

TRUSS SCREED

SE12



OPERATIONS & PARTS MANUAL

Manual Part #: 064633 | Revision: C
Language: English | Original Instructions



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.

Engine Driven Screed

OPERATIONS - PARTS

MANUAL

This manual covers the products listed below:

<u>Part No.</u>	<u>Description</u>
022380	Screed, Truss, Steel, Engine Driven, SE12, 2' Section (.61M)
027986	Screed, Truss, Steel, Engine Driven, SE12, 2.5' Section (.76m)
022379	Screed, Truss, Steel, Engine Driven, SE12, 5' Section (1.5m)
022378	Screed, Truss, Steel, Engine Driven, SE12, 7.5' Section (2.3m)
028379	Screed, Truss, Steel, Engine Driven, SE12, 10.0' Section (3.1m)

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Limited Warranty

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.
3. Replacement or repair parts, installed in the product, are warranted only for the remainder of warranty period of the product as though they were the original parts.
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.
8. Allen will pay shop labor on warranty items at the Allen Shop Labor Rate in existence on the date of the warranty claim. An Allen labor chart will determine the time allowed to complete a repair and will govern the shop labor hours that will be allowed.
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;
11. 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;
12. LOSS OF USE OF THE PRODUCT; COMMERCIAL LOSS; OR ANY OTHER CHARGES WHATSOEVER OR ANY LIABILITIES FOR DIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGE OR DELAY.
13. ALLEN ENGINEERING CORPORATION MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED. THIS LIMITED WARRANTY IS IN LIEU OF THE WARRANTY OF MERCHANTABILITY AND FITNESS. THERE ARE NO OTHER WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION ON THIS DOCUMENT.
14. No Allen employee or representative is authorized to change this warranty in any way or grant any other warranty
15. unless such change is made in writing and signed by an officer of Allen Engineering Corporation.

Information Contained In This Manual



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 O&M instructions. See your battery manufacturer for battery warranty.

Dealer 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: _____

Phone #: (____) - ____ - _____

Address: _____

City: _____ State: _____ Zip: _____

Salesman: _____ Mobile Phone _____

Additional Comments: _____



Ordering Parts

Section 4.0 contains illustrated parts lists for help in ordering replacement parts for your machine. Follow the instructions below when ordering parts to insure 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" section of this 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.



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.

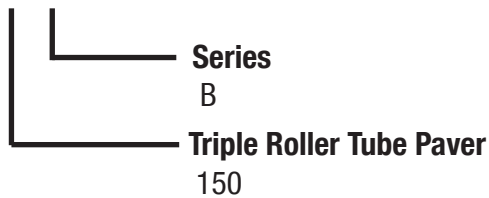
Model Number - Serial Number Codes

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

T150 B

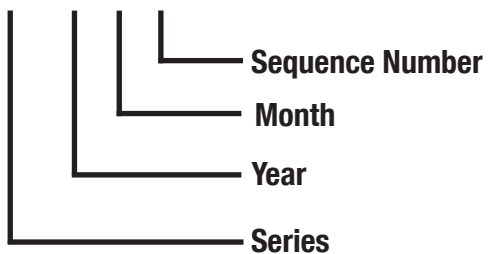


Serial Number

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

T15 14 01 180



Unit Identification

Unit Identification Plate Location:

An identification plate listing the model number and the serial number is attached to each unit and is located on the top left corner of the operator end handle. See image below for serial number plate location. This plate should not be removed at any time.

Please record the information found on this plate below so it will be available should the identification plate become lost or damaged. When ordering parts or requesting service information, you will ALWAYS be asked to specify the model and serial numbers of the machine.

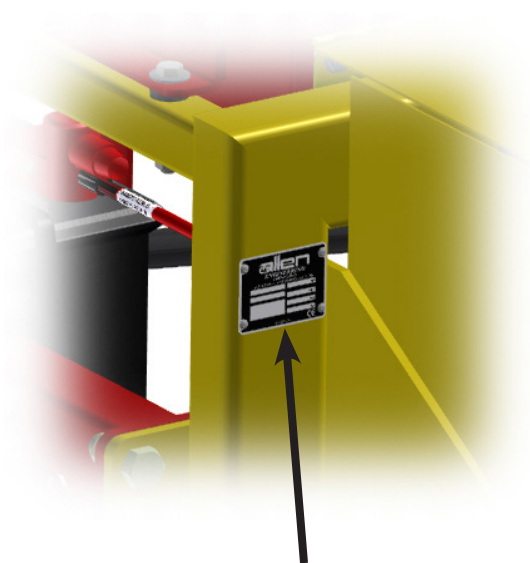
FILL IN FOR FUTURE REFERENCE

Model Number: _____

Serial Number: _____

Date Purchased: _____

Purchased From: _____



Technical Specifications

Engine Powered Screed Specifications		
Recommended Slump	3 in (76 mm)	
Max. Concrete Depth	8 in (203 mm)	
Max Screed Width	65 ft (19.8 m)	
PART #	DESCRIPTION	Weight lb. (kg)
022380	2' (.61 m) truss with eccentric shaft vibration	37 (17)
027986	2.5' (.76 m) truss with eccentric shaft vibration	46 (21)
022379	5' (1.5 m) truss with eccentric shaft vibration	90 (41)
022378	7.5' (2.3 m) truss with eccentric shaft vibration	135 (61)
028379	10' (3.1 m) truss with eccentric shaft vibration	180 (82)
ACCESSORIES		
PART #	DESCRIPTION	Weight lb. (kg)
025894	End handles (two each)	36 (16)
018993	Manual Winches, set of two	40 (18)
028363	Hydraulic Winches, includes 2.5' truss	261 (118)
527001	Adjustable end brackets with rollers	22 (10)
527000	Adjustable end brackets without rollers	20 (9)
046708	Invert/crown kit, for adjustments up to ¼-inch per foot	12 (6)
027879	9 HP Engine (Honda) Low Profile Kit	115 (52)
075815	9.5 HP Engine (Kohler) Kit	122 (55)
028327	11 HP Engine (Honda) Low Profile Kit	118 (54)
543000	Truss screed dolly (standard)	45 (20)
543001	Truss screed dolly (heavy duty)	87 (39)

- Top Pipe - Coupling System - Fine Thread Adjustment 1 5/16-16tpi with Full Flow 1" Non-Restricting Air System with Dual Locking Jam Nuts.
- Vibration Proff Welds with Exclusive Vibration-Dampening System.
- Bolt-On Blades with Quick Connecting Splice Plates Front and Back at Each Truss Section using 1/2-13 Nuts and Bolts Throughout.
- Balanced Design Truss Height to Overall Base Width Provides Equilateral Triangle Strength for Obtaining Precise Grade Control. and Structure Integrity.
- Top Pipe Coupling System Provides for Crowned or Invert Slab Section without Loosening Bottom Splice Blade Bolts. Special Crowns or Inverts are obtainable with Ball Joint Top Pipe Coupler or Crown Invert Bracket. Crowns greater then 1/8"/ft are considered special.
- NOTE: Select Screed Width to Allow Minimum Overhangs Past Forms; 6" Overhangs are Ideal.

Engine Specifications

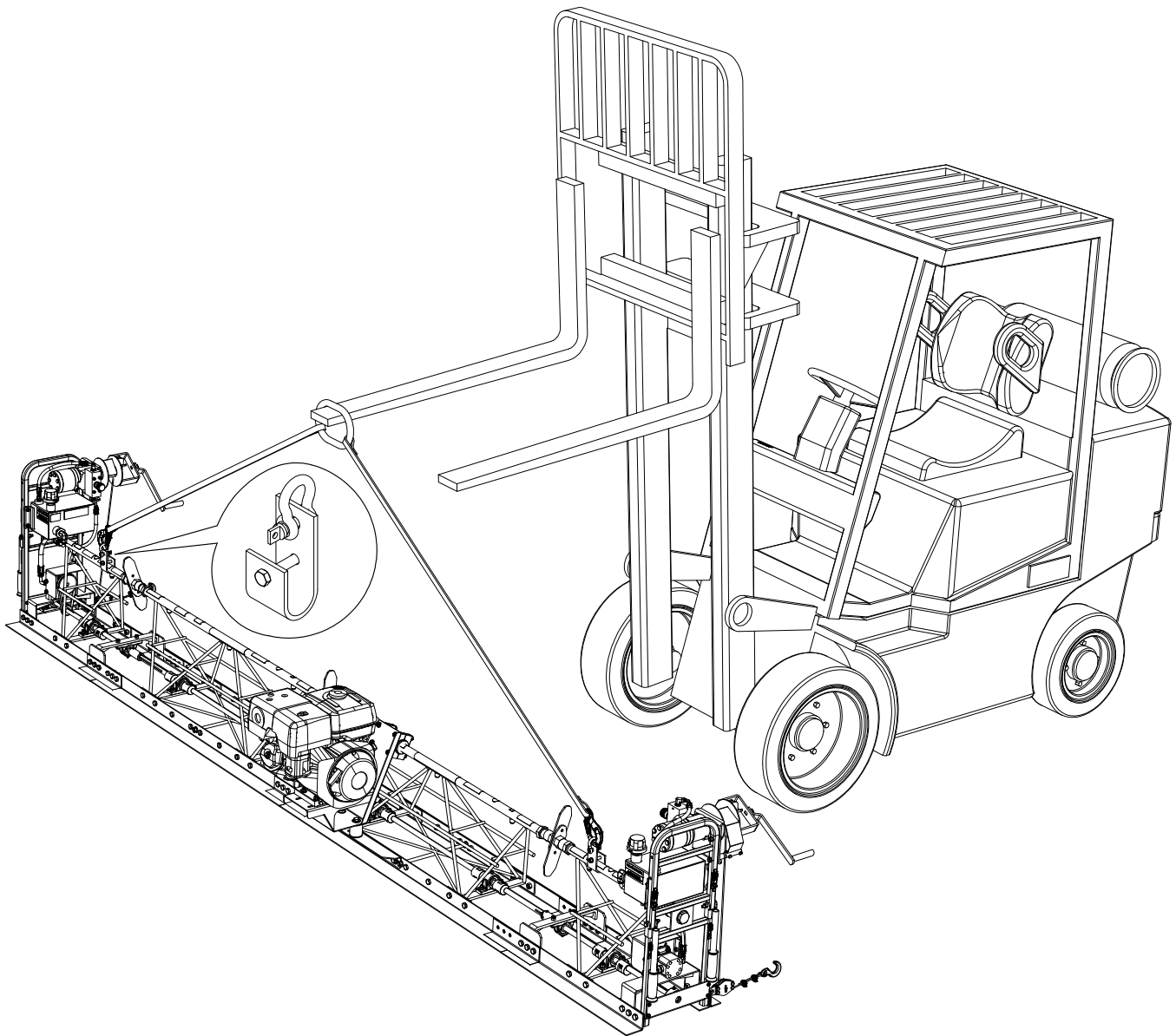
MODEL	Honda GX270	Honda GX340
Type	Air-cooled 4 stroke, Single Cylinder, OHV, Horizontal Shaft Gasoline Engine	Air-cooled 4 stroke, Single Cylinder, OHV, Horizontal Shaft Gasoline Engine
Bore X Stroke	3.0 in. X 2.3 in. (77 mm x 58 mm)	3.4 in. X 2.5 in. (88 mm x 64 mm)
Displacement	16.4 cu-in. (270 cc)	23.7 cu-in. (389 cc)
Max. Output	9.0 H.P. @3600 RPM	11.0 H.P. @3600 RPM
Fuel Tank Capacity	Approx. 1.95 U.S. Gallons (6.0 Liters)	Approx. 1.95 U.S. Gallons (6.0 Liters)
Fuel	Unleaded Gasoline	Unleaded Gasoline
Lube Oil Capacity	1.06 qt. (1.1 liters)	1.06 qt. (1.1 liters)
Oil Type	4-Stroke API, SFor SG SAE 10W-30 General Use	4-Stroke API, SFor SG SAE 10W-30 General Use
Speed Control Method	Centrifugal Fly-weight Type	Centrifugal Fly-weight Type
Cooling System	Forced Air	Forced Air
Starting Method	Recoil Start	Recoil Start
Spark Plug Type	BPR6ES NGK	BPR6ES NGK
Spark Plug Gap	0.028-0.031 in. (0.70 - 0.80 mm)	0.028-0.031 in. (0.70 - 0.80 mm)
Dimension (L x Wx H)	15.0 x 16.8 X 16.6 in. (381 X 428 X 422 mm)	15.9 x 18.1 X 17.6 in. (406 X 460 X 448 mm)
Dry Net Weight	55.1 lbs (25 Kg.)	69.8 lbs (31.7 Kg.)

MODEL	Kohler CH395
Type	Air-cooled 4 stroke, OHV, Horizontal Shaft Gasoline Engine
Bore X Stroke	3.1 in. X 2.3 in. (78 mm x 58 mm)
Displacement	16.9 cu-in. (277 cc)
Max. Output	9.5 HP
Fuel Tank Capacity	Approx. 1.79 U.S. Gallons (6.8 Liters)
Fuel	Unleaded Gasoline
Lube Oil Capacity	1.4 qt. (1.3 liters)
Oil Type	10W-30 General Use
Speed Control Method	Electric
Starting Method	Recoil Start
Spark Plug Gap	0.028-0.031 in. (0.70 - 0.80 mm)
Dimension (L x Wx H)	15.9 x 16.8 X 16.7 in. (40.4 X 42.7 X 42.4 cm)
Dry Net Weight	61.7 lbs (27.8 Kg.)

Lifting Specifications

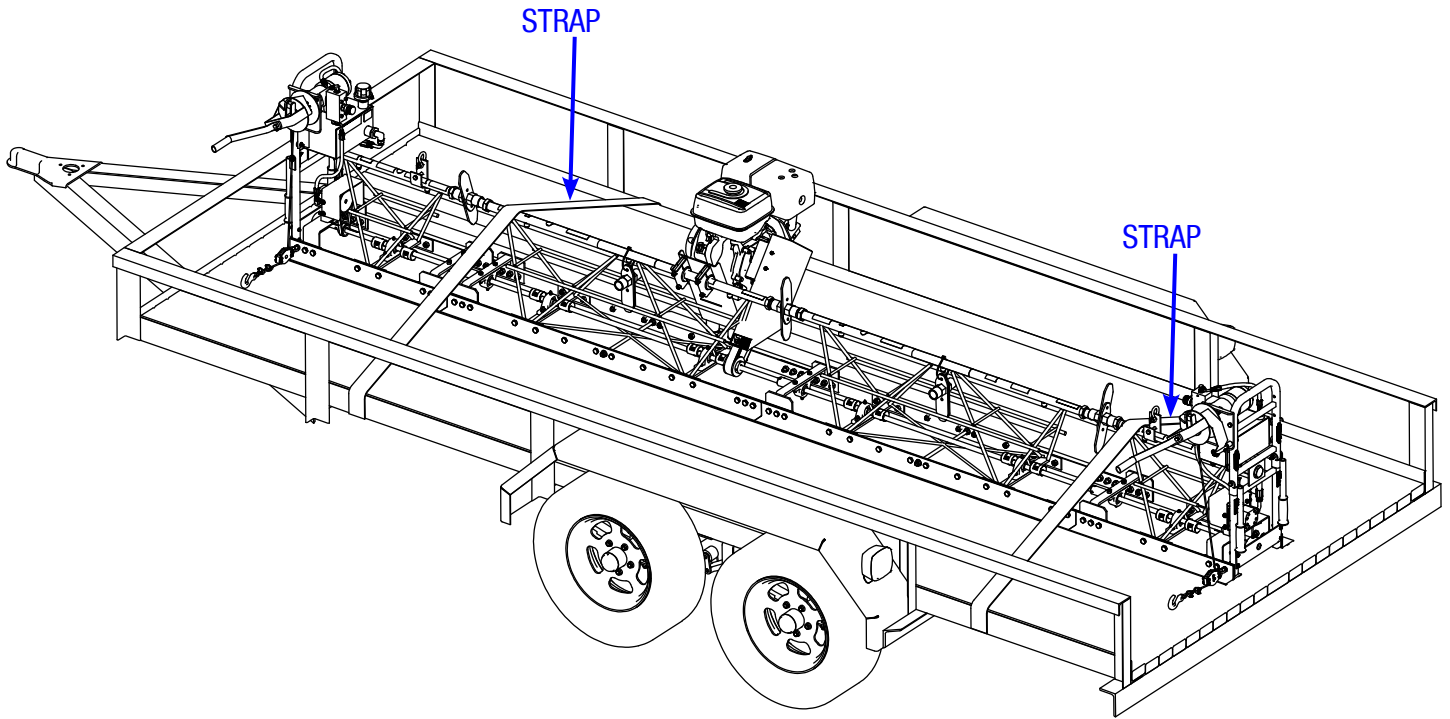
The following procedure and illustration describe how to lift the screed.

- Attach the U-shaped lifting bracket and associated hardware to the top of each truss frame section as shown in the illustration below. Tighten bracket securely so that it will not slip.
- Utilize a spreader bar of proper length and lifting capacity. Secure lifting straps from both ends of the spreader bar to the attached lifting brackets.
- Connect lifting cables from the spreader bar to the lifting hook of a crane or forklift. Ensure that the lifting hook and chain are of appropriate lifting capacity.
- Use crane or forklift to hoist screed onto a flatbed truck for transporting or onto the form for screeding.



Transportation

Place the screed on a flatbed truck or a trailer during transportation as shown below. Attach suitable tie-down straps to the screed to secure it. Route tie-down straps over truss frame sections as required.



Standard Machine Dimensions

The dimensions of the air powered screed in this manual are illustrated on this page. the geight and width are in Figure 1 and the lengths of the different screed sections available are illustrated in Figure 2.

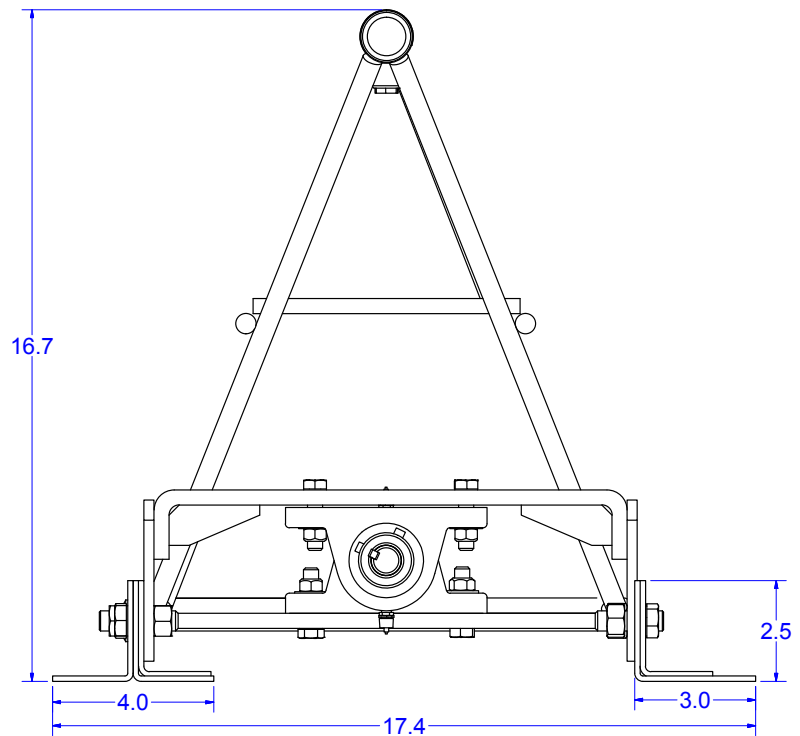
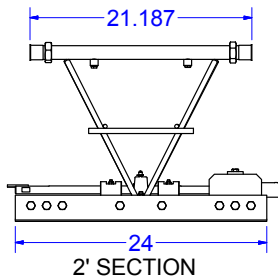


FIGURE 1

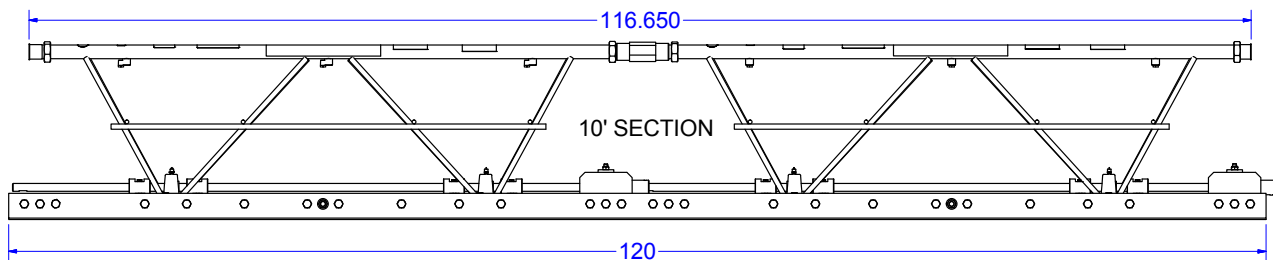
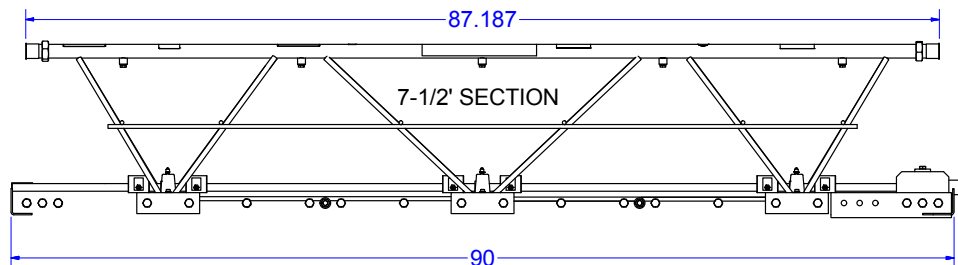
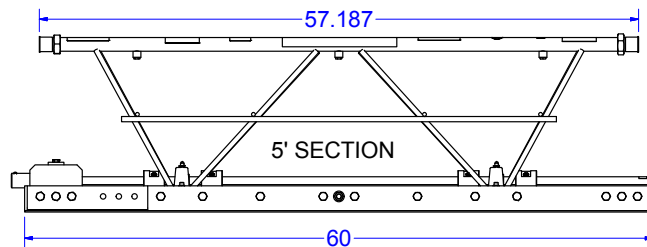
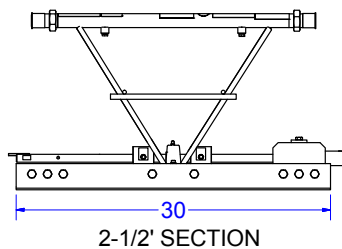


FIGURE 2

SECTION 1 SAFETY

State Regulations Proposition 65 Warning



WARNING



CALIFORNIA — Proposition 65 Warning

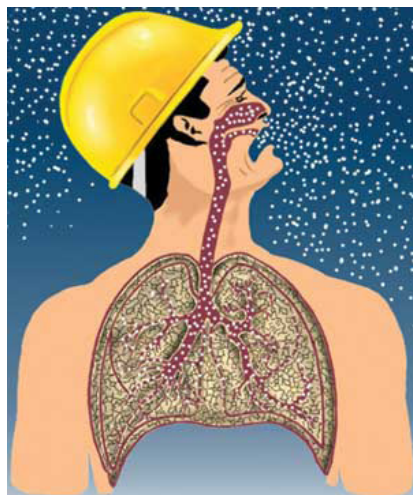
Engine exhaust and some of its constituents, and some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to the State of California to cause cancer, birth defects and other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks.
- Cement and other masonry products.
- Arsenic and chromium from chemically treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: **ALWAYS** work in a well ventilated area, and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

Federal Regulation Respiratory Hazard

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. If you are unfamiliar with the risks associated with the particular process and/or material being cut or the composition of the tool being used, review the material safety data sheet and/or consult your employer, the material manufacturer/supplier, governmental agencies such as OSHA and NIOSH and other sources on hazardous materials. California and some other authorities, for instance, have published lists of substances known to cause cancer, reproductive toxicity, or other harmful effects.

Control dust, mist and fumes at the source where possible. In this regard use good work practices and follow the recommendations of the manufacturers or suppliers, OSHA/NIOSH, and occupational and trade associations. Water should be used for dust suppression when wet cutting is feasible. When the hazards from inhalation of dust, mists and fumes cannot be eliminated, the operator and any bystanders should always wear a respirator approved by NIOSH/MSHA for the materials being used.

! WARNING

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. Silica is a basic component of sand, quartz, brick clay, granite and numerous other minerals and rocks. Repeated and/or substantial inhalation of airborne crystalline silica can cause serious or fatal respiratory diseases, including silicosis. In addition, California and some other authorities have listed respirable crystalline silica as a substance known to cause cancer. When cutting such materials, always follow the respiratory precautions mentioned above.

SECTION 1 SAFETY

Safety Information

DO NOT operate or service the equipment before reading the entire manual. Safety precautions should be followed at all times when operating this equipment. Failure to read and understand the safety messages and operating instructions could result in injury to yourself and others.

SAFETY NOTES

The four safety notes shown below will inform you about potential hazards that could injure you or others. The safety notes specifically address the level of exposure to the operator and are preceded by one of four words: DANGER, WARNING, CAUTION or NOTICE.



Indicates a hazardous situation which, if not avoided, **will** result in death or serious injury.



Indicates a hazardous situation which, if not avoided, **could** result in death or serious injury.






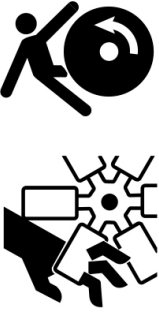


Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.



Addresses practices not related to personal injury.



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.

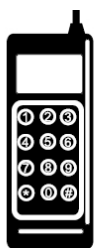
Symbol	Safety Hazard
	Lethal exhaust gas hazards
	Explosive fuel hazards
	Burn hazards
	Rotating parts/crush hazards
	Pressurized fluid hazards
	Hydraulic fluid hazards

SECTION 1 SAFETY

General Safety

NEVER operate this equipment without proper protective clothing, shatterproof glasses, respiratory protection, hearing protection, steel-toed boots and other protective devices required by the job or city and state regulations.

Avoid wearing jewelry or loose fitting clothes that may snag on the controls or moving parts as this can cause serious injury.



NEVER operate this equipment when not feeling well due to fatigue, illness or when under medication.



NEVER operate this equipment under the influence of drugs or alcohol.



ALWAYS clear the work area of any debris, tools, etc. that would constitute a hazard while the equipment is in operation.

ALWAYS wear adequate hearing protection while running your air powered screed.

DO NOT use the equipment for any purpose other than its intended purposes or applications.

This equipment should only be operated by trained and qualified personnel 18 years of age and older.

Whenever necessary, replace serial plate, operation and safety decals when they become difficult to read. Manufacturer does not assume responsibility for any accident due to equipment modifications.

Unauthorized equipment modifications will void all warranties.

NEVER use accessories or attachments that are not recommended by AEC for this equipment.

Damage to the equipment and/or injury to operator may result.

ALWAYS know the location of the nearest fire extinguisher.



ALWAYS know the location of the nearest first aid kit.



ALWAYS know the location of the nearest phone or keep a phone on the job site. Also, know the phone numbers of the nearest ambulance, doctor and fire department. This information will be invaluable in the case of an emergency.

EMERGENCY



Engine fuel exhaust gases contain poisonous carbon monoxide. This gas is colorless and odorless, and can cause death if inhaled.

The engine of this equipment requires an adequate free flow of cooling air. never operate this equipment in any enclosed or narrow area where free flow of the air is restricted. If the air flow is restricted it will cause injury to people and property and serious damage to the equipment or engine.



NEVER operate the equipment in an explosive atmosphere or near combustible materials. An explosion or fire could result causing severe bodily harm or even death.



If applicable, never use your hand to find hydraulic leaks. Use a piece of wood or cardboard. Hydraulic fluid injected into the skin must be treated by a knowledgeable physician immediately or severe injury or death can occur.



ALWAYS keep clear of rotating or moving parts while operating the screed.

NEVER disconnect any emergency or safety devices. These devices are intended for operator safety.

Disconnection of these devices can cause severe injury, bodily harm or even death.

Disconnection of any of these devices will void all warranties.



NEVER allow passengers or riders on the screed during operation.

NEVER lubricate components or attempt service on a running machine.

SECTION 1 SAFETY

General Safety, continued

NOTICE

ALWAYS keep the machine in proper running condition.

Fix damage to machine and replace any broken parts immediately.

ALWAYS inspect your screed upon arrival for damage or tampering that can sometimes occur during shipping. If damage is found, file a claim with your carrier **Immediately!!** Mark freight bill of lading as “damaged shipping”

ALWAYS store equipment properly when it is not being used. Equipment should be stored in a clean, dry location out of the reach of children and unauthorized personnel.

ENGINE SAFETY



DO NOT place hands or fingers inside engine compartment when engine is running.

NEVER operate the engine with heat shields or guards removed.

Keep fingers, hands hair and clothing away from all moving parts to prevent injury.



ALWAYS disconnect spark plugs before servicing engine to prevent accidental start-up.

DO NOT remove the engine oil drain plug while the engine is hot. The possibility of hot oil exists which could cause severe scalding.



NEVER touch the hot exhaust manifold, muffler or cylinder. Allow these parts to cool before servicing equipment.

ALWAYS be aware of HOT components on this machine, such as, Hydraulic components.



NOTICE

NEVER run engine without an air filter or with a dirty air filter. Severe engine damage may occur. Service air filter frequently to prevent engine malfunction.

NEVER tamper with the factory settings of the engine or engine governor. Damage to the engine or equipment can result if operating in speed ranges above the maximum allowable.

FUEL SAFETY



DO NOT start the engine near spilled fuel or combustible fluids. Fuel is extremely flammable and its vapors can cause an explosion if ignited.

ALWAYS refuel in a well-ventilated area, away from sparks and open flames.

ALWAYS use extreme caution when working with flammable liquids.

DO NOT fill the fuel tank while the engine is running or hot.

DO NOT overfill tank, since spilled fuel could ignite if it comes into contact with hot engine parts or sparks from the ignition system.

Store fuel in appropriate containers, in well-ventilated areas and away from sparks and flames.

NEVER use fuel as a cleaning agent.

DO NOT smoke around or near the equipment. Fire or explosion could result from fuel vapors or if fuel is spilled on a hot engine.



TRANSPORTATION SAFETY



NEVER allow any person or animal to stand underneath the equipment while lifting.

NEVER lift or transport screed with personnel standing on the screed.

Use proper heavy lifting procedures when lifting the screed.



NOTICE

Machine can be transported on flatbed truck of proper weight capacity.

The easiest way to lift the screed is to attach lifting hooks to the screed frame. Lifting hooks should be placed at equal distances from each end of the screed.

SECTION 1 SAFETY

General Safety, continued

A strap or chain can be attached to these hooks, allowing a forklift or crane to lift the screed up onto and off of a slab of concrete. The strap or chain should have a minimum of 2,000 pounds (1,000 kg) lifting capacity and the lifting device must be capable of lifting at least this amount.

ALWAYS make sure crane or lifting device has been properly secured to the lifting hooks on the equipment.

ALWAYS shutdown engine before transporting.

NEVER lift the equipment while the engine is running.

Tighten fuel tank cap securely and close fuel cock to prevent fuel from spilling.

Use adequate lifting cable (wire or rope) of sufficient strength.

DO NOT lift machine to unnecessary heights.

ALWAYS tie down equipment during transport by securing the equipment with rope.

TOWING SAFETY



Check with your local county or state safety towing regulations, in addition to meeting Department of Transportation (DOT) Safety Towing Regulations, before towing your screed.



In order to reduce the possibility of an accident while transporting the screed on public roads, **ALWAYS** make sure the trailer that supports the screed and the towing vehicle are mechanically sound and in good operating condition.

ALWAYS shutdown engine before transporting

Make sure the hitch and coupling of the towing vehicle are rated equal to, or greater than the trailer “gross vehicle weight rating.”

ALWAYS inspect the hitch and coupling for wear. **NEVER** tow a trailer with defective hitches, couplings, chains, etc.

Check the tire air pressure on both towing vehicle and trailer. Trailer tires should be inflated to 50 psi cold. Also check the tire tread wear on both vehicles.

ALWAYS make sure the trailer is equipped with a safety chain.

ALWAYS properly attach trailer's safety chains to towing vehicle.

ALWAYS make sure the vehicle and trailer directional, backup, brake and trailer lights are connected and working properly.

DOT Requirements include the following:

- Connect and test electric brake operation.
- Secure portable power cables in cable tray with tie wraps.

The maximum speed for highway towing is 55 MPH unless posted otherwise. Recommended off-road towing is not to exceed 15 MPH or less depending on type of terrain.

Avoid sudden stops and starts. This can cause skidding, or jack-knifing. Smooth, gradual starts and stops will improve towing.

Avoid sharp turns to prevent rolling.

Trailer should be adjusted to a level position at all times when towing.

Raise and lock trailer wheel stand in up position when towing.

Place chock blocks underneath wheel to prevent rolling while parked.

Place support blocks underneath the trailer's bumper to prevent tipping while parked.

Use the trailer's swivel jack to adjust the trailer height to a level position while parked.

CLEANING SAFETY



DO NOT use gasoline, other fuels, or any flammable solvent to clean parts, especially in enclosed areas. Fumes from fuels and solvents can cause serious health problems if you are exposed to them over an extended period of time.



DO NOT attempt to clean or service screed while machine is running.

SECTION 1 SAFETY

General Safety, continued

NOTICE

When the life cycle of this equipment is over, it is recommended that the screed frame and all other metal parts be sent to a recycling center.

Metal recycling involves the collection of metal from discarded products and its transformation into raw materials to use in manufacturing a new product.

Recyclers and manufacturers alike promote the process of recycling metal. Using a metal recycling center promotes energy cost savings.



NOTICE

The gasoline engine used in this equipment has been designed to reduce harmful levels of carbon monoxide (CO), hydrocarbons (HC) and nitrogen oxides (NOx) contained in diesel exhaust emissions.

This engine has been certified to meet US EPA Evaporative emissions requirements in the installed configuration. Attempting to modify or make adjustments to the engine emission system by unauthorized personnel without proper training could damage the equipment or create an unsafe condition.

Additionally, modifying the fuel system may adversely affect evaporative emissions, resulting in fines or other penalties.

ENVIRONMENTAL SAFETY

Decommissioning is a controlled process used to safely retire a piece of equipment that is no longer serviceable. If the equipment poses an unacceptable and unrepairable safety risk due to wear or damage or is no longer cost effective to maintain (beyond life-cycle reliability) and is to be decommissioned (demolition and dismantlement), be sure to follow rules below.

DO NOT pour waste or oil directly onto the ground, down a drain or into any water source.

Contact your country's Department of Public Works or recycling agency in your area and arrange for proper disposal of any electrical components, waste or oil associated with this equipment.

AVERAGE EQUIVALENT SOUND PRESSURE LEVEL	SOUND PRESSURE LEVEL AT OPERATOR'S EAR	EQUIVALENT SOUND POWER LEVEL
110 dB(A)	106dB(A)	126dB(A)

The information above was acquired through vibration and sound analysis taken here at AEC. A certified sound and vibration technician was hired to test several of our products. All of the data collected was measured according to OSHA standards ISO 3744. If there are any questions on this particular subject, contact AEC Customer Service at 870-236-7751 or 800-643-0095.

SECTION 1 SAFETY

Notes

SECTION 2 OPERATIONS

Before starting the air powered screed, there are a few items that need to be looked over.

- Make sure that bolts are secure and will not vibrate loose.
- Check jam nuts on top pipe to ensure that they are tight against the top pipe coupler.
- Check the hydraulic level in the tank for the hydraulic winches (if applicable).
- Check winch cables to make sure that they will not loosen during the screed run.
- Look over the forms to check for unevenness so that the screed will not hang up.

Ask yourselves these questions when preparing your screed for a job.

- What is the “exact” pour width?
- What is the slump?
- Is the slab flat, crowned, or inverted?
- What is the required surface tolerance?
- Choose screed type and size based on the above information.
- Are any accessories required?
- Do the winches work properly?

Operating your air powered screed correctly will greatly produce the outcome of the pour. Follow the instructions below to operate your screed correctly and you will be very pleased with your equipment.

THE JOB SITE:

FORMS

- Are they Stable?
- Will they support the weight of the screed?
- Have the form pins been driven below the top of the forms?
- Can the screed pass from form to form without getting caught?

COLUMNS & WALLS

- Screed size is important.
- How will they support the weight of the screed?
- Consider the use of HD winches & 6" extension handles.
- What do you do when you are up against a wall?
 - a) wall bracket b) pipe rail c) form

CONCRETE

- Are there any mix characteristics or additives that effect the performance of the screed?
- Will the supply of concrete be steady or intermittent?

Be aware of the importance of WEATHER!

THE CREW

- Two key people should be trained to operate the scree.
- The screed is a finishing machine, there is a technique to its operation. The TRAVEL SPEED, the VIBRATORY FREQUENCY, and the FEEDING of the screed must all be controlled.
- Knowing how the winches operate before you start is essential.
- To what do you hook the cables.
- Tools and spare parts should be on the job.

SECTION 2 OPERATIONS

Lifting Procedures

The following procedures describe proper lifting techniques for screed. There is no OSHA standard weight limit for manual lifting. Therefore, rather than stating a regulated limit, they ask that employers or contractors do the following:

- A) identify each hazard to which a person at the work place (job site) is likely to be exposed to.
- B) Assess the risk of injury or harm to a person resulting from each hazard.
- C) Consider the means by which the risk may be reduced.

NOTE: Never lift more than what you personally feel that you can handle.

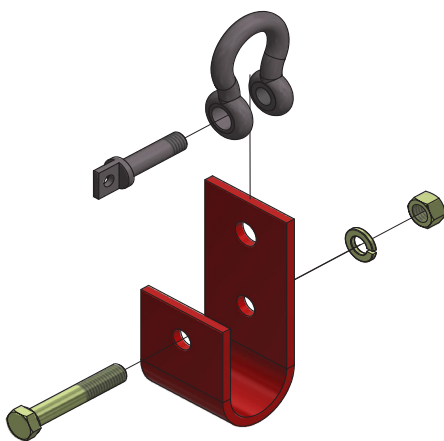
The lifting handles at each end of the screed are not intended to be used as the only source of lift the screed. It is quite obvious that two large men will not be able to lift 70 feet of screed. the following list of maximum screed lengths is very important so that the length of your screed will not be too long.

SX SCREED - MAXIMUM 60 FEET

HD SCREED - MAXIMUM 60 FEET

SHD SCREED - MAXIMUM 60 FEET

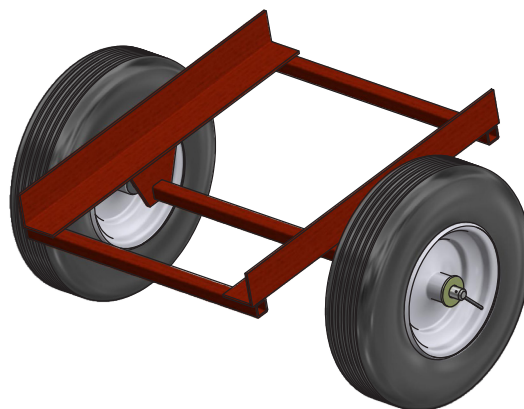
For proper lifting of an average screed (30 ft.), the screed lifting hook is an ideal item to use. This instrument should be placed at equal distances from each end. A special lifting bridle is then used by a forklift, crane, front-end loader, etc. to raise and transport the screed. Also available from Allen Engineering is the screed cart. This item is used to move the screed around on the job site only.



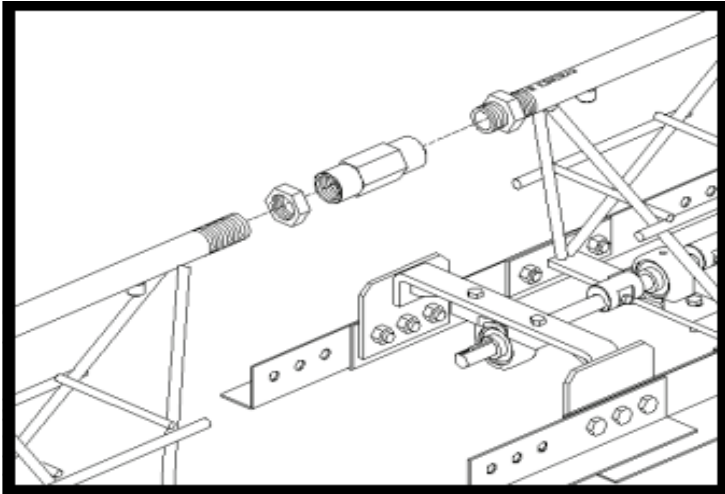
**LIFTING HOOK
PART #532000**

**STANDARD SCREED CART
MAXIMUM 500 lbs. - 543000**

**HEAVY DUTY SCREED CART
MAXIMUM 1,000 lbs. - 543001**



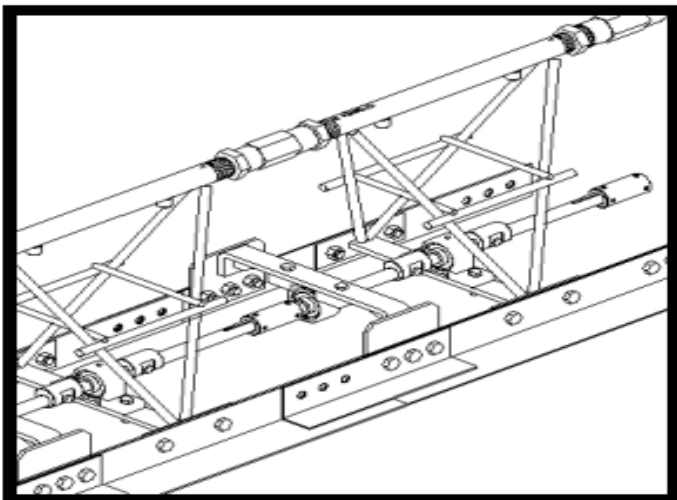
The following figures describe the proper instructions for correctly assembling engine driven screed. Make sure you follow the instructions in order. If the assembling of your screed is not done in this order, there could be some problems in trying to maintain floor flatness because your screed is not level. Levelness of your screed is critical!



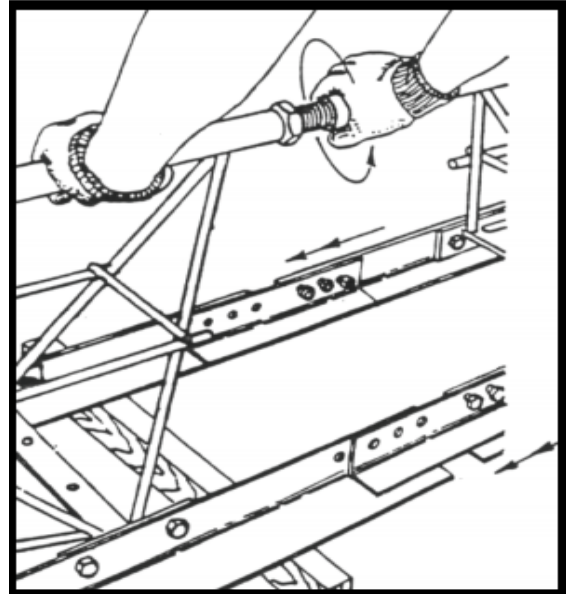
STEP 1: Screw jam nuts onto top pipe. Start the top pipe coupler onto the top pipe of the mating truss section. Only thread the coupler on about three turns

NOTE: The right and left hand jam nuts will already be installed on the screed section.

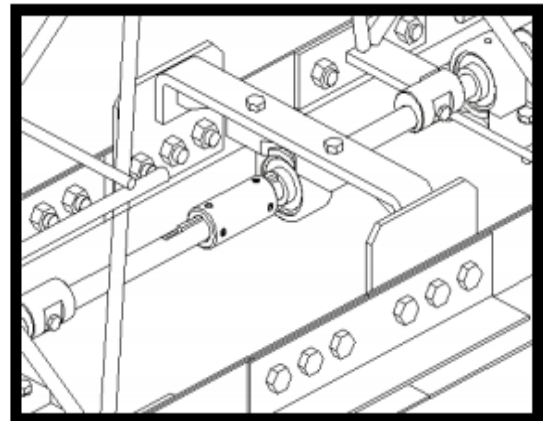
TIGHTEN JAM NUTS AFTER SCREED IS LEVEL



STEP 3: Bearing support bolts should be loose so that splice plate can move in clearance holes. With 15" adjustable wrench, turn top pipe coupler until screed an bull float blades contact, then back the coupler off slightly so that the blades touch without tension.



STEP 2: Slide screed sections together until top pipe threads on screed marked "R" line up with threads in coupler on the screed. Start coupler on adjoining threads by hand to prevent cross threading.

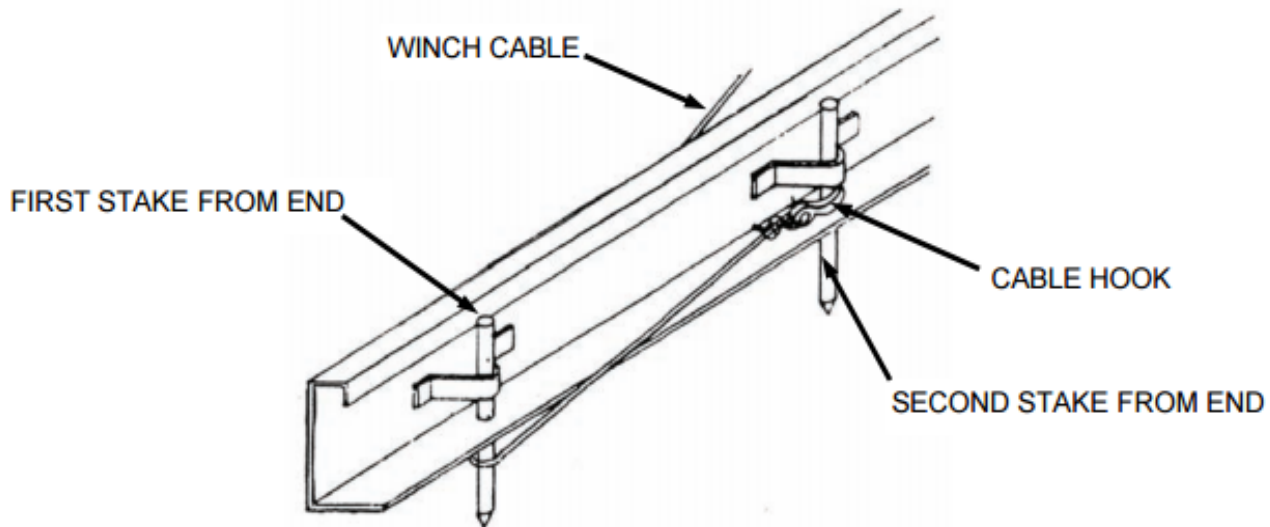


STEP 4: Tighten bolts on splice plates. Next slide the shaft coupler on the adjoining section and tighten the set screws provided. make sure that the 3/16 key is on the shaft before sliding sections together. Repeat these steps for attaching all engine driven screed sections.

SECTION 2 OPERATIONS

Attaching Winches to Form Stakes

The figure below illustrates the proper way to attach the winch cables to the form stake. This is the only way that the cables should be attached. If the cables are not attached properly, the cables could snap loose causing severe injury to finishing personnel surrounding the screed.



To attach the winch cables properly, adhere to the following instructions.

- Take the cable and go around the last form stake. Make sure that you go underneath the form.
- Attach the cable hook to the next form stake from the end.

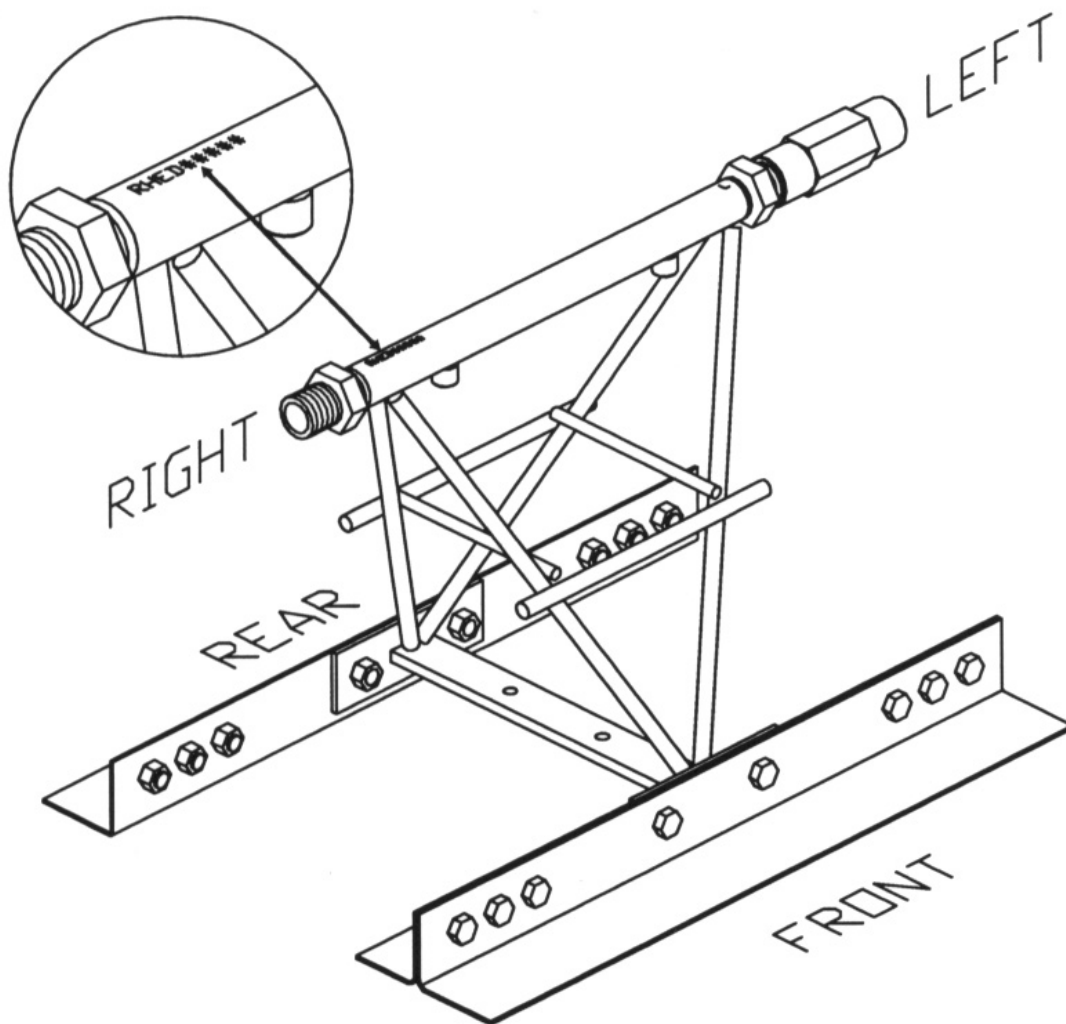
Determining Left and Right of Screed Section

SECTION 2 OPERATIONS

The following illustration shows all the key information on how to determine the left and right and the front and rear of a screed section.

Note the circle with the serial number.

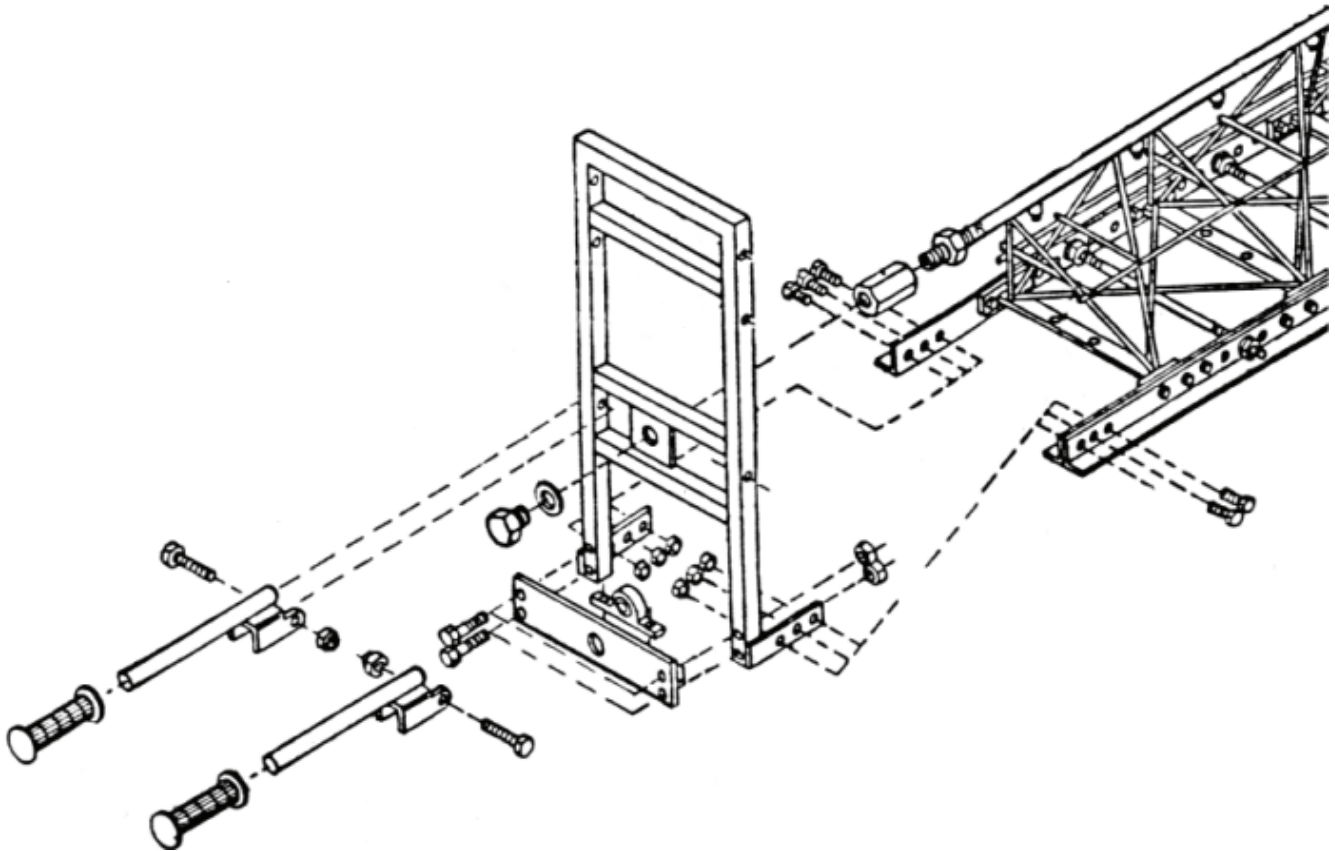
this is probably the easiest way to determine the left and right sides of the screed assembly. The right side has the model number and the 5 digit serial number. The left hand side is only stamped with an "L". Also the front of the screed is determined by the two screed blades mounted back-to-back. The rear of the screed has only one bull-float blade.



SECTION 2 OPERATIONS

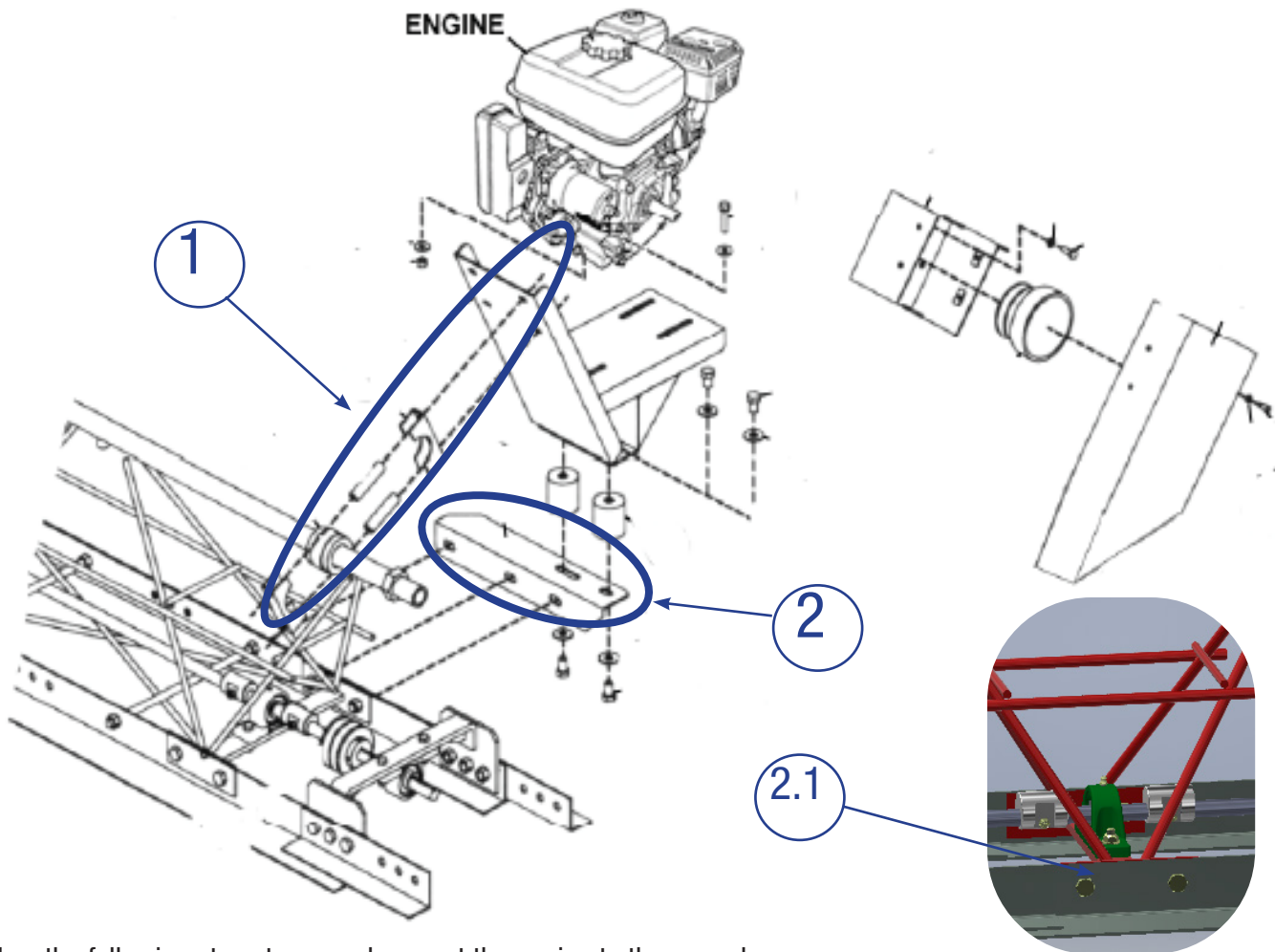
End Handle Assembly

The following figure shows the proper way to mount a standard end handle to the screed section. Do not try to modify this mounting procedure, this is the only way to mount the end handles where they will work properly.



Follow the steps below to properly mount the end handles to your screed.

- Mount the bearing onto the bearing support bracket.
- Mount the handle grips onto the lifting handles.
- Mount the lifting handles onto the end handle using two 3/8 x 2 bolts and 3/8 nylon lock nuts.
- Mount the bearing support bracket to the end handle using four 1/4 x 1 1/2 bolts and 1/4 stover nuts.
- Mount the end handle to the screed using three 1/2 x 3/4 bolts, three 1/2 x 1 bolts and six 1/2 hex nuts. screw the appropriate adapter for the end you are working on onto the top pipe.



Follow the following steps to properly mount the engine to the screed.

- Firstly insure that the Engine itself is on the rear side of the screed.
- Make sure to attach the v-belt and pulley to the drive shaft.

1

- Start by attaching the rubber bushing to the top bar of the screed.
- Proceed to place the clamp and clamp spacer around the bushing.
- Tighten the engine mount onto the screed with the 4 3/8-16 x 3 3/4" hex screws, 3/8" washer, and 3/8" hex nut.

2

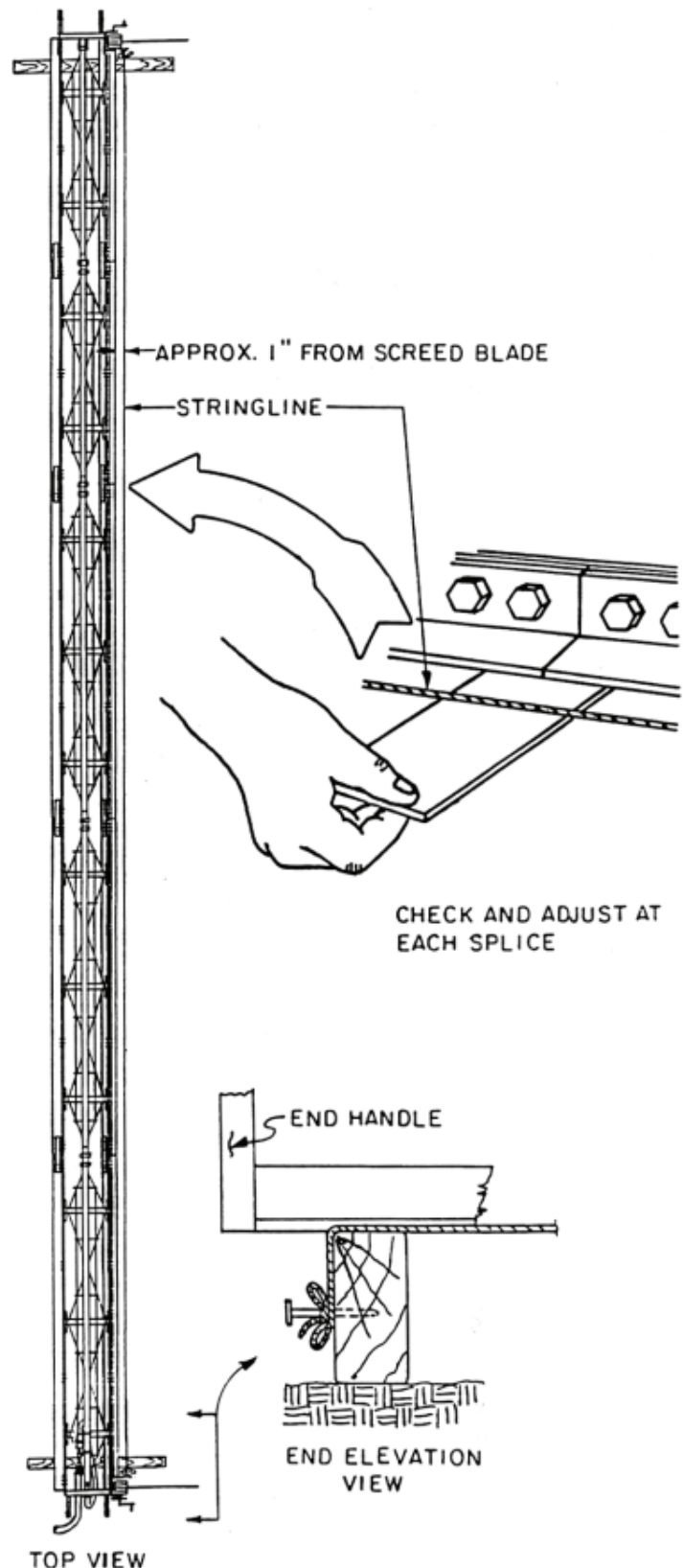
- Line the engine up with the holes shown in the figure at 2.1.
- Tighten the 1/2-13 x 1" hex screw, 1/2" washer, and 1/2-13" hex nut to the screed.

SECTION 2 OPERATIONS

String Lining

To string line your screed, there are a few important steps that need to be followed.

- Place screed ends on a 2 x 6 or other wooden type support.
- At approximately 1" out from the leading edge of the screed blade, drive a nail into the wooden support. NOTE: Nail should be on the outside of the wooden support.
- Stretch a line as tight as possible from nail to nail. Make sure that the nail is contacting each support at the pint of blade contact.
- NOTE: The supports do not have to be on the same level.
- Use a short, flat piece of metal or wood as a gauge block to compare the string to the bottom surface of the screed blade and bull-float blade.
- The blades should be equal to each other at each splice. If they are not even, loosen jam nuts and tighten top pipe coupler as described on page 33.



SECTION 3 SERVICE

SECTION 3 SERVICE

Periodic Maintenance Schedule

The following list contains information regarding the maintenance and operations procedures that must be adhered to improve the life of your machine. A well maintained piece of machinery will provide you years of satisfaction.

- Use Loctite anti-seize MIL A 907D to lubricate the top pipe coupler threads before assembly.
- Oil winch bushings at 10 hr. operation intervals. Use light lubricating oil.
- **CAUTION!** Change worn or frayed cables - cables under tension may snap and cause severe injury. Use proper methods illustrated in this manual to properly attach cables. **ALWAYS** connect cables properly - wrap cable under last form pin then connect cable hook to the next form pin towards the screed.
- **DO NOT** hook cables to a stake driven into the ground, the stake can tilt and allow cable under tension to snap back and cause severe injury.
- **CAUTION!** For Screeds over 75ft. in length consult the factory.
- **ALWAYS** make sure that the drive shaft is aligned properly. To make sure that you do this correctly you will need to utilize AEC tool part number 020255.
- When connecting drive shafts, assemble with all the weights on each section facing the bull-float blade. if weights are mis-matched, the screed will no vibrate properly. Match the key-ways on the drive shafts and the connectors.
- Do not over speed, engine RPM must not exceed 3600 RPM. Shaft speed will not exceed design limits if engine speed maximum is adhered to.
- **DO NOT** crown or invert without universal joints or flex couplers on the shaft connectors.
- Maintain engine in accordance with the manufacturer's instructions.
- Grease screed bearings at 40 hr. operation intervals. Use one stroke of a hand grease gun. Use SHell Alvonia #21, Texaco L-15, Chevron SR1. Clean fittings before greasing. For low temperatures, use Dow Molykote BR-2. **DO NOT OVER GREASE.**
- For cold weather operations, use bearing lubricant Allen BR-2. This grease flows at amients of -22°F~ thru 356°F.
- **CAUTION!** When installing pillow block bearings, be sure that the bottom flat surface does not have nicks or deep marks. this can cause the bearing to ride off of the mounted surface; when vibration occurs this small deformation can wear off quickly, allowing the bearing to loosen. With the bearing loose on its mounting, failure can occur.

Periodic Maintenance Schedule

The table below list basic engine maintenance. Refer to OEM engine manufacturer's Operation Manual for additional information on engine maintenance. A copy of the engine operator's manual was supplied with the machine when it was shipped.

TABLE CHECK LIST					
ITEM	DAILY	EVERY 20 HRS	EVERY 50 HRS	EVERY 100 HRS	EVERY 300 HRS
Check engine oil level	✓				
Check & tighten external hardware	✓				
Check drive belt for wear		✓			
Check valve clearance					✓
Change engine oil				✓	
Replace engine oil filter				✓	
Replace spark plug					✓

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

SECTION 4 PARTS

Factory Service Information

This section contains the illustrated drawings and parts list for help in identifying and/or ordering replacement parts for your machine. Follow the instructions in the front section of this manual “Ordering Parts” when ordering replacement parts to insure prompt and accurate delivery.



! NOTE

All set screws have blue (LOC-TITE™) applied at the factory. If set screw is removed or loosened for any reason re-apply blue (LOC-TITE™).



! NOTE

All grease fittings are capped with CAP PLUG GC-5 (AEC PN 015692) to protect the fitting. If cap becomes missing or damaged replace it as soon as possible.



! NOTE

Anti-Seize is applied at the factory to drive line couplings, and moving components. If these parts are disassembled re-apply a light coat of a graphite based anti-seize.

We recommend AEC quality replacement parts, available from the AEC Customer Service Department or your nearest AEC Dealer.

Part numbers are subject to change without notice. Part numbers might be different outside of the United States of America. Use part numbers listed in the applicable parts list table when you place your order. If a part number changes, the AEC Customer Service Department or your nearest AEC dealer will have the latest part number for the replacement part.

Remember when you order replacement parts, you will need your model number and serial number. These are the numbers that you have recorded in the UNIT ID section of this manual. Please order replacement parts by the appropriate part number, not the key number.

This manual contains an illustrated parts list for help in ordering replacement parts for your machine. Follow the instructions below when ordering parts to insure prompt and accurate delivery:

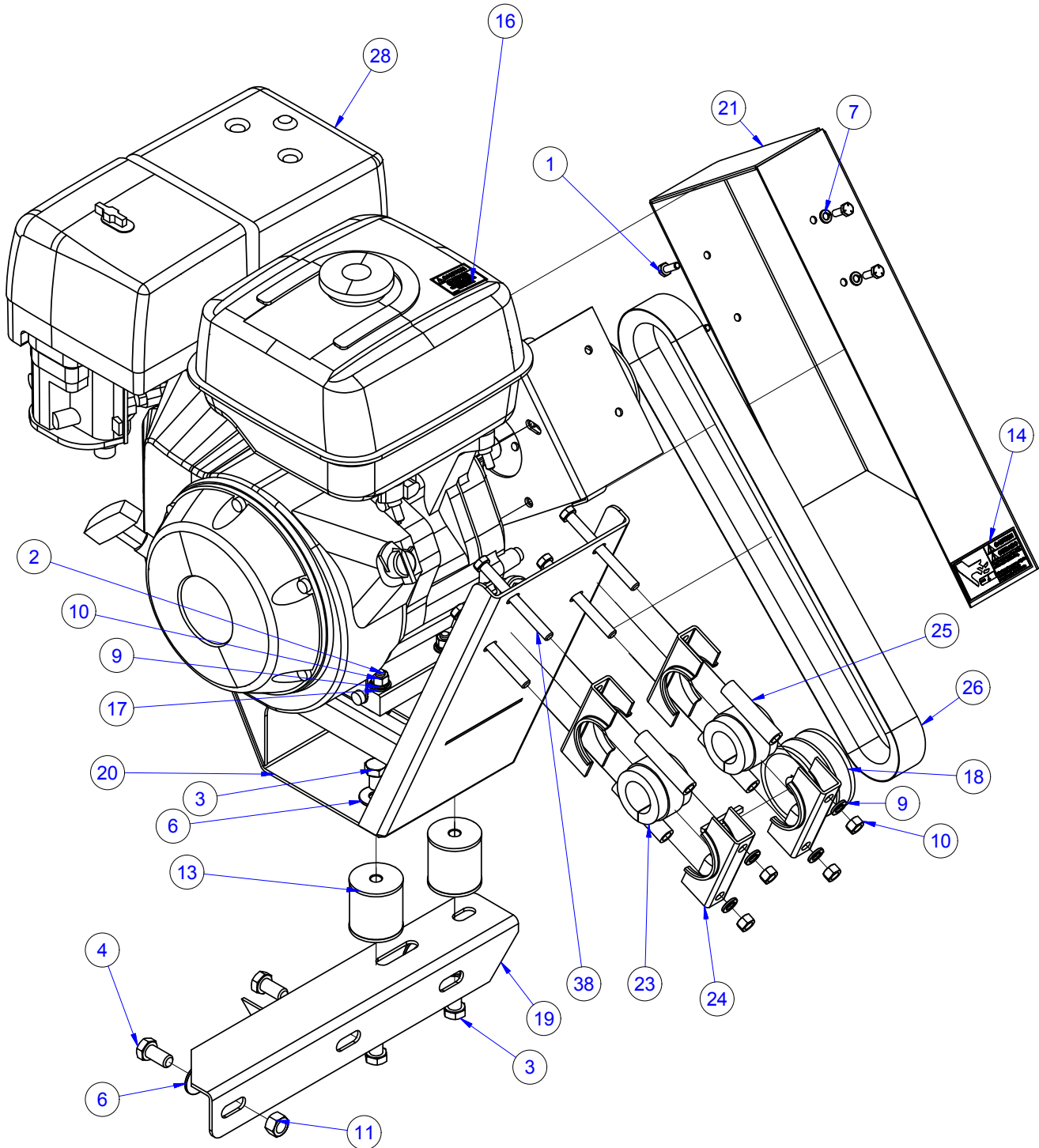
1. All orders for service parts - include the serial number for the machine. Shipment will be delayed if this information is not available.
2. Include correct description and part number from the "PARTS" Section 4.
3. Specify exact shipping instructions, including the preferred routing and complete destination 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.

SECTION 4 PARTS

4.1 - Engine Mount, Illustration



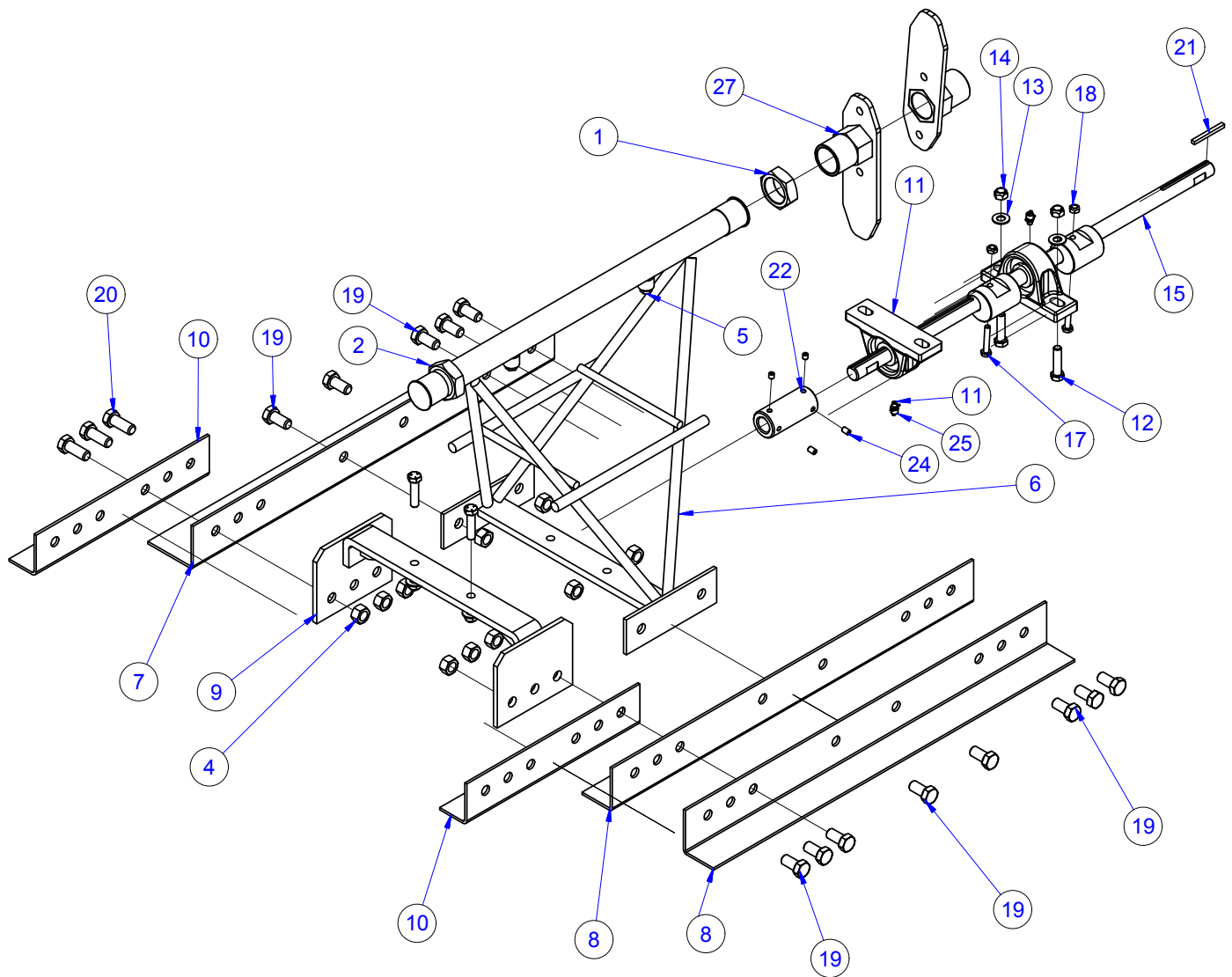
4.1 - Engine Mount, Parts List

SECTION 4 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
-	027879	KIT, ENGINE SE12 9HP HONDA	-
-	075815	KIT, ENGINE SE12 9.5HP KOHLER	-
1	010002	FASTENER, HHCS 1/4-20 X 3/4	4
2	010039	FASTENER, HHCS 3/8-16 X 1 3/4" LONG GR8	4
3	010066	FASTENER, HHCS 1/2-13 X 3/4 GR 5	4
4	010067	FASTENER, HHCS 1/2-13 X 1 GR8	3
5	010082	FASTENER, FLAT WASHER 5/16	4
6	010085	FASTENER, FLAT WASHER 1/2 GR8	7
7	010089	FASTENER, LOCK WASHER 1/4	4
8	010090	FASTENER, LOCK WASHER 5/16	4
9	010091	FASTENER, LOCK WASHER 3/8	8
10	010102	FASTENER, NUT HEX 3/8-16	8
11	010106	FASTENER, NUT HEX 1/2-13 GR8	1
12	010273	KEY, 3/16 SQ X 2	1
13	012725	RUBBER ISOLATOR, 2" WITH 1/2-13 UNC	2
14	012894	DECAL, CAUTION KEEP HANDS AWAY(SHAFT)	1
15	012974	FASTENER, HHCS 5/16-24 X 3/4	4
16	016191	DECAL, ALLOW ENG TO COOL	1
17	017751	FASTENER, FLAT WASHER HARD A325 3/8 (p)	12
18	020698	PULLEY, 2BK30X3/4 2 SET SCREWS (p) 9HP	1
	022549	PULLEY, 2BK36 X 3/4 (MODIFIED) (p) 11HP	1
19	027871	BRACKET, ANGLE 5/8/11 HP LOPRO	1
20	027872-T	MOUNT, ENGINE 8/11 HP LOPRO	1
21	027877	GUARD, BELT 8/11 HP LOPRO	1
22	027878	BRACKET, BELT GUARD LP MOUNT	1
23	027883	BUSHING, RUBBER SPLIT	2
24	027884	CLAMP, LOPRO ENGINE MOUNT	4
25	027885	SPACER, CLAMP LOPRO ENG MT	4
26	039745	V-BELT, 2BX - 40 GDY 9 HP	1
	039748	V-BELT, 2BX - 42 GDY 11HP	1
27	126003	CLUTCH, 1" BORE 2 GRV NR 1300	1
28	042481	ENGINE, 9 HP HONDA, GX270	1
	018967	ENGINE, 11 HP HONDA, GX340	1
	070069	ENGINE, 9.5 HP KOHLER CH395	1
38	027882	FASTENER, HHCS 3/8-16 X 3-3/4 LONG GRADE 8 YELLOW ZINC	4

SECTION 4 PARTS

4.2 - 2 Foot Section, Illustration



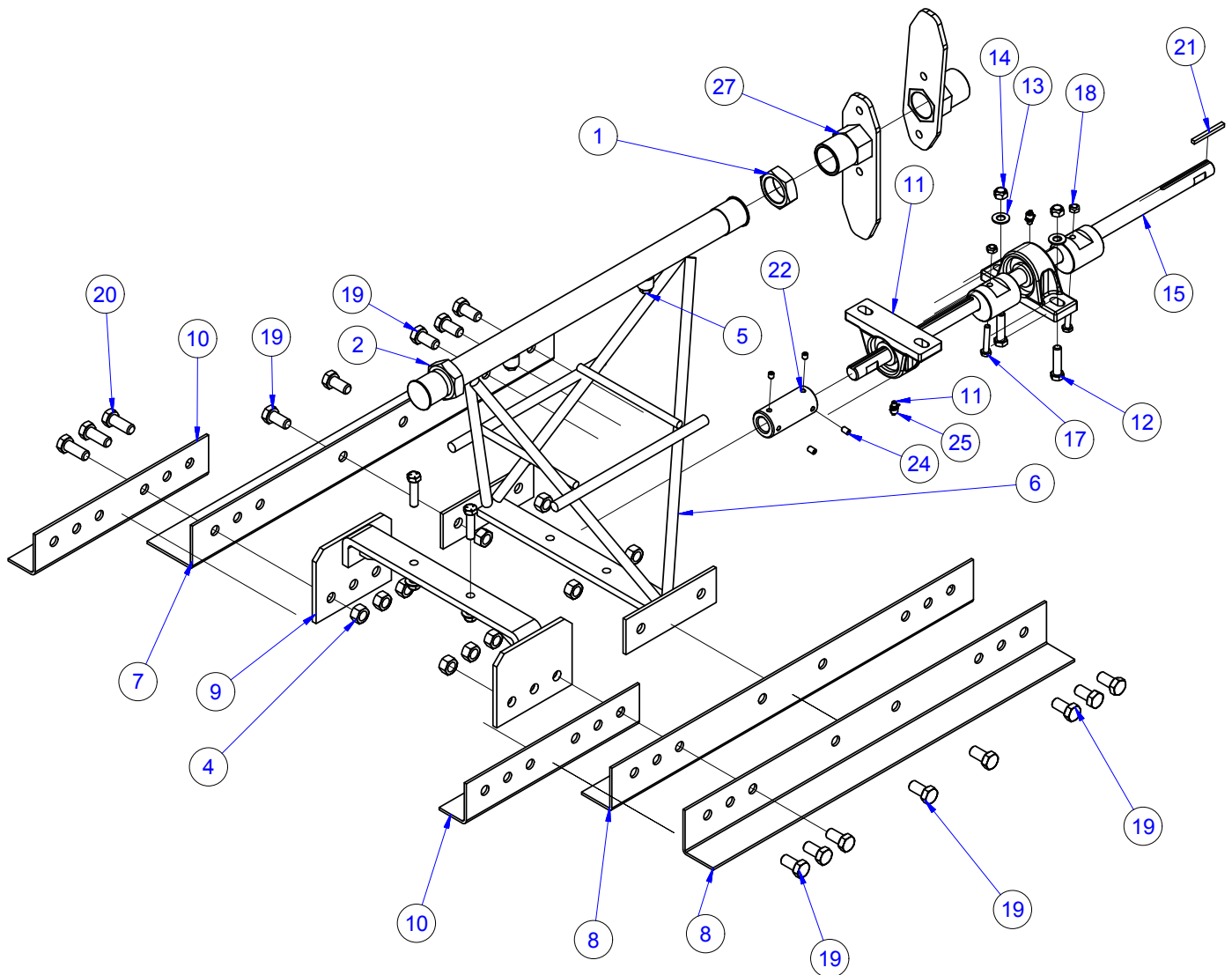
4.2 - 2 Foot Section, Parts List

SECTION 4 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	108000	JAM NUT RH (SX ED)	1
2	108001	JAM NUT LH (SX ED)	1
3	010002	FASTENER, HHCS 1/4-20 X 3/4 (p)	6
4	010106	FASTENER, NUT HEX 1/2-13	16
5	012401	PLUG, 1/4 NPT M. #P-28 PLASTIC	2
6	016564	SCREED TRUSS, 2' HED WELDMENT	1
7	010173	BLADE, BULL-FLOAT 12HD 2FT (p)	1
8	010172	BLADE, SCREED 2' 10GA (p)	2
9	135000	SUPPORT, ED INTERMEDIATE BRG	1
10	106001	PLATE, SPLICE 10GA	2
11	020704	BEARING 3/4" PB (p)	2
12	028402	FASTENER, HHCS 3/8-16 X 1-1/2 GR 8	4
13	017751	FASTENER, FLAT WASHER HARD A325 3/8 (p)	4
14	020514	FASTENER, NUT STOVER LOCK 3/8-16	4
15	020716	DRIVE SHAFT	1
16	029270	ECCENTRIC WEIGHT, HD AGC SCD	2
17	010005	FASTENER, HHCS 1/4-20 X 1-1/2 GR 8	2
18	020542	FASTENER, NUT STOVER LOCK 1/4-20	2
19	010067	FASTENER, HHCS 1/2-13 X 1 GR8	11
20	010068	FASTENER, HHCS 1/2-13 X 1-1/4 GR 5	3
21	010273	KEY, 3/16 SQ X 2	2
22	020635	COUPLER, SHAFT	1
23	013374	SCREW, 1/4-28 X 1/4 SFLKG SKT SET	2
24	018999	SCREW, 1/4-28 X 3/8 SFLKG SKT SET	2
25	015692	CAP, Ø1/4 RED GREASE	2
26	012899	CAPLUG, RCL-16 (P)	2
27	044834	ASSEMBLY, STEEL TOP PIPE COUPLER	2
28	039351	TIE, 15.0 LG BLK STD CABLE [Ø3.000]	1

SECTION 4 PARTS

4.3 - 2.5 Foot Section, Illustration



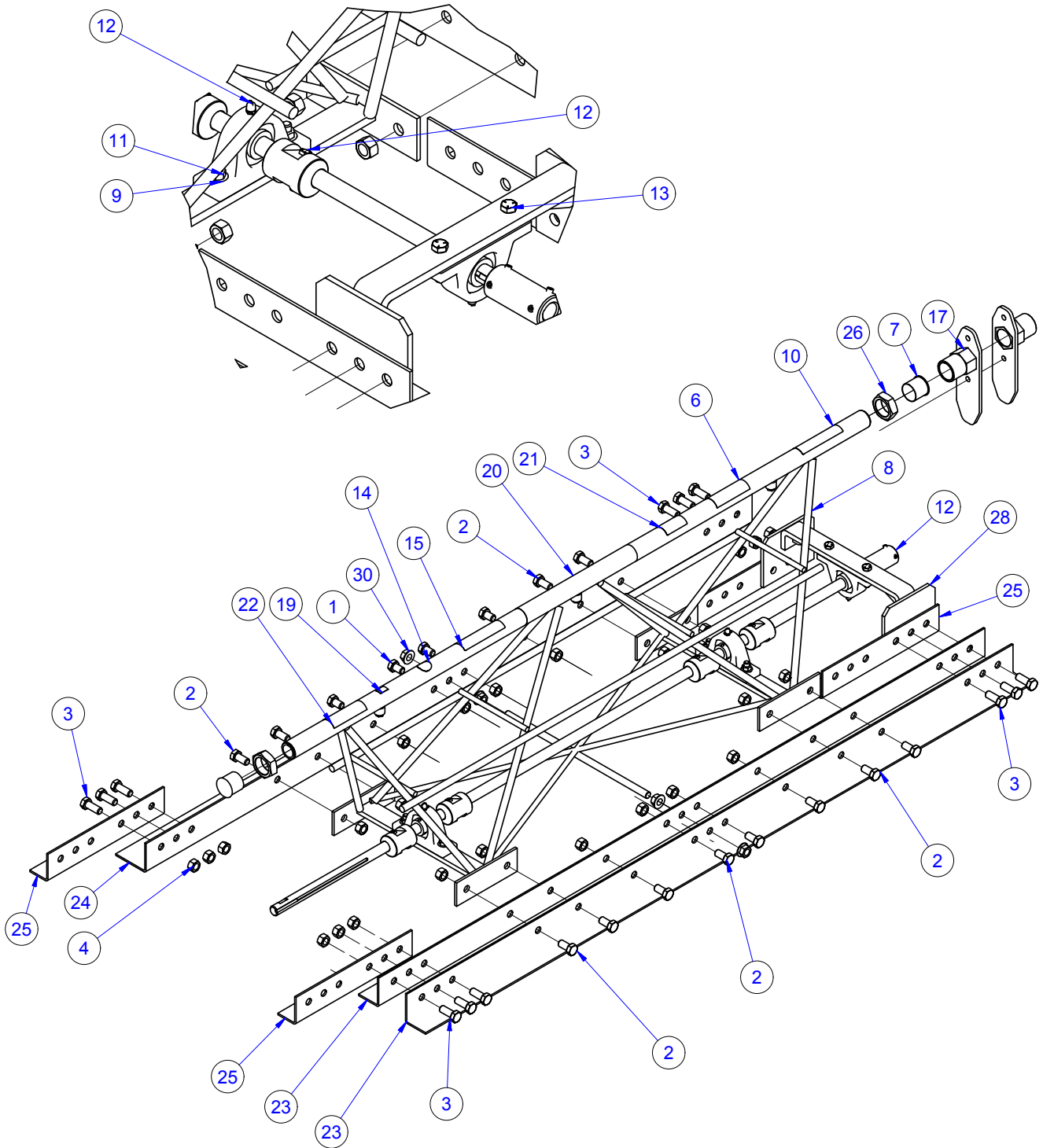
4.3 - 2.5 Foot Section, Parts List

SECTION 4 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	108000	JAM NUT RH (SX ED)	1
2	108001	JAM NUT LH (SX ED)	1
3	010002	FASTENER, HHCS 1/4-20 X 3/4 (p)	6
4	010106	FASTENER, NUT HEX 1/2-13	16
5	012401	PLUG, 1/4 NPT M. #P-28 PLASTIC	2
6	028700	SCREED TRUSS, 2.5' HED WELDMENT	1
7	028702	BLADE, BULL-FLOAT 12HD 2FT (p)	1
8	028701	BLADE, SCREED 2.5' 10GA (p)	2
9	135000	SUPPORT, ED INTERMEDIATE BRG	1
10	106001	PLATE, SPLICE 10GA	2
11	020704	BEARING 3/4" PB (p)	2
12	028402	FASTENER, HHCS 3/8-16 X 1-1/2 GR 8	4
13	017751	FASTENER, FLAT WASHER HARD A325 3/8 (p)	4
14	020514	FASTENER, NUT STOVER LOCK 3/8-16	4
15	020716	DRIVE SHAFT	1
16	029270	ECCENTRIC WEIGHT, HD AGC SCD	2
17	010005	FASTENER, HHCS 1/4-20 X 1-1/2 GR 8	2
18	020542	FASTENER, NUT STOVER LOCK 1/4-20	2
19	010067	FASTENER, HHCS 1/2-13 X 1 GR8	11
20	010068	FASTENER, HHCS 1/2-13 X 1-1/4 GR 5	3
21	010273	KEY, 3/16 SQ X 2	2
22	020635	COUPLER, SHAFT	1
23	013374	SCREW, 1/4-28 X 1/4 SFLKG SKT SET	2
24	018999	SCREW, 1/4-28 X 3/8 SFLKG SKT SET	2
25	015692	CAP, Ø1/4 RED GREASE	2
26	012899	CAPLUG, RCL-16 (P)	2
27	044834	ASSEMBLY, STEEL TOP PIPE COUPLER	2
28	039351	TIE, 15.0 LG BLK STD CABLE [Ø3.000]	1

SECTION 4 PARTS

4.4 - 5 Foot Section, Illustration



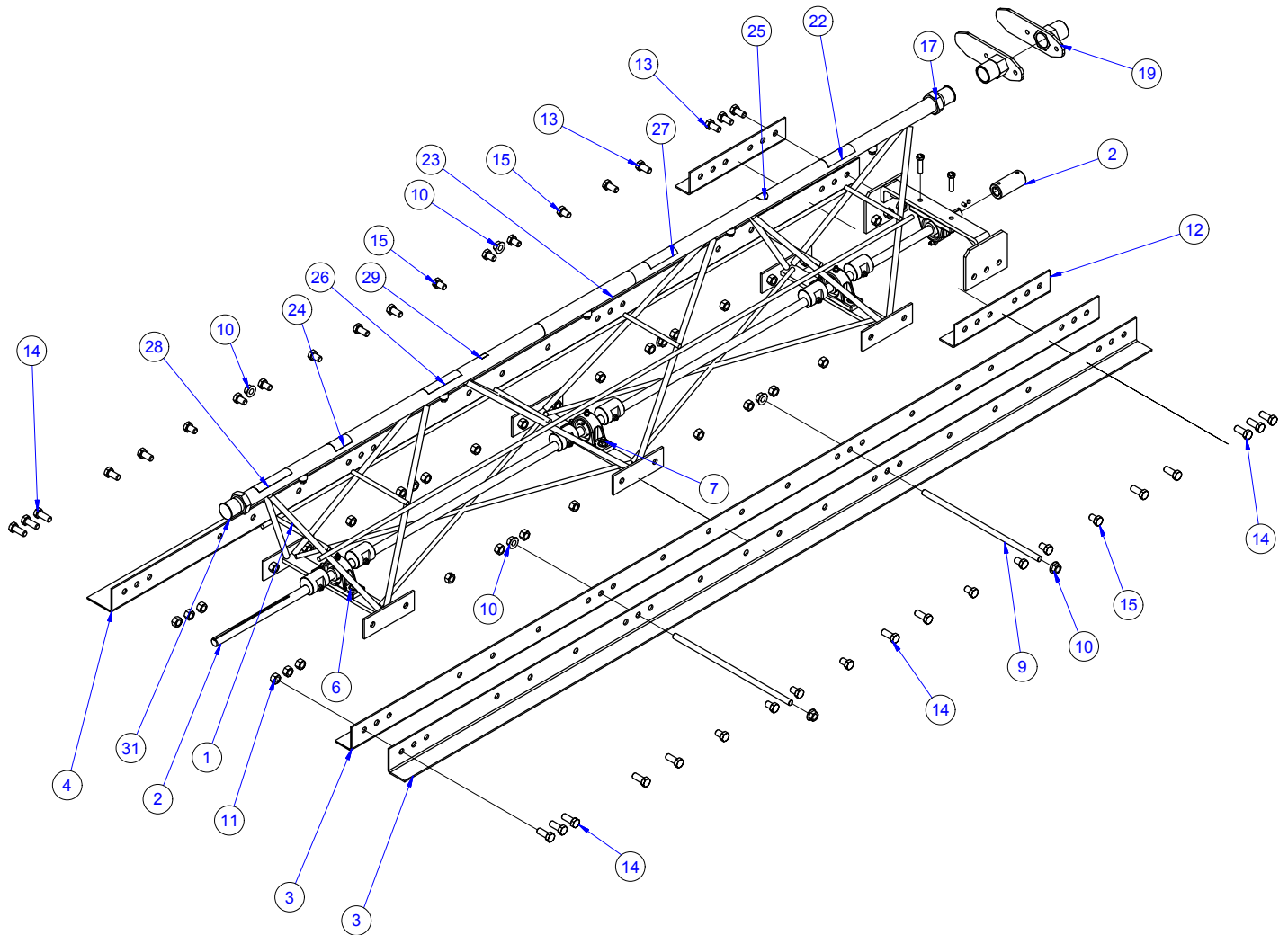
4.4 - 5 Foot Section, Parts List

SECTION 4 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	010066	FASTENER, HHCS 1/2-13 X 3/4 GR 5	4
2	010067	FASTENER, HHCS 1/2-13 X 1 GR8	12
3	010068	FASTENER, HHCS 1/2-13 X 1-1/4 GR 5	12
4	010106	FASTENER, NUT HEX 1/2-13 GR8	28
5	012401	PLUG, 1/4 NPT M. #P-28 PLASTIC	3
6	012894	DECAL, CAUTION KEEP HANDS AWAY(SHAFT)	1
7	012899	CAPLUG, RCL-16 (P)	2
8	016565	SCREED TRUSS, 5' HED WELDMENT (p)	1
9	017751	FASTENER, FLAT WASHER HARD A325 3/8 (p)	6
10	020048	DECAL, DO NOT CROWN W/O UJOINT	1
11	020514	FASTENER, NUT STOVER LOCK 3/8-16 (p)	6
12	022190	SHAFT ASS'Y, 5' STD HED	1
13	028402	FASTENER, HHCS 3/8-16 X 1-1/2 GR 8	6
14	036669	DECAL, HEARING PROTECTION (1")	1
15	037501	DECAL, MODEL 12 HED	1
16	038400	COUPLER, STEEL SCREED LH TOP PIPE	1
17	044834	ASSEMBLY, STEEL TOP PIPE COUPLER	1
18	039351	TIE, 15.0 LG BLK STD CABLE [Ø3.000]	1
19	039893	DECAL, CE	1
20	049413	DECAL, RAZORBACK TRUSS SCREED	1
21	053446	DECAL, MADE IN USA (SP)	1
22	056336	DECAL AEC 1.5" X 3.25" WHITE/RED	1
23	103001	BLADE, SCREED 5' 10GA	2
24	105001	BLADE, BULLFLOAT 5' 10GA	1
25	106001	PLATE, SPLICE 10GA	4
26	108000	JAM NUT RH (SX ED)	1
27	108001	JAM NUT LH (SX ED)	1
28	135000	SUPPORT, ED INTERMEDIATE BRG	1
29	136000	ROD, STABILIZER 1/2-13 x 14" ZINC	1
30	1909790	NUT WHIZ 1/2-13NC ZP	4

SECTION 4 PARTS

4.5 - 7.5 Foot Section, Illustration



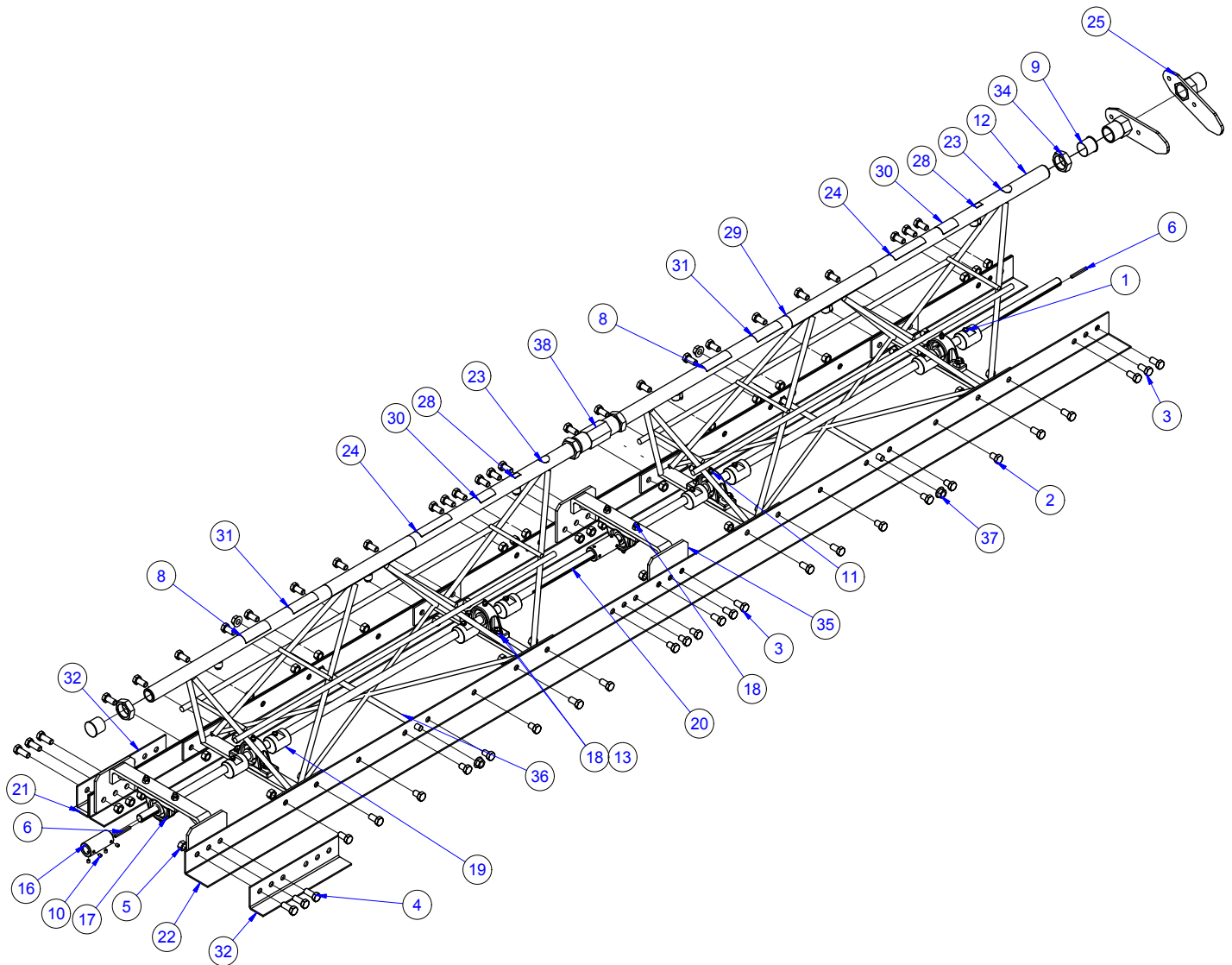
4.5 - 7.5 Foot Section, Parts List

SECTION 4 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	016566	SCREED TRUSS, 7 1/2'HED WELDMENT	1
2	022189	SHAFT ASS'Y, 7 1/2' STD HED SCR. (p)	1
3	102001	BLADE, SCREED 7 1/2' 10GA	2
4	104001	BLADE, BULL-FLOAT 7 1/2' 10GA	1
5	135000	SUPPORT, ED INTERMEDIATE BRG	1
6	017751	FASTENER, FLAT WASHER HARD A325 3/8 (p)	8
7	020514	FASTENER, NUT STOVER LOCK 3/8-16	10
8	028402	FASTENER, HHCS 3/8-16 X 1-1/2 GR 8	8
9	136000	ROD, STABILIZER 1/2-13 x 14" ZINC	2
10	1909790	NUT WHIZ 1/2-13NC ZP	8
11	010106	FASTENER, NUT HEX 1/2-13 GR8	40
12	106001	PLATE, SPLICE 10GA	2
13	010067	FASTENER, HHCS 1/2-13 X 1 GR8	9
14	010068	FASTENER, HHCS 1/2-13 X 1-1/4 GR 5	15
15	010066	FASTENER, HHCS 1/2-13 X 3/4 GR 5	16
16	012401	PLUG, 1/4 NPT M. #P-28 PLASTIC	5
17	108000	JAM NUT RH (SX ED)	1
18	108001	JAM NUT LH (SX ED)	1
19	038401	COUPLER, STEEL SCREED RH TOP PIPE	1
20	038400	COUPLER, STEEL SCREED LH TOP PIPE	1
21	010036	FASTENER, HHCS 3/8-16 X 1	2
22	012894	DECAL, CAUTION KEEP HANDS AWAY(SHAFT)	1
23	049413	DECAL, RAZORBACK TRUSS SCREED	1
24	053446	DECAL, MADE IN USA (SP)	1
25	036669	DECAL, HEARING PROTECTION (1")	1
26	037501	DECAL, MODEL 12 HED	1
27	056336	DECAL AEC 1.5" X 3.25" WHITE/RED	1
28	020048	DECAL, DO NOT CROWN W/O U-JOINT	1
29	039893	DECAL, CE	1
30	039351	TIE, 15.0 LG BLK STD CABLE [Ø3.000]	1
31	012899	CAPLUG, RCL-16 (P)	2

SECTION 4 PARTS

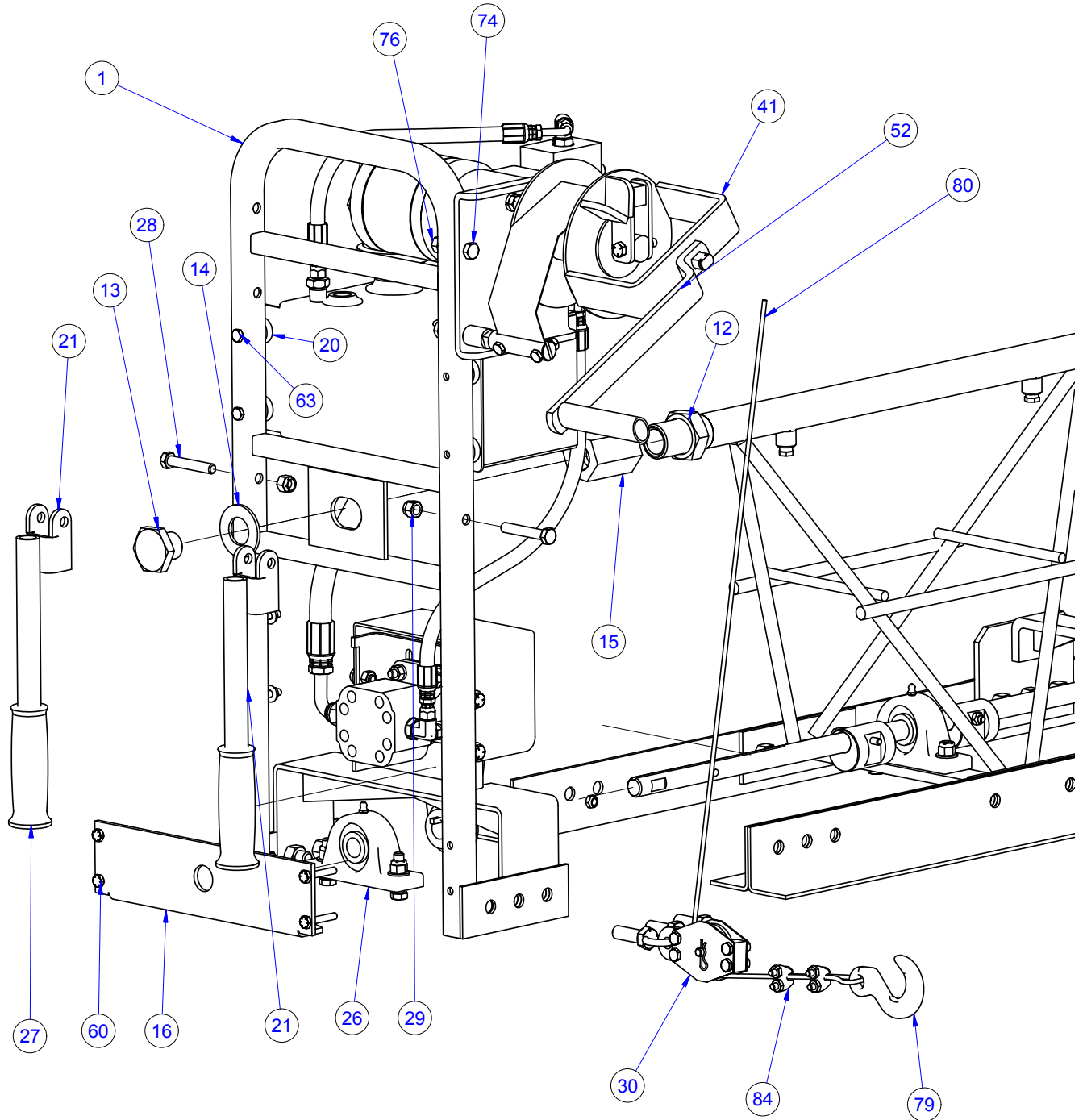
4.6 - 10 Foot Section, Illustration



4.6 - 10 Foot Section, Parts List

SECTION 4 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	010005	FASTENER, HHCS 1/4-20 X 1-1/2 GR 8	8
2	010066	FASTENER, HHCS 1/2-13 X 3/4 GR 5	11
3	010067	FASTENER, HHCS 1/2-13 X 1 GR8	39
4	010068	FASTENER, HHCS 1/2-13 X 1-1/4 GR 5	6
5	010106	FASTENER, NUT HEX 1/2-13 GR8	56
6	010273	KEY, 3/16 SQ X 2	3
7	012401	PLUG, 1/4 NPT M. #P-28 PLASTIC	6
8	012894	DECAL, CAUTION KEEP HANDS AWAY(SHAFT)	2
9	012899	CAPLUG, RCL-16 (P)	2
10	013374	SCREW, 1/4-28 X 1/4 SFLKG SKT SET	8
11	015692	CAP, Ø1/4 RED GREASE	6
12	016565	SCREED TRUSS, 5' HED WELDMENT (p)	2
13	017751	FASTENER, FLAT WASHER HARD A325 3/8 (p)	12
14	020514	FASTENER, NUT STOVER LOCK 3/8-16	12
15	020542	FASTENER, NUT STOVER LOCK 1/4-20	8
16	020635	COUPLER, SHAFT	2
17	020704	BEARING 3/4" PB (p)	6
18	028402	FASTENER, HHCS 3/8-16 X 1-1/2 GR 8	12
19	029270	ECCENTRIC WEIGHT, HD AGC SCD	8
20	032112	SHAFT, DRIVE ED SCREED 5'10"KW	2
21	032138	BLADE, SCREED HED	2
22	032139	BLADE, BULL-FLOAT HED	1
23	036669	DECAL, HEARING PROTECTION (1")	2
24	037501	DECAL, MODEL 12 HED	2
25	044834	ASSEMBLY, STEEL TOP PIPE COUPLER	3
26	038401	COUPLER, STEEL SCREED RH TOP PIPE	1
27	039351	TIE, 15.0 LG BLK STD CABLE [Ø3.000]	1
28	039893	DECAL, CE	2
29	049413	DECAL, RAZORBACK TRUSS SCREED	2
30	053446	DECAL, MADE IN USA (SP)	2
31	056336	DECAL AEC 1.5" X 3.25" WHITE/RED	2
32	106001	PLATE, SPLICE 10GA	2
33	108000	JAM NUT RH (SX ED)	2
34	108001	JAM NUT LH (SX ED)	2
35	135000	SUPPORT, ED INTERMEDIATE BRG	2
36	136000	ROD, STABILIZER 1/2-13 x 14" ZINC	2
37	1909790	NUT WHIZ 1/2-13NC ZP	8
38	107000	COUPLER, TOP PIPE SX ED	1

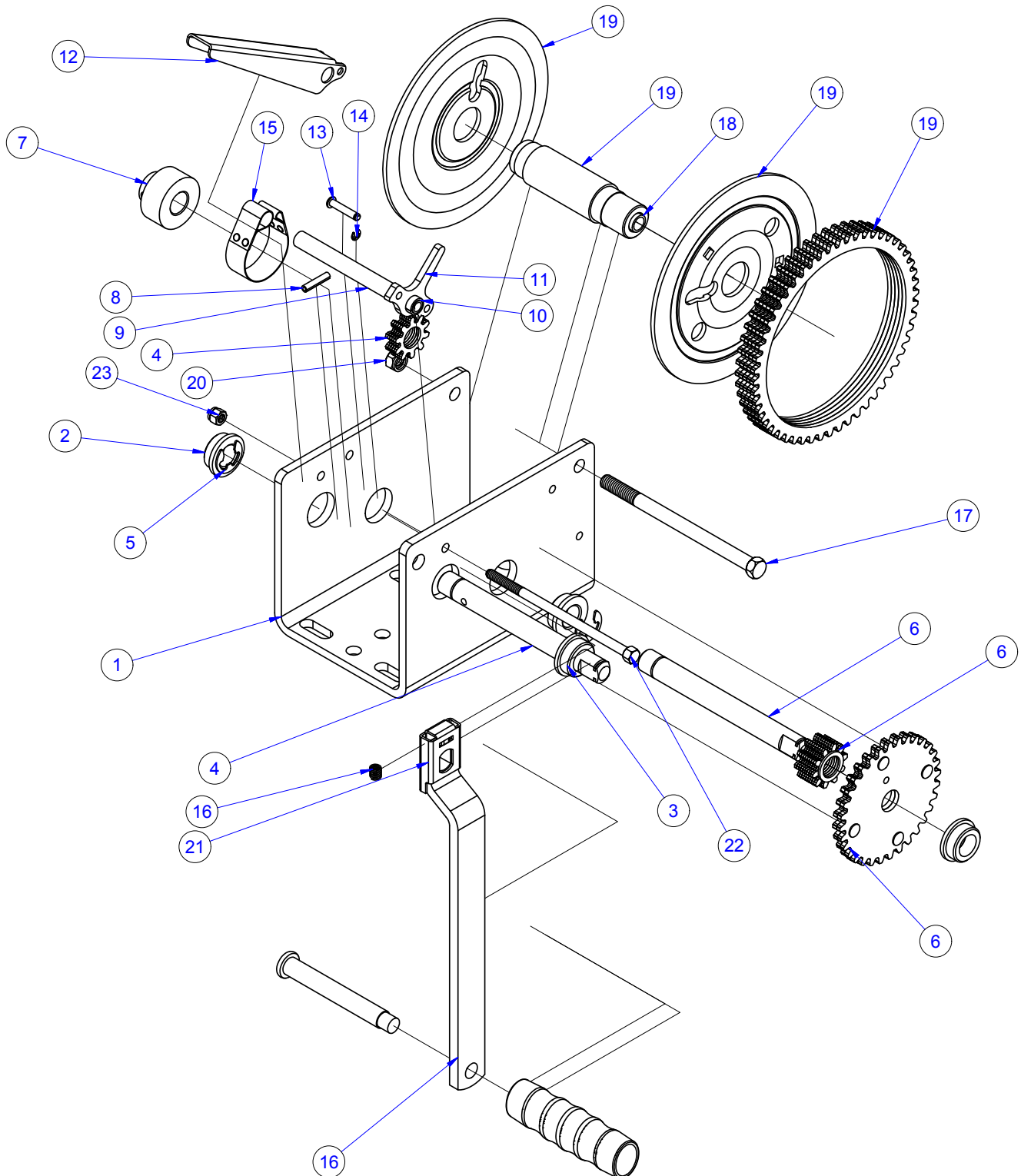


4.7 - End Handle Assembly, Parts List

SECTION 4 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	109000	END HANDLE	1
12	108000	JAM NUT RH (SX ED)	1
13	113000	END HANDLE NUT	1
14	010088	FASTENER, FLAT WASHER 1"	1
15	114000	RH AIR END SX ADAPTER	1
16	112000	BRACKET, BEARING SUPPORT	1
20	015713	BUSHING, NITRILE	4
21	017066	SCREED LIFTING HANDLE	2
26	020704_A	BEARING 3/4" PB (p)	3
27	048308	GRIP, HANDLE (7/8"ID)	2
28	010040	FASTENER, HHCS 3/8-16 X 2 GR 5	2
29	010464	FASTENER, NUT NYLOK 3/8-16	8
30	025992	PULLEY BLOCK, HD W/EYEBOLT (p)	1
41	038280	ASSEMBLY, HYD WINCH REEL	1
52	110102	WINCH HANDLE	1
60	010005	FASTENER, HHCS 1/4-20 X 1-1/2 GR 8	6
63	010007	FASTENER, HHCS 1/4-20 X 2	4
70	106001	PLATE, SPLICE 10GA	2
71	010067	FASTENER, HHCS 1/2-13 X 1 GR8	5
72	010106	FASTENER, NUT HEX 1/2-13 GR8	15
73	010068	FASTENER, HHCS 1/2-13 X 1-1/4 GR 5	10
74	010039	FASTENER, HHCS 3/8-16 X 1 3/4" LONG GR8	1
75	010091	FASTENER, LOCK WASHER 3/8	6
76	010102	FASTENER, NUT HEX 3/8-16	1
77	010036	FASTENER, HHCS 3/8-16 X 1	4
78	010003	FASTENER, HHCS 1/4-20 X 1	2
79	110008	HOOK, SLIP 1/4" PLATED BULK	1
80	000751	CABLE, 5/32 7 X 19 GALV	1
84	022656	CABLE CLAMP	2

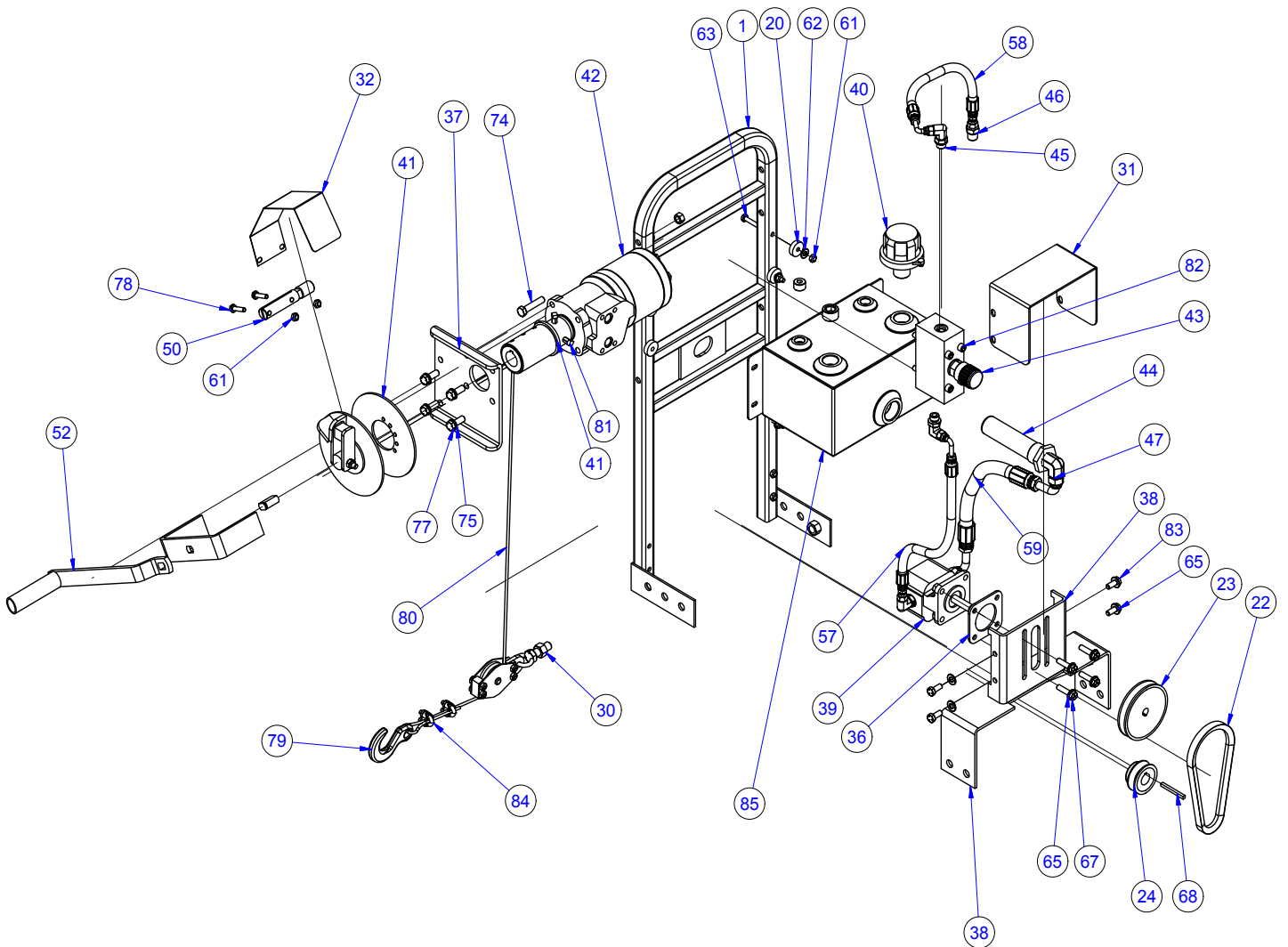
4.8 - Winch Assembly, Illustration



4.8 - Winch Assembly, Parts List

SECTION 4 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	404875	BASE	1
2	204009	BUSHING	2
3	204012	BUSHING	2
4	304780	DRIVE SHAFT ASSEMBLY	1
5	205116	E-RING 5	2
6	304727	IDS ASSEMBLY	1
7	404910	DRUM	1
8	207255	ROLL PIN	1
9	404878	SPACER SLEEVE	1
10	404872	SHORT SLEEVE	1
11	404868	REVERSIBLE SLEEVE	1
12	404889	BRAKE LEVER	1
13	404909	BRAKE PIN	1
14	205135	E-RING	1
15	404908	BRAKE BAND	1
16	304294	HANDLE ASSEMBLY	1
17	204804	CAP SCREW	1
18	204808	REEL SPACER	1
19	304728	REEL ASSEMBLY	1
20	204803	LOCK NUT	1
21	404180	HANDLE SPRING	1
22	205006	DRIVE SHAFT, 0.25	1
23	205014	LOCK NUT	1



4.9 - Hydraulic Winch Assembly, Parts List

SECTION 4 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	109000	END HANDLE ASSEMBLY	1
20	015713	BUSHING, NITRILE	4
21	017066	SCREED LIFTING HANDLE	2
22	026486	V-BELT	1
23	010500	AK39X1/2 PULLEY	1
24	011896	PULLEY 3/4"	1
30	025992	PULLEY BLOCK, HD W/EYEBOLT (p)	1
31	027903	PUMP COVER	1
32	029108	SPRING, F/ HYD WINCH	1
36	029111	PLATE	1
37	029112	REEL BRACKET	1
38	029114	PUMP BRACKET	1
39	029105	PUMP, HYDRAULIC	1
40	010495	FILLER BREATHER WITH BAFFLE	1
41	038280	ASSEMBLY, HYD WINCH REEL	1
42	034011	MOTOR, WHITE (255320F3710AAAAA)	1
43	029107	VALVE, FLOW CONTROL MCD-5439	1
44	034012	1 X 1/2 TANK SUCTION STRAINER W/O BTPASS (TMF-05-0)	1
45	023838	CNTCTR, 9/16X1/4 STRTTHD ORING (p)	3
46	027925	FTG, FL NIPPLE 3/8 X 1/4 37 DG	1
47	023414	ELBOW, 1/2"X1/2" 90DEG	1
50	029109	ROD, SPRING	1
51	029270	ECCENTRIC WEIGHT, HD AGC SCD	2
52	110102	HANDLE	1
57	029398	HOSE, ASSEMBLY, 19-1/2", 1/4" DIAMETER	1
58	029397	HOSE, ASSEMBLY, 16", 1/4 DIAMETER	1
59	029400	HOSE, LEFT HAND , ASSEMBLY, 16", 1/2" DIAMETER	1
	029401	HOSE, RIGHT HAND , ASSEMBLY, 16", 1/2" DIAMETER	1
60	010005	FASTENER, HHCS 1/4-20 X 1-1/2 GR 8	6

SECTION 4 PARTS

4.9 - Hydraulic Winch Assembly, Parts List

ITEM	PART NO.	DESCRIPTION	QTY
61	020542	FASTENER, NUT STOVER LOCK 1/4-20	12
62	010081	FASTENER, FLAT WASHER 1/4	4
63	010007	FASTENER, HHCS 1/4-20 X 2	4
64	010090	FASTENER, LOCK WASHER 5/16	4
65	010082	FASTENER, FLAT WASHER 5/16	8
66	010100	FASTENER, NUT HEX 5/16-18	8
67	010021	FASTENER, HHCS 5/16-18 X 1-1/4 GR5	4
68	010273	KEY, 3/16 SQ X 2	2
74	010039	FASTENER, HHCS 3/8-16 X 1 3/4" LONG GR8	1
75	010091	FASTENER, LOCK WASHER 3/8	6
76	010102	FASTENER, NUT HEX 3/8-16	1
77	010036	FASTENER, HHCS 3/8-16 X 1	4
78	010003	FASTENER, HHCS 1/4-20 X 1	2
79	110008	HOOK, SLIP 1/4" PLATED BULK	1
80	000751	CABLE, 5/32 7 X 19 GALV	1
81	022297	FASTENER, SQHSS 5/16-24 X 1	3
82	SHCS	SHCS, VALVE	4
83	010019	FASTENER, HHCS 5/16-18 X 3/4 GR 5	4
84	022656	CABLE CLAMP	2
85	065666	TANK, HYDRAULIC	1
86	035327	PLUG, 3/4-14 NPTF HOLLOW HEX	1
87	065669	PLUG, 3/4-14 NPTF HOLLOW HEX	1

4.9 - Hydraulic Winch Assembly, Parts List

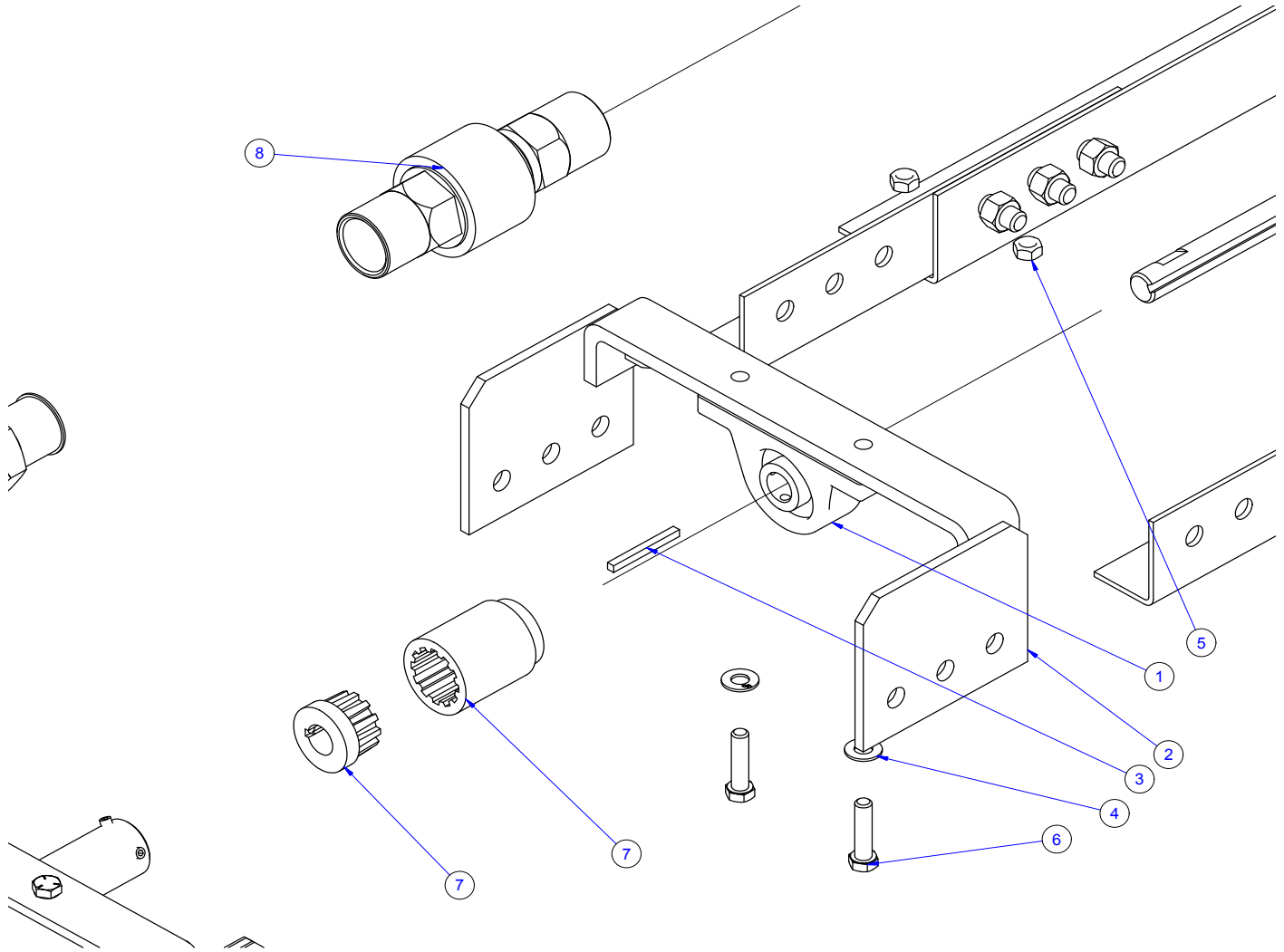
SECTION 4 PARTS

**THESE PARTS ARE KITTED FOR A COMPLETE HYDRAULIC SYSTEM
ON THE SCREED. PLEASE REFER TO THE PREVIOUS TABLE FOR
ORDERING INDIVIDUAL COMPONENTS WITHIN THIS KIT.**

KIT, HYDRAULIC WINCH (033696)			
ITEM	PART #	DESCRIPTION	QTY
1	034011	MOTOR, HYDRAULIC	2
2	029104	PUMP, RIGHT HAND	1
3	029105	PUMP, LEFT HAND	1
4	010495	CAP, BREATHER, HYDRAULIC TANK	2
5	034012	STRAINER, SUCTION, 1" X 1/2", WITHOUT BY-PASS	2
6	029107	VALVE, FLOW CONTROL (T-1401) [MCD-5439]	2
7	045923	FITTING, ELBOW, 90°, (F6801-4-6-NW0)	6
8	027925	FITTING, FL NIPPLE, 3/8" X 1/4" (2404-4-6)	2
9	023414	FITTING, ELBOW, 90°, 1/2" X 1/2" (2501-8-8)	2
10	045921	FITTING, STRAIGHT, (6400-8-8-0)	2
11	035564	PLUG, 1/4", HEX, HOLLOW PIPE (5406-HHP-4)	2
12	029400	HOSE, LEFT HAND , ASSEMBLY, 16", 1/2" DIAMETER (29400-SKD)	1
13	029401	HOSE, RIGHT HAND , ASSEMBLY, 16", 1/2" DIAMETER (29401-SKD)	1
14	029397	HOSE, ASSEMBLY, 16", 1/4" DIAMETER (29397-SKD)	2
15	029398	HOSE, ASSEMBLY, 19-1/2", 1/4" DIAMETER (29398-SKD)	2

SECTION 4 PARTS

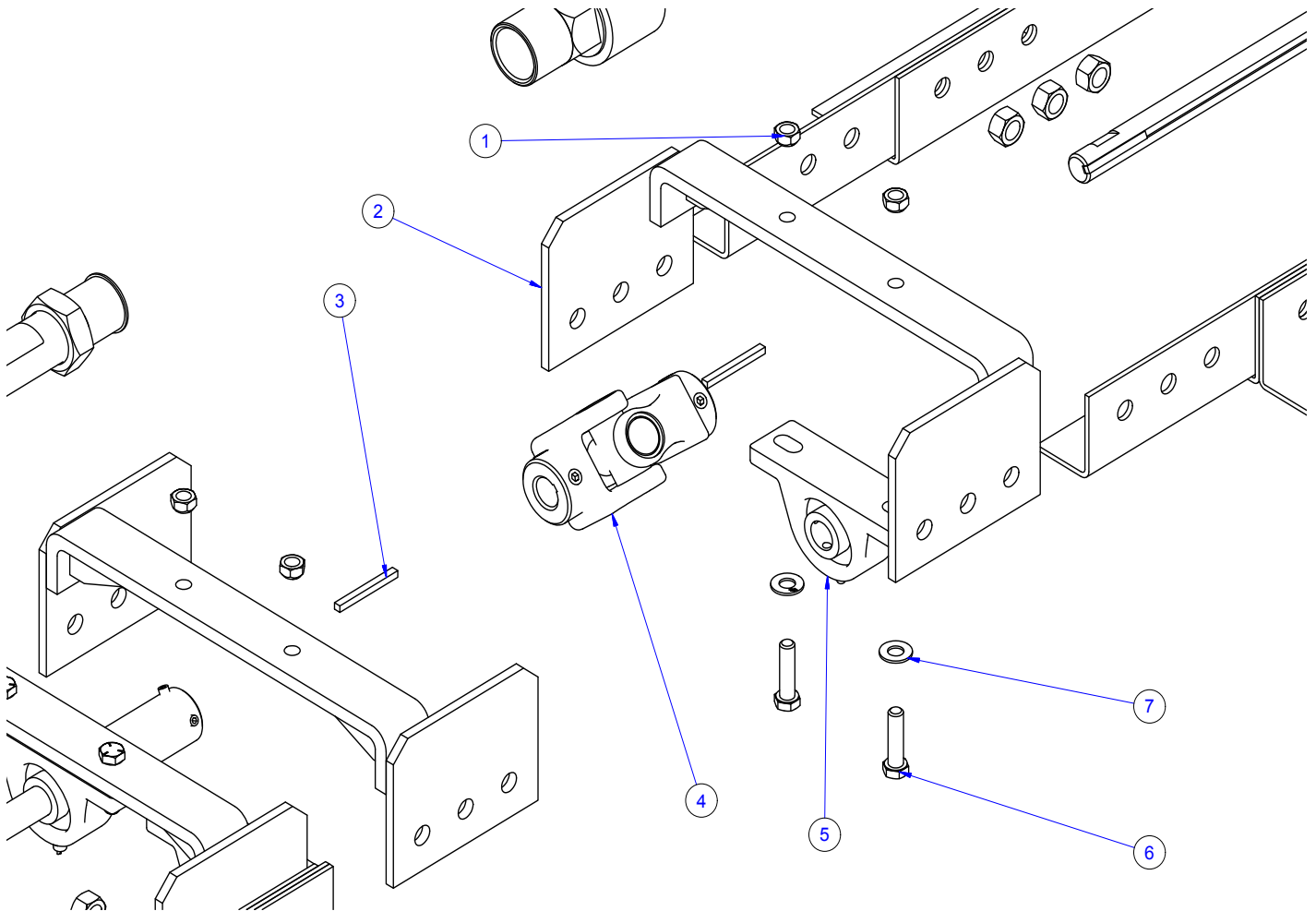
4.10 - Flex Coupler Assembly, Illustration & Parts List



ITEM	PART NO.	DESCRIPTION	QTY
1	020704	BEARING 3/4" PB (p)	2
2	221155	SUPPORT OFF INTERMEDIAT BRG	2
3	010273	KEY, 3/16 SQ X 2	2
4	017751	FASTENER, FLAT WASHER HARD A325 3/8 (p)	6
5	020514	FASTENER, NUT STOVER LOCK 3/8-16 (p)	4
6	010038	FASTENER, HHCS 3/8-16 X 1-1/2 GR 5	4
7	020699	COUPLER-FLEX 43 PG/SF-2-7/8	1
8	022599	COUPLER,LRG T/P BALL JOINT 1 5/16 (p)	1

4.11 - U-Joint Assembly, Illustration & Parts List

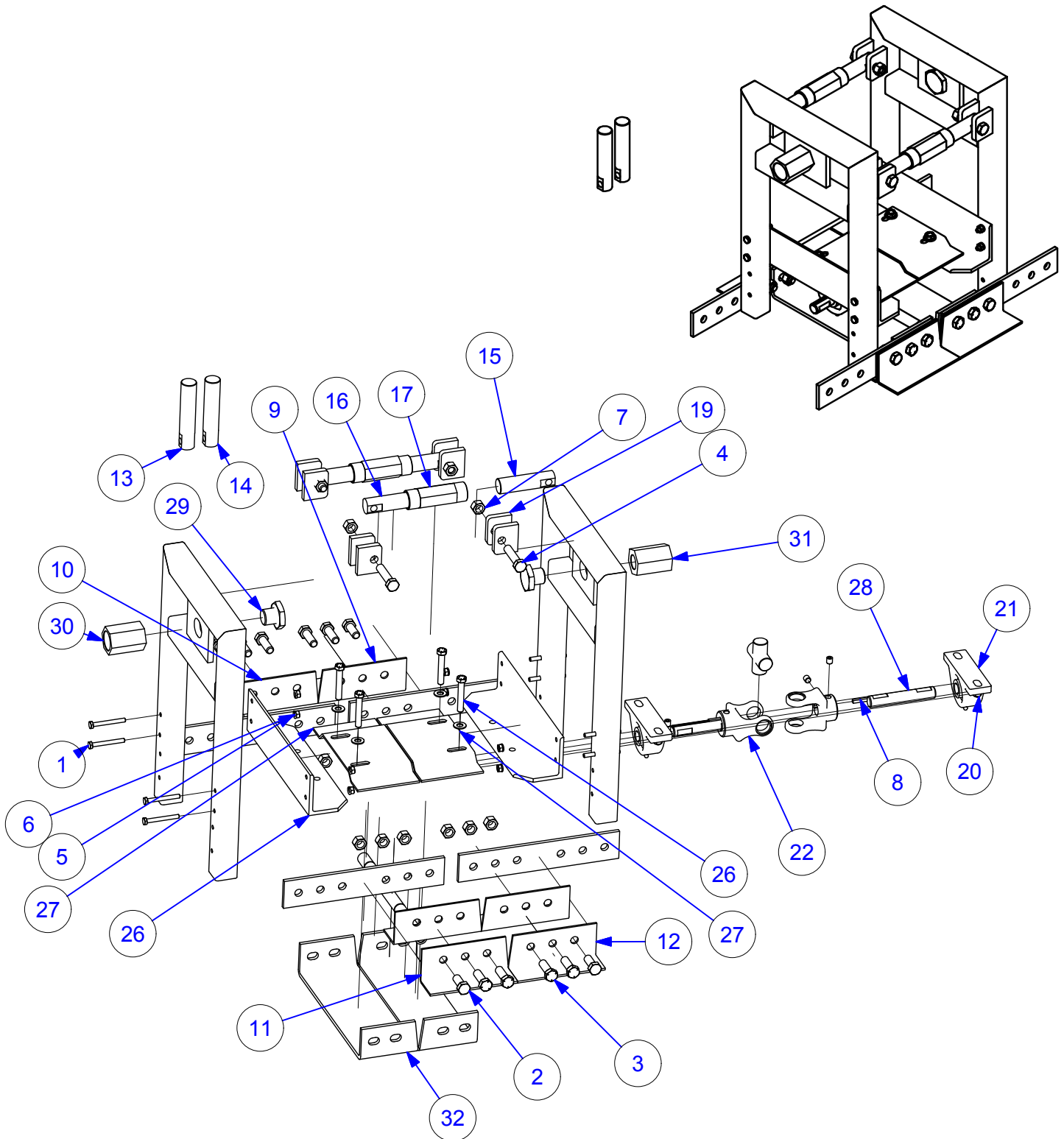
SECTION 4 PARTS



ITEM	PART NO.	DESCRIPTION	QTY
1	020514	FASTENER, NUT STOVER LOCK 3/8-16	4
2	221155	SUPPORT OFF INTERMEDIAT BRG	2
3	010273	KEY, 3/16 SQ X 2	2
4	022635	UNIVERSAL JOINT ASSEMBLY MOD,ED SC (p)	1
5	020704	BEARING 3/4" PB (p)	2
6	010038	FASTENER, HHCS 3/8-16 X 1-1/2 GR 5	4
7	017751	FASTENER, FLAT WASHER HARD A325 3/8 (p)	6

SECTION 4 PARTS

4.12 - Crown Invert Bracket Assembly, Illustration



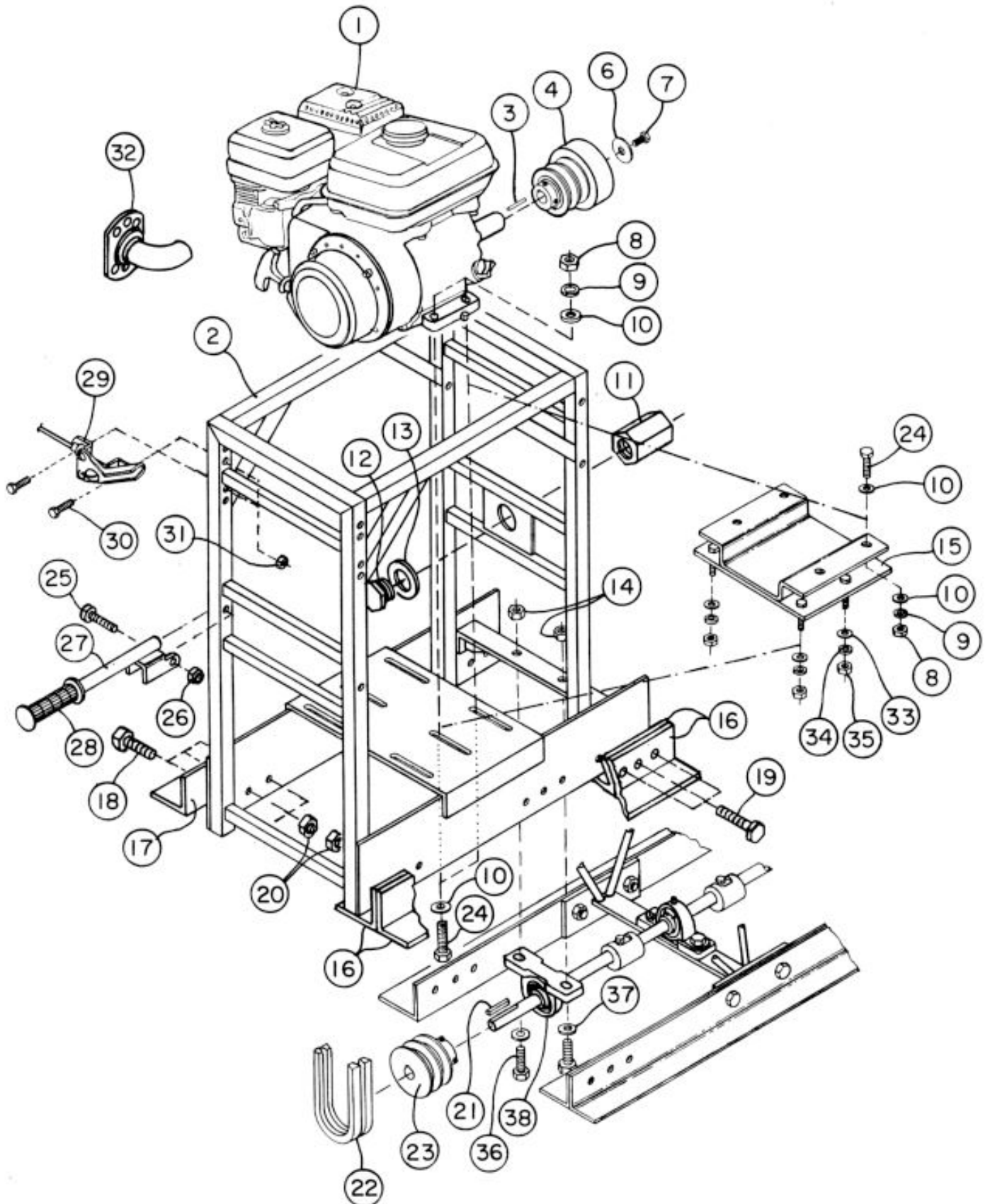
4.12 - Crown Invert Bracket Assembly, Parts List

SECTION 4 PARTS

ITEM	PART #	DESCRIPTION	QTY
1	010008	FASTENER, HHCS 1/4-20 X 2-1/4 GR 5	8
2	010068	FASTENER, HHCS 1/2-13 X 1-1/4 GR 5	4
3	010069	FASTENER, HHCS 1/2-13 X 1-1/2 GRADE 8	8
4	010072	FASTENER, HHCS 1/2-13 X 2-1/4 GR 5	4
5	010089	FASTENER, LOCK WASHER 1/4	8
6	010098	FASTENER, NUT HEX 1/4-20	8
7	010106	FASTENER, NUT HEX 1/2-13 GR8	16
8	010273	KEY, 3/16 SQ X 2	2
9	010432	BLADE, 12HD RH CROWN INV BULLFLT (p)	1
10	010433	BLADE, 12HD LH CROWN INV BULLFLT (p)	1
11	010434	BLADE, 12HD RH CROWN INVERT SCD (p)	2
12	010435	BLADE, 12HD LH CROWN INVERT SCD (p)	2
13	010440	ROD RH CROWN ADJ	1
14	010441	ROD LH CROWN ADJ	1
15	010454	ROD RH INVERT ADJ	2
16	010455	ROD RH INVERT ADJ	2
17	016885	TURNBUCKLE INVERT COUPLER ASSEMBLY	2
18	017751	FASTENER, FLAT WASHER HARD A325 3/8 (p)	8
19	018212	HANDLE, CROWN INVERT	2
20	020514	FASTENER, NUT STOVER LOCK 3/8-16	4
21	020704_A	BEARING 3/4" PB (p)	2
22	022635	UNIVERSAL JOINT ASSEMBLY MOD,ED SC (p)	1
25	040637	BOLT, 3/8-16 X 2-1/4 GR 8 HHC	4
26	046656	BEARING SUPPORT CROWN INVERT BRACKET	2
27	046657	COVER, SHAFT F/ NCI CROWN	2
28	046658	SHAFT, NCI CROWN INVERT	2
29	113000	END HANDLE NUT	2
30	114000	RH AIR END SX ADAPTOR	1
31	115000	LH AIR END SX ADAPTOR	1
32	221165	HINGE ASSEMBLY	1

SECTION 4 PARTS

4.13 - End Mount Engine Assembly, Illustration



4.13 - End Mount Assembly, Parts List

SECTION 4 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	020203	ENGINE 5.5 HP	1
2	126001	HANDLE	1
3	010273	KEY	1
4	100620	CLUTCH	1
6	010082	WASHER FLAT	1
7	020829	BOLT 5/16 X 1 3/4	1
8	010100	NUT HEX 5/16	4
9	010090	WASHER LOCK	4
10	010082	WASHER FLAT	8
11	114000	R.H. ADAPTOR	1
12	113000	NUT END	1
13	010088	WASHER	1
14	020514	NUT STOVER 3/8	2
15	027483	ENGINE MOUNT	1
16	102003	BLADE, SCREED 18"	2
17	104003	BLADE, BULLFLOAT 18"	1
18	010066	BOLT 1/2 X 3/4	6
19	010067	BOLT 1/2 X 1	6
20	010106	NUT, HEX 1/2	12
21	010273	KEY	1
22	020720	V-BELT	2
23	020698	PULLY	1
24	010023	BOLT 5/16 X 1 3/4	4
25	010040	BOLT 3/8 X 2	2
26	010464	NUT, NYLON	2
27	017066	HANDLE	2
28	015767	GRIP, HANDLE	2
29	124000	THROTTLE ASSEMBLY	1
30	010002	BOLT 1/4 X 3/4	2
31	020542	NUT, STOVER	2
32	020983	MUFFLER	1
33	010091	WASHER FLAT	4
34	010091	WASHER LOCK	4
35	010102	NUT, HEX 1/2	4
36	010038	BOLT 3/8 X 1 1/2	2

SECTION 4 PARTS

4.14 - Decals (068412) Standard SE12 Screed

Razorback Decal
Part #: 068418



CE Decal
Part #: 068414



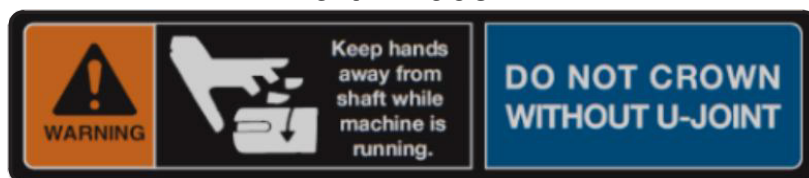
Model Decal
Part #: 068419



Pinch Decal
0.75" X 0.75"
Part #: 068406



Crown Decal
Part #: 068417



Belt Warning Decal
Part #: 068416



Model # Decal
Part #: 068413



Engine Warning Decal
Part #: 068415



Allen Decal
Part #: 068420

4.15 - Decals (068421) Hydraulic SE12 Screed

SECTION 4 PARTS

HYDRAULIC SCREED DECAL KIT (068421)
INCLUDE DECALS LOCATED ON PREVIOUS
PAGE PLUS THE THREE INCLUDED HERE.

Hyd. Fill Decal
Part #: 068424



Pinch Decal
1.25" X 1.25"
Part #: 068422



Cables Decal
Part #: 068423



SECTION 4 PARTS

Revision Detail

MANUAL REVISION DETAIL

REVISION #	REVISION DATE	REVISION REFERENCE #	REVISION BY
-	10/15	Initial Release	AW
A	06/16	-	AW
B	06/18	MN 18-011, 18-020, 18-060	MW
C	01/22	Updated Covers	MK

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Allen Products are covered under one or more of the following patent numbers:

U.S. Design Patents: 344,736; 400,542; 400,544; 402,998; 402,999; 403,332; 404,041; 404,042; 410,931; 413,127; 416,564; 465,897; 466,909; 474,203.

U.S. Utility Patents: 5,108,220; 5,238,323; 5,328,295; 5,352,063; 5,405,216; 5,476,342; 5,480,257; 5,480,258; 5,533,831; 5,562,361; 5,567,075; 5,613,801; 5,658,089; 5,685,667; 5,803,658; 5,816,739; 5,816,740; 5,890,833; 5,934,823; 5,967,696; 5,988,938; 5,988,939; 6,019,433; 6,019,545; 6,048,130; 6,053,660; 6,089,786; 6,106,193; 6,857,815; 5,288,166; 6,582,153 B1, 7,108,449; 7,114,876; 7,316,523; 7,690,864 B2

Canadian Patents: 2,039,893.

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