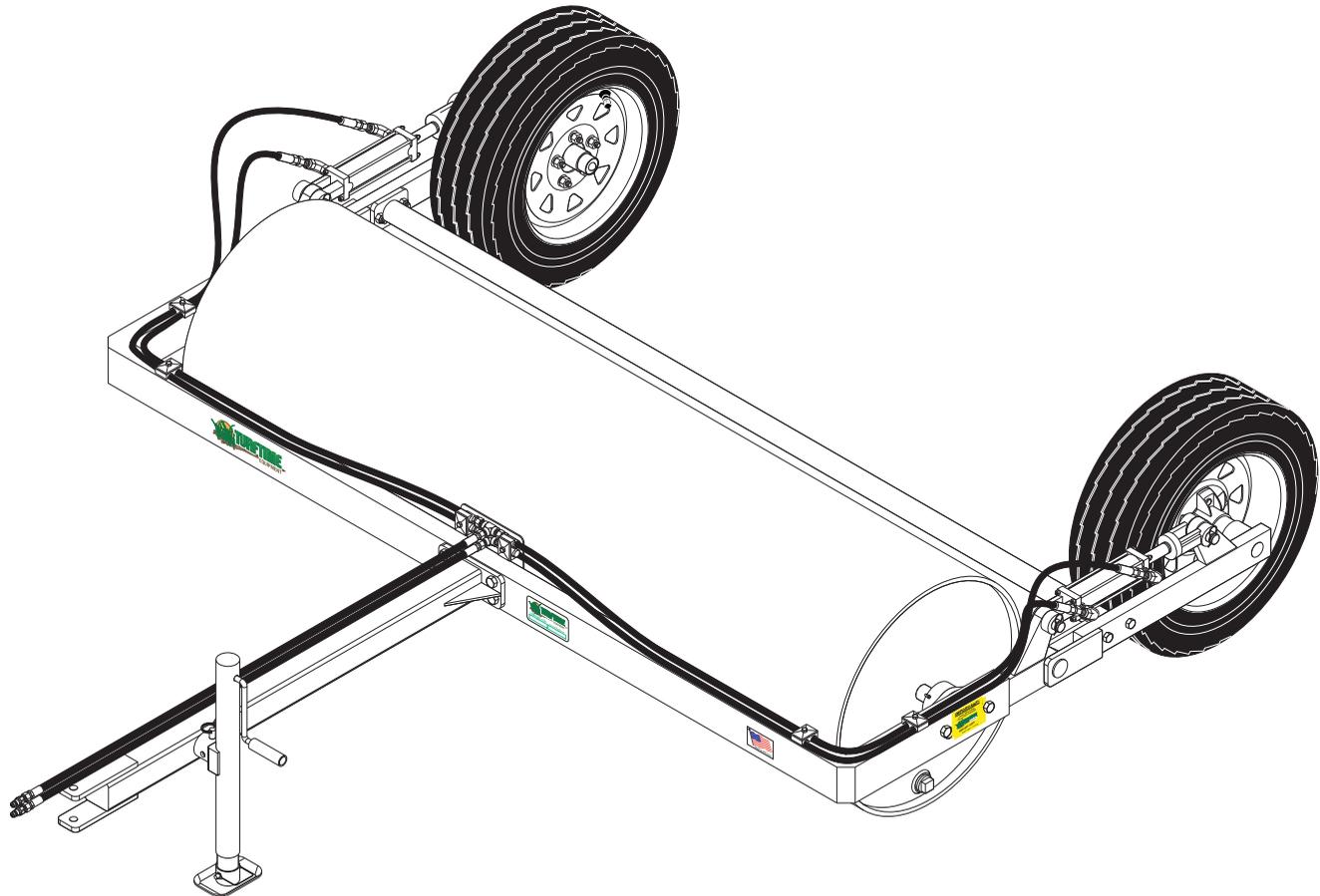




800 N. Railroad Avenue
New Holland PA 17557
Phone (800) 201-1031
<http://www.turftimeeq.com/>



AR Series Roller

With Optional Wheels

Owner's Manual

DISCLAIMER

The information in this manual is provided to promote the safe use of and assist the operator in achieving the best performance from the products described when used for their intended applications.

TurfTime Equipment, LLC reserves the right to alter, correct, and/or improve the documentation and the products described within the documentation at its own discretion and without giving prior notice as far as this is reasonable to the owner of the products.

You are responsible to verify the suitability and intended use of any TurfTime Equipment, LLC products for your specific application. All information made available in the documentation is supplied without any accompanying guarantee.

This manual, including all illustrations contained herein, is copyright protected. Any changes to the contents or the publication of extracts of this document is prohibited.

SERIAL NUMBER INFORMATION

Model **Serial Number**

Dealer Name **Dealer Phone Number**

HOW TO ORDER REPAIR PARTS

Each Advantage Rollers has its own model and serial number.

The model and serial number for the Advantage Rollers is located on the front of the frame see Figure 3.

Always mention the model and serial number when calling for service or when ordering repair parts.

All parts listed and illustrated in this manual may be ordered through your nearest authorized dealer. If parts you need are not available locally, your order will be processed through the factory and shipped promptly.

When ordering repair parts, have the following information ready:

1. Item part number
2. Quantity needed
3. Part description
4. Advantage Rollers model and serial number

Be sure to record both the model and serial number of your Advantage Rollers upon delivery. Keep this information in a safe place for future reference.

TurfTime Equipment
800 N. Railroad Avenue
New Holland PA 17557
Phone (800) 201-1031

LIMITED WARRANTY STATEMENT

3-year Limited Warranty

TurfTime Equipment, LLC, (TTE) hereby warrants that TTE's products will be free from defects in material and workmanship under normal use according to the provisions and limitations herein set forth. All parts, specifically EXCLUDING expendable 'wear' parts, that become unserviceable, due to defective material or workmanship, within 3 YEARS of date of the original retail purchase, shall, at TTE's option, be repaired or replaced as detailed below.

If the equipment is used for rental purposes, warranty is limited to 90 days from the initial rental date.

Limitations

The obligations of TTE for breach of warranty shall be limited to products manufactured by TTE; (1) that are installed, operated, and maintained according to TTE's instruction furnished and/or available to the purchaser upon request; (2) that are installed according to all other applicable federal, state, and local codes or regulations; and (3) that the purchaser substantiates were defective in material and workmanship notwithstanding that they were properly installed and correctly maintained as set forth and were not abused or misused. The obligation of TTE shall be limited to replacing or repairing the defective product, at the option of TTE. TTE shall not be responsible for any labor or cost of removal or repairing or re-installation of its products and shall not be liable for transportation costs to and from its facility in New Holland, PA. Use of parts for modification or repair of the product or any component part thereof not authorized or manufactured by TTE specifically for such product shall void this warranty.

This warranty shall not apply to any damage to or defect in TTE's products that is directly or indirectly caused by; (1) FORCE MAJEURE, act of GOD, or other accident not related to an inherent product defect; or (2) abuse, misuse, or neglect of the such product, including any damage caused by improper assembly, installation, adjustment, or faulty instruction of the purchaser. Other than as expressly set forth herein above, TTE makes no other warranty, express or implied, with respect to any of TTE's products, included but not limited to any merchantability or fitness for a particular purpose. In no event shall TTE be responsible for any incidental or consequential damages of any nature suffered by purchaser or any other person or entity caused in whole or in part by any of TTE's products.

Any person or entity to whom this warranty extends and who claims breach of warranty against TTE must bring suit thereon within 60 days from the date of occurrence of such breach of warranty or be forever barred from any and all legal or other remedies for such breach of warranty. TTE is not responsible for and hereby disclaims any undertaking, representation, or warranty made by any dealer, distributor, or other person that is inconsistent with or in any way more expensive than the provisions of this limited warranty. This warranty grants specific legal rights and shall be read in conformity with applicable state law. In some jurisdictions, the applicable law mandates warranty provisions that provide greater rights than those provided for herein. In such case, this limited warranty shall be read to include such mandates provisions; and any provision herein that is prohibited or unenforceable in any such jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceable without invalidating the remaining provisions and without affecting the validity or enforceability of such provisions in any other jurisdiction.

Statement of Policy

In accordance with our established policy of constant improvement, we reserve the right to amend these specifications at any time without notice.

Warranty by Manufacturer

Dealer/distributor understands and agrees that the manufacturer extends only the following warranty to its customers. In the event dealer/distributor extends any additional warranty such as enlarging the scope or period of warranty or undertaking a warranty of fitness for any particular purpose or obligation not encompassed in manufacturer's warranty, dealer/distributor shall be solely responsible therefore and shall have no recourse against manufacturer with respect thereto.

CONTENTS

DISCLAIMER.....	I
SERIAL NUMBER INFORMATION.....	I
HOW TO ORDER REPAIR PARTS.....	I
LIMITED WARRANTY STATEMENT.....	II
3-year Limited Warranty.....	ii
Limitations.....	ii
Statement of Policy.....	ii
Warranty by Manufacturer.....	ii
SAFETY PRECAUTION DEFINITIONS.....	iv
SAFETY.....	1
SETUP AND ADJUSTMENT.....	1
Attaching Pull-type Roller to the Tractor.....	1
Pull-Type Rollers.....	1
SETUP AND OPERATION.....	1
Adding Fluid to the Roller.....	2
Figure 1. Roller Fill/Vent and Drain Plugs.....	2
OPERATION.....	2
Transport.....	2
General use.....	2
SPECIFICATIONS.....	3
Initial.....	3
Seasonal Each Spring and Fall.....	3
Winter.....	3
MAINTENANCE.....	4
LUBRICATION.....	4
Recommended procedure.....	4
Figure 2. Roller bearings.....	4
ILLUSTRATED PARTS BREAKDOWN.....	5
Figure 3. Frame, Roller, Drawbar, Jack and Related Parts.....	6
Figure 4. Optional Wheels and Related Parts.....	8

This manual is furnished to you by TurfTime Equipment LLC as a guide to get the greatest benefit from your product. Before attempting to install or operate, carefully read all sections of this manual. Be sure that you thoroughly understand all of the safety information and operating procedures.

SAFETY PRECAUTION DEFINITIONS

Dangers, Warnings, Cautions, and Notes are strategically placed throughout this manual to further emphasize the importance of personal safety, qualifications of operating personnel, and proper use of the equipment in its intended application. These precautions supplement and/or complement the safety information decals installed on the equipment and include headings that are defined as follows:

DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

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

CAUTION

Indicates a potentially hazardous situation or practice which, if not avoided, will result in damage to equipment and/or minor injury.

NOTICE

Indicates an operating procedure, practice, etc., or portion thereof, which is essential to highlight.

Always use caution and safe operating practices when operating this equipment.

Install all safety panels and guards before operating your equipment.

Stay clear of all moving parts when the machine is in operation.

Keep all people clear of the machine when it is running.

Read and comply with all safety recommendations of your tractor/skid steer manufacturer, as outlined in its operator and service manuals.

NOTE: Some equipment depicted in illustrations may not reflect exact production model configurations.

SETUP AND OPERATION

SAFETY

While operating this equipment use common sense and follow all safety guidelines.

In addition to observing the specific precautions listed throughout this manual, the following general statements apply. These must be adhered to in order to insure proper and safe operation.

DANGER

Keep hands and feet from under the equipment at all times. Make sure that all people are safely clear of the equipment before operating.

In order to prevent serious injury and to promote safe operation, keep shields in place during operation, and insure that all mounting hardware is properly tightened.

WARNING

DO NOT attempt to operate the equipment in areas with steep inclines, ditches, large rocks, stumps, or holes that may upset the tractor, endangering the operator or damaging the equipment.

Never clean, adjust or repair the equipment while it or the tractor are running. Never attempt to pull material from any part of the equipment while it is running.

Ensure that the tractor is capable of handling the attached equipment. Consult the owner's manual of your specific tractor for the towing capacity or 3-point hitch lift capacity. Never exceed these limits.

Never wear loose clothing while operating the equipment as it may become caught in the moving parts of the machine.

Never allow anyone to ride on the equipment or tow vehicle.

For safe operation of the equipment, periodically inspect all parts for excessive wear. Replace worn components with authorized parts.

To prevent the hitch from becoming disconnected during operation, always use the proper size hitch pin and safety cotter.

Be sure to use proper safety chains when towing equipment on a public roadway.

CAUTION

Most equipment accidents can be avoided by the observance of a few simple safety precautions.

Do not clean, lubricate or make any adjustments on the equipment while it is in motion.

Do not start the machine until you know everyone is clear of the area and all tools have been stowed away.

Do not work around the unit in loose clothing that might catch on any of the moving parts.

Do not attempt to pull material from any part of the equipment while it is in operation.

Replace all shields after lubrication or repairs.

Do not allow anyone to ride on the equipment

Park on level ground or block wheels to prevent the machine from rolling

Always follow manufacturer's instructions for maintenance, repair and adjustments

Read and pay close attention to hydraulic line safety.

WARNING

Never attempt to stop a leak by covering it with your hand as doing so can cause severe injury.

TurfTime Equipment LLC assumes no liability for injuries sustained because of failure to read this manual or due to carelessness. Always refer to this manual for guidance, or contact your local dealer.

SETUP AND ADJUSTMENT

NOTE: Not following these instructions may void the warranty

Attaching Pull-type Roller to the Tractor

Always attach the roller to the tractor on a firm, level surface.

Pull-Type Rollers

1. Adjust the roller tongue jack so the height of the tongue matches the height of the tractor drawbar.
2. Back the tractor up to the roller, sliding the drawbar into the hitch until the pin holes line up.

SETUP AND OPERATION

3. Turn off the tractor engine and apply the parking brake.
4. Insert a 1-inch diameter hitch pin through the roller tongue and drawbar. Secure it with a cotter pin.
5. If the roller is equipped with a wheel cylinder kit, attach the hydraulic hoses to the tractor.
6. Lower the jack so the weight rests on the drawbar, pull the pin and rotate it into storage position.

Adding Fluid to the Roller

The roller should be filled with fluid to increase the weight and affect on the ground surface. To fill the roller:

CAUTION

A partially-filled roller will allow the fluid to slosh around more than a fully-loaded roller. This will be more noticeable with a 3-point hitch, but in any arrangement, could cause instability of a tractor that is too light.

1. Position the roller so one of the 2-inch plugs is positioned at the top.
2. Remove the top plug and fill with water to the desired weight.

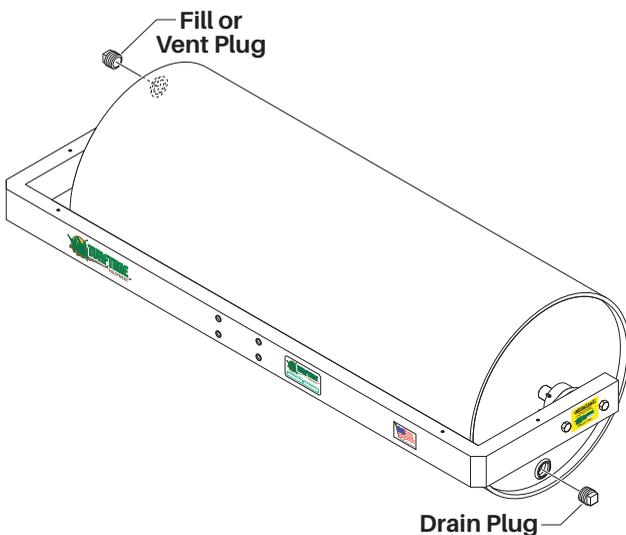


Figure 1. Roller Fill/Vent and Drain Plugs

NOTICE

Water weighs 8.34 lb. (3.78 kg) per gallon at 62°F.

Other fluids may be used, such as ethylene glycol antifreeze, but be aware that they may kill grass if a spill occurs while filling.

3. When filled to the desired level, reinstall the plug securely. Apply a small amount of grease or anti-seize to the plug threads to minimize oxidation.

OPERATION

Transport

When transporting the roller, fully raise the roller to avoid contact with roads, banks, etc.

- Keep the hydraulic wheel cylinders full extended (wheels down) for maximum roller clearance.

For standard rollers without the hydraulic wheel kit, transport the roller at a reduced speed when on paved or stone roads. Be aware of the loaded weight of the roller when traveling, avoiding objects that may be crushed.

General use

The Advantage roller will be most efficient when the full weight of the machine is applied to the ground.

- Hydraulic wheel cylinders should be fully retracted (wheels up).

SETUP AND OPERATION

SPECIFICATIONS							
Model	Roller Diameter	Wall Thickness	Rolling Width	Frame Width	Overall Length	Weight (Empty)	Weight Full (Water)
AR2460	24"	3/8"	60"	66"	121"	720 lb.	1620 lb.
AR3060	30"	3/8"	60"	66"	121"	870 lb.	2250 lb.
AR2472	24"	3/8"	72"	78"	121"	870 lb.	2000 lb.
AR3072	30"	3/8"	72"	78"	121"	1045 lb.	2700 lb.
AR2484	24"	3/8"	84"	90"	121"	950 lb.	2250 lb.
AR3084	30"	3/8"	84"	90"	121"	1220 lb.	3220 lb.

Initial

After initial inspection following delivery of your roller, check for any loose parts. Verify that the roller turns freely on the axle.

Seasonal Each Spring and Fall

Lubricate the grease fittings on each end of the roller. Never over-grease as this will push the seals out of the bearings, causing bearing failure.

Ensure that all bolts and nuts are tightened properly.

Winter

The water must be removed from the roller before subjected the roller to below freezing temperatures. Failure to do so could result in damage to the roller.

NOTICE

If a solution other than water has been used, it must be disposed of properly.

1. Position the roller so the 2-inch drain plug is in the lowest position.
2. Remove the drain plug and allow the water to drain. Removing the upper drain plug will allow the water to flow faster.
3. When the roller is empty, replace the drain plugs. Place a small amount of grease or anti-seize on the plug threads to prevent oxidation and rust.

NOTICE

If the plugs are not reinstalled and the inside of the roller sealed, rust may form, eventually causing damage.

MAINTENANCE

LUBRICATION

The Advantage Roller requires a minimum amount of lubrication. However, the importance of sufficient and proper lubrication cannot be overstated as it is the best insurance against unnecessary repairs and will greatly increase the life of the machine.

Recommended procedure

Use a high-quality, extreme pressure (EP) 2 lithium grease on all bearings. Examples of acceptable grease are ExxonMobil Ronex MP and Libriplate 1200-2.

Ensure grease fittings are free of pain and dirt. Grease should be forced into the fittings until it comes out around the shaft.

NOTICE

Do not over-lubricate sealed bearings. Apply one-half stroke or pump from a grease gun once per year.

Lubricate all roller bearings once per year.

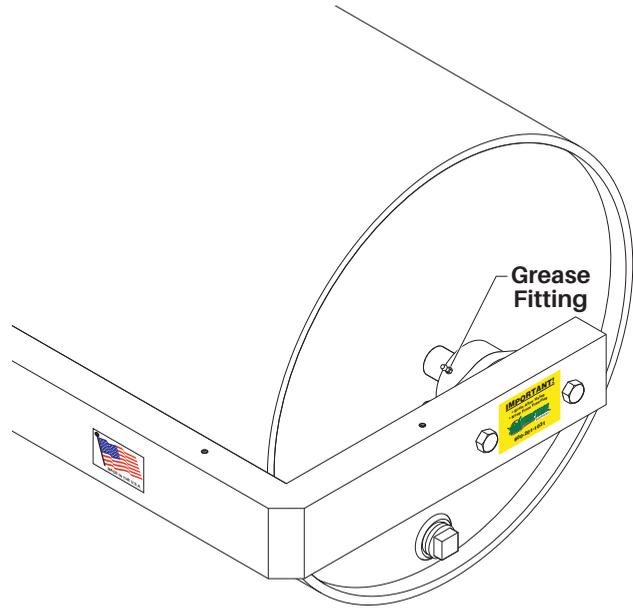


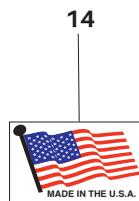
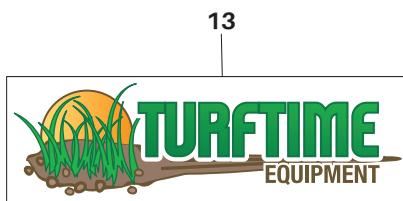
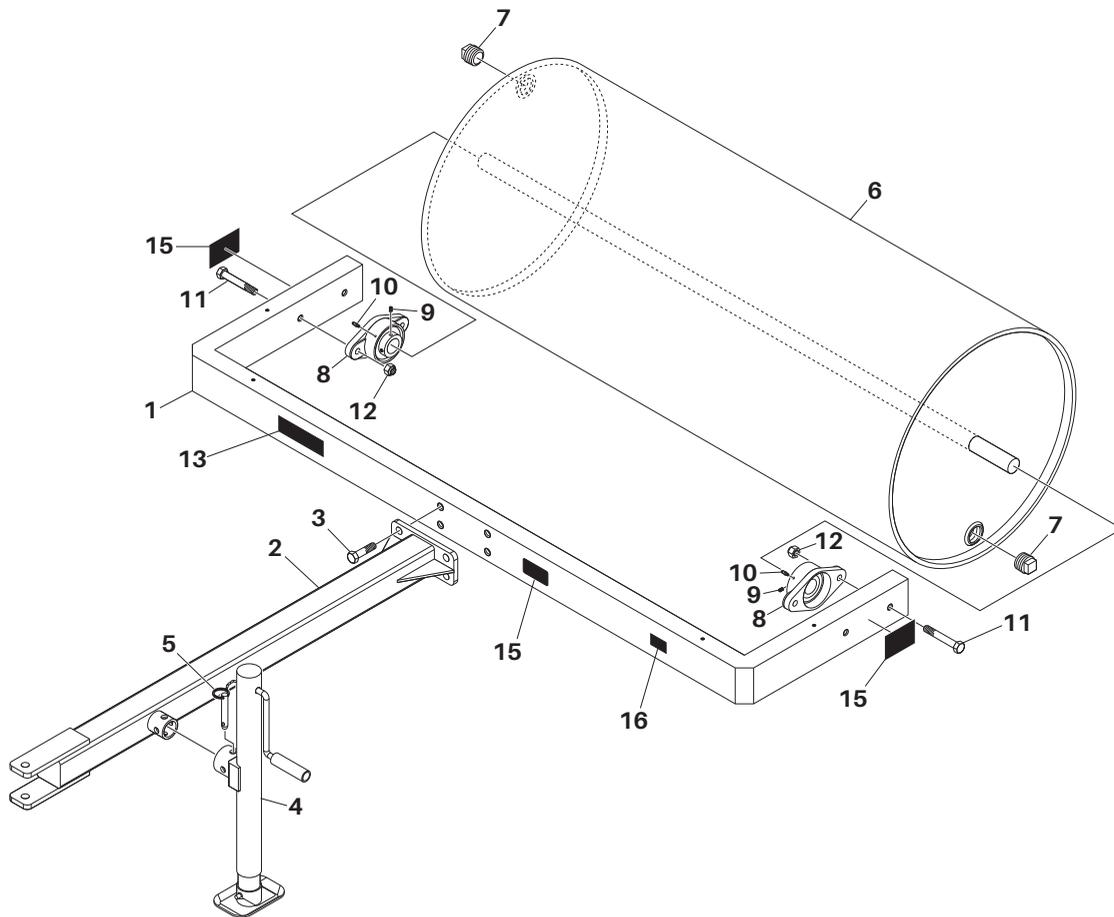
Figure 2. Roller bearings

ILLUSTRATED PARTS BREAKDOWN

Figure 3.	Frame, Roller, Drawbar, Jack and Related Parts.....	6
Figure 4.	Optional Wheels and Related Parts.....	8

ILLUSTRATED PARTS BREAKDOWN

Figure 3. Frame, Roller, Drawbar, Jack and Related Parts



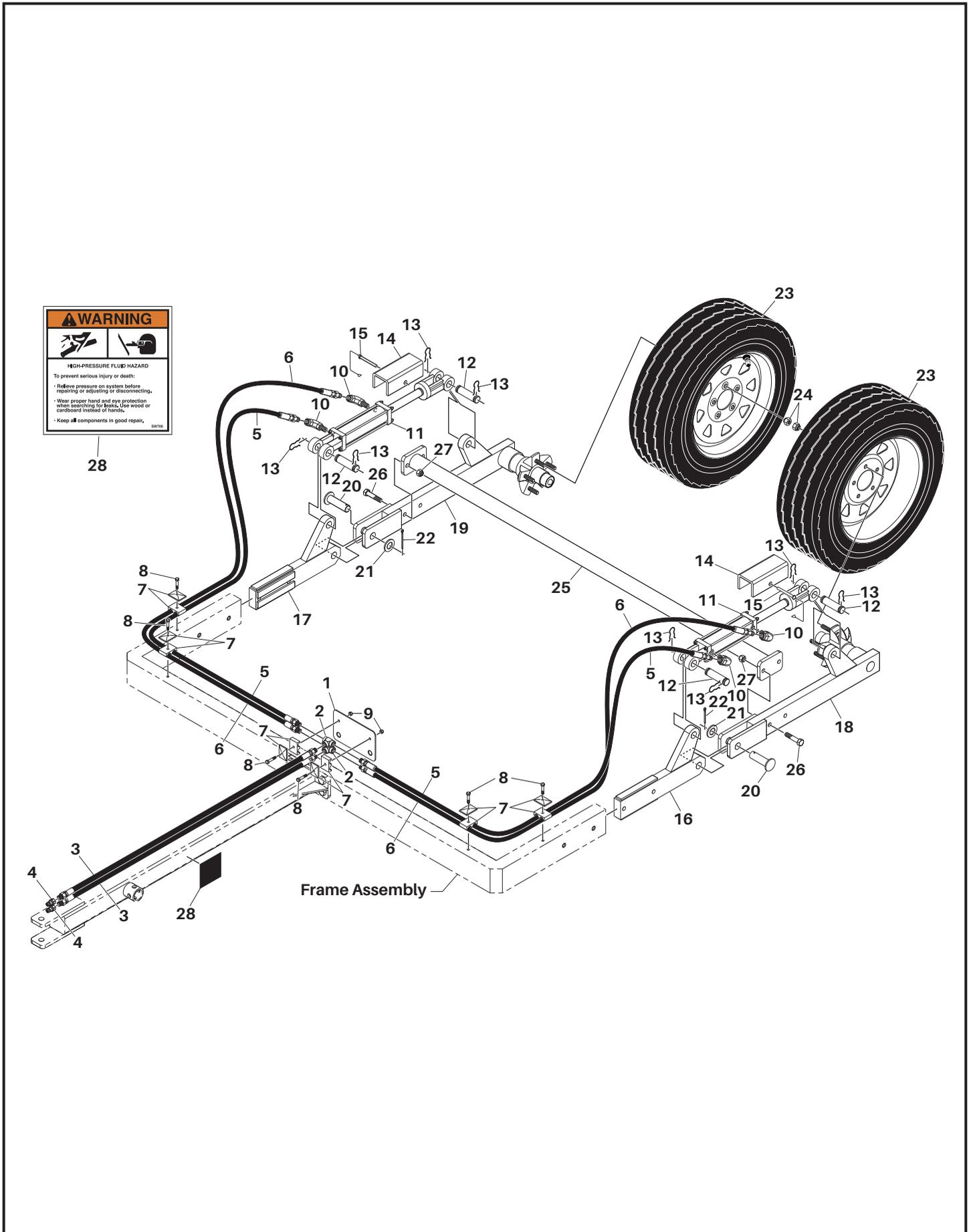
ILLUSTRATED PARTS BREAKDOWN

Figure 3. Frame, Roller, Drawbar, Jack and Related Parts

Item	Part No.	Qty	Description
1	ARW2001	1	Frame Assembly, 60", Models AR2460 & AR3060
	ARW2002	1	Frame Assembly, 72", Models AR2472 & AR3072
	ARW2003	1	Frame Assembly, 84", Models AR2484 & AR3084
2	ARW2004	1	Drawbar
3	ARW2005	4	Bolt, Hex Head, 3/4"-10UNC x 4" Long
4	ARW2006	1	Jack, Includes Item 5
5	ARW2007	1	Pin
6	ARW2008	1	Roller, 24" Dia. x 60", Includes Item 7
	ARW2009	1	Roller, 30" Dia. x 60", Includes Item 7
	ARW2010	1	Roller, 24" Dia. x 72", Includes Item 7
	ARW2011	1	Roller, 30" Dia. x 72", Includes Item 7
	ARW2012	1	Roller, 24" Dia. x 84", Includes Item 7
	ARW2013	1	Roller, 30" Dia. x 84", Includes Item 7
7	ARW2014	2	Plug, Fill/Drain, 2"
8	ARW2015	2	Bearing, 1-1/2" Dia., Roller 24", Includes Items 9 & 10
	ARW2016	2	Bearing, 1-3/4" Dia., Roller 30", Includes Items 9 & 10
9	ARW2017	2	Fitting, Grease
10	ARW2018	4	Screw, Set, 1/4"-28UNF x 1/2" Long
11	ARW2019	4	Bolt, Hex Head, 1/2"-13UNC x 3-1/2" Long, Roller 24"
	ARW2020	4	Bolt, Hex Head, 5/8"-11UNC x 3-1/2" Long, Roller 30"
12	ARW2021	4	Nut, Hex, Nylon Lock, 1/2"-13UNC, Roller 24"
	ARW2022	4	Nut, Hex, Nylon Lock, 5/8"-11UNC, Roller 30"
13	ARW2023	1	Decal, TurfTime Equipment
14	ARW2024	1	Decal, Made In USA
15	ARW2025	2	Decal, Drain
16	ARW2026	1	Plate, Model and Serial Numbers

ILLUSTRATED PARTS BREAKDOWN

Figure 4. Optional Wheels and Related Parts



ILLUSTRATED PARTS BREAKDOWN

Figure 4. Optional Wheels and Related Parts

Item	Part No.	Qty	Description
1	ARW2027	1	Plate
2	ARW2028	2	Fitting, Tee
3	ARW2029	2	Hose Assembly, 3/8" Dia. x 84" Long
4	ARW2030	2	Fitting, Quick Disconnect, Male
5	ARW2031	2	Hose Assembly, 3/8" Dia. x 55" Long, 60" Roller
	ARW2032	2	Hose Assembly, 3/8" Dia. x 61" Long, 72" Roller
	ARW2033	2	Hose Assembly, 3/8" Dia. x 67" Long, 84" Roller
6	ARW2034	2	Hose Assembly, 3/8" Dia. x 66" Long, 60" Roller
	ARW2035	2	Hose Assembly, 3/8" Dia. x 72" Long, 72" Roller
	ARW2036	2	Hose Assembly, 3/8" Dia. x 78" Long, 84" Roller
7	ARW2037	6	Clamp, Hose
8	ARW2038	6	Bolt, Hex Head, 1/4"-20UNC x 2-1/2" Long
9	ARW2039	2	Nut, Hex, Nylon Lock, 1/4"-20UNC
10	ARW2040	4	Fitting, Elbow, 90°
11	ARW2041	2	Cylinder Assembly, Includes Items 12 & 13
12	ARW2042	4	Pin, 1" Dia. x 3-1/2" Long
13	ARW2043	8	Pin, Hair Clip
14	ARW2044	2	Stop, Cylinder
15	ARW2045	2	Pin, Spring Lock
16	ARW2046	1	Support, Cylinder, Left Front
17	ARW2047	1	Support, Cylinder, Right Front
18	ARW2048	1	Support, Cylinder, Left Rear
19	ARW2049	1	Support, Cylinder, Right Rear
20	ARW2050	2	Pin, Pivot, Cylinder Supports, 1" Dia. x 2-3/4" Long
21	ARW2051	2	Washer, Flat, 1"
22	ARW2052	2	Pin, Cotter, 1/4" Dia. x 1-1/2" Long
23	ARW2053	2	Wheel and Tire
24	ARW2054	10	Nut, Hex, 1/2"-20UNF
25	ARW2055	1	Bar, Support, 60" Roller
	ARW2056	1	Bar, Support, 72" Roller
	ARW2057	1	Bar, Support, 84" Roller
26	ARW2058	4	Bolt, Hex Head, 1/2"-13UNC x 2" Long
27	ARW2059	4	Nut, Hex, Nylon Lock, 1/2"-13UNC
28	ARW2060	1	Decal, Warning, High Pressure Fluid