

# **Vibratory Packer**

For

**Skid Steer Loaders** 

Operator's Manual
Maintenance
Parts Information



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## REFERENCE INFORMATION

Write the serial number for your attachment in the spaces below. Always refer to this serial
number when calling for service or parts.
Sorial Number
Serial Number
YOUR ATTACHMENT DEALER
ADDRESS:
ADDRESS:
PHONE:
CONTACT:

**NOTE:** Erskine Attachments LLC reserves the right to make improvements in design or changes in specifications at any time without notice and without incurring any obligations to install them on units previously sold.

## **SAFETY**

DO NOT use or perform maintenance on this machine until this manual has been read and understood. In addition, read the Operation and Maintenance Manual(s) pertaining to the attachment and the attachment carrier ("Loader").

The user is responsible for inspecting the machine daily, and for having parts repaired or replaced when continued use of the machine would cause damage, excessive wear to other parts or make the machine unsafe for continued operation.

If an operating procedure, tool device, maintenance or work method not specifically recommended is used, you must satisfy yourself that it is safe for you and others. You must also ensure that the attachment will not be damaged or made unsafe by the procedures you choose.

Erskine Attachments LLC cannot anticipate every possible circumstance that might involve potential hazard. The safety messages found in this manual and on the machine are therefore not all inclusive.

The signal words **CAUTION**, **WARNING**, or **DANGER** are used to indicate hazards.

▲ CAUTION Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

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

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

The word **IMPORTANT** is used in the text when immediate damage will occur due to improper technique or operation.

The word **NOTE** is used to convey information that is out of context with the manual text; special information such as specifications, techniques, reference information, and other information of a supplementary nature.

# Improper operation can cause serious injury or death.

## **Pre-operation**

- This machine is designed for compacting dirt and aggregate materials only. NEVER use this machine for any other purpose.
- Read the operator's manual for the "Skid Steer Loader." NEVER allow untrained people to operate.
- Operating instructions must be given to everyone before operating this attachment and at least once a year thereafter in accordance with OSHA regulations.
- NEVER exceed the maximum recommended input power or speed specifications for the attachment. Over-powering or over-speeding the attachment may cause personal injury and/or machine damage.
- Keep all shields, guards, and covers in place.
- Do not modify equipment or add attachments that are not approved by Erskine Attachments LLC.
- Use adequate safety warning lights and devices as required by local regulations. Obey all local laws and regulations regarding machine operation on public property.
- Make sure the area being compacted does not contain utilities or structures that could be damaged by vibration.
- Depending on the loader and application, this attachment may increase whole-body or hand-arm vibration exposure to operators. To evaluate the potential health effects of those regularly exposed, perform an assessment according to applicable ANSI and/or ISO human vibration standards.

## Operation

- Always wear eye protection that meets ANSI z87.1 standard or use with a loader enclosure that provides similar protection.
- Hydraulic connections may be hot after use. Use gloves if connecting or disconnecting after use.
- Check and be sure all operating controls are in neutral before starting the engine.

## **Operation (continued)**

- Keep people away from loader and attachment when in use. This attachment has rotating parts.
- Depending on how this attachment is used, dust can be created. Prolonged exposure to dust can cause chronic and acute health problems. A NIOSH-approved respirator may be required.
- NEVER operate near embankments or terrain that is so steep that rollover could occur.
- Always stay in the operator position when using the attachment.
- Before leaving the operators position, disengage hydraulic drive, lower the attachment to rest flat on the ground, stop engine, set park brake, and wait for all motion to stop.
- NEVER clear debris while engine is running.

## **Avoid High Pressure Fluids Hazard**



- Escaping fluid under pressure can penetrate the skin causing serious injury.
- Avoid the hazard by relieving the pressure before disconnecting hydraulic lines.
- Use a piece of paper or cardboard, NOT BODY PARTS, to check for suspected leaks. Wear protective gloves and safety glasses or goggles when servicing or performing maintenance on hydraulic systems.
- If an accident occurs, see a doctor immediately.
   Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result.

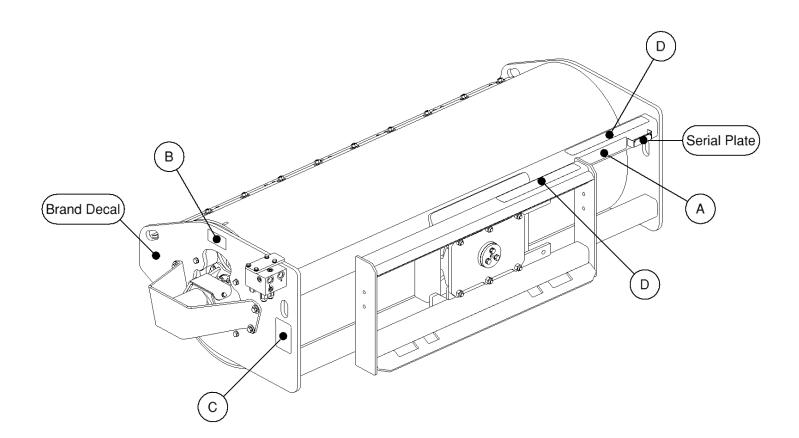
## Maintenance

- NEVER make adjustments, lubricate, clean, or perform any service on the machine while it is in operation.
- Make sure the attachment is serviced on a daily basis. Improper maintenance can cause serious injury or death in addition to damage to the attachment and/or your equipment.

# SERIAL NUMBER AND SAFETY DECAL LOCATIONS

## **Serial Number Location:**

It is important to refer to the serial number of the attachment when making repairs or ordering parts. Early or later models (identification made by serial number) may use different parts, or it may be necessary to use different procedures in doing a specific operation.



## SERIAL NUMBER AND SAFETY DECAL LOCATIONS

## **Safety Decals Locations:**

The locations of the safety decals are shown. If these decals are missing, damaged, or painted over they must be replaced. Call Erskine Attachments LLC (218-435-4045) for replacement decals.



## **IMPORTANT**

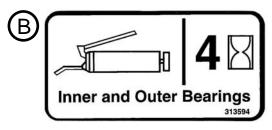
Failure to comply will result in severe damage to unit and void all warranties.

The 4 shaft bearings must be greased at least every 4 hours of operation.
Drive motor has preset rpm limit. Do not continue increasing engine rpm after the rpm limit has been reached. Do not operate in high flow mode.

Part number: 314526

**Location:** On back of frame, by serial plate

Quantity: 1



Part number: 313594

**Location:** On each endplate above bearings

Quantity: 2





READ OWNER'S MANUAL BEFORE OPERATING EQUIPMENT

Part number: 200001

Location: On left side of frame, near valve

Quantity: 1



Part number: 202153 (Anti-skid tape 2x16)
Location: On top of mount and frame

tubes, right side

Quantity: 2

**Small Brand Decal** 

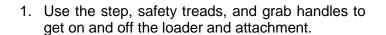
**Location:** On each endplate

Quantity: 2

## **USER'S MOUNTING INSTRUCTIONS**

After the initial set-up assembly is completed use the following procedure to mount the attachment to the loader.

▲ WARNING Levers must be fully down and locked. Failure to secure wedges or pins can allow the attachment to come off and cause injury or death.





- 2. Sitting in the operator's seat, lower seat bar (if so equipped) and fasten the seat belt.
- 3. Drive the loader to the rear of the attachment. Put the loader quick attach coupler into the attachment mounting bracket.



- 4. Tilt the loader coupler backward a small amount until it is fully engaged in the attachment mounting bracket.
- 5. Stop the engine and engage the park brake.
- 6. Secure the coupler locking mechanism that attaches the attachment to the loader.

## **USER'S MOUNTING INSTRUCTIONS**

7. Connect the hydraulic quick couplers from the attachment to the loader auxiliary couplers and case drain.

**IMPORTANT:** Wipe the ends of the hydraulic quick couplers (both lead and loader) with a rag to remove any possible contamination. Contamination can cause hydraulic components to fail and is not covered under warranty.

**IMPORTANT:** Make sure the quick couplers are fully engaged. If the quick couplers do not fully engage, check to see that the couplers are the same size and brand. Do not force the quick couplers together.

**NOTE:** See the loader's operator's manual for auxiliary hydraulic specifications and connection instructions.

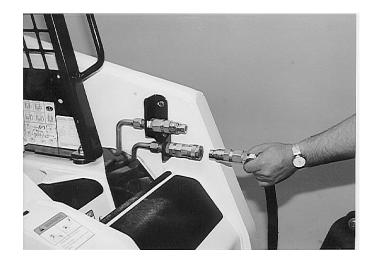
**NOTE:** Attachment is shipped with 12FJX (1-1/16" Female JIC Swivel) fittings on the ends of the lead hoses.

8. Make sure the hoses are properly routed to fit your specific loader. If the hoses are not routed correctly, hoses may get pinched or rub on tires. Be sure to check the hose routing through the <u>full range</u> of intended motion of the attachment <u>before</u> operating it.

More than one routing may be acceptable depending on the loader. Pick the routing that best suits your loader.

**IMPORTANT:** Proper hose routing is the responsibility of the owner and/or operator. Pinched or stretched hoses are not covered under warranty.

Mounting is now complete and you are ready to use the attachment. Use reverse order of above instructions to dismount the attachment from the loader.



## **OPERATING INSTRUCTIONS**







- 1. With the operator in the seat of the loader, the seatbelt fastened, and the seat bar lowered (if so equipped), start the engine.
- 2. With the loader arms fully lowered, position the attachment flat on the ground.
- 3. With the loader engine RPM at an **idle**, engage the auxiliary hydraulics in continuous flow mode to operate the attachment motor in the desired direction.

**IMPORTANT:** Only engage and disengage the auxiliary hydraulics with the loader engine RPM as low as possible. Failure to do so will result in premature coupler wear.

4. Gradually increase the loader engine speed until the attachment has reached its maximum RPM.

**IMPORTANT:** The attachment has an RPM limiter for the motor. When the motor has reached this limit, DO NOT continue increasing loader engine RPM. Doing so will increase the heat in the skid steer hydraulic system.

5. Slowly drive forward or backward to begin compacting in the desired direction.

**IMPORTANT:** Raise the attachment off of the ground when turning.

**NOTE:** The direction that the motor rotates influences how well the drum will roll along the ground as the attachment is driven in either the forward or reverse directions. Operate the motor accordingly.

6. Down pressure may be applied to the attachment by raising the skid steer's front tires off of the ground by 1" to 2". This will increase the compaction capabilities of the attachment. However, do this in a limited fashion, as the added weight will shorten the lifespan of the isolation mounts.

## **ROUTINE MAINTENANCE**

▲ WARNING Lower the attachment to rest on the ground, shut down the engine, relieve the hydraulic pressure to the attachment, set the park brake, and wait for all motion to stop before leaving the operator's seat to perform service of any kind.

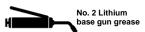
It is the operator's responsibility to make daily inspections of the loader and attachment for damage, loose bolts, fluid leaks, or anything else that could cause a potential service or safety problem. Preventive maintenance is the easiest and least expensive type of maintenance.

**IMPORTANT:** Bolts and set screws can loosen after initial usage. After the first hour of operation check all bolts and set screws.

## LUBRICATION

Lubrication Legend

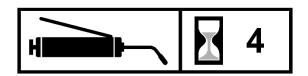








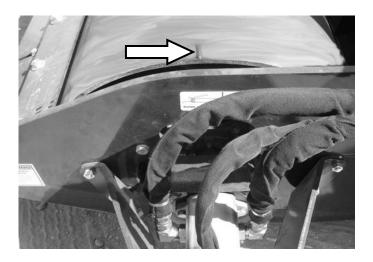
Use No. 2 lithium base gun grease when lubricating all attachment grease fittings.

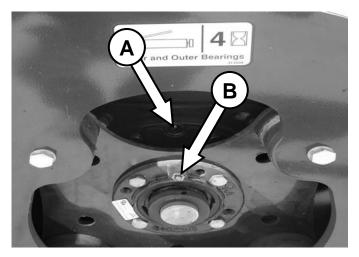


Roll the drum until the weld mark on the motor side is up, as shown, to position the hub bearing zerks for greasing.

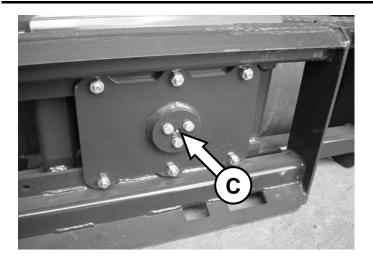
Grease the two hub bearing zerks [A] and the two flange bearing zerks [B] every 4 hours of operation.

**IMPORTANT:** Do not over-grease bearing. Only add **two pumps** of grease every greasing interval.





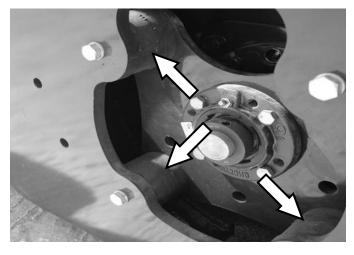
## **ROUTINE MAINTENANCE**



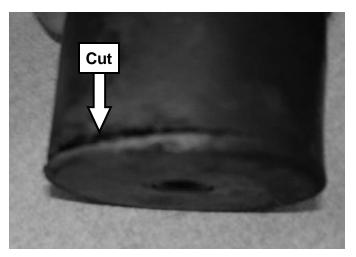


Grease the center oscillation pivot **[C]** every **40 hours** of operation.

**NOTE:** The attachment must be disconnected from the loader in order to access this grease zerk.



Visually inspect the eight isolation mounts (four on each end) for cuts or tears **weekly**.



**IMPORTANT:** If a rubber isolation mount has a cut or tear, it must be replaced. If it is not replaced, the remaining good isolation mounts will be put under more load, which will result in premature isolation mount failure.

**IMPORTANT:** Rubber isolation mounts that have a permanent deformation should be replaced.

## **ROUTINE MAINTENANCE**

Visually check the drive coupler rubber member for wear every **80 hours** of operation.

- 1. Remove the two bolts from the coupler shield.
- 2. Visually inspect.
- 3. Grab the coupler and check by hand to see if it feels tight or loose.

**NOTE:** If the coupler is tight, it is in good operating condition. If the coupler is loose, it is a sign of wear, and replacement may soon be required.

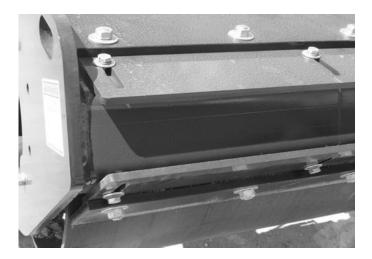
4. Reinstall the coupler shield.



## **Scraper Maintenance**

As the top and bottom scrapers wear, loosen the 3/8" bolts and slide the adjustment plate toward the drum accordingly.

**NOTE:** The smooth drum scraper is shown. The procedure to adjust the padded drum scraper is the same as the smooth.



## **BOLT TORQUE INFORMATION**

Torque-Tension Relationships for SAE J429 Grade Bolts

Nominal	SAE J429 Grade 2			SAE J429 Grade 5		SAE J429 Grade 8			
Thread	Clamp Tightening Torque		Clamp Tightening Torque		Clamp Tightening Torque				
Size	Load (lbs)	K = .15	K = .20	Load (lbs)	K = .15	K = .20	Load (lbs)	K = .15	K = .20
			Unified	l Coarse Thre	ead Series				
1/4-20	1,300	49 in-lbs	65 in-lbs	2,000	75 in-lbs	100 in-lbs	2,850	107 in-lbs	143 in-lbs
5/16-18	2,150	101	134	3,350	157	210	4700	220	305
3/8-16	3,200	15 ft-lbs	20 ft-lbs	4,950	23 ft-lbs	31 ft-lbs	6,950	32.5 ft-lbs	44 ft-lbs
7/16-14	4,400	24	30	6,800	37	50	9,600	53	70
1/2-13	5,850	36.5	49	9,050	57	75	12,800	80	107
9/16-12	7,500	53	70	11,600	82	109	16,400	115	154
5/8-11	9,300	73	97	14,500	113	151	20,300	159	211
3/4-10	13,800	129	173	21,300	200	266	30,100	282	376
7/8-9	11,425	125	166	29,435	321	430	41,550	454	606
1-8	15,000	187.5	250	38,600	482.5	640	54,540	680	900
			Unified	Fine Thread	Series				
1/4-28	1,500	55 in-lbs	75 in-lbs	2,300	85 in-lbs	115 in-lbs	3,250	120 in-lbs	163 in-lbs
5/16-24	2,400	112	150	3,700	173	230	5,200	245	325
3/8-24	3,600	17 ft-lbs	22.5 ft-lbs	5,600	26 ft-lbs	35 ft-lbs	7,900	37 ft-lbs	50 ft-lbs
7/16-20	4,900	27	36	7,550	42	55	10,700	59	78
1/2-20	6,600	41	55	10,200	64	85	14,400	90	120
9/16-18	8,400	59	79	13,000	92	122	18,300	129	172
5/8-18	10,600	83	110	16,300	128	170	23,000	180	240
3/4-16	15,400	144	193	23,800	223	298	33,600	315	420
7/8-14	12,610	138	184	32,480	355	473	45,855	500	668
1-12	16,410	205	273	42,270	528	704	59,670	745	995

Clamp load estimated as 75% of proof load for specified bolts.

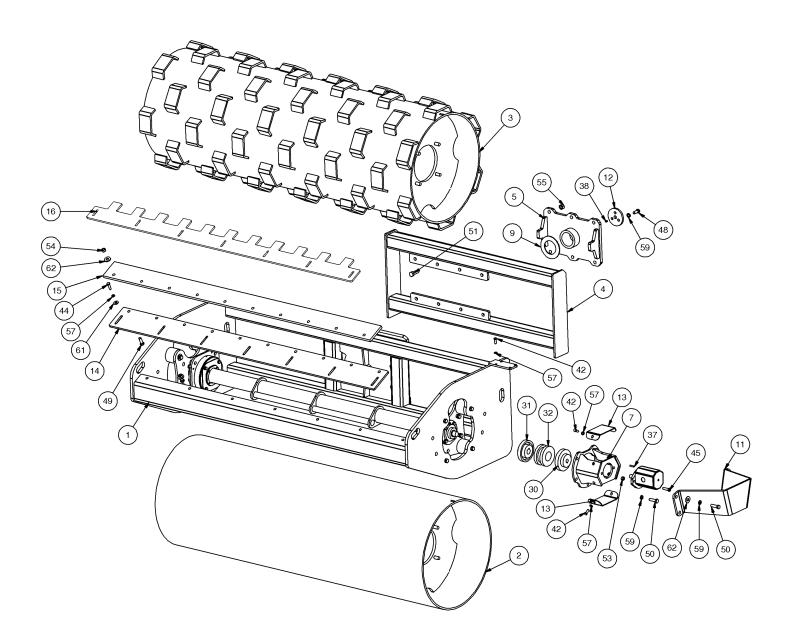
Torque values for ¼ and 5/16 inch series are in inch-pounds. All other torque values are in foot-pounds.

Torque values calculated from formula T = KDF

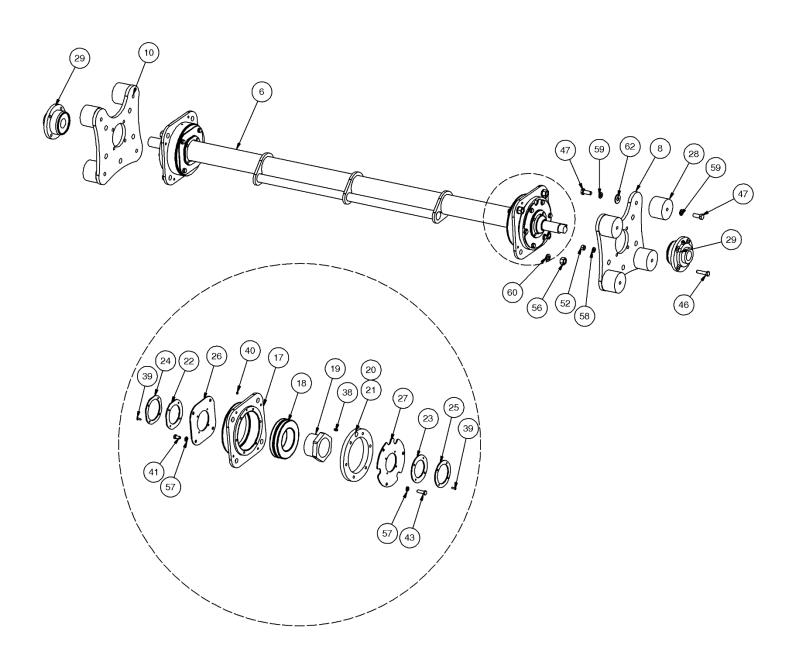
where: K=0.15 for "lubricated" conditions

K=0.20 for "dry" conditions

ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
1	1	313501	FRAME 72 W/A	
	1	313504	FRAME 48 W/A	OBSOLETE
2	1	313508	DRUM 72 SMOOTH W/A	
	1	313505	DRUM 48 SMOOTH W/A	OBSOLETE
3	1	314538	DRUM 72 PADDED W/A	
	1	314537	DRUM 48 PADDED W/A	OBSOLETE
4	1	313506	MOUNT W/A	
5	1	313507	PIVOT W/A	
7	1	314518	MOTOR MOUNT W/A	
9	1	317102	WEAR PLATE PAINTED	
11	1	313542	PLATE MOTOR SHIELD PAINTED	
12	1	313538	PLATE PIVOT KEEPER PAINTED	
13	2	314522	SHIELD COUPLER PAINTED	
14	2	313587	PLATE SCRAPER SM 72 PAINTED	
	2	313586	PLATE SCRAPER SM 48 PAINTED	OBSOLETE
15	2	313530	SCRAPER SM 72 URETHANE	
	2	313544	SCRAPER SM 48 URETHANE	OBSOLETE
16	2	313523	PLATE SCRAPER PD 72 PAINTED	
	2	313525	PLATE SCRAPER PD 48 PAINTED	OBSOLETE
30	1	313576	COUPLER 7S 3/4"	
31	1	313575	COUPLER 7S 1-1/8"	
32	1	313574	COUPLER 7JN	
37	1	101293	KEY SQ 1/4 X 2	
38	1	60105	ZERK GREASE 1/4-28 UNF STR	
42	8	103116	BOLT HEX	3/8 X 1 - UNC - GR 5
44	14 (72") / 10 (48")	103879	BOLT HEX	3/8 X 1.5 - UNC - GR 5
45	2	13159	BOLT HEX	7/16 X 1.5 - UNC - GR 5
48	3	13207	BOLT HEX	1/2 X 1-1/4 - UNC - GR 5
49	20 (72") / 16 (48")	13209	BOLT HEX	1/2 X 1-1/2 - UNC - GR 5
50	9	13210	BOLT HEX	1/2 X 1-3/4 - UNC - GR 5
51	6	13311	BOLT HEX	5/8 X 2 - UNC - GR 5
53	2	37213	NUT HEX	7/16 - UNC - GR 5 - REV LOCK
54	20 (72") / 16 (48")	37214	NUT HEX	1/2 - UNC - GR 5 - REV LOCK
55	6	37216	NUT HEX	5/8 - UNC - GR 5 - REV LOCK
57	42 (72") / 38 (48")	103880	WASHER LOCK	0.375 - GR 5
59	28 (72") / 24 (48")	33626	WASHER LOCK	0.5 - GR 5
61	14 (72") / 10 (48")	33008	WASHER FLAT	3/8 - USS - GR 5
62	32 (72") / 28 (48")	33012	WASHER FLAT	1/2 - USS - GR 5



ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
6	1	313510	SHAFT 72 W/A	
	1	313517	SHAFT 48 W/A	OBSOLETE
8	1	314510	PLATE ISOLATION MOUNT W/A	
10	1	313539	PLATE ISOLATION MOUNT PAINTED	
17	2	314521	BEARING HOUSING MACHINED	
18	2	313511	BRG DRUM	
19	2	313580	BRG TAPER ADAPTER	
20	1	313540	TUBE BRG SPACER	
21	1	313551	TUBE BRG SPACER MOTOR SIDE	
22	2	314507	SEAL BRG INNER	
23	2	314506	SEAL BRG OUTER	
24	2	314505	PLATE BRG SEAL INNER	
25	2	314504	PLATE BRG SEAL OUTER	
26	2	313581	PLATE BRG COVER INNER	
27	2	313550	PLATE BRG COVER OUTER	
28	8	314525	MOUNT RUBBER	
29	2	313568	BRG 1-7/16 SPHERICAL W/FLANGE	
38	2	60105	ZERK GREASE 1/4-28 UNF STR	
39	16	62180	RIVET 3/16 X 3/8 CLOSED	
40	2	25396	SET SCREW	1/4 X 0.25 - UNF - GR 5
41	8	13103	BOLT HEX	3/8 X 0.75 - UNC - GR 5
43	12	13107	BOLT HEX	3/8 X 1.25 - UNC - GR 5
46	8	13160	BOLT HEX	7/16 X 1.75 - UNC - GR 5
47	16	17207	BOLT HEX	1/2 X 1-1/4- UNF - GR 5
52	8	36108	NUT HEX	7/16 - UNC - GR 5 - REG
56	8	36464	NUT HEX FULL	5/8 - UNF - GR 8 - REG
57	20	103880	WASHER LOCK	0.375 - GR 5
58	8	33624	WASHER LOCK	0.4375 - GR 5
59	28	33626	WASHER LOCK	0.5 - GR 5
60	8	33897	WASHER LOCK	0.625 - GR 8
62	32	33012	WASHER FLAT	1/2 - USS - GR 5

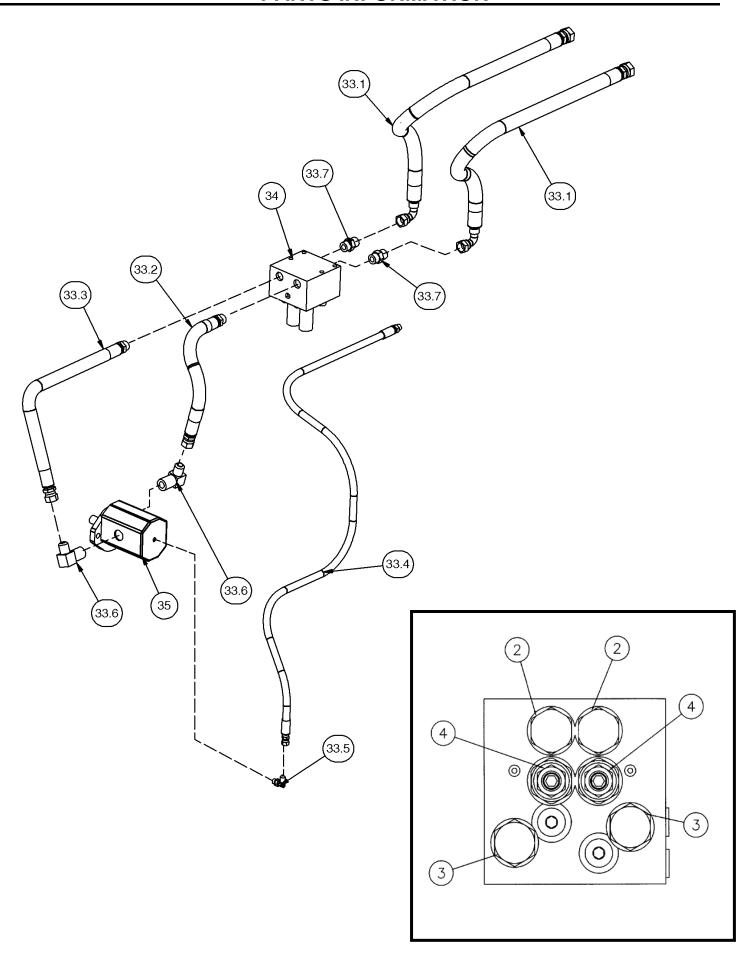


## **HYDRAULIC ASSEMBLY**

ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
33:1	2	313595	HOSE 5/8 X 58 12FJX-10FJX-90	LEAD
33:2	1	313596	HOSE 1/2 X 17 10MB-10FJX	MOTOR TO VALVE
33:3	1	313597	HOSE 1/2 X 22 10MB-10FJX	MOTOR TO VALVE
33:4	1	330894	HOSE 1/2 X 80 6FJX-8FJX	CD (REPLACED 314540)
	1	314540	HOSE 1/4 X 80 4FJX-6FJX	CD (REPLACED BY 330894)
	1	313598	HOSE 1/4 X 20 6MB-4FJX	CD (REPLACED BY 314540)
33:5	1	330919	ADPT ELBOW 4MB-6MJ-90	REPLACED 103497
	1	103497	ADPT ELBOW 4MB-4MJ-90	REPLACED BY 330919
33:6	2	300215	ADPT ELBOW 12MB-10MJ -90	
33:7	2	201852	ADPT STRAIGHT 10MB-10MJ	
34	1	300501	VALVE BLOCK	
35	1	313545	MOTOR	
	1	314527	SEAL KIT – MOTOR	PARTS ONLY

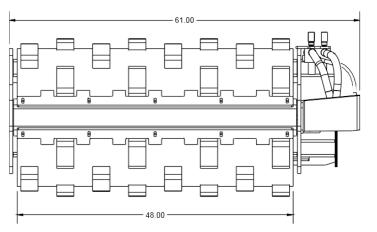
## **VALVE ASSEMBLY**

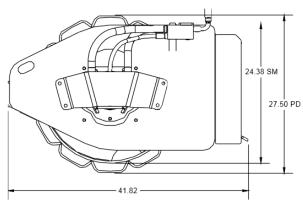
ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
2	2	314536	VALVE – check	
3	2	316118	LOGIC ELEMENT	
4	2	300505	VALVE – pressure relief	



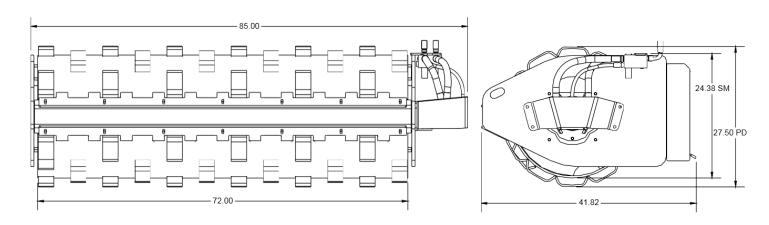
# **GENERAL SPECIFICATIONS**

Model	VP48SM	VP48PD
Dynamic Force	4050 lbs.	4000 lbs.
Amplitude	.08"	.07"
Compacting Energy	100 lbs./in	350 lbs./in
Vibrations per Minute	2000* vpm	2000* vpm
Hydraulic Flow Range	11-22* gpm	11-22* gpm
Operating Weight	1,390 lbs.	1,480 lbs.





Model	VP72SM	VP72PD
Dynamic Force	4150 lbs.	4100 lbs.
Amplitude	.06"	.05"
Compacting Energy	80 lbs./in	290 lbs./in
Vibrations per Minute	2000* vpm	2000* vpm
Hydraulic Flow Range	11-22* gpm	11-22* gpm
Operating Weight	1,720 lbs.	1,870 lbs.



All dimensions are in INCHES.

<sup>\*</sup>The valve block limits the flow to the motor so that the max speed is 2000 rpm at 17 gpm.

# **NOTES**

# **NOTES**



# **LIMITED WARRANTY**

Erskine Attachments LLC warrants each new machine manufactured by us to be free from defects in material and workmanship for a period of twenty-four (24) months from date of delivery to the original purchaser.

Our obligation under this warranty is to replace free of charge, at our factory or authorized dealership, any part proven defective within the stated warranty time limit.

All parts must be returned freight prepaid and adequately packaged to prevent damage in transit.

This warranty does not cover:

- 1. New products which have been operated in excess of rated capacities or negligence
- 2. Misuse, abuse, accidents or damage due to improperly routed hoses
- 3. Machines which have been altered, modified or repaired in any manner not authorized by our company
- 4. Previously owned equipment
- 5. Any ground engaging tools in which natural wear is involved, i.e. tooth tips, cutting teeth, etc
- 6. Normal maintenance
- 7. Fork tines
- 8. Hydraulic motors that have been disassembled in any manor

In no event will the Sales Representative, Dealership, Erskine Attachments LLC, or any other company affiliated with it or them be liable for incidental or consequential damages or injuries, including but not limited to the loss of profit, rental or substitute equipment or other commercial loss. Purchaser's sole and exclusive remedy being as provided here in above.

Erskine Attachments LLC must receive immediate notification of defect and no allowance will be made for repairs without our consent or approval.

This warranty is in lieu of all other warranties, express or implied by law or otherwise, and there is no warranty of merchantability or fitness purpose.

No agent, employee, or representative of Erskine Attachments LLC has any authority to bind Erskine Attachments LLC to any warranty except as specifically set forth herein. Any of these limitations excluded by local law shall be deemed deleted from this warranty; all other terms apply.

This warranty may not be enlarged or modified in any manner except in writing signed by an executive officer of Erskine Attachments LLC to improve its products whenever it is possible and practical to do so. Erskine Attachments LLC reserves the right to make changes and or add improvements at any time without incurring any obligation to make such changes or add such improvements to products previously sold.

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