TRIPLE ROLLER TUBE PAVERS

TRTP75



SAFETY & OPERATIONS MANUAL

Manual Part #: 075707 | 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.

TRIPLE ROLLER TUBE PAVER

Safety and Operations MANUAL

This manual covers the Triple Roller Tube Paver (TRTP) models listed below:

[A] part numbers are the base build of the 75 TRTP with no options. [B] part numbers add the scraper option to the 75 TRTP and [C] part numbers add the scraper and water spray system option to the 75 TRTP.

| FA7 | Doub No. | Describition |
|-----|-----------------|--|
| [A] | <u>Part No.</u> | <u>Description</u> |
| | 073956 | ASSY, 14' 75 TRTP |
| | 073957 | ASSY, 16' 75 TRTP |
| | 073700 | ASSY, 18' 75 TRTP |
| | 073949 | ASSY, 20' 75 TRTP |
| | 073950 | ASSY, 22' 75 TRTP |
| | 073951 | ASSY, 24' 75 TRTP |
| | 073952 | ASSY, 26' 75 TRTP |
| | 073953 | ASSY, 28' 75 TRTP |
| [B] | Part No. | <u>Description</u> |
| | 074783 | ASSY, 14' 75 TRTP SCRAPER OPTION |
| | 074784 | ASSY, 16' 75 TRTP SCRAPER OPTION |
| | 074785 | ASSY, 18' 75 TRTP SCRAPER OPTION |
| | 074786 | ASSY, 20' 75 TRTP SCRAPER OPTION |
| | 074787 | ASSY, 22' 75 TRTP SCRAPER OPTION |
| | 074788 | ASSY, 24' 75 TRTP SCRAPER OPTION |
| | 074789 | ASSY, 26' 75 TRTP SCRAPER OPTION |
| | 074790 | ASSY, 28' 75 TRTP SCRAPER OPTION |
| [C] | Part No. | <u>Description</u> |
| | 074974 | ASSY, 14' 75 TRTP SCRAPER & WATER SPRAY OPTION |
| | 074975 | ASSY, 16' 75 TRTP SCRAPER & WATER SPRAY OPTION |
| | 074976 | ASSY, 18' 75 TRTP SCRAPER & WATER SPRAY OPTION |
| | 074977 | ASSY, 20' 75 TRTP SCRAPER & WATER SPRAY OPTION |
| | 074978 | ASSY, 22' 75 TRTP SCRAPER & WATER SPRAY OPTION |
| | 074979 | ASSY, 24' 75 TRTP SCRAPER & WATER SPRAY OPTION |
| | 074980 | ASSY, 26' 75 TRTP SCRAPER & WATER SPRAY OPTION |
| | 074981 | ASSY, 28' 75 TRTP SCRAPER & WATER SPRAY OPTION |
| | Optional Fea | ture: Steering Leg Part Number 073724 |

Optional Feature: Steering Leg Part Number 073724 **Optional Feature:** Power Spray Part Number 076289

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General Information

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; SHOP SUPPLIES; EN-VIRONMENTAL 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; COM-MERCIAL LOSS; OR ANY OTHER CHARGES WHATSOEVER OR ANY LIABILITIES FOR DIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGE OR DELAY.
- 11. 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.
- 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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Information Contained in this Manual

General Information



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

Complete any warranty requirements as specified by the engine manufacturer in their instructions found inside the manual box located under the operator platform on the motor side of the machine.

Your engine 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 Owner's engine manual for complete O&M instructions. See your battery manufacturer for battery warranty.

General Information

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.

| ione #: () | | |
|---------------------|---------------|------|
| ddress: | | |
| ity: | State: | Zip: |
| alesman: | Mobile Phone: | |
| dditional Comments: | | |
| | | |
| | | |
| | | |
| | | |

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Ordering Parts

General Information

The Parts and Decals manual 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 must 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.



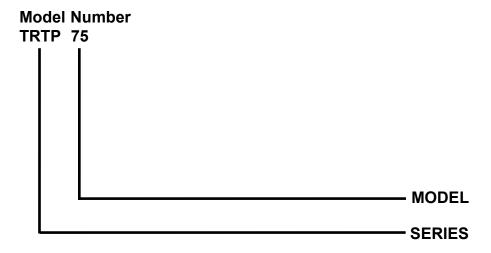
ALL INFORMATION, SPECIFICATIONS, AND ILLUSTRATIONS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE AND ARE BASED ON THE LATEST INFORMATION AT THE TIME OF PUBLICATION.

General Information

Model Number / Serial Number Codes

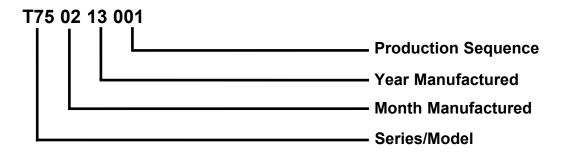
Manufacturer's Codes:

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.



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.



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Unit Identification

General Information

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 side of the operator end handle. The serial number plate is shown below. 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: | |

| MODEL PART NUMBER | ENGINEERING CORPORATION |
|--|--|
| POWER | P.O. BOX 819 PARAGOULD, AR. 72450, USA |
| WEIGHT SERIAL NO. PRODUCTION DATE {MM.DD.YYYY} | € 800.643.0095 (USA ONLY) € 870.236.7751 € 800.643.0097 (USA ONLY) € 870.236.3934 € WWW.ALLENENG.COM |

General Information

Technical Specifications

Measurements in this manual are in U.S. units and their customary metric units (i.e., metric units contained within brackets [cm]). The machine RIGHT-HAND and LEFT-HAND sides are determined by the operator's POV when standing on the machine's operator platform.

Engine, Power Unit

- Honda iGX800, V-Twin Air Cooled, 4 Stroke OHV
- (OLD) Honda iGX700, V-Twin Air Cooled, 4 Stroke OHV

Machine Dimensions

- Length: the tube length plus 35.18" [89.35 cm] or 2' 11.18" or roughly 3'. With a 14' tube the length of the machine is approximately 16' 11.18" or 17'.
- Tube lengths are available in 2' [0.61 m] increments starting at 14' [4.3 m] to 28' [8.53 m]
- Width: 52" [132.08 cm]
- Height: 53.89" [136.8 cm]

Features

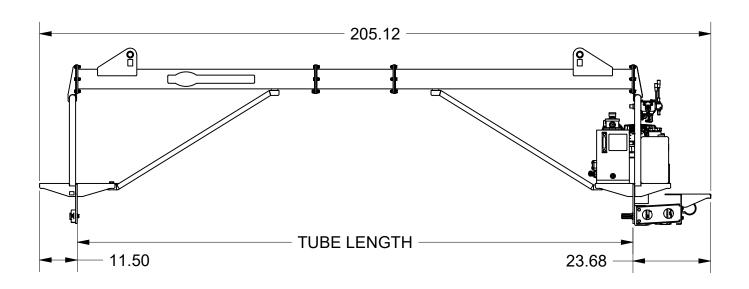
- Hydraulic Oil Tank: 10 Gallon [37.85 L]
- Fuel Tank: 7 Gallon [26.50 L]
- Weight, in 2' increments from 14'-28' the weight of the machine is approximately [1990 lb, 2230 lb, 2381 lb, 2510 lb, 2626 lb, 2762 lb, 2917 lb, 3072 lb]
 [903 kg, 1012 kg, 1080 kg, 1139 kg, 1191 kg, 1253 kg, 1323 kg, 1393 kg]
- The weight of the machine will vary depending on the tube length and optional accessories
- Scraper option
- Scraper and Water Spray option
- Steering Leg option

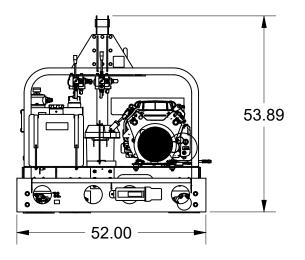
Roller Tubes

- Diameter: 6-5/8" [16.83 cm] Pipe, or 8" [20.32 cm] Pipe
- Wall Thickness: 6" tube 0.28" [7.11 mm], 8" tube 0.323" [8.20 mm]
- Tube weight per foot (estimated): 6" tube 20.1 lb [9.12 kg], 8" tube 29.1 lb [13.20 kg]

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14' SETUP SHOWN





General Information

Engine Specifications

Engine Information

The 75 Triple Roller Tube Paver is equipped with a 24 HP Honda gasoline engine. Refer to the applicable engine OEM Owner's manual for specific instructions regarding engine operation. This manual is included with the paver at the time of shipping from AEC.

Engine Features:

| Model Number: | IGX800 |
|-----------------------------------|--------------------|
| Fuel Type | Gasoline |
| Net Power @3600 RPM hp (kW) | 24.91 (18.6) |
| Displacement cu in (cc) | 47.5 (779) |
| Bore in (mm) | 3.2 (83) |
| Stroke in (mm) | 2.83 (72) |
| Net Torque @ 2500 RPM lbs ft (Nm) | 40.2 (54.5) |
| Compression Ratio | 9.1:1 |
| Dry Weight Ibs (kg) | 103.4 (46.9) |
| Oil Capacity U.S. quarts (L) | 2.1 (2.0) |
| Lubrication | Full pressure |
| Dimensions L x W x H in | 16.9 x 19.4 x 17.2 |



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Engine Specifications (Old engine)

General Information

Engine Features:

| Model Number: | IGX700 |
|-----------------------------------|------------------|
| Fuel Type | Gasoline |
| Net Power @3600 RPM hp (kW) | 22.1 (16.5) |
| Displacement cu in (cc) | 41.97 (688) |
| Bore in (mm) | 3.07 (78) |
| Stroke in (mm) | 2.83 (72) |
| Net Torque @ 2500 RPM lbs ft (Nm) | 35.6 (48.3) |
| Compression Ratio | 9.3:1 |
| Dry Weight Ibs (kg) | 103.8 (47.1) |
| Oil Capacity U.S. quarts (L) | 2.0 (1.9) |
| Lubrication | Full pressure |
| Dimensions L x W x H in | 16.9 x 19 x 17.2 |



General Information

CE Declaration

PENDING CE DECLARATION AT THIS TIME.

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Sound Pressure Level Information:

Sound pressure is "A" weighted . Measured at the operators ear position while the paver is operating at full throttle in a manner most often experienced in "normal" circumstances. Sound pressure may vary depending upon the environment. 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 while operating the paver 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.

| S | Summary Data Of Sound And Vibration Testing for CE Marking | | | | | | |
|-----------------|--|---------------------------|---------------------|----------------------|------------------------------|------------------------------|------------------------------|
| Test Machine | Engine Type | Distant Sound Press | Operator Ear SPL | Sound Power Level | Seat Vibration Overall | Foot Vibration Overall | Hand Vibration Maximum |
| TRTP75 | Honda 24 hp | TBD | TBD | TBD | TBD | TBD | TBD |
| Thi | This information was acquired from extensive sound and vibration analysis tests conducted at | | | | | | |

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Allen Engineering Corporation test facilities.

SECTION 1: SAFETY

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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.



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.

SECTION 1 SAFETY

Manual Tag Safety Detail

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 highlight that contains useful or important information.

EMERGENCY

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.

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A WARNING A 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 arrester 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.

| Symbol | Safety Hazard | |
|--------------|------------------------------|--|
| 2 | Lethal exhaust gas hazards | |
| My | Explosive fuel hazards | |
| ahilituhtun. | 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.

SECTION 1 SAFETY

Operating Safety



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 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 quards in place and in working order.

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Operating Safety

SECTION 1 SAFETY

- Before starting up and during operation of the paver, the operator must make sure that there are no persons near the machine's moving parts and paving path. Always check the job site for obstructions and bystanders.
- Only dismount the machine while it is stationary.
- The operator should look in the direction of travel and must always have a clear view of the route ahead.



Be careful not to touch any hydraulic components after the paver has been in use, these components can be extremely hot an can cause burns. Also, do not attempt to loosen or disconnect any hydraulic components without first relieving hydraulic circuit pressure

SECTION 1 SAFETY

Engine Safety

▲ DANGER

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** 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.

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Service Safety

SECTION 1 SAFETY



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.

- 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.
- ALWAYS work on completely depressurized systems. When checking for leaks use a piece of cardboard to find any signs of leakage.

SECTION 1 SAFETY

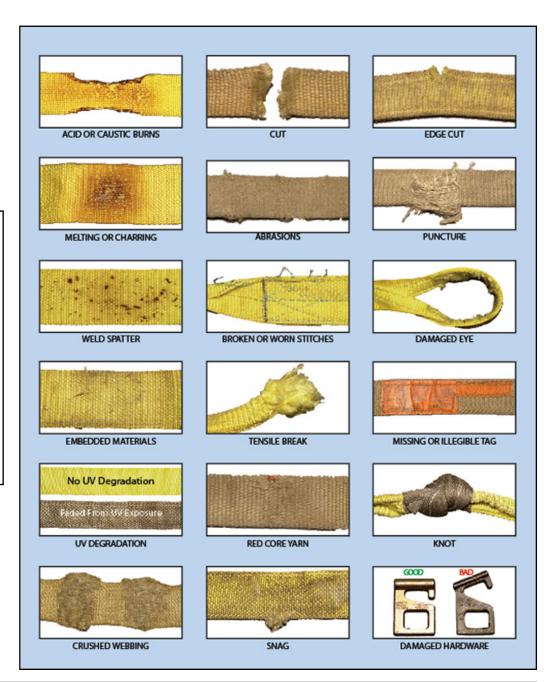
Lifting Safety

ALWAYS do a thorough inspection of the slings, chains, and hooks before attempting to lift the machine!

OSHA has set forth guidelines which detail the use of Rigging Equipment for Material handling. This guideline is found under

OSHA Standard Number: 1926.251

Please read and follow all guidelines found in this standard.



Removal from service.

Synthetic web slings shall be immediately removed from service if any of the following conditions are present:

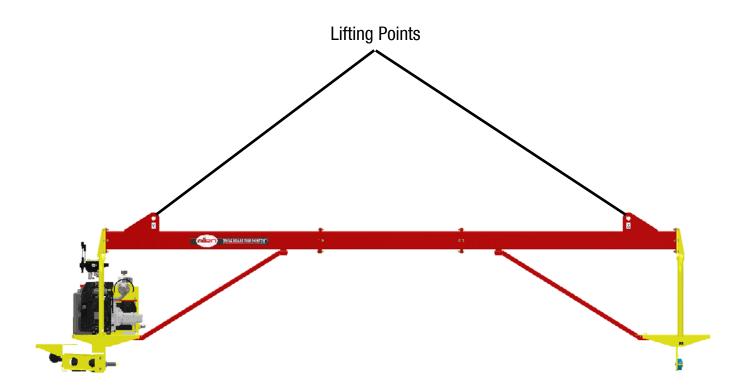
OSHA 1926.251(e)(8)

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- When lifting the machine, all personnel must be clear of the machine.
- DO NOT stand near or under the machine while it is being lifted.

Lifting instructions using a hoist:

- A lifting harness is shipped with the machine, but it is available for purchase if a replacement is needed. Part
 number 075041 is for the Shackle and 075042, 075043, 075044 are for the straps, which are 10', 12' and 14'
 respectively. Different machine sizes will require different lifting straps to stay balanced. See Accessories on page
 44.
- Place straps, chains, or hooks through each lifting point on the machine. Use straps or chains connected to a central lifting device. Ensure that all lifting devices have sufficient weight-bearing capacity.
- ALWAYS shutdown the engine before transporting.
- Avoid sharp bends, pinching, and crushing. Use loops and thimbles at all times. Ensure that the straps are protected from sharp corners.
- Never wrap a strap around a hook
- Avoid bending near any splice or attached fittings
- Ensure that the strap's angle is always greater than 45° and preferably greater than 60°.



SECTION 1 SAFETY

Transportation - Trailer Safety

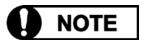
- Make sure the hitch and coupling of the towing vehicle are rated equal to, or greater than the trailer "gross vehicle weight rating."
- ALWAYS inspect the hitch and coupling for wear. Never tow a trailer with defective hitches, couplings, chains, etc.
- Check the tire air pressure on both towing vehicle 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.
- Use tie downs to ensure machine does not move during transportation.

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SECTION 2: OPERATION

SECTION 2 OPERATIONS

Introduction to Triple Roller Tube Paver 75



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.

- The 75 Triple Roller Tube Paver (TRTP) is a simple and economic but effective paving machine. This model is the smallest of the TRTP family. The 75 TRTP is the ideal machine for smaller paving jobs.
- This machine is powered by an air-cooled 24 hp Honda gasoline engine.
- The finishing tube has a variable speed control with forward and reverse movement. The maximum setting for the finishing tube is approximately 170 RPM and the maximum setting for the travel tubes are approximately 25 RPM.
- This machine can be fitted with either 6" or 8" diameter tubes. The length of the tubes can be customized from 14' to 28' in 2' increments.

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Start-up Procedure

SECTION 2
OPERATIONS

Before Starting Procedures

Before starting the paver check for the following:

- 1. Oil level in the engine and hydraulics
- 2. Check for hydraulic leaks
- 3. Fuel level in the fuel tank
- 4. Condition of the air cleaner on the engine
- 5. Verify that all of the controls are in the neutral position
- 6. Verify that the daily maintenance has been performed
- 7. Check for properly functioning controls before operating the paver

Starting Procedures

Before starting the paver, refer to Figure 2.1 and Figure 2.2 on pages 31 and 32 for the location and identification of operational and visual controls pertaining to the operation of the 75 Triple Roller Tube Paver.

- 1. Ensure that the fuel valve is open, this is located on the bottom of the fuel tank.
- 2. Move the throttle control to the MIN position. See Figure 2.1.
- 3. Insert the key and turn the engine switch to the ON position. The indicator (red) should come on and then turn off.
- 4. Then turn and hold the engine switch on the START position until the engine starts, release the switch when engine starts. The switch will return to the ON position, check that the indicator light is off.
- 5. Allow engine to warm up for 5 minutes before operating paver.



Operating the starter for more than 5 seconds can damage the starter or engine. If engine fails to start release the button and wait 15 seconds before operating starter again.



To turn off the 75 TRTP make sure that the throttle is in the MIN position and then turn the engine switch over to the OFF position and the engine will stop.

SECTION 2 OPERATIONS

75 TRTP - Operator Controls

The Information below was taken directly from the manufactures product literature. For further information please reference the engine manufactures Owner's Manual.

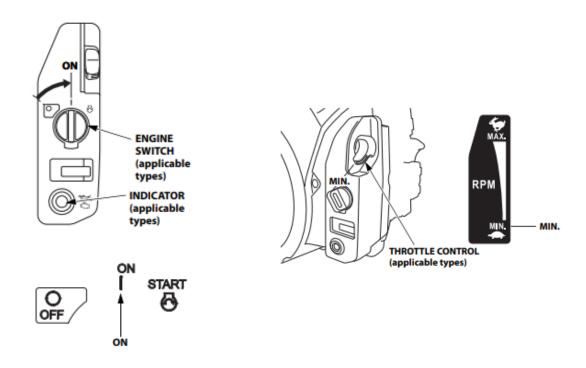


Figure 2.1: Operator Controls [D]

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Operating The 75 TRTP

The operation of this machine is simple and easy to learn. It does not have a lot of components and parts, except for the hoses and hydraulic components, this machine is a simple and economic concrete paver. However, without proper instruction on how to operate this machine, it can become hazardous to the surrounding workers and result in an improper finish.



All items in this manual are describe from the operator's POV from the operators platform.

Location of all Operating Controls

- A. Finish Tube Control (Forward & Reverse)
- B. Travel Tube Control (Forward & Reverse)
- C. Steering Leg Control (Up & Down) [Optional Feature]

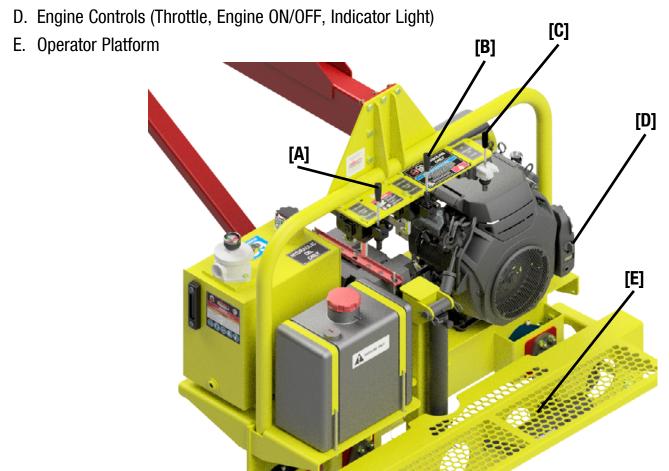


Figure 2.2: Operations Control Components

SECTION 2 OPERATIONS

75 TRTP Operation

Operating The 75 TRTP Continued

- After the engine has been started and warmed up, increase the throttle to the maximum engine RPM
- To start paving in the forward motion, pull the finish tube lever [A] down and push the travel tube lever [B] up. The finish tube will rotate in opposite direction (CW) of the travel tube (CCW).
- To go in reverse, pull the travel tube lever [B] down and push the finish tube lever [A] up.
- To make all the tubes travel in the same direction (whether forward or reverse), push both the travel tube and the finish tube levers in the same direction.
- (If applicable) To turn the machine push the steering leg lever [C] up, this will extend the steering leg. The forward or reverse motion of the tubes controls the rotation of the machine. Once the machine is turned to the desired distance pull the lever down to retract the steering leg.
- Always try to maintain an equal amount of overhang on either side of the paving path.
- Be mindful of any rocks, high spots, or other obstructions that may appear on the paving forms or surface. If one side of the paver gets stuck on an obstacle it will cause the paver to turn and it will need to be squared back up on the forms or surface.

Stopping the Paver

To stop the paver's movement, return the control levers to their neutral position.



DO NOT use excessive pressure on the controls. Excessive pressure does not increase the reaction time of the machine and can damage the controls.

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Finish Tube Adjustment Procedure

To adjust the front finish tube height do the Following. Refer to Figures 2.3 and 2.4 for reference.

- Loosen the hardware for the bearings and the hydraulic motor attachment plates (A).
 Note: this must be done on both the motor end and idle end
- Adjust the finish tube (B) to the desired height above grade and re-tighten the hardware.

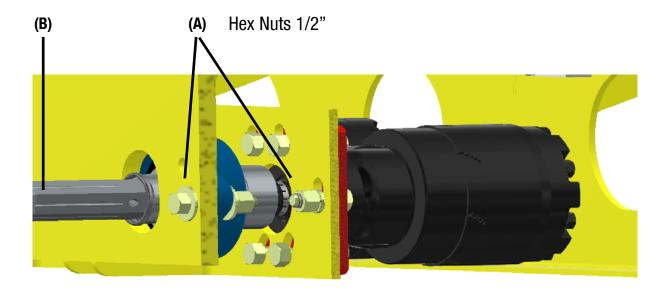


Figure 2.3: Finish Tube Adjustment, Motor End

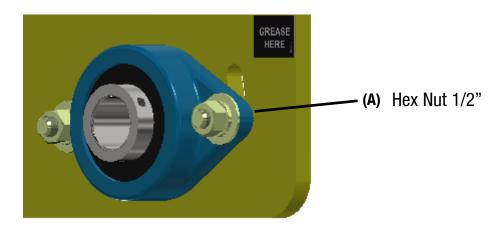


Figure 2.4: Finish Tube Adjustment, Idle End

SECTION 3: SERVICE

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Troubleshooting

SECTION 3 SERVICE

| Area | Malfunction | Possible | Corrective | Ref. |
|--------|--|---|---------------------------------------|------|
| 7.1.00 | manunous. | Cause | Measure | |
| | | Battery is discharged | - Add battery fluid | |
| | Engine does not start, or is difficult to start | | - Charge the battery | |
| | | | - Replace the battery | + |
| | | Battery cable is disconnected | - Connect battery cable | |
| | | Blown fuse | - Replace fuse | |
| | | Bad connection or breakage in the wiring | - Contact your AEC dealer | |
| | | Out of fuel | - Fill fuel | |
| | | Air is in fuel | - Contact your AEC dealer | |
| | | Engine fouled | - Wait a while and try starting again | |
| | | Insufficient or wrong oil | - Fill or change oil | |
| | | Dirty or damaged spark plug | - Clean or replace spark plug | |
| | | Contamination in fuel system | - Contact your AEC dealer | |
| | | Other (other than above) | - Contact your AEC dealer | |
| | | Out of fuel | - Fill fuel | |
| | Engine stalls | Cold engine | - Warm up the engine | |
| | | Other (other than above) | - Contact your AEC dealer | |
| | Engine stops abruptly | Out of fuel | - Fill fuel | 1 |
| | | Piston siezure due to insufficient or bad oil | - Contact your AEC dealer | |
| | | Other (other than above) | - Contact your AEC dealer | 1 |
| | Engine does not stop | Electrical malfunction | - Contact your AEC dealer | 1 |
| Engine | | Other (other than above) | - Contact your AEC dealer | 1 |
| | Idling is not stable | Insufficient intake air (clogged air cleaner) | - Clean or replace the air cleaner | 1 |
| | | Other (other than above) | - Contact your AEC dealer | † |
| | Poor power or acceleration | Bad fuel | - Change fuel | † |
| | | Wrong oil (improper viscosity) | - Change to suitable oil | + |
| | | Accelerator (throttle) is not properly adjusted | - Contact your AEC dealer | 1 |
| | | Insufficient intake air (clogged air cleaner) | - Clean or replace the air cleaner | + |
| | | Excessive load | - Reduce load | + |
| | | Loose drive belt | - Adjust | + |
| | | Other (other than above) | - Contact your AEC dealer | + |
| | Irregular noise or | Other (other than above) | - Contact your AEC dealer | + |
| | vibration from or around | | - Contact your AEC dealer | |
| | the engine | | | |
| | Excessive oil | | - Contact your AEC dealer | 1 |
| | consumption | | | |
| | ' | Insufficient amount of engine oil | - Fill oil | |
| | Engine overheats | Cooling fan is clogged or blocked | - Clean | |
| | | Other (other than above) | - Contact your AEC dealer | 1 |
| | Excessive fuel | Clogged air cleaner | - Clean or replace air cleaner | 1 |
| | consumption | Other (other than above) | - Contact your AEC dealer | 1 |

SECTION 3 SERVICE

Troubleshooting Continued & Filters

| Area | Malfunction | Possible Cause | Corrective Measure | Ref. |
|---------------------|--|--|------------------------------------|------|
| Engine | Black smoke comes out of exhaust | Bad fuel | - Change fuel | |
| | | Clogged air cleaner | - Clean or replace the air cleaner | |
| | | Other (other than above) | - Contact your AEC dealer | |
| | White or blue smoke comes out of exhaust | Engine oil level is too high | - Adjust the oil level | |
| | | Other (other than above) | - Contact your AEC dealer | |
| Safety Devices | Lamp does not light | Blown bulb | - Replace | |
| | | Blown fuse | - Replace | |
| | | Other (other than above) | - Contact your AEC dealer | |
| Hydraulic System | Pump does not work | Insufficient or deteriorated hydraulic fluid | - Add or change fluid | |
| | | Other (other than above) | - Contact your AEC dealer | |



AIR CLEANER PART #: 064832



ENGINE OIL FILTER PART #: 064831



ENGINE FUEL FILTER PART #: 064833

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Periodic Maintenance Schedule

SECTION 3
SERVICE

Periodic Maintenance Schedule

The table below lists basic paver and engine maintenance. Refer to OEM engine manufacturer's Owner's Manual for additional information on engine maintenance.

| CHECK LIST | | | | | | | |
|----------------------------|-------|-----------------|-----------------|------------------|------------------|------------------|------------------|
| ITEM | DAILY | EVERY 20 HRS | EVERY 50 HRS | EVERY 100 HRS | EVERY 200 HRS | EVERY 300 HRS | EVERY 500 HRS |
| Check Hydraulic Oil Level | ✓ | | | | | | |
| Check Engine Oil | ✓ | | | | | | |
| Check Fuel Level | ✓ | | | | | | |
| Check Hose and Fittings | ✓ | | | | | | |
| Check External Hardware | ✓ | | | | | | |
| Change Engine Oil | | | | ✓ | | | |
| Grease Bearings | | ✓ | | | | | |
| Replace Engine Fuel Filter | | | | | | ✓ | |
| Replace Engine Oil Filter | | | | | ✓ | | |
| Check Valve Clearance | | | | | | ✓ | |
| Check Air Cleaner | ✓ | | | | | | |
| Clean Air Cleaner | | | | ✓ | | | |
| Replace Air Cleaner | | | | | | | ✓ |
| Check Hydraulic Motors | | | ✓ | | | | |
| Grease Steering Leg | | | ✓ | | | | |
| Check Hydraulic Oil Filter | ✓ | | | | | | |

SECTION 3 SERVICE

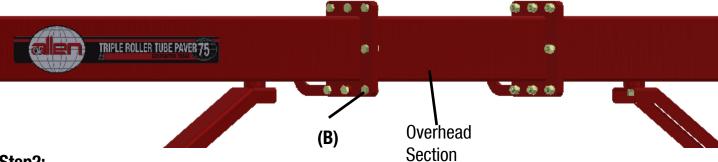
Tube Changing Procedure

Note: Make sure that the frame is supported by a crane or hoist to ensure that it does not collapse



Step 1:

- On the Idle end
- Remove the 1" nuts (A) from the tubes
- Loosen the set screws on the bearings

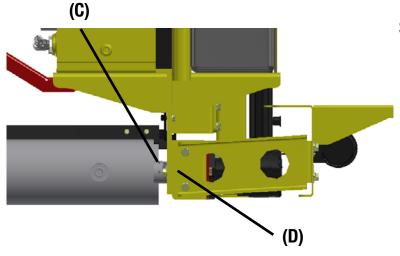


Step2:

Remove the 1/2" bolts (B) that connect the center overhead section(s) in between the motor end and the idle end

Note: Make sure that the frame is supported by a crane or hoist to ensure that it does not collapse

Take the sections apart or add sections until the desired length is achieved



Step 3:

- Remove the 1/4" bolts (C) from the hex drivers
- Pull the tube out of the motor end frame (D), repeat this process with all three tubes
- Replace the old tubes with the new length tubes
- Reassemble the 1/4" bolts into the hex drivers and the 1" nut on the idle end

Bearings

The bearings for the roller tubes must be greased approximately every 20 hours. See figures 3.1 and 3.2 for the location of the grease ports.



Figure 3.1: Motor Side Bearing Grease Points

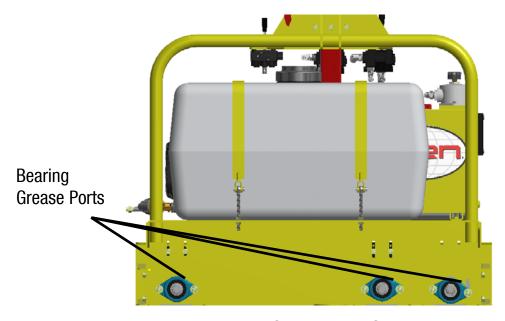


Figure 3.2: Idle Side Bearing Grease Points

SECTION 3 SERVICE

Cleaning Procedure

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.

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Battery - Jump Start

Battery Jump Start Procedures

Occasionally it may be necessary to jump start a weak battery. If jump starting is necessary the following procedure is recommended to prevent starter damage, battery damage, and personal injury.



Jump starting a battery incorrectly can cause the battery to explode, resulting in severe personal injury or death. Do not smoke or allow any ignition sources near the battery and do not start a frozen battery.



Electrical arching can cause severe personal injury. Do not allow the positive and negative cable ends to touch.

- 1. Use a battery that has the same voltage as the one used with your engine.
- 2. Attach one end of the positive booster cable (red) to the positive (+) terminal of the booster battery. Attach the other end to the (+) terminal of your engine battery.
- 3. Attach one end of the negative booster cable (black) to the negative (-) terminal on the booster. Attach the other end of the negative cable to your engine battery.
- 4. Jump starting in any other manner may result in damage to the battery or the electrical system.



Over cranking the engine can cause damage to the starter. If the starter is engaged for more than 15 seconds wait 5 minutes to let the starter cool.



When using lights or high amperage drawing accessories, idle the engine for a period of 20 minutes to bring the battery to a charging state.

Battery - Jump Start

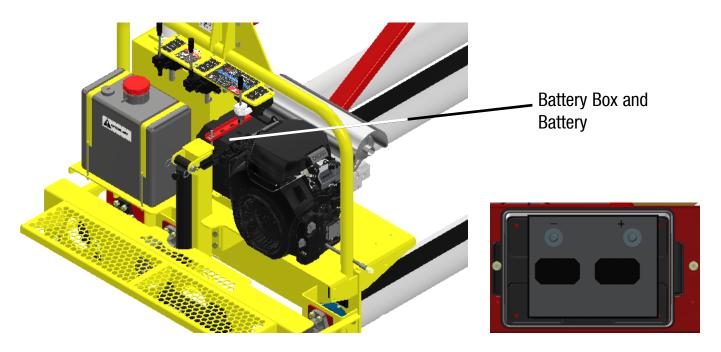


Figure 3.11: Battery Location and Terminals

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Accessories

General Information



Shackle, Screw Pin Sling Saver 3" wide, 12.5 Tons

Part Number: 075041

Lifting Straps:

 10' long, 2" wide 10" long flat eyes, 8,800 lb cap choker Part Number: 075042

 12' long, 2" wide 10" long flat eyes, 8,800 lb cap choker Part Number: 075043

• 14' long, 2" wide 10" long flat eyes, 8,800 lb cap choker Part Number: 075044

The following list details what straps are needed for each tube length:

• 14': Motor End 075042, Idle End 075042

• 16': Motor End 075042, Idle End 075042

• 18': Motor End 075043, Idle End 075043

• 20': Motor End 075043, Idle End 075043

• 22': Motor End 075042, Idle End 075043

• 24': Motor End 075042, Idle End 075044

• 26': Motor End 075043, Idle End 075044

• 28': Motor End 075044, Idle End 075044

General Information

Parts Manual

Parts Manual

In order to provide a premier experience to our customers, we have moved the "Parts" section out of this manual and placed it in a separate "Parts & Decals Manual". This will allow us to provide any changes or other important information quicker to you, the customer. See below for ways to access the "Parts & Decals Manual".

Mobile Device:

Scan this QR code with a compatible device (cellular phone, tablet, etc.) to view the machine's specification page with links to the manuals.



Computer:

Link

Mail:

A physical copy of the parts manual can also be mailed to you upon request. Please contact Allen Engineering service department and one can be sent to you.

Allen Engineering P.O. Box 819 Paragould, Ar. 72451, USA

Phone: 1.800.643.0095 (USA Only) / 1.870.236.7751 Fax: 1.800.643.0097 (USA Only) / 1.870.236.3934

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Revision Detail

General Information

| MANUAL REVISION DETAIL | | | | | |
|------------------------|---------------|---|-------------|--|--|
| REVISION # | REVISION DATE | REVISION REFERENCE # | REVISION BY | | |
| | 01/22 | Initial Release | MK | | |
| Α | 06/22 | ECR 22-241, 26' & 28' Information | MK | | |
| В | 06/24 | 24-002, Updated engine info | MK | | |
| С | 07/25 | Added Power Spray Option PN to model list | MK | | |

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