

# KLUTCH

## 4.25 Cubic Ft. Portable Gas-Powered Cement Mixer

Owner's Manual



**⚠ WARNING:** Read carefully and understand all ASSEMBLY AND OPERATION INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

Item #58124

**READ & SAVE THESE INSTRUCTIONS**

Thank you very much for choosing a Klutch™ product!

For future reference, please complete the owner's record below:

Serial Number/Lot Date Code: \_\_\_\_\_

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

Save the receipt, warranty, and this manual. It is important that you read the entire manual to become familiar with this product before you begin using it.

This cement mixer is designed for certain applications only. Northern Tool & Equipment is not responsible for issues arising from modification or improper use of this product such as an application for which it was not designed. We strongly recommend that this product not be modified and/or used for any application other than that for which it was designed.

For technical questions, please call **1-800-222-5381**.

## Table of Contents

Intended Use.....	4
Packaging Contents.....	4
Technical Specifications .....	4
Important Safety Information .....	4
Specific Operation Warnings .....	6
Main Parts of Product .....	7
Assembly Instructions.....	8
Before Each Use.....	11
Operating Instructions.....	11
After Each Use.....	12
Maintenance .....	12
Troubleshooting.....	14
Parts Diagram.....	15
Parts List.....	15
Replacement Parts .....	17
Limited Warranty .....	18

## Intended Use

The Klutch 4.25 Cubic Ft. Portable Gas-Powered Cement Mixer is powered by a gas engine and features a 4.25-cubic ft. drum capacity. The drum rotates 360° for variable pouring angles. It rolls on two 10-inch solid rubber tires for easy portability. Powder-coated steel frame and drum resists corrosion. Cast iron ring gear for added durability. The mixer is ideal for mixing plaster, stucco, mortar, and concrete.

## Packaging Contents

- Engine box
- Round handle
- Blades (2)
- Handle plate
- Upper drum
- Rubber seal
- Lower drum
- Wheels (2)
- H stand
- Wheel bracket
- Support bracket
- Owner's Manual

## Technical Specifications

Property	Specification
Engine Power	79 CC
Drum Capacity (cubic ft.)	4.25
Drum Capacity (lb.)	Holds up to 246 lb. of premix concrete
Drum Opening	15.2"
Drum Speed	36 RPM
Rubber Wheels	10in. (2)

## Important Safety Information

### **⚠WARNING**

- Read and understand all instructions. Failure to follow all instructions may result in serious injury or property damage.
- The warnings, cautions, and instructions in this manual cannot cover all possible conditions or situations that could occur. Exercise common sense and caution when using this tool. Always be aware of the environment and ensure that the tool is used in a safe and responsible manner.
- Do not allow persons to operate or assemble the product until they have read this manual and have developed a thorough understanding of how it works.
- Do not modify this product in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the product. There are specific applications for which the product was designed.
- Use the right tool for the job. DO NOT attempt to force small equipment to do the work of larger industrial equipment. There are certain applications for which this equipment was designed. It will be a safer experience and do the job better at the capacity for which it was intended. DO NOT use

this equipment for a purpose for which it was not intended.

- Industrial or commercial applications must follow OSHA requirements.

## **⚠WARNING**

### **WORK AREA SAFETY**

- Inspect the work area before each use. Keep work area clean, dry, free of clutter, and well-lit. Cluttered, wet, or dark work areas can result in injury. Using the product in confined work areas may put you dangerously close to cutting tools and rotating parts.
- Do not use the product where there is a risk of causing a fire or an explosion; e.g., in the presence of flammable liquids, gases, or dust. The product can create sparks, which may ignite the flammable liquids, gases, or dust.
- Do not allow the product to come into contact with an electrical source. The tool is not insulated and contact will cause electrical shock.
- Keep children and bystanders away from the work area while operating the tool. Do not allow children to handle the product.
- Be aware of all power lines, electrical circuits, water pipes, and other mechanical hazards in your work area. Some of these hazards may be hidden from your view and may cause personal injury and/or property damage if contacted.

## **⚠WARNING**

### **PERSONAL SAFETY**

- Stay alert, watch what you are doing, and use common sense when operating the tool. Do not use the tool while you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating the tool may result in serious personal injury.
- Dress properly. Do not wear loose clothing, dangling objects, or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts. Air vents on the tool often cover moving parts and should be avoided.
- Wear the proper personal protective equipment when necessary. Use ANSI Z87.1 compliant safety goggles (not safety glasses) with side shields, or when needed, a face shield. Use a dust mask in dusty work conditions. Also use non-skid safety shoes, hardhat, gloves, dust collection systems, and hearing protection when appropriate. This applies to all persons in the work area.
- Do not overreach. Keep proper footing and balance at all times.

## **⚠CAUTION**

### **CEMENT MIXER USE AND CARE**

- Do not force the cement mixer. Products are safer and do a better job when used in the manner for which they are designed. Plan your work and use the correct product for the job.
- Check for damaged parts before each use. Carefully check that the product will operate properly

and perform its intended function. Replace damaged or worn parts immediately. Never operate the product with a damaged part.

- Store the product when it is not in use. Store it in a dry, secure place out of the reach of children. Inspect the tool for good working condition prior to storage and before re-use.
- Use only accessories that are recommended by the manufacturer for use with your product. Accessories that may be suitable for one product may create a risk of injury when used with another tool. Never use an accessory that has a lower operating speed or operating pressure than the tool itself.
- Keep guards in place and in working order. Never operate the product without the guards in place.

## Specific Operation Warnings

### **⚠WARNING**

- To prevent serious injury or property damage, read and understand owner's manual before operating.
- Always use the proper protective equipment, including ANSI Z87.1 compliant eye protection, heavy duty work gloves, and hearing protection.
- Rotating Parts Hazard. Do not place tools, hoses, hands, arms, or any part of the body inside the drum unless engine is off, and the spark plug wire is disconnected.
- For use on a hard, level surface.
- Not for use by or around children.

### **⚠WARNING**

#### **FIRE HAZARD**

- Do not fuel at the work site or while the machine is running.
- Refuel machine on a hard, level surface.
- Keep open flames and sparks away from the machine while fueling.
- Do not smoke while fueling.
- Do not fill beyond the overfill marking. Expansion of fuel from heat of sun or normal operation may cause tank spillage if overfilled.
- Clean up any fuel spills before starting engine.

### **⚠WARNING**

#### **BURN HAZARD**

- Do not touch. Allow surface to cool before servicing.

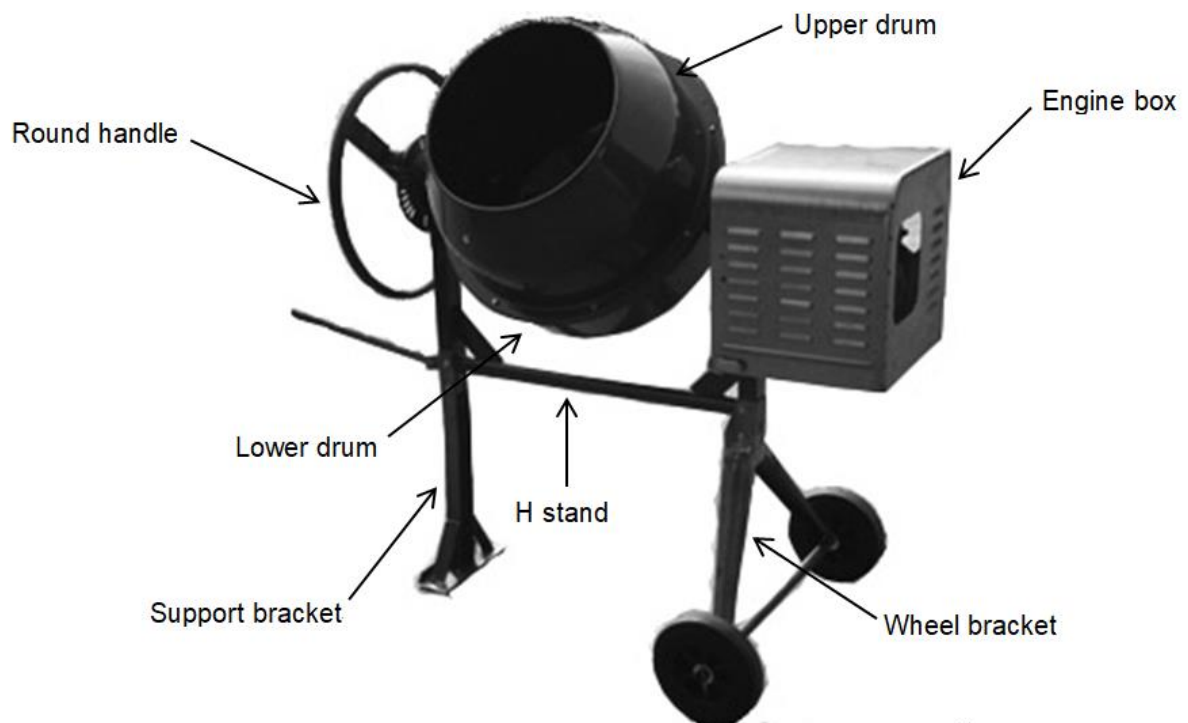
## ⚠WARNING

### CARBON MONOXIDE

- Using an engine indoors CAN KILL YOU IN MINUTES.
- Engine exhaust contains carbon monoxide. This is a poison you cannot see or smell.
- NEVER use an engine inside a home or garage, EVEN IF doors and windows are open.
- Only use OUTSIDE and far away from windows, doors, and vents.

## Main Parts of Product

Subassembly
Engine box
Upper drum
Lower drum
Round handle
H stand
Support bracket
Wheel bracket



## Assembly Instructions

### ⚠WARNING

- Read the ENTIRE MANUAL - IMPORTANT SAFETY INFORMATION: Read all sections of this manual including all text under subheadings therein before set-up or use of this product.

1. Place the Crossbeam (71) into the Wheel Bracket (4) so the bolt holes line up. Fasten together using Hex Bolts (64), a Flat Washer (55), and a Hex Nut (5). Set the stand on its side for easier assembly. See Figure A.

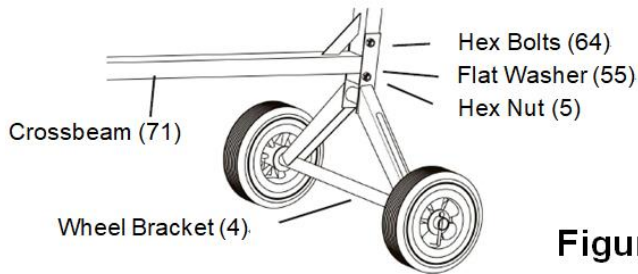


Figure A.

2. Insert the Support Bracket (72) onto the Crossbeam (71), so the bolt holes line up. Fasten together using Hex Bolts (64), a Flat Washer (55), and a Hex Nut (5). See Figure B.

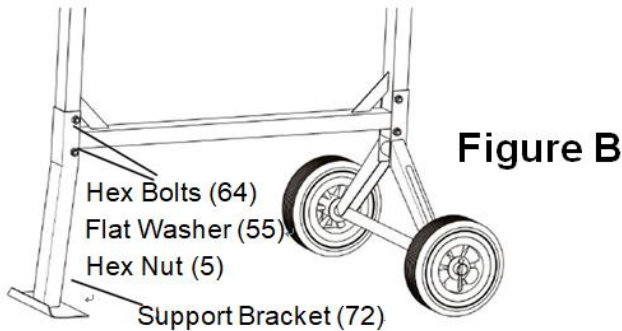


Figure B

3. Tighten all connections with a wrench until secure. Place the Crossbeam upright.
4. To attach the Wheels (3) to the Wheel Bracket (4), slide a Flat Washer (2), a Wheel (3) and the second Flat Washer (2) onto the Bracket Axle. Insert the Cotter Pin (1) into the Bracket's Axle holes and split the ends. See Figure C.

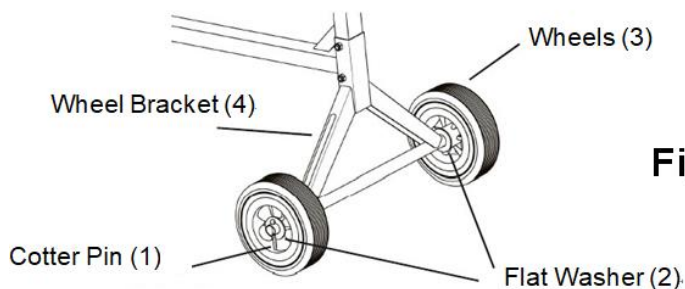
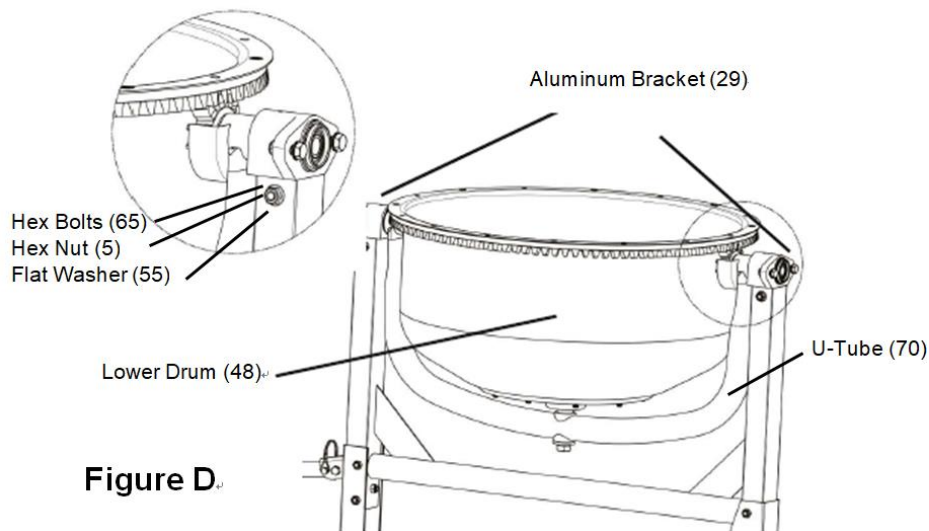


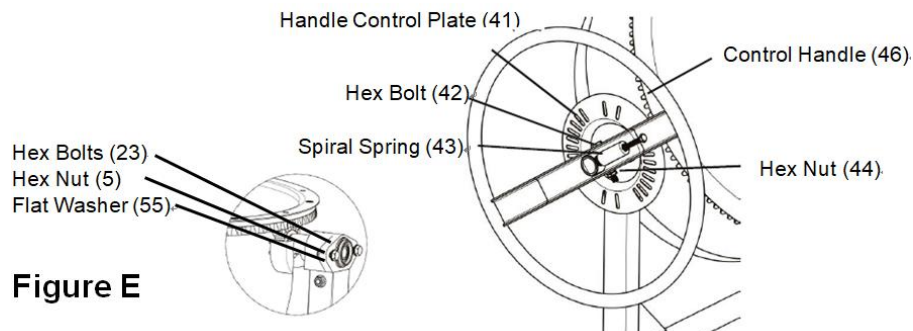
Figure C

5. With assistance, set the Lower Drum (48) with attached Aluminum Bracket (29) into the Crossbeam assembly. Fasten together using Hex Bolts (65), a Flat Washer (55), and a Hex Nut (5). See Figure D.



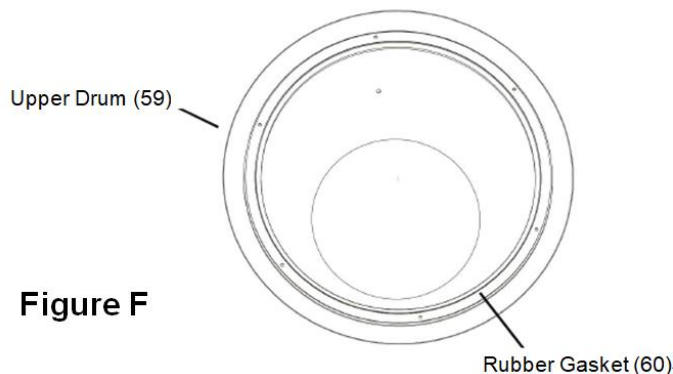
**Figure D.**

6. Use a Hex Bolt (23) to mount the Handle Plate (41) to the U-Tube (70). Fasten together with a Flat Washer (55) and a Hex Nut (5).
7. Attach the Control Handle (46) to the U-Tube (70) shaft by inserting the Coil Spring (43) into the lower hole of the Spring Base. Press down on the Spring Base until the holes align on the U-Tube (70) end.
8. Insert a Hex Bolt (42) and secure with two Flat Washers (45) and a Hex Nut (44). Tighten to a point where the Handle can still move. See Figure E.



**Figure E**

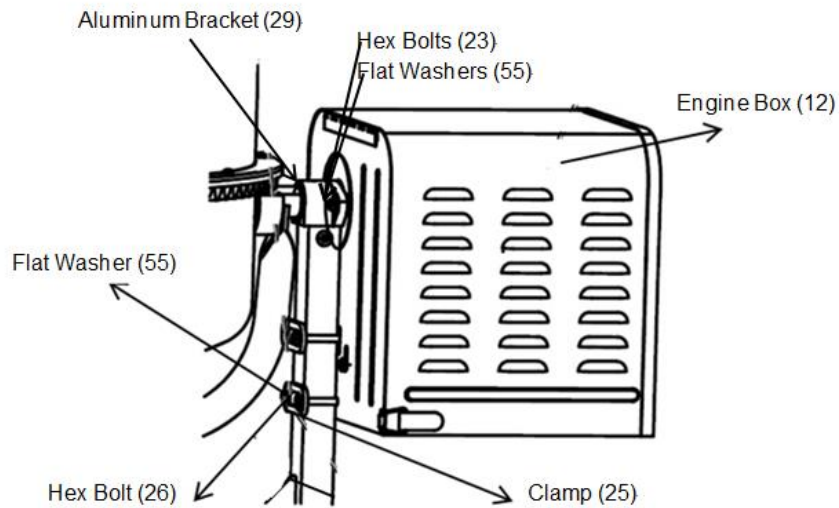
9. Use gasket sealer (not included) to stick the Rubber Gasket (60) to the Upper Drum (59), making sure the holes in both align. The Gasket must be flat on the Upper Drum to ensure a proper seal. See Figure F.



**Figure F**

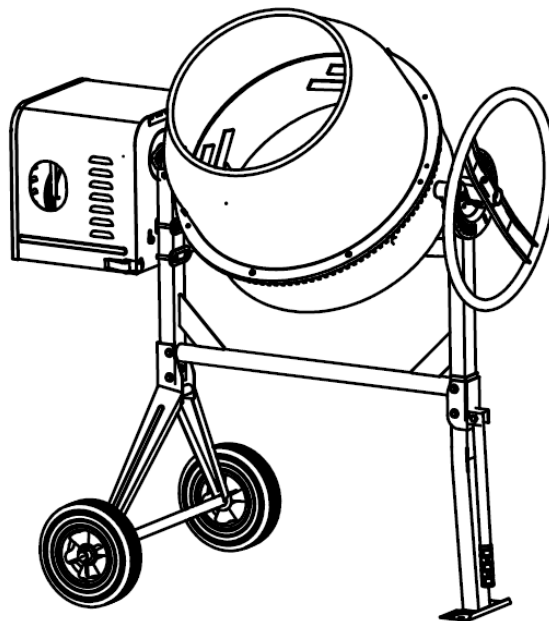
10. Place the Upper Drum onto the Lower Drum (48), making sure the mounting holes align in both. Insert the eight Hex Flange Bolts M6x16 (57) into each mounting hole. Fasten the Drums together with a Hex Flange Nut M6 (74) and Elastic Washer (75).

11. Mount each Mixing Blade (62) inside the assembled Drum with the pointed end facing down. The open end of each Blade should point in the direction of the Drum rotation (counter-clockwise). Fasten the Blade to the Drums using a Hex Bolt (61), Washer (55), Seal Washers (56), and a Hex Flange Nut (5).
12. Mount the Engine Box (12) to the Attached Aluminum Bracket (29) using Hex Bolts (23) and Flat Washers (55). Use Hex Bolts (26), Flat Washers (55), and Clamps (25) to attach the Engine Box to the stand. Tighten all connections until secure. See Figure G.



**Figure G**

13. Check all connections and verify that all screws, nuts, and bolts are securely tightened.



## Before Each Use

Inspect the general condition of the mixer. Check for: loose hardware; misalignment or binding of moving parts; cracked or broken parts; damaged or cracked belts; and any other condition that may affect its safe operation.

## Operating Instructions

### ⚠WARNING

- Always use the proper protective equipment, including ANSI Z87.1 compliant eye protection, heavy duty work gloves, and hearing protection.
- Rotating Parts Hazard. Do not place tools, hoses, hands, arms, or any part of the body inside the drum unless engine is off, and the spark plug wire is disconnected.
- For use on a hard, level surface.
- Not for use by or around children.

### ⚠WARNING

#### FIRE HAZARD

- Do not fuel at the work site or while the machine is running.
- Refuel machine on a hard, level surface.
- Keep open flames and sparks away from the machine while fueling.
- Do not smoke while fueling.
- Do not fill beyond the overfill marking. Expansion of fuel from heat of sun or normal operation may cause tank spillage if overfilled.
- Clean up any fuel spills before starting engine.

### ⚠WARNING

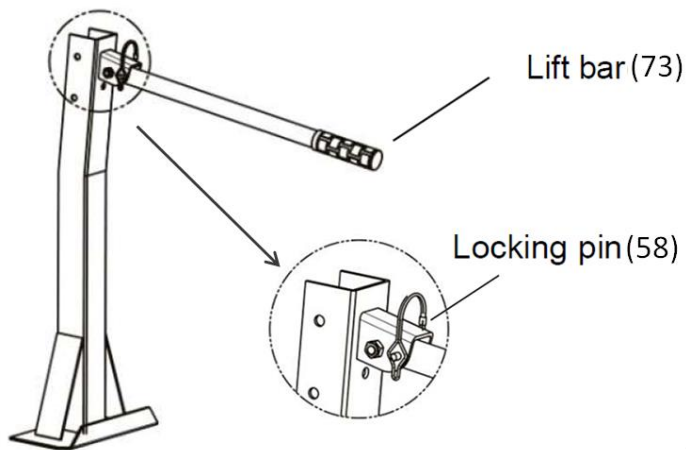
#### BURN HAZARD

- Do not touch. Allow surface to cool before servicing.

1. Add material to the Drum. A typical mixture would include: 2 gallons water with 3 shovels of cement and 15 shovels of aggregate rock (using a size 3 shovel, not included).
2. Adjust the Drum angle by pulling on the Control Handle (46). First, disengage the Locking Pins on the Handle and push on it until the desired angle is reached. Re-engage the Locking Pins.
3. Start the engine.

### Before Moving or Transporting Mixer

When transporting the mixer, the Lift Bar (73) must be secured with a Locking Pin (58) to hold the Lift Bar.



### After Each Use

#### **⚠WARNING**

- Recheck all fasteners and other connections for tightness.

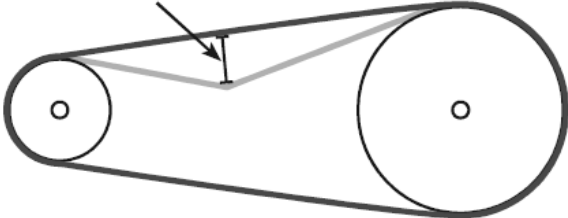
1. Once materials are mixed, tilt the Drum and dump the mixture where needed. The Drum will rotate while the mixture is dumping.
2. When finished, flame-out the engine.
3. Tilt the Drum angle as far down as possible to drain all fluids from the Drum.
4. Immediately wash out all debris from the inside and outside of the mixer. Scrub the inside of the Drum with a stiff, long handled bristle brush for best results. Wipe external surfaces of the mixer with a clean cloth.
5. Store the mixer indoors where children are out of reach.

### Maintenance

#### **⚠WARNING**

- TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION: remove spark plug from engine before performing any inspection, maintenance, or cleaning procedures.

Maintain the mixer by adopting a program of conscientious repair and maintenance in accordance with the following recommended procedures. It is recommended that the general condition of any tool be examined before it is used. Keep your tool in good repair. Keep handles dry, clean, and free from oil and grease. The following chart is based on a normal operation schedule.

Maintenance Interval	Maintenance Point
Periodically	Recheck all fasteners and other connections for tightness.
Belt Inspection and Tensioning	Retighten belt after the first 25 hours of use. To test the tension, follow the steps below.
	1. Lift the engine cover.
	2. Examine belt for cracks, tears in the backing, or other damage. Replace belt if damaged according to steps below:
	2.1 Loosen the engine bracket bolts and slide the bracket up as far as possible.
	2.2 Slide the old belt off the larger pulley first, then remove it from the engine pulley.
	2.3 Put the new belt around the engine pulley first, then around the large pulley.
	2.4 Move the engine bracket down the belt until it is properly tensioned according to the directions below. Tighten the engine bracket bolts.
	3. Check and adjust the belt tension according to the steps below:
	3.1 Press on the center of the longest span on the belt with moderate finger pressure. Then measure the deflection distance, the distance that the belt moved. The belt should deflect anywhere from 1/2" to 3/4". <div style="text-align: center; margin-top: 10px;"> <p><b>Deflection Distance = 1/2" to 3/4"</b></p>  <p>The diagram shows two pulleys of different sizes connected by a belt. An arrow points to the center of the longest span of the belt, indicating where to measure the deflection distance. The text above the arrow states 'Deflection Distance = 1/2" to 3/4"'. The pulley on the left is smaller than the one on the right.</p> </div>
	3.2 If the belt deflects too much, tighten belt by loosening the engine mounting bolts and moving the engine away from the other pulley slightly. Secure motor mounting bolts and retest tension. If the belt is too long to be properly tensioned, it must be replaced.
	3.3 If the belt deflects too little, loosen the engine bracket bolts and lift it upward. Secure engine mounting bracket and retest tension.
	4. Before use, replace engine cover.

## Troubleshooting

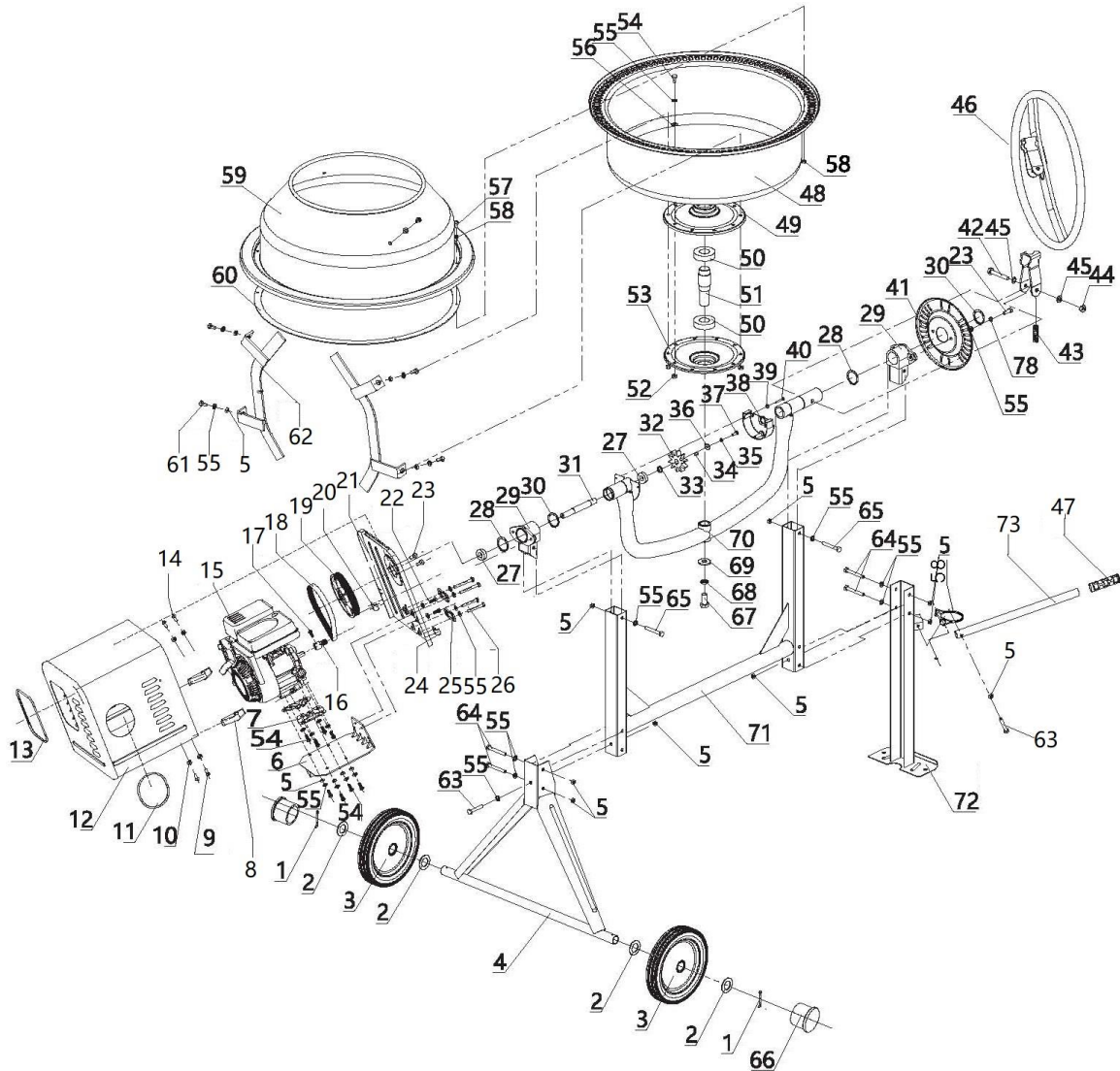
### ⚠WARNING

- Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect power supply before service.

Use the table below to troubleshoot problems before contacting service personnel or your local dealer. If the problem continues after troubleshooting, call your local dealer for assistance.

Failure	Possible Cause	Corrective Action
Engine will not start	1. Choke the lever into the OPEN position.	1. Move to the CLOSED position.
	2. Engine switch is in OFF position.	2. Move to ON position.
	3. Engine oil is low.	3. Fill with the recommended oil to the proper level.
	4. Out of fuel.	4. Refuel.
	5. Bad fuel, engine stored without treating or draining gasoline or refueled with bad gasoline.	5. Drain fuel tank and carburetor. Refuel with fresh gasoline.
	6. Spark plug is faulty or improperly gapped.	6. Gap or replace spark plug.
	7. Engine is flooded.	7. Move throttle to OPEN/RUN position.
	8. Spark plug fouled and fails to produce a spark.	8. Remove and clean spark plug. Check electrode spacing and set the gap to the correct dimension. Replace spark plug if damaged. Ensure the spark lead is installed.
	9. Fuel filter is restricted, carburetor has malfunctioned, ignition has malfunctioned, or valve is stuck.	9. Replace or repair faulty components as needed or take engine to a technician, if necessary.
Engine lacks power	1. Filter element(s) restricted.	1. Clean or replace filter element(s).
	2. Stale fuel, engine stored without treating, or draining ethanol base gasoline.	2. Drain fuel tank and carburetor. Refuel with fresh gas.
	3. Fuel filter is restricted, carburetor has malfunctioned, ignition has malfunctioned, or valve is stuck.	3. Replace or repair faulty components as needed. Take engine to a technician, if necessary.
Excessive noise or rattling	1. Belt (if equipped) is too loose (slipping) or too tight (bearing damage).	1. Adjust tension belt.
	2. Internal damage or wear.	2. Have technician service tool.
Overheating/Overloading	1. Running at 100% load for extended time.	1. Allow for lighter or no-load intervals.

## Parts Diagram



## Parts List

Part Number	Part Description	Quantity
1	Cotter Pin 5x40	2
2	Flat Washer 27	4
3	Wheel	2
4	Wheel Bracket	1
5	Hex Nut M8	19
6	Engine Bracket	1
7	Plate	2
8	Clip	2
9	Bolt M4x8	2
10	Nut M4	4
11	Shield	1
12	Engine Box	1
13	Shield	1
14	Bolt M4x8	2

Part Number	Part Description	Quantity
15	Engine	1
16	Engine Pulley	1
17	Bolt M5x12	1
18	Belt	1
19	Drum Pulley	1
20	Hook	1
21	Engine Hood	1
22	Hex Bolt M8x40	1
23	Hex Bolt M8x25	4
24	Hook	1
25	Clamp	2
26	Hex Bolt M8x65	4
27	Bearing 6002Z	2
28	Ring Shield	2
29	Attached Aluminum Bracket	2
30	Ring Shield	2
31	Pinion Shaft	1
32	Gear	1
33	Spacer	1
34	Flat Key	1
35	Spring Washer M6	2
36	Flat Washer M6	2
37	Screw M6x15	2
38	Gear Cover	1
39	Flat Washer M4	3
40	Screw M4x30	3
41	Handle Control Plate	1
42	Hex Bolt M10x70	1
43	Coil Spring	1
44	Nut M10	1
45	Flat Washer M10	2
46	Control Handle	1
47	Rubber Sleeve	1
48	Lower Drum	1
49	Upper Bearing Cover	1
50	Bearing 6206Z	2
51	Shaft	1
52	Hex Flange Nut M8	10
53	Lower Bearing Cover	1
54	Hex Bolt M8x16	20
55	Flat Washer 8	36
56	Seal Washer	10
57	Hex Flange Bolt M6x16	8
58	Locking Pin	1
59	Upper Drum	1
60	Rubber Gasket	1
61	Hex Bolt M8x20	4
62	Mixer Blade	2
63	Hex Bolt M8x55	2
64	Hex Bolt M8x65	4
65	Hex Bolt M8x60	2
66	Cap	2
67	Hex Bolt M14x30	1

Part Number	Part Description	Quantity
68	Spring Washer M14	1
69	Washer	1
70	U-Tube	1
71	Crossbeam	1
72	Support Bracket	1
73	Lift Bar	1
74	Hex Flange Nut M6	8
75	Elastic Washer	8

## Replacement Parts

- For replacement parts and technical questions, please call Customer Service at **1-800-222-5381**.
- Not all product components are available for replacement. The illustrations provided are a convenient reference to the location and position of parts in the assembly sequence.
- When ordering parts, the following information will be required: item description, item model number, item serial number/item lot date code, and the replacement part reference number.
- The distributor reserves the rights to make design changes and improvements to product lines and manuals without notice.

## Limited Warranty

Northern Tool and Equipment Company, Inc. ("We" or "Us") warrants to the original purchaser only ("You" or "Your") that the Klutch product purchased will be free from material defects in both materials and workmanship, normal wear and tear excepted, for a period of **one year** from date of purchase. The foregoing warranty is valid only if the installation and use of the product is strictly in accordance with product instructions. There are no other warranties, express or implied, including the warranty of merchantability or fitness for a particular purpose. If the product does not comply with this limited warranty, Your sole and exclusive remedy is that We will, at our sole option and within a commercially reasonable time, either replace the product or product component without charge to You or refund the purchase price (less shipping). This limited warranty is not transferable.

### Limitations on the Warranty

This limited warranty does not cover: (a) normal wear and tear; (b) damage through abuse, neglect, misuse, or as a result of any accident or in any other manner; (c) damage from misapplication, overloading, or improper installation; (d) improper maintenance and repair; and (e) product alteration in any manner by anyone other than Us, with the sole exception of alterations made pursuant to product instructions and in a workmanlike manner.

### Obligations of Purchaser

You must retain Your product purchase receipt to verify date of purchase and that You are the original purchaser. To make a warranty claim, contact Us at 1-800-222-5381, identify the product by make and model number, and follow the claim instructions that will be provided. The product and the purchase receipt must be provided to Us in order to process Your warranty claim. Any returned product that is replaced or refunded by Us becomes our property. You will be responsible for return shipping costs or costs related to Your return visit to a retail store.

### Remedy Limits

Product replacement or a refund of the purchase price is Your sole remedy under this limited warranty or any other warranty related to the product. We shall not be liable for: service or labor charges or damage to Your property incurred in removing or replacing the product; any damages, including, without limitation, damages to tangible personal property or personal injury, related to Your improper use, installation, or maintenance of the product or product component; or any indirect, incidental or consequential damages of any kind for any reason.

### Assumption of Risk

You acknowledge and agree that any use of the product for any purpose other than the specified use(s) stated in the product instructions is at Your own risk.

### Governing Law

This limited warranty gives You specific legal rights, and You also may have other rights which vary from state to state. Some states do not allow limitations or exclusions on implied warranties or incidental or consequential damages, so the above limitations may not apply to You. This limited warranty is governed by the laws of the State of Minnesota, without regard to rules pertaining to conflicts of law. The state courts located in Dakota County, Minnesota shall have exclusive jurisdiction for any disputes relating to this warranty.

# **KLUTCH**

Distributed by:

Northern Tool & Equipment Company, Inc.

Burnsville, Minnesota 55306

[www.northerntool.com](http://www.northerntool.com)

Made in China