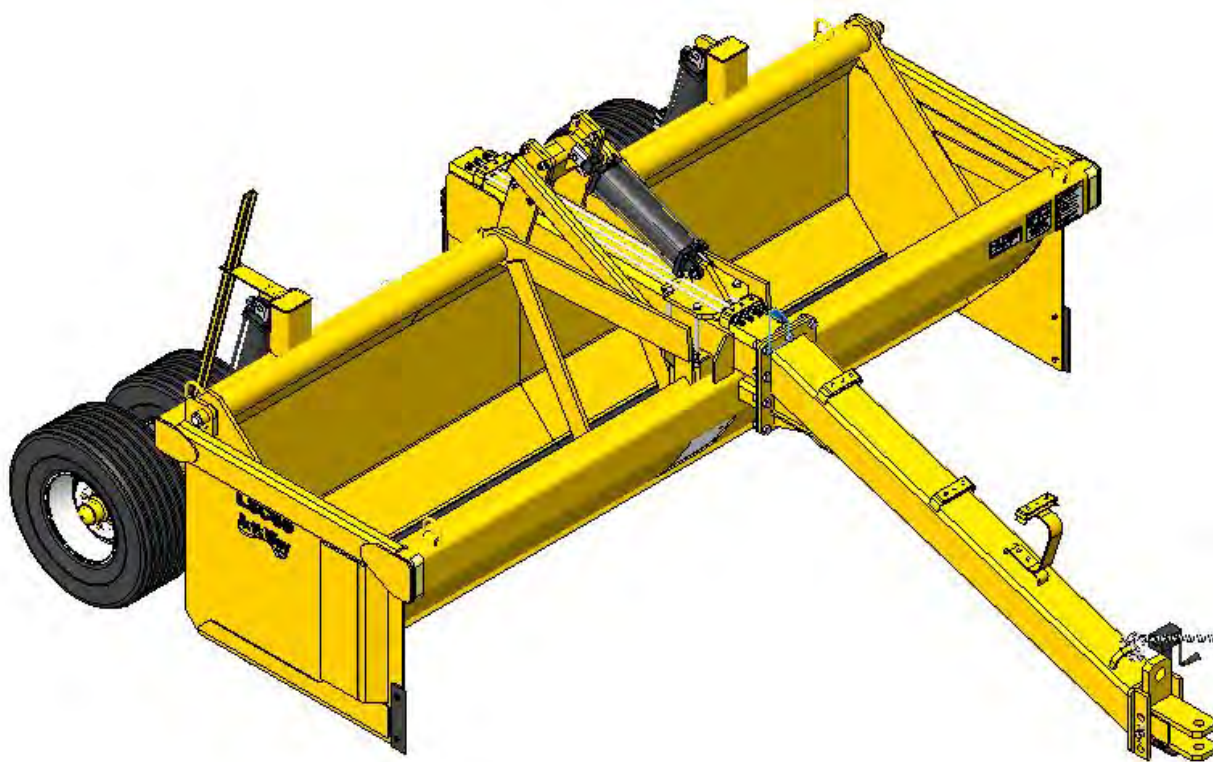




LSC50

CarryAll Scraper

**Illustrated Parts List
Set Up and
Operating Instructions**



**589180
Issued 12-2011**



This symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED. The message that follows the symbol contains important information about your safety. Carefully read the message. Make sure you fully understand the causes of possible injury or death.

IF THIS MACHINE IS USED BY AN EMPLOYEE, IS LOANED, OR IS RENTED, MAKE SURE THAT THE OPERATOR UNDERSTANDS THE TWO INSTRUCTIONS BELOW.

BEFORE THE OPERATOR STARTS THE ENGINE:

1. GIVE INSTRUCTIONS TO THE OPERATOR ABOUT SAFE AND CORRECT USE OF THE MACHINE.
2. MAKE SURE THE OPERATOR READS AND UNDERSTANDS THE OPERATOR'S MANUAL FOR THIS MACHINE.

WARNING

IMPROPER OPERATION OF THIS MACHINE CAN CAUSE INJURY OR DEATH.

BEFORE STARTING THE ENGINE, DO THE FOLLOWING:

1. READ THE OPERATOR'S MANUAL.
2. READ ALL SAFETY DECALS ON THE MACHINE.
3. CLEAR THE AREA OF OTHER PERSONS.

LEARN AND PRACTICE SAFE USE OF MACHINE CONTROLS IN A SAFE AND CLEAR AREA BEFORE YOU OPERATE THIS MACHINE ON A JOB SITE.

It is your responsibility to observe pertinent laws and regulations and to follow manufacturer's instructions on machine operation and maintenance. See your Authorized Art's-Way Manufacturing Co., Inc. dealer or Art's-Way Manufacturing Co., Inc. for additional operator's manuals, illustrated parts catalogs, and service manuals.

TO THE OWNER

Congratulations on the purchase of your new Art's-Way Carryall Scraper. You have selected a top quality machine that is designed and built with pride to ensure that you have many years of efficient, reliable service.

Even if you are an experienced operator of this or similar equipment, ***we ask that you read the Operating Instructions before using this scraper.*** The way you operate, adjust and maintain this unit will have much to do with its successful performance. Any further questions you may have about this piece of Art's-Way equipment should be directed to your local Art's-Way dealer or to Art's-Way Manufacturing Co., Inc., Armstrong, Iowa 50514, (712) 864-3131.

Specifications And Design Are Subject To Change Without Notice

Art's-Way Manufacturing Co., Inc. is continually making product improvements. In doing so, we reserve the right to make changes or add improvements to our products without obligation for the equipment previously sold.

Because modifications to this scraper may affect the performance, function and safety of its operation, no modifications are to be made without the written permission of Art's-Way Manufacturing Co., Inc. Any modifications made without the written permission of Art's-Way Manufacturing Co., Inc. shall void the warranty of this product.

In the interest of continued safe operation of this scraper, *pay particular attention to the safety alert symbol throughout this manual.*

Art's-Way Manufacturing Co., Inc. Statement of Liability

Art's-Way Manufacturing Co., Inc. recognizes its responsibility to provide its customers with a safe and efficient product. Art's-Way attempts to design and manufacture its product in accordance with accepted engineering practices in effect at the date of design. This statement should not be interpreted to mean that our products will protect against the user's own carelessness or failure to follow common safety practices as set forth in this manual, nor will Art's-Way be liable for any such act. In addition, Art's-Way assumes no liability for product altered or modified in any way by users or anyone other than an authorized dealer.

Important Warranty Information

The warranty for this scraper appears on page iv of this Manual. In order to establish proper warranty registration, the Warranty Registration and Dealer Pre-Delivery Checklist must be completed and returned to the factory. Failure to comply with this requirement may result in reduced warranty allowances.

PARTS AND SERVICE

As the new purchaser of your Carryall Scraper, it is very important to consider the following factors:

A. Original Quality

B. Availability of Service Parts

C. Availability of adequate Service Facilities

Art's-Way Manufacturing Co., Inc. has an excellent dealership network ready to answer any questions you may have about your scraper. Parts for your machine may be ordered through our dealers. When placing a parts order, please have the model and serial number ready. This will allow the dealer to fill your order as quickly as possible.

For your convenience, we have provided this space for you to record your model number, serial number and the date of purchase, as well as your dealer's name and address.

Owner's Name: _____

Owner's Address: _____

Purchase Date: _____

Dealership Name: _____

Dealership Address: _____

Dealership Phone No.: _____

Scraper Serial Number Location

(Located on the front, upper cross beam of the carriage) Enter the serial number and model number of your scraper in the spaces provided above.



SERIAL NO.

MODEL NO.

Manufactured By
Art's-Way Manufacturing Co., Inc.
Armstrong, IA



TABLE OF CONTENTS

DESCRIPTION	PAGE
TO THE OWNER	1
PARTS AND SERVICE	2
TABLE OF CONTENTS	3
LIMITED WARRANTY	4
SAFETY FIRST	5
SAFETY GUIDELINES	6, 7, 8
SAFETY DECALS	10, 11
CARRYALL SCRAPER MAIN ASSEMBLY	12, 13
HUB AND AXLE & WHEEL AND TIRE ASSEMBLY	14
SCRAPER HYDRAULICS	15
SCRAPER DECALS	16
ASSEMBLY AND SETUP	17
GENERAL	18
OPERATION SAFETY	19
GENERAL FIELD OPERATING INSTRUCTIONS	19, 20, 21
SCRAPER MAINTENANCE	21, 22
GENERAL SPECIFICATIONS	23

LIMITED WARRANTY

Art's-Way Manufacturing Co., Inc. warrants the products it sells to be free from defects in material and workmanship for a period of one (1) year after the date of delivery to the first purchaser, subject to the following conditions:

- **Art's-Way Manufacturing Co., Inc.** obligation and liability under this warranty is to repair or replace (at the company's option) any parts which, upon manufacture, were defective in material or workmanship.
- All parts and repairs under this warranty shall be supplied at an authorized **Art's-Way Manufacturing Co., Inc.** dealer or at the factory, at the option of **Art's-Way Manufacturing Co., Inc.**
- **Art's-Way Manufacturing Co., Inc.** warranty does not extend to parts and elements not manufactured by **Art's-Way Manufacturing Co., Inc.** and which carry the warranty of the other manufacturer.
- Transportation or shipping to an authorized dealer for necessary repairs is at the expense of the purchaser.
- **Art's-Way Manufacturing Co., Inc.** makes no other warranty expressed or implied and makes no warranty of merchantability or fitness for any particular purpose beyond that expressly stated in this warranty. **Art's-Way Manufacturing Co., Inc.** liability is limited to the terms set forth in this warranty and does not include any liability for direct, indirect, incidental or consequential damages or expenses of delay and the Company's liability is limited to repair or replacement of defective parts as set forth herein.
- Any improper use, and maintenance, including operation after discovery of defective or worn parts, operation beyond the rated capacity, substitution of parts not approved by **Art's-Way Manufacturing Co., Inc.** or any alteration or repair by other than an authorized **Art's-Way Manufacturing Co., Inc.** dealer which affects the product materially and adversely, shall void this warranty.
- No dealer, 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 **Art's-Way Manufacturing Co., Inc.** at its home office.
- Some states do not allow limitations on how long an implied warranty lasts or exclusions of, or limitations on relief such as incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you the specific legal rights and you may have other rights which vary from state to state.

SAFETY FIRST

Accidents can be prevented if the operator:

- Fully understands how the machine functions
- Knows the precautions and observes them
- Is careful to consider the safe action at all times.

Take note! This Safety Alert Symbol found throughout this manual is used to call your attention to instructions involving your personal safety and the safety of others. Failure to follow these instructions can result in injury or death.



**THIS SYMBOL MEANS
ATTENTION!
BECOME ALERT!
YOUR SAFETY IS INVOLVED!**

Signal Words: Note the use of the signal words **DANGER**, **WARNING**, and **CAUTION** on the Carryall Scraper and in this manual. The appropriate signal word for each has been selected using the following guidelines:



DANGER: Indicates an imminently hazardous situation that, if not avoided, *will* result in death or serious injury. This signal word is limited to the most extreme situations for machine components which for functional purposes cannot be guarded.



WARNING: Indicates a potentially hazardous situation that, if not avoided, *could* result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.



CAUTION: Indicates a potentially hazardous situation that, if not avoided, *may* result in minor or moderate injury. It may also be used to alert against unsafe practices.

Art's-Way Manufacturing Co., Inc. strives to make our equipment as safe as it can possibly be. The Carryall Scraper conforms to applicable safety standards at the time of manufacturing. A safety conscious equipment operator makes an effective accident-prevention program complete.

Safety features and instructions for the Carryall Scraper are detailed elsewhere in the Operating Instructions section of the manual. It is the responsibility of the Carryall Scraper owner to ensure that **all** operators read and understand the Manual before they are allowed to operate the scraper.

SAFETY GUIDELINES



CAUTION: Remember, a careful operator is the best insurance against an accident.



CAUTION: Read and Understand the Operating Instructions and all the safety decals before operating the scraper. Review all safety instructions with all operators annually.

Before Operating

- Do not wear loose fitting clothing as it may catch in moving parts
- Check to be sure all hydraulic lines and fittings are secure and that no lines are crimped or worn. Tighten, adjust, and replace as necessary. Do not attempt to make temporary repairs to hydraulic lines. (See the Hydraulic Safety section below.)
- Install the safety chain when attaching the scraper to the tractor.
- Clear the area of bystanders, especially children, when making adjustments, repairs, or performing maintenance on the scraper.
- Do not allow riders while transporting.
- Put all tractor and machine controls in *neutral* before starting. Follow the starting instructions according to your tractor Manual.
- Operate the scraper only while seated on the tractor seat.
- Make sure the unit is adequately supported with safety blocks or stands when changing tires or working on it.

During Operation

- Keep hands, feet, hair and clothing away from moving parts.
- Keep all children and bystanders away from the Carryall Scraper when in operation.
- Do not allow riders while the scraper is in operation.
- Do not attempt to unclog, clean or adjust the scraper while the tractor is running.
- Before servicing, adjusting, repairing or unplugging the scraper, stop the tractor engine, place all controls in neutral, set the parking brake, remove the ignition key, and wait for all moving parts to stop.
- Keep all hydraulic lines, fittings, and couplers tight and free of leaks. (See the Hydraulic Safety section below.)

Maintenance Safety

- Follow all operating, maintenance and safety instructions found in the Manual.
- Before servicing, adjusting, repairing or unplugging the scraper, stop the tractor engine, place all controls in neutral, set the parking brake, remove the ignition key.
- Use only the tools, jacks and hoists that are of sufficient capacity for the job.
- Use support blocks or safety stands when changing tires or working under the machine.
- Follow the good shop practices of keeping the service area clean and

SAFETY GUIDELINES

dry and use adequate light for the job at hand.

Hydraulic Safety

- Before applying pressure from the hydraulic system, make sure all lines, fittings, and couplers are tight and in good condition.
- Relieve pressure from the hydraulic circuit before servicing or disconnecting from the tractor.
- Make sure all shields/guards are in place and properly secured when maintenance work is complete.
- Replace any worn, cut, abraded, flattened or crimped hoses.
- Do not make any temporary repairs to the hydraulic lines, fittings or hoses by using tape, clamps, or cement. The hydraulic system operates under extremely high pressure and temporary repairs may fail suddenly and create a hazardous situation.
- Wear proper hand and eye protection when searching for a high-pressure hydraulic leak. Use a piece of wood or cardboard as a backstop instead of hands to identify and isolate a leak. If injured by a concentrated high-pressure stream of hydraulic fluid, seek medical attention immediately. Serious infection or toxic reaction can develop if hydraulic fluid penetrates the surface of the skin.
- Before applying pressure to the system, make sure all components are tight and that the lines, hoses and couplings are not damaged.

Transportation Safety

- Be sure to comply with all local regulations regarding transporting equipment on public roads and highways.
- Make sure the Slow Moving Vehicle (SMV) emblem and all lights and reflectors required by local highway and transportation authorities are in place, clean and clearly visible to all oncoming or following traffic.
- Do not allow riders while transporting.
- Make sure the Carryall Scraper is securely attached to the tractor and install a safety chain to the scraper. Install a retainer through the drawbar pin and attach the safety clip.
- Install cylinder stops on both lift cylinders.
- Do not fail to latch the tractor brake pedals together.
- Do not exceed 20 MPH (32 km/h) when transporting the scraper. Always reduce speed on rough roads and surfaces or when going down inclines.
- Drive slowly when turning and always use turn signals on the tractor to indicate your turning intentions to other traffic.
- The weight of the trailed scraper should **NEVER** exceed the capacity of the towing vehicle.
- Check clearances carefully whenever the scraper is towed.

Storage Safety

- Store the scraper in an area away from human activity.
- Do not permit children to play on or around the stored machine.
- Install cylinder stops on both lift cylinders.
- Park the Carryall Scraper on firm level ground and block the tires.

Tire Safety

- Have a qualified tire dealer or repair service perform tire repairs.
- Do not attempt to mount a tire unless you have the proper equipment and experience to do the job.
- Follow proper procedures when mounting a tire on a rim to prevent an explosion which could result in serious injury.
- Do not substitute tires of lesser road rating and capacity for the original equipment tires.



CAUTION: Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion which may result in serious injury or death. Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job. Have it done by your dealer or qualified tire repair service.

easy access to all sides of the machine.

- Use only forklifts, lift cranes, jacks, and tools with sufficient capacity for the loads.
- Do not allow spectators, especially children, in the working area.

Remember:

The Best Operator is a Safe Operator

Assembly Safety

- Use adequate manpower to perform assembly safety.
- Assemble the scraper in an area with sufficient space to maneuver the largest components and allow

NOTES

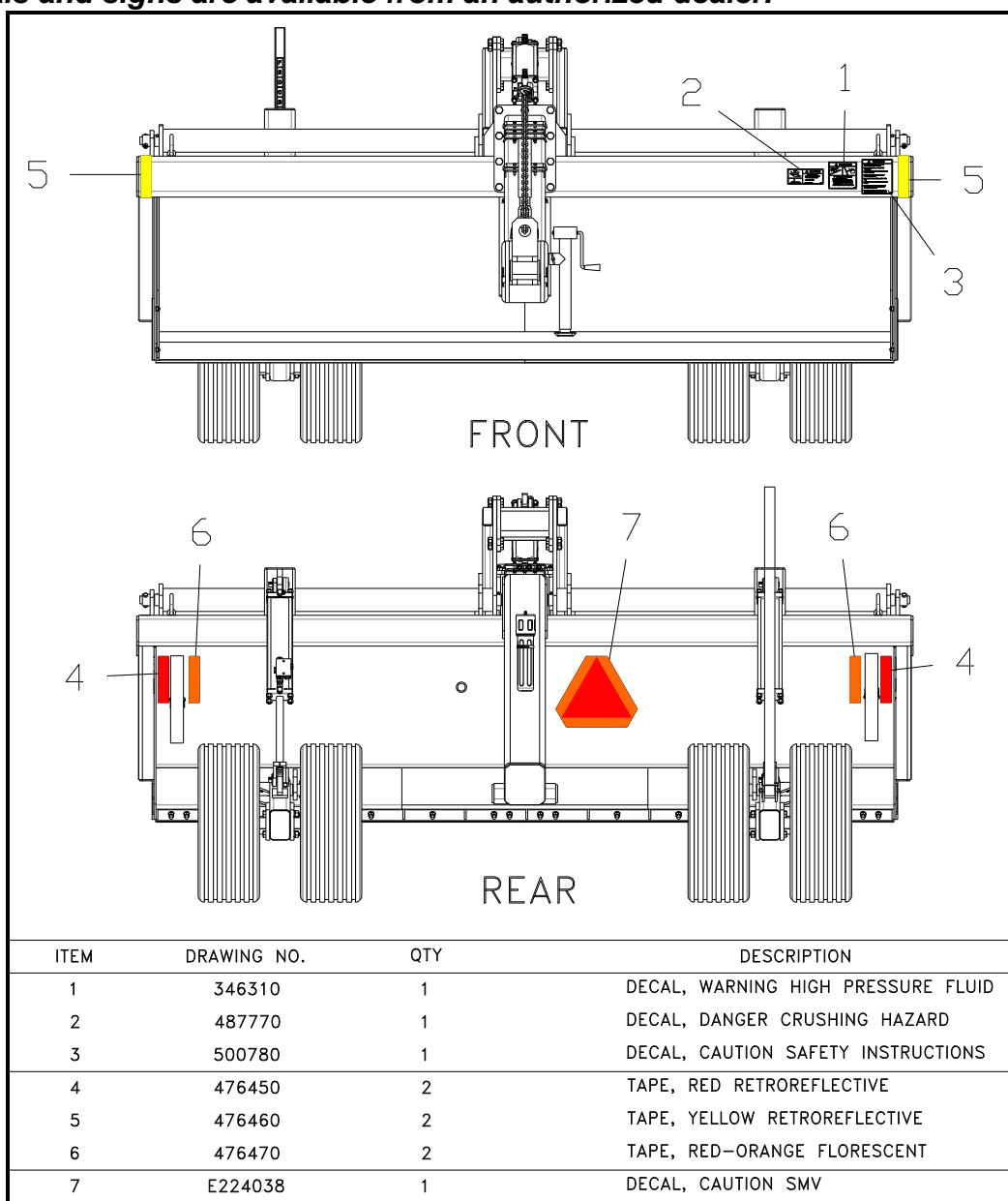
SAFETY DECALS

Decal Locations & Identification

The different types of safety decals for your scraper are illustrated on the following pages. Please familiarize yourself with the appearance of each decal, the warning it describes, and the area where it is located on the scraper (see below).

Safety awareness is the responsibility of each operator of the scraper. Keep safety decals and signs clean and legible and be sure replacement parts display the current safety decals and signs as well.

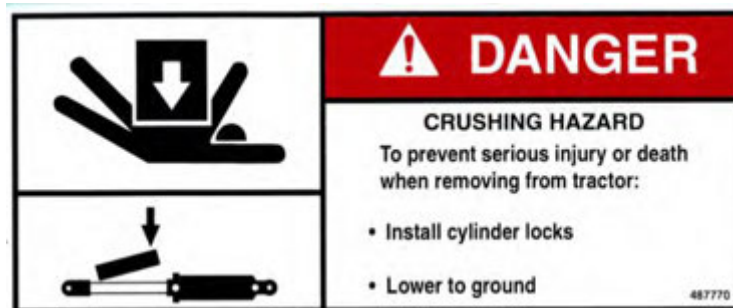
Remember: Always replace missing, damaged or illegible safety decals. New decals and signs are available from an authorized dealer.



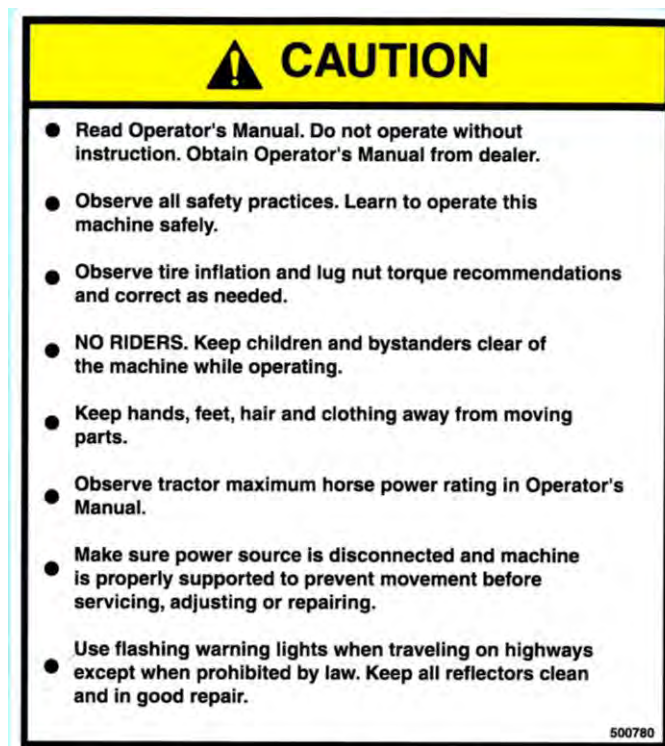
SAFETY DECALS



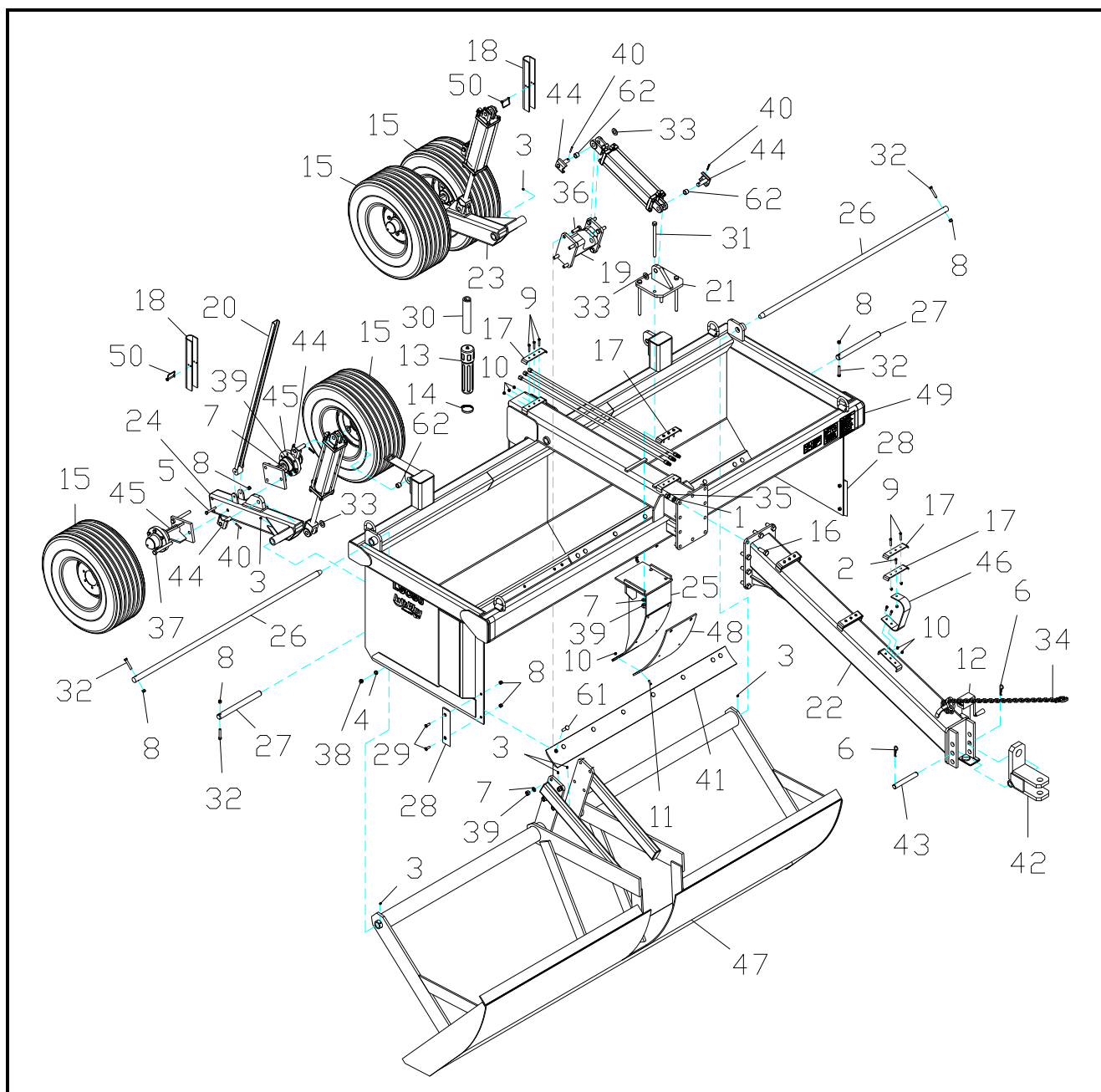
1. WARNING – High Pressure Fluid (346310)



2. DANGER – Crushing Hazard (487770)



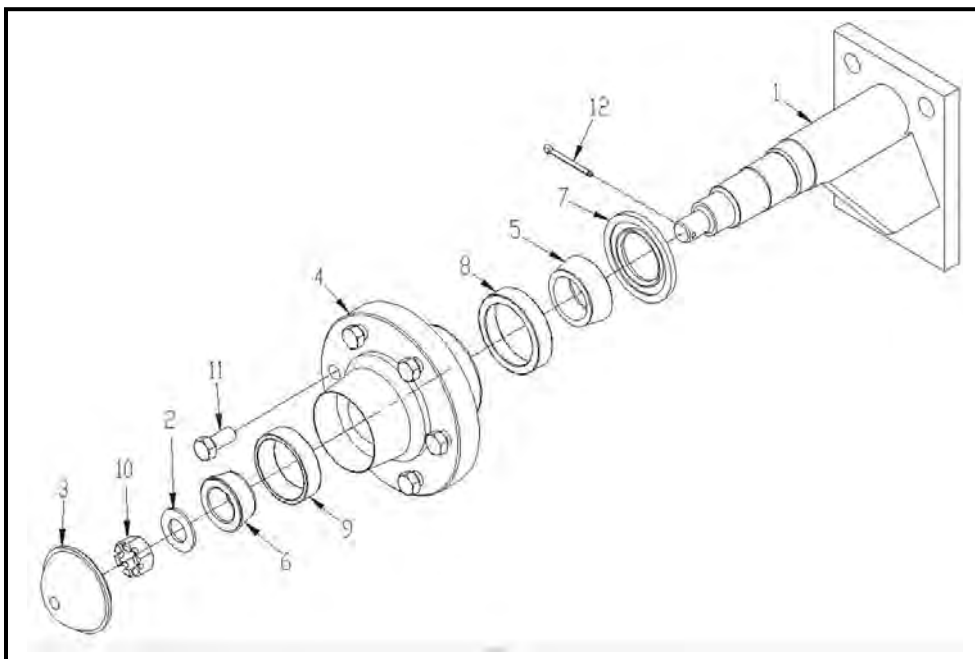
3. CAUTION – Safety Instructions (500780)

CARRYALL SCRAPER MAIN ASSEMBLY

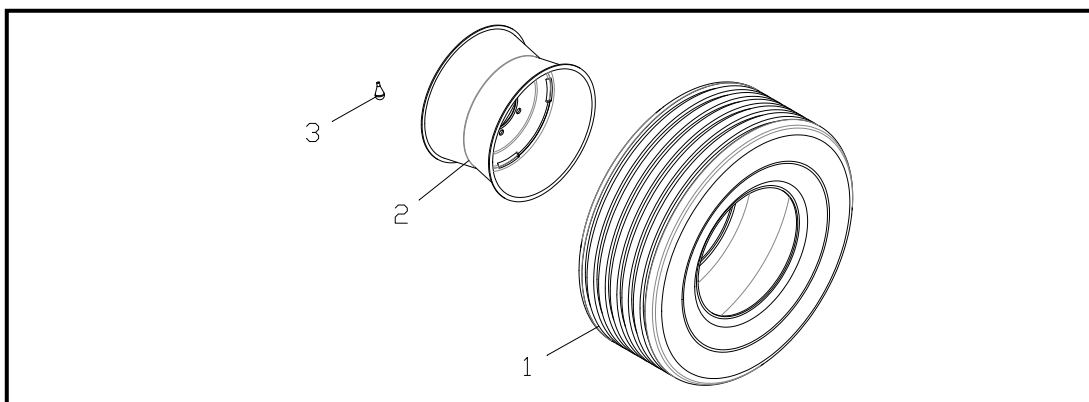
CARRYALL SCRAPER MAIN ASSEMBLY

ITEM	PART NUMBER	NOMENCLATURE	QTY
1	003460	WASHER, LOCK 7/8 ZN	10
2	006690	BOLT, HHCS 3/8-16 X 1-1/4 GR5 ZN	3
3	013170	FITTING, GREASE STRAIGHT	6
4	020440	WASHER, LOCK 5/8 ZN	16
5	034650	BOLT, HHCS 1/2-13 X 3-1/2 GR5 ZN	1
6	035830	PIN, BRIDGE 3/16 X 1-1/2 INTERNAL HAIR ZN	2
7	036800	WASHER, LOCK 3/4 SAE MED	18
8	037540	NUT, LOCK 1/2-13 GR5 ZN NYLON	9
9	037790	BOLT, HHCS 3/8-16 X 2 GR5 ZN	14
10	073630	NUT, LOCK 3/8-16 ZN	23
11	395840	SCREW, FCHMS 3/8-16 X 1-1/4	6
12	398130	JACK, SCREW SIDE WIND	1
13	449190	TUBE, MANUAL HOLDER	1
14	455160	CLAMP, HOSE	1
15	500770	TIRE & WHEEL ASSY, 11L-15 3800# IMP.	4
16	536250	BOLT, HHCS 7/8-14 X 2-1/2 GR8 ZN	10
17	577901	MOUNT, HYD.	6
18	578000	STOP, HYD.	2
19	578030	MOUNT, CYLINDER	1
20	578110	GUIDE, DEPTH WLDT	1
21	578150	MOUNT, CYLINDER	1
22	578290	TUBE WLDT, MAIN HITCH	1
23	578800	AXLE WLDT, SUPPORT LH	1
24	578810	AXLE WLDT, SUPPORT RH	1
25	578830	MOUNT WLDT, PLASTIC FILLER	1
26	578850	PIN, LONG CLAM	2
27	578910	PIN, AXLE	2
28	579000	BLADE, EDGE	2
29	579160	SCREW, FCHMS 1/2-13 X 1-1/2 GR5 ZN	4
30	589170	MANUAL, IPL/OPERATORS	1
31	990740	BOLT, HHCS 3/4-10	4
32	990840	BOLT, HHCS 1/2-13 X 3.00 GR5 ZN	4
33	1107389	WASHER, FLAT 1" SAE ZN	6
34	1765302	CHAIN, SAFETY 5/16 X 5'	1
35	R61741	NUT, HEX 7/8-14 GR5 ZN	10
36	G146700	BOLT, HHC 3/4-10 X 2 GR8 ZN	8
37	G211028	BOLT, HHCS 3/4-10 X 5-1/2 GR8 ZN	6
38	I124589	NUT, HEX 5/8-11 GR5 ZN	16
39	J14H794	NUT, HEX 3/4-10 GR5 ZN	18
40	J34H334	PIN, ROLL 5/16 X 2	6
41	LS4000125	EDGE, 6'	2
42	LSGRA1435	HITCH WLDT	1
43	LSGRA1449	PIN, PIVOT - TONGUE	1
44	LSGRA1600	PIN, CYLINDER 1"	6
45	LSGRA1970	HUB & AXLE ASSY	4
46	LSIC00004	HOLDER, HOSE	1
47	LSSCR2063	CLAM WLDT, 12'	1
48	LSSCR2075	SLIDE, POLY	1
49	LSSCR2210	SCRAPER FRAME	1
50	R18660	SNAPPER PIN, .31 X 2.75 USABLE LENGTH	2
51	V059805	BOLT, PLOW 5/8 X 2-1/2	16
52	V180220	BUSHING, STEEL 1-1/2 X 1 X 1	4

HUB AND AXLE & WHEEL AND TIRE ASSEMBLIES

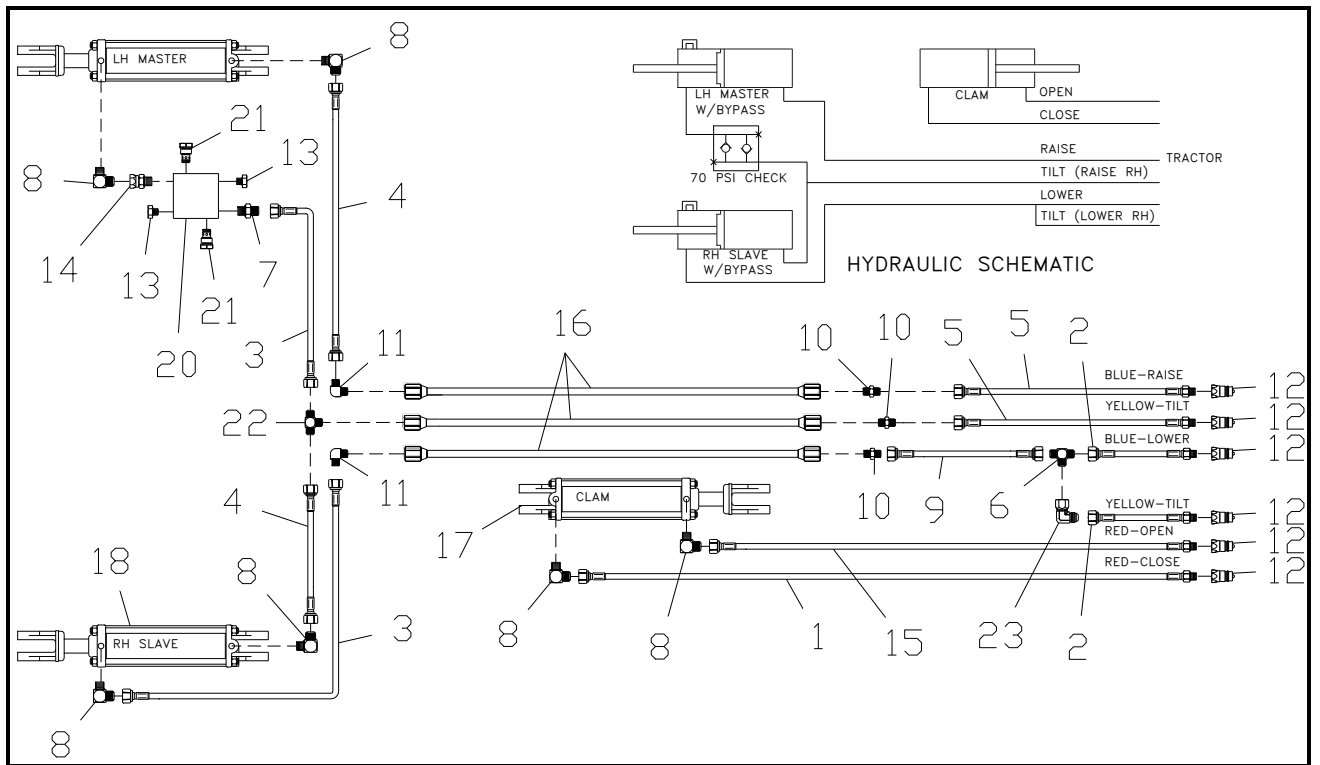


ITEM	PART NUMBER	NOMENCLATURE	QTY
	LSGRA1970	HUB AND AXLE ASSEMBLY	REF.
1	LSGRA1445	MOUNT WLDT, AXLE ASSEMBLY	1
2	I131018	WASHER, FLAT 7/8 SAE ZN	1
3	129840	CAP, HUB	1
4	007590	HUB ASSY, 6 X 6 X 4.62	1
5	129790	BRG, TPD ROL, CONE, 1.80 ID	1
6	129800	BRG, TPD ROL, CONE, 1.38 ID	1
7	129810	SEAL, 2.0 X 3.62	1
8	129770	CUP, BRG. 3.265 OD	1
9	129780	BRG, TPD ROL, CUP, 2.88 OD	1
10	129830	NUT, SLOTTED 7/8-14 GR5 ZN	1
11	007080	HBOLT, 0.5000-13 X 2.5 X 1.25-N	6
12	003950	PIN, COTTER 3/16 X 2	1

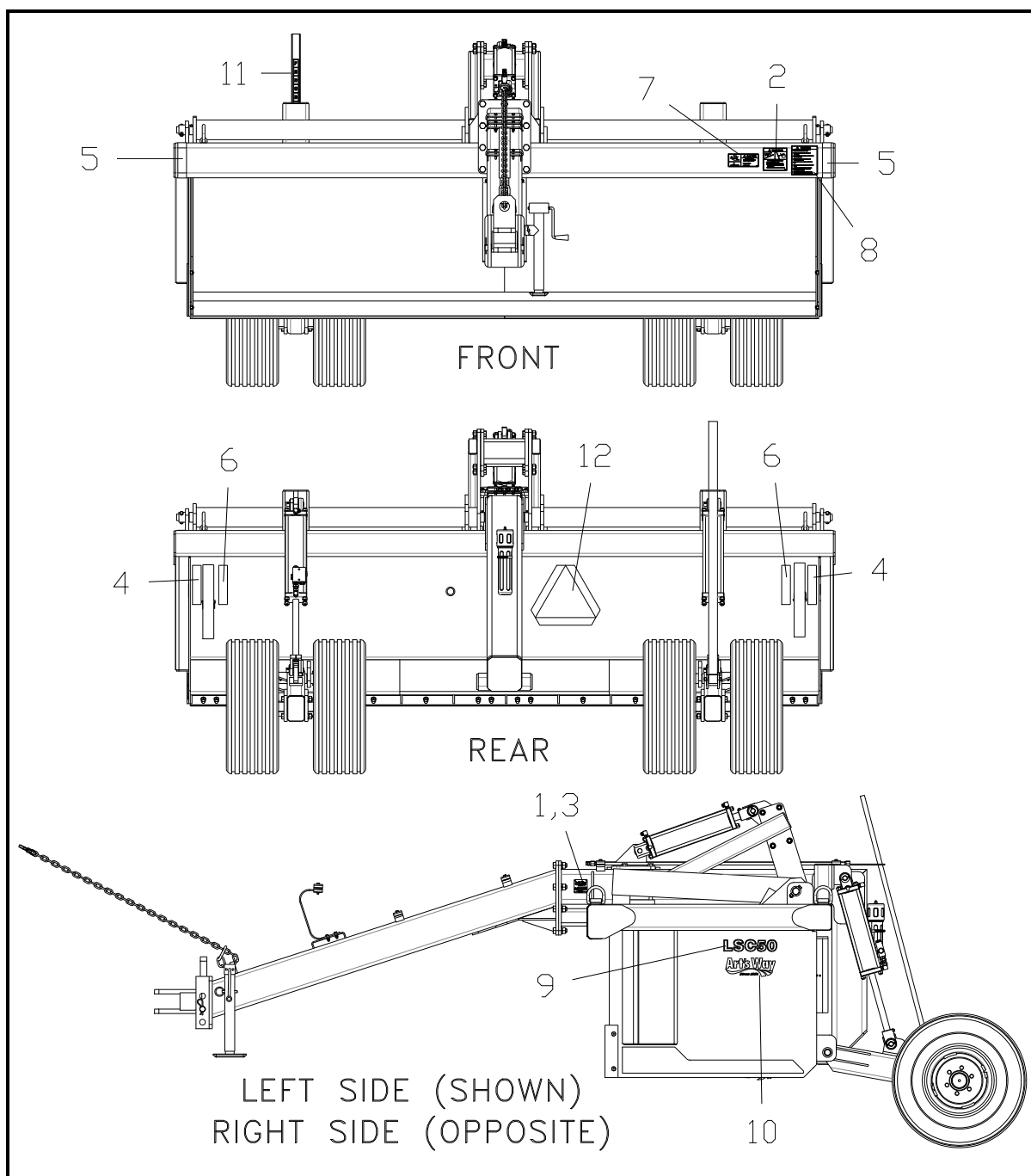


ITEM	PART NUMBER	NOMENCLATURE	QTY
	500770	TIRE AND WHEEL ASSEMBLY	REF.
1	I1980927C1	TIRE, 11L-15 8-PLY	1
2	U51900004	WHEEL, 15 X 10 6-BOLT	1
3	164420	VALVE, STEM W/CAP	1

SCRAPER HYDRAULICS



ITEM	PART NUMBER	NOMENCLATURE	QTY
1	580980	HOSE ASSY, 1/2 X 186 -8 FJIC X -8 ORBM	1
2	581000	HOSE ASSY, 1/2 X 20 -8 FJIC X -8 ORBM	2
3	580950	HOSE ASSY, 1/2 X 63 -8 FJIC X -8 FJIC	2
4	580960	HOSE ASSY, 1/2 X 56 -8 FJIC X -8 FJIC	2
5	581010	HOSE ASSY, 1/2 X 138 -8 FJIC X -8 ORBM	2
6	MP09.74123	TEE, UNION 3/4-16 37 DEG. JIC	2
7	MP32.02101	ADAPTER, 1/2 MJIC X 10 ORB	1
8	530210	ADAPTER, 90 DEG. 3/4 MORB X 3/4 MJIC	6
9	580940	HOSE ASSY, 1/2 X 120 -8 FJIC X -8 FJIC	1
10	581030	UNION, HYD. STR. 7/8-14 MJIC X 3/4-16 MJIC	3
11	581040	ADAPTER, 90, 7/8-14 MJIC X 3/4-16 MJIC	2
12	MP09.74158	COUPLER, QUICK MALE 3/4-16 FORB (-8 SAE)	6
13	274420	PLUG, HEX HEAD 7/8-14 ORB	2
14	581050	SWIVEL, 7/8-14 MJIC X 3/4-16 FJIC	2
15	580970	HOSE ASSY, 1/2 X 168 -8 FJIC X -8 ORBM	1
16	581480	TUBE ASSY, HYD STR -10 FJIC	3
17	LS4000026	CYLINDER, HYD 4" X 16"	1
	581370	SEAL KIT, HYD. CYLINDER 4B X 1-3/4R ASAE	Ref.
18	LS4000098	CYLINDER, HYD 3-3/4" X 16" W/BYPASS (SLAVE)	1
	581350	SEAL KIT, HYD. CYLINDER 3-3/4B X 1-3/8R ASAE	Ref.
19	LS4000100	CYLINDER, HYD 4" X 16" W/BYPASS (MASTER)	1
	581360	SEAL KIT, HYD. CYLINDER 4B X 1-3/8R ASAE	Ref.
20	LS4000135	MANIFOLD, HYD	1
21	LS4000136	VALVE, CHECK HYD PO	2
22	589480	ADAPTER, TEE 3/4 MJIC 3/4 MJIC 7/8 MJIC	1
23	551560	ADAPTER, 90, 3/4-16 FJIC X 3/4-16 MJIC	1
24	149670	TIE, 3/16" X 11" CABLE (NOT SHOWN)	6
25	MP17.00564	CABLE TIE - BLUE (TO MARK HOSES) (NOT SHOWN)	2
26	MP17.00565	CABLE TIE - RED (TO MARK HOSES) (NOT SHOWN)	2
27	MP17.00566	CABLE TIE - YELLOW (TO MARK HOSES) (NOT SHOWN)	2

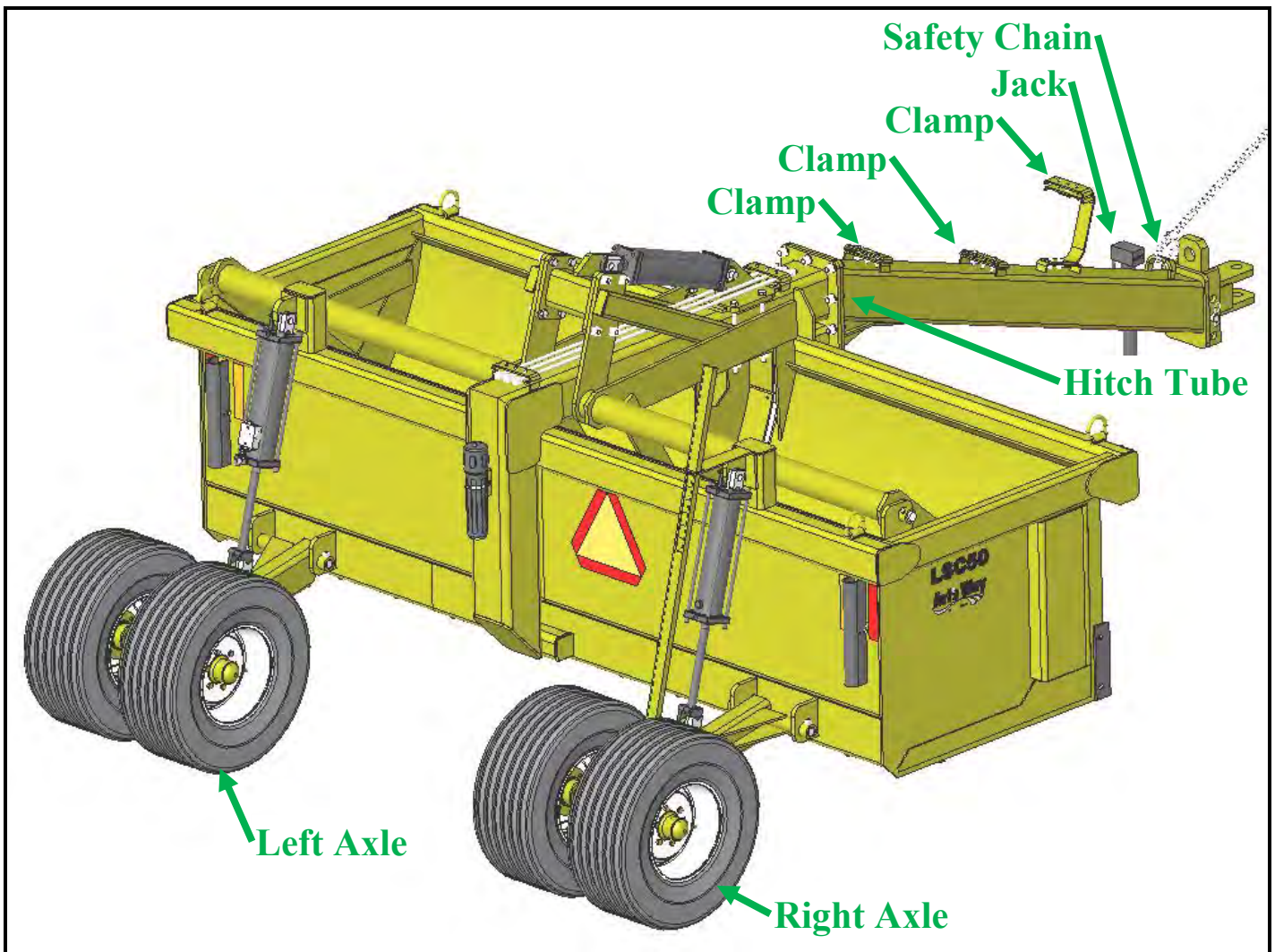
SCRAPER DECALS

ITEM	PART NUMBER	NOMENCLATURE	QTY
1	204510	NAIL, $\frac{1}{4}$ GRIP	4
2	346310	DECAL, WARNING HIGH PRESSURE FLUID	1
3	355500	TAG, SERIAL NUMBER FINISHED	1
4	476450	TAPE, RED RETOREFLECTIVE	2
5	476460	TAPE, YELLOW RETOREFLECTIVE	2
6	476470	TAPE, RED-ORANGE FLORESCENT	2
7	487770	DECAL, DANGER CRUSHING HAZARD	1
8	500780	DECAL, CAUTION SAFETY INSTRUCTIONS	1
9	581320	DECAL, LSC50	2
10	582470	DECAL, ARTSWAY	2
11	589160	DECAL, DEPTH INDICATOR SCRAPER	1
12	E224038	DECAL, CAUTION SMV	1

Assembly and Set Up

The Art's-Way Carryall Scraper is shipped partially assembled from the factory. To place the machine in service (see illustration below and Main Assembly):

- Position Axle Assemblies as shown (make sure Depth Guide on Right Axle Assembly goes through Bracket), attach to Main Frame with Pin. Bolt Pin in place. Attach Cylinder to lug on Axle Assembly.
- Hitch Tube Weldment as shown, secure in place with (10) $\frac{3}{4}$ " bolts, nuts, and lock washers provided. Rout hydraulic hoses through Clamp. Attach Safety chain to lug as shown. Mount Jack to Hitch.
- Fill the hydraulic system completely with hydraulic fluid and bleed free of all air. Smooth operation of the systems depends on a system completely purged of air.
- Grease six points as noted in Maintenance section of this manual. Check wheel bearings for grease.
- Check all nuts, bolts, and cotter pins to be sure each is properly tightened.
- Test cycle all hydraulic cylinders to insure a smooth operation of the scraper. If rough operations are discovered, bleed again and refill the hydraulic system as needed until smooth operation is attained.



General

The rugged Art's-Way Carryall Scraper Model LSC50 has been engineered and manufactured to meet the needs of the modern farmer. With the farm tractor, the Carryall Scraper is designed for agricultural use to scrape, cut, slope, carry and spread dirt, manure and other agricultural materials.

For dependable operation of the scraper, there are few items to check, however, attention to each will provide a more successful experience in use of your machine.

- Grease the six grease points before each day's operation or after 8 hours of use.
- Check to be sure all hydraulic lines and fittings are secure and that no lines are crimped or worn. Tighten, adjust, and replace as necessary. Do not attempt to make temporary repairs to hydraulic lines.
- Check and be sure the hydraulic system is full of oil and free of air. A test cycle of all cylinders prior to beginning work is highly advisable.
- Periodically check the cutting edge bolted to the scraper to ensure that it has not worn to the point where the machine body is being abraded, thereby causing damage to the scraper. Replacement cutting edges are available from your dealer.

Operation of the scraper is not a complex undertaking. A short familiarization with the operation of the machine will prove to make operation much easier.

- There are three adjustment holes for the clevis which will adjust the hitch point 3" at a time. Adjust the height to pull straight in a cutting position.
- Three hydraulic remotes are required to operate the machine. Each pair of hoses is color coded for hookup: **yellow – tilt;**

blue – raise and lower; red – clam (see Scraper Hydraulics illustration page 15).

- The lift cylinder will allow the LS50 to raise approximately 18" off the ground.
- The master/slave lift cylinders will allow the machine to tilt approximately 14° to either side. Right hand cylinder (slave) raises and lowers to achieve desired tilt angle.
- When filling the Carryall, open the clam approximately 15" – just enough to fill the box with material. In loose sand or weeds and brush, open the clam wider to allow the material to flow more freely. For using as a box scraper, position the clam wide open.

Note: *The bypass on the master/slave (lift) cylinders will allow them to rephase when either cylinder is fully extended.*

Hooking the Carryall Scraper to the Tractor

- A single/double swivel tongue hitch is provided on all models of the Carryall Scraper.
- When hooking to a tractor straight drawbar, the double tongue is placed on top and below the drawbar with a drawbar pin and safety clip securing the hitch.
- When hooking the single/double tongue to a clevis or hammer strap tractor drawbar, the thicker lip of the Carryall double hitch is used like a single into the clevis of the drawbar and secured with a drawbar pin and safety clip.

Operation Safety



CAUTION: *Read and understand this section prior to operation of the Carryall Scraper and follow all instructions when using the scraper.*

1. Do not service the scraper if the blade is in the raised position. Service the scraper only when the blade is lowered to the ground (or supported), the cylinder stops are installed, and all engine power is shut off.
2. Do not allow anyone to ride on an implement that is attached to or drawn by another machine.
3. Use safe operating practices at all times.
4. Be sure all safety decals and reflectors are mounted securely, operating properly and wiped clean before transporting. Comply with state and local laws governing highway safety when transporting machinery on a public road or highway.



CAUTION: Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion which may result in serious injury or death. Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job. Have it done by your dealer or qualified tire repair service.

General Field Operating Instructions

The Carryall Scraper will work under a very wide variety of soil and moisture conditions; however, dirt moving is primarily a dry soil operation. If the soil sticks to the wheels and builds up excessively, it is too wet to work. Excessive slippage, unnecessary power consumption, and over compaction of the fill area may result. The question of top soil removal, proper finished grade and balancing out your cuts and fills can be answered by your local, state, or federal technicians if in doubt.

It does not require any special skill or training to operate the Carryall Scraper. However, a little experience plus good management can help get the job done more quickly. The **Total Yards Moved per Hour** depends on:

1. **Having a Definite Plan** and following it.
2. The **Average Load Size**.
3. The **Hauling Distance**.
4. The **Speed of Operations** (or total time per cycle).
5. The amount of **Lost Time** from interruptions, unnecessary stops, etc.

It will pay in time and fuel saved to lay out a definite plan before you start your project, especially on field leveling or terracing. Some suggestions on planning "cut-haul-fill" patterns are covering below under **Field Grading**.

Field Grading

Determine, before you start operations, the area to be cut and filled, the depth of each cut and fill, any tilt or angle, and the best haul-route pattern. It is cheaper to haul in two directions from the same cut, if possible. There are, in general, three "cut-haul-fill" patterns. Sometimes they can be combined at a definite savings.

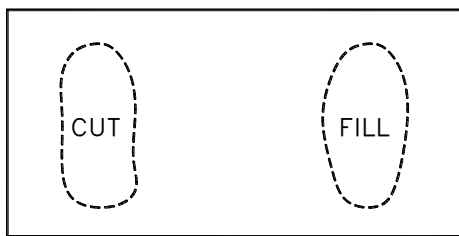


Figure A

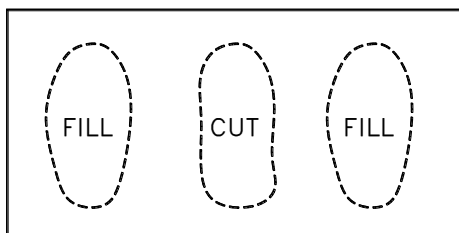


Figure B

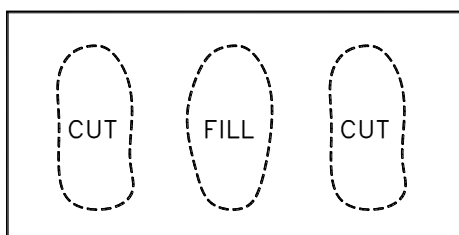


Figure C

If you can work the plan shown in Figure B or C, rather than A, it will save travel and turning time. It may be possible to reduce empty travel time by combining several cuts, hauls, and fills on the field in one overall or continuous circuit.

Field Finishing

After completing your soil moving work, you still must finish your field by smoothing, especially the cut and fill areas. A few times over the field with a Smoother will wipe out the rough spots and surface irregularities.

After extensive earth moving and land forming, you should consider the need to:

1. Use a subsoiler or pan breaker if moisture conditions and heavy traffic have caused excessive compaction.
2. Apply proper fertilizer to the cut areas.
3. Plant an annual crop the first season while permitting the fill areas to settle.

4. Recheck the grades and correct any settlement by again leveling before planting a perennial crop.
5. Maintain the correct surface (and produce a good seedbed) by always using a land smoother ahead of your seeder.

It takes time, money, and effort to establish correct grades on your fields. Erosion and tillage operations cause surface irregularities. To protect your investment, keep the surface smooth and maintain correct grades by using an Art's-Way Land Plane.

Field Loading

The size of your loads will depend on:

1. The tractor power and traction.
2. The soil conditions.
3. The operator's skills and procedure.

Your average load size can usually be increased with practice. In general, more yards per hour can be moved by taking the largest load you can pick up quickly, then hauling, unloading, and returning as fast as you can safely.

Under some conditions (like loading sand) speed may help in heaping the load; while in others, power is more often a factor. Generally, it is preferable to make long, thin, smooth cuts and keep the tractor moving. It is better for succeeding loads to keep the cut area relatively smooth.

Normally, the best gear for loading is the highest gear in which the tractor will spin the wheels before stalling the engine. When possible, make the cut in the same direction as you haul to save time and avoid turning with a full load. Start to make your cut as you approach a slight ridge or high spot. It requires power to take the soil back, and up, in the bucket, which can best be supplied by cutting into the ridge or high spot.

Field Hauling

If the field or work area is rough or the distance to haul is rather long, it will be worthwhile to make a smooth hauling lane and possibly a separate return path so you can haul and return in a high gear. (For route patterns, see **Field Grading**.) As you leave the loading area, raise the load to the hauling position.

Field Spreading and Dumping

A single control valve on the tractor operates the clam. The clam can be stopped at any point to vary the thickness of the spread soil.

In dry, light soils, the bucket will start to dump as soon as the clam opens. However, in heavier and damp, sticky soils, the rear of the Scraper must be rotated forward by raising the Scraper before the load starts to dump. This might result in a thicker, more concentrated spreading than desired. The soil, however, can be distributed over a wider area, in a thinner layer, by crossing the fill on a succeeding trip, with the Scraper in a lower position. The best way to actually distribute the soil over the fill area is with a land smoother, after all dirt moving is completed.

When dumping, it is recommended that the highest possible speed be maintained through the fill area, and that the Scraper be gradually opened, rather than to open it quickly by moving the clam control valve rapidly from the hauling (closed) position to the full dump (open) position.

Scraper Maintenance

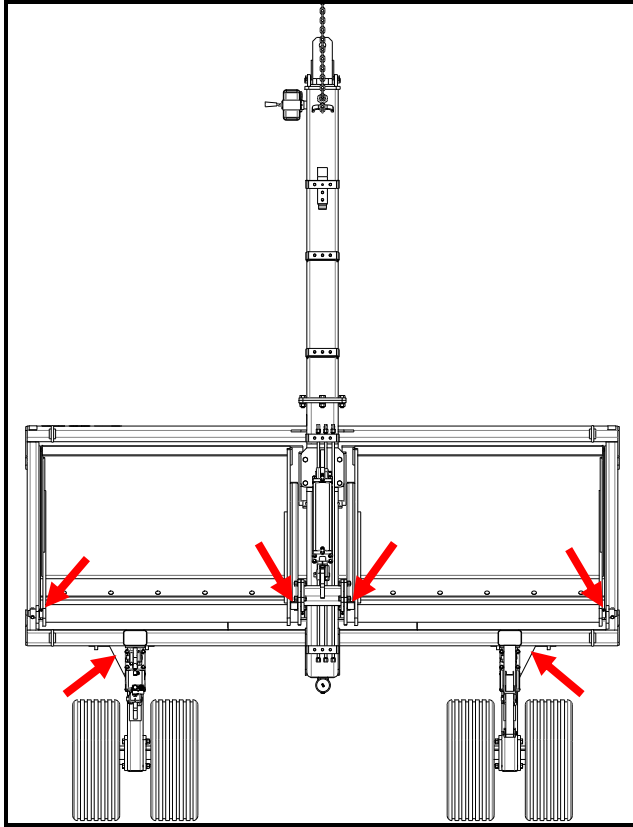
Proper and consistent maintenance is a key to long and satisfactory performance of the scraper. Before operating the machine:

- Install the cylinder safety stops on both lift cylinders (shown below) when working on the scraper.



- Check and be sure the hydraulic system is full of oil and free of air. A test cycle of all cylinders prior to beginning work is highly advisable.
- Check to be sure all hydraulic lines and fittings are secure and that no lines are crimped or worn. Tighten, adjust, and replace as necessary. Do not attempt to make temporary repairs to hydraulic lines.
- If any grease fittings are missing, replace them immediately. Clean fittings thoroughly before using grease gun.

- Grease the six grease points (shown below) before each day's operation or after 8 hours of use. The grease points are: two on the wheel legs and four on the torque tube.



- Clean and hand pack wheel bearings each year of operation. See below for proper procedure:

Wheel Bearing – Cleaning and Lubrication:

Raise the wheel off the ground.

1. Remove hub cap and pull cotter pin from the slotted nut.
2. Remove slotted nut, hub and bearing cones.
3. Clean all parts thoroughly and inspect for damage or wear.
4. Pack bearing and hub with high quality wheel bearing grease.

Service at the End of the Season:

When work is completed for the season, clean the implement thoroughly to remove dirt and trash which would hold moisture and cause rusting. Clean and repack the wheel bearings with grease annually.

Paint all parts which have chipped or require painting.

Inspect scraper for broken or missing parts. See your dealer during the off season, so that parts or service can be obtained when the machine is not needed in the field.

Store the LSC50 scraper under cover, with all parts in good operating condition.

General Specifications		LSC50
Blade Length		12'
Overall Length		15' 8"
Cutting Edge Angle		35°
Blade Tilt		14°
Blade Cutting Edge		Replaceable
Blade to Ground Clearance		18"
Transport Width		12' 7"
Hydraulics	Lift	4 x 16"
	Clam	Master/Slave 4x16"
Hydraulic remotes (three)		Lift Tilt Clam
Tires		4 – 11L x 15 8 ply
Hubs		6 bolt
Spindle size		2-3/4"
HP Required		100 – 230
Empty Weight		4950 lbs.

NOTES



**ART'S-WAY MANUFACTURING CO., INC.
TECHNICAL MANUALS**

Manuals are available from your local dealer or Art's-Way Manufacturing Co., Inc. for the operation, service, and repair of your machine. For prompt convenient service, contact your local dealer for assistance in obtaining the manuals for your machine.

Your local dealer can expedite your order for operator manuals, illustrated parts catalogs, service manuals, and maintenance records.

Always give the Machine Name, Model, and Serial Number so your local dealer can provide the correct manuals for your machine.

Art's-Way Manufacturing Co., Inc. reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold.

Except as expressly authorized, no part of this manual may be reproduced, copied, transmitted, disseminated, downloaded or stored in any storage medium, for any purpose without the express prior written consent of Art's-Way Manufacturing Co., Inc.

**ART'S-WAY MANUFACTURING CO., INC.
HWY 9 WEST - PO Box 288
Armstrong, IA. 50514 U.S.A**

© Copyright 2010
ART'S-WAY MANUFACTURING CO., INC.
All Rights Reserved



Art's-Way Manufacturing Co., Inc.
Hwy 9 West – PO Box 288
Armstrong, IA. 50514 U.S.A