INSPECTION AND UNPACKING:

Polar Temp Ice Transport (IT), Truck Bodies (TB) and Pallet Load (PL) units are individually inspected and carefully packaged to ensure each unit arrives without damage.

- Upon receipt, **immediately inspect** the units for any evidence of shipping damage **while the delivery truck driver is there**. If the unit is damaged, **document damage on the bill of lading** and give the driver a copy. Notify the delivering carrier immediately and request a damage inspection and claim. Polar Temp is not responsible for damage to the unit during transit. A unit damaged in transit is the delivering carrier's responsibility.

- Remove the wood shipping base and other protective materials. First, carefully cut the steel bands that extend around the top and through the shipping base area. After removing the bands, again be careful as the remaining wood protective material is removed from around the unit. The wood protective material at the front and rear of the unit should be removed prior to the top material. Be aware that the top protective material could fall. Ask for help, as this material is being removed. Finally, remove the plastic protective wrap from the unit.

INSTALLATION:

Carefully raise the unit into position with a forklift or other safe device rated to lift the load and slide it into the pickup box, trailer or pallet load location. Approximate weight of the model 3' x 7' is 700 lbs., model 4' x 8' is 1200 lbs., model 5' x 9' is 1500 lbs., model 5' x 10' is 1700 lbs., model 7' x 12' is 2000 lbs. and model 7' x 16' is 2500 lbs.

- The mobile unit, whether it be a trailer or pickup truck should be strong enough to support the unit with a load of ice. Be sure to check the load capacity of the mobile unit prior to installing the box on it.
- It is essential that auto-defrost models be parked on a level surface to allow defrost water to drain properly. If defrost water does not drain, it will freeze in the drain pan which can eventually cause the fans to seize.
- Auto-defrost models should be parked to prevent the evaporator drain hose from being kinked or hose opening from being obstructed.
- Adequate space should be allowed around the exterior walls of the unit to allow for evaporation of any condensation that may occur on exterior surfaces.
- The units should be located in a shaded area away from direct sunlight for the most economical operation. Good ventilation for the refrigeration system is required.
  DO NOT BLOCK AIRFLOW TO THE CONDENSING UNIT.
- A minimum 115-Volt, 20 Amp grounded power source should be provided within a range of the power cord.
  USE ONLY PROPERLY SIZED EXTENSION CORDS. A 12 GUAGE MINIMUM CORD IS RECOMMENDED, BUT PROPERLY SIZED CORDS DEPEND ON THE LENGTH OF TRAVEL FROM THE POWER SOURCE TO THE UNIT.

OPERATION:

Electrical

WARNING – Improper use or removal of the grounding plug can result in a risk of electric shock!

The electrical power supplied to the unit must be as identified on the serial number data plate located on the inside the unit. Electrical service connections must be in accordance with the National Electrical Code, state code and any local codes that may apply. All units are equipped with a power cord and a 3-prong plug.

Be sure to use a grounded electrical receptacle with a fused circuit sized correctly for the electrical load. Extension cords may decrease the voltage to the unit and ultimately cause the compressor or other component failure. The unit data plate indicates the recommended maximum overcurrent protective device size.

Note:
Some outdoor locations require ground fault interrupt (GFI) outlets. These outlets may trip upon condensing unit start. Refrigeration equipment is exempt in some areas from GFI requirements. Local electric codes should be checked.

This unit requires 120-volt ac and a 20-amp breaker. The unit was shipped with a 10-gauge, 25-foot, 3 conductor power cord. If you require a longer cord, it should be of heavier gauge per the chart below.

Cord Length	Minimum Wire Size
Up to 50 feet	10 AWG
Up to 100 feet	8 AWG
Up to 150 feet	6 AWG
Up to 200 feet	4 AWG

Using a power cord of inadequate size can result in hard starting, inefficient operation and shortened compressor life.

Start Up

Plug the unit power cord into the properly sized electric receptacle outlet. Turn the power on-off switch to the *ON* position. The condensing unit will start and continue to operate until air temperature inside the storage space reaches +10 to +20-degree F.

To stop refrigeration of the transport, turn the power switch to the *OFF* position.

Temperature Control

The unit temperature is maintained by a thermostat that cycles the condensing unit on and off automatically. On auto-defrost (AD) models, the temperature control is located in the control box near the condensing unit housing. On cold wall (CW) models, the temperature control is also located in the control box near the condensing unit housing.

The temperature is adjusted by turning the thermostat control knob clock-wise for colder temperature and counter-clockwise for warmer temperatures. Turning the control knob fully counter-clockwise will

shut power off to the compressor. **DO NOT** re-adjust the internal adjustments of the thermostat without consulting Polar Temp.

Bagged Ice Loading
After the IT is operating at required temperature, load it with bagged ice. Bagged ice should **NOT** be stacked such that it will obstruct air flow in automatic defrost blower coil. Cold wall units should have ice stacked to allow open-air access to thermostat sensor at upper rear interior. Approximately 3" needs to be clear from top of stacked ice to top of inside interior for effective refrigeration and ice storage.

MAINTENANCE:

Refrigeration
WARNING – Disconnect electrical power before cleaning.

Clean refrigeration cover grill openings, condenser fins, and condenser fan blades at least two (2) times per year, more often if needed. A dirty condenser will cause the refrigeration system to become less efficient and may lead to compressor failure. Clean the evaporator coil and fan blades on auto-defrost units as required.

- Clean condenser coil fins with a fine bristle brush or vacuum
- Routinely check wiring harnesses for loose connections or broken insulation

Defrosting
Frost cannot be avoided. It develops from moist air entering the storage area when the door is opened. Frost forms on the cold evaporator on automatic defrost units, on the walls (evaporator) of a cold wall refrigeration system and on the faces of the plates in a cold plate system. When the frost accumulation on the evaporator becomes too heavy, it acts as an insulator and drastically reduces the refrigeration efficiency. Excess frost or water on the interior of the unit should be removed or drained. Do ***not*** allow water to stand in the unit.

Cold Wall (CW): Cold Wall type units utilize the interior wall surface as the refrigeration evaporator. Frost accumulation will occur on all wall surfaces. The unit can be defrosted by conventional methods using a wooden paddle or plastic scraper. Care must be exercised to prevent damaging piping and control parts. **Do not** use a sharp instrument to "chop" the frost from the interior surface as you may do irreparable damage.

Auto-Defrost (AD): Auto-Defrost (sometimes referred to as "electric defrost") type units utilize a evaporator with an electric defrost heating element to melt the frost off the evaporator coil. The defrost cycle is controlled by the defrost timer which energizes the heating element. The defrost timer is located in the condensing unit compartment or control box. The control is pre-set to periodically place the system in a defrost cycle automatically every six (6) hours. The length of the defrost cycle is approximately 14 to 16 minutes. The timer used is adjustable to set for your specific requirements.

Cold Plate (CP): Cold Plate type units utilize individual plates, placed on the inside wall surfaces of the unit, as the refrigeration evaporator. Frost accumulation will occur on the surface of the plates, including the sides, top and bottom. The unit can be defrosted by conventional methods using a wooden paddle or a plastic scraper. Care must be exercised to prevent damaging piping, control parts and the plates. **DO**

NOT use a sharp instrument to "chop" the frost from the plate surface as you may do irreparable damage.

Finish
Schedule periodic cleaning of the unit interior and exterior. The unit can be cleaned with a mild detergent and water. **DO NOT USE** strong detergents, abrasive cleaners, or solvents, as they are likely to leave objectionable odors, which may be absorbed, by the ice. Do not use wax or polish on the interior for the same reason. Wash exterior surfaces with a mild soap and warm water applied with a soft sponge or cloth. Wax exterior to maintain appearance and to protect the finish just as you would an automobile.

Axle
The safest and most proven suspension system available comes with springs and equalizers. This allows all four tires to remain in contact with the road. All two axle trailers come standard with electric brakes on the rear axle. (Hydraulic brakes are optional). Easy lube hubs allow you to grease bearings without disassembly.

Tires and Wheels
White painted corrosion resistant wheels that exceed the rated capacity of the trailer are standard. Highest quality bias ply tires are used to match trailer capacity. These properly matched accessories eliminate possibilities of sway. Wheels are fastened adequately with five lug nuts. Check the lug nuts and tire pressures periodically for safe travel. Refer to the VIN plate for recommended tire pressure and tire size. Replace tires with identical size tires as was received on the trailer. **WARNING: Failure to follow these instructions may result in wheel loss which can cause injury or death! Torque wheel nuts to 90-120 ft. lbs. before first road use. Re-torque to 90-120 ft. lbs. after 10, 25, and 50 miles. Check periodically thereafter.** Rev. 4/17/06

Hitch Jack – Trailer Units
A side wind tongue jack with foot is located at the hitch allowing for easy raising and lowering for hook-up and disconnect from your vehicle. Lubricate the gears periodically.

Safety Chains – Trailer Units
6-foot safety chain with hooks is provided on all trailers. Examination of the chains and the welded connecting area should take place before each trip.

Signal, Stop, and Marker Lights – Trailer and Truck Bodies
A standard 7-pin trailer light kit is used. Keep the electrical connector lubricated with an electrical lubricant. Always check lights before traveling.

Break-A-Way Kit – Trailer Units
Another important safety feature is the Break-A-Way kit that in the event of the trailer coming detached from a vehicle, the Break-A-Way Kit powered separately from the pulling vehicle activates the trailer brakes. Check operation of the breakaway hitch before every move**. Note: The cable from the break-away-switch to the vehicle pulling the trailer should be slightly shorter than the safety chains so the trailer brakes will be activated prior to the chain activation.** Rev. 4/17/06

Hitch Assembly – Trailer Units
Lubricating the ball coupling area of the hitch periodically is recommended to reduce friction and premature wear.

BODY:

Insulated Body

The body is made with rock hard, high performance polyester pre-painted sheet metal exterior wall surface and galvanized G90 interior wall surface insulated with CFC-free foamed-in-place polyurethane. The floor is made with three 7" wide channels spaced for standard pallets, with 22 Ga. G90 galvanized sheet metal and robust slip resistant diamond plate aluminum.

Door, Gasket and Frame

Door openings are formed with a recessed type PVC channel allowing the door to be recessed into the opening providing a rigid, well-insulated entry. The door has a magnetic gasket providing a positive seal. Gaskets should be checked for tears or any other problems that would cause loss of seal. Replace torn/worn gaskets to maintain correct temperature and refrigeration efficiency. Hinges exposed to harsh environmental conditions may require a lubricant for ease of operation. Spray light penetrating oil on the spring-loaded hinge cartridge to extend the hinge life.

Door Hinges and Lock

Maintenance free heavy-duty hinges are fastened to the body with stainless steel bolts into 1/4" thick aluminum angle extending the full height of the door opening. Hinges are mounted to the door with stainless steel bolts into 1/4" plate. Doors have a pad lockable feature, inside safety release and they swing open 180° offering clear entry into the body.

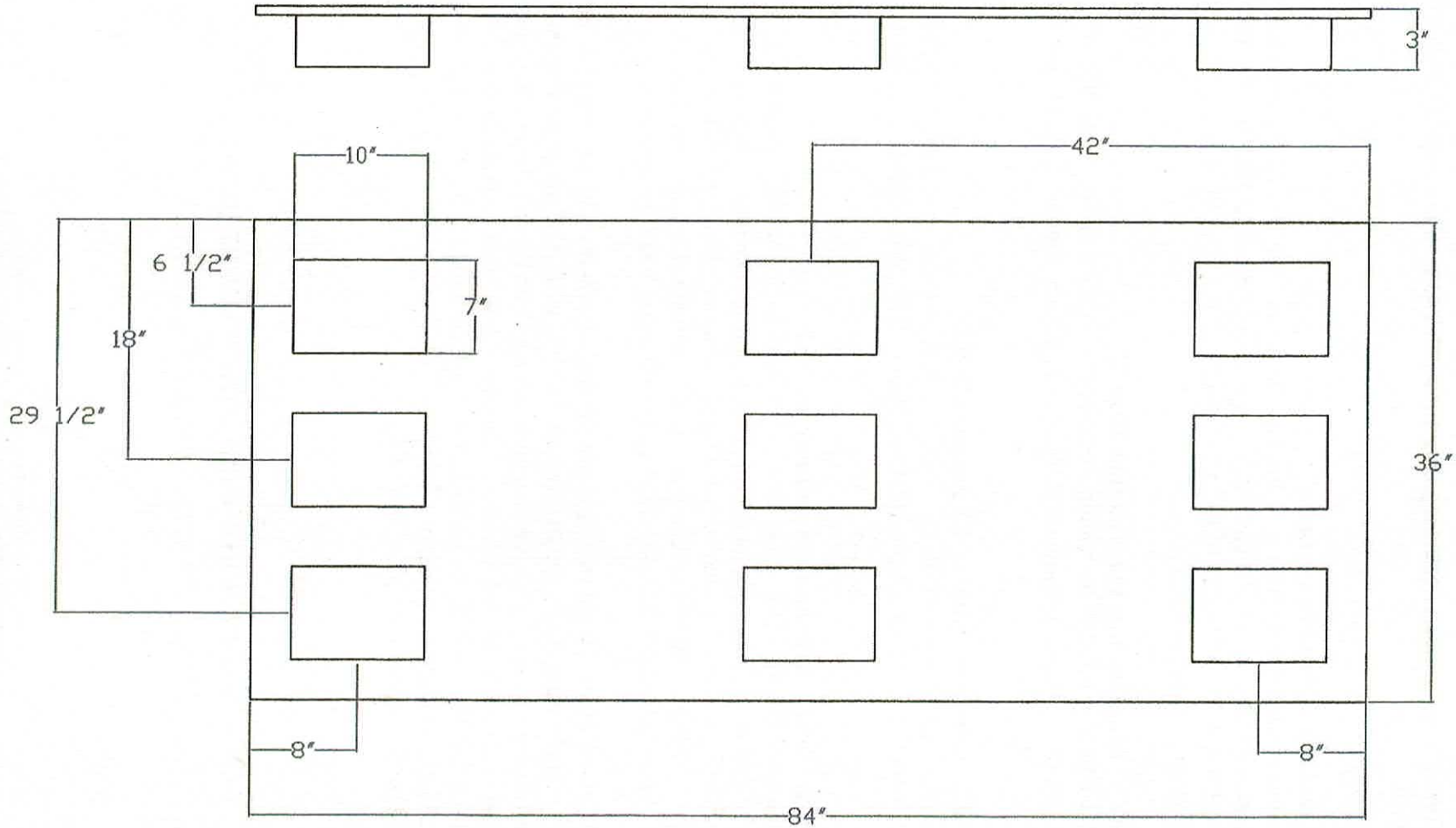
Interior and Auxiliary Lighting

Both 12 volt (optional) and 120-volt interior lighting is supplied on the interior of the trailer. The 120V lighting is activated as the door is opened. For 12-volt use, a separate switch must be activated. An optional spotlight is available for exterior lighting.

Body Mounting

Trailer bodies are mounted securely between the 1/4" x 2" x 4" tubular frame of the trailer with 1/2" diameter bolts. Robust 1/4" aluminum angle wall bumpers are used at each side of the interior floor where the bolts extend through to the heavy angle iron supports of the trailer. A drawing showing hole patterns for mounting transport units to the trailer or truck is included with this manual.

3' x 7' TRANSPORT
FLOOR SUPPORTS

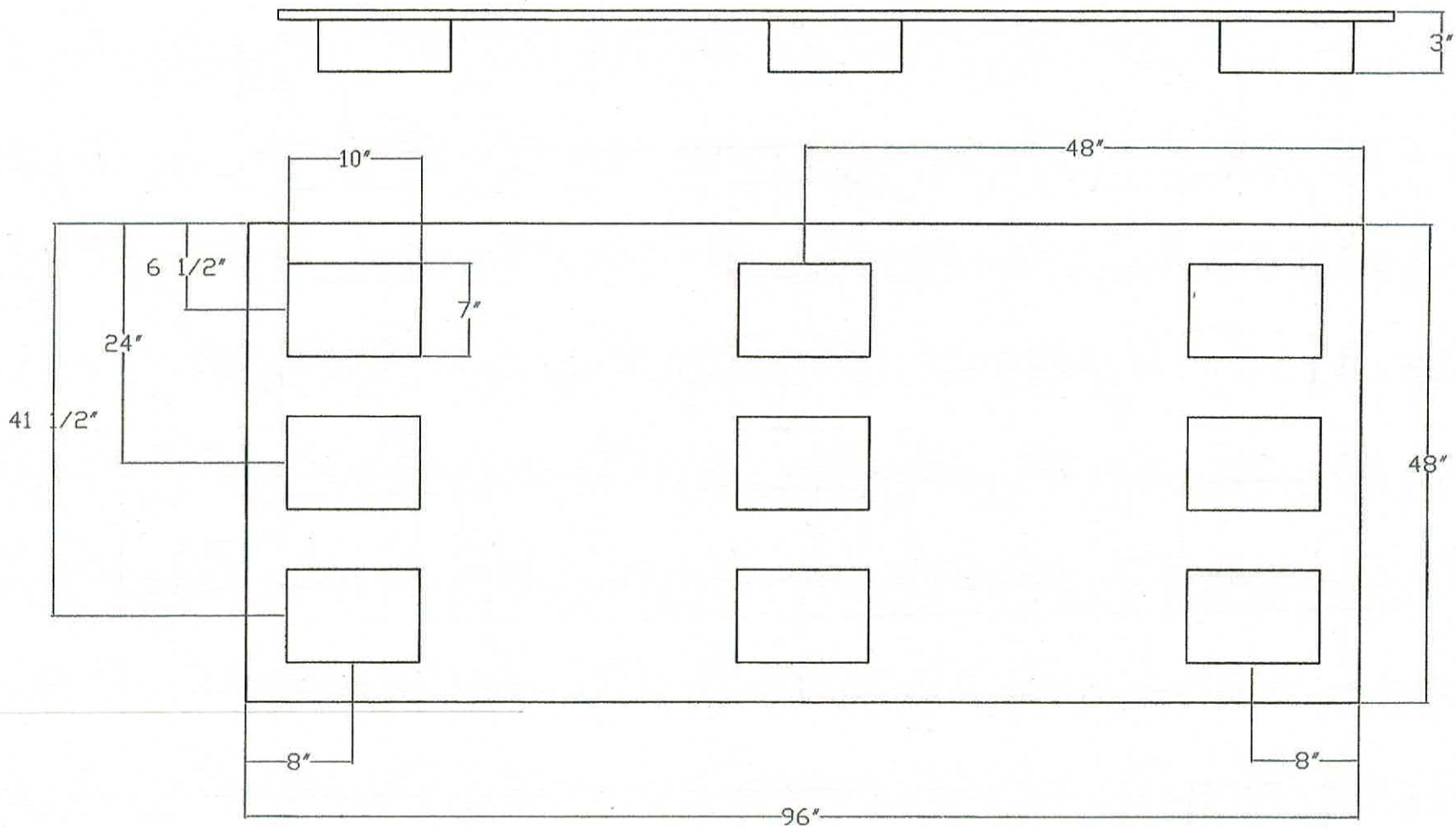


Polar Temp
Ice Merchandisers

Part Decription:
3'x7' Floor Supports
Drawing Number:
0003037
Drawn By: C.Mc
Date:2/24/11

Sheet

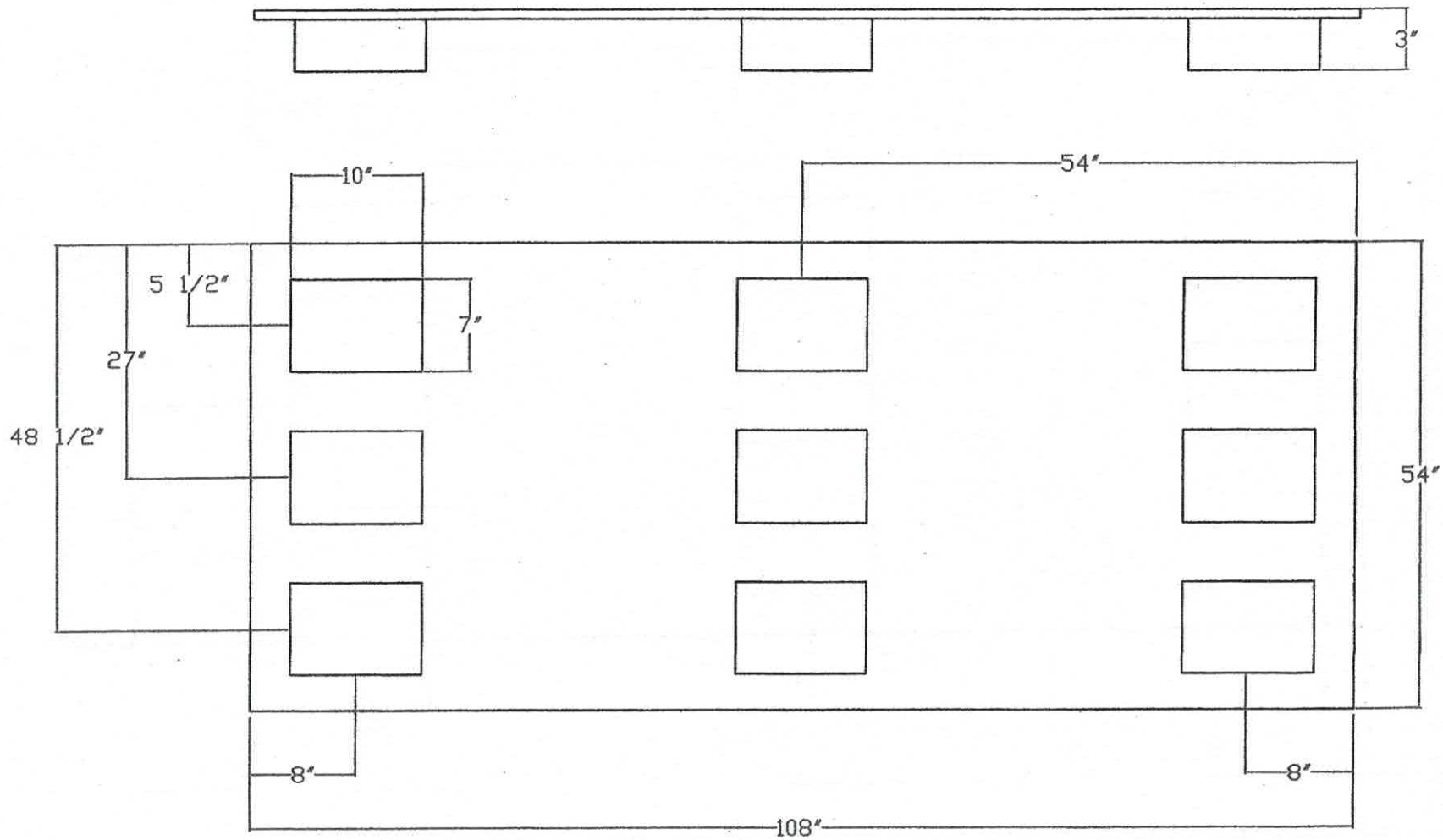
4' x 8' TRANSPORT
FLOOR SUPPORTS



Polar Temp
Ice Merchandisers

Part Decription:
4'x8' Floor Supports
Drawing Number:
0003038
Drawn By: C.Mc
Date:2/28/11
Scale:None

5' x 9' TRANSPORT, TRUCK BODY, AND PALLET LOAD
FLOOR SUPPORTS

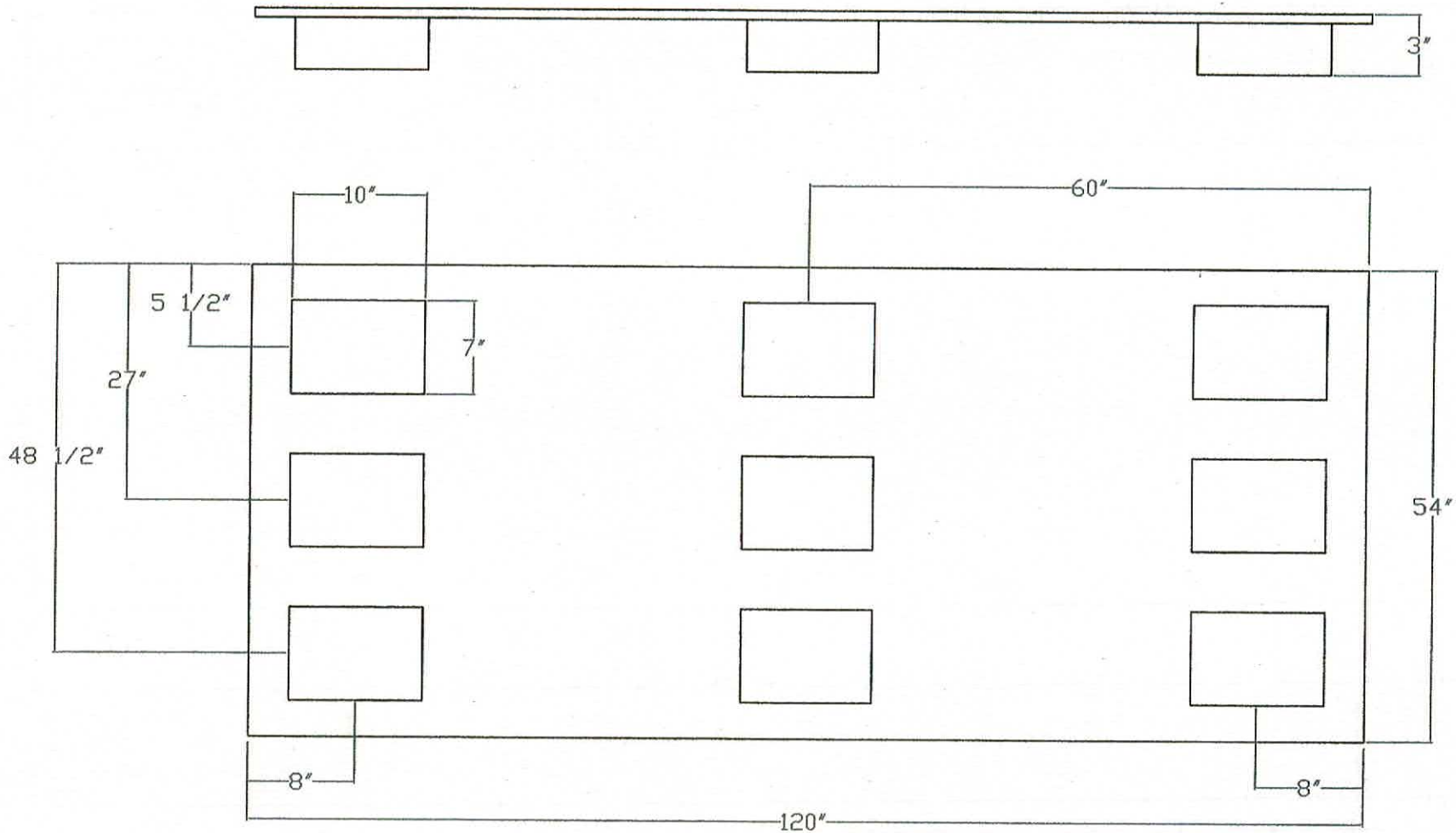


Part Decription:
5'x9' Floor Supports
Drawing Number:
0003039
Drawn By: C.Mc
Date:2/28/11
Scale:1/2"

Polar Temp
Ice Merchandisers

Rev A:Changed width to 54" was 56". 8-27-13

5' x 10' TRANSPORT, TRUCK BODY, AND PALLET LOAD
FLOOR SUPPORTS

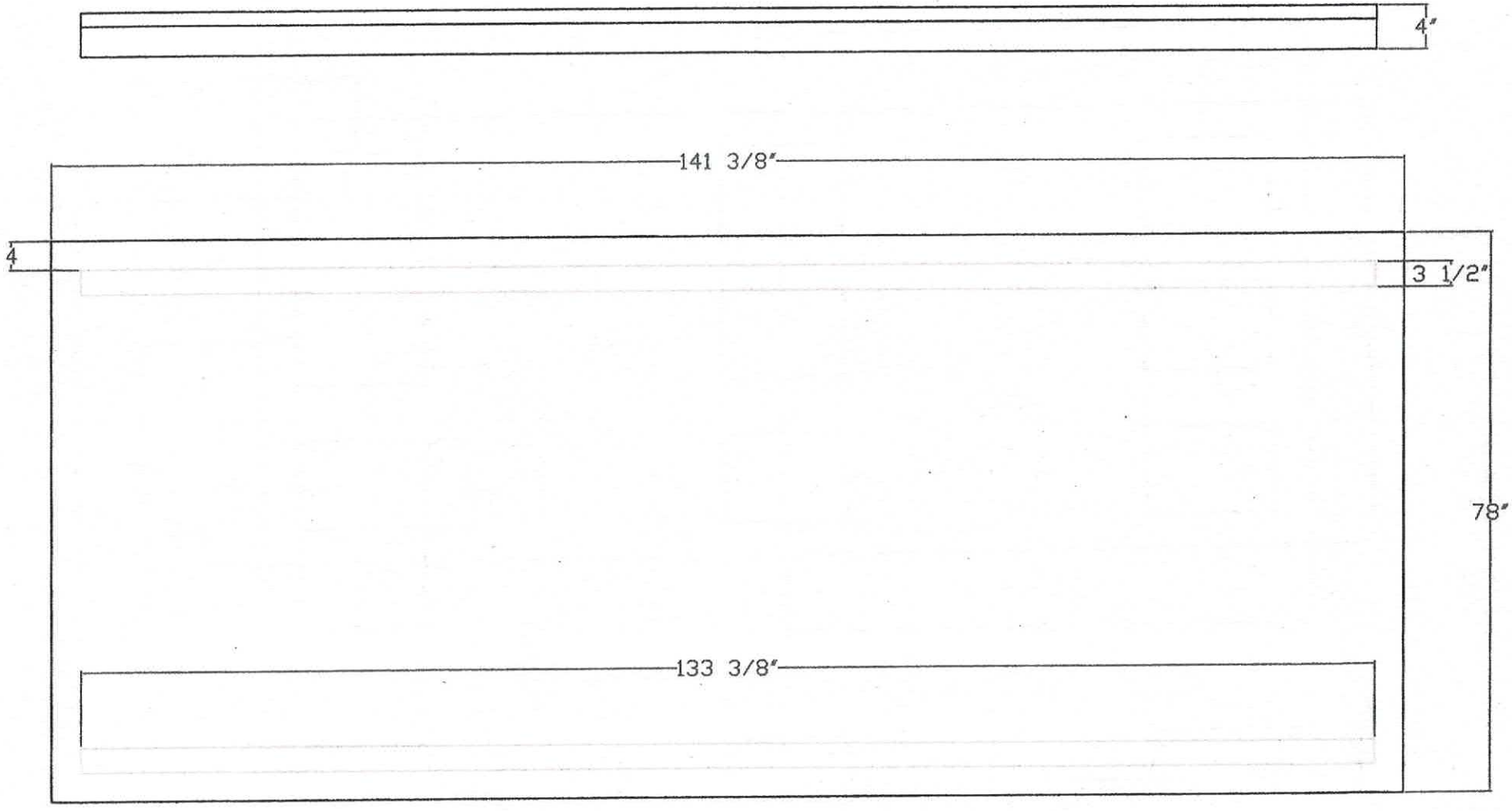


Polar Temp
Ice Merchandisers

Rev A:Changed width to 54".Was 56". 8-27-13

Part Decription:
5'x10' Floor Supports
Drawing Number:
0003040
Drawn By: C.Mc
Date:2/28/11
Scale:None

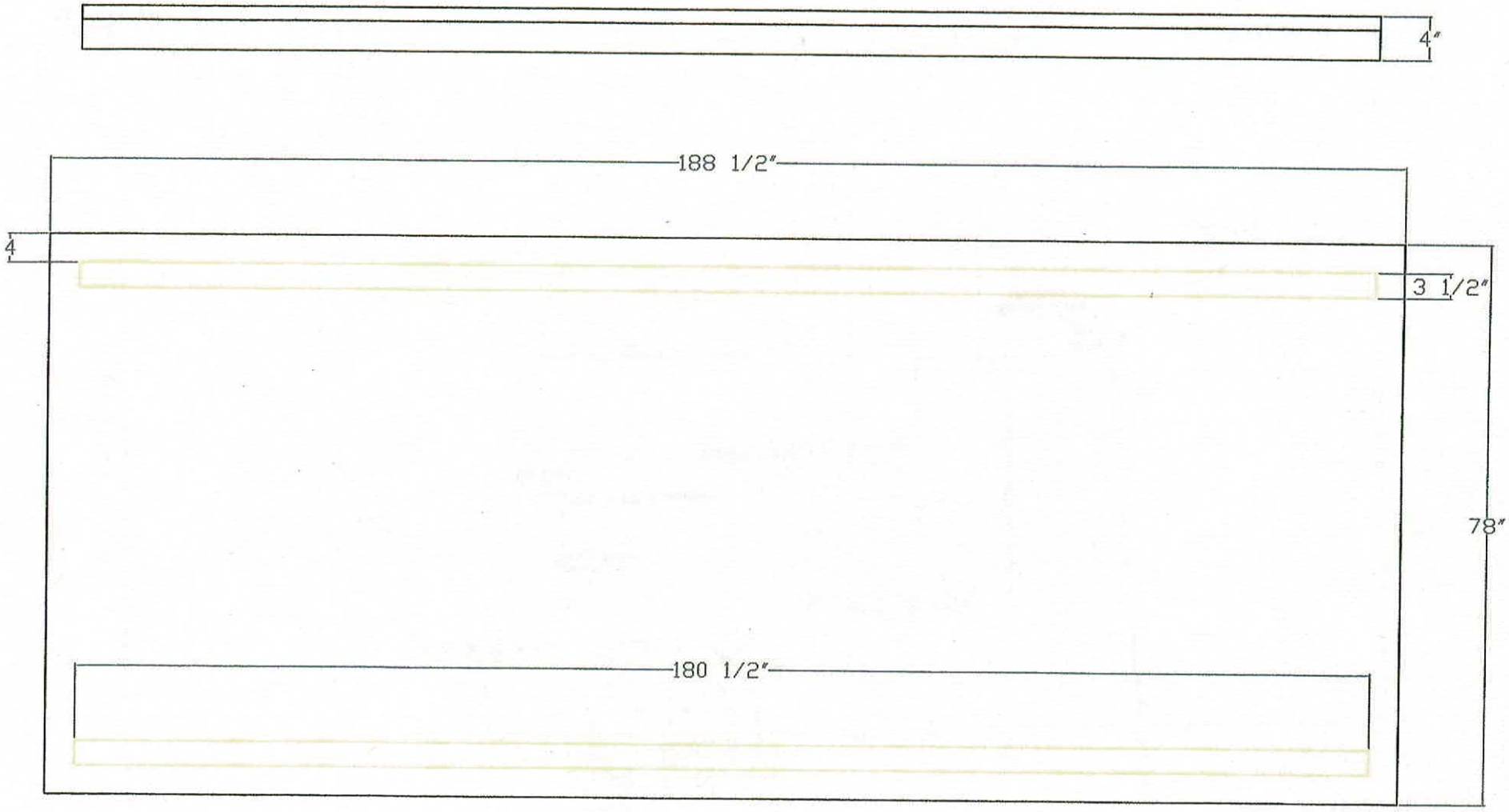
7'x12' ICE TRANSPORT AND TRUCK BODY
FLOOR SUPPORTS



Part Decription:
7'x12' Floor Supports
Drawing Number:
0003041
Drawn By: C.Mc
Date:2/28/11
Scale None

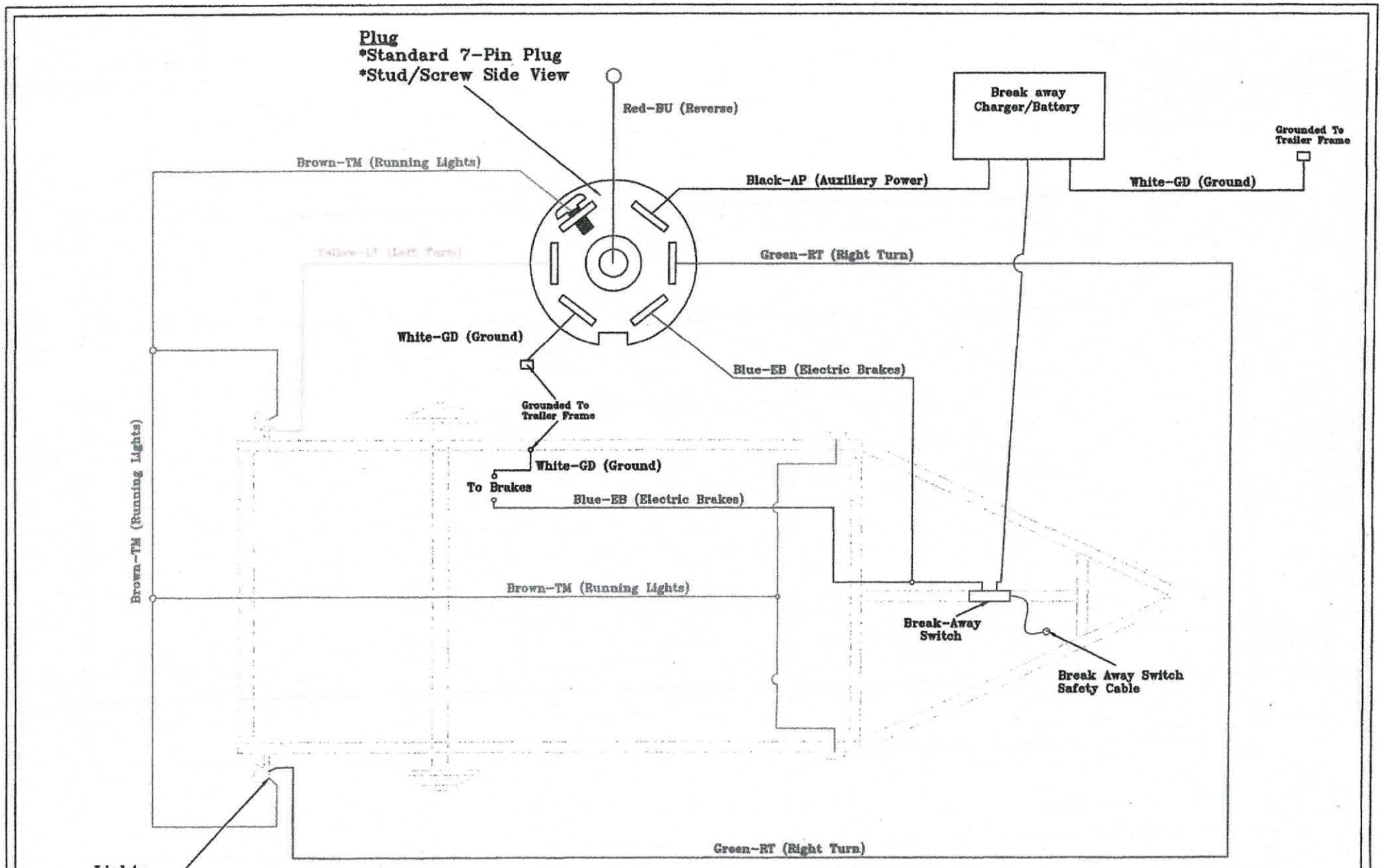
Polar Temp
Ice Merchandisers

7'x16' ICE TRANSPORT AND TRUCK BODY
FLOOR SUPPORTS



Polar Temp
Ice Merchandisers

Part Decription:
7'x16' Floor Supports
Drawing Number:
0003042
Drawn By: C.Mc
Date:2/28/11
Scale:None



Brakes
*Two White Leads From Brakes,One Ground,One Power
*Brakes Must be Grounded To Operate
*If Brakes Lock,Adjust Brake Controller.

Polar Temp
Ice Merchandisers

Part Decription: Trailer Wiring
Drawing Number:
Part Number:0003044
Drawn By: C.Mc
Date:3/7/11
Scale:None

POLAR TEMP
TRANSPORT, TRUCK BODY and PALLLET LOAD
POLICY STATEMENT

Warranty

Seller warrants the goods sold to be free from defects in materials and workmanship, under normal conditions and use for the following period of time:

Compressor – five (5) years from the original date of shipment
Ice Transport, Truck Body or Pallet Load Parts – one (1) year from the original date of shipment
Labor – 60 days (Purchaser's authorized service technician must contact factory for approval).

This warranty applies to goods installed in the continental United States, Canada and the Caribbean Islands only. Seller's sole obligation under this warranty shall be limited to repair or replacement of any part or parts of said goods, F.O.B. Seller's factory which proves defective within the applicable warranty period. Seller reserves the right to inspect allegedly defective goods and to require the return, at the Buyer's expense, of goods for the purposes of inspection. This warranty shall not apply to any good, or any part thereof, which has been subject to any accidents or negligence or abuse of misuse, alteration or detrimentally affected its physical condition, use or operation qualities.

Parts Orders

Please order parts by Polar Temp part number as listed in the replacement parts catalog. Call Polar Temp factory sales location for replacement parts catalog. Always have available the model and serial number of the cabinet, and in some cases the manufacturers name and model number of the part. In case of warranty replacement this information is required. Parts will not be issued as warranty or warranty authorized without this information.

Method of Shipment

Every shipment is carefully packed for domestic shipment and labeled to prevent damage or loss in transit. Specify where shipment should be sent, freight, express, parcel post, airfreight or united parcel. If no preference is given, or in case of freight shipment, the routing is not furnished, shipment will be made according to our discretion without liability of any kind on our part for each selection. We welcome your suggestions on preferred carriers for better service.

Common carrier shipments are forwarded freight collect. Under pre-approved circumstances, where transportation charges are prepaid, they will be added to the invoice. Please note that prepaid freight charges are subject to sales tax if a signed sales tax exemption certificate is not on file with Polar Temp. All UPS shipments will be prepaid and added to the invoice.

POLAR TEMP ICE
TRANSPORT, TRUCK BODY and PALLET LOAD POLICY
POLICY STATEMENT

Ship Dates
Promise of delivery represents only our best estimate of the time required completing the work and shipping the product from our plant. Orders are accepted with the understanding that shipping dates are approximate and subject to change because of factory conditions, fires, supplier delays, material shortages, civil or military authority, mandatory priority and/or other causes beyond our knowledge or control.

Return Of Merchandise
No returned ice transport will be accepted without prior authorization from Polar Temp. When orders have been correctly filled, and transport is returned, a 10% handling charge plus reconditioning charges, if any, will be applied. No return shipment will be accepted unless authorized in advance and the freight is prepaid. During the warranty period, in order to obtain proper credit from our vendors, all defective parts must be returned within 45 days, freight prepaid to our factory for repair, replacement or credit.

Pricing
All prices listed are F.O.B. Lithia Springs and/or Austell, Georgia, and are subject to change without notice.