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## Tremor 3400 Post Driver



A Product By:

**Eterra**

A Skid Steer Solutions, Inc.  
Company

USA

[www.etterra-usa.com](http://www.etterra-usa.com)

## User Manual

For more information and customer support –  
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## **About This Manual**

This document is divided into the following chapters:

- Chapter 1, “Introduction” – Use this to familiarize your self with the features and safety requirements when using this product.
- Chapter 2, “Operation” - Learn how to operate this Post Installer efficiently and safely.
- Chapter 3, “Maintenance and Troubleshooting Guidelines”, explains how to work the Post Installer in the safest manner possible.
- Chapter 4, “Warranty” – See what you are covered for and how long. We offer one of the most extensive and hassle free warranties in the business. We know that you depend on this product to make a living and it shows with how easy it is to get replacement parts and technical advice.

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## **Who Should Use It**

This guide is intended for users of different degrees of knowledge and experience with equipment.

- Users: This manual provides all of the safety information you will need to operate the Eterra Tremor Post Installer without incident.
- Technicians: All service information and parts diagrams are furnished so that you can inspect and repair your TREMOR yourself or with the help of a qualified service technician.

# 1. Introduction

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## 1.1. Purpose

The Eterra Tremor 3400 is designed to be used with skid steer loaders or excavators of the appropriate weight class. They are intended to be used by operators of all experience levels. To accomplish this feat, a very simple design has been used which is unlike anything else found in the industry. By offering a bolt on driver style, the Tremor may be used for skid steer applications as well as excavator and backhoe operations. The safety and construction features of the Tremor Post Installers are second to none.

You must read and understand the theory of operation so that you can operate these Post Installers safely and so you can maintain the safety of the operators and bystanders.

This product was designed to be sold online and out of the box ready to operate with the minimal amount of assembly.

### **This Document:**

The sole purpose of this manual is to help you train yourself to be a responsible operator and troubleshooter of the operation of the Eterra TREMOR so that you can identify safety issues before anything serious can happen. Failure to follow the directives noted in this document may lead to serious injury or death.

## 1.2. Scope

Please read and understand all safety directives prior to operation and follow the initial start-up procedure before ever powering up the TREMOR. It is extremely important that the TREMOR is checked and re-checked prior to each operation and that it is thoroughly cleaned after each use to minimize damage caused by seized parts.

### 1.3. Safety Marking

Safety Alert Symbols are used throughout this manual and on decals on your Post Installer. When you see symbols become alert to safety information and adhere to it to prevent injury or death.

**SIGNAL WORDS** - There are signal words that are used in conjunction with the safety alert symbol; these signal words have been selected using the following guidelines:

**DANGER** – An immediate and specific hazard WILL result in severe personal injury or death if the proper precautions are not taken.

**WARNING** – A specific hazard or unsafe practice which could result in severe personal injury or death if proper precautions are not taken.

**CAUTION** – Unsafe practices which could result in personal injury if proper practices are not taken, or as a reminder of good safety practices.

You, as the owner of an Eterra Post Installer are responsible for its safe operation and maintenance. You need to make sure anyone working with, maintaining or working around the Post Installer is familiar with the operation and maintenance of the unit. Be alert, know all safety information in this manual and adhere to safety practices at all times.

Remember a safe operator is the key to avoiding most accidents. Most accidents can be avoided by – THINKING SAFETY AND WORKING SAFELY.

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### 1.4. General Safety

- Read, study and understand your Operator's Manual.
- Understand all safety symbols before operating or maintaining the TREMOR.
- After maintaining or adjusting, make sure all tools and foreign objects are removed.
- Stop Skid Steer, set park brake and remove the key from ignition. Make sure all moving parts have been stopped before dismounting your Skid Steer for any reason.
- Make sure all guards and shields are properly installed and secure.
- NEVER leave the Post Installer lifted off the ground and stand under it for any reason.

## **1.5. Operational Safety**

- Read and understand the Operator's Manual and all safety signs before operating, servicing, adjusting or unplugging.
- Do not allow riders on the Skid Steer during field operation or transport.
- Install and secure all guards and shields before starting and operating.
- Never wear ill-fitting, baggy or frayed clothing when working around or on any of the drive system components.
- Keep hands, feet, hair and clothing away from all moving and/or rotating parts.
- Never operate the machine inside a closed building.
- Stop Skid Steer engine, place hydraulic controls in neutral, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
- NEVER EVER Climb out of your machine with the boom raised. Serious injury or death can occur.
- Ensure that all Skid Steer controls are in neutral before starting.
- Clear the area of all bystanders, especially children, before starting.
- Be careful when working around or maintaining a high-pressure hydraulic system. Wear proper eye and hand protection when searching for a high-pressure leak. Use a piece of wood or cardboard as a backstop when searching for a pin-hole leak in a hose or line.
- Before applying pressure to the hydraulic system, make sure all components are tight and that steel lines, hoses and couplings are not damaged.
- Take care when working on steep ground, particularly when turning, and especially with mounted Post Installers.
- Stay away from overhead obstructions and power lines during set-up and operation. Electrocutation can occur without direct contact.
- Review all safety instructions annually.

## **1.6. Maintenance & Transport Safety**

- Review the Operator's Manual and all related Maintenance, Operating and SAFETY information annually with all personnel who will be working with, maintaining or operating the Post Installer.
- Be careful when working around or maintaining high-pressure hydraulic systems. Wear proper eye and hand protection when searching for a high-pressure hydraulic leak. Use a piece of wood or cardboard as a backstop when searching for a pin-hole leak in a hose or steel line. Do not attempt any makeshift repairs to the hydraulic lines, fittings or hoses by using tape, clamps or cements. The hydraulic system operates under extremely high-pressure. Such repairs will fail suddenly and create a hazardous and unsafe condition.
- Before applying pressure to a hydraulic system, make sure all components are tight and that steel lines, hoses and couplings are not damaged.
- Seek immediate medical attention if a high-pressure concentrated stream of hydraulic fluid pierces the skin, as a toxic reaction and infection could develop.
- Keep hands, feet, clothing and hair away from all moving and/or rotating parts.
- Never wear ill-fitting, baggy or frayed clothing when working around or on any of the drive system components.
- Clear the area of all bystanders, especially children, when carrying out any maintenance or making adjustments on the systems components.
- Lower boom to the ground before servicing, adjusting or repairing the machine.
- When moving on or near roadways, make sure the SMV (Slow Moving Vehicle) emblem and all the lights and reflectors that are required by the local highway and transport authorities are in place, are clean and can be seen clearly by all overtaking and oncoming traffic.
- Never transport with the boom arms extended upward. Boom arms should be in the stowed position in towards the Skid Steer when transporting.
- Do not allow riders on any parts of the machine during either field operation or road and highway travel.
- Attach the Post Installer to the Skid Steer using the skid mounting plate. Always use warning flashers (hazard) on the Skid Steer when transporting unless prohibited by law.



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## **2. Operation**

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### **2.1. Introduction**

The Tremor 3400 Post Installer was designed to be a highly effective vibratory driving solution for skid steer loaders of all sizes. If maintained properly, it will provide the owner with many years of service with no damage to property or people. If not maintained properly, the TREMOR can easily injure people or property and will not last as long as the design allows. You must visually inspect and test the TREMOR before and after each use to insure nothing has come loose or is badly worn. The rubber shock mounts must be checked before each use. They must also be warmed up properly when being used in a cold weather application. The Owner's Manual is designed to help you be a safe and knowledgeable operator of this Post Installer.

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### **2.2. Theory of Operation**

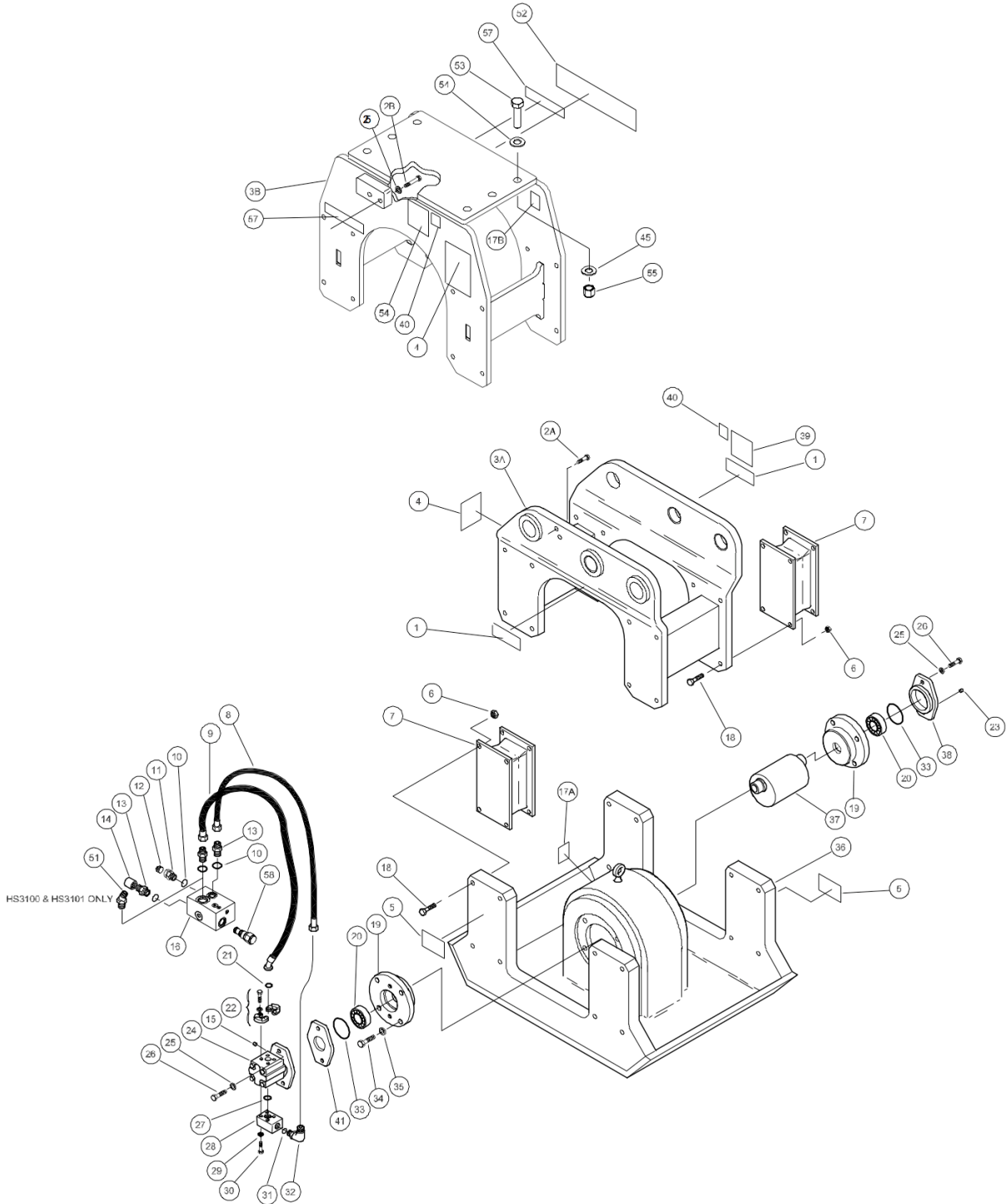
The TREMOR Vibratory Post Installer is a plate compactor drive system that has been refit and commissioned as a stand-alone vibratory post driver. The bolt on simplicity of this design allows the owner to use this as a skid steer driver and as an excavator or backhoe driver by just unbolting the head and then bolting it to a new coupler.

Driving posts is managed by aligning the proper cup over the post and applying a small amount of pressure. Turn on your hydraulics and watch as the post is vibrated into the ground magically. The TREMOR does not require a lot of hydraulic flow (12 GPM is Optimal) or machine weight. It simply finesses the post into the ground by liquefying the ground around the post and allowing the post to slide through it.

When you first are using your TREMOR, hold it up in front of your machine and vary your hydraulic flow. You will find a flow that will allow the TREMOR to bounce. Record the RPM of your machine and use this as your reference every time you drive a post. This is the flow that gives you the maximum vibration for post driving. Other flows can be used for using the TREMOR for compacting or driving Sheet Piling, but for general post driving you want the head to bounce.

The TREMOR drive system contains a large eccentric that is hydraulically driven. When you are applying hydraulic force to the motor, the eccentric is spun and causes a vibration. The flow is regulated through an aluminum control block connected to the hoses so you cannot over spin the eccentric. Flow is directional to the motor so make sure your hoses are connected correctly otherwise you will experience very low power at the head.

### 2.1. Main Components - TREMOR 3400



## 2.2. Parts List - TREMOR 3400

Item	Part No.	Qty	Description
1	18968	2	Decal, HS3004
2A	04661	2	Capscrew (3004F)
2B	20382	2	Capscrew (HS3100& HS3101)
3A	35792	1	Upper Frame Weldment (HS3004F)
3B	65719	1	Upper Frame Weldment (HS3100 & HS3101)
4	47351	1	Decal, Composite Safety (HS3004F, HS3100)
5	05152	2	Decal, Stanley
6	04353	32	Nut
7	12079	4	Shock Mount
8	35788	1	Hose Assy (HS3004F)
	65729	1	Hose Assy (HS3100 & HS3101)
9	35789	1	Hose Assy
10	06891	4	O-ring
11	02112	1	Adaptor
12	25109	1	Plug
13	2773	--	Connector (1 for HS3004, 2 for HS3100 & HS3101)
14	28841	--	Cap (1 for HS3004, 2 for HS3100 & HS3101)
15	372003	1	Grease Fitting 45°
16	35704	1	Hose Block Assy (HS3004F & HS3100)
	65733	1	Hose Block Assy (HS3101)
17A	47352	1	Decal, Pick Point (HS3004F)
17B	47352	2	Decal, Pick Point (HS3100 & HS3101)
18	02099	32	Capscrew
19	206028	2	Bearing Carrier
20	206019	2	Bearing
21	06891	1	O-ring
22	350215	1	Split Flange Kit (HS3004F, HS3100)
	10289	1	Split Flange Kit (HS3101)
23	372003	1	Grease Fitting
24	22061	1	Motor (HS3004F, HS3100)
	22060	1	Motor (HS3101)
25	371050	6	Washer
26	02504	4	Capscrew
27	00834	1	O-ring
28	206029	1	Inlet Manifold (HS3004F, HS3100)
	10272	1	Inlet Manifold (HS3101)
29	371056	4	Washer (HS3004F & HS3100)
	02634	4	Washer (HS3101)
30	370155	4	Capscrew (HS3004F & HS3100)
	02665	4	Capscrew (HS3101)

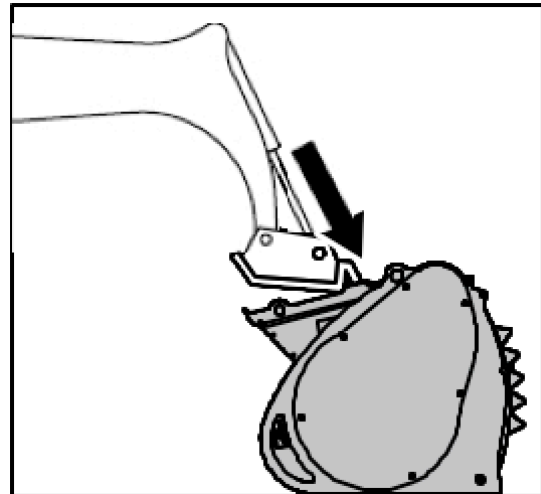
Item	Part No.	Qty	Description
31	1605	1	O-ring
32	4860	1	Elbow
33	6330	2	O-ring
34	370352	8	Capscrew
35	371061	8	Washer
36	35245	1	Shoe Weldment
37	12669	1	Mass Weight Assy
38	206024	1	Bearing Cover
39	58887	1	CE Plate (HS3004F)
40	58602	1	Decal, Sound Power Level
41	21896	1	Mount Adapter, M30 Motor
42	----	--	NO ITEM
43	----	--	NO ITEM
44	----	--	NO ITEM
45	----	--	NO ITEM
46	----	--	NO ITEM
47	----	--	NO ITEM
48	----	--	NO ITEM
49	----	--	NO ITEM
50	----	--	NO ITEM
51	04328	1	45° Elbow (HS3100 & HS3101)
52	09163	1	Decal, Stanley (HS3100 & HS3101)
53	370353	6	Capscrew (HS3100 & HS3101)
54	20876	12	Washer (HS3100 & HS3101)
55	371514	6	Nut (HS3100 & HS3101)
56	65730	1	Decal, CE (HS3100)
	65731	1	Decal, CE (HS3101)
57	12686	2	Decal, HS3000 (HS3100 & HS3101)
58	35702	1	Cartridge
	<b>206020</b>	<b>1</b>	<b>Motor Seal Kit 9 gpm Motor</b>
	<b>21654</b>	<b>1</b>	<b>Motor Seal Kit 13 gpm Motor</b>

## 2.3. Pre-Operation Checklist

- The Eterra TREMOR Post Installer is designed to ensure years of trouble free use. A poorly maintained machine is an invitation to expenses and trouble. We recommend that before operation that this checklist be followed to ensure trouble free operation.
- Give the machine a “once-over” for any loose bolts, worn parts, cracked welds, hydraulic leaks, frayed hoses etc. and make necessary repairs. Double check the Post Installer coupler as well as mounts to insure nothing has come loose as you risk the Post Installer head falling off if not properly inspected.
- Check for excessive wear as well as cracks in rubber shock mounts. Replace as needed.
- Be sure that there are no tools lying on or in the machine.
- Lubricate the main eccentric bearings daily or after each 8 hours of use.
- Make sure all hoses are clear of cuts, abrasions, worn spots and pinch points before operating. Check that hoses do not get caught in the pinch areas of your skid steer boom.
- Check the tire pressure and make sure they are inflated to their recommended pressures. Connect to Skid Steer and check mechanical Skid Steer connection point for wear that could cause TREMOR to fall off. Repair any damage as needed.

### Connection to Skid Steer:

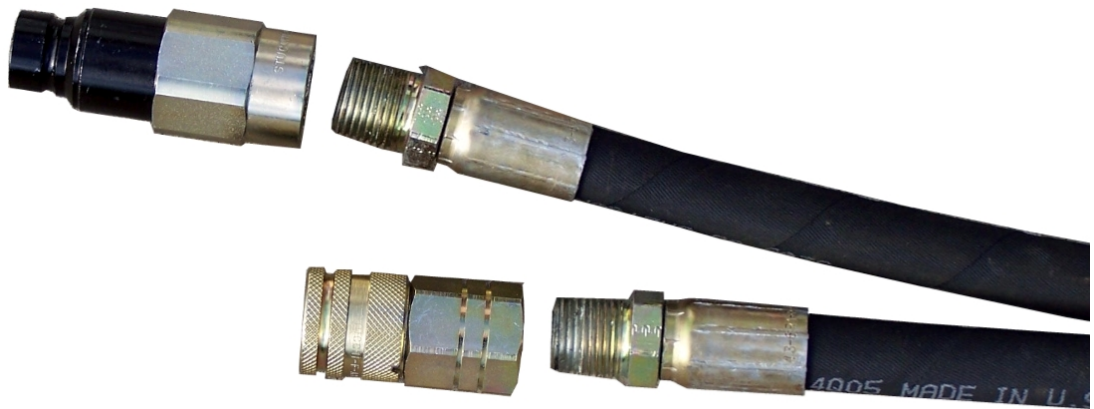
Slowly approach the machine to the coupling plate of the equipment. Hook the top of the machine coupling to the top of the coupling plate. Slowly move the machine forward and at the same time pull the coupling back to fix the bottom of the coupling plate (fig. 14). Stop the machine and remove the ignition key. Lock the coupling between the machine and the equipment by means of the locking device.



- Connect hydraulic lines to skid.

## 2.4. Hydraulic Connections

Depending on your order, your TREMOR may or may not have come with hydraulic quick couplers. The hose ends are furnished with fittings that will screw either directly into the back of the hydraulic couplers or a 90 degree fitting depending on your specific machine requirements. You should check the best hose routing for your machine prior to use and adjust accordingly. The TREMOR operates in one direction and is marked on the control block the direction of flow. If your controls do not work in the direction expected, swap the couplers as your machine may have a detent position with a reverse flow to the way your Post Installer was tested and shipped. The Tremor will lack power if the couplers are installed in the wrong direction. If you are experiencing a lack of power, then simply swap the couplers and you will notice a large improvement. Couplers can be alternated on hose ends easily by the operator. Angled fitting either 45 degree or 90 degree may be used to alter the length and angle of hoses for a more optimal sweep of the hoses.



- Once the couplers are installed, you may connect them to your machine by pushing the male coupler into the female coupler on the Skid Steer and the female coupler of the attachment into the male coupler on the Skid Steer.

## 2.5. Hose Routing

- It is important that you check and recheck your hose routing each time you connect the attachment to your Skid Steer. Each machine is different so you need to make sure that you have routed the hoses away from any potential pinch points. Check that there are no pinch points around the main skid steer pivot. Average hose lengths are shipped at no-charge with each Post Installer. Try to route the hoses towards the front bottom of the mount and away from the back pinch zone.
- It is the customers' responsibility to modify these hose lengths locally as required for your specific machine. Hose lengths can be varied by using or not using a 45 or 90 degree fitting. **There is no warranty either expressed or implied with regards to hose damage due to improper routing or length.**

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## 2.6. TREMOR Operation - Initial

- After you have connected your hoses to your machine, you will want to start the skid steer, and turn on your auxiliary hydraulics. Run the Post Installer up for just a few seconds and turn off the skid steer. Check for leaks at all hose fittings. Tighten as needed and test again.
- Run the machine and familiarize your self with the Post Installer and how it handles different types of posts. Stop and check for leaks. Check the mount to insure nothing has come loose.
- Do not wear loose fitting clothing or jewelry. Hearing and eye protection are highly recommended even if you are inside an enclosed cab. Wear heavy gloves whenever you are handling the hoses or posts.
- Before leaving the skid steer, make sure that the hydraulic power has been turned off and the Tremor has come to a complete stop. THINK before you walk anywhere near the front of the Post Installer if any covers have been removed or damaged.
- If there is any kind of excess vibration, stop using the TREMOR at once until this has been remedied. Excessive vibration can be caused by damaged shock mounts or a loose connection plate. Replace or repair damaged parts immediately.
- To prevent tipping or control losses, reduce your speed when making turns or transitioning onto or off of slopes.
- Post Installers can be extremely dangerous due to excessive weight. Always carry them in the lowest possible position so that you minimize your tipping potential. Only raise the boom up when you are in position to drive a post. Do not drive around with the boom extended up.
- Never allow children to be near or operate this equipment.

## 2.7. Pre-Operation Guidelines for all Installations

### DAILY MAINTENANCE CHECKS

Check for loose or missing fasteners. Tighten or replace as needed. See Torque Specifications in the ASSEMBLY section of this manual. Check to be certain that the flow control valve on the carrier is set to the proper flow for the Tremor. See the SPECIFICATIONS section of this manual. Check shock mounts for cracks or tears. Rotate shock mounts 180° when fatigue tears begin to show at top outer crease of the shock mount. This will prolong the life of the shock mount. Check for abrasion and hydraulic leaks at fittings and hoses. Replace defective hoses and fittings. Adjust hoses and tighten fittings so the hoses do not deflect into contact with structure during use.

Lubricate bearings with two pumps of grease every 40 hours of operation. A greasing location is provided in both bearing carriers. Inspect pins and bushings for correct fit and lubrication.

Check level of hydraulic reservoir on carrier. Make certain that quick couplers are fully engaged and leak free.

### PRE-INSTALLATION INSTRUCTIONS

Test the carrier hydraulic system to verify that the system is operating at the manufacturer's specified capacity and pressure ratings. Be sure the fluid and filter in the hydraulic system are clean. When tightening pipe threads, be careful that any seal-ant used (Teflon® tape, etc.) does not enter the hydraulic system. Foreign matter introduced into the system may damage hydraulic valves, motors and pumps.

### LOW-TEMPERATURE WARM-UP PROCEDURE

When the weather gets cold, the shock mounts on Tremors can become stiff. In severe weather, where the ambient temperature is below freezing for extended periods, shock mounts can even become brittle. Therefore, it is necessary to warm the shock mounts prior to using the Tremor. To warm the shock mounts follow these steps:

1. After starting the carrier, warm up the system until hydraulic lines are warm to the touch.
2. With the carrier at idle, place the Tremor flat on the ground, and using a slight down pressure to keep the Tremor in place, turn the Tremor on. DO NOT place a load on the Tremor during this procedure.
3. When the ambient temperature is below freezing, the Tremor should be operated on the ground with a slight down pressure (no load) for at least one minute before putting it to work.

**DO NOT SUSPEND THE TREMOR IN THE AIR DURING THE WARM-UP PROCEDURE. THE TREMOR MUST BE PLACED FLAT ON THE GROUND WITH A VERY SLIGHT DOWN PRESSURE TO KEEP IT IN PLACE. WHEN AMBIENT TEMPERATURES ARE BELOW FREEZING, SUSPENDING THE TREMOR IN THE AIR WITHOUT FIRST WARMING IT UP MAY CAUSE THE SHOCK MOUNTS TO CRACK.**

**FAILURE TO FOLLOW THESE PROCEDURES WILL VOID TREMOR SHOCK MOUNT WARRANTY**

## **2.8. Operation – Driving & Compaction**

The TREMOR is designed to use the DYNAMIC FORCE of the mass weight assembly, turning at a high rpm, to produce a vibratory force, and with controlled placement, an impact force. The DOWN PRESSURE of the carrier on the Tremor gives a high static pressure which assists in the compaction or driving. The vibration frequency is controlled by the hydraulic flow input to the Tremor and is optimized for use in granular soils. The rate of driving and compaction depends on such factors as moisture content of the soil, condition of the Tremor and carrier, and the skill of the operator. Efficient Tremor performance is directly related to the flow rate specified. A higher flow rate does not improve performance. It results in fluid overheating, and contributes to early bearing failure. A lower flow rate causes reduced compaction performance.

The TREMOR delivers up to 3,400 lbs/1,542 kg of vibratory force. Its base plate covers a 17.5 x 20 in./44 x 51 cm area. It comes standard with a flow control to prevent over-speeding.

### **POST DRIVING**

The following instructions are very important to the proper performance of the Tremor and the attainment of the specified driving depth. With a standard baseplate, the Tremor is held with full down pressure for no more than 5-10 seconds. Control the flow of the driver so that the driver is jumping to it's maximum. This is generally around 12 – 16 GPM. Set your throttle so that the machine is ready once you push the controls to on. Place the correct sized cup onto the TREMOR and place over the post so that it is up and inside the driver.

Align the post so that it is plumb. There are several types of clamp on temporary levels that can be installed to aid in keeping the post level. A spotter should also be used to help with post placement and level checking.

Lower your boom so the post is held snug, but the rubber shock mounts are not being displaced. Turn on your hydraulics with your throttle turn up to a predetermined RPM and allow the driver to start. Move your boom down as the post starts to slide into the ground. If the TREMOR stalls, lift it up slightly and allow it to start moving the post again. Too much pressure or flow are actually a detriment to driving. You must balance the two properly to have a clean install with the minimum of effort. If the driver stalls for an extended time, you have probably encountered a large item that is not easily moved. In this case, you will have to relocate the post or dig the rock out and start over. The TREMOR cannot drive a wooden post through a solid rock.

If your post is not plumb, it is still easy to change to direction slightly as the post is vibrating. You have to do this slowly and carefully or you can break or bend the post. A spotter is very useful for this operation but never let the spotter get too close where if the TREMOR were to fall off your machine, they could be injured.

Sheet Piling may be driven by removing the cups and using the compactor base only. This is a 5 minute task that gives you so much more flexibility when using the TREMOR.

### **COMPACTION GENERAL**

The following instructions are very important to the proper performance of the Tremor and the attainment of the specified compaction density. With a standard baseplate, the Tremor is held with full down pressure for no more than 5-10 seconds. The application pattern should always begin next to a bank or footing and at the previously compacted area. When the maximum attainable density for that particular soil condition is reached, a slight increase in vibration will be felt by the operator. This increase in vibration is in no way harmful to the machine, and indicates that the soil will not compress any further. In fact, additional time in that location may actually loosen the soil previously compacted. Work as much area as possible from one position and overlap each compacted section slightly. The vibration frequency has been chosen to give maximum efficiency in granular soils using lifts of 2 to 4 feet. The closer the width of the trench is to the width of the Tremor, the higher the delivered compactive effort.

It is necessary to turn the Tremor OFF when being transported or sitting idle. Should the running Tremor be placed on a hard surface without down pressure, the unit and the carrier will vibrate excessively. Down pressure transmits the vibration to the soil; neutral pressure will rattle the whole carrier assembly.

### **SLOPE TECHNIQUE**



This method of compaction is of primary interest to a pipeline contractor seeking high production and efficient equipment utilization. The fill material is placed at one end of the trench and allowed to seek its own angle of repose. Compaction is begun on this angle above, but still near, the top of the pipe. All fill material is backfilled to this angle and the Tremor is worked up and down the slope. Backfilling, compaction, and resurfacing can be done very shortly after the pipe is in place.

#### SOIL TESTING

Compaction density specifications are based on soil samples of a set moisture content and soil composition. Changing weather conditions, for example, can alter the moisture content of the fill being used, and may make meeting the specifications impossible. It is imperative that frequent and reliable tests be conducted during application of the Tremor to determine the maximum lift that can be used and still provide the required density. It is important that lifts in excess of the established test results NOT be used if the required density is to be achieved and maintained.

#### DRIVING

Many driving jobs can be done with the Tremor. Timber sheeting, steel and aluminum sheeting, H and I-beams, soldier piles and guard rail posts. The Tremor will drive these materials in most soil conditions, except solid rock or soil with a very high clay content.

The Tremor is placed on the object to be driven using the front one-third (that portion of the baseplate furthest from the operator) of the baseplate. This position is critical to proper delivery of the Tremor's vibratory force into the object. The front portion of the Tremor will impart an impact or "slap" that will drive the material into the soil. The center portion of the Tremor will "rock" on the material and provide very little impact force. Apply down pressure evenly, but do not compress the shock mounts fully. Too much down pressure will make the Tremor difficult to control on top of the driven object, and the impact required will be damped out.

**SERIOUS INJURY OR DEATH COULD RESULT FROM ATTEMPTING TO SUPPORT THE DRIVEN MATERIAL. PERSONNEL WHO ATTEMPT TO SUPPORT THE DRIVEN MATERIAL CAN BE STRUCK OR CRUSHED. DO NOT ATTEMPT TO SUPPORT THE DRIVEN MATERIAL.**

## 2.9. Troubleshooting

<b>PROBLEM</b>	<b>CAUSE</b>	<b>SOLUTION</b>
Compactor Inoperative.	System Flow Valve not operating or adjusted incorrectly.	Adjust flow for compactor; flow and pressure test attachment circuit or compactor flow control, if installed.
	Seized bearings.	Replace bearings and perform flow and pressure tests.
	Kinked hose.	Replace.
	Plugged quick-disconnect	Repair or replace.
Rapid bearing failure.	Lack of lubrication.	Lubricate both bearings every 40 hours.
	Overspeeding.	Adjust flow for compactor; flow and pressure test attachment circuit or compactor flow control, if installed.
Rapid shock mount failure.	Excessive down pressure or carrier too large for compactor.	Compress shock mounts no more than 2-2.5 in./51-64 mm during operation.
	Cold weather operation.	Warm up according to Low-Temperature Warmup procedure.
Failure to achieve required compaction specifications.	Improper use.	See Operation section of this manual.
	Overspeeding or underspeeding of compactor.	Adjust flow for compactor; flow and pressure test attachment circuit or compactor flow control, if installed.
	Moisture/soil content incorrect for specified density..	Correct condition of soil, or compactor specifications are not reasonable for conditions.

## 2.10. Specifications

Centrifugal Force	3400 Ft. Lbs.
Developed Frequency	2100 VPM
Minimum Flow	12 GPM
Maximum Flow	25 GPM
Optimal Flow	13 GPM
Operating Pressure	1600 – 2000 psi
Back Pressure	Not to exceed 250 psi
Relief Setting	2500 psi

### 3. Warranty

#### **Skid Steer Solutions, Inc.'s Limited Product Warranty**

If you find physical defects in the materials or the workmanship used in making the product described in this document, Skid Steer Solutions, Inc. will repair, or at its option, replace, the product at no charge to you, provided you return it (freight prepaid, with proof of your purchase from the original reseller) during the 1 Year period after the date of your original purchase of the product.

#### **Skid Steer Solutions, Inc.'s RMA Replacement Product Warranty**

If you find physical defects in the materials or the workmanship used in the refurbishment of an RMA product replacement, we will repair, or at our option replace, the product at no charge to you for a period of 90-days from the date the RMA was created, or until the end of your original warranty period (whichever is greater).

#### **Skid Steer Solutions, Inc.'s Refurbished Product Warranty**

If you find physical defects in the materials or the workmanship used in a product sold as a refurbished unit, we will repair, or at our option replace, the product at no charge to you for a period of 90-days from the date of purchase.

SKID STEER SOLUTIONS WARRANTS THAT THE EQUIPMENT DELIVERED BY SELLER WILL BE OF THE KIND AND QUALITY DESCRIBED IN THE ORDER OR CONTRACT AND WILL BE FREE FROM DEFECTS IN WORKMANSHIP OR MATERIAL. SHOULD ANY FAILURE TO CONFORM WITH THIS WARRANTY OCCUR, AND THE BUYER HAVING GIVEN WRITTEN NOTICE TO SELLER WITHIN 180 DAYS FROM THE DATE OF SHIPPING, SELLER SHALL CORRECT SUCH NONCONFORMITY AT ITS OPTION BY EITHER REPAIRING THE DEFECTIVE PART OR PARTS OR MAKING AVAILABLE F.O.B. AT SELLERS LOCATION A REPAIR OR REPLACEMENT PART.

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