

SL90

Junior, Senior and Super *Manual*



Senior



Junior



Super

Call 1-800-869-1800 or go online at www.wittekgolf.com to order!

SL 90 Junior



SL 90 Senior



SL 90 Super



Unpacking and Inspection

SL90 Junior Ball Picker **(Two Section)**

One crate contains:

- 2 – Picker sections complete with hardware
- 4 – Picker baskets
- 1 – Swivel and caster fork complete
- 1 – Deflector complete with hardware
- 1 – Drawbar complete with hardware

SL90 Senior Ball Picker **(Three Section)**

One crate contains:

- 3 – Picker sections complete with hardware
- 6 – Picker baskets
- 1 – Swivel and caster fork complete
- 2 – Deflector complete with hardware

One piece contains:

- 1 – Drawbar complete with hardware

SL90 Super Ball Picker **(Five Section)**

One crate contains:

- 5 – Picker sections complete with hardware
- 10 – Picker baskets
- 1 – Swivel and caster fork complete
- 4 – Deflector complete with hardware
- 2 – Outtrigger bars complete with swivel and caster forks

One piece contains:

- 1 – Drawbar complete with hardware

IMPORTANT

INSPECTION

Check that all components are accounted for. Contact Wittek **immediately** if any components are missing.

Inspect all components for visible damage. If any damage is discovered, report it to the shipping carrier and take the appropriate action. Check that all moving parts – front wheel, caster fork, and drum sections move and turn freely.

Customer is responsible for filing any damage claims with the carrier.

Assembly of the *SL90 Junior and Senior Pickers*

Assemble the picker on **level ground**.

Installing the front wheel fork:

1. Remove nylon lock nuts and washers from mounted studs on drawbar.
 2. Place swivel and caster fork over mounted studs on drawbar.
 3. Replace and secure lock nuts and washers.
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Installing the picker sections:

1. Remove the 5/8" nuts and bolts from each picker section.
 2. Place picker sections directly behind the carriage tongues on the drawbar.
 3. Slide the connecting slots on each picker section onto carriage tongues of the drawbar.
 4. Align the holes and replace and secure 5/8" nuts and bolts.
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Installing the deflectors:

1. Remove nuts and bolts from deflector(s).
 2. Insert deflector(s) upward through appropriate hole in drawbar.
 3. Align the holes and replace and secure nuts and bolts at desired height.
 4. Adjust height so the deflector is not dragging on the ground.
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Installing mounted chain couplers:

1. Place chained coupler over the matching, upright connecting bars.

Be sure the picker baskets are secured in their position!

Assembly of the *SL90 Super Picker*

**First, follow steps for the SL90 Junior and Senior Picker.
Then use the following steps for the additional sections:**

1. Remove the outrigger mounting hardware from each end of the drawbar.
 2. Insert the outrigger bars (the ends with the two holes) between the mounting prongs of the corresponding (left/right) ends of the drawbar.
 3. Align the mounting holes.
 4. Remove the 5/8" nuts and bolts from each picker section.
 5. Replace and secure the nuts and bolts.
 6. Place picker section directly behind the carriage tongues on the drawbar.
 7. Slide the connecting slots on each picker section onto carriage tongues of the drawbar.
 8. Align the holes and replace and secure 5/8" nuts and bolts. **DO NOT OVER TIGHTEN!**
- Installing Deflectors:**
9. Remove nuts and bolts from deflector(s).
 10. Insert deflector(s) upward through appropriate hole in outrigger bars.
 11. Align the holes and replace and secure nuts and bolts at desired height.
 12. Place chained coupler over the matching, upright connecting bars.

Mounting the vehicle attachment bar

Pull Bar: Used if the picker is going to be pulled only

The pull bar, on the drawbar assembly, is designed to work with any of the various implement type connector hitches available. Cable hooks, "S" type hooks, or conventional hitching balls may also be used. There are two general rules to follow when attaching a picker to a towing vehicle:

1. Be sure that the pull bar mount is loose enough to swivel and that it is not rigidly locked to the vehicle.
2. Be sure that the pull bar is at **no more than** a 30° angle from ground level when attached to the towing vehicle.

A-Frame Mount: Used if the picker is going to be pushed only

Two standard 2" ball hitches are included with the SL90 A-Frame. Mount these ball hitches on a solid surface (bumper, bracket, etc.) of the pushing vehicle. Mount A-Frame to ball hitches as with conventional trailer mount. **DO NOT OVER TIGHTEN!**

NOTES:

Maximum A-Frame spread is 3 feet. Do not mount ball hitches more than 3 feet apart.

Do not mount A-Frame at an extreme angle. Best operating results are achieved when A-Frame is level with the ground.

Safety chains are sometimes used as an extra precaution. These are not necessary for normal operation. However, their use is not discouraged.

The Picker is now ready for operation.

Operation and Use

Specifics, such as travel patterns and picking frequency, are unique to each individual range. Through repeated use, range operators will learn to adapt to the use of the SL90 picker to their best advantage.

The following are some general guidelines for the best use of the SL90 picker.

Picking Operation

- **Maintain vehicle speed of 5-8 mph.**
- Avoid sharp turns or extreme patterns.
- Learn to gauge weather conditions that limit use of the picker.
- Do **not** pick balls in excessively muddy conditions.
- Avoid abrasive surfaces, such as paved parking lots, asphalt or concrete, stone or gravel road, or cart paths.
- Clean the picker at the end of each day or more often in extremely wet or muddy conditions. Use a mild soap with a moderate flow of water.

Preventive Maintenance

Spray all moving metal contact points with a petroleum-distillate based aerosol lubricant every week or more often depending on use.

Check all retaining pins and mounting bolts (tie rod ends, shaft collars, and draw bar connections, etc.) at least once a week or more depending on usage.

Off-Season Storage

Disassemble picker and store in a shelter protected from extreme weather conditions.

Be aware of specific weather or climatic conditions (extreme aridity or salt/sea humidity, etc.) and apply appropriate storage precautions to machinery.

Start of Season - Preparing after Storage

Coat all moving metal contact points with a liberal amount of non-gumming teflon or petroleum-distillate based aerosol lubricant with a clean, lint-free cloth or towel.

Replacing Worn or Damaged Discs

These instructions are for replacing worn or damaged discs of the drum section.

Preparations:

1. Remove drum section from frame.
2. Determine the shortest point to worn/damaged disc.
3. Remove pillow block bearings from the axle on the end you are working with by loosening the set screw.

NOTE: It might be difficult to remove the bearings because of the beveled edge created by the set screws.

Removing discs:

1. Remove nylon lock nuts and washers from tie rods.

NOTE: WITTEK uses nylon lock nuts on all nuts and bolts combinations. It is recommended that when replacing the lock nut, a **new** nylon lock nut is used. Nylon lock nuts can be purchased at any hardware store (standard size of 3/8" is used).

2. Remove end plate by loosening and removing the nut and bolt.
3. Remove the wheel only, tire, wheel only and the spacer.
4. Begin to remove discs until you reach the worn/damaged disc.
5. Replace old disc with new disc.

Reassembling discs:

1. Replace disc(s) that were removed.
2. Replace the spacer, wheel only, tire and wheel only.

NOTE: Before replacing the end plate and pillow block bearings, *lightly* sand the shaft to smooth out beveled edges or other nicks created by the set screw (this will make it easier to replace the end plate and pillow block bearings).

3. Replace end plate.
4. Replace washers and nuts on tie rods.
5. Finger tighten all nuts evenly.
6. Place drum section on a flat surface (i.e. worktable).

7. Using a golf ball as a guide tool, insert the golf ball in the space between each disc to determine that the golf ball fits "snugly" and that the golf ball does not slide down. If sliding occurs, retighten the nuts on the tie rods until you have reached the desired snugness in each disc section.

Do Not Over Tighten Nuts!

8. Replace nut and bolt on end plate.
9. Replace pillow block bearings.
DO NOT TIGHTEN SET SCREW on the pillow block bearing.
10. Loosen the set screw on the pillow block bearing on the other end of drum section.
11. Replace drum onto frame of picker.
12. Align the drum section by centering the fingers on the frame in each disc section.
13. TIGHTEN set screws on the pillow block bearings on both ends of drum section.

Replacement Parts and Repairs

SL90 pickers are designed for continuous use and are virtually indestructible. However, certain component parts, such as discs, bearings, and wire hoppers, are subject to wear and deterioration and may eventually require replacement.

Many components of the SL90 picker (combination discs, end wheel, etc.) are maintained in stock at Wittek for immediate delivery. In emergency cases, parts can be shipped via Next Day delivery.

When ordering parts, refer to the item and part numbers listed in the Replacement Parts Section of this manual. Always identify picker model and serial number as found on the identification sticker located on the top of the draw bar. If the model and serial numbers are unavailable, identification can be made through parts measurements. Consult Wittek for details

In cases of older pickers, some parts may have become obsolete because of design or engineering changes. Many outdated parts are maintained in inventory, or can be manufactured. Consult Wittek for details.

Extremely worn or old pickers may require installation of a complete replacement drum section. Consult Wittek for details.

All assemblies and replacements of the SL90 picker utilize standard hardware and can be accomplished by maintenance personnel. Be sure to follow all fundamental operation and safety rules when working machinery.



Drum Section Replacement Parts for all SL90 Junior, Senior and Super Pickers

Drum Section Parts List

Key #	PART NO.	Item Description / Quantity
1	71801	3/4" Pillow Block Bearing (2 Per Drum)
2	71916	End Plate (2 Per Drum)
3	71805	3/4" Axle
4	71919	Tie Rod 3/8" (4 Per Drum)
5	71808	Drum Section Tire (2 Per Drum)
6	71978	Wheel Only (looks Like Pie Plate- 4 Per Drum)
7	71959	Spacer (2 Per Drum)
8	71932	Plastic Disc - Black (19 Per Drum)

PART NO.	Item Description / Quantity
71801	Pillow Block Bearings 3/4"
71805	Axle 3/4"
71808	Tire only for Drum Section
71916	Metal End Plate
71919	Tie Rods 3/8"
71920	Replacement 3 ft. Drum Section
71821	2001 SL90 Frame only
71932	2000 Plastic Disc for LT Ball Pickers (Black)
71959	Steel End Spacer (2 per Drum Section)
71978	Steel Wheel Only (4 per Drum Section)

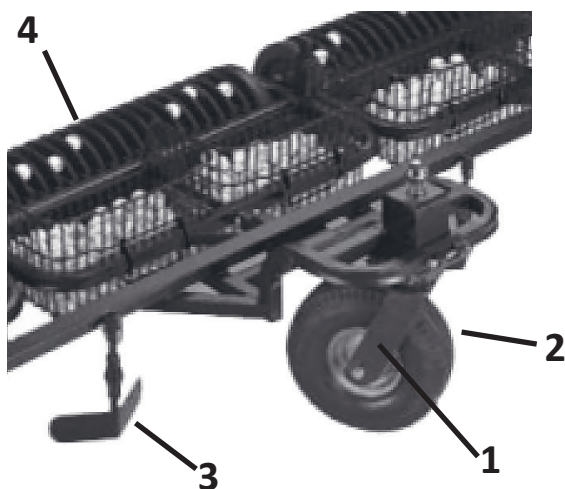
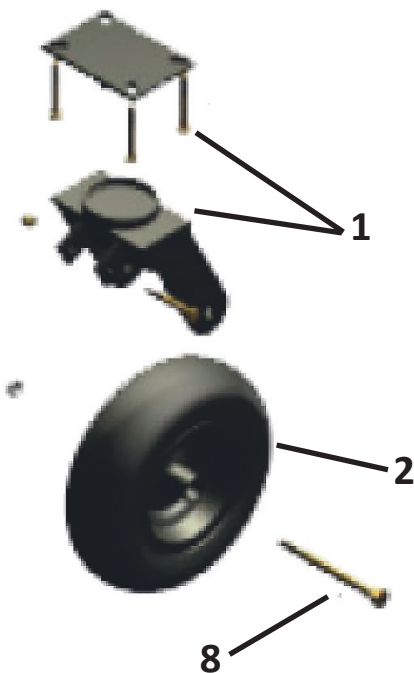


Drawbar Replacement Parts for all SL90 Junior, Senior and Super Pickers

Drawbar Parts List

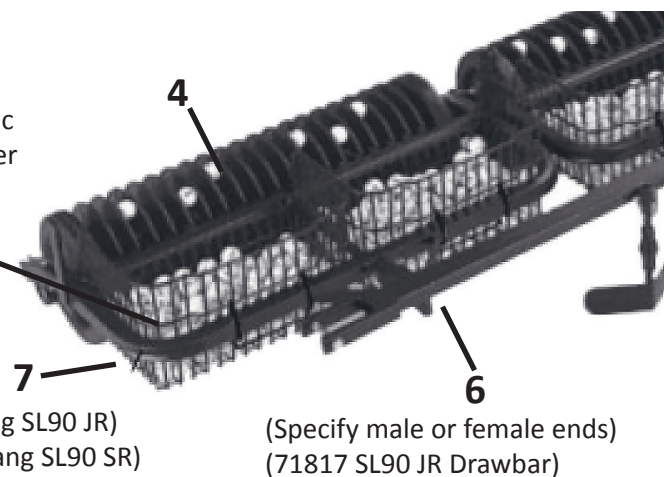
Key #	PART NO.	Item Description / Quantity
1	71936	SL90 Swivel caster fork
2	71989	Front wheel/tire assembly
3	71817	SL90 Deflector
4	71920	Replacement 3' Drum section (no bearings)
5	71912	Plastic picker basket
6	71816	SL90 Senior drawbar
7	71821	SL90 Frame only (no drum section)
8	71941	SL90 Axle for front wheel

PART NO.	Item Description / Quantity
71715	Small Swivel and Caster Fork (for Super Picker Outriggers)
71725	Small Front Wheel, Tire, Tube, and Axle (for Super Picker Outriggers)
71790	Axle for Small Front Wheel (for Super Picker Outriggers)
71794	Bearings for 2000 Small Front Wheel (for Super Picker Outriggers)
71813	Right SL90 Outtrigger Bar Only (SPECIFY MALE OR FEMALE ENDS)
71814	Left SL90 Outtrigger Bar Only (SPECIFY MALE OR FEMALE ENDS)
71815	SL90 Junior Draw Bar Only (SPECIFY MALE OR FEMALE ENDS)
71816	SL90 Senior Draw Bar Only (SPECIFY MALE OR FEMALE ENDS)
71817	SL90 Deflector with Rod
71989	SL90 Front Wheel / Tire Complete
71936	SL90 Swivel and Caster Fork
71941	SL90 Axle for Front Wheel
71950	Bearings for 2000 SL90 Front Wheel



Two plastic
baskets per
section

5
(Two gang SL90 JR)
(Three gang SL90 SR)
(Five gang SL90 Super)



(Specify male or female ends)
(71817 SL90 JR Drawbar)

