



Tool Repair and Storage

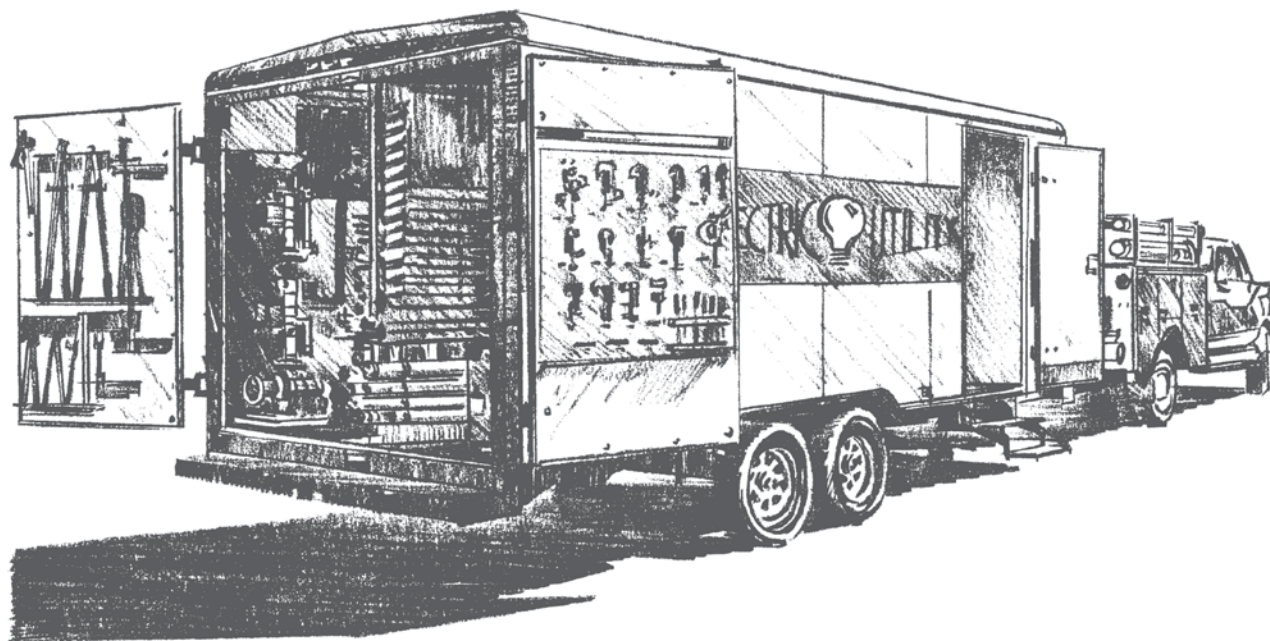
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www.hubbellpowersystems.com
E-mail: hpsliterature@hps.hubbell.com

Care, Storage and Repair of Epoxiglas® Tools

Epoxiglas® Hot Sticks

In 1957, Chance introduced a new handle for hot line tools . . . the material known as Epoxiglas . . . the result of a three-year research and development program.

Epoxiglas consists of thousands of epoxy resin-impregnated glass fibers wound around and laid lengthwise over a unicellular plastic foam core. This foam core consists of millions of unconnected individual cells containing a low boiling inert material which inhibits moisture absorption and condensation. The unicellular foam is bonded to the reinforced walls to obtain a foam integrity that cannot be matched by other tool manufacturing methods.

The electrical and mechanical advantages of Epoxiglas Hot Line Tools have been verified by their acceptance for the stringent requirements of hot line maintenance by electric utilities throughout the world.

Care of Epoxiglas hot line tools

Although extreme care is exercised in the manufacture of Chance hot line tools, a certain amount of care should be used in the protection of these tools in order to have them ready for use at all times. Proper care will result not only in longer life, but also in greater safety and produce added confidence on the part of the line crew using the tools.

One of the most important factors in the care of hot line tools is to keep them dry. They should never be laid directly upon the ground; they should be kept in the truck or a tool trailer until ready for use, then placed upon a tool rack near the groundman. If it is necessary to lay the tool on the ground, a clean dry tarpaulin should be spread to prevent the tools from contacting the ground.

Most line crews have the groundman wipe the hot stick clean with a silicone impregnated Chance Hot Stick Wiping Cloth immediately before it is sent up the structure for use on energized lines.



**Cleaning a pole
with Chance
Moisture Eater II**

Cleaning Epoxiglas hot line tools

After approximately 10 wipedowns, or whenever contaminated by moisture bearing and conductive materials, the tool should be cleaned and reglossed. This can be done most efficiently by using the Chance cleaner-solvent called Moisture Eater II. This cleaner can be applied with a non-abrasive cloth for light cleaning or used in conjunction with abrasive cleaning pads for heavy contamination that might be ground into scars

or scuffs in the tool surface. If the gloss finish of the pole has been removed, it can be returned to factory conditions by wiping with Chance Gloss Restorer, forming a clear, tough coating to retard future contamination.

Repairing small ruptures

Repairing a small rupture in the pole with an Epoxiglas Bond Kit.



Surface ruptures in Epoxiglas caused by misuse should be repaired as soon as discovered. This can be accomplished by removing the damaged fibers, cleaning the void with Chance Moisture Eater II and application of Chance Epoxiglas Bond. After the patch has set, wipe the pole down with Epoxiglas Gloss Restorer and it is ready for use.

Protecting tools during transportation

When transporting hot line tools from one location to another, containers should be provided which will prevent damage to the surfaces of the individual tools, or the tools should be mounted on racks in trucks or trailers. These racks should be well padded and so constructed that the tools are held firmly in order to prevent damage to them or the tow vehicle.

Inspecting tools

Check each tool regularly for indications that the tool may have been overstressed; this type of damage is evidenced by bent or cracked parts. Bent rivets or bolts are signs that ferrules have been pulled away from their original positions and have damaged the handle. Check metal parts of the tools for excessive wear and other visible damage. Excessive strain will overstress the parts and weaken them, and weakened parts may cause the tool to break at a later date, even when supporting a load considerably lower than the load for which the tool was designed. Therefore, if there should be any doubt about the condition of a tool, or part thereof, it should be thoroughly tested before being used.

Individual products required for maintaining, storing and repairing Chance Hot Line Tools are described in this catalog section.



Epoxiglas® Cleaning Kit

The items contained in this kit are essential for the care and maintenance of Epoxiglas® tools and insulated boom sections of aerial lift trucks. The proper use of these maintenance aids will ensure that maximum and useful life is obtained from Epoxiglas products. Do not use on Gel-Coat or painted boom surfaces.

The kit consists of four parts:

1. **Moisture Eater II** — This cleaner should be used on contaminated Epoxiglas during general tool maintenance and in preparation for reglossing a tool's surface. Moisture Eater removes moisture and a wide variety of contaminants such as dirt, tar, grease, tree sap, light metal rubbings and old surface coatings without harming the Epoxiglas material.

2. **Abrasive Cleaning Pads** — These pads are used in conjunction with Moisture Eater II to remove contamination that clings to the tool or contamination ground into scars and scuffs in the tools surface. Gloss restorer must be applied after using these pads since cleaning with Moisture Eater II will remove the glossy finish on the tool as well as contamination. The pads may also be used on metal parts to remove oxides and surface corrosion.

3. **Gloss Restorer Kit** — This kit consists of two parts. When mixed and applied to the surface of a cleaned Epoxiglas tool they combine to form a clear, tough coating that replaces the original gloss and protects against contamination and moisture.



4. **Hot Stick Wiping Cloths** — Silicone impregnated cloths are used to wipe down mildly contaminated Epoxiglas, removing dust and dirt, and depositing a thin protective film on the surface of the tool. They give an added measure of protection when used after recoating with gloss restorer.

Moisture Eater II Cleaner-Solvent for hot-line tools, line hose and blankets

- Stronger solvent for water and conductive contaminants
- Safe to Earth's ozone layer: Free of chlorinated hydrocarbons
- More economical, easier to work with due to lower evaporation rate
- Pleasant, orange scent from citrus-based biodegradable component

Less waste

Moisture Eater II contains no water and dissolves water in its presence. In fact, it removes twice as much water as the original Moisture Eater.

Without undue worry about wasting the chemical, you can take the time necessary to thoroughly clean tools. This is because the unique formula of Moisture Eater II gives it a much lower evaporation rate than the original formula and other hot-line tool cleaners. Expect drying times from 10 to 20 minutes.

Environment- friendly advantages

The new formula consists of two solvents: One for oils, waxes and silicone-type contamination; one for moisture contamination. This combination is ideally suited for cleaning hot-line tools. A by-product of citrus fruit, one component is biodegradable. And the other component protects it from decomposing until used. Plus, the reformulation eliminates chlorinated solvents harmful to the Earth's ozone layer. For more technical details, refer to Material Safety Data Sheet ABC/C56.



Available in 1-gallon jug as Cat. No. C4002364
(also comes in Epoxiglas Cleaning Kit).

Catalog No.	Description
C4002364	Moisture Eater II Cleaner, 1 gal./4.23 liters
C4002365	Epoxiglas Cleaning Kit*
The above kit consists of the following items: (Each may also be ordered separately.)	
C4002364	Moisture Eater II Cleaner, 1 gal./4.23 liters
C4001166	Abrasive Cleaning Pads (box of 20)
C4001520	Gloss Restorer Kit
M1904	Hot Stick Wiping Cloth (*2 in Kit above)

Moisture Eater II Wipes for hot-line tools, rubber line hose & blankets

- Economical, individual packets encourage daily use
- Helps comply with OSHA

Packaged to put convenience on the job every day

Small pocket-size packets encourage frequent cleaning of insulated hot-line tools, line hose and rubber blankets. This helps utilities stay in compliance with OSHA 29 CFR 1910.269(j).

It's so easy: Just zip open a foil packet and pull out the pre-moistened, lint-free towel. Each wipe is saturated with a half ounce of orange-scented Moisture Eater II solvent.

The hanger box holds 50 wipes to keep them handy in crew bays, on trailers, in trucks. Above the dispenser, the words "You can comply with OSHA!" urge daily tool cleaning.

The sealed wipes mean no more rags to store or try to keep clean in the field; no more jugs to stow, big spills, evaporation losses or wasteful excesses just to wet large cloths.



Workable, environment-friendly formula

The unique formulation of Moisture Eater II removes concerns about wasting it while taking time to thoroughly clean tools. It has a much lower evaporation rate than other hot-line tool cleaners.

You can expect drying times from 10 to 20 minutes without concern because it contains no water and actually dissolves water in its presence.

By environmental design, the Moisture Eater II formula does not contain chlorinated solvents harmful to the Earth's ozone layer. The proprietary Moisture Eater II mix contains two solvents: One for oils, waxes and silicone-type contamination; one for contamination wet with water. This combination is ideally suited for cleaning hot-line tools. A by-product of citrus fruit, one component is biodegradable. The other protects it from decomposing until used. For more technical details, refer to Material Safety Data Sheet ABC/C56.



Line hose and rubber blankets clean up easily with Moisture Eater II wipes.

Ordering Information

Catalog No.	Description	Weight
C4002538	Moisture Eater II Wipes (1 box of 50 packets)	2.7 lb. (1.2 kg.)

Silicone Wipes for hot-line tools

- Economical, individual packets encourage daily use
- Packaged to put convenience on the jobsite every day
- Perfect step to follow daily cleaning or gloss restoration

Quick and easy extra protection

Small pocket-size packets encourage frequent care of insulated hot-line tools. This helps utilities stay in compliance with OSHA 29 CFR 1910.269(j). To urge daily tool care, the words "You can comply with OSHA!" appear on each dispenser box of 50 wipes. The hanger box holds 50 wipes to keep them handy in crew bays, on trailers and in trucks.

The convenience of sealed wipes mean no more rags to store or try to keep clean in the field. The disposable wipes are so easy to use. Just zip open a foil packet, pull out the silicone-saturated 8" x 10" lint-free towel and wipe down a hotstick.

These wipes contain the same silicone that impregnates Hot Stick Wiping Cloths in the Chance Epoxiglas® Cleaning Kit. Using the cloths or Silicone Wipes on fiberglass tools removes dust and deposits a thin protective coat that helps resist accumulation of dirt and other airborne contaminants.

Benefits daily cleaning and refinishing

As the last part in the everyday clean-and-wipe routine, a Silicone Wipe replaces the film of protection that cleaners such as Moisture Eater II remove along with contaminants. This final silicone "step" helps preserve the benefits not only of daily cleaning but also when refinishing tool surfaces. Used after Chance Gloss Restorer, the sealed and disposable Silicone Wipes assure a clean application of a preservative layer on the new surfaces.



Simple and convenient:

- Easy-open
- Single-use
- Disposable

Ordering Information

Catalog Number	Description	Weight
C4002568	Silicone Wipes, one box of 50 packets	2.7 lb. (1.2 kg.)

Wet/Dry Hot Stick Tester

for easy, portable compliance with industry standards

New controls and meter for all requirements

Simple to operate, this portable unit makes easy work of testing insulated live-line tools. It features wet and dry modes selected by a toggle switch and follows procedures specified by ASTM, IEEE and OSHA. Its graduated meter gives precise readout of each tool's leakage current.

Portable operating ease

For testing any length fiberglass-reinforced plastic (FRP) hot stick up to 3 inches in diameter, the Wet/Dry Tester offers convenience for spot checks at field jobsites or periodic diagnostics in the workshop.

It's like having full-scale test setups for both Wet 75kV-per-foot and Dry 100kV-per-foot in a compact, self-contained unit easily carried and operated by just one person.

In the Setup procedure before each use, a zeroing knob is used to set the meter to zero without a tool in the tester. Then the furnished Check Bar is used as a self-check to make sure the tester is functional.

A seven-minute videotape included with each unit demonstrates "how-to" basics for Setup, Dry and Wet tests. The illustrated Owners Manual gives specifics which must be read and understood before operating the tester.



Ordering Information

Included with each Tester:

- Check bar
- Owners operating instruction manual
- ½" VHS videotape demonstration
- Carrying case

Catalog No.	Wet/Dry Hot Stick Tester	Weight
C4033178	115-volt model	20 lb./9.0 kg.
C4033179	230-volt model	20 lb./9.0 kg.



Quantitative test results

When the tester is placed on a tool, the meter displays any increase in leakage current due to the hot stick's presence. This gives an immediate indication of the stick's true leakage condition, independent of stray currents (through the air, internal to testers, etc.) zeroed out in advance.

The tester detects leakage currents due to surface contamination, internal moisture and such internal conductive materials as carbon tracks.





Epoxiglas® Bond Patching Kit

The Epoxiglas Bond Patching Kit can be used to repair small surface ruptures on Epoxiglas Hot Sticks, to install new ferules on Epoxiglas poles, or to assist in replacing rungs on Epoxiglas Ladders.

The kit consists of a tube of hardener and a tube of resin that are mixed immediately before repairs are made. A mixing stick is included, that can also be used to place the bond in the area to be repaired.

Epoxiglas Bond contains the same orange color as used in Epoxiglas poles. Small surface ruptures can be repaired by removing damaged fibers, cleaning the void with Moisture Eater II cleaner-solvent and then applying Epoxiglas Bond.

Cat. No.	Description	Weight
H1917	Epoxiglas Bond Patching Kit	.5 lb./ .23 kg.

Epoxy Sand Kit

This kit contains the necessary ingredients to replace sand finish on one 10' ladder. These ingredients are a can of Epoxy resin, a can of curing agent, a pint of sand, a stirring blade and instruction sheet for mixing.

Cat. No.	Description	Weight
H1921	Epoxy Sand Kit	4 lb./1.8 kg.

Epoxiglas Plug Kit

The Chance Epoxiglas Plug Kit replaces adhesive coated wood plugs. The kit offers you a better structure and moisture seal and requires less operator skill to install . . . features high strength low shrink material, which is of the same ingredients as used in Chance factory "plugging processes". A chemical adjustment prevents the kit from "scumming" over in transit or storage.

Cat. No.	Description	Approx. Weight
C4000730	Epoxiglas Plug Kit	6 lb./2.7 kg.

Tool Lubricant

Chance Tool Lubricant is a non-flammable, non-toxic, non-corrosive material, especially prepared to give hoists and tools the lubrication needed to keep them in top working condition. The lubricant coats the moving parts with a tough, durable film to prevent the tools from binding and galling. Handy plastic squeeze bottle for easy application.

Cat. No.	Description	Approx. Weight
M1909	Chance Tool Lubricant	4 oz./ .1 kg.

Dry Film Tool Lubricant

Chance Dry Film Tool Lubricant is offered as a lubricant for all bearing surfaces, sliding and threaded, of Chance Hot Line Tools, Construction Tools and Pole Line Hardware.

This dry film blend of solid lubricants, basic ingredient is Molybdenum Disulfide, is applied as any aerosol-packaged spray material, and air dries and bonds to the tool surface almost instantly.

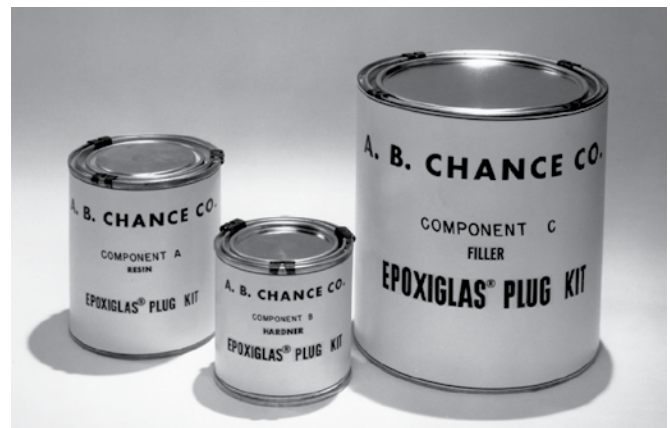
Cat. No.	Description	Weight
C4002335	Dry Film Lubricant	16 oz.



H1917



H1921



C4000730

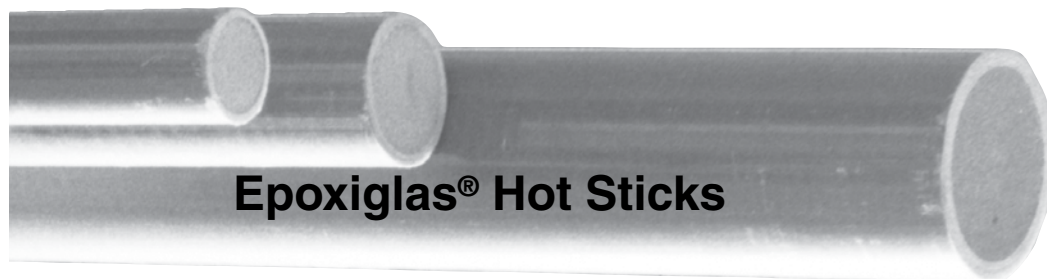


M1909



C4002335

Epoxiglas[®] Blank Poles



Tested per OSHA & ASTM F711

Epoxiglas[®] blank poles are available for field repairs in a number of sizes. Extreme caution must be taken in tool reassembly, following detailed instructions available from Hubbell Power Systems, Inc. Contact your Chance territory manager for details. Failure to properly attach metal ferrules and splices to these poles or to use proper materials for rivets, internal plugs, adhesives or procedures may result in premature or below rating breakage.

Epoxiglas poles were specifically designed by Chance engineers for use in hot line tool applications. Materials used in Epoxiglas poles are glass fibers, epoxy resin, and unicellular plastic foam. In the finished form, the unicellular plastic foam acts as a core, over which specially treated glass fibers are

placed circumferentially and longitudinally after being coated with a specially formulated epoxy resin and oven-cured.

Because Epoxiglas Poles are moisture-absorption resistant, heated trailers and drying room are not required. Only the reasonable care normally afforded hot line tools is necessary to maintain sound insulation level.

The color selection for Epoxiglas was Omaha orange... because of its easy detectability and general contrast with common environment in usage areas. The color is actually present throughout the material — not just a surface finish.

Cat. No.	Dia.	Length	Weight
H4539	1 1/4"	3'11"	1.3 lb./6 kg.
H45391	1 1/4"	5'11"	2.0 lb./9 kg.
H45392	1 1/4"	7'11"	2.7 lb./1.2 kg.
H45393	1 1/4"	9'11"	3.3 lb./1.5 kg.
H45394	1 1/4"	11'11"	4.0 lb./1.8 kg.
H45401	1 1/2"	5'11"	2.9 lb./1.3 kg.

Cat. No.	Dia.	Length	Weight
H45402	1 1/2"	7'11"	3.9 lb./1.8 kg.
H45403	1 1/2"	9'11"	4.8 lb./2.2 kg.
H45404	1 1/2"	11'11"	5.8 lb./2.6 kg.
H45405	1 1/2"	13'11"	6.8 lb./3.1 kg.
H45406	1 1/2"	15'11"	7.8 lb./3.5 kg.
H45413	2"	9'11"	8.7 lb./3.9 kg.

Cat. No.	Dia.	Length	Weight
H45414	2"	11'11"	10.4 lb./4.7 kg.
H4542	2 1/2"	5'11"	7.4 lb./3.3 kg.
H45421	2 1/2"	7'11"	9.9 lb./4.5 kg.
H45422	2 1/2"	9'11"	12.4 lb./5.6 kg.
H45423	2 1/2"	11'11"	14.9 lb./6.7 kg.
H45424	2 1/2"	13'11"	17.4 lb./7.8 kg.

End Caps

For more information on end caps, see Catalog Section 2100.



Heavy Duty Cap

Catalog No.	Description
P4032312P	Heavy-Duty End Cap for 1 1/4" Epoxiglas pole
056394P	Plastisol End Cap for 1 1/4" Epoxiglas pole
056395P	Plastisol End Cap for 1 1/2" Epoxiglas pole
069326P	Plastisol End Cap for 2" Epoxiglas pole
069214P	Plastisol End Cap for 2 1/2" Epoxiglas pole



Plastisol Cap

Rigid Pole Splices



H33651

Chance Rigid Pole Splices are recommended for all load conditions—tensile, compressive, or deflection. These Splices make a rigid connection that is stronger than the pole. Use of heat-treated aluminum alloy for the ferrule makes these splices lightweight and keeps spliced poles well balanced. Counter-threaded stainless steel collar locks threaded poles together. The Rigid Splice is available for assembly on Epoxiglas blank poles (above), to shorten Epoxiglas tools for storage

or to couple with other spliced tools, as on page 2118. Also see page 2118 for Universal Fittings for Spliced Poles.

Cat. No.	Description
H33651	Rigid Splice for 1 1/4" Pole
H33652	Rigid Splice for 1 1/2" Pole
H33653	Rigid Splice for (1 1/2 to 1 1/4")

Hand Guards

Hand Tool* Guard
spacing below tool head

Voltage kV/phase	Minimum Insulation
15.....	2'1"
34.5.....	2'4"
69.....	3'
115.....	3'2"
161.....	4'
230.....	5'3"
345.....	8'6"
500.....	11'3"
765.....	14'11"

* These spacings apply to hand tools. Other tools may permit reduced spacings. Always refer to OSHA regulations and your utility work clearance procedures.

Catalog No.	Hand Guard Description	Weight
M30021	Flexible rubber for 1½" dia. pole	4 oz./1 kg.
C4030799	Natural nylon fits 1¼" dia. pole	2 oz./0.06 kg.
C4030800	Natural nylon fits only 1¼" Grip-All	2 oz./0.06 kg.

Help Maintain Minimum
OSHA Insulation
Clearances.

Handguards assist in maintaining minimum clearances between the hand and the working end of the hot line tool.



**Flexible
Rubber**



**Natural
Nylon**

Tool Hangers

These hangers engage conductors up to 556.5 kcmil ACSR.

H17605 Pole Hanger was designed for use on 1¼" or 1½" diameter Epoxiglas® poles. It includes a black Nylon-filled plastic hook and a steel hose clamp for easy attachment.

M1858 Pole Hangers respectively attach to 1¼" and 1½" Epoxiglas poles by heat-shrink plastic tubing. Each includes a Polyethylene hook, shrink tubing, tape and installation instructions.

Catalog No.	Description	Weight
H17605	Nylon-filled Plastic Hook & Steel Clamp	7 oz./3 kg.
M1858	Polyethylene Hanger for 1¼" Pole	7 oz./3 kg.



H17605



M1858

Hot Line Tool Rack

With the Chance Hot Line Tool Rack, there is no need for rolls of canvas or other ground covering devices. The compact, collapsible Racks take up little space on the line truck or in the trailer.

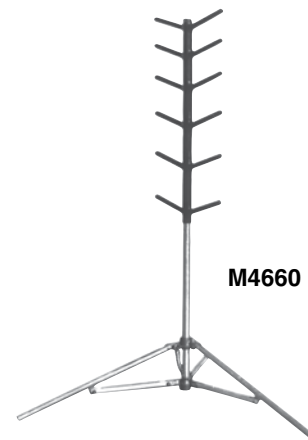
Tools are protected against abrasion by soft, tough plastisol coating over arms and center mast. All metal parts below the plastisol are galvanized or bronze for resistance to corrosion.

The folding tripod-like legs can be locked in the fully opened or fully closed position. An eyebolt, secured by a bead chain, is used to lock the legs in position.

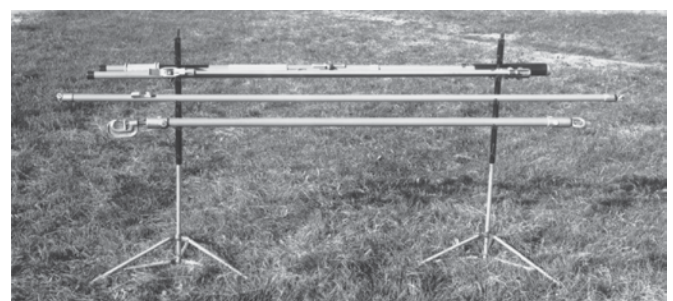
Each pair of Tool Racks will support up to 12 tools as there are 12 arms to a rack. Poles of 3" diameter will easily fit on the arms.

Catalog No.	Description	No. of Tools Accommodated	Weight
M4660	1 Tool Rack*	12	10 lb.

* These are normally used in pairs: Quantities of two M4660 should be specified.



M4660



Tarps & Storage Bags for Hot Line Tools

All-Purpose Tarps in the same yellow heavy-duty vinyl-impregnated fabric are available in the two sizes at right.



Description	Catalog No.
10 ft. x 10 ft. Tarpaulin	T3060025
12 ft. x 12 ft. Tarpaulin	T3060014

To select the right bag, first locate tool catalog number and specify bag catalog number listed in adjacent column.

Chance waterproof storage bags help guard against contaminants and abrasion to help maintain the insulating properties of hotline tools. Yellow heavy-duty vinyl-impregnated fabric lasts for years of rugged service. Snaps, Velcro[®] closures and custom-tailored pockets fit the appropriate tools listed below and on facing page.

ALL-ANGLE COG WRENCHES

Tool Cat. No.	Bag Cat. No.
C4030184	P6216
C4030185	P6218
C4030186	P62110

AMERTONGS

Tool Cat. No.	Bag Cat. No.
H19686	P6216
H19688	P6218
H19786	P6406
H19788	P6408

CABLE CUTTERS

Lever-Type

Tool Cat. No.	Bag Cat. No.
H18716, H18736	P6406
T4030687	P6408

Hydraulic

C4030731 & C4032861	T3060007
C4030732 & C4032862	T3060008

Ratchet

C4031381	T3060028
C4031382	T3060028
C4031383	T3060029
C4031384	T3060029
C4031421	C3060023
C4031422, C4031423	C3060000

DISCONNECT STICKS

Fixed and Spliced

Tool Cat. No.	Bag Cat. No.
H30465, H304611	P6434
H30466, H304612, H304622	P6436
H30467, H304613, H304623	P6438
H30468, H304614, H304624	P64310
H30469, H304615, H304617	P64312
H304616, H304618, H304620	N/A
H314612	P6215
H314616, H314618	P6218
H314620	P62110
H314624	P62112

FLEXIBLE INSULATED WRENCHES

Tool Cat. No.	Bag Cat. No.
H18912, H18915, H18917	P6436
H18913, H18916, H18918	P6438

GRIP-ALL CLAMPSTICKS

Tool Cat. No.	Bag Cat. No.
C4030291	P6434
C4030292, C4031035	P6436
C4030293, C4031036	P6438
C4030294	P64310
C4030295	P64312
C4030296, C4030297	P6432
C4030298	P6433
C4030299	P6435
C4030342	PSP6435005
C4030343	PSP6435004



HOIST, NYLON RATCHET

Tool Cat. No.	Bag Cat. No.
PSC3090323	C3060000

PLATFORM (Roll Bag)

Tool Cat. No.	Bag Cat. No.
H49646W	P610

POSITIVE-GRIP CLAMPSTICKS

Tool Cat. No.	Bag Cat. No.
HG30302, HG303012	P64310

ROLLER LINK STICKS

Tool Cat. No.	Bag Cat. No.
H47144	P6436
H47146	P6438

STRAIN LINK STICKS

Tool Cat. No.	Bag Cat. No.
C4000812	P6436
C4000814	P6438
C4000815	P64310
C4000816	P64312
C4000817	P64314
C4000818	N/A
H47161	P6434
H47162, H4717	P6215
H47163, H47171, H47181	P6218
H47164, H47182	P62110
H47165, H47183	P62112
H47166, H47184	P62114
H4718	P6216

STRAIN POLES

Tool Cat. No.	Bag Cat. No.
H1949113, C4012146	P62110
C4000612, C4000613,	P62112
C4012147	N/A
C4012148	P62114
C4012149	N/A

TELESCOPING DISCONNECT STICKS

Tool Cat. No.	Bag Cat. No.
C4031017, C4031018, C4031019, C4031598, C4031599, C4031600	P6213
C4031020, C4031021, C4031022, C4031022EM, C4031601, C4031602	P6215
C4031023, C4031597, C4031739	P6434
T4032205	C4032813
T4033349	P6216

TIE STICKS

Tool Cat. No.	Bag Cat. No.
H185519, H185520 H185525, H185526	P6438

TRANSFORMER GIN

Tool Cat. No.	Bag Cat. No.
C4000090	P644

TREE TRIMMERS & EXTENSIONS

Tool Cat. No.	Bag Cat. No.
H2006, H2106	P6218
H2036, H2056, H2136, H2156	P6436
H2038, H2058, H2138, H2158	P6438

UNIVERSAL POLES

Tool Cat. No.	Bag Cat. No.
H1760, H17604, H1761, H1770, H17908	P6438
H17601, H17603	P6436
H17602, H17606	P6434
H176010, H179010	P64310
H176012, H179012	P64312
H176014, H179014	P64314

WIRE HOLDING STICKS

Tool Cat. No.	Bag Cat. No.
C4033068	P6436
C4033069	P6438

WIRE TONGS

Tool Cat. No.	Bag Cat. No.
H46458, H46468	P6218
H464510, H464610, H464710	P62110
H464612, H464712, C4000171, H467712	P62112
H464714, H467714, C4000172, T4001252	P62114
H464716	P6218 (2 each)

Tool and Rubber Protective Bags and Buckets

These protective bags and buckets are made of double vinyl laminated open weave nylon cloth . . . lightweight and durable with nylon stitching throughout. Standard color of all synthetic material is easy-to-see, bright yellow.

LINEMAN'S TOOL BAG

(22" L x 11" W x 11" D) — Plywood bottom covered inside and out with metal skids on bottom of bag. Has full separating heavy duty zipper, heavy webbing handles, completely around the bag, and full 4-inch pocket on the inside.

LINE HOSE BAG

(48" L x 7" Dia.) — With 3-inch wide plastic top ring, molded plastic bottom with 2-inch cuff, and 3/8-inch rope handle.



C4170147



C4170151

GLOVE BAG

(18" L x 8" W) — One piece front and back, bar-tacked at all corners. Leather reinforced inside and out for snap, and double nylon stitched. Gusset has 4-inch top tapering to 2-inch bottom.

COMBINATION GLOVE AND SLEEVE BAG

(18" L x 8" W) — Separate storage for rubber gloves and sleeves. Single flap, double nylon stitching, reinforced inside and out for snap.



C4170148



C4170150

TOOL BUCKET

(12" dia. x 15" D) — Molded plastic bottom with 2½-inch tapered molded flange up sides. Top has molded plastic ring, ½-inch polypropylene rope handle, standard 4" x 8" inside pocket.



C4170144

TOOL BUCKET

(7" dia. x 10" D) — For steel tower work, it has a molded plastic top and bottom, with 3/8-inch Chemline rope handle.



C4170146

SLEEVE BAG

(27" L x 12" Top — 7" Bottom) — For flat storage of rubber sleeves. Bar-tacked corners, snap fasteners, and double nylon stitching.



C4170149

Cat. No.	Description	Weights
C4170144	Tool Bucket (15" Deep)	2 lb. 8 oz.
C4170146	Tool Bucket (10" Deep)	12 oz.
C4170147	Lineman's Tool Bag	3 lb.
C4170148	Glove Bag	8 oz.
C4170149	Sleeve Bag	10 oz.
C4170150	Glove & Sleeve Bag	10 oz.
C4170151	Line Hose Bag	2 lb.

For Hot Stick Storage Bags, see Catalog Page 2510.

Storage Canisters for Rubber Insulating Blankets

Proper storage extends blanket life, provides easy access in service

For physical and contamination protection, these canisters provide are lightweight yet durable and stow easily on service vehicles and in warehouses.

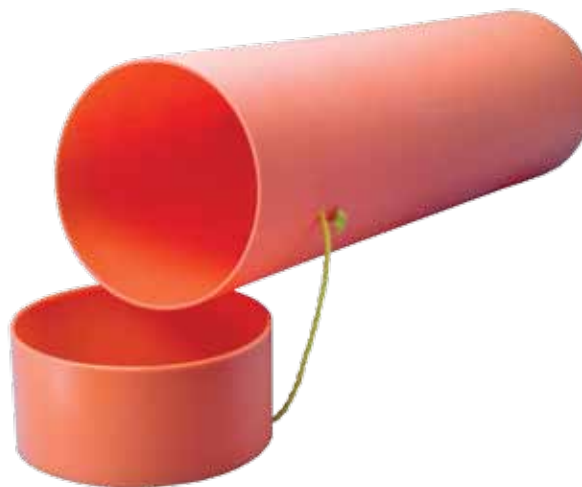
Cylindrical shape helps promote proper treatment since rubber blankets should never be folded, creased or compressed when stored. Rolling blankets before inserting helps keep them ready for service. Blankets nested inside each other may be inserted or withdrawn one at a time as needed.

Long-lasting construction

The bright orange canisters are molded of high-impact-resistant high-density polyethylene for tough, rust-free resilience. A polypropylene rope keeps the tight-fitting cap secured to the canister.



C4032999 has a molded handle and is 10" in diameter.



C4032998 does not have a handle and is 7" in diameter.

Storage Canisters for Rubber Insulating Blankets

Catalog No.	Description	Weight
C4032998	No handle, 7" dia., 37" long	6 lb./2.7 kg.
C4032999	With handle, 10" dia., 37" long	7 ⁵ / ₈ lb./3.43 kg.

Silicone Lubricant for flexible line hose and general applications

Developed to help keep line hose easy to put on and slide into place, this silicone material also serves as a multi-purpose lubricant.

Handy 10 oz. size aerosol package provides a convenient applicator to coat all interior line hose surfaces. Simply spread open the hose near one end and direct the can nozzle's wide spray pattern inside, working down the hose to its other end. A soft, clean cloth may be used to wipe silicone on large surfaces.

An excellent all-purpose lubricant, it may be used in place of petroleum-based lubricants. Surfaces to be coated should be clean and dry.

For more technical details, refer to Material Safety Data sheet ABC/C40.



Catalog No.	Description	Can Contents
C4002320	Silicone Aerosol Lubricant	10 oz./284 gm.

Hot Sticks Manual for high-voltage line maintenance

Copyrighted 162-page reference was derived from thousands of suggestions by safety directors, maintenance supervisors and lineworkers. It provides illustrated, step-by-step guidelines to 21 typical hot-line operations. These high-voltage jobs include change-outs of insulators, crossarms and poles on straight lines, deadends, running corners and suspension construction. System voltages on these jobs range from 5 through 287 kV.

Catalog No.	Description	Weight
100	Hot Sticks Manual	14 oz. (396 g.)

In addition to these procedures, the manual's five other sections cover:

- History and development of hot-line tools,
- Manufacture and care of hot-line tools,
- Training hot stick crews,
- Working loads for principal hot-line tools (includes conductor charts and OSHA clearances),
- Hot-line tools (details commonly-used items, including wire tongs and saddles, tie sticks, link sticks, auxiliary arms, lever lifts, strain carriers, deadend insulator tools and gin poles).

Dedicated to all hot stick crews, the book was compiled to promote safety and efficiency in hot-line maintenance.



Walk-in Tool Trailers

- Dual rear doors • Tandem axles • 7-ft. width
- Aluminum body • 7,000-lb. GVW • 16-ft. & 20-ft. standard lengths

Choice of sizes, hitch and options

The upright workspace and all-weather shelter of these units makes them line-crew favorites. Easy-handling standard-trailer lengths of 16 and 20 feet provide adequate capacity for most hot-line tool sets. Non-stock trailer sizes available by special order are listed below.

Towing-hitch choices include 3" pintle-eye (standard on Catalog Numbers below) or optional 2⁵/₁₆" ball-type. Be sure to specify hitch type when ordering.

A full range of factory-installed optional equipment is listed below and on the next page. Any accessory selected must be specified as a separate line item when ordering.

Sturdy construction

Aluminum (0.30" thick) skin delivers advantages of rust-proof for long service life and light weight for towing ease. White is exterior-finish color. Plywood interior-wall linings and floor add durability for linework conditions. Interior walls are vinyl coated white to enhance illumination.

Running gear, brakes and towing group are load-rated for road-worthy dependability. Electrical components meet applicable standards.

Standard Equipment

Built-in storage provisions:

Full-length 12"-wide 14"-deep bins with dividers on both sides; 29" x 20"-deep bins across front; overhead rack and thumbscrews for 30 universal tools; two full-height center racks with 100 adjustable plastic-covered supports and 29 elastic tiedowns; ladder channel on floor between tool racks.

Running gear, towing group:

Breakaway-braking system (meets DOT requirements) with battery mounted on tongue; 7,000-lb. GVW tandem-axle with equalizer suspension; four steel-belted radial 15" type ST, 8-ply, load-range C tires; fold-up hand-crank tongue jack with sand pad; adjustable-height pintle-eye hitch; two safety chains.

Optional Equipment

Tool storage and care:

Second rack and thumbscrews for 30 universal tools, second tool rack on wall with 24 supports and eight elastic tiedowns, second interior ladder rack, two 12Vdc interior lights with wall switch, 110/220Vac "dry-room" heater. Additional Stud Kit (10 per box) Catalog No. T4002528.

Exterior, mechanicals:

12Vdc power tongue jack, spare tire/wheel on mounting bracket over tongue, rear skid plate, rear-mounted bumper, 2⁵/₁₆" ball-type hitch.

Ordering Information

*Standard-equipment trailers with single side door

Catalog No.	Description	Weight
C4050299	16 ft. Walk-In Trailer	2,200 lb. (990 kg.)
C4050300	20 ft. Walk-In Trailer	2,450 lb. (1,102.5 kg.)



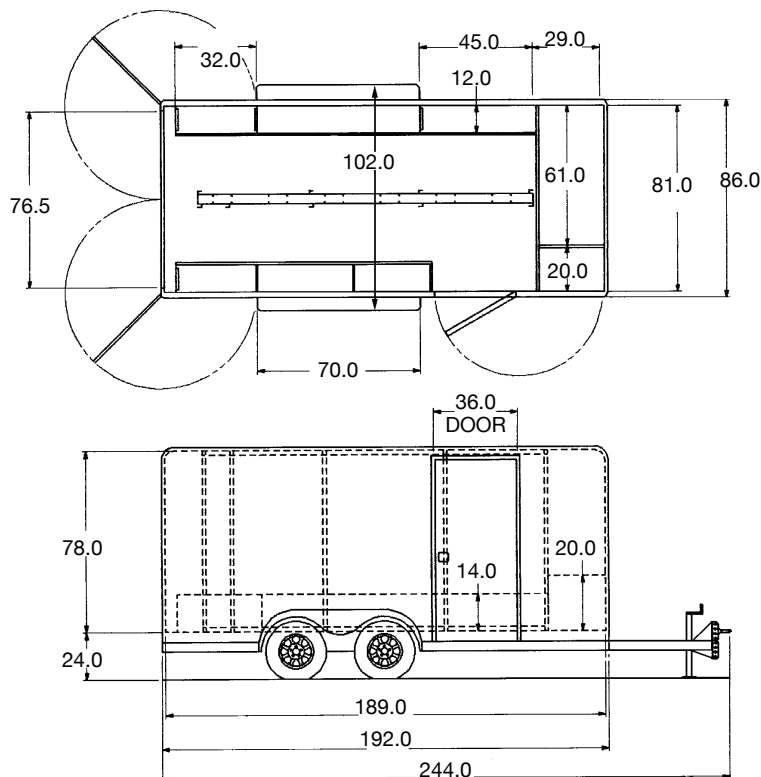
Cable plug mates with socket on vehicle (furnished) for DC connections, even the breakaway-battery recharging circuit.



Double doors hook back for 24" step-up access through 76 1/2"-wide opening to ample interior with 6-ft. 6-in. headroom. Single door forward on right side gives 36"-wide opening.

See next page for dimension drawings, storage-compartment layouts, specification details, accessory selections.

Tool Storage/Repair - 2500

16-ft. (body-length) Trailer

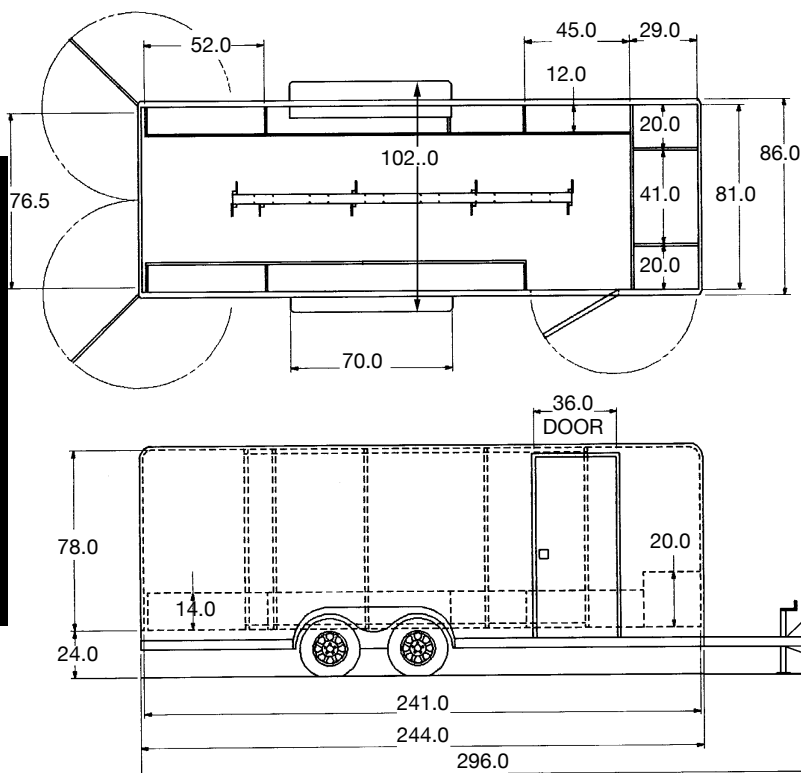
Trailer gross vehicle weight 7,000 lb.
 Tandem axles..... 3,500 lb. capacity, each
 Trailer curb weight, empty 2,200 lb.
 Payload capacity 4,800 lb.
 Brakes..... Electric, all four wheels
 Tires ST225/75R-15, load range C
 Hitch weight, empty 210 lb.
 Hitch with safety chains... 3" pintle or 2⁵/₁₆" ball
 Hitch height..... Adjustable, 19" through 27"
 Tongue jack..... Manual crank with sand pad
 Exterior lights and reflectors... Comply with ICC
 Prefinished (white) aluminum skin 0.30" gauge
 Interior floor Plywood
 Interior walls are vinyl coated white.
 Breakaway system & battery (meets DOT)

Standard Storage Provisions

- 14"-deep bins (both sides), 20"-deep front bins
- Rack for 30 universal tools (left, overhead)
- Ladder-rack channel (center, on floor)
- Full-height tool racks (center-mounted), 150 plastic-coated supports & 29 elastic tiedowns

Optional Equipment

- Added 30-universal-tool rack (right, overhead)
- Second ladder channel (over standard rack)
- Side-wall tool rack (left wall) with 24 plastic-coated supports & eight elastic tiedowns
- Interior lights, two (overhead midway), 12Vdc
- Heater unit, 110/220Vac, thermostat & fan
- Powered tongue jack, 12Vdc
- Spare tire & wheel on bracket over tongue
- Rear-mounted bumper • Rear skid plate

20-ft. (body-length) Trailer

Trailer gross vehicle weight 7,000 lb.
 Tandem axles..... 3,500 lb. capacity, each
 Trailer curb weight, empty 2,450 lb.
 Payload capacity 4,550 lb.
 Brakes..... Electric, all four wheels
 Tires ST225/75R-15, load range C
 Hitch weight, empty 250 lb.
 Hitch with safety chains... 3" pintle or 2⁵/₁₆" ball
 Hitch height..... Adjustable, 19" through 27"
 Tongue jack..... Manual crank with sand pad
 Exterior lights and reflectors... Comply with ICC
 Prefinished (white) aluminum skin .. 0.30" gauge
 Interior floor Plywood
 Interior walls are vinyl coated white.
 Breakaway system & battery (meets DOT)

Standard Storage Provisions

- 14"-deep bins (both sides), 20"-deep front bins
- Rack for 30 universal tools (left, overhead)
- Ladder rack channel (center, floor)
- Full-height tool racks (center-mounted), 150 plastic-coated supports & 29 elastic tiedowns

Optional Equipment

- Added 30-universal-tool rack (right, overhead)
- Second ladder channel (over standard rack)
- Side-wall tool rack (left wall) with 24 plastic-coated supports & eight elastic tiedowns
- Interior lights, two (overhead midway), 12Vdc
- Heater unit, 110/220Vac, thermostat & fan
- Powered tongue jack, 12Vdc
- Spare tire & wheel on bracket over tongue
- Rear-mounted bumper • Rear skid plate

Fiberglass Trailer for Hot Line Tools

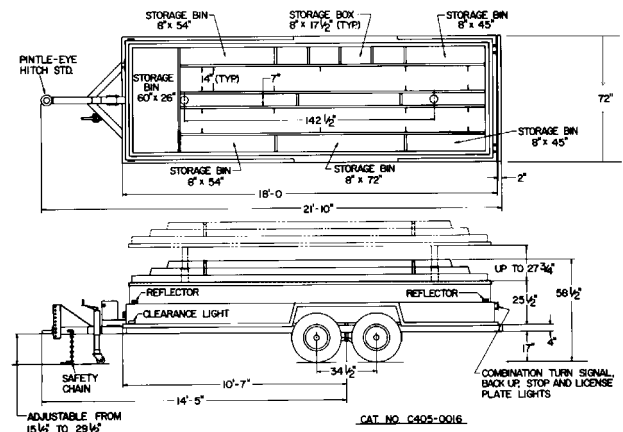
- 8,500-lb. payload capacity
- Tandem-axle



Rustproof, lightweight fiberglass with low-profile body extends service life and reduces towing drag. For cargo strength, the complete floor is steel. For full access to interior from all sides, weather-tight lid opens straight up on two telescoping center posts.



(Left) Channel racks for Universal Tool accessories under lid.
(Right) Roomy interior with padded supports and stretch tiedowns.



Standard Equipment

Running Gear/Towing Group:

12,000-lb. GVW tandem-axle/equalizer suspension, four 8:00 x 14.5 12-ply tires each rated for 2,790 lb. @ 100 lb. psi, fold-up hand-crank jack with castor wheel, adjustable-height pintle-eye hitch, two safety chains, rear bumper of rectangular-tube steel. Break-away with "hot-shot" battery.

Electrical System:

ATA-approved wiring with ready-to-mount brake-control, seven-conductor cables and socket . . . electric brakes . . . front clearance lights, one each side . . . dual rear lights with tail, stop, back-up and turn-signal functions . . . and license plate light.

In-Body Storage:

12 hot line tool compartments . . . 150 adjustable plastic-covered tool supports . . . 10 elastic tie-down straps . . . one channel rack for 30 Universal Tool accessories.

Solid white (one color) paint.

Manual crank for lid open/close device (smooth-operating sprocket-chain mechanism).

Step-up brackets, front and rear, both sides.

Optional Equipment

- Thermostatic-controlled heater (110V or 220V)
- Additional channel rack for 22 Universal accessories
- Ladder-rack brackets (plastisol-coated) mounted on lid
- Electric motor for lid open/close device
- Socket-type hitch (fits 2⁵/₁₆" ball, adjustable height)
- Two-tone paint
- Additional Stud Kit (10 per box) Catalog No. T4002528.

ORDERING INFORMATION

Catalog No.	Description	Empty Weight
C4050016	Standard Fiberglass Trailer	2,600 lb./1,170 kg.