



# M402302A.2

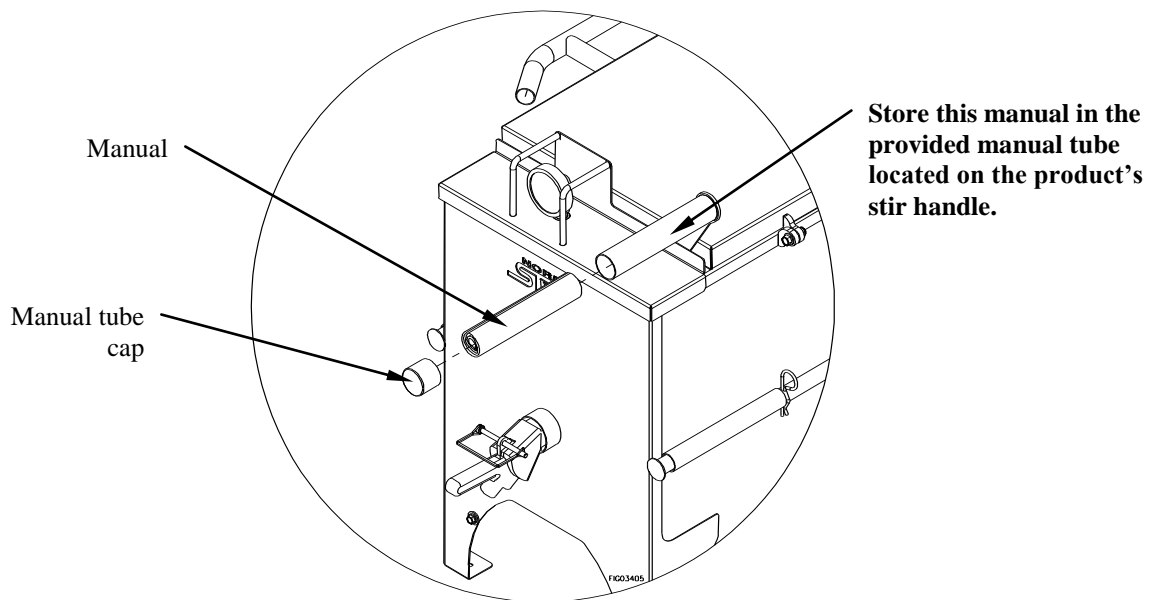
ITEM NUMBER: 402302
SERIAL NUMBER: _____

# Owner's Manual

Instructions for Assembly, Test, Operation, and Servicing

**30 Gallon Asphalt Melt Kettle:** Direct Fire Asphalt repair product used to heat and dispense hot pour crack filler into pour pots, crack banders, and other crack fill applicators.

<b>⚠ WARNING</b>
<p><b>READ and UNDERSTAND the <u>Owner's Manual</u> completely before using this Melt Kettle.</b> Assemble, test, and use only in accordance with the Owner's Manual instructions.</p> <p><b>Improper use of the Melt Kettle could result in serious injury to the operator or nearby persons/animals.</b></p>



**Any Questions, Comments, Problems, or Parts Orders**  
*Call North Star Product Support 1-800-270-0810*

## Hazard Signal Word Definitions






	<p>This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.</p>
	<p>DANGER (red) indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.</p>
	<p>WARNING (orange) indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.</p>
	<p>CAUTION (yellow) indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.</p>
	<p>CAUTION (yellow) used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.</p>

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## About Your Asphalt Melt Kettle

**Thank you for purchasing your Northstar Asphalt Melt Kettle!**

### About Your Melt Kettle

This asphalt Melt Kettle is designed for heating DIRECT FIRE HOT POUR CRACK FILLER material.

The technical specifications for your asphalt Melt Kettle are provided in the “Specifications” section of this manual.

#### **WARNING**

Read and understand this owner’s manual completely before using the asphalt Melt Kettle.

*Improper use of the asphalt Melt Kettle could result in serious injury for the operator or nearby persons/animals.*

Follow all safety precautions presented throughout this manual.

**Contact North Star Product Support at 1-800-270-0810 for any questions about the appropriate use of this asphalt Melt Kettle and/or optional accessories.**

### Warranty Registration:

Please fill in the warranty registration information and have it on hand when you call in on a warranty claim.

### **Attention: All Rental Companies and Private Owners who loan this equipment to others!**

All persons to whom you rent/loan the melt kettle must have access to and read this manual. Keep this owner’s manual with the Melt Kettle at all times and advise all persons who will operate the machine to read it. You must provide instruction on how to safely operate the Melt Kettle and remain available to answer any questions a renter/borrower might have.

# Important Safety Information

## WARNING

Read and understand **this owner's manual** completely before using the Melt Kettle. Read the **asphalt crack filler label instructions** before handling the material.

*Improper use of the Melt Kettle or handling of the filler material could result in serious injury to the operator or nearby persons/animals, or cause damage to the environment.*

**LISTED BELOW** is a summary of safety information of particular importance. See individual sections of this owner's manual for more details.

### -----DURING ASSEMBLY -----

- **EXERCISE CAUTION** Follow the steps listed in the Assembly section of this manual *in exact sequence* when assembling the Melt Kettle
- **CHECK and TEST completed assembly** as directed in this manual. Serious injury could result from filler material leaks if the Melt Kettle is improperly assembled.
- **DO NOT MODIFY the Melt Kettle design.**

### -----DURING OPERATION -----

#### General Filler Material Safety

## WARNING

- Heed the warnings below and follow all instructions carefully.
- Improper handling of crack filler material can result in serious injury or cause damage to the environment.

- **READ and FOLLOW the filler material label instructions and warnings.**
- **AVOID inhaling, ingesting, or coming into contact with any filler material.**
- **KNOW applicable licensing and regulatory requirements.** Refer to any applicable licensing restrictions or state/federal regulations with regard to the application of the particular crack filler material you plan to use.
- **KNOW emergency procedures before handling the filler material.** Carefully review "Filler Material Accident Procedures" listed below and later in this manual. Also see First Aid instructions on the filler material label.
- **NEVER operate Melt Kettle without proper safety equipment.**  
Melt Kettle operator must wear:
  - Hard hat with face shield. It is recommended that goggles be worn under the shield for additional safety.
  - Long sleeve cotton shirt, buttoned at cuff.
  - Long cotton pants without cuffs that cover the top of the boot.
  - Gloves (cotton or leather) that cover the wrists and fit snug at cuff.
  - Proper non-skid, protective footwear that covers the ankle.
  - If required by the material manufacture wear a properly rated respirator and/or additional protective gear.
- **EXERCISE EXTRA CAUTION around children and pets.** Keep Melt Kettle and filler material away from them at all times.

## Important Safety Information

- **DO NOT MIX OR POUR filler in an enclosed, unventilated area.** ALWAYS ensure there is adequate ventilation when mixing, pouring, or applying.
- **Crack filler material storage.** ALWAYS store crack filler material per the manufacturer's recommendations.
- **Health monitoring.** Monitor the health of operators who are frequently exposed to crack filler materials, as recommended by the crack filler material label or local/federal regulations.

### Filler Material Application Safety

#### **WARNING**

*Caution must be used when applying crack filler materials to avoid unsafe exposure to humans and the environment.*

Heed the warnings below and follow all instructions carefully.

#### Before Use

- **WEAR appropriate clothing** to prevent any possibility of skin contact. (See **General Filler Material Safety** section above)
- **INSPECT and PREPARE the Melt Kettle before each use** as directed in this manual.
- **MAKE SURE SPOUT IS ORIENTED to pour straight down** before starting to use the Melt Kettle. An incorrectly positioned spout may pour filler material on you or others.
- **CLEAR work area of people / pets and POST warning notices** to restrict access for the period recommended on filler material label.
- **KEEP Melt Kettle and filler material away from children/pets.**
- **DO NOT ALLOW anyone younger than 18 to use the Melt Kettle.**
- **Melt Kettle preparation.** ALWAYS inspect and prepare the Melt Kettle before use according to the directions provided in this manual.
- **Excess water.** ALWAYS remove any excess water that may be left inside the Melt Kettle. If hot filler material comes in contact with the water it may spatter and cause burns.
- **Operator age.** You must be 18 years of age or older to operate this Melt Kettle.
- **Position the Melt Kettle so it is at least 7 feet from combustible material** and on level ground.
- **Liquid Petroleum Gas (LPG) cylinder must be upright and secured** so it can not tip over and located away from the Melt Kettle or any source of flame. Check local laws for the exact distance.
- Make sure connections are tight when **attaching the torch assembly to LPG cylinder.**
- **Never operate the torch without the regulator.** Note: Torch is designed for vapor propane only.
- **Make a visible inspection of the LPG cylinder and components** for damage or defects.
- **If damage or defects are found,** replace or repair before using this product.
- **Check for leaks.** If a leak is detected, turn off the cylinder valve.
- **Repair all leaks** and continue only if there are no leaks.
- **Carefully load** or determine there is at least 60 to 90 lbs of material in the Melt Kettle.
- **Never overfill** or allow the torch to fire into an empty Melt Kettle.

#### Risk of Fire and Explosion

- **This Melt Kettle is designed for vapor LP fuel only.**
- **Improper installation of Liquid petroleum Gas (LPG) system can cause injury or death.** LPG is a lethal and explosive gas.
- **Check hoses, fittings and valves for leaks before each use.** Never operate equipment that is damaged.

## **Important Safety Information**

- **Always have two fully charged ABC rated dry chemical fire extinguisher within 20 feet of the Melt Kettle.** Never use water to put out a Melt Kettle fire.
- **Position the Melt Kettle burner so it is at least 7 feet from combustible material.**
- **Do not over heat material.** Due to the possibility of flashing and fire, never heat material above manufactures recommendation or 50°F below flash point. If material does become too hot, remove the torch immediately.
- **Always remove torch from Melt Kettle before lighting.** Do not use a disposable lighter or matches to light the burner. Use a spark lighter.
- **If the torch goes out while in the burner well of the Melt Kettle, it is extremely important to allow any unburned gas in the burner well to be vented before reinserting the torch.**
- **Never allow the torch to fire into an empty Melt Kettle.**
- **Never leave Melt Kettle unattended during operation.**
- **Propane is heavier than air, which can cause it to accumulate in low areas.** Be certain all areas are well ventilated.
- **Propane has a distinct odor.** If you smell it, immediately discontinue work, extinguish all flames, locate the leak and correct it before lighting torch.
- **Never operate Melt Kettle in or on a building.**
- **Never move or transport Melt Kettle while burner is running.**
- **Never lift or hoist Melt Kettle overhead.**

### **Burn hazard**

- **Use extreme caution at all times.** The torch has an intense open flame. Disregard of safe practices can result in severe fire damage, personal injury or possible death.
- **Never direct torch flame toward any person or animal.**
- Keep hands and head out from under the Melt Kettle's lid and do not touch hot surfaces or material.
- Before lighting Melt Kettle, lift cover lid to be sure it will open freely, exhaust openings are unobstructed, and remove any water or moisture from vat.
- **Do not open cover lid while agitating material.**
- Load material into Melt Kettle carefully to prevent splashing.
- Melt Kettle lid should be secured and dispensing valve locked when Melt Kettle is not in operation.
- Do not secure the lid when Melt Kettle is in operation.
- Never move or transport Melt Kettle when HOT. Department Of Transportation regulations require that no material in this Melt Kettle be transported at a temperature of 212° F or higher. Residue hot material in Melt Kettle can be lowered in temperature to comply with federal regulations by the addition of cold material. Do not transport Melt Kettle when more than half full.

### **Personal Protective Equipment**

**Never operate Melt Kettle without proper safety equipment.**

Melt Kettle operator must wear:

- Hard hat with face shield. It is recommended that goggles be worn under the shield for additional safety.
- Long sleeve cotton shirt, buttoned at cuff.
- Long cotton pants without cuffs that cover the top of the boot.
- Gloves (cotton or leather) that cover the wrists and fit snug at cuff.
- Proper non-skid, protective footwear that covers the ankle.
- If required by the material manufactures wear a properly rated respirator and/or additional protective gear.

### **During Use**

- **EXERCISE EXTRA CAUTION** when pouring near areas accessible to children and pets.

## Important Safety Information

- **CLEAN up spills immediately** per instructions on the filler material label.
- **SEE troubleshooting section of this manual before attempting any repairs.** Wear personal protective equipment and follow safety instructions.
- **If the burner goes out at any time, it will not relight itself. It is extremely important** to turn off the LP valve and allow any unburned gas in the burner well to be vented before relighting/reinserting the torch.
- **Monitor the temperature** of the material and adjust the flame accordingly. **DO NOT over heat material.**
- **When adding cold material to existing hot material,** never drop or throw the material into the vat. The Melt Kettle is considered full when liquid material is approximately two to three inches below the top of the vat.
- **Make certain material is hot enough** for proper application and that the drain valve is thawed.
- **Stir material prior to drawing off** and frequently during the melting process. Stirring will increase melting rate and keep un-melted material away from the drain valve.
- **Place the container to be filled** under the drain valve and open the valve slowly. **Never** attempt to pry or hit the drain valve if it will not open.
- **Children/pets.** ALWAYS exercise extra caution when applying near areas accessible to children and pets.
- **Eating/smoking.** DO NOT eat, drink, smoke, rub your eyes, or touch any part of your bare skin while handling crack filler material.
- **Spills.** ALWAYS clean up spills immediately per instructions on the crack filler material label.
- **Unattended.** DO NOT leave Melt Kettle unattended when hot.
- **Troubleshooting.** ALWAYS refer to the safety instructions in the Troubleshooting Section before attempting any repairs.
- **Melt Kettle lid.** Always keep lid closed while in use

### In case of fire:

1. **Close Melt Kettle lid.** Never throw water on fire.
  2. **Shut off LP-Gas** cylinder valve.
  3. **Use an ABC type fire extinguisher** on any flame outside of vat to prevent spread of fire.
  4. **If fire threatens to spread call the fire department.**
- **Torch Shut off**
    1. **Turn off LPG** cylinder valve.
    2. **Allow gas to burn out of hose.**
    3. **After the flame has gone out,** turn the flame adjusting valve to the off or closed position.
  - **Disconnecting torch from supply Cylinder**
    1. Be certain the supply cylinder valve is turned off.
    2. Disconnect the P.O.L. fitting from the supply cylinder.
    3. Replace the protective plastic plug on the cylinder valve outlet.
  - **Clean Melt Kettle.** A Clean kettle heats better and lasts longer. Frequency of cleaning depends on usage and circumstances. It is recommended that the inside of the Melt Kettle be completely cleaned at least once a year. Some trouble signs to watch for are:
    1. Excessive carbon build up. Carbon build up can create a fire hazard, reduce the useable capacity of the melt kettle and negatively affects the heating performance.
    2. Material on the outside of the Kettle. Material on the outside of the kettle that is not cleaned off makes kettle fires more difficult to put out and increased the chances of fire spreading beyond the kettle.
  - **Crack filler material disposal/storage.** ALWAYS dispose of or store remaining crack filler materials properly as recommended on the crack filler material label.



## Important Safety Information

- **Storage**

Do not store torch in locations where it may be damaged. Never attempt to store the torch while it is hot. When the torch is stored indoors, the connection between the LPG supply cylinder and torch must be disconnected. The cylinder must be removed from the torch and stored in accordance with Chapter 5 of ANSI/NFPA 58, the standard for storage and handling of liquefied petroleum gases.

- **Moving/Transporting**

This product is not designed or intended to be used for transporting hot materials.

Before transporting or moving the Melt Kettle be sure the following requirements are met.

1. Burners are off.
2. Lid is closed and secured.
3. Drain valve is locked.
4. Melt Kettle is cooled down below 212° F. (material inside is solidified)
5. Melt Kettle is secured to truck or trailer to prevent overturning when vehicle is moving.

### Crack Filler Material Accident Procedures:

 **WARNING**

Before you fill the Melt Kettle, review the following information with regard to handling accidents. Crack filler material spills, Melt Kettle leaks, personal contamination, and poisoning are accident situations, which you may encounter. **All require an immediate response – See instructions below.**

<b>Skin and Eye contact with crack filler material</b>	<p><b>Personal contamination can occur when crack filler materials splash, spill, or spray directly onto a person.</b></p> <ol style="list-style-type: none"> <li>1. Follow the emergency first aid instructions on the crack filler material label listed in the “First Aid” or “Statements of Practical Treatment” section. <u>General procedures include:</u> <ol style="list-style-type: none"> <li>a) Eyes – immediately flush with water. <b>Seek medical attention</b></li> <li>b) Skin – wash all contaminated skin surfaces with soap and water. If splashed with hot material cool the burned area with water. <b>Do not attempt to remove material from the burned area and seek medical attention.</b></li> <li>c) Clothing –Remove contaminated clothing if possible without causing harm. <b>Seek medical attention if needed.</b></li> </ol> </li> <li>2. Seek medical advice if instructed on the label or the victim experiences symptoms of harmful effects. Bring the filler material label for reference.</li> </ol>
<b>Poisoning by ingestion or inhalation</b>	<p><b>In case of poisoning from ingestion or inhalation:</b> IF THE VICTIM HAS COLLAPSED OR IS NOT BREATHING, <u><b>CALL 911.</b></u> Otherwise:</p> <ol style="list-style-type: none"> <li>1. Avoid breathing fumes. Fumes can cause eye and respiratory track irritation and may cause nausea and dizziness. If inhaled, remove individual to fresh air. If irritation persists, <b>seek medical attention</b></li> <li>2. If you are the victim, immediately seek assistance from nearby personnel because you may become incapacitated.</li> <li>3. Follow the emergency first aid instructions on the crack filler material label in the “First Aid” or “Statement of Practical Treatment” section.</li> <li>4. Call a poison control center for further advice. <b>In the U.S., call 1-800-222-1222 to</b></li> </ol>

## Important Safety Information

	<p><b>be automatically linked to the nearest certified poison control center.</b> Have the crack filler material label available for reference.</p>
<p><b>Crack filler material spills</b></p>	<p><b>Crack filler material spills must be quickly contained and properly cleaned up.</b> Refer to the crack filler material label for any specific clean-up instructions with regard to the crack filler material spilled.</p> <p><u>General procedures include:</u></p> <ol style="list-style-type: none"><li>1. <b>Control</b> the spill by stopping the source of the spill. If the source of the spill is a container leak, place the leaking container in a larger, watertight container. Keep unprotected people away from the spill site.</li><li>2. <b>Contain</b> the spill so that it does not spread and get into water sources. Use a shovel or other tool to make a dike around the spill with soil, sod, or absorbent material.</li><li>3. <b>Clean up</b> the spill immediately, per the crack filler material manufacturer's instructions.</li><li>4. <b>Seek additional advice</b> from the crack filler material manufacturer.<ul style="list-style-type: none"><li>- <i>Crack filler material manufacturer.</i> The crack filler material label provides contact information for the crack filler material manufacturer.</li></ul></li></ol>

# Component Identification & Warning Label Location

**Read and understand operating instructions before using this equipment.**

**DANGER**

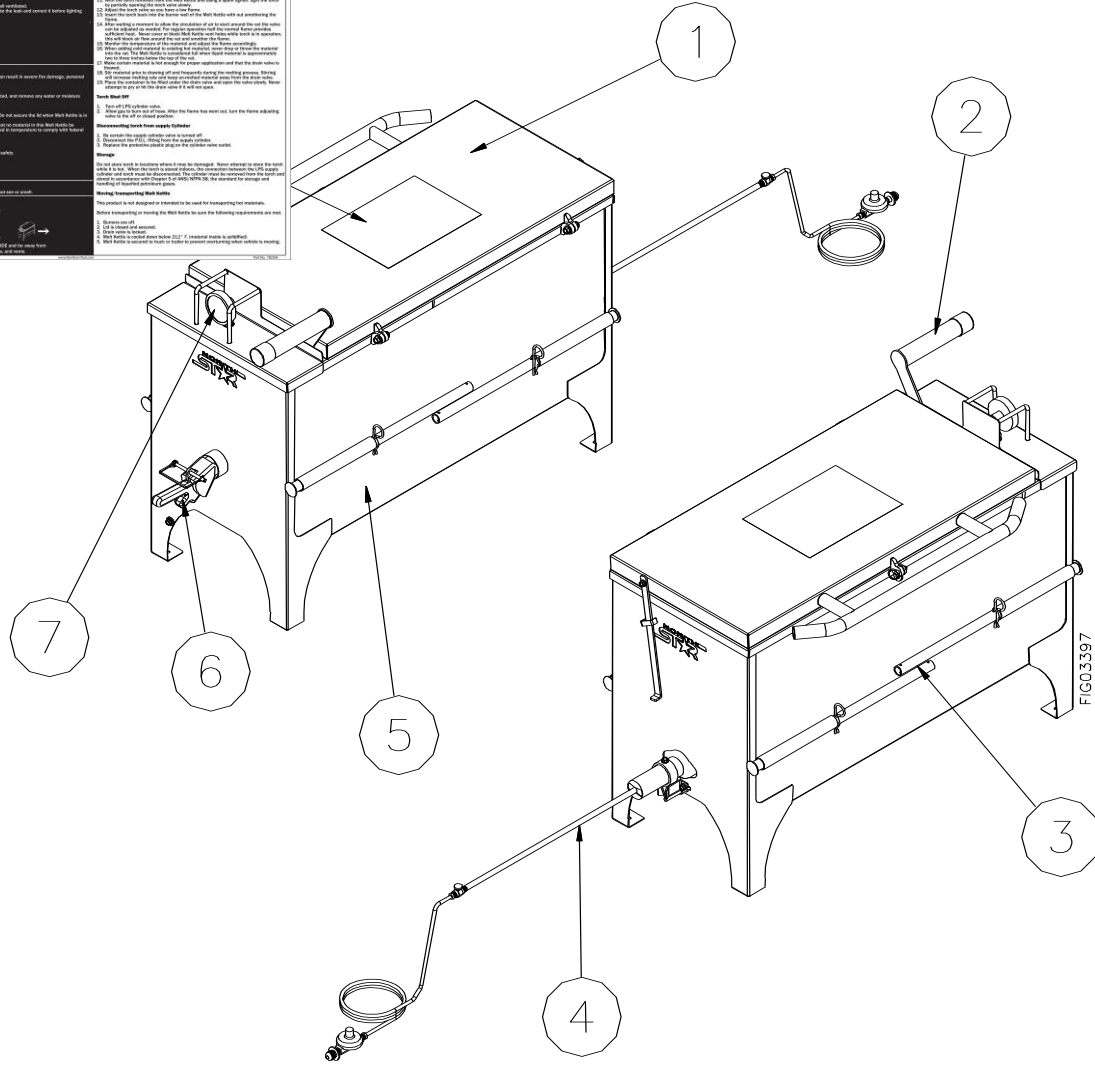
**Risk of fire and explosion:**

- Do not use the equipment near any combustible material or in any confined space, including garages, basements, and basements. Do not use the equipment near any flammable or combustible materials, including, but not limited to, gasoline, oil, kerosene, and other fuels. Do not use the equipment near any flammable or combustible liquids, gases, or vapors. Do not use the equipment near any flammable or combustible materials, including, but not limited to, gasoline, oil, kerosene, and other fuels. Do not use the equipment near any flammable or combustible liquids, gases, or vapors.
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**OPERATING INSTRUCTIONS**

**Receiving Melt Kettle**

1. Position the Melt Kettle on its feet so that it has been conditioned and is not on the ground. Do not use the equipment on uneven or soft ground. Do not use the equipment on uneven or soft ground. Do not use the equipment on uneven or soft ground.
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- 1. Lid.** Covers the melting vat. The lid should always be kept closed except when loading material.
- 2. Stir handle/Manual tube.** The stir handle is used to agitate/stir the crack fill material during the melting process. The Handle is also a manual tube for storing the owner's manual.
- 3. Handles.** The slide handles are for transporting the Melt Kettle by hand. (see the Moving / Transporting section of this manual for proper procedure)
- 4. Torch assembly.** The torch assembly consists of a torch mount, torch, LP hose, torch valve, and regulator.
- 5. Frame weldment.** The frame weldment directs heat generated by the torch around the vat, which melts the crack filler material. Mounting holes in each leg are also provided for securing the melt kettle during transport. (See the Moving/Transporting section of this manual for details on mounting the melt kettle.)
- 6. Pour valve.** The pour valve is used for dispensing melted crack filler material into pour pots, crack banders and other crack fill applicators.
- 7. Temperature gauge.** The temperature gauge is for monitoring the temperature of the crack filler material inside the vat.
- 8. Warning decal part # 782564.** To reorder, call NorthStar product support @ 1-800-270-0810.

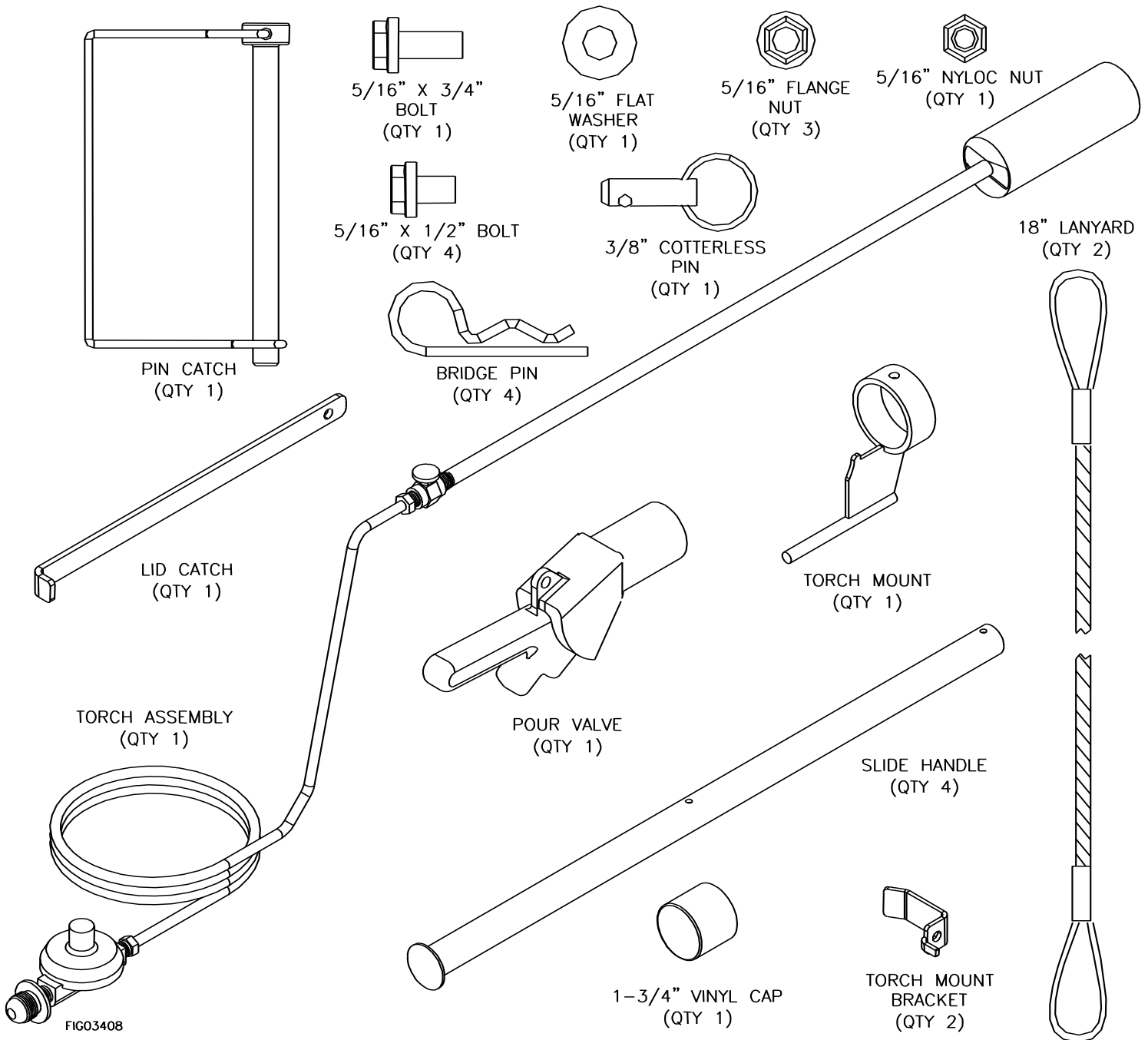
# Unpacking

## Closely inspect all contents in the shipping carton.

Note that some parts are shipped inside the manual bag.

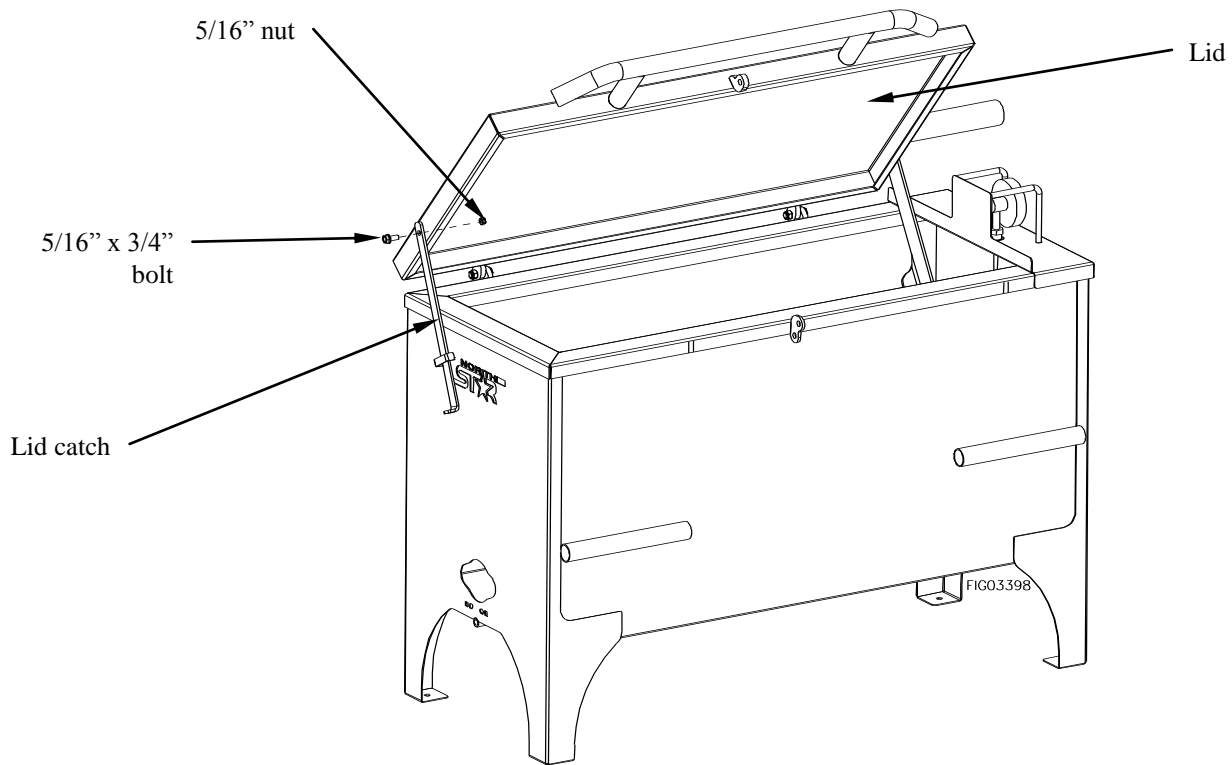
- If you have missing or damaged components: Contact NorthStar Product Support at 1-800-270-0810.

## The following items are found in the manual bag and vat.



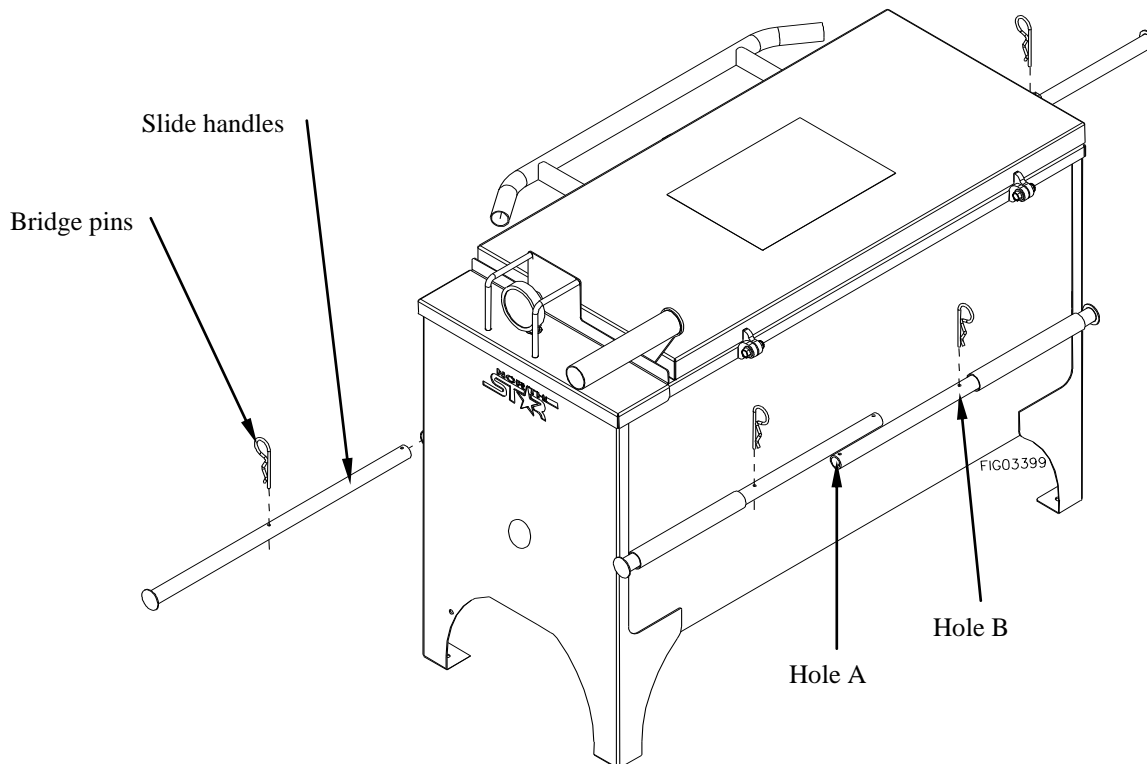
# Assembly

**Step 1: Install lid catch using a 5/16" x 3/4" bolt and 5/16" nyloc nut.**



**Step 2: Install handles by inserting them into the tubes welded on each side of the melt kettle. Use the provided bridge pins to secure each handle.**

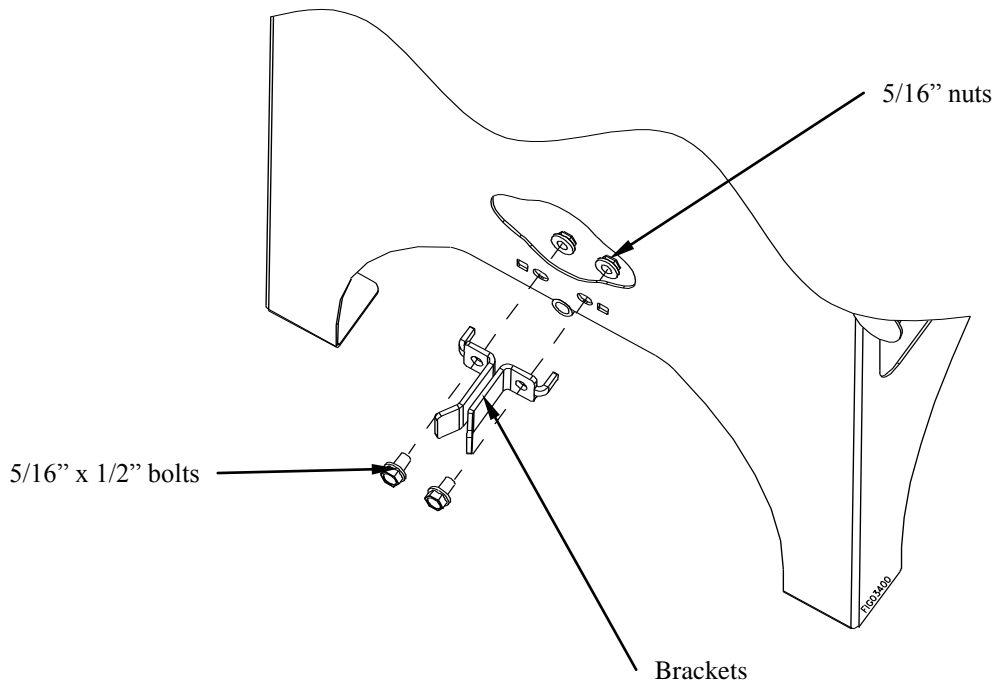
1. For transporting or moving the melt kettle by hand, insert the bridge pins into hole A.
2. For storing or transporting by other means, insert the bridge pins into hole B.



# Assembly

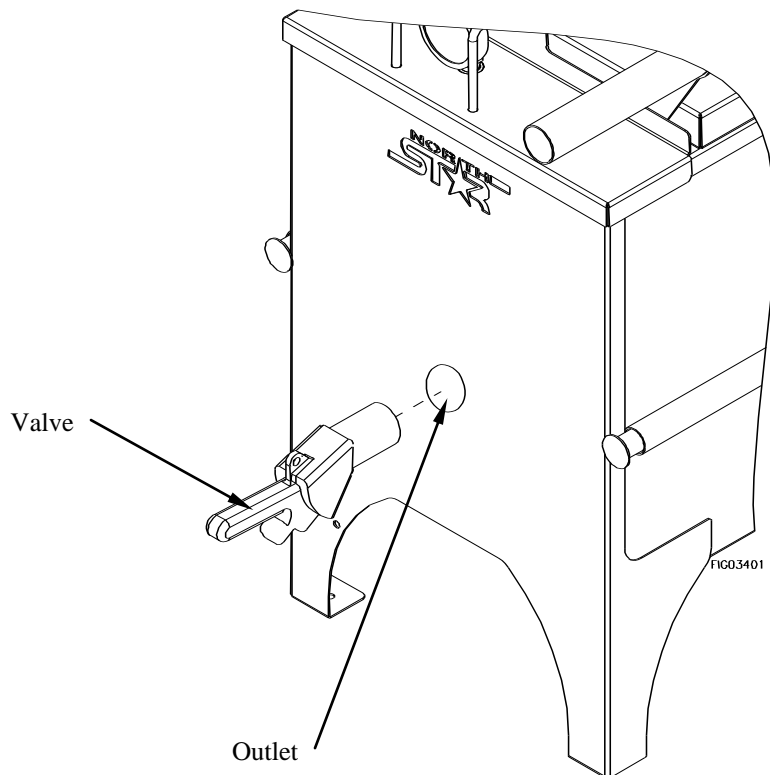
## **Step 3: Install torch mount brackets using (2) 5/16" x 1/2" bolts and (2) 5/16" flange nuts.**

**Note:** Ensure that the Torch Mount fits between the Mount Brackets. You may need to loosen the fasteners and adjust the spacing between the brackets so they will accept the torch mount.



## **Step 4: Thread valve into outlet.**

Ensure valve is tight to prevent leaking. Valve should be oriented as shown with outlet facing down.



# Assembly

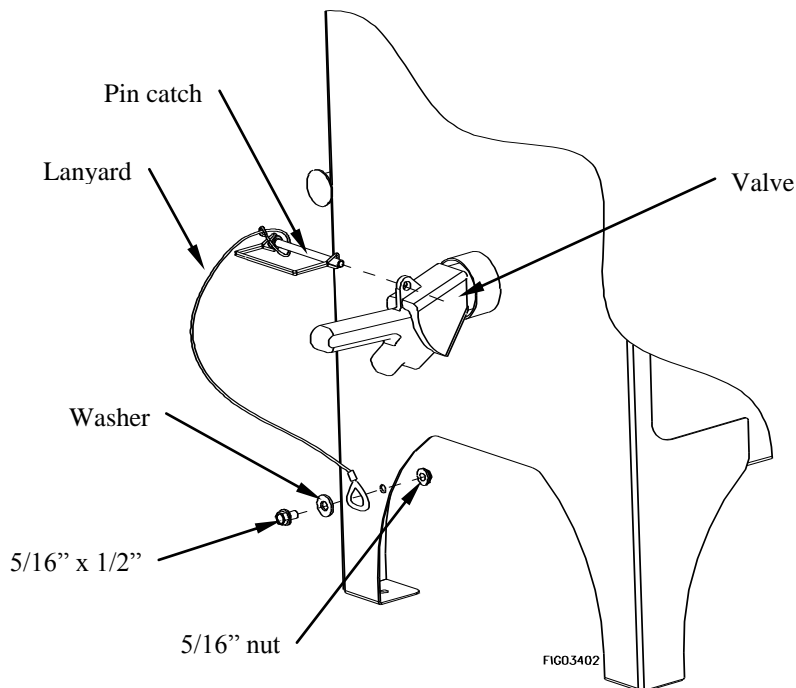
## **Step 5: a) Attach lanyard to pin.**

Insert 18" lanyard through catch pin wire and then back through its own loop.

## **b) Insert pin catch through hole in valve.**

## **c) Attach lanyard to melt kettle.**

Insert 5/16" x 1/2" bolt through the washer, then through the lanyard loop and secure to the melt kettle leg with (1) 5/16" flange nut.



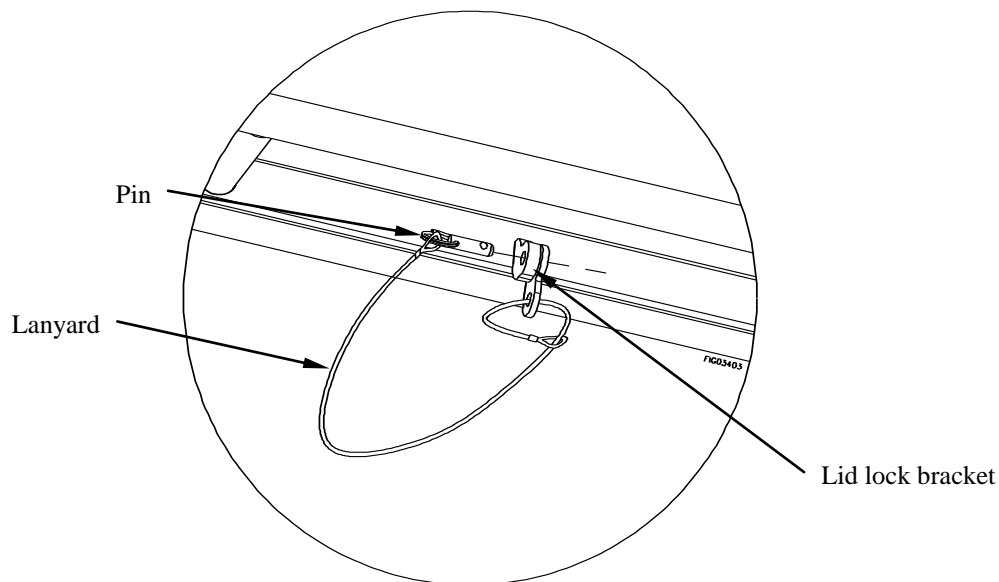
## **Step 6: a) Attach lanyard to melt kettle.**

Insert one end of lanyard through bottom hole on lid lock bracket, and then pull other end through its own loop.

## **b) Attach pin to lanyard.**

Thread other end of lanyard through key ring end of pin.

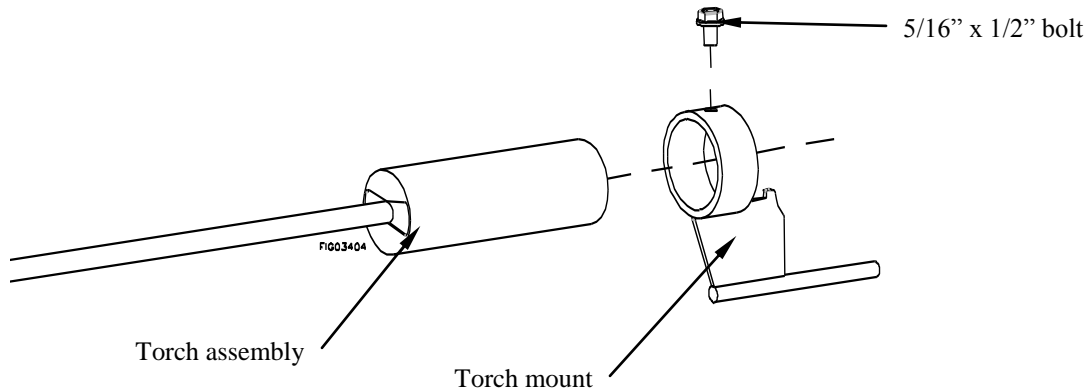
## **c) Insert pin through top hole on lid lock bracket.**



# Assembly

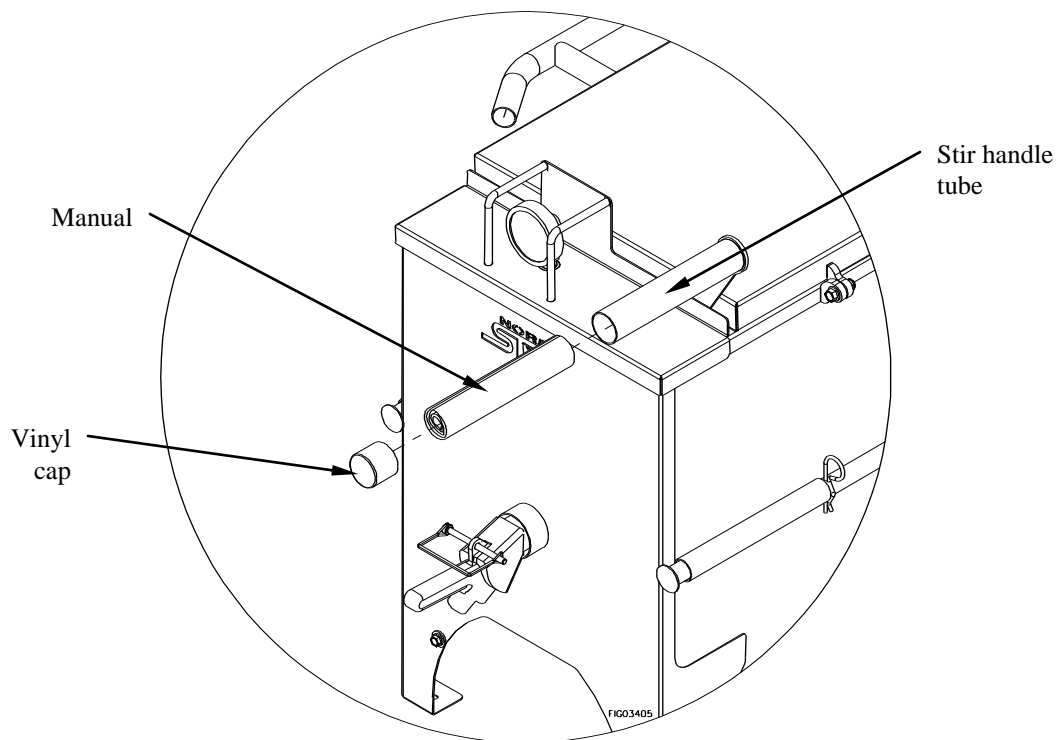
## **Step 7: Install torch mount to torch assembly.**

Slide torch mount over the head of torch until it hits the stopper on the torch mount. Lock torch mount into place using 5/16" x 1/2" bolt.



## **Step 8: On product manual storage.**

Roll up manual, and place inside stir handle tube. Enclose with 1-3/4" vinyl cap.





# Operation – Using the Asphalt Melt Kettle

## Step One: Inspect/Repair

If the asphalt Melt Kettle has been used previously, it must be prepared BEFORE EACH SUBSEQUENT USE.

### ⚠ WARNING

Read instructions below carefully for inspecting and preparing the asphalt Melt Kettle. Damaged or missing components could result in injury to the operator or bystanders. Hot filler material may spatter when it comes in contact with water left in the Melt Kettle.

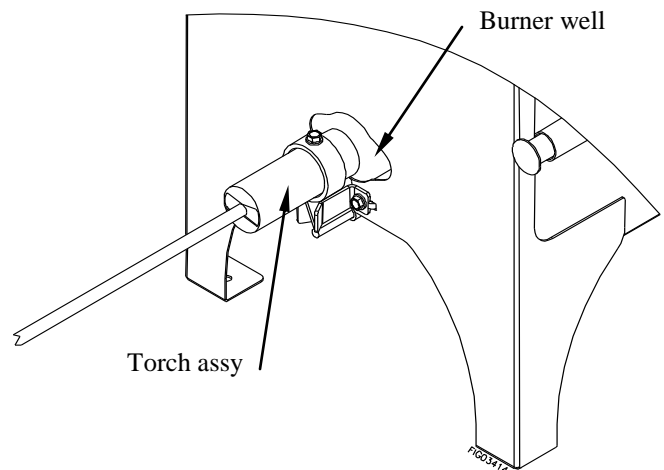
### Important safety rules:

- **Replacement parts.** If a part needs replacement, only use parts that meet the manufacturer's specifications. Replacement parts that do not meet specifications may result in a safety hazard or poor operation of the asphalt Melt Kettle.

<b>1. Review safety information</b>	<b>Review the "Important Safety Information"</b> section provided in this manual.
<b>2. Inspect &amp; repair</b>	<b>Inspect and test the asphalt Melt Kettle thoroughly</b> <ol style="list-style-type: none"><li>a. Position the Melt Kettle so it is at least 7 feet from combustible material and on level ground.</li><li>b. Liquid Petroleum Gas (LPG) cylinder must be upright and secured so it can not tip over and located away from the Melt Kettle or any source of flame. Check local laws for the exact distance.</li><li>c. Attach torch assembly to LPG cylinder. Make sure connections are tight.</li><li>d. Never operate the torch without the regulator. Note: Torch is designed for vapor propane only.</li><li>e. Make a visible inspection of the LPG cylinder and components for damage or defects. If damage or defects are found, replace or repair before using this product.</li><li>f. Make sure torch valve is off.</li><li>g. Turn on the LPG cylinder valve approximately one-half turn.</li><li>h. Use a soap solution to check for leaks. If a leak is detected, turn off the cylinder valve. Repair all leaks and continue only if there are no leaks.</li></ol>

## Step Two: Lighting the Torch

- Carefully load or determine there is at least 60 to 90 lbs of material in the Melt Kettle. **Never** overfill or allow the torch to fire into an empty Melt Kettle. Make sure Melt Kettle is free of any moisture or water.
- Open the LPG cylinder valve slowly all the way.
- With the torch removed from the Melt Kettle and using a spark lighter, light the torch by partially opening the torch valve slowly.
- Adjust the torch valve so you have a low flame.
- Insert the torch back into the burner well of the Melt Kettle without smothering the flame.



## Operation – Using the Asphalt Melt Kettle

- After waiting a moment to allow the circulation of air to start around the vat the valve can be adjusted as needed. For regular operation half the normal flame provides sufficient heat. **Never** cover or block Melt Kettle vent holes while torch is in operation, this will block airflow around the vat and smother the flame.
- **Note: If the burner goes out at any time, it will not relight itself. It is extremely important** to turn off the LP valve and allow any unburned gas in the burner well to be vented before relighting and reinserting the torch.

### **Step Three: Filling the Melt Kettle**

DO NOT OVER FILL THE VAT ON THE MELT KETTLE!

- Monitor the temperature of the material and adjust the flame accordingly.
- When adding cold material to existing hot material, never drop or throw the material into the vat. The Melt Kettle is considered full when liquid material is approximately two to three inches below the top of the vat.

### **Step Four: Dispensing Filler material**

- Make certain material is hot enough for proper application and that the drain valve is thawed.
- Stir material prior to drawing off and frequently during the melting process. Stirring will increase melting rate and keep un-melted material away from the drain valve.
- Place the container to be filled under the drain valve and open the valve slowly. Never attempt to pry or hit the drain valve if it will not open.

### **Step Five: Torch Shut off / Disconnecting Torch from supply Cylinder**

#### **Torch Shut Off**

- Turn off LPG cylinder valve.
- Allow gas to burn out of hose. After the flame has gone out, turn the flame-adjusting valve to the off or closed position.

#### **Disconnecting torch from supply Cylinder**

- Be certain the supply cylinder valve is turned off.
- Disconnect the P.O.L. fitting from the supply cylinder.
- Replace the protective plastic plug on the cylinder valve outlet.

### **Step Six: Moving/Transporting**

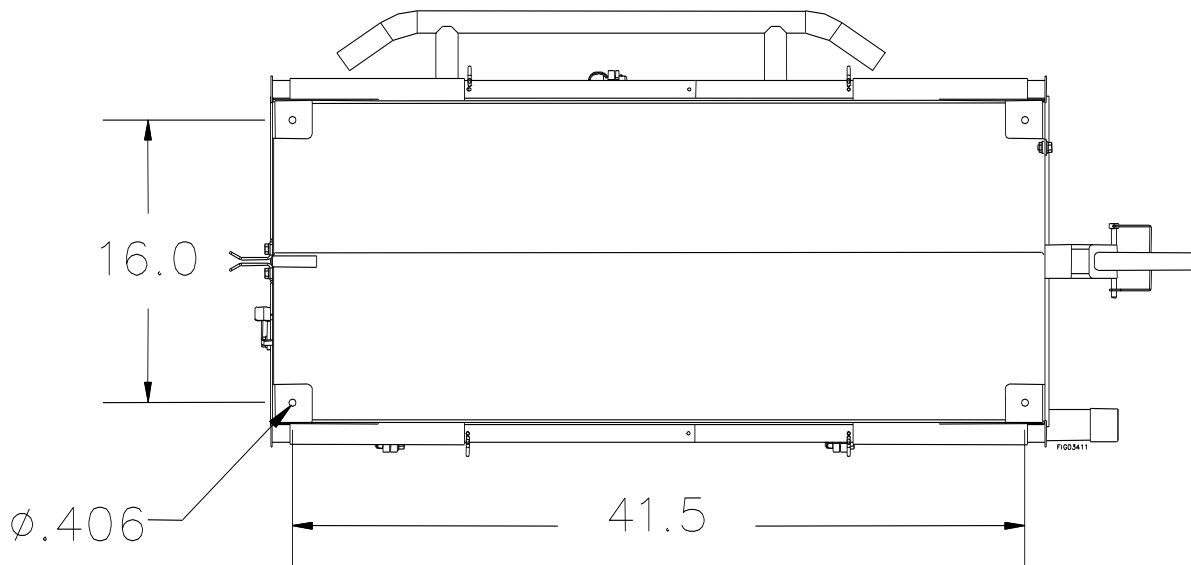
This product is not designed or intended to be used for transporting hot materials.

Before transporting or moving the Melt Kettle be sure the following requirements are met.

1. Burners are off.
2. Lid is closed and secured. (See pg 15 for instructions)
3. Drain valve is locked. (See pg 15 for instructions)
4. Melt Kettle is cooled down below 212° F. (material inside is solidified)
5. Melt Kettle is secured to truck or trailer to prevent overturning when vehicle is moving.

**Note:** Mount the melt kettle using the provided holes located on the feet of the melt kettle legs. The holes are sized for 3/8” Bolts (Grade 5 or higher). See figure located on the next page for mounting hole pattern dimensions.

## Operation – Using the Asphalt Melt Kettle



**Note:** See the Assembly section of this manual for details on securing the handles for storage and transporting by hand.

### **Step Seven: Storage**

Do not store torch in locations where it may be damaged. Never attempt to store the torch while it is hot. When the torch is stored indoors, the connection between the LPG supply cylinder and torch must be disconnected. The cylinder must be removed from the torch and stored in accordance with Chapter 5 of ANSI/NFPA 58, the standard for storage and handling of liquefied petroleum gases.

# Troubleshooting

## ⚠ WARNING

Before troubleshooting or attempting to service, read the following safety rules to avoid accidental exposure.

**Before attempting to service the Melt Kettle:**

<b>1. Personal protective equipment</b>	<b>Wear personal protective equipment as directed on the crack filler material label while servicing your Melt Kettle.</b>
<b>2. Review troubleshooting table</b>	<b>Review the Troubleshooting Table below for the type of problem you are experiencing.</b> However, DO NOT attempt to repair until the steps listed below are followed.

PROBLEM	CAUSE	SOLUTION
Material not coming out	Spout blocked or dispensing valve may not be thawed.	Allow Melt kettle to cool and use a stiff piece of wire or screw driver to remove the blockage or continue to heat material, but do not over heat.???
Material slow to come out	Not hot enough	Heat up spout and hopper with propane torch, or continue to heat material, but do not over heat.
Flame will not stay lit.	Smothering flame/wind	If the torch is inserted into the burner well when the flame is running full, it is likely to be smothered before it can start an updraft. If the torch is smothered while in the burner well of the kettle, <b>it is extremely important to allow any unburned gas in the burner well to vent before reinserting the torch.</b> If wind is a factor, locate the Melt Kettle so the burner is operating down wind. Shielding may also be necessary.
No Gas to burner	Tank valve on supply LPG tank was opened to quickly	The Torch Assembly is equipped with an excess flow valve. Close the tank valve, bleed the gas system, and reopen the valve slowly to prevent the excess flow valve from automatically shutting.

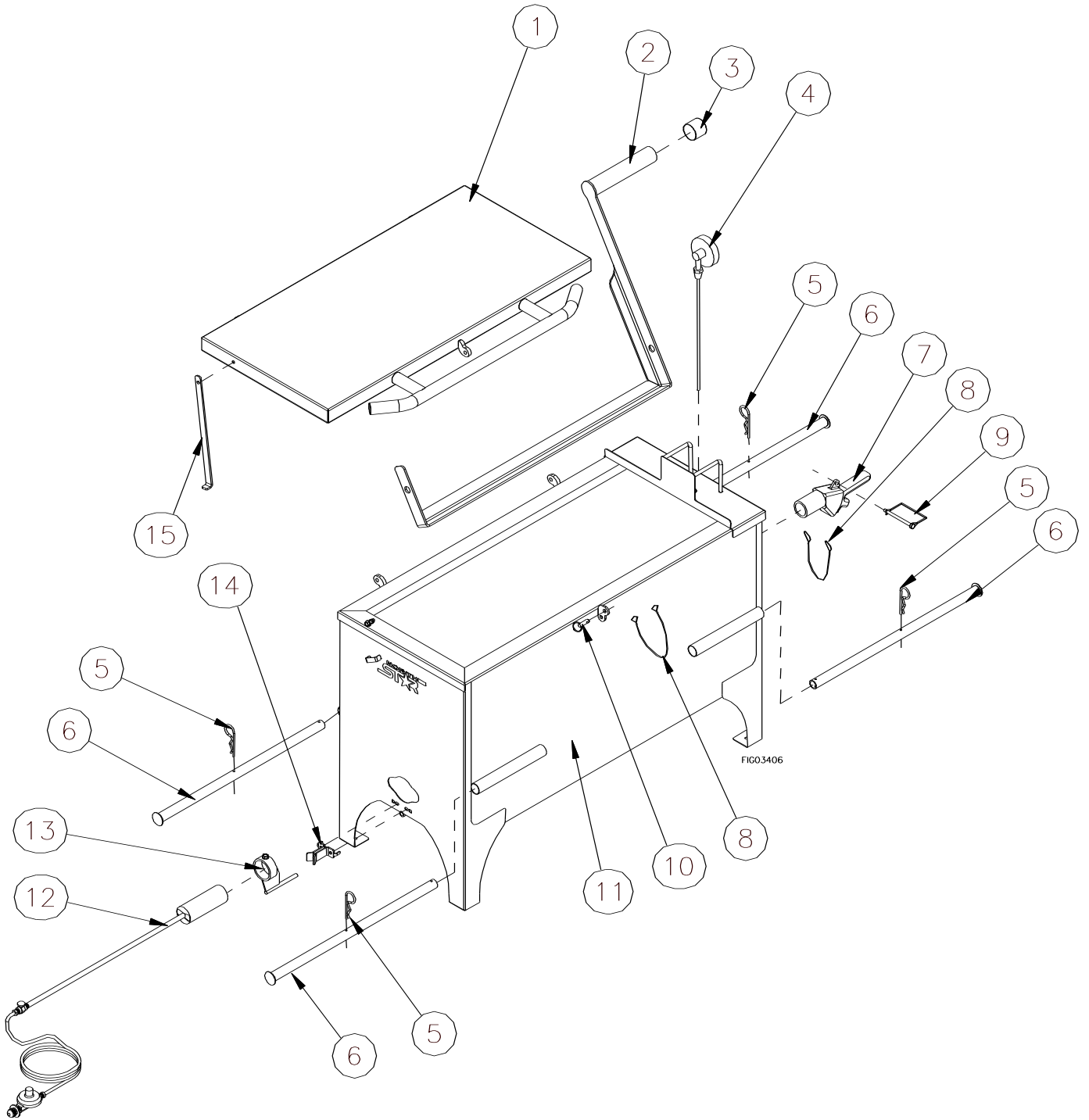
## Specifications

402300 – Asphalt Melt Kettle	
Capacity:	30 Gallons
Package Dimensions:	58”L x 50”W x 55” H
Product Dimensions:	56”L x 48”W x 49” H
Weight:	440 lbs

The manufacturer reserves the right to make improvements in design and/or changes in specifications at any time without incurring any obligation to install them on units previously sold.

**Any Questions, Comments, Problems or Parts Orders**  
***Call North Star Product Support 1-800-270-0810***

# 402302 Exploded View – Rev A.2



Item	Part #	Description	Qty.
1	783356	Lid	1
2	782456	Stir handle/manual tube	1
3	782599	1-3/4" vinyl cap	1
4	782477	Temperature gauge	1
5	30313	Bridge pin	4
6	782483	Slide handle	4
7	782478	Pour valve	1

Item	Part #	Description	Qty.
8	782689	Lanyard	2
9	778498	Pin catch	1
10	38071	Cotterless pin	1
11	782473	Melter tank	1
12	782470	Torch assembly	1
13	782586	Torch mount	1
14	782583	Torch mount bracket	2
15	782449	Lid catch	1

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# Limited Warranty

Dear Valued Customer:

The NorthStar Product you just purchased is built with the finest material and craftsmanship. Use this product properly and enjoy the benefits from its high performance. By purchasing a North Star product, you show a desire for quality and durability.

Like all mechanical equipment this unit requires a due amount of care. Treat this unit like the high quality piece of machinery it is. Neglect and improper handling may impair its performance. Please thoroughly read the instructions and understand the operation before using your product.

## Limited Warranty

North Star shall warranty any piece of equipment manufactured, or parts of equipment manufactured, to be free from defects in material or workmanship for a period of 30 days from the date of purchase by user. This warranty applies to the original purchaser of the equipment and is non transferable. Verification of purchase is the responsibility of the buyer. Parts will be replaced or repaired at no charge, except when the equipment has failed due to lack of proper maintenance. Any misuse, abuse, alteration or improper installation or operations will void warranty. Determining whether a part is to be replaced or repaired is the sole decision of North Star.

**NOTE:** Some services performed by parties other than North Star may void warranty.

**This warranty covers parts only.** It will not provide for replacement of complete products due to defective parts. Components not manufactured by North Star are guaranteed by their manufacturer and can be serviced at factory-authorized locations near you. Any costs incurred due to replacement or repair of items outside of a North Star approved facility is the responsibility of the buyer and not covered under warranty. North Star can supply you with the service center location in your area.

This warranty specifically excludes the following; failure of parts due to damage caused by accident, fire, flood, windstorm, acts of God, applications not approved by North Star in writing, corrosion caused by crack filler material, use of replacement parts which do not conform to manufacturer's specifications, and damage caused by vandalism. Additional exclusions: loss of running time, inconvenience, loss of income, or loss of use, including any implied warranty of merchantability of fitness for a specific use.

Warranty does not cover items subject to normal wear on parts subject to direct physical contact by the public. This warranty does not cover any personal injury or damage to surrounding property caused by failure of any part.

This warranty is in lieu of any other warranty expressed or implied and North Star assumes no other responsibility or liability outside that expressed within this warranty.

Please fill in the following information and have it on hand when you call in on a warranty claim.

Customer Number: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_

North Star Serial Number: \_\_\_\_\_

Item Number: \_\_\_\_\_



Manufactured by  
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