

# **GIANT-VAC®**

**ASSEMBLY INSTRUCTIONS**  
**OPERATOR'S MANUAL**  
**PARTS LIST**

## ***5-Yard*** ***Self-Contained*** ***Truck Loader***



***Models covered:***

TLR20520KH

R0207.1

# 1 *preliminaries*

## **Congratulations!**

You have just purchased one of the finest pieces of outdoor power equipment on the market today. If properly cared for, your new Giant-Vac truck loader will provide years of dependable service. Please read and follow this instruction manual carefully in order to get the most out of your new equipment.

Each product leaves our factory in excellent condition; occasionally, however, some damage may occur during shipment. If any such damage is found upon initial inspection, *immediately* notify the transport carrier who delivered your machine, as they are solely responsible for such damage, as well as any subsequent adjustments necessary.

**Before assembly, please take a moment and record your model number and serial number below for future reference (both are located on the silver tag adhered to the engine side of the impeller housing assembly):**

**Model Number** \_\_\_\_\_

**Serial Number** \_\_\_\_\_

**Also be sure to promptly fill out and return the warranty registration enclosed in your manual packet.**

Your new loader requires very little assembly. Simply follow the instructions contained within this manual to begin enjoying the benefits of your new unit.

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CALIFORNIA PROPOSITION 65 WARNING

Gasoline and Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.

As an owner of off-road gasoline or diesel engine equipment and/or as an employer, you also may have an obligation under the California Occupational Safety and Health Act or under Proposition 65 to warn persons exposed to gas and diesel engine exhaust and/or other Proposition 65 chemicals in and around your workplace. See California Health and Safety Code section 25249.5, Title 22 of the California Code of Regulations at Section 1200 *et seq.*, and Title 8 of the California Code of Regulations Section 5194.

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R0507.1

# 2

## ***safety rules regarding outdoor power equipment***

**PLEASE READ THE FOLLOWING BEFORE ASSEMBLING OR OPERATING UNIT**

### **TRAINING**

- Read, understand, and follow all instructions in the manual and on the unit before starting. If the operator(s) or mechanic(s) cannot read English it is the owner's responsibility to explain this material to them.
- Become familiar with the safe operation of the equipment, operator controls, and safety signs.
- All operators and mechanics should be trained. The owner is responsible for training the users.
- Only allow responsible adults, who are familiar with the instructions, to operate the unit.
- Never let children or untrained people operate or service the equipment. Local regulations may restrict the age of the operator.
- The owner/user can prevent and is responsible for accidents or injuries occurring to themselves, other people or property.

### **PREPARATION**

- Evaluate the terrain to determine what accessories and attachments are needed to properly and safely perform the job. Use only accessories and attachments approved by the manufacturer.
- Wear appropriate clothing including safety shoes, safety glasses and ear protection. Long hair, loose clothing or jewelry may get tangled in moving parts.
- Inspect the area where the equipment is to be used and remove rocks or any other such objects which can damage the machine or the receiver box.
- Use extra care when handling gasoline and other fuels. They are flammable and vapors are explosive.
  - a) Use only an approved container.
  - b) Never remove fuel cap or add fuel with the engine running. Allow engine to cool before refueling. Do not smoke.
  - c) Never refuel or drain the machine indoors.
- Check that operator's presence controls, safety switches and shields are attached and functioning properly. Do not operate unless they are functioning properly.

### **OPERATION**

- Never run an engine in an enclosed area.
- Operate only in the daylight or with good artificial light, keeping away from holes and hidden hazards.
- Be sure all components are securely in place and in good operating order before starting engine.
- Be sure of your footing while using equipment, especially when backing up. Walk, don't run.
- Do not operate the unit without discharge connected to a debris receiver box.
- Slow down and use caution when making turns and when changing directions on slopes.
- Never leave a running unit unattended. Always stop engine, and remove keys before leaving unit.
- Never operate without guards securely in place. Be sure all safety features are attached, adjusted properly and functioning properly.
- Never operate with intake or discharge components loose, removed or altered.
- Do not change the engine governor setting or over speed the engine.
- Stop on level ground, shut off engine before leaving the operator's position for any reason including emptying the receiver box or unclogging the intake or discharge.
- Stop equipment and inspect impeller blades after picking up unusually large or hard objects or abnormal vibration occurs. Make necessary repairs before resuming operations.
- Keep hands and feet away from the intake and discharge.
- Never carry passengers and keep pets and bystanders away.
- Do not operate the unit while under the influence of alcohol or drugs.
- Slow down and use caution when making turns and crossing roads and sidewalks.
- Use care when hooking or unhooking the machine to a towing vehicle.
- Use care when approaching blind corners, shrubs, trees or other objects that may obscure vision.

## 2

## *safety rules regarding outdoor power equipment (cont.)*

### **SLOPE OPERATION**

Slopes are a major factor related to loss-of-control and tip-over accidents, which can result in severe injury or death. All slopes require extra caution. If you cannot back up the slope, or if you feel uneasy on it, do not operate on it.

#### **Do**

- Remove obstacles such as rocks, tree limbs, etc.
- Watch for holes, ruts, or bumps. Uneven terrain could overturn the unit. Tall grass can hide obstacles.
- Use slow speed.
- Keep all movement on the slopes slow and gradual. Do not make sudden changes in speed or direction.

#### **Do Not**

- Do not start or stop on a slope. If tires lose traction, stop the unit and proceed slowly straight down the slope.
- Do not turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.
- Do not operate near drop-offs, ditches, or embankments. The operator could lose footing or balance or unit could suddenly turn over if a wheel is over the edge of a cliff or ditch, or if an edge caves in.

### **CHILDREN**

Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the unit and its activity. Never assume that children will remain where you last saw them.

- Keep children out of the operating area and under the watchful care of another responsible adult.
- Be alert and turn unit off if children enter the area.
- Before and during reverse operation, look behind and down for small children.
- Never carry children. They may fall off and be seriously injured or interfere with safe unit operation.
- Never allow children to operate the unit.
- Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.

### **EMISSIONS**

- Engine exhaust from this product contains chemicals known, in certain quantities, to cause cancer, birth defects, or other reproductive harm.
- Look for the relevant Emissions Durability Period and Air Index information on the engine emissions label.

### **MAINTENANCE AND STORAGE**

- Always observe safe refueling and fuel handling practices when refueling the unit after transportation or storage.
- Always follow the engine manual instructions for storage preparations before storing the unit for both short and long term periods.
- Always follow the engine manual instructions for proper start-up procedures when returning the unit to service.
- Never store the machine or fuel container inside where there is an open flame, such as in a water heater. Allow unit to cool before storing.
- Shut off fuel while storing or transporting. Do not store fuel near flames or drain indoors.
- Keep all hardware, especially impeller bolt, tight and keep all parts in good working condition. Replace all worn or damaged decals.
- Never tamper with safety devices. Check their proper operation regularly.
- Clean debris from units, drives, mufflers, and engine to prevent fires. Clean up oil or fuel spillage.
- Stop and inspect the equipment if you strike an object. Repair, if necessary, before restarting.
- Never make adjustments or repairs with the engine running unless specified otherwise.
- Park machine on level ground. Never allow untrained personnel to service machine.
- Use jack stands to support components when required.
- Carefully release pressure from components with stored energy. (e.g. springs)
- Check impeller on a regular basis for bent, worn or cracked blades. Only replace impellers; never straighten or weld them.
- Keep hands and feet away from moving parts.

## **2** *safety rules regarding outdoor power equipment (cont.)*

- Belts and belt guard components are subject to wear, damage, and deterioration, which could expose moving parts or allow objects to be thrown. Frequently check components and replace with manufacturer's recommended parts, when necessary.
- Check operation of brake, tail and license lights frequently. Replace as required.
- Use only factory authorized replacement parts when making repairs.
- Always comply with factory specifications on all settings and adjustments.
- Only authorized service locations should be utilized for major service and repair requirements.
- Never attempt to make major repairs on this unit unless you have been properly trained. Improper service procedures can result in hazardous operation, equipment damage and voiding of manufacturer's warranty.

## **3** *unit assembly & set-up*

### **CONNECTING UNIT TO TOWING VEHICLE**

- Install appropriate trailer plug onto end of unit wiring harness to match socket on towing vehicle. Wiring scheme is as follows:

**Red – Right Turn Signal**

**Yellow – Left Turn Signal**

**Brown – Taillights**

**Black – Power to Brakes**

**Blue – Ground**

**Green - Accessory**

- Back towing vehicle up to unit. Raise or lower support jack until ball hitch receiver on unit is about 3-4" higher than ball hitch on vehicle. Flip lock lever up on ball hitch receiver.
- With assistance behind, back up slowly, aligning both ball hitch receiver with ball hitch.
- Lower front of unit down until ball hitch receiver drops completely onto ball hitch. Rock unit back and forth a couple of times to ensure full coupling of ball hitch. Lock ball hitch receiver lever. Use a clevis pin or padlock through locking hole in lever, to prevent accidental disconnect.
- Connect safety chains to vehicle in a criss-cross fashion to cradle draw bar in case of accidental disconnect, then connect wiring harness plug into trailer socket of vehicle and breakaway cable.
- Also be sure to fully raise support jack.



**Note: To prevent possible rollover, block rear wheels when unit is parked or disconnected from towing vehicle.**

**Your unit is now ready to be started and checked for proper operation. See your engine manual for proper engine prep and operation.**

## **4** *unit operation*

### **GENERAL GUIDELINES TO OBSERVE DURING OPERATION**

- Never allow a person to ride, sit or stand on the unit. Never allow a person to ride, sit or stand on the towing vehicle other than in the driver's cab of the towing vehicle.
- Make sure that the driver of the towing vehicle has the operator of the unit in full view at all times. Also, when operating the unit, instruct the operator to stay to the side of the machine, never in front or behind.
- Collecting debris into piles for the machine to intercept prior to startup will save time and fuel as well as wear and tear on the unit.
- We recommend the following for the most efficient performance: if debris is very dry, run the machine at approximately half throttle; this will help reduce the amount of small particles of debris escaping through the ventilation screen. If debris is wet or partially frozen, run the machine at full throttle.
- Lower intake hose boom assembly until nozzle floats 2-3 inches from the ground, then adjust engine throttle so that when nozzle is pushed to the ground, suction can be broken with moderate effort using three fingers of one hand. This will make operation relatively easy and comfortable.
- Time and experience will be your best guide in finding the most efficient performance from your unit.

### **UNCOUPLING UNIT FROM TOWING VEHICLE**

- Disconnect taillight/brakelight plug from towing vehicle receiver.
- Unhook safety chains from rear of towing vehicle and breakaway cable.
- Unlock ball hitch receiver lever on unit and flip lever up.
- Crank down wheel jack until ball hitch receiver on unit clears ball hitch on towing vehicle.
- Block Rear Wheels
- Pull vehicle away from unit.

## **5** *unit maintenance*

### **GENERAL MAINTENANCE**

***NOTE: Some maintenance services, such as engine repairs, electrical repairs, etc., should be performed only by a qualified technician.***

- Check overall condition of unit prior to each use, repairing or replacing worn, damaged or missing components promptly. Check all fasteners regularly and tighten if necessary.
- Follow engine manufacturer's recommendations for maintenance schedules. Use only recommended parts, fluids and lubricants. Failure to follow manufacturer's recommendations may void manufacturer's warranties.
- Lubricate impeller shaft bearings every 50 hours of operation. Use a high quality bearing grease, available from your local dealer (or auto parts store).
- Maintain tire pressure as indicated on tire sidewall. Replace worn or damaged tires promptly.
- Keep engine free from a buildup of grass, leaves or excessive grease. An accumulation of these combustible materials may result in a fire, or simply impede performance.
- Never change attachments or make any adjustments, repairs or replacements until the unit is completely shut down and the battery is disconnected.

### **STORAGE**

- Keep the unit in locked storage to prevent unauthorized individuals, especially children, from playing and/or tampering with the unit.
- When storing the unit for prolonged periods, it is recommended to disconnect the battery.
- Store fuel in an approved, clearly marked container.
- NO NOT store gasoline powered equipment or fuel containers in any closed area where heat-radiating appliances or open pilot lights are present, unless the fuel has been completely drained from the power equipment and the fuel containers.

### **REPLACEMENT PARTS**

***Replacement parts are available from your local Giant-Vac dealer.***

**Giant-Vac Model TLR20520KH 5-Yard Self Contained**  
Sheet 1 - ENGINE GROUP

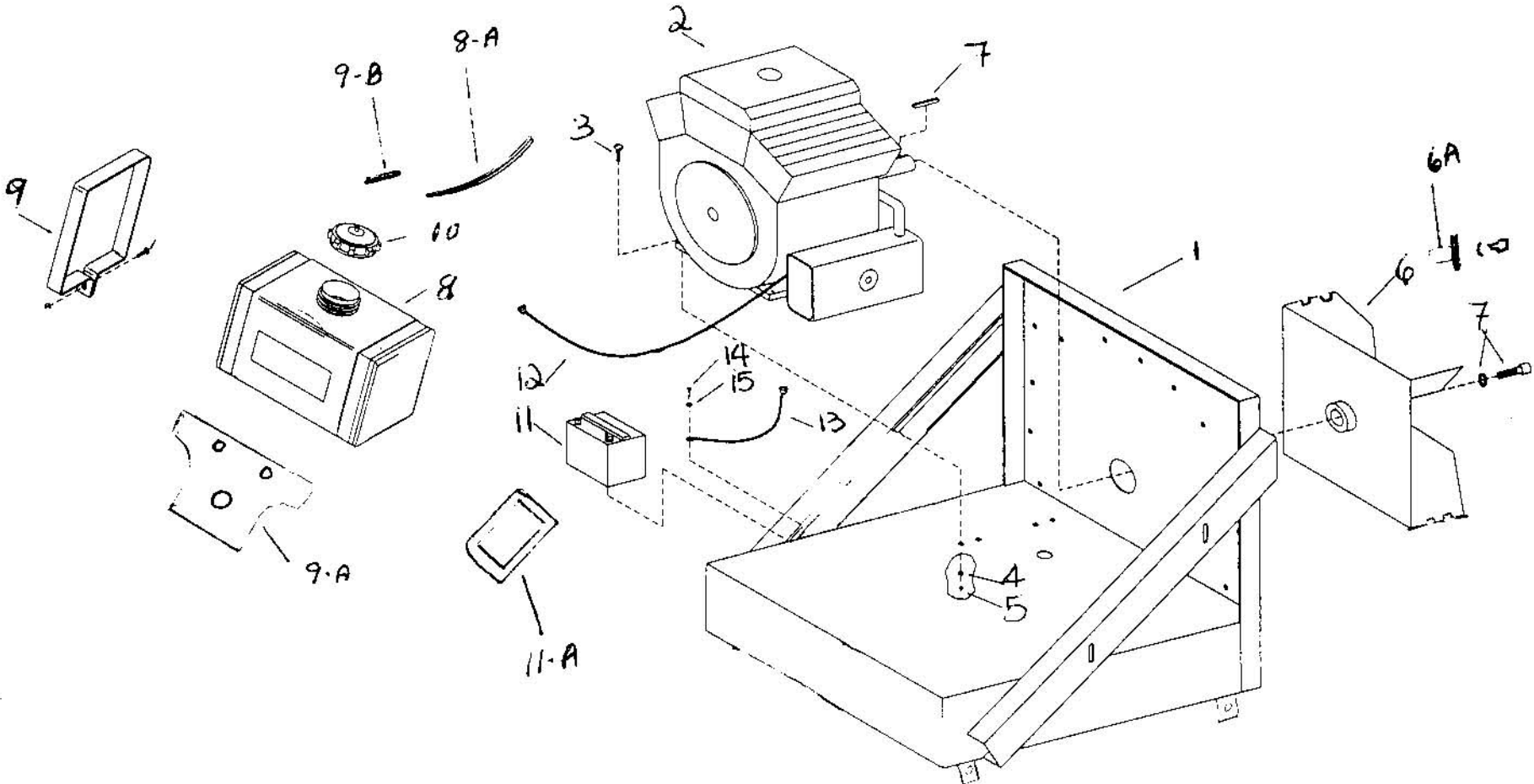
<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>TRL20520KH</u>
1	10271	Engine Base	1
2	39069	20HP Kohler Command Engine	1
3	31595	3/8-16 x 1-3/4 Hex Bolt	1
4	31008	3/8 Lock Washer	4
5	31009	3/8-16 Hex Nut	4
6	21610	Impeller	1
7	31447	Kit, Key and Bolt	1
8	40117	Fuel Tank	1
9	31157	Fuel Tank Strap	2
10	40119	Fuel Tank Cap	1
11	39020	Battery	1
12	31642	Battery Cable - 32SS (Positive)	1
13	31643	Battery Cable - 16SS (Ground)	1
11A	40118	Battery Box	1
6A	21566	Impeller Hub	1
8A	31755	Hose, Rubber Fuel 1/4inch	1
9A	31158	Fuel Tank Mount	1
9B	31445	In-Line Fuel Valve	1

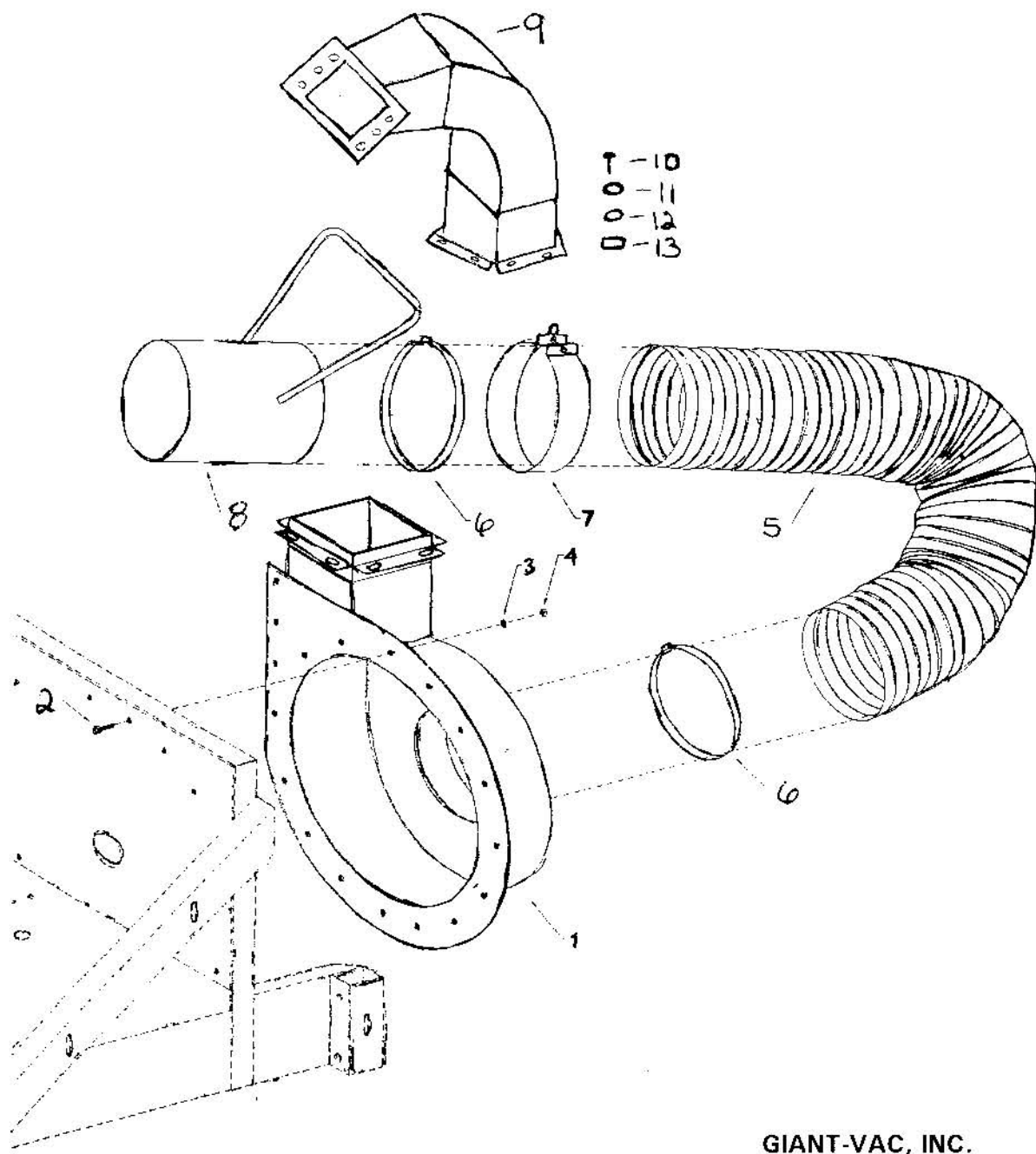
ITEMS NOT SHOWN

31747	3/8-16 x 2 Hex Bolt	3
34041	Clamp 1/2inch	4
32117	3/8 Cushion Clamp	3
31837	Battery Terminal Cover - Black	1
27375	Hub Safety Retainer	1
39187	Muffler Guard	1



GIANT-VAC, INC.  
Model TLR20520KH  
Engine Group  
Sheet 1 of 5  
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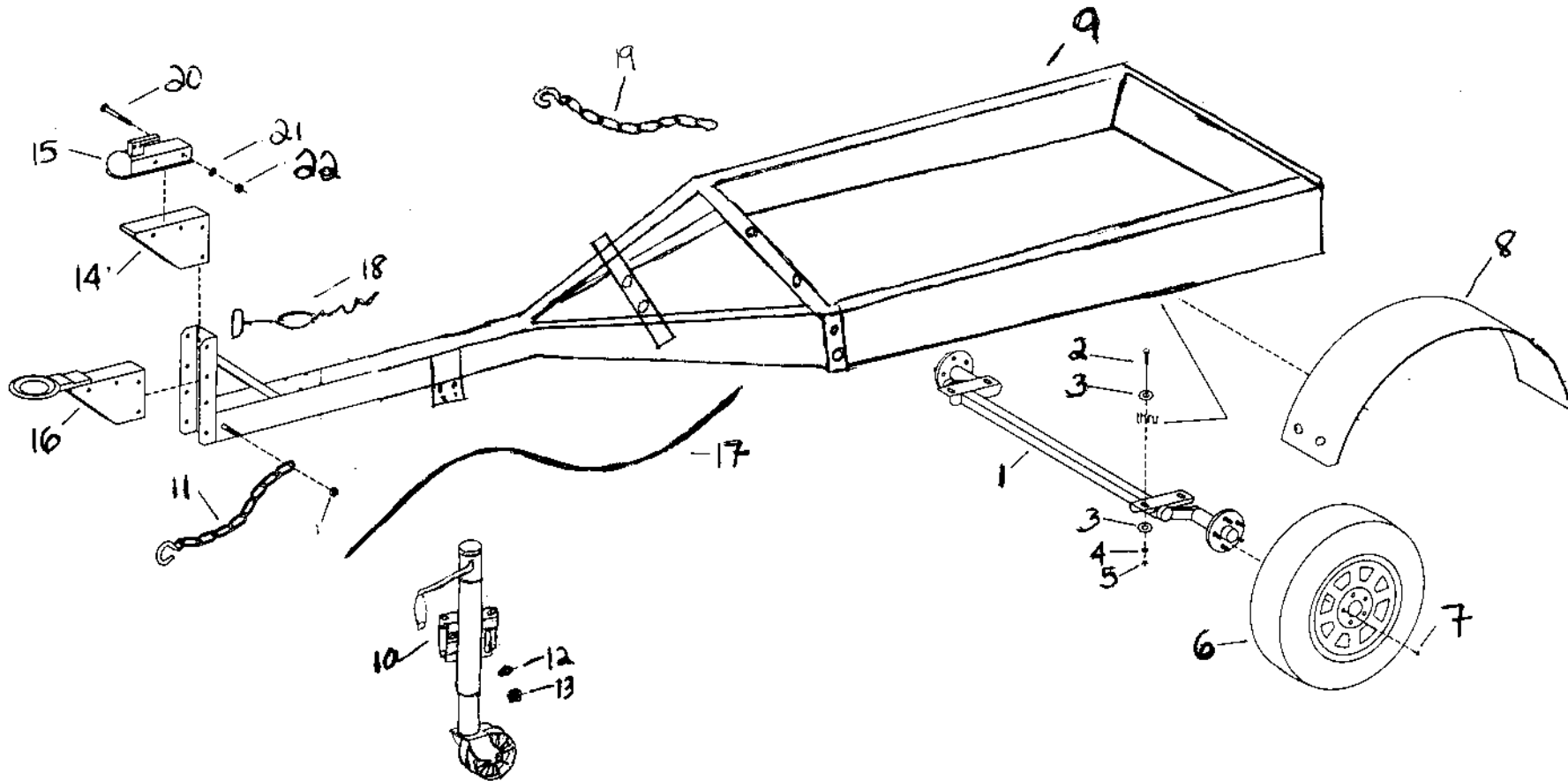


**GIANT-VAC, INC.**  
**Model TLR20520KH**  
**Intake & Exhaust Group**  
**Sheet 2 of 5**  
**R0407.1**

**Giant-Vac Model TLR20520KH 5-Yard Self Contained**  
 Sheet 2 - INTAKE & EXHAUST GROUP

<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>TRL20520KH</u>
1	10239	Housing, Impeller - Complete with Liner Kit Below	1
--	70865	Liner, 2-pc Replaceable Wear - with Hardware	1
2	31033	3/8-16 x 1 Hex Bolt	18
3	31008	3/8 Lock Washer	18
4	31009	3/8-16 Hex Nut	18
5	34019	Hose, Intake 12" x 10'	1
6	34020	Clamp, Hose 12"	2
7	40110	Band, Hose Support 12" with Hardware	1
--	31141	5/16-18 x 3-1/2" Hex Bolt (Support Band Hardware)	1
--	31004	5/16-18 Hex Nut	2
8	20165	Nozzle, Intake 12" w/Adjustable Handle	1
--	20168	Handle, Adjustable with Foam Grip	1
9	24670	Discharge Elbow	1
--	71131	Elbow Liner	8
10	31097	3/8-16 x 1-1/4 Hex Bolt	8
12	31034	3/8 Flat Washer	8
12	31008	3/8 Lock Washer	8
13	31009	3/8-16 Hex Nut	8

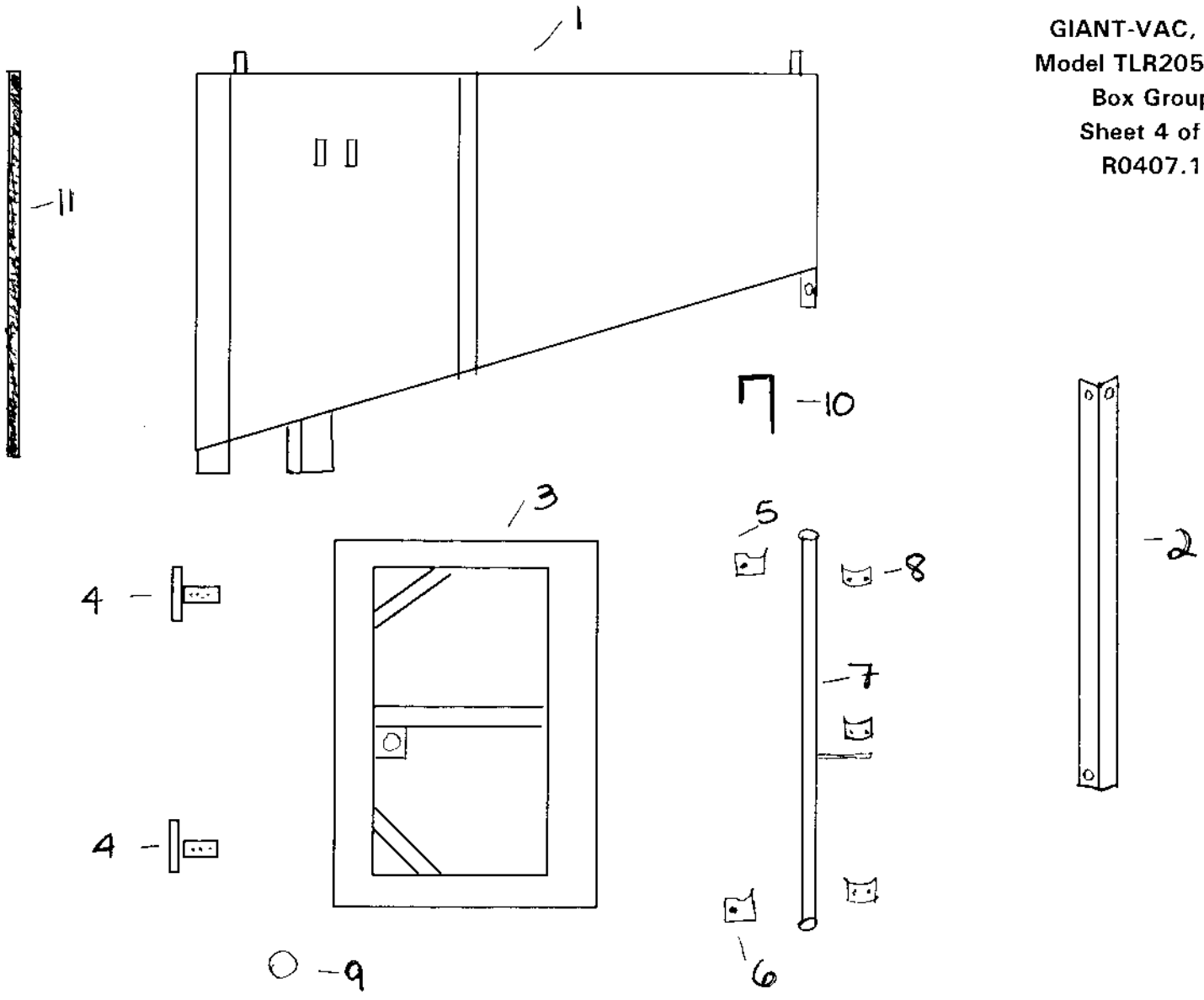
GIANT-VAC, INC.  
Model TLR20520KH  
Trailer Group  
Sheet 3 of 5  
R0407.1



**Giant-Vac Model TLR20520KH 5-Yard Self Contained**  
Sheet 3 - TRAILER GROUP

<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>TRL20520KH</u>
1	33332	Torflex Axle	1
2	32154	1/2-13 x 1-1/4 Hex Bolt	4
3	32155	1/2 Flat Washer	8
4	31078	1/2 Lock Washer	4
5	32156	1/2-13 Hex End Lock Nut	4
6	33208	Tires 700x15	2
7	31152	Lug Nuts	12
8	33222L	Fender R.H.	1
8	33222R	Fender L.H.	1
9	27130	Trailer Frame	1
10	33173	Jack, 2 Wheel	1
11	31641	Chain, Safety w/1 S-Hook	2
12	31008	3/8 Lock Washer	4
13	31009	3/8-16 Hex Nut	4
15	38007	Ball Hitch & Adapter 2-5/16 w/Adj Height	1
16	38012	Pintle Ring (Optional)	1
17	31887	Wiring Harness	1
18	70872	Breakaway Switch	1
19	31671	Chain, Nozzle Retainer 1/2 x 12"	1
20	31467	1/2-13 x 3-1/2 Hex Bolt	1
21	31078	1/2 Lock Washer	1
22	31406	1/2 Lock Nut	1
ITEMS NOT SHOWN			
	31017	5/8 x 4-1/2 Hex Bolt	2
	31199	5/8 Lock Nut	2
	31033	3/8-16 x 1 Hex Bolt	4
	32117	3/8 Cushion Clamp	12

GIANT-VAC, INC.  
Model TLR20520KH  
Box Group  
Sheet 4 of 5  
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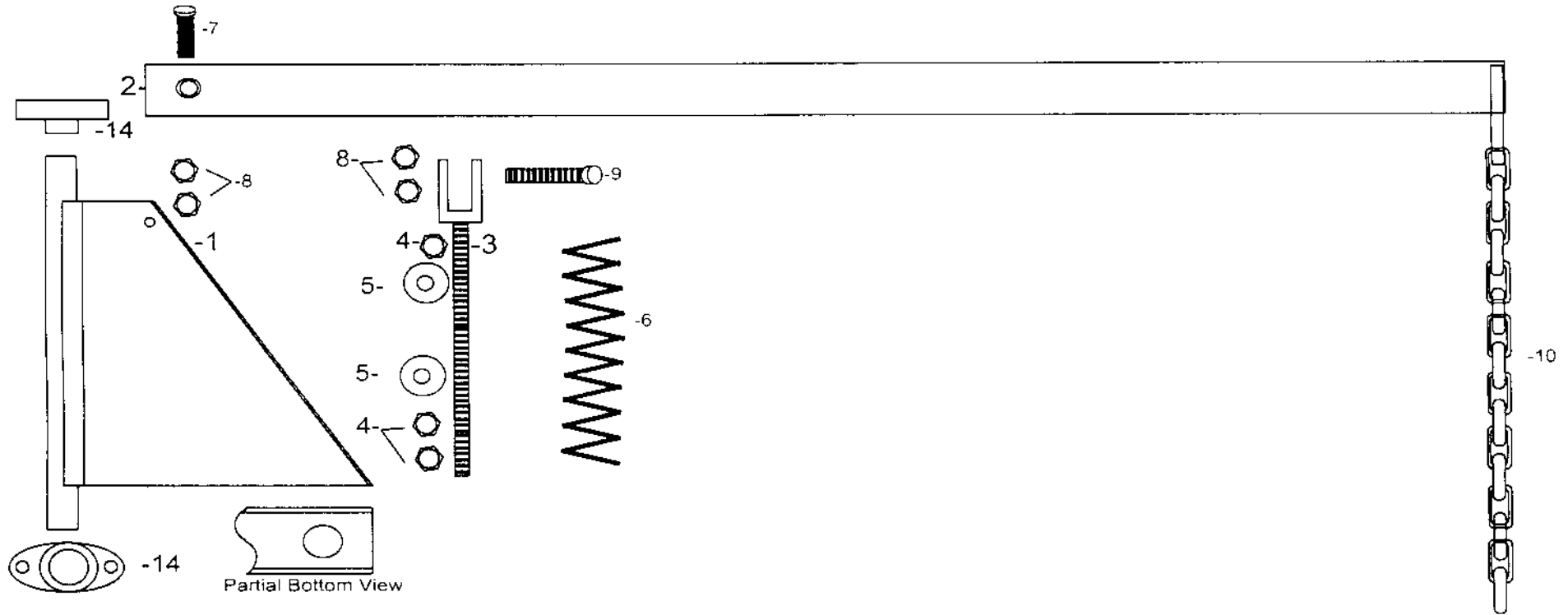
**Giant-Vac Model TLR20520KH 5-Yard Self Contained**  
Sheet 4 - BOX GROUP

<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>TRL20520KH</u>
1	27131	5 Yard Box	1
2	27132L	Box Support Left	1
2	27132R	Box Support Right	1
3	27203L	Barn Type Rear Door Left	1
3	27203R	Barn Type Rear Door Right	1
4	32009	Door Hinge	4
5	32220T	Door Lock Top	2
6	32220B	Door Lock Bottom	2
7	32221L	Door Rod Left	1
7	32221R	Door Rod Right	1
8	32222	Rod Holder	6
9	31639	Stop & Tail Light Assembly	2
10	27376	Door Retaining Rod	2
11	31506	Door Gasket - 20 Feet	1

ITEMS NOT SHOWN

31751	Marker Plate Assembly	1
31752	License Plate Bracket	1
31679	Clearance Lights, Amber	2
31674	Clearance Lights, Red	2

# Hose Support Boom (Manual)



GIANT-VAC, INC.  
Model TLR20520KH  
Hose Support Boom Group  
Sheet 5 of 5  
R0407.1

**GIANT-VAC**



**Giant-Vac Model TLR20520KH 5-Yard Self Contained**  
Sheet 5 - HOSE SUPPORT BOOM GROUP

<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>TRL20520KH</u>
1	40159	Boom Vertical Member Bearing Style	1
2	40131	Boom Horizontal Member	1
3	40108	Guide, Threaded Spring	1
4	31110	3/4-10 Hex Nut	2
5	31023	3/4 Flat Washer	2
6	31332	Spring, Boom	1
7	31025	1/2-13 x 3 Hex Bolt	1
8	31406	1/2 Lock Nut	2
9	31025	1/2-13 x 3 Hex Bolt	1
10	31140	Chain, Boom w/2 S-Hooks	1
14	36299	Bearing, 1.50 2 Bolt	2

# ***warranty***

**GIANT-VAC, INC.**, here in after called Giant-Vac, warrants each new Giant-Vac to the original retail purchaser of the new Giant-Vac equipment to be free from manufacturing defects in normal service for a period of 1 year, unless it is used for rental purposes, which limits the warranty to 30 days. This warranty does not apply to engines, tires or other parts that are purchased and warranted by their manufacturer. Items such as bags, grass catchers, hoses and blades are not warranted, as these are considered expendable items. This warranty does not include equipment failures due to normal wear.

Any obligation under this warranty is expressly limited to the replacement or repair, at an authorized servicing Giant-Vac dealer, or at a point designated by us, of such parts as appear to us to have been defective. All defective parts have to be returned freight prepaid before credit will be issued.

We shall not be liable for transportation charges in connection with the replacement or repair of defective parts.

This warranty does not apply to a Giant-Vac upon which repairs or alterations have been made by others except with our prior written approval.

We shall not be liable for consequential damages or contingent liabilities for the fitness of any Giant-Vac for any particular purpose.

We make no other express, implied or statutory warranty, nor is anyone authorized to make any in our behalf.

***GIANT-VAC***<sup>®</sup>

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