



**BROOKLYN SEVERE-DUTY
EQUIPMENT CORPORATION**

OWNER'S MANUAL

Industrial Grade Through-the-Wall and Split Air Conditioners

"AW" and "AS" Series

For further assistance, please contact your local sales representative

or

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Section I:

Special Benefits of BSDE Air Conditioners

Brooklyn Severe-Duty Equipment makes all its air conditioners for your tough industrial, marine, and military applications.

As a result, you will find that we have constructed your air-conditioner of materials and components much more robust than those used in normal residential and commercial-grade through-the-wall and window air conditioners.

1. Among the differences is that the BSDE units are made of thicker-gauge materials to make them stronger and heavier weight.

BSDE makes the standard cabinet from 18-gauge 316L stainless steel instead of the lighter weight 20 and 22 gauge painted steel commonly used by other manufacturers. They have reinforced 16-gauge 316L stainless-steel base pans to give them added strength.

2. The evaporator and condenser coils have a maximum of only 10 fins per inch instead of the more common 16 or more per inch.

The wider spacing allows dirt and dust particles, which would have clogged the fins on other air conditioners, to pass through the BSDE coils.

Less obstruction reduces the need for frequent cleaning and other maintenance, lowers head pressure thereby reducing strain on the compressor and other components, and increases their life spans.

It also increases the efficiency of the units, especially as the units age, because they run cleaner, thereby reducing electrical consumption and costs.

The downside is that the wider spacing requires that the condenser and evaporator be physically larger than those with denser spacing are, and as a result, the cabinets are also larger. However, in most industrial applications this difference in size causes few problems and the longer life and reduced maintenance more than compensate for the any problem with the slightly larger size.

3. Standard BSDE units also have several types of corrosion protection which most manufacturers offer only as expensive options.

a. The most important is an anti-corrosion coating which is applied to all BSDE condensers, evaporators and copper tubing. This newly-developed low-porosity epoxy material is applied in extremely thin layers by dipping the entire coil into a bath of the coating where it is electrostatically charged to assure complete and uniform coverage. Then the coating is baked on to cure it. This dipping and baking procedure is repeated as necessary to assure complete protection of the coils.

However, despite effectiveness of the coating, the film is so thin that it has almost no effect on the heat-transferring characteristics of the coils. By utilizing the latest generation of this coating, BSDE assures that its coils and tubing have one of the most effective coatings available to protect against corrosive gases and the salt and humidity in marine environments.

b. To improve the fan motor's resistance to corrosion, the shaft is made of stainless steel and the motor itself is totally enclosed to keep out dusts and liquids.

c. The standard cabinet is made of 316L stainless steel, one of the strongest and most corrosion-resistant construction metals available. As an option, cabinets can also be made of such materials as aluminum and 304 stainless steel.

d. BSDE also reduces corrosion by designing the units to run with dry condensers. Most window and through-the-wall air conditioners use a slinger rig on the condenser fan to pull condensate water up from the pan and throw it onto the condenser. While this procedure helps to cool the condenser, it has the disadvantage in dirty atmospheres of wetting the condenser so that the dirt in the air sticks to the evaporator. This dirt gradually fills the spaces between the fins on the condenser reducing the flow of air. The water can also mix with gases and other contaminants in the air to form acids and other corrosive liquids which can damage your air conditioner.

4. To further protect the units, standard BSDE air conditioners are made with only mechanical controls.

Unlike electronic controls which can be extremely sensitive to voltage fluctuations, analog controls have the advantage of being more tolerant of voltage fluctuations, as well as being easier and less expensive to service. In addition, they are readily available worldwide so they help eliminate the need to keep expensive chips and other components in stock.

5. BSDE air conditioners use only dependable and proven reciprocating compressors—never rotary compressors.

6. All standard air conditioners come with high and low-pressure safety switches which will automatically shut down the entire unit before other components can be damaged by maintenance or other problems in the system.

7. HAZARDOUS-DUTY UNITS: BSDE also offers units designed specifically to be safe for use in areas classified as "hazardous" such as those which have explosive or flammable gases, dusts, or flyings present.

a. Unlike most manufacturers of hazardous-duty air conditioning who buy and modify existing units made for household or commercial use by other manufacturers, Brooklyn Severe-Duty Equipment designs its units from scratch specifically for hazardous locations.

Therefore, the units we build work better and look better than units which had to be taken apart, modified and then reassembled with components the cabinet was not originally designed to enclose.

b. Also unlike most manufacturers, when BSDE makes air conditioners for hazardous duty, all appropriate components utilized by BSDE, including the compressors, are specifically recognized by Underwriters Laboratories (UL) as suitable for use in the indicated environments.

c. All BSDE "explosion-proofed" models are well-enough protected against the corrosion that they resist the corrosive effects of such hazardous gases as H₂S far better than competitor's models.

d. In addition, BSDE offers units modified for use in Class II and Class III areas which include locations with explosive, flammable, and otherwise hazardous dusts, flyings and other air-borne particles. Common locations with hazardous dusts include coal mines, grain elevators, and textile plants.

8. BSDE designs its air conditioners so that they will provide their full rated capacities at 131°F (55°C) in order that they will provide full cooling even in hot industrial locations or at high altitudes.

Most manufacturers rate their air conditioners' capacities at standard ARI conditions which call for testing the capacity at only 95°F (35°C). When the units are run at higher temperatures, their capacity falls off quickly as the temperatures rise. In addition, most standard air conditioners will not run well at temperatures above 120°F (49°C), and if they are forced to do so, they run under such strain that they do not last long.

By designing its units for high ambient temperatures and altitudes, BSDE assures that its units will run at full capacity for many years.

9. To assure that its units will run at high temperatures, BSDE has also had to make adaptations to allow them to run properly at lower ambient temperatures. As a result, we make all our units with receivers, accumulators, and head-pressure controls, features which are rarely found in other standardized air conditioners.

These features offer you the additional advantages of an air conditioner which will provide its full cooling capacity without modification at ambient temperatures as low as 32°F (0°C). With modification, they will maintain their full cooling down to -40°F/C.

10. Furthermore, our designing the units for high ambient temperatures and other difficult conditions make the units more energy efficient than competitive units.

Also important for you the user is that this efficiency does not only exist under the ideal test conditions present in laboratories when new, clean units are rated. BSDE air conditioners' resilience and adaptation for high temperatures and harsh conditions assure you that the contrast in efficiency compared to residential and commercial-grade units will grow as the units age and competitive units start to corrode or lose part of their efficiency by being clogged by dust and other airborne particles.

11. All BSDE units are run tested under load in the factory before shipping to assure you that they will perform as promised.

Section II:

Installation and Operation of Air-Conditioners

A. Design and Manufacturing Standards

1. Brooklyn Severe-Duty Equipment Corporation designs and builds all its air conditioners for industrial, not residential or even commercial applications.

Therefore, we use industrial-grade materials and design into the units adaptations for the harsh conditions caused by the corrosion and dirt which are often found in industrial, marine, military, and mining environments.

B. Unpacking and Inspecting the Equipment

1. Since our units undergo extensive inspection and testing in the factory, we know that your unit worked properly when it left our plant. Before we ship the units, we pack them securely, on a pallet in a wooden crate or in a heavy corrugated box with a wooden base, to assure that they reach you in perfect condition.

2. **Damage in Transit:** Sometimes, despite our best efforts, rough handling in transit causes obvious or hidden damage. Therefore, you must inspect the units thoroughly as soon as you receive them to assure that they were not harmed. Although problems are rare, our experience is that the vast majority of the problems which users have with our equipment stem from damages in transit which were not detected during the initial inspection.

3. **Inspect Immediately Upon Receipt:** As soon as you receive the units, open them and inspect them for damage. If you detect any problem, even small dents, they may be indications of more serious internal damage. You must inform the transport company immediately so that you retain your option to file a claim in the future if problems occur. BSDE is not responsible for any damages occurring in transit, no matter how soon or late they are detected.

4. **NOTE:** IF THE UNIT ARRIVES ON ITS SIDE, END OR UPSIDE DOWN, YOU MUST INFORM THE TRANSPORT COMPANY AND FILE A CLAIM WITH THEM IMMEDIATELY. BSDE air conditioners are built to be stored, transported and used only in an upright position.

5. **Pallet:** Since BSDE ships virtually all of its equipment on a pallet, if this unit arrives not mounted on a pallet, it was probably removed in transit. Therefore, since one purpose of the pallet is to protect the air conditioner, unless the packing list gives you reason to believe that it was purposely not shipped from the factory on a pallet, you should immediately inform the carrier and prepare to file a claim with them.

6. **Filing Claims with Shipping and Insurance Companies:** Normally you have up to 30 days to file a claim with the carrier and often longer with the insurance company. However,

generally, the sooner you file your claim, the easier it is to obtain compensation for damage from the carrier. Informing them of problems at the time of delivery helps establish your claim. Photographs of the packaging and damages can help substantiate a claim.

7. BSDE's liability: Ownership of the unit transfers from BSDE to the customer upon acceptance of the unit by the carrier. As a result, BSDE has no liability for damages in transit.

C. Installation

1. General Safety Precautions

- a. The unit should be installed, started up, and maintained only by qualified and competent technicians.
- b. BSDE air conditioning units draw enough power that they should only be installed on a circuit dedicated to the air conditioner.
- c. Always comply with local electrical codes and ordinances. It is a good idea to comply with the National Electrical Code (NEC), even if the unit is being installed in a country other than the United States.
- d. Verify that the wall, roof or other platform and the supports on which you will mount the air conditioner is strong enough to safely support its weight.
- e. Always disconnect the power from the unit before working on it.
- f. Since the units are heavy, be sure to have an adequate crew and equipment to safely handle the weight without risk of injury or damage.
- g. Never modify or alter the unit; doing so may damage the unit and will usually void the warranty. Utilize only replacement parts obtained from BSDE.
- h. Units supplied with a plug-in cord should not be connected to an extension cord.
- i. When installing **hazardous-duty** units in classified areas:
 - 1'. Be sure that the rating of the air conditioner is suitable for the classification of the environment. Division 1 equipment can be used in Division 2 areas, but Division 2 equipment can NOT be used safely in Division 1 areas, even for short periods!!!!
 - 2'. All repairs requiring open flame or high temperature should not be made in the classified area unless the location has been declassified by purging or other suitable method. Given that these units are movable, it would generally be safer to transport them to an unclassified location before doing such repairs.
 - 3'. All hazardous-duty units must be hard wired; they can not have plug-in cords.
 - 4'. Most BSDE hazardous-duty units are factory sealed (see the label on the unit to be sure). However, the wiring connections made at the site **MUST BE PROPERLY**

SECURED AND SEALED as specified by the National Electrical Code (NEC) and any other applicable code to make them safe.

2. Cabinet Installation Procedure

a. Choose a location which will allow a minimum of one foot, and preferably two feet, of unobstructed air space around the outside of each of the sides and of the back of the unit to allow good air circulation. These distances should be maintained around the outside ends and louvers of through-the-wall units and around the ends of condensing sections and the louvers of evaporating sections of split units.

These minimum dimensions assume good ventilation. The temperature of the air entering the condenser should not be allowed to rise in temperature by being trapped in an area with insufficient ventilation. The higher the temperature of the air which enters its condenser, the less capacity any air conditioner has and the lower its efficiency.

b. Cut and prepare a rough opening in the wall by making it square and plumb with dimensions of approximately 28-1/2" wide by 18-1/2" high for units up to "18" models and 20-1/2" high for models above "18".

The louvers on the tops and sides of the cabinets must have unrestricted air flow. Therefore, assure that the distance from the front of grill covering the evaporator back to the front of the louvers on the sides of the cabinet (which must be exposed completely to the free air) is a minimum of 13" (33 cm) on models up to "18" and a minimum of 17-1/2" (44 cm) for larger models.

c. Fully frame the opening to support the unit and permit attachment of the sleeve to the supports.

d. Remove the front cover and then pull the chassis assembly (insert) from the sleeve of the cabinet. If the sleeve is still protected by plastic film, peel it off before inserting the sleeve into the wall.

e. Insert the sleeve into the opening in the wall and support it with the optional pair of support brackets manufactured by BSDE or with a suitably strong and securely mounted alternative support system.

f. Carefully reinsert the chassis (insert) into the sleeve.

g. Position the front cover on the unit and secure it.

h. **Wiring:** Be sure that the on-off switch is in the "off" position before connecting power.

See plate inside cold-air discharge duct for electrical specifications for the unit. Verify that the circuit provides the correct voltage, proper amperage supply and limit, and the correct number of phases to the unit. Also, verify that the wiring is of sufficient gauge to handle the start-up amperage of the compressor during the 20-30 seconds it may take to start the compressor. Connect units only to circuits dedicated to the air conditioner and protected by a **time-delay fuse or breaker**.

Note: a leading cause of failure of air conditioners, which is not covered by the warranty, is connecting them to wires which would be adequate were the air conditioner installed close to the circuit-breaker but which are too small to carry sufficient amperage over a longer distance to handle the high start-up amperage of the air conditioner. This start-up demand can be a multiple of the FLA of the unit for the first 20-30 seconds. The time-delay fuse or circuit breaker will handle the additional load during the start-up, but under-sized wires will not and the most common result is greatly shortened life for the compressor.

Connect the wires either by plugging the cord into a dedicated outlet or by wiring it as necessary to meet all applicable electrical codes.

BSDE supplies a cord with a plug for 115-volt units and a cord without a plug for 200-240 volt units. We build all hazardous-duty units with a conduit seal and sufficient wire to enable the installer to properly connect to a power source.

Be sure to connect the phases correctly in three-phase units; incorrect installation will not only make the unit run poorly, if it runs at all, but also it will also void the warranty.

Note for Installers of Hazardous-Duty Models: *If your unit is designed for and being installed into a hazardous location, the unit does not have a power cord. The NEC, UL and other electrical codes require that it be hard wired directly into the power circuit.*

The air conditioner must be connected and then secured in a way which will eliminate the possibility that the connected wires can pull apart, particularly in a location exposed to the hazardous environment. It is essential to prevent the separation of the wires while power is applied because if they do separate they will cause a spark which could ignite or cause an explosion of hazardous materials present in the vicinity.

SPECIAL INSTRUCTIONS FOR INSTALLING SPLIT UNITS

1. Supply power is connected to only one section of the split unit, usually the condensing section. Therefore, supply power for the other sections, as well as the control wires, must be installed by the user. BSDE sizes its wiring for installations of with up to fifty feet (15 meters) of distance between the condensing and evaporating sections.

2. All wires to be connected between the condensing unit and evaporating units are color coded and labeled. The gauge of wire must be maintained to assure that the units will run correctly and safely.

There is no need to open the NEMA 7/9 boxes installed in the units. In addition, all connections should be made in properly sealed junction boxes approved for the area as classified under all applicable electrical and other codes.

3. Maximum separation of condensing and evaporating sections: for tubing 100 feet (30 meters); for wiring 50 feet (15 meters). The distances can generally be increased, but only by increasing the gauge of the wires and tubing and making other adaptations. Contact factory for further information.

4. Since BSDE can not know how you will connect the systems, BSDE provides 6 feet of each wire in each section to connect to your additional wiring in a junction box.

In most hazardous-duty units, the wires leaving the NEMA 4X/7/9 boxes are completely sealed, and as long as the integrity of the conduit seals is not violated, the units will need no additional sealing except on the wiring and junction boxes you install.

BSDE does not make an exit hole in either cabinet for wiring between sections. We leave you the opportunity to choose the best location for your installation. Once you choose the location, make a ¾" diameter or larger hole with a knock-out punch or other tool, and line it with a protective grommet to ensure that the wiring is not damaged on the sharp edges. Better would be to install wiring in a protective conduit.

5. BSDE installs shut off valves with access (Schradler) valves to enable the installer to easily evacuate and then fill the lines with either liquid (the 3/8" line) or gaseous refrigerant.

Warning: DO NOT OPEN BALL VALVES OR RECEIVER UNTIL TUBING IS COMPLETELY ASSEMBLED AND LINES ARE CHARGED.

BSDE supplies no extra gas in its system for charging the user-installed lines between the two sections because we do not know the length of the lines you will be installing.

6. Low pressure lines should be insulated to minimize condensation and cooling loss.

7. **NOTE:** IF IT BECOMES NECESSARY FOR ADDITIONAL REFRIGERANT TO BE ADDED TO THE SYSTEM FOR ANY REASON: If you can not determine the exact weight of the gas lost, you must

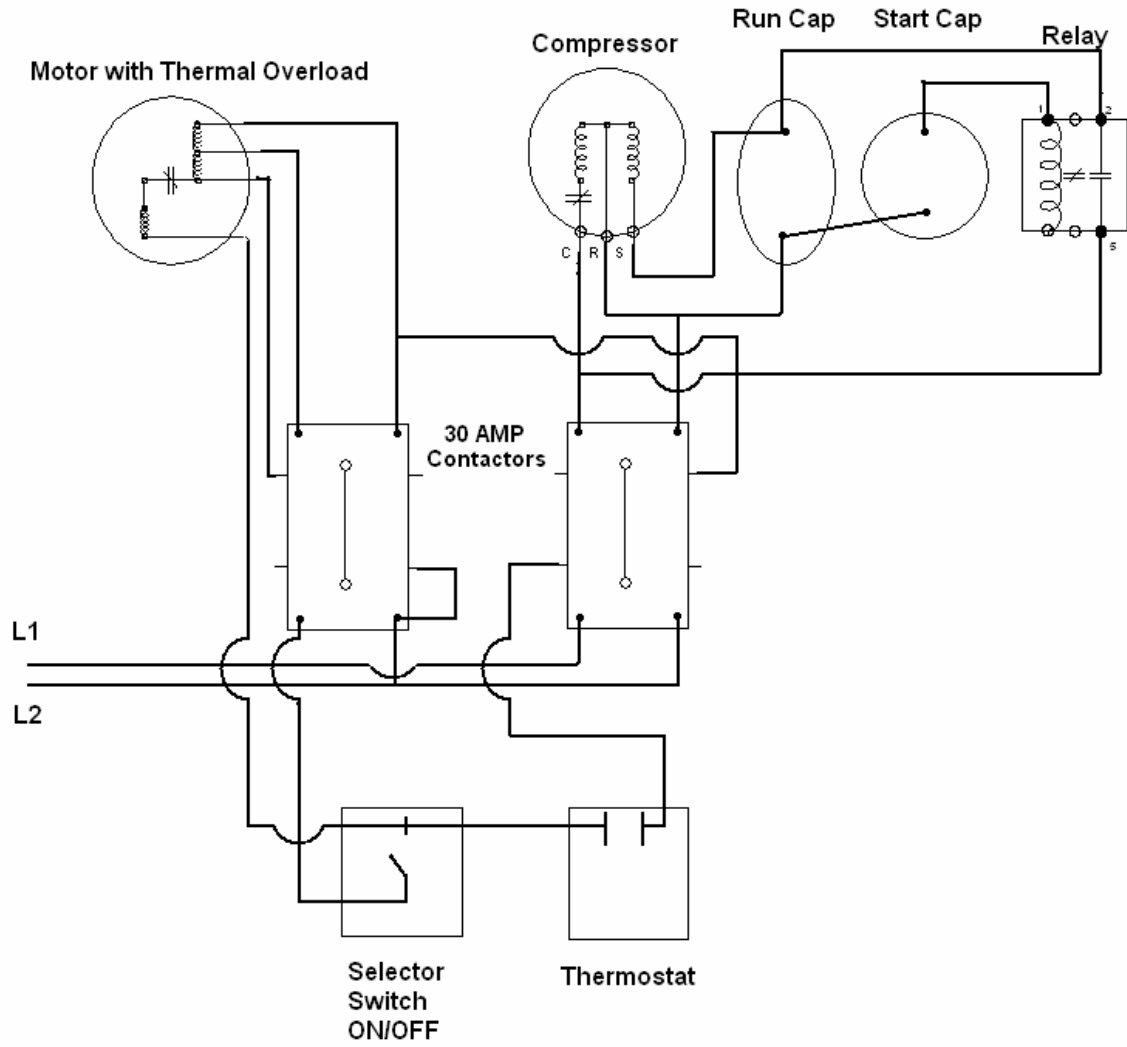
evacuate the entire system and then refill with the exact weight of refrigerant indicated on the data plate. Then you must add the gas you need to properly charge the user-added lines between the two sections.

The data plate is mounted inside the cold air discharge duct in the evaporating unit. You must remove the front panel, and you will find it just behind the discharge grill.

YOU CAN **NOT** DETERMINE THE PROPER CHARGE WITH GAUGES; IT MUST BE ADDED BASED ON WEIGHT.

8. Warning: BE SURE TO OPEN ALL BALL VALVES AND THE RECEIVER BEFORE STARTING THE UNIT.

Electrical Sketch



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D. Operation of Air Conditioners

1. Units to be installed in Ordinary and **Hazardous** Locations

- a. Always turn the power-selector switch to "off" when plugging in or unplugging the unit's power cord (and the main switch for the circuit in the case of **hazardous-duty** units).
- b. In cooling mode, the thermostat adjusts the temperature of the space to be cooled by turning the compressor on and off. The fan stays on constantly at the speed selected on the power-selector switch to allow it to circulate the air in the space and to enable the thermostat to accurately monitor the temperature of the conditioned space.
- c. In heating mode, the thermostat will cycle the heating element on and off, but the fan will run continuously to circulate air throughout the heated space.
- d. The unit's capacity, performance, and capacity ratings are determined at the highest fan speed. Lower fan speeds reduce capacity and are provided to accommodate the preferences of the users.
- e. Only operate the unit with a clean air filter and the front cover in place.
- f. Always **wait a minimum of three minutes after stopping the air conditioner before restarting** it to allow it to dissipate the high refrigerant pressure at the outlet of the compressor and thereby to equalize the refrigerant pressures throughout the system.
- g. To maintain the unit's efficiency and increase its life span, only operate the unit when the condenser, evaporator and all surfaces in contact with the moving air are clean.

2. Special Instructions for units with the optional "hidden thermostat" feature:

- a. Since one of the principal causes of the failure of industrial air conditioners is users' adjusting the temperature too frequently, BSDE offers the option of making the thermostat inaccessible to users. If BSDE built your unit with restricted access to the thermostat, it was set at the factory for approximately 72°F (22°C). If the temperature must be adjusted, you will find the thermostat in the same box as the power-control switch behind the name plate on the lower left-hand corner of the front of the air conditioner.

To gain access to the thermostat the screws holding the upper part of the dividing partition of the air conditioner must be removed and then the NEMA 7/9 box inside must be opened. Be sure to close the NEMA 7/9 box carefully and securely to assure that the cover's neoprene seal seats correctly and completely so that it seals effectively.

Note: If the unit has the option of limited access to the thermostat, you can not adjust the temperature while the unit is operating. Power must be removed from the unit before the NEMA 4X/7/9 box is opened. If the unit is made for hazardous duty, steps must be taken (such as moving the unit to a safe area) to assure that the box is not closed with hazardous gases or dusts inside.

E. Maintenance

1. BSDE air conditioners are specifically designed to minimize the amount of maintenance they require.

For instance, the low density of the fins on the condenser and evaporator reduces the amount of dirt which they block so that they will need less cleaning, especially in dusty environments. The corrosion coating on both the coils and BSDE's utilizing totally-enclosed fan motors with stainless-steel shafts also substantially reduce corrosion, even in aggressive environments. High and low-pressure cutout switches found in most models will help prevent damage to components in the event of problems with the air conditioner.

2. Preventative Maintenance

- a. Regularly inspect, and clean as necessary, the condenser, all louvers, the evaporator, the air-discharge duct, the fan and blower blades, and the return-air filter in front of evaporator. In high-dust areas, it may be necessary to service the filter every two weeks, or even more often.
- b. Regularly check the condensate drains to assure that they remain clean enough to drain properly.
- c. Occasionally wipe down the cabinet with warm soapy water to keep the finish looking good.
- d. At least annually, check that all screws in cabinet, chassis (insert), and mounting brackets are tight and replace them if worn.

3. Adding Refrigerant to the System

WARNING: If it becomes necessary to add additional refrigerant to the system for any reason, if you can not determine the exact weight of the gas lost, you must evacuate the entire system. Then refill the system with the exact weight of refrigerant indicated on the data plate mounted inside the unit. If the unit is a split system, you will need to add the proper charge for the user-added lines between the two sections.

The data plate is mounted inside the cold air discharge duct next to the evaporator. You must remove the front panel, and you will find it just behind the discharge grill.

BSDE's special patent-pending control system, which enables the system to operate in a wide range of ambient temperatures and altitudes, makes it **IMPOSSIBLE TO DETERMINE THE PROPER REFRIGERANT CHARGE WITH GAUGES; REFRIGERANT MUST BE INSTALLED ON THE BASIS OF WEIGHT.**

Note for Users of Hazardous-Duty Models: *If this unit is designed for and installed in a hazardous location, you must take special precautions when doing certain types of maintenance.*

Most importantly, no work which will require high temperatures such as soldering and welding or use of ordinary electrical equipment such as a vacuum pump or vacuum cleaner can be done on the unit unless precautions are taken to assure that no hazardous gases or particles are present.

Given that BSDE designed most of these units so that you can remove the inserts from their cabinets quickly and then easily transport them to a shop in a safe area, Brooklyn Severe-Duty Equipment Corporation always recommends that you do all major repairs only after moving the insert (chassis) to a safe location.

Parts List for Split Model AWN-24

To ensure parts are correct please provide serial number when ordering.

Fax to: Brooklyn Severe-Duty Equipment Corporation Fax: 718-643-1333

Serial Number: _____ Where Installed: _____

Purchaser: _____ Company: _____

Parts Order PO#: _____

Country & City Code: _____ Phone: _____ Fax: _____

<u>Description of Part</u>	<u>Part Number</u>	<u>Qty</u>	<u>Pricing</u>	<u>Total</u>
Accumulator	2421.0001			
Ball valve with access – 3/8”	2322.0001			
Ball valve with access– 3/4”	2325.0001			
Blower housing	4222.0001			
Blower wheel	4223.0001			
Compressor start capacitor	1713.0003			
Compressor run capacitor	1723.0003			
Compressor relay	1774.0003			
Constant pressure valve	2512.0001			
Contactora	1771.0001			
Condenser coil	2212.0002			
Control overlay	6412.0001			
Control-panel knob	5411.0001			
Drain fitting	5512.0001			
Drain tubing	5511.0001			
Evaporator coil	2222.0003			
Fan blade	4113.0001			
Filter drier	2340.0001			
Filter – Air filter	4411.0001			
Front grille	3131.0001			
Front air discharge grille	4322.0001			
Head pressure control valve	2311.0001			
Motor – Condensing unit	1133.0001			
Motor – Evaporating unit	1132.0001			
Receiver	2412.0001			
Rubber hose assembly	2391.0003			
Screw package – 10 of each screw	3500.0001			
Sight glass	2351.0001			
Selector switch	1323.0001			
Water tight hose	1283.0001			

Water tight fitting	1284.0001			
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<u>Hazardous-Duty Components</u>	<u>Part Number</u>	<u>Qty</u>	<u>Pricing</u>	<u>Total</u>
APS Explosion-Proof Compressor	1621.0003			
Nipples - 3/4" x 3"	1825.0005			
Conduit Seal 3/4" diameter	1842.0001			
Control-Knob Potentiometer Shaft	1842.0001			
Elbow - 3/4" Street Elbow	1823.0003			
Hermetically-sealed thermal overload	1532.0001			
NEMA 4X/7/9 Box – Large	1422.0001			
Packing fiber	1852.0002			
Sealing Compound	1851.0001			

Section IV

Brooklyn Severe-Duty Equipment Corporation Air-Conditioner Limited Warranty

Important Note: Your Brooklyn Severe-Duty Equipment Corporation ("BSDE") unit, like other high quality industrial machinery, will give you many years of excellent service if maintained properly and regularly. The first step is to have a competent service technician inspect the unit for damage in transit and then supervise its installation to assure that it is done correctly. Since all of BSDE's equipment is thoroughly inspected and tested before it is shipped, most problems result from damage sustained in transit or installation, incorrect installation, inadequate maintenance, or inappropriate usage. To assure maximum benefit and life from your investment in equipment from BSDE, follow the instructions and recommendations in the owners' manual.

Limited Warranty: BSDE offers the strongest warranty in the harsh-duty air-conditioning industry. We warrant to the original user ("you") for a period of 12 months after installation or 15 months after purchase, whichever comes first (the Warranty Term), any air-conditioner made by BSDE to be free from defects in material and workmanship, subject to the terms, conditions and limitations set forth below.

48 Hour Replacement Service: *If you have a problem of any sort with the air conditioner, simply call or fax the factory at the numbers below and explain the problem. If we can not help you fix it by phone or fax nor through the service of our local representative, we will send you a replacement unit or module for a standard product, freight prepaid, within 48 hours. Special products such as hazardous-duty units are not covered by this service. Your obligation will be to sign and fax back to us a Replacement Unit Acceptance Form which we will provide to you before we can ship. You will also be obligated to return immediately the malfunctioning product freight prepaid to us using the replacement unit's packaging for the returned unit.*

BSDE does not warrant that use of the equipment will be uninterrupted or error free, or that the equipment will operate in all installed environments. BSDE's sole obligation under this warranty will be to repair or replace, at its sole discretion any equipment or part thereof which in its judgment is defective in manufacture. This warranty does not apply to any equipment that is repaired or altered other than by BSDE-authorized personnel, is subjected to physical, thermal, or electrical abuse, stress or misuse, is operated without the filter(s) installed and/or without the filter(s) being properly maintained, or is stored, maintained or operated in any manner inconsistent with BSDE's specifications and instructions. Once BSDE receives and inspects the unit, if it determines that the damage was not caused by errors or defects in manufacture, we will bill you for the repairs or for the unit we shipped you.

This warranty expressly covers only the cost of replacement or repair by BSDE and excludes all other costs such as those incurred for handling and transportation, labor, customs duties, removal or reinstallation of components, and consequential damages caused by defects in or failure of the equipment. All goods returned to BSDE must be shipped prepaid and will be returned insured freight collect. Goods returned to BSDE will only be accepted for service under this warranty if they are accompanied by a Return-Goods Authorization from BSDE. This warranty will not be enforceable if the buyer or intermediary is in default in making payment required under the terms of purchase from BSDE. BSDE will not be responsible for any failure to perform as required under the terms of this warranty caused by force majeure. This warranty will not be enforceable if the buyer or intermediary uses the goods on any motorized vehicle or craft without the specific, written permission of BSDE.

This limited warranty is the only one applicable to these goods and BSDE will recognize no other obligations, liabilities or warranties. Further, this limited warranty can not be claimed or amended by any other party. THIS LIMITED WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES, CONTRACTS OR AGREEMENTS NOT EXPRESSLY SET FORTH HEREIN, WHETHER EXPRESS OR IMPLIED BY OPERATION OF LAW OR OTHERWISE, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. BSDE WILL NOT BE RESPONSIBLE OR LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL LOSSES, DAMAGES, OR EXPENSES (INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, DATA OR USE) DIRECTLY OR INDIRECTLY ARISING FROM THE SALE, HANDLING, INSTALLATION, SERVICE OR USE OF THE EQUIPMENT, OR FROM ANY CAUSE RELATING THERETO. BSDE'S ENTIRE RESPONSIBILITY IS EXPRESSLY LIMITED TO REPAIR OR REPLACEMENT OF EQUIPMENT AS DESCRIBED HEREIN, AND IN NO EVENT SHALL BSDE OR ITS SUPPLIERS, CONTRACTORS, VENDORS OR AGENTS BE LIABLE UNDER ANY LEGAL THEORY OR FOR ANY CAUSE WHATSOEVER, WHETHER BASED ON WARRANTY, CONTRACT, TORT, NEGLIGENCE OR OTHER THEORY, EVEN IF ADVISED OF THE POSSIBILITY THEREOF, FOR ANY AMOUNT IN EXCESS OF THE PRICE, FEE OR CHARGE THEREFORE RECEIVED BY BSDE. BY ACCEPTING, INSTALLING AND/OR USING THE EQUIPMENT, BUYER SPECIFICALLY ACCEPTS THE TERMS OF THIS LIMITED WARRANTY.

This Limited Warranty is deemed to be a New York State contract, entered into in New York State, and shall be governed and construed in accord with the laws of the State of New York without reference to its conflict of laws provisions or the UN Convention for the International Sale of Goods. Buyer and BSDE specifically agree that any action between the parties relating to this Limited Warranty, the equipment or services provided shall be brought and tried in New York.

Date Installed: _____ Model: _____ Serial Number: _____

Brooklyn Severe-Duty Equipment Corporation

63 Flushing Avenue, Unit 236, Brooklyn, New York 11205 Telephone: 718-643-0606 Fax: 718-643-1333

Registration

Please complete the information requested below and mail this form back to BSDE at the address below.

We request this information so that when you contact BSDE we will be able to assist you quickly and efficiently. Many requests for information come to us with only parts of the information we need to either identify the unit or contact the person who called us, especially if the customer uses a language we are not easily able to understand.

Model Number: _____ Serial Number: _____

Owner: _____

Address:

Street: _____

City: _____ State/Province: _____

Postal Code: _____ Country: _____

Phone Number: Country Code: _____ Area/City Code: _____

Number(s): _____ Extension: _____ Fax: _____

E-Mail Address: _____

Date Purchased: _____ Date Installed: _____

Person Who Installed Unit:

Installing Company Name:

Installing Company Address:

Street: _____

City: _____ State/Province: _____

Postal Code: _____ Country: _____

Installing Company Phone Number: _____ Extension: _____

Installing Company Fax Number: _____

Installing Company E-Mail Address: _____

Brooklyn Severe-Duty Equipment Corporation
Brooklyn Navy Yard, Unit 236, Brooklyn, New York 11205 U.S.A.
Telephone: 718-643-0606 Fax: 718-643-1333