the pump, hoses and gun

(This is also good practice if the cleaner is to remain unused for more than 3-4 weeks.)

WITH A FLOAT BOX

1. Shut off the water supply, and disconnect hose.
2. You need a short (2') length of hose with a male garden hose fitting on one end.
3. Connect the short hose to the inlet of the machine.
4. Put the other end of the water hose into a container of windshield washer or anti-freeze.
5. Turn on the Cleaner and open gun until liquid comes out of the nozzle "foamy" or "soapy".
6. Put gun in "OFF" position for 5 seconds to get antifreeze into bypass line. Shut off motor, unit is now winterized.

   CAUTION - If your hose is longer than 35 feet, the float box may empty before the liquid from the nozzle gets foamy. If this happens, refill the float box with antifreeze and continue.

SERVICE AND MAINTENANCE

MAINTENANCE SCHEDULE

WEEKLY

Check the oil level of the high pressure pump. If the oil is milky or the oil level is below the minimum mark, change or fill with SAE 20W or 30W oil.

MONTHLY

Clean the filter in the float valve. (An old toothbrush can be used to scrub while the filter is held under running water).

ANNUALLY

Clean the heating coil, descale the heating coil, clean the filter ahead of and in the oil pump, and check & reset the combustion efficiency of the burner.

Clean Heating Coil - Remove burner from coil by removing the four flange mount nuts. Inspect inside of combustion chamber and if it is heavily sooted so that air passage could be a serious problem, clean the air passage with a heavy duty vacuum. Run machine at full pressure and check the inside coil for leaks.
Check Oil Filter - Loosen nut cap of oil filter until cup and filter element can be removed. Replace the filter element. At this time, check for water and sediment in the filter cup. Finally, clean the cup with fuel oil.
Check Oil Pump Screen - (ONLY if pump is not working properly): Remove the back of the oil pump taking care not to lose any of the small pieces from inside the pump. The screen is a steel mesh cylinder inside the pump. Check for water and sludge. Clean with fuel oil and replace.
Coil Maintenance - Liming of the coils is caused by mineral deposits from the water and occurs in hard water areas. The deliming procedure requires special caution and tools to perform. We recommend that you call your local service person if problems arise.

CHECKING FOR SCALE OR LIMING IN THE COIL

1. Remove outlet orifice and check for any liming. Clean the orifice if needed.
2. Remove outlet gun and hose.
3. Install a pressure gauge between the unloader and coil inlet.
4. Turn on the pump without the water outlet gun or outlet orifice. If the pressure reading is above 50 psi, have your machine descaled. Else, reassemble the machine.

DESCALING

If pressure drop in the coil is over 50 psi - descaling is recommended. Descaling requires the use of highly corrosive chemicals. It also requires the use of goggles and special protective clothing.

1. This procedure requires a 20L pail of descaling chemical.
2. Plumb the pump suction into the pail of descaling compound with a screen on the end of the suction line.
3. Plumb a hose from the machine outlet back in the pail of descaling compound.
4. Turn the pump on and circulate the compound through the machine for about 20 minutes.
5. After that time the chemical being pumped out of the coil should be running thin and dirty rather than foaming heavily.
6. Remove the extra plumbing and reconnect machine together and run clean cold water through the machine for five minutes.

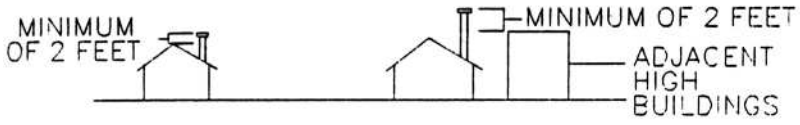
SETTING THE COMBUSTION EFFICIENCY OF THE BURNER

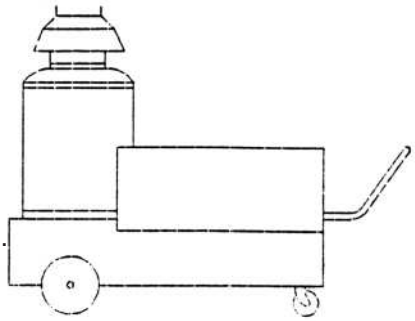
1. Remove the flame tube assembly from the burner.
   a. Remove any heavy sooting on spinner head.
   b. Change oil nozzle.
   c. Change electrode insulators if cracked.
   d. Check electrode points for excessive wear and replace.
2. Check spark gap of transformer.
3. Ensure that the fan moves freely.
4. Fire the burner and check the exhaust gas with a smoke tester. Using the suitable test instruments for smoke and CO_2 or O_2 set the air settings to obtain a trace of smoke. Measure the CO_2 and the O_2 at this point and add sufficient air to reduce the CO_2 or increase the O_2 by one percent (1%) as an insurance margin, unless otherwise specified by the appliance manufacturer's instructions EXAMPLE: 13% CO_2 & a trace of smoke reduced to 12% CO_2.
5. Tighten all locking screws after the final adjustments are made.
6. Start and stop the unit several times to ensure that there are no significant rumbles or pulsations.

NOTE: Machines to be used indoors MUST be in accordance with local regulations and CSA Standards B139.

- Make sure chimney is of suitable size. (7" minimum).
- Make sure that there is enough air for combustion.
- Be sure to protect against a down draft in below freezing weather.

A DOWN DRAFT CAN CAUSE THE COIL TO FREEZE, RESULTING IN EXPENSIVE DAMAGE!





CHIMNEY SIZE

- All venting should be the same size as the stack opening (7" minimum).
- Never use vent pipe smaller than the stack opening.
- If total run is more than 25', use larger size chimney.
- A 90 degree elbow is equivalent to a run of 20 feet.
- If a horizontal run is used, make sure the flow rises at least 1/4" per foot.

COMBUSTION AIR SUPPLY

- These hot water pressure cleaners burn No. 1 or No. 2 Fuel Oil. This means that air is required for combustion and for ventilation.
- The appliance installer will know how and where to place a supply air duct. Take care that this opening will not promote drafts which could blow out the pilot light.
- Keep the area around the machine clear so this air can get to the burner. If the wheels are removed, the machine should be bolted to a stand 18" off the floor.

APPLIANCE IN CONFINED SPACE

- The confined space should have two permanent openings: one near the top of the enclosure and one near the bottom of the enclosure. Each opening shall have a free area of not less than one (1) square inch per 1000 BTU's per hour of the total input rating of all appliances within the enclosure. The openings shall have free access to the room interior which should have adequate infiltration from the outside.

		H3525BEF1	H4030BEF1	H4030BEF3A 3B, 3C, 3D
HOT WATER MODELS	Pressure PSI	2500	3000	3000
	Volume GPM (US)	3.5	3.9	3.9
	Nozzle Size	5	4.5	4.5
	*Water Temperature	185	185	185
	Engine Motor – HP	6	7.5	7.5
ELECTRICS	Amps 230V – 1 Phase	30	33	
	Amps 208V – 3 Phase (3A)			22
	Amps 230V – 3 Phase (3B)			20
	Amps 460V – 3 Phase (3C)			10
	Amps 575V – 3 Phase (3D)			8
BURNER	Burner BTU's	315,000	315,000	315,000
	Firing Rate GPH (US)	2.25	2.25	2.25
	Fuel Pressure PSI	100	100	100
	Fuel Nozzle	#2.25 80A	#2.25 80A	#2.25 80A
	Fuel Type	No.1 or No. 2 Fuel Oil	No.1 or No. 2 Fuel Oil	No.1 or No. 2 Fuel Oil
STANDARD SAFETY COMPONENTS	Unloader Pressure Switch High Temp Limit Protector Pressure Relief Valve Adjustable Thermostat	Standard	Standard	Standard
FEATURES	Gun	4000 psi	4000 psi	4000 psi
	Wand	48"	48"	48"
	Hose	50'	50'	50'
	Paint - Powder	Standard	Standard	Standard
	Upstream Soap Injector	Standard	Standard	Standard
	Coil - Pipe Schedule	80	80	80
	Pump - Direct Drive	Belt	Belt	Belt
	Oil for Pump	SAE 20W or 30W	SAE 20W or 30W	SAE 20W or 30W
	Dimensions (LxWxH) in.	54x30x55	54x30x55	54x30x55
	Weight (pounds)	530	550	550

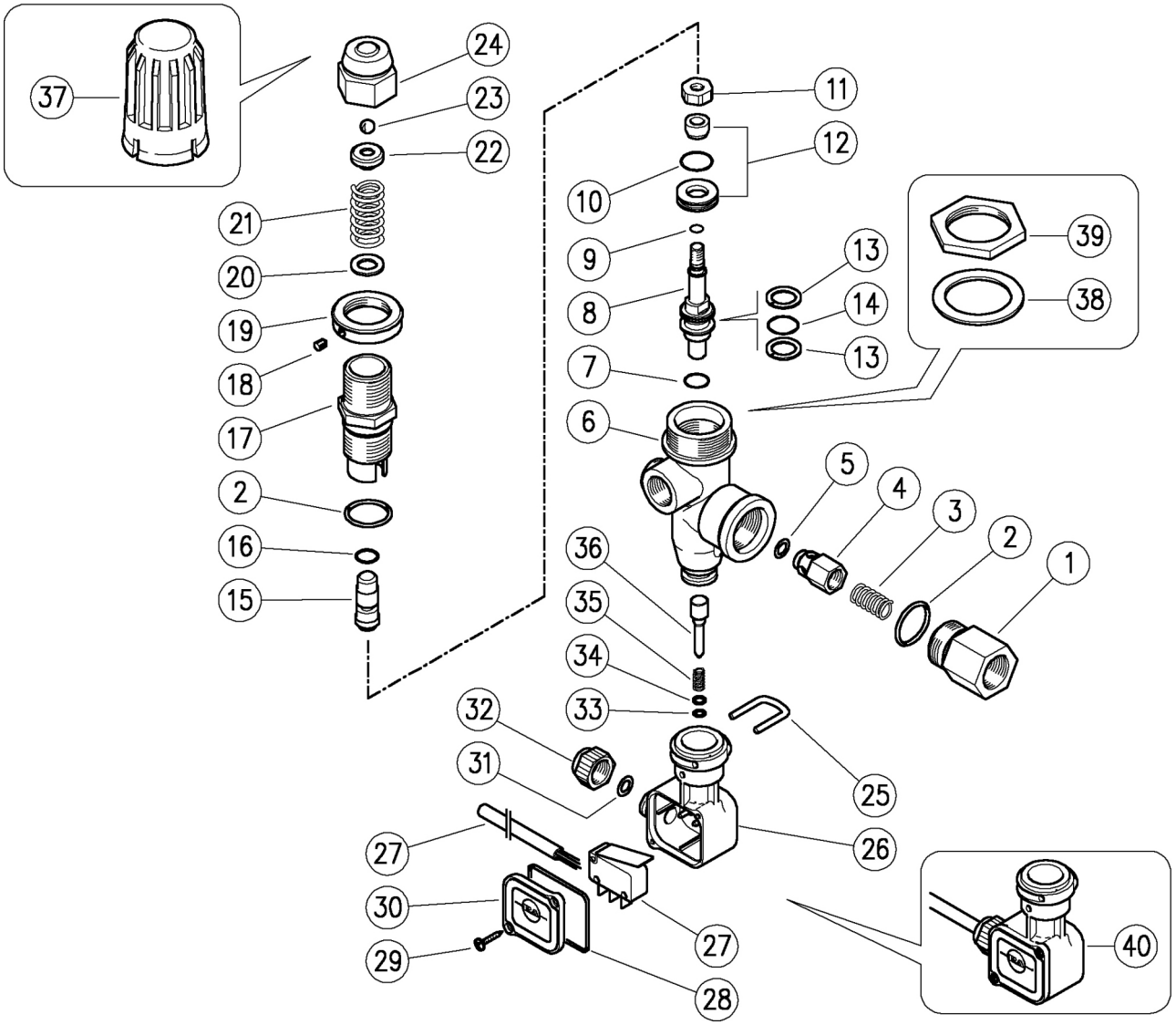
*NOTE: Water temperature varies with the volume and pressure settings, and water inlet temperature.

TROUBLE	POSSIBLE CAUSE	REMEDY
Low Pressure	Leaks in water system	Tighten all fittings
	Insufficient water supply	Fill tank or increase line size to machine
	Outlet orifice worn or wrong size	Replace with correct orifice. CAUTION: Do not use smaller than recommended.Excessive pressure will damage pump.
	Gun control unloader valve bypass leak	Repair or replace unloader valve
	Dirty or worn check valves	Replace or clean. Refer to high in pump pressure pump manual.
	Cylinder cups leaking and/or worn cylinder sleeves	Replace. Refer to high pressure pump manual.
Excessive Pressure	Outlet orifice restricted	Remove orifice at tip of gun and clean. Flush coil with water before replacing.
	Scale or dirt in coils	De-scale coils
	Pump speed too high	Check water output GPM
Relief Valve Operates	Relief valve set at low pressure	Re-adjust relief valve
	Relief valve dripping after adjustment	Replace valve
	Unloader valve stuck	Repair unloader valve
Weak or no chemical at nozzle	Clogged soap screens	Clean or replace
	Air leak around soap siphon check valve and/or metering valve leaking	Tighten all fittings and tubing
Pump motor heating or overloading	Motor wet	Allow to dry. Have motor checked by qualified repair station.
Pump motor heating or overloading	Outlet orifice restricted	Remove orifice at tip of gun and clean.
	Undersize outlet orifice	Replace with correct size

TROUBLE	POSSIBLE CAUSE	REMEDY
Pump motor heating or overloading	Coil scaling up	Descale coil
	Water pump out of oil	Fill to correct level. Check for leaks
	Overload switch operated	Allow motor to cool. CAUTION – Switch may automatically reset
	Faulty motor	Repair or replace
Burner will not ignite	No fuel	Fill fuel tank and check fuel filter for water and other contaminants
	Electrodes out of alignment	Adjust.
	Electrode insulator failure	Check for breaks, cracks, or spark trails – Replace.
	Water flow switch not closing	Adjust, repair or replace.
	Fuel solenoid valve not opening	Clean, repair or replace.
	Weak transformer	Clean and check transformer terminals. Replace if necessary. Check for spark.
	Plugged oil nozzle	Replace (do not clean).
	Faulty burner oil pump .	Adjust or replace.
Unit smokes	Improper fuel	Use No. 1 or No. 2 Fuel oil.
	Air to burner insufficient	Air adjustment or burner – Remove soot from coils.
	Fuel nozzle interior loose	Replace nozzle.
Water temperature too low	Coils liming up	Descale.
	Improper combustion	Readjust burner.

60.1280.00 VB8 unload. 3/8F Bsp,

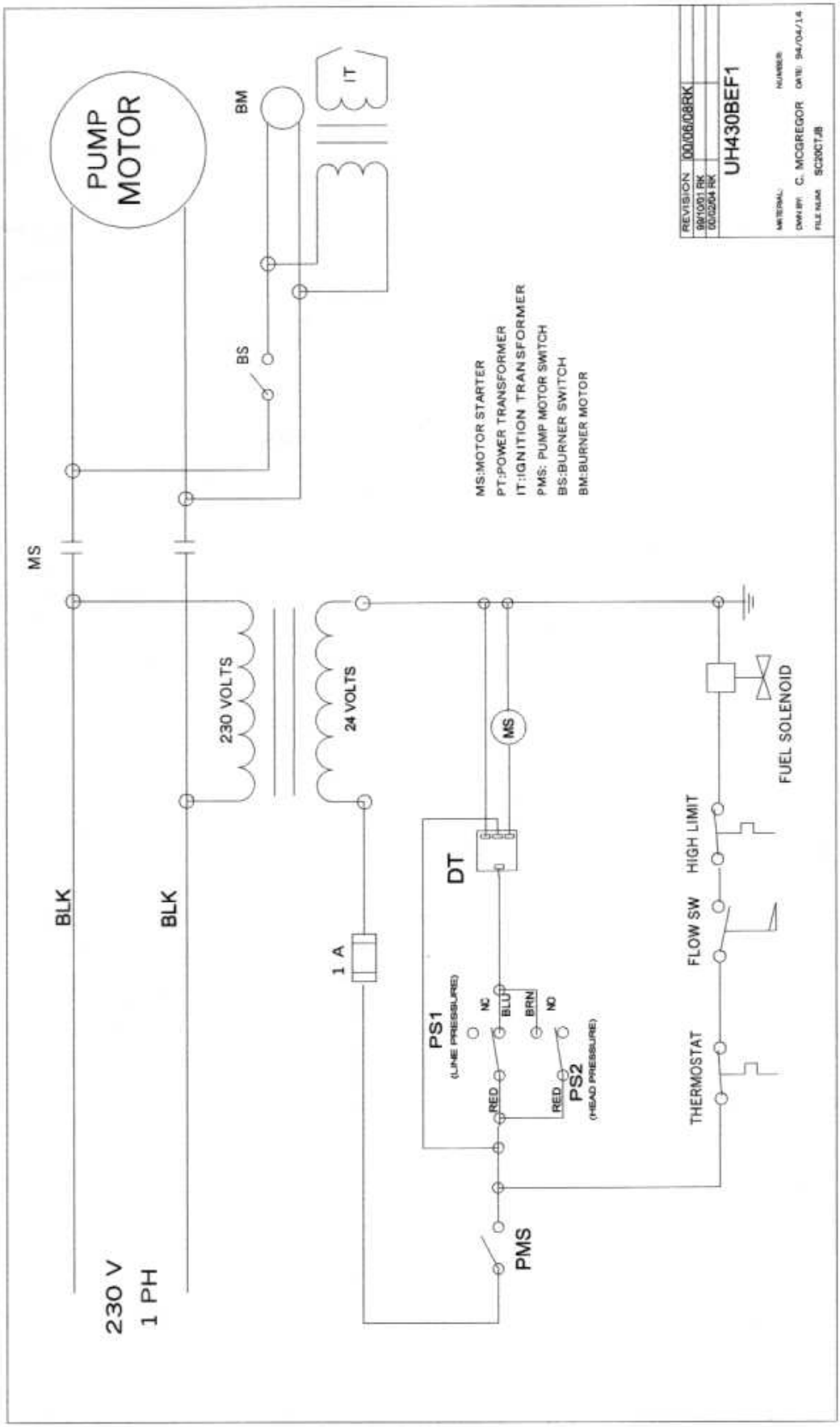
60.1290.00 VB8 unload. 3/8F Bsp,

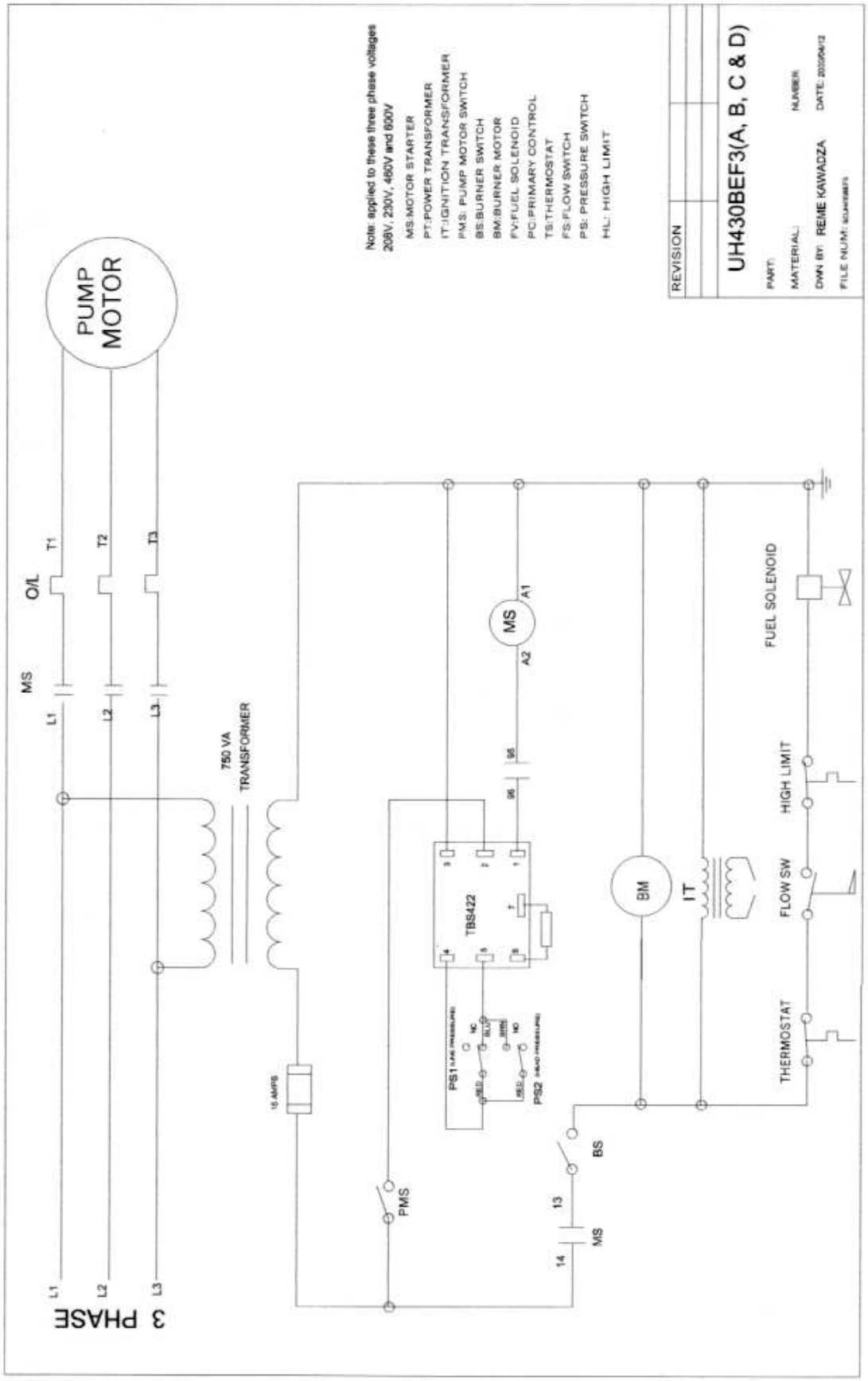


Pos.	P/N	Description	Q.ty	K1	K2	K3	K4	
1	60.0058.31	3/8 Bsp F outlet fitting	1					5
2	10.3070.02	O ring 1,78 x 18,77 mm	2	•				25
3	60.0053.51	Spring	1					25
4	60.0052.31	Check valve	1					25
5	10.3213.00	O-ring 3 x 6 mm	1	•				25
6	60.1201.35	VB8 brass body	1					3
7	10.3170.08	O ring 2,62 x 7,6 mm	1	•				25
8	60.1206.31	Piston	1					5
9	10.3001.01	O-ring 1 x 4 mm	1	•				25
10	10.3066.01	O ring 1,78 x 15,6 mm	1	•				25
11	60.1205.31	M 6 nut	1					10
12	60.2221.20	VB8/9 seat+shutter	1	•				3
13	10.4021.00	Back ring 11,4 x 15,9 mm	2	•				25
14	10.3175.00	O ring 2,62 x 10,77 mm	1	•				25
15	60.1204.31	Spring guide	1					5
16	10.3167.01	O ring 2,62 x 5,23 mm	1	•				10
17	60.1203.31	Piston housing	1					5
18	16.2100.00	M 4 x 4 mm dowel	1					25
19	60.1704.31	M 22 nut	1					5
20	14.3719.00	Washer 9 x 15 mm	1					10

Kit	P/N	Description	
K1	60.1212.24	VB8 spare parts kit 9x1 pcs	1

Pos.	P/N	Description	Q.ty	K1	K2	K3	K4	
21	60.1208.61	3,2 x 33 mm spring	1					5
22	60.1210.31	Upper frame	1					10
23	14.7421.00	1/4" ball	1					25
24	60.1209.31	Brass cap	1					5
25	29.0087.51	Sst clip	1					25
26	29.0089.84	Plastic housing	1					10
27	12.5006.00	El.cable + micro switch	1					5
28	10.3206.01	O ring 2,62 x 28,25 mm	1					25
29	16.3020.00	2,5 x 12 mm screw	2					50
30	29.0088.84	Cover	1					10
31	10.3169.00	O ring 2,62 x 6,02 mm	1					25
32	29.0082.84	Black nut-40 bar	1					10
33	10.3038.00	O ring 1,78 x 3,68 mm	1					50
34	14.3519.53	Sst washer 4 x 8 mm	1					25
35	60.2303.51	Spring	1					10
36	60.1281.31	PR 5 pin	1					10
37	60.1202.84	Plastic handle (60.1290.00)	1					5
38	14.3582.00	Washer D. 30 mm (60.1290.00)	1					10
39	60.2254.31	M 30 nut (60.1290.00)	1					10
40	29.0096.24	PR 5 pl.housing kit	1					50


PUMP MOTOR
BM
IT
BS
MS
BLK
BLK
230 VOLTS
24 VOLTS
1 A
PS1
(LINE PRESSURE)
NC
BLU
BRN
NO
RED
RED
PS2
(HEAD PRESSURE)
DT
MS
PMS
THERMOSTAT
FLOW SW
HIGH LIMIT
FUEL SOLENOID
230 V
1 PH
MS:MOTOR STARTER
PT:POWER TRANSFORMER
IT:IGNITION TRANSFORMER
PMS: PUMP MOTOR SWITCH
BS:BURNER SWITCH
BM:BURNER MOTOR
REVISION 00/06/08RK
99/10/01 RK
02/02/04 RK
UH430BEF1
MATERIAL: NUMBER
DWN BY: C. MCGREGOR DATE: 94/04/14
FILE NAME SC20CTJB


Note: applied to these three phase voltages
208V, 230V, 460V and 600V
MS:MOTOR STARTER
PT:POWER TRANSFORMER
IT:IGNITION TRANSFORMER
PMS: PUMP MOTOR SWITCH
BS:BURNER SWITCH
BM:BURNER MOTOR
FV:FUEL SOLENOID
PC:PRIMARY CONTROL
TS:THERMOSTAT
FS:FLOW SWITCH
PS: PRESSURE SWITCH
HL: HIGH LIMIT
REVISION
UH430BEF3(A, B, C & D)
PART:
MATERIAL:
NUMBER
DWN BY: REME KAWADZA
DATE: 2020/04/13
FILE NUM:
PUMP MOTOR
O/L
T1
T2
T3
MS
L1
L2
L3
3 PHASE
750 VA TRANSFORMER
10 AMPS
TBS422
PS1
PS2
MS
A1
A2
95
96
BM
IT
FUEL SOLENOID
HIGH LIMIT
FLOW SW
THERMOSTAT
PMS
BS
13
14

Effective May 1, 2002

This product is warranted to be free from defects in materials and workmanship under normal use and service, for a period of one year from the date of purchase, unless stated otherwise below, when operated and maintained in accordance with the Maintenance and Operation Instructions supplied with the unit. The warranty does not cover misuse or negligence.

This warranty is extended only to the original purchaser. Hoses, spray guns, wands and other accessories are warranted for 30 days. Warranty is void if repairs are attempted by anyone other than an Authorized Service Centre.

If a difficulty develops with the product, you should contact the nearest Authorized Repair Centre or DYNABLAST INC. office. Only these locations are authorized to make repairs to the product or replacement of defective parts, which will be done at no charge within a reasonable time after receipt of the product. Units or parts should be returned at the customer's expense to the nearest DYNABLAST location or Authorized Service Centre. Pack unit in a strong carton and pad tightly to avoid damage. Damage in transit is not covered by warranty. Include original purchase receipt with any claim (but keep a copy for your files).

DYNABLAST INC. liability under warranty is limited to repair of the product and/or replacement of parts and is given to the purchaser in lieu of all other remedies including incidental and consequential charges. There are no expressed warranties other than those specified herein.

SPECIAL WARRANTIES	**WARRANTY PERIOD**
Honda Engine (warranted by Honda) please refer to your engine owners manual.	2 year parts and labour
Interpump / General Pump Limited Warranty (see attached for details)	5 years non-wear parts
Fabricated Components (frame, coil skin, coil cap, handle, belt guard)	1 year parts, 1 year labour
Burner, Transformer, Control Switch, Safety Switch	1 year parts and labour
Schedule 80 Heating Coil Limited Warranty *(see below)	5 year parts, 1 year labour
Schedule 40 Heating Coil	2 year parts, 1 year labour

* **Limited Coil Warranty (Schedule 80 only)**
100% cost of coil replacement, for up to 3 years, including 1 year labour.
50% cost of coil replacement, for up to 4 years, not including labour.
25% cost of coil replacement, for up to 5 years, not including labour.

We must receive the coil serial number section of the coil to substantiate the warranty claim.
We will not replace coils under warranty if the coils have been subjected to misuse such as:
1. Freezing 2. Lime Deposit 3. Other foreign material deposit 4. Shock or Vibration

Any replacement during the warranty period will have a warranty of one (1) year, or the balance of the original warranty, whichever is greater.

Contact your dealer for sales and service support. For your nearest dealer, contact Dynablast Inc. Mississauga, Ontario, Canada at 1-877-52BLAST.

Warranty for Pumps on Dynablast Pressure Washers

January 1, 2002

The following statement is intended to assist our customers in understanding the terms of our warranty, the circumstances under which we will honour claims and the procedure for making such claims.

Dynablast Inc. warrants each pump manufactured by Interpump and General Pump to be free of defects in material and workmanship for a period of (5) five years from the date of shipment. In addition, Dynablast Inc. warrants all forged brass manifolds to be free of defects in material and workmanship and from damage resulting from freezing for the life of the pump. Liability under this warranty is on all non-wear parts and limited to the repair and replacement of any pump returned to Dynablast Inc. which upon inspection, is judged to be defective due to workmanship or material failure. Any product returned to Dynablast Inc. should be shipped freight prepaid to:

Dynablast Inc.
2625 Meadowpine Blvd.
Mississauga, Ontario, Canada
L5N 7K5

and must display a Return Goods Authorization number obtained from Dynablast Inc. Inside Sales Department 1-877-522 5278, Fax (905) 567-9222.

In the course of marketing or servicing the customer or potential customer's needs, Dynablast Inc. will use its best judgement in its recommendations. However, the ultimate responsibility for product application decisions shall rest with the customer. The sole and only warranty made by Dynablast Inc. is the limited warranty described above. Dynablast Inc. makes no other warranty of any kind, expressed or implied, including any implied warranty or merchantability or of fitness for a particular use or purpose. Dynablast Inc. disclaims and denies any liability for any direct, indirect, special incidental or consequential damages which may be suffered as a result of sale, delivery, servicing, use, loss of any product, downtime, labour, freight or other charges not expressly included herein. The only liability and the total liability of Dynablast Inc. under this warranty or in any claim involving Dynablast Inc. is expressly limited to the replacement or purchase price of the product.

The following items are not warranted due to matters beyond Dynablast Inc.'s control.

1. Normal wear and tear on parts that are considered standard wear parts;
2. Defects caused by the fault or negligence of the buyer or third buyer;
3. Use of unauthorized repair parts;
4. Modifications made by the customer;

This warranty statement supercedes and replaces non-dated warranties or previously dated warranties and applies to pressure washers shipped after January 1, 2002. The Interpump and General Pump pumps included on pressure washers from Dynablast Inc. will be eligible for warranty consideration as outlined above.