

ROLLER TUBE FINISHERS

RTF EPU



SAFETY, OPERATION & PARTS MANUAL

Manual Part #: 061435 | Revision: A
Language: English | Original Instructions



POLY-PAVER

SAFETY & OPERATIONS MANUAL

This manual covers the Trowel Parts listed below

<u>Part No.</u>	<u>Description</u>
065108	Finisher, Roller Tube, Honda GXH50, Screed

NOTICE

This manual, or a copy of it, must be kept with the machine at all times.
There is a manual storage container located on the machine for your convenience.

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10,100,537; 9,068,301; 9,068,300; 8,360,680; 7,690,864; 7,114,876B1; 6,857,815B2; 6,582,153
With other Patents Pending.

Printed in U.S.A.

Allen Engineering Corporation ("Allen") warrants its products to be free of defects in material or workmanship for:

TWO YEARS FROM END USER'S DATE OF PURCHASE

Warranty period begins on the date of purchase by the End User of the product. All warranty is based on the following limited warranty terms and conditions, including the disclaimer of implied warranties and consequential damages.



1. Allen's obligation and liability under this warranty is limited to repairing or replacing parts if, after Allen's inspection, there is determined to be a defect in material or workmanship. Allen reserves the choice to repair or replace.
2. If Allen chooses to replace the part, it will be at no cost to the customer and will be made available to the Allen Distributor, Dealer, or Rental Center from whom the End User purchased the product.
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4. Allen does not warranty engines or batteries. Engine warranty claims should be made directly to an authorized factory service center for the particular engine manufacturer. Batteries are not warranted due to unknown treatment during transport, etc, and any battery claims should be directed to the battery manufacturer.
5. Allen's warranty does not cover the normal maintenance of products or its components (such as engine tuneups and oil & filter changes). The warranty also does not cover normal wear and tear items (such as belts and consumables).
6. Allen's warranty will be void if it is determined that the defect resulted from operator abuse, failure to perform normal maintenance on the product, modification to product, alterations or repairs made to the product without the written approval of Allen. Allen specifically excludes from warranty any damage to any trowels resulting from an impact to the rotors.
7. Impact damage to gear boxes is not covered under the Allen warranty and is deemed customer abuse.
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9. Allen will pay freight on warranty replacement parts at worldwide standard ground rates. No warranty replacement parts will be shipped air freight at the expense of Allen. Allen only pays outbound freight charges when sending warranty replacement parts to the customer via ground service. Allen does not pay any inbound freight. However, if Allen determines this to be a warranted item, only then will Allen reimburse the customer for inbound freight at standard ground rates.
10. ALLEN ENGINEERING CORPORATION'S WARRANTY POLICY WILL NOT COVER THE FOLLOWING: TAXES; SHOP SUPPLIES; ENVIRONMENTAL SURCHARGES; AIR FREIGHT; TRAVEL TIME; LOSS OF TIME; INCONVENIENCE; LOSS OF RENTAL REVENUE; RENTAL COSTS OF EQUIPMENT USED TO REPLACE THE PRODUCT BEING REPAIRED; LOSS OF USE OF THE PRODUCT; COMMERCIAL LOSS; OR ANY OTHER CHARGES WHATSOEVER OR ANY LIABILITIES FOR DIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGE OR DELAY.
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12. No Allen employee or representative is authorized to change this warranty in any way or grant any other warranty unless such change is made in writing and signed by an officer of Allen Engineering Corporation.

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This manual provides information and procedures to safely operate and maintain the Allen Machine.

For your own safety and protection from personal injury, carefully read, understand, and observe the safety instructions described in this manual. Keep this manual or a copy of it with the machine at all times.

Always operate this machine in accordance with the instructions described in this manual. A well maintained piece of equipment will provide many years of trouble free operation.

This manual is divided into the following sections:

**SECTION 1
SAFETY**

**SECTION 2
OPERATIONS**

**SECTION 3
SERVICE**

**SECTION 4
PARTS**

Complete any warranty requirements as specified by the engine manufacturer in their instructions found inside the manual box located on the back of the riding trowel operator's seat.

Your engine and clutch is not manufactured by Allen Engineering Corporation, Inc, and therefore is not covered under Allen Engineering Corporation, Inc warranty.

Your engine manufacturer should be contacted if you wish to purchase a parts manual or a repair manual for your engine.

Refer to enclosed owners engine manual for complete OEM instructions. See your battery manufacturer for battery warranty.



Sound Pressure Level Information:

Sound pressure is “A” weighted . Measured at the operators ear position while the ride-on trowel is operating at full throttle on concrete in a manner most often experienced in “normal ” circumstances. Sound pressure may vary depending upon the condition of the concrete. Hearing protection is always recommended.



Vibration Level Information:

The vibration level indicated is the maximum RMS (Root Mean Square) velocity value obtained at the handle grip while operating the ride-on trowel on curing concrete in a manner most often experienced in “normal ” circumstances. Values were obtained from all three axes of motion. The values shown represent the maximum RMS value from these measurements.

Summary Data Of Sound And Vibration Testing			
Operator Ear SPL	Seat Vibration Average	Left Hand Vibration Average	Right Hand Vibration Average
- dB (A)	- m/sec ²	- m/sec ²	- m/sec ²
This information was acquired from sound and vibration analysis tests conducted at Allen Engineering Corporation test facilities.			

PENDING INFORMATION

Dealer Information / Ordering Parts

GENERAL INFORMATION

Your Dealer has Allen Engineering Corporation trained mechanics and original Allen replacement parts. Always contact the Allen Dealer who sold you this machine for Allen Certified repairs and replacement parts.

Place Allen Dealer information below for future reference.

Dealer Name: _____ Dealer Phone #: (____) - ____ - ____ Address: _____ City / State / Zip: _____	Salesman: _____ Salesman Phone #: _____ Additional Comments: _____ _____ _____
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The "PARTS & DECALS MANUAL" contain illustrated parts lists for help in ordering replacement parts for your machine. Follow the instructions below when ordering parts to ensure prompt and accurate delivery:

1. All orders for service parts - include the serial number for the machine. Shipment will be delayed if this information is not available.
2. Include correct description and part number from the "PARTS & DECALS MANUAL"
3. Specify exact shipping instructions, including the preferred routing and complete destination address.
4. **DO NOT** return parts to AEC without receiving written authorization from AEC. All authorized returns must be shipped pre-paid.
5. When placing an order, please contact the AEC dealer nearest you.



NOTE

ALL INFORMATION, SPECIFICATIONS, AND ILLUSTRATIONS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE AND ARE BASED ON THE LATEST INFORMATION AT THE TIME OF PUBLICATION.

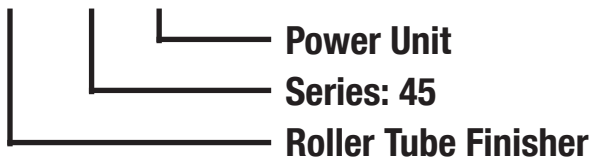
Model Number / Serial Number Unit Identification

Manufacturer's Codes:

When ordering parts or requesting service information, you will always be asked to specify the model and serial numbers of the machine. The legends below specifically defines each significant character or group of characters of the Model Number and Serial Number codes.

Model Number

RTF 45 PU



Serial Number:

The serial number found on the identification plate is a ten digit format. The model number identifies your machine and will ensure that you receive the correct replacement parts.

Serial Number Example

12175



Unit Identification:

Please record the information below. When ordering parts or requesting service information, you will always be asked to specify the model and serial numbers of the machine.

Model Number:_____

Serial Number:_____

Date Purchased:_____

Purchased From:_____

Machine Specifications

- Engine Driven Power Unit Kit with GXH50, 4-Cycle Honda Engine
- High Speed 300RPM Gearbox
- Folding Kickstand (Located on both ends)
- Variable Speed Control Handle
- Swivel handles for ease of use and storage
- Uses a 4" Diameter finishing tube.

Engine Specifications Honda GXH50

Engine Type	Air-cooled 4-stroke OHV
Bore x Stroke	41.8 X 36 mm
Displacement	49.4 cm ³
Net Power Output	2.1 HP (1.6 kW) @ 7,000 rpm
Net Torque	2.0 lb-ft (2.7 Nm) @ 4,500 rpm
PTO Shaft Rotation	Counterclockwise (from PTO shaft side)
Compression Ratio	8.0:1
Carburetor	Float Type
Ignition System	Transistorized magneto
Starting System	Recoil
Lubrication System	Forced Splash
Governor System	Centrifugal Mechanical
Air cleaner	Semi-dry
Oil Capacity	0.26 US qt (0.25l)
Fuel	Unleaded 86 octane or higher
Fuel Tank Capacity	.81 U.S. qt (.77 liter)
Dry Weight	12.1 lb (5.5 kg)
Width	10.8" (274mm)
Height	13.0" (353mm)



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SECTION 1 SAFETY

⚠ WARNING

RESPIRATORY HAZARDS

Grinding/cutting/drilling of masonry, concrete, metal and other materials can generate dust, mists and fumes containing chemicals known to cause serious or fatal injury or illness, such as respiratory disease, cancer, birth defects or other reproductive harm.



SILICOSIS WARNING

Grinding/cutting/drilling of masonry, concrete, metal and other materials with silica in their composition may give off dust or mists containing crystalline silica.

⚠ WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

CALIFORNIA PROPOSITION 65 WARNING

Gasoline engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects and other reproductive harm.

Safety-Alert Signs

This manual contains Safety-Alert Signs, as defined below, which must be followed to reduce the possibility of improper service damage to the equipment or personal injury. Read and follow all Safety-Alert Signs included in this manual.



NOTE defines an operating procedure, condition, etc. which is essential to high-light that contains useful or important information.



EMERGENCY is used for the identification of safety equipment, first aid, or emergency egress locations.



NOTICE used to convey safety information on labels and signs.



CAUTION is indicative of a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



WARNING Indicative of a potentially hazardous situations that could result in death or serious injury



DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury

Spark Arrestor Notice / Hazard Symbols



WARNING









ADVERTENCIA



Operation of this equipment may create sparks that can start fires around dry vegetation. A spark arrestor may be required. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.

El funcionamiento de este equipo puede producir chispas que pueden iniciar incendios en vegetación seca. Un supresor de chispas puede ser necesario. El operador debe comunicarse con las agencias locales de bomberos para las leyes o reglamentos relativos a los requisitos de prevención de incendios.

Some states require that in certain locations arrestors be used on internal combustion engines. A spark arrestor is a device designed to prevent the discharge of spark or flames from the engine exhaust. It is often required when operating equipment on forested land to prevent the risk of fires. Consult the engine distributor or local authorities and make sure that you comply with regulations regarding spark arrestors.

	Lethal exhaust gas hazards
	Explosive fuel hazards
	Burn hazards
	Rotating parts/crush hazards
	Pressurized fluid hazards
	Hydraulic fluid hazards

Potential hazards associated with the operation of this equipment will be referenced with hazard symbols which may appear throughout this manual in conjunction with safety notes.



Familiarity and proper training are required for the safe operation of this equipment! Equipment operated improperly or by untrained personnel can be dangerous! Read the operating instructions contained in both this manual and the engine manual and familiarize yourself with the location and proper use of all controls.

- **NEVER** operate this machine in applications for which it is not intended.
- **NEVER** operate this machine while under the influence of drugs or alcohol.
- **NEVER** allow anyone to operate this equipment without proper training. People operating this equipment must be familiar with the risks and hazards associated with it.
- **NEVER** touch the engine or muffler while the engine is on or immediately after it has been turned off. These areas get hot and may cause burns.
- **NEVER** use accessories or attachments that are not recommended by AEC. Damage to equipment and injury to the user may result.
- **NEVER** operate the machine with the belt guard missing. Exposed drive belt and pulleys create potentially dangerous hazards that can cause serious injuries.
- **NEVER** leave machine running unattended.
- **DO NOT** run the machine indoors or in an enclosed area such as a deep trench unless adequate ventilation, through such items as exhaust fans or hoses, is provided. Exhaust gas from the engine contains poisonous carbon monoxide gas; exposure to carbon monoxide can cause loss of consciousness and may lead to death.
- **ALWAYS** remain aware of moving parts and keep hands, feet, and loose clothing away from the moving parts of the equipment.
- **ALWAYS** keep hands, feet, and loose clothing away from moving parts of the machine.
- **ALWAYS** read, understand, and follow procedures in the Operator's Manual before attempting to operate the equipment.
- **ALWAYS** be sure operator is familiar with proper safety precautions and operation techniques before using machine.
- **ALWAYS** close fuel valve on engines equipped with one when machine is not being operated.
- **ALWAYS** store the equipment properly when it is not being used. Equipment should be stored in a clean, dry location out of the reach of children.
- **ALWAYS** operate the machine with all safety devices and guards in place and in working order.



Internal combustion engines present special hazards during operation and fueling. Read and follow the warning instructions in the engine owner's manual and the safety guidelines below. Failure to follow the warnings and safety guidelines could result in severe injury or death.

- **DO NOT** run the machine indoors or in an enclosed area such as a deep trench unless adequate ventilation, through such items as exhaust fans or hoses, is provided. Exhaust gas from the engine contains poisonous carbon monoxide gas; exposure to carbon monoxide can cause loss of consciousness and may lead to death.
- **DO NOT** smoke while operating the machine.
- **DO NOT** smoke when refueling the engine.
- **DO NOT** use fuel that is more than 90 days old. Use of unmixed, improperly mixed, or fuel older than 90 days, (stale fuel), may cause hard starting, poor performance, or severe engine damage and void the product warranty.
- **DO NOT** refuel a hot or running engine.
- **DO NOT** refuel the engine near an open flame.
- **DO NOT** spill fuel when refueling the engine.
- **DO NOT** run the engine near open flames.
- **ALWAYS** refill the fuel tank in a well-ventilated area.
- **ALWAYS** replace the fuel tank cap after refueling.
- **ALWAYS** keep the area around the muffler free of debris such as leaves, paper, cartons, etc. A hot muffler could ignite the debris and start a fire.



Poorly maintained equipment can become a safety hazard! In order for the equipment to operate safely and properly over a long period of time, periodic maintenance and occasional repairs are necessary.

- **ALWAYS** disconnect the battery before servicing the equipment.
- **DO NOT** attempt to clean or service the machine while it is running. Rotating parts can cause severe injury.
- **DO NOT** crank a flooded engine with the spark plug removed on gasoline-powered engines. Fuel trapped in the cylinder will squirt out the spark plug opening.
- **DO NOT** test for spark on gasoline-powered engines if the engine is flooded or the smell of gasoline is present. A stray spark could ignite the fumes.
- **DO NOT** use gasoline or other types of fuels or flammable solvents to clean parts, especially in enclosed areas. Fumes from fuels and solvents can become explosive.
- **ALWAYS** turn engine off and remove key from machine before performing maintenance or making repairs.
- **ALWAYS** keep the area around the muffler free of debris such as leaves, paper, cartons, etc. A hot muffler could ignite the debris and start a fire.
- **ALWAYS** replace worn or damaged components with spare parts designed and recommended by AEC Corporation.
- **ALWAYS** disconnect the spark plug on machines equipped with gasoline engines, before servicing, to avoid accidental start-up.
- **ALWAYS** switch off the power supply at the battery disconnect before adjusting or maintaining the electrical equipment.
- **ALWAYS** keep the machine clean and labels legible. Replace all missing and hard-to read labels. Labels provide important operating instructions and warn of dangers and hazards.

SECTION 2 OPERATION

**NOTE**

This machine is built with user safety in mind. However, it can present hazards if improperly operated and serviced. Follow operating instructions carefully. If you have any questions about operating or servicing this equipment, please contact your Allen Engineering Dealer or AEC Customer Service at 800-643-0095 or 870-236-7751.

Before Starting Procedures

Before operation each day check for the following:

1. All guards, side screens and panels are in place
2. All safety and information signs are in place and legible
3. Engine and Gearbox Oil levels are correct.
4. Fuel level in fuel tank.
5. Check the battery level (if applicable)
6. Condition of air filter on engine.
7. Verify that daily maintenance of grease points have been performed. (if applicable)
8. Check operating controls for proper operation and adjustment
9. Check speed control operation before and after starting engine for proper operation
10. Remove any loose objects that could interfere with the operation of the machine

Note: If there is any indication that faulty equipment exists, shutdown safely, inform the proper authority and **DO NOT** operate the machine until the problem has been fixed.

For Safety in Shipping, both fuel and oil have been removed and they **MUST BE REPLACED prior to start-up.**

The following components are supplied with your machine:

- 1- Roller Screed Drive End Assembly
- 1- Opposite End Handle Assembly
- 1- Drive End Shelf-Align Plug with Spring Pin
- 1- Opposite End Self-Align Plug with Spring Pin
- 1- Roller Screed Tube
- 1- Operation Instruction Manual

Assembly

Insert Self-Align Plugs into Roller Tube as seen below. Fig. A

Tighten the three bolts on the Self-Align Plugs until the plug is secured in the tube. Leave no gap between the plug and tube. (DO NOT over tighten.) Fig B



FIGURE A

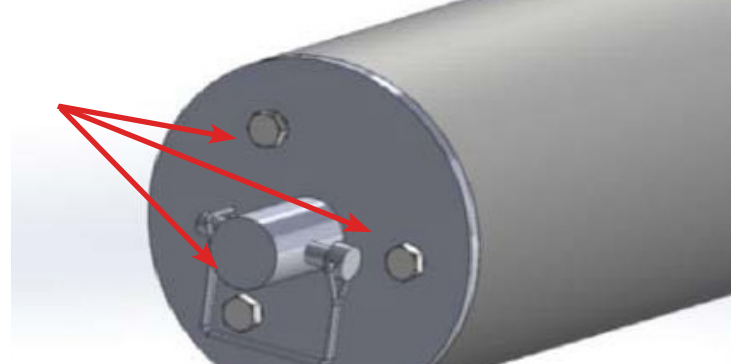


FIGURE B

Attaching drive end

Remove the spring pin from the drive end. Attach the Roller Screed Drive End Assembly to the Drive End Align Plug, securing it with the spring pin. See Fig. C

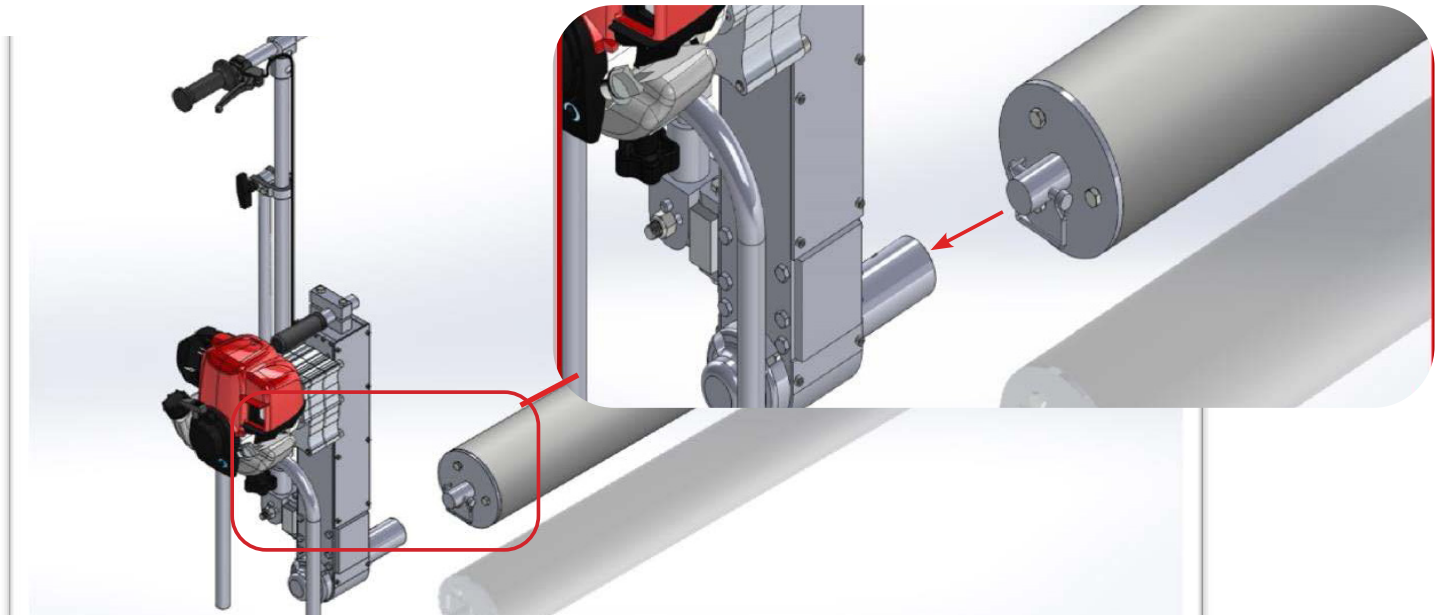


FIGURE C

Attaching opposite end handle

Remove Spring Pin from the opposite end plug. Attach Opposite End Handle Assembly to the Opposite End Plug (opposite of the power unit, securing it with the spring pin. See Fig D

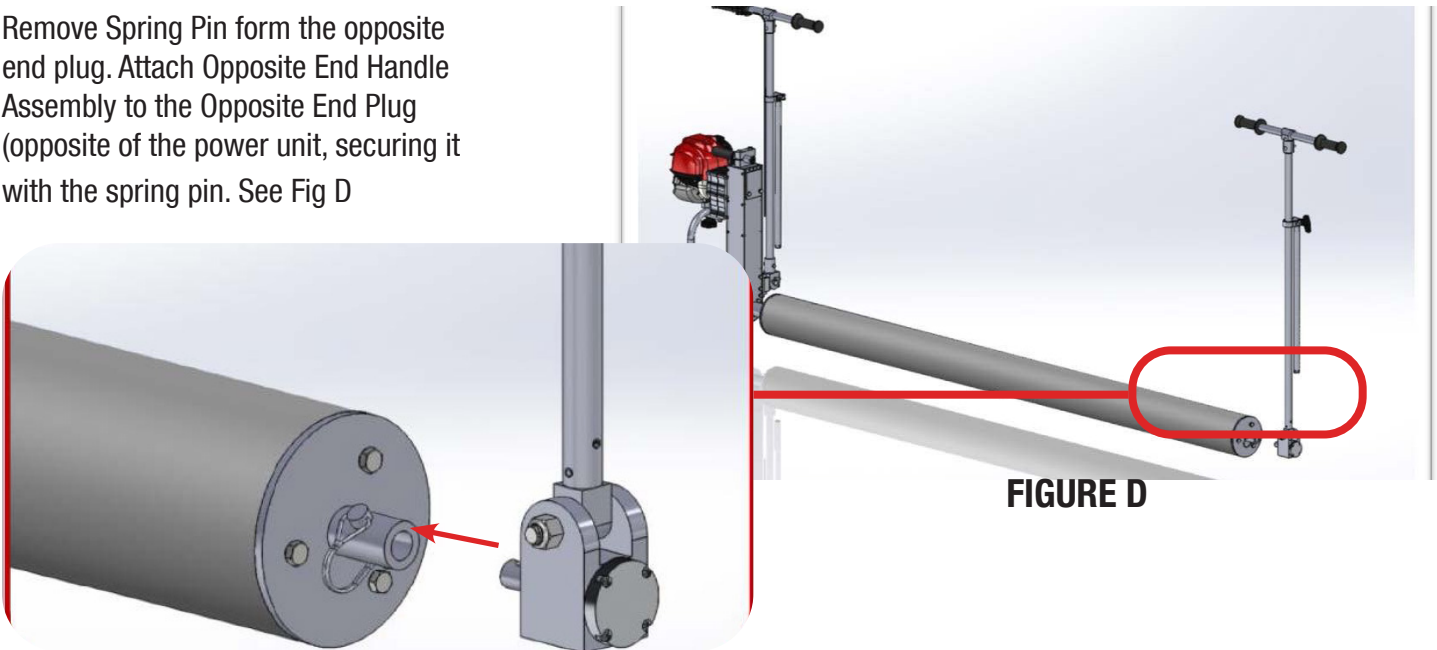


FIGURE D

Setting up handles & kickstand

To make transportation & storage easier, the drive handle is locked in the upright position. To unlock, remove the hitch pin from handle stop shown in Fig E.

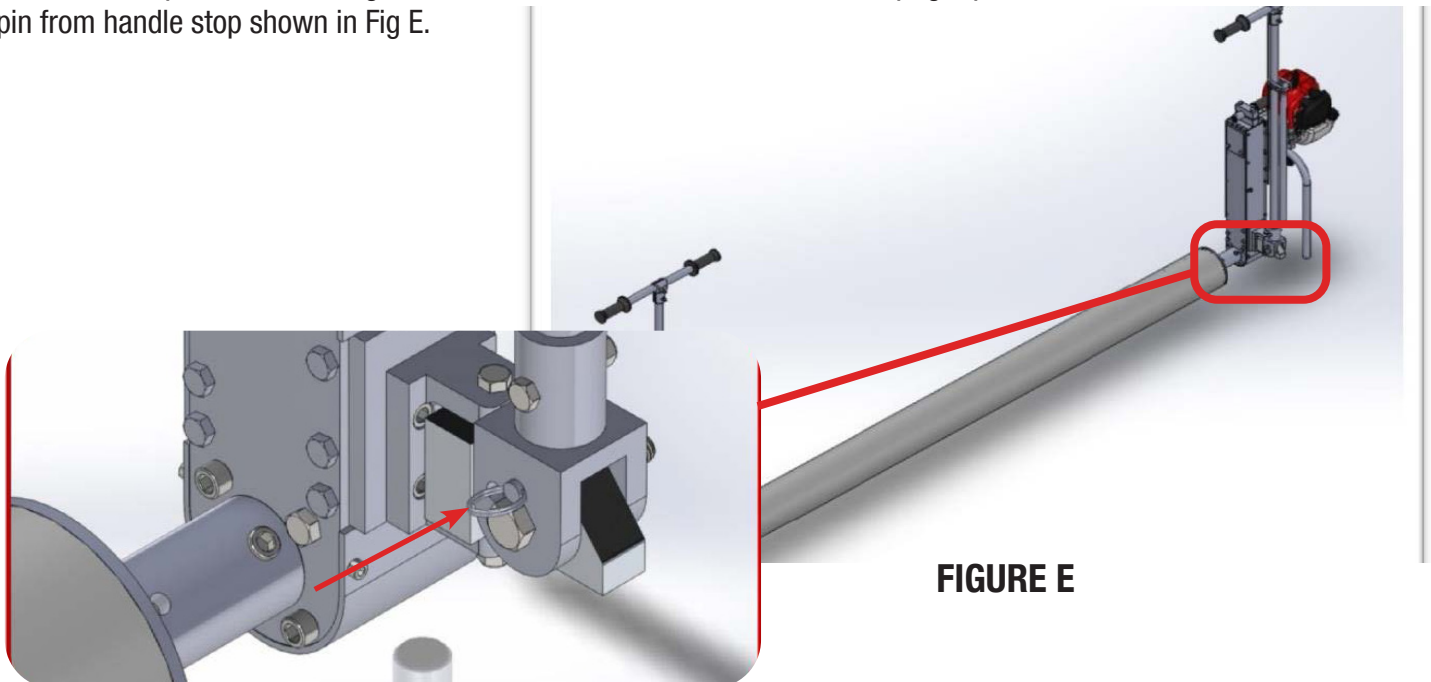
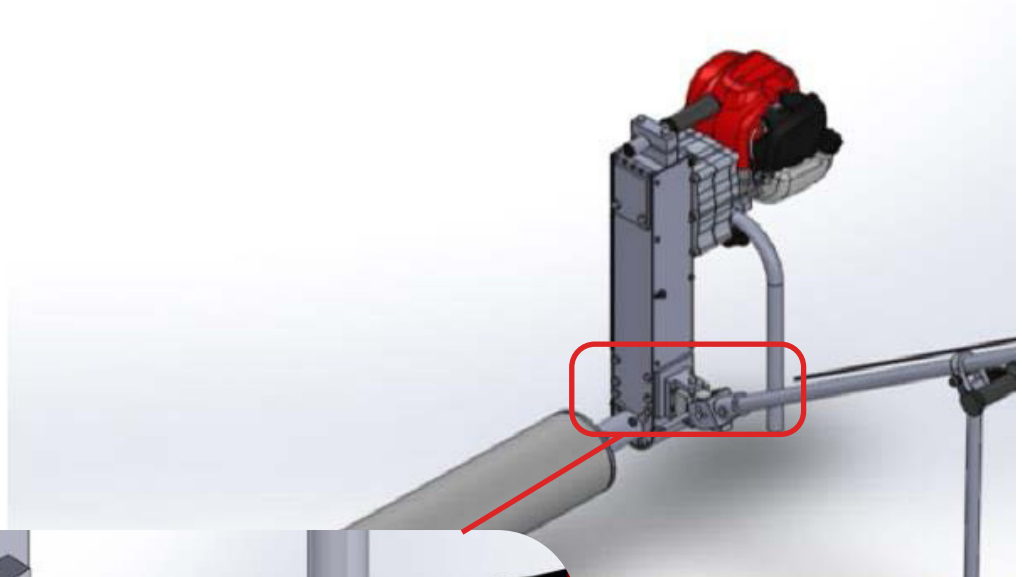
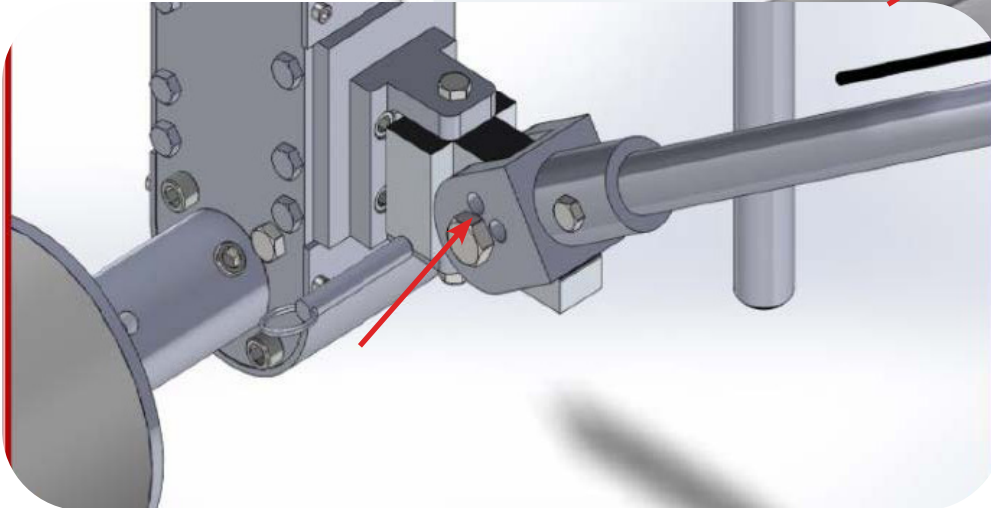


FIGURE E

Pull the drive handle back until the other hole is lined up. Put the hitch pin back in to the lock handle shown in Fig F. Loosen kickstand knob and pull out kickstand to allow handle to stand up.

FIGURE F



Start up the engine and let it warm up (3 - 5 min) before operating at normal throttle. (See the Honda Manual for detailed instruction on how to start engine.)

Lift the entire unit and place upon the forms within the pour itself. Once placement has begun, ensure that the concrete covers the entire bay between the forms before attempting the screeding process. Deflection is a consideration in any type of screeding machine marketed and it is imperative that the concrete itself supports a portion of the weight of the tube when in operation, this makes for a flatter floor.



REMEMBER EVERY PASS OF THE TUBE IS REMOVING A PROPORTION OF FAT FROM THE SURFACE AND DUMPING THIS AT THE POINT OF DELIVERY AS THE TUBE MOVES FORWARD. 2-3 PASSES IS IDEAL. MORE THAN THAT IS NOT RECOMMENDED.

Different concrete mixes will leave different textures right at the surface. It is often prevalent when the desired concrete level is reached to return the tube to the starting point and to pull it down the length of the previously screeded patch without the tube returning. This will often leave a pleasing surface finish. It is essential to perform this operation on any slope work undertaken.

- No initial training is required to operate the equipment, but good understanding of how concrete works is recommended.
- Do not use equipment in extreme weather conditions (rain, sleet, snow, etc.). Moisture inside the engine can cause damage.
- When you pick a tube for a slab, exceed the span by at least 600mm (2 ft). If you are going to be working around a lot of obstructions, give yourself at least 900mm (3 ft). As you approach an obstruction, one operator will lag as the other advances to cut a steep angle. Then they switch to an opposite angle and jump. At this point, manually trim the “V” shaped area forward just enough for the tube to grab it, and then proceed.
- Metal expands and Contracts according to its temperature. This causes the tube to bow when it has been parked for a period of 30 seconds in direct sunlight. The differences in temperature between the sunny side and the concrete side makes the tube deflect slightly. You may not notice this in a span less the 7.9m (26 ft) . You can strike in heavier build up for 30 seconds or more to bring your tube to a proper temperature. This should be done before you attempt to venture back onto a previous area to begin a strike-off pass.
- Special care must be taken with tubes 7.9m (26 ft) or longer. Novice operators will find themselves unsure of whether to proceed or to back up. If you stop traveling with the tube spinning, you will notice it begin to jump slightly. Tubes of this length will tend to flex under this condition, if they are not traveling either forward or back. Always spin long lenth tubes slightly slower than you would tubes of less than 7m (23 ft).
- If you are going to stop, turn off the tube. Also tubes of 7.9m (26 ft) or longer run at a slower rpm than shorter tubes. With care, one can expect good strikes to a span of 8.5m (28 ft). Even though we sell tubes longer than 8.5m (28 ft), they are not expected to span any wider than 8.5m (28 ft). Avoid excessive passes when using tubes over 7.9m (26 ft). Make one pass to strike off the excess, then another pass to correct any errors and provide a uniform surface.
- In pursuit of a low slump and superflat slabs, you will find your tube very useful in floating and trimming procedures. You may use the tube to trim the surface after the slab is partially set. If you are adding maa-terial or color to the surface, the tube will introduce these materials into the surface, by traveling with the spin. you still lift the valve to the up position, but always travel back instead of striking forward.

Tolerance

An ideal concrete mix design has a slump of 100 mm (4 inches). Slump any wetter is a step in the wrong direction. This tool operates on friction between the face of the tube and the major aggregate. When working properly, the buildup breaks away from the body of the slab to tumble ahead of the tube. If the slump is too wet, the tube cannot gather or accumulate this build up properly. Under this condition, you will see the build-up slide ahead of the tube, rather than tumble.

When the tool is on a level slab, it is pulled by the operators at an upward angle. If you operate light tubes in a slump which is 76 mm (3 inches) or lower, they will tend to ride high when they encounter build up. This is more pronounced if the major aggregate is larger than 37 mm (1'). This is not the case on slope because the tool is drawn forward in the line with the plane of the slab.

Matrix

Finishers who are accustomed to the surface left by a vibratory screed, are usually startled by the presence of major aggregate existing at the surface. Do not panic. You must realize that when the slab is this flat, you do not need a lot of fine material on top to apply a finish. As you reach about mid set, you will feel the stability of this major aggregate holding your surface from shifting during floating process.

Jobs with quality control supervision will not allow surface vibration because of the segregation of materials at the surface. The heaviest item in the mix is rock and the lightest is water. Surface vibration causes the surface to result in lower density. It also causes an increased water/cement ratio in this critical area of the slab. The Rollerscreed tube is widely accepted, Specifically because of its ability to consolidate without segregation.

The presence of major aggregate at the surface provides the ultimate performance, because of the increased density. This requires some care in the form of maintaining a more shallow pitch in your troweling habits. The ready mix producer has more to do with this than anything. If your aggregate is crushed with sharp fractures or if it is uncommonly bony, you may need to take measures to crowd the large rock away from the surface slightly.

There is a lot of chemistry used in making ready mix products to meet the required strength, while cement content is reduced. You must get a feel for your concrete, to tune in on a method that works for you. Concrete supplies will vary, from one to another, as so their products.

The friction screed has become an alternative to the surface vibrator.

This tool is a spinning tube, manually drawn over the slab. The face of the spinning tube encounters the surface, sweeping the excess concrete forward. This method aggressively cuts the high material into a roll which gathers in front of the tube. This allows operators to grasp the high material and remove it from the surface. This step is so effective, operators use the tube for preliminary placement, as well as striking the final grade.

Step 1: Placement

Delivery begins as workmen have filled the first corner and across the starting edge. Grade is a little high, to assure the area is full. Delivery continues, but the starting area is not completely full on the other side. The workmen are unsure of the exact grade, so they make a quick stroke with the tube. This removes the over burden, which is brought forward, then the spinning tube races back out of the way.

The delivery continues with your men and the mixer operator knowing exactly how far your placement currently stands. The delivery happens at a much quicker pace because they can see the placement volume by watching the tube. As high and low spots appear, they are visible and obvious. The rotation of the tube carries itself back to recover any of these flaws that appear.

Step 2: Strike-Off

Once an area has received the proper volume of delivery and the over burden has been removed, the final strike is made. This provides a flat grade, consistent with the formwork, ready for the finish tools.

Timing is most critical. Within two minutes after the material is dropped, you have the initial strike. After that, the body of the slab is in place. The material which moves after that point is a matter of texture.

The Rollerscreed tube gives powerful control of surface grade, during this precious window of time. Do not wait even a few minutes for workmen to walk around in your delivery area, raking this material to grade. Keep a man there to push some fill back into the holes which occur. Get the rest of the men out of the way and cut the grade with the tube.

You can maintain a better flatness if you cut grade immediately upon placement. Using friction to cut grade is very precise and it is also quick. The Rollerscreed tube is not capable of the tremendous width, as that of the vibratory screeds.

The aggregate is left undisturbed, at the surface. A thin layer of fines is present, adequate for a smooth finish. The matrix of aggregate is still intact, giving high density and providing stability for finishing machines.

As the Roller screed tube bites the surface, the force is directed against the high material that which exists at proper grade is left undisturbed, except for the shear, applied by the bottom and face of the tube. As a result, the arrangement of the aggregate is left intact, in its proper matrix.

Your setup probably includes some of the following:

1. Cold Slabs
2. Form work
3. Temporary

The strike-off is done supported by the setup. Since your setup fixes reference for grade.

The final surface tolerance can be only as pure as the setup.

The Rollerscreed tube cuts grade slightly lower than the setup. This is similar to the conditions which occur when using manual strike-off. Then, shrinking occurs in the concrete, during hydration. The final surface will arrive at 3 mm (1/8") below the form work. Formwork should be set artificially high, by 3 mm (1/8"). Finishers should be advised to avoid filling the edges to form level, since the desired grade is slightly lower.

Similarly, cold slabs are spaced. With a 3 mm (1/8") strip of flat steel, so the final grade will match the cold slab. The strip of flat steel prevents excessive wear to the tube. This wear becomes significant, when the tube extends over a cold slab which has a rough texture.

SECTION 3 SERVICE

There is no scheduled maintenance on gears or Roller Tube Finisher Parts. Clean any concrete from unit and tube after each use. Allowing concrete to dry on unit or tube may cause harm to the unit itself.

Change oil every 50 hours.

Machine Cleaning Procedure

When cleaning the machine, please adhere to the following information to ensure proper cleaning and to keep the machine in the best condition possible.

Power Washing Procedure:

NOTICE

- Ensure that the water pressure is below 2000 PSI (14 MPa)
- Always keep the water temperature below 180°F (80°C)
- Use a spray nozzle with at minimum 40° wide spray angle
- Keep the nozzle at least 1 foot (300mm) away from the machine
- Avoid spraying water on the engine and electronic components. Examples include electronic displays, lights, switches, wiring, etc. The electronic components may be damaged if water is sprayed on them.
- Keep a perpendicular angle (90°) when cleaning over a decal.
 - Holding nozzle of a pressure washer at an angle different from 90° may lift the decal from the machine.
- Recommended using a safe cement dissolver, BACK-SET or similar, to remove hardened concrete.
- It is NOT recommended to use chemicals such as:
 - Muriatic Acid
 - Hydrochloric Acid
 - Hydrofluoric Acid
 - Sulfuric Acid
 - Phosphoric Acid
- To prevent build-up of concrete on the machine, use BODY GUARD or similar protection wax.

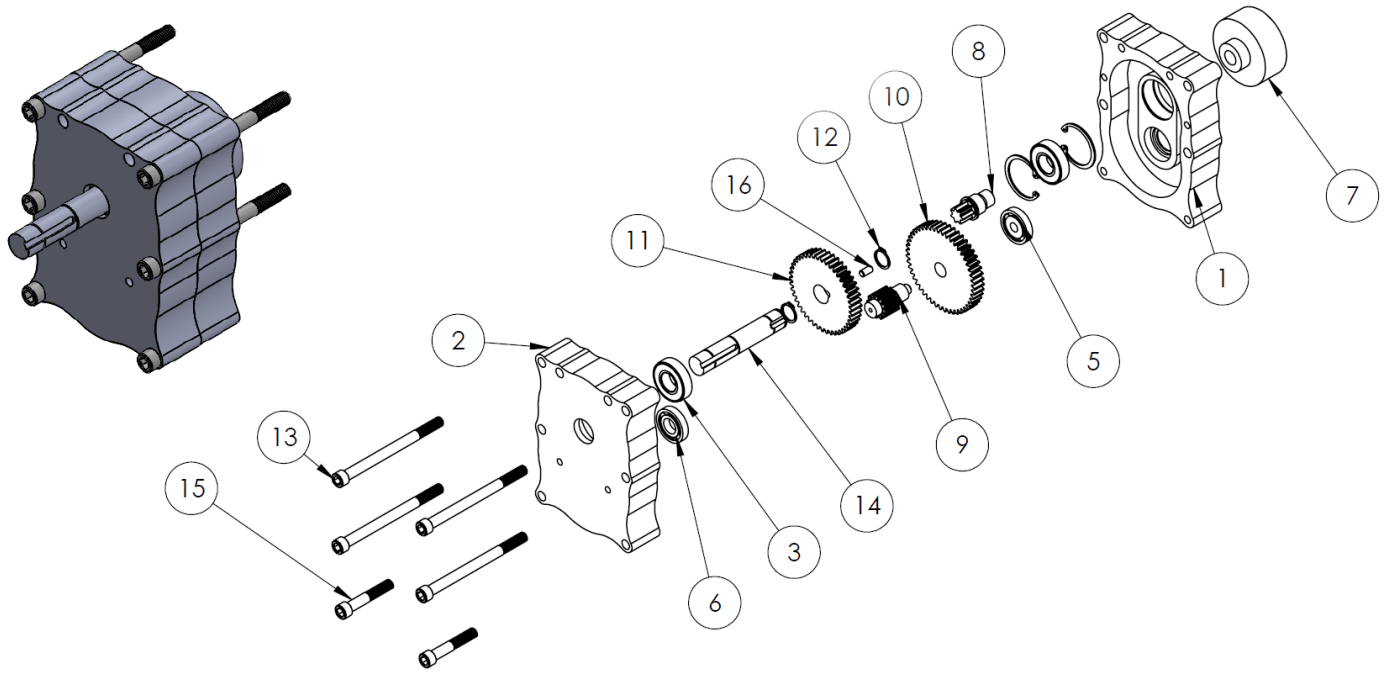
Filter Cleaning Procedure:

- Remove air filters and blow out with compressed air, NOT to exceed 80 PSI.

SECTION 4 PARTS

GBWC50-WC50 Gearbox

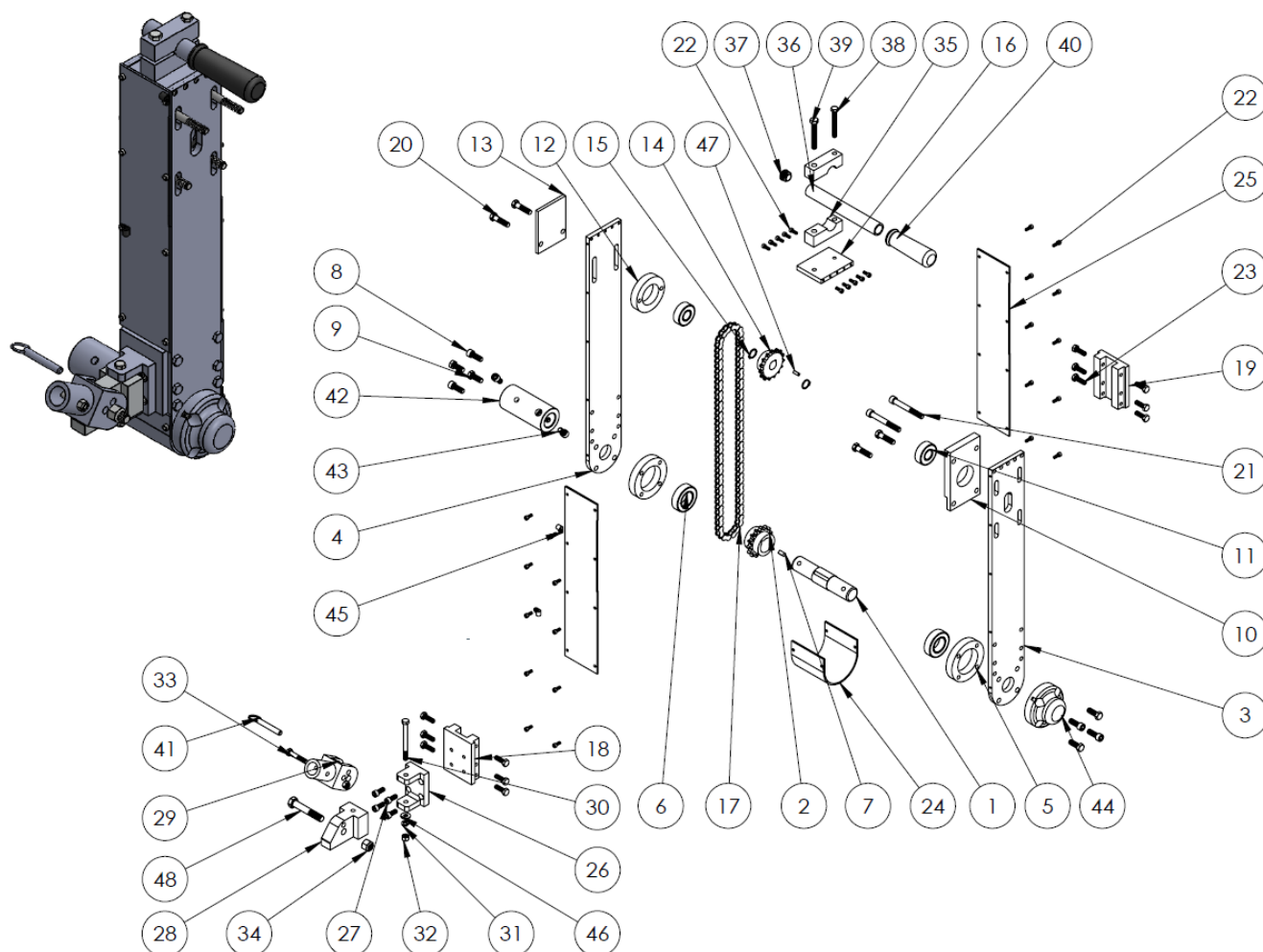
SECTION 4 PARTS



ITEM	PART NO.	DESCRIPTION	QTY
1	066831	INPUT BOX SIDE	1
2	066832	OUTPUT BOX SIDE	1
3	066833	BALL BEARING R12 1 5/8" OD X 3/4" ID	2
4	066834	1 5/8" GROOVED DIA INT RING	2
5	066835	BALL BEARING R10 W 3/8" BORE SIZE	1
6	066836	BALL BEARING R10 W 5/8" BORE SIZE	1
7	066837	CLUTCH DRUM 3" ROUND	1
8	066838	GEAR 7T PINION THREAD	1
9	066839	GEAR 12T PINION LH THREAD	1
10	066840	GEAR 48T LH THREAD	1
11	066841	GEAR 44T 3/4" HOLE	1
12	066810	RETAINING RING	2
13	066842	3/8-16 X 5" SHCS	4
14	066843	DRIVE SHAFT	1
15	066844	3/8-16 X 2 3/4" SHCS	2
16	066845	1/4 X 1/5 STEEL DOWEL PIN	1

SECTION 4 PARTS

DB500 - Drive Body Assembly



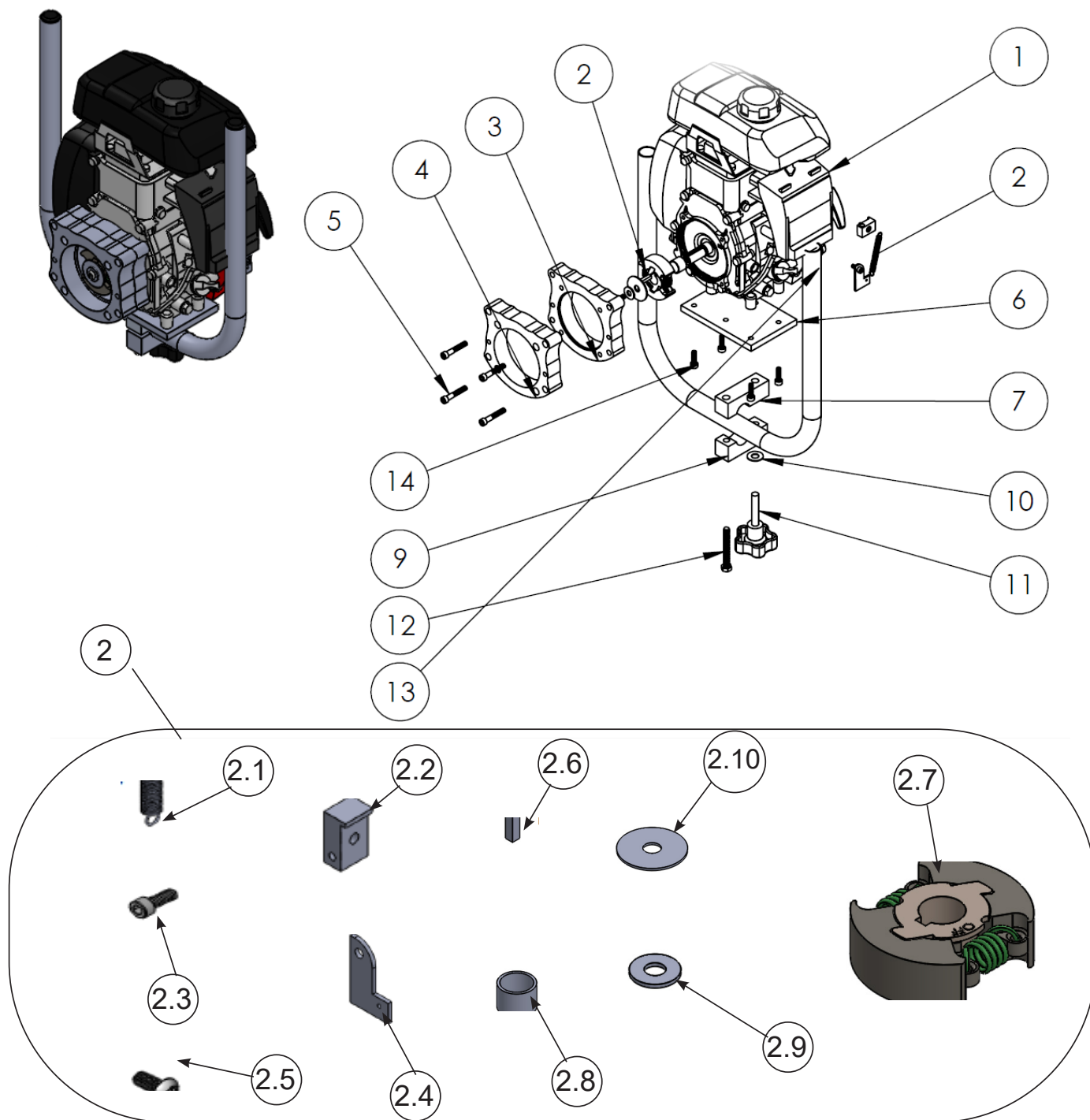
ITEM	PART NO.	DESCRIPTION	QTY
1	064326	1 1/4 X 6" SS OUTPUT SHAFT	1
2	066800	1 1/4" NO 40 CHAIN SPROCKET	1
3	066801	ENGINE SIDE PLATE	1
4	066802	TUBE SIDE PLATE	1
5	064330	3-1/2" BEARING CARRIER	2
6	066803	1 1/4" OD ROLLER BEARING	2
7	066804	1/4" X 1/2" KEY STOCK	1
8	015884	3/8-16 X 1" SHCS	4
9	010036	3/8-16 X 1" HHCS	4
10	066805	GEAR BOX SUPPORT PLATE	1
11	066806	3/4" ID - 1 4/5" OD ROLLER BEARING	2
12	066807	BEARING CARRIER	1
13	066808	BEARING COVER PLATE	1
14	666809	3/4 BORE #40 CHAIN SPROCKET	1

DB500 - Drive Body Assembly**SECTION 4
PARTS**

ITEM	PART NO.	DESCRIPTION	QTY
15	066810	RETAINING RING	2
16	066811	TOP PLATE	1
17	066812	#40 CHAIN 42" LONG	1
18	066813	SWIVEL MOUNT PLATE	1
19	066814	SUPPORT PLATE 1" X 4"	1
20	028402	3/8-16 X 1 1/2" HHCS	4
21	066815	3/8-16 X 3" SHCS	2
22	066816	10-24 X 1/2" SHCS	30
23	010020	5/16-18 X 1" HHCS	12
24	064328	COVER PLATE	1
25	066817	INSPECT PLATE	2
26	066818	SWIVEL BASE - ELECTRIC	1
27	066819	5/16-18 X 3/4" SHCS	4
28	066820	MALE HANDLE STOP	1
29	066821	FEMALE HANDLE STOP	1
30	010029	5/16-18 X 3.5" HHCS	1
31	010090	5/16 LOCK WASHER	1
32	066822	5/16-18 LOCKING NUT	2
33	010023	5/16-18 X 1 3/4" HHCS	1
34	066823	1/2-13 LOCKING HEX NUT	1
35	066824	TUBING CAP	2
36	066825	LIFT HANDLE TUBE	1
37	046646	7/8 CAP PLUG	1
38	010026	5/16-18 X 2 1/2" HHCS	1
39	010042	3/8-16 X 2 1/2" HHCS	1
40	066826	LIFT HANDLE GRIP	1
41	066827	3/8 X 2 1/4" HITCH PIN	1
42	064327	2 X 4 1/2" SS OUTPUT DRIVE ADPT	1
43	066828	3/8-16 X 5/8" SHCS	2
44	064329	DRIVE SHAFT COVER CAP	1
45	066829	NYLON CASING CLAMP	2
46	MV415	1/4" FLAT WASHER	1
47	015813	3/16" KEY STOCK	1
48	066830	1/2-16 X 3" HALF-THREAD HHCS	1

SECTION 4 PARTS

Engine - Kickstand Assembly



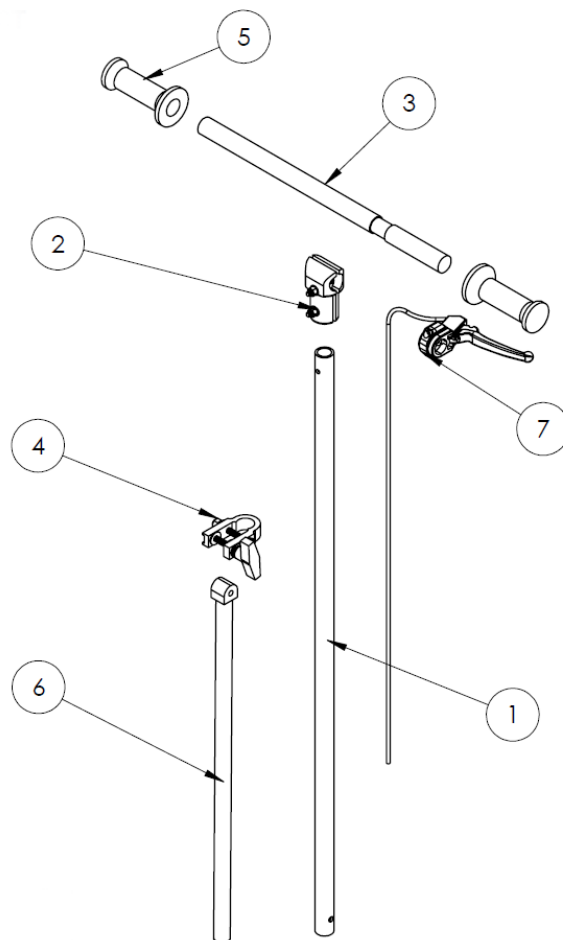
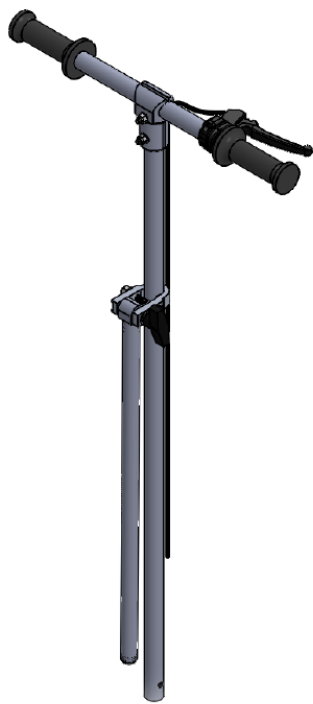
Engine - Kickstand Assembly

SECTION 4 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	066846	GX50 HONDA ENGINE	1
2	WC80	-	-
2.1	066847	SPRING	1
2.2	066848	THROTTLE GUIDE	1
2.3	066816	10-24 X 1/2"	1
2.4	066849	WC50 SPRING ARM	1
2.5	020311	1/4 - 28 X 1/2" BHSCS	1
2.6	066850	KEYSTOCK	1
2.7	064899	WC50 CLUTCH	1
2.8	066852	CLUTCH SPACER	1
2.9	32100-16	1 1/4 FLAT WASHER	1
2.10	066853	CLUTCH WASHER	1
3	066854	ENGINE MOUNTING PLATE	1
4	066855	ENGINE PLATE TO GEARBOX ADAPTER	1
5	066856	.25-28 X 1.5" SCHS	4
6	066857	WC50 ENGINE KICK STAND PLATE	1
7	066858	ENGINE STAND CLAMP	1
8	066859	WC50 KICK STAND	1
9	066860	KICK STAND CLAMP	1
10	049931	3/8 FLAT WASHER	1
11	064325	5/16-16 X PLASTIC KNOB	1
12	010026	5/16-18 X 2.5" HHCS	1
13	046646	7/8" CAP PLUG	2
14	048312	1.0 X 20 M6 SHCS	4

SECTION 4 PARTS

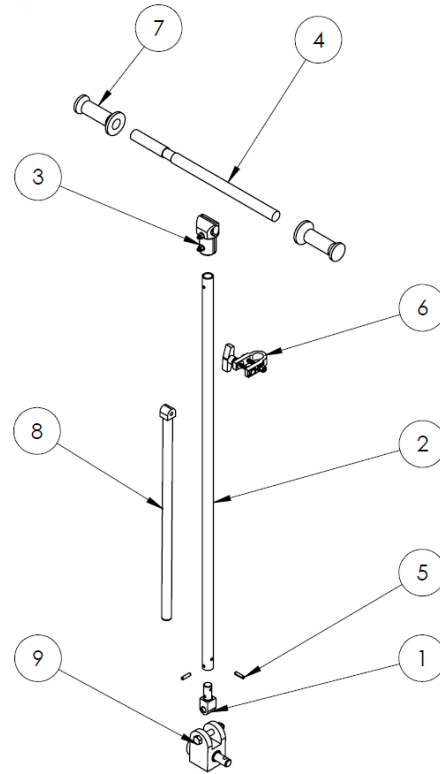
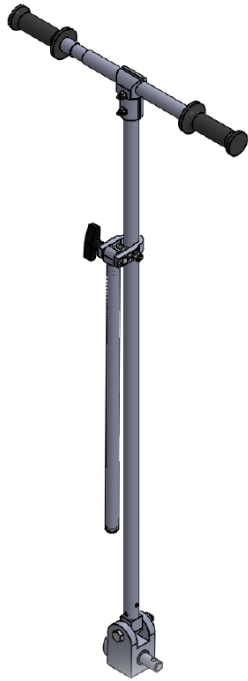
Drive End Pull Handle Assembly



ITEM	PART NO.	DESCRIPTION	QTY
1	066861	TUBING- 37 1/2 X 1	1
2	066862	CROSS BAR CLAMP	1
3	066863	TUBING- 18X1	1
4	066864	KICKSTAND CONNECTOR	1
5	066865	HANDLE GRIP	2
6	066866	KICKSTAND ASSEMBLY	1
7	066867	THROTTLE ASSEMBLY	1

Opposite End Pull Handle Assembly

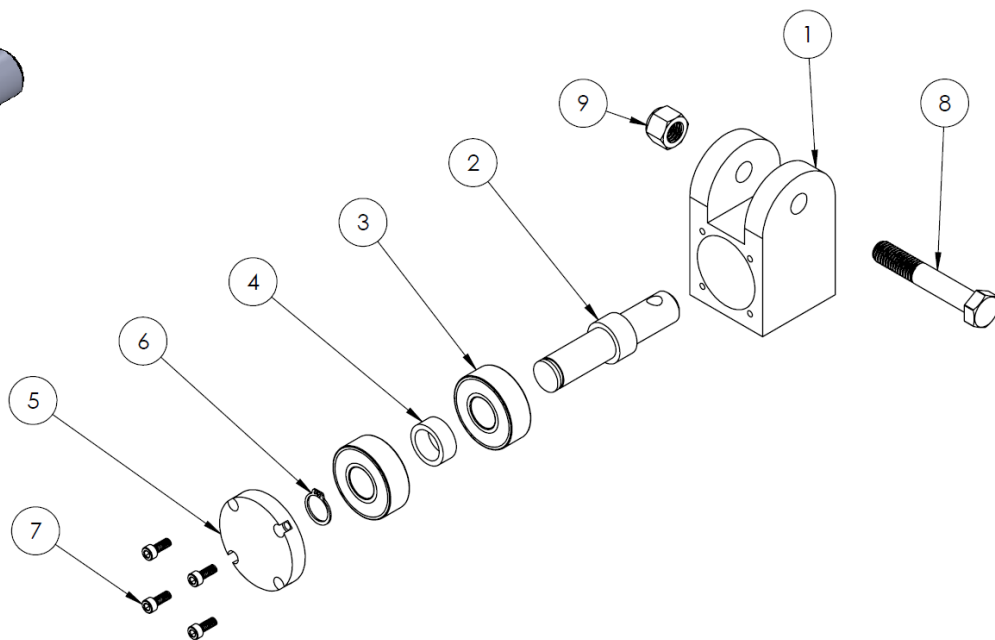
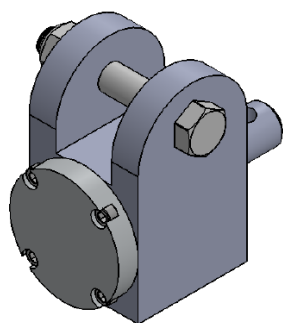
SECTION 4 PARTS



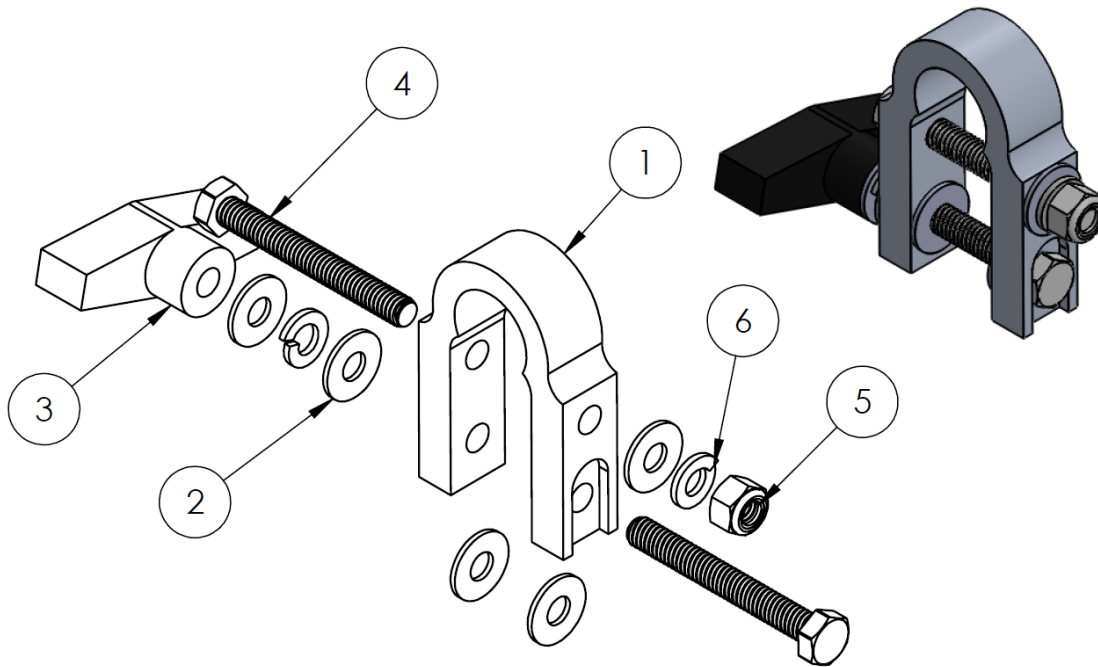
ITEM	PART NO.	DESCRIPTION	QTY
1	066869	OPPOSITE END HANDLE BRACKET	1
2	066870	TUBING 43 X 1	1
3	066862	CROSS BAR CLAMP	1
4	066863	TUBING - 18X1	1
5	066868	.25" X 1" SPRING PIN	2
6	066864	KICKSTAND CONNECTOR	1
7	066865	HANDLE GRIP	2
8	066866	KICKSTAND ASSEMBLY	1
9	066871	OPPOSITE END ROLLER SWIVEL	1

SECTION 4 PARTS

Opposite End Roller Swivel Assembly



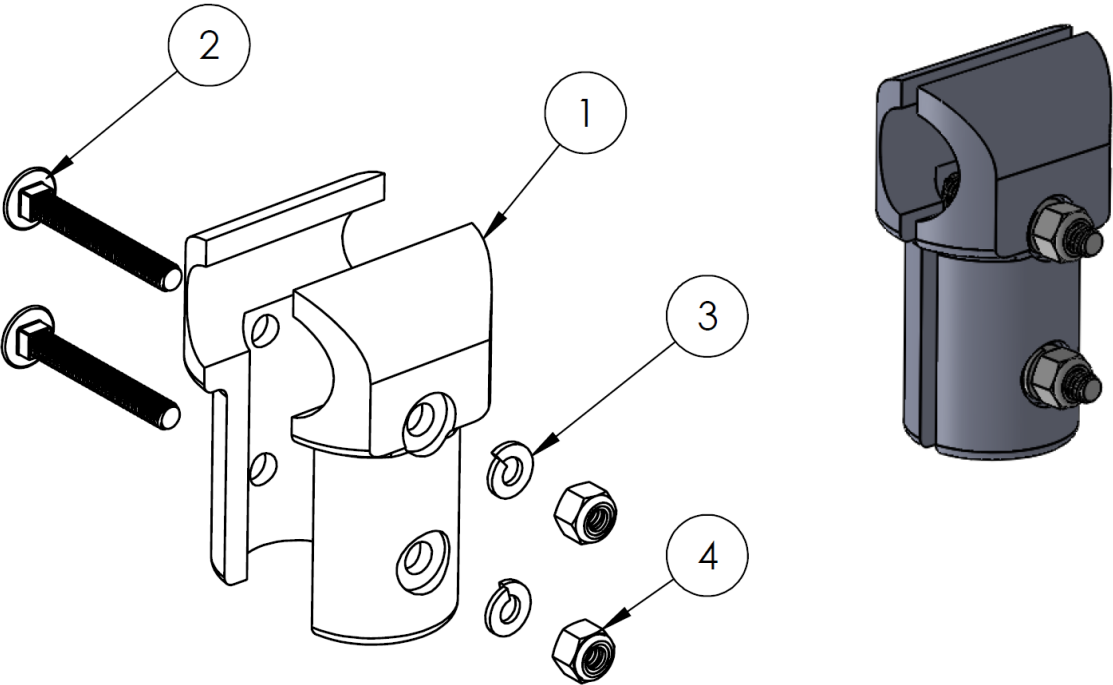
ITEM	PART NO.	DESCRIPTION	QTY
1	066872	SWIVEL CASE	1
2	066873	BEARING SHAFT	1
3	066806	.75 X 1.8 ROLLER BEARING	2
4	066874	BEARING SPACER	1
5	066875	END CAP	1
6	066810	RETAINING RING	1
7	066816	10-24 X .50 SHCS	4
8	066830	.5-16 X 3 1.5 THREAD HHCS	1
9	050492	.5-13 LOCKING HEX NUT	1



ITEM	PART NO.	DESCRIPTION	QTY
1	066876	U-CLAMP	1
2	MV415	1/4 FLAT WASHER	5
3	066877	5/16 X 2 1/2 PLASTIC KNOB	1
4	010026	5/16 - 18 X 2 1/2 HHCS	2
5	066878	5/16 - 18 NYLON LOCK NUT	1
6	010090	5/16 LOCK WASHER	2

SECTION 4
PARTS

Cross Bar Clamp Assembly
Universal End Plug



ITEM	PART NO.	DESCRIPTION	QTY
1	066879	T-CLAMP	1
2	043196	1/4-20 X 1 3/4 CH BOLT	2
3	010089	1/4 LOCK WASHER	2
4	PR611	1/4 NYLON LOCK NUT	2



ITEM	PART NO.	DESCRIPTION	QTY
1	065109	Plug, Univeral, End, 4.5"	1

MANUAL REVISION DETAIL			
REVISION #	REVISION DATE	REVISION REFERENCE #	REVISION BY
-	05/20	Initial Release	MW
A	01/22	Updated Cover	MK



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