

SL90 Manual



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



UNPACKING AND INSPECTION

The Wittek SL90 Pickers are packed complete with all component parts in two specially designed corrugated containers.

SL90 Junior Picker (Two Section)

One crated container 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 Picker (Three Section)

One crated container contains:

- 3 – PICKER SECTIONS COMPLETE WITH HARDWARE
- 6 – PICKER BASKETS
- 1 – SWIVEL AND CASTER FORK COMPLETE
- 2 – DEFLECTORS COMPLETE WITH HARDWARE

AND

One piece contains:

- 1 – DRAWBAR COMPLETE WITH HARDWARE

SL90 Super Picker (Five Section)

One crated container contains:

- 5 – PICKER SECTIONS COMPLETE WITH HARDWARE
- 10 – PICKER BASKETS
- 1 – SWIVEL AND CASTER FORK COMPLETE
- 4 – DEFLECTORS COMPLETE WITH HARDWARE
- 2 – OUTRIGGER BARS COMPLETE WITH SWIVEL & CASTER FORKS
- 2 – DEFLECTORS COMPLETE WITH HARDWARE

AND

One piece contains:

- 1 – DRAWBAR COMPLETE WITH HARDWARE

Inspection

Check that all components are accounted for. Contact factory **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, pull bar, and drum sections move and turn freely.

CUSTOMER IS RESPONSIBLE FOR FILING ANY DAMAGE CLAIMS WITH THE CARRIER.

ASSEMBLY

Assemble the picker on level ground.

SL90 Junior and Senior Picker

Installing the Drawbar and Swivel & Caster 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.

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.

DO NOT OVER TIGHTEN THE CONNECTING BOLTS.

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.

5.

Installing Mounted Chain Couplers:

Place chained coupler over the matching, upright connecting bars.

Be sure the picker baskets are secured in their position!

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. Replace and secure the nuts and bolts.
5. Remove the 5/8" nuts and bolts from each picker section.
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!

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.

VEHICLE ATTACHMENT

Pull Bar: Picker towed by vehicle

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: Picker pushed by vehicle.

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 traveling patterns and picking frequency are unique to each individual range. Through repeated use, range operators will learn to adapt the use of the SL90 picker to their **own** advantage. The following are some general guidelines for the best use of the SL90 picker.

Picking Operation

Maintain vehicle speed of 5 – 8 m.p.h.

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, concrete, stone or gravel roads, 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 type lubricant every week or more often depending on use.

Check all lock nuts and mounting bolts (tie rod ends, shaft collars, draw bar connections, etc.) every week or more often depending on use.

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.

Removing From 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 the factory 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 factory 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 factory for details.

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

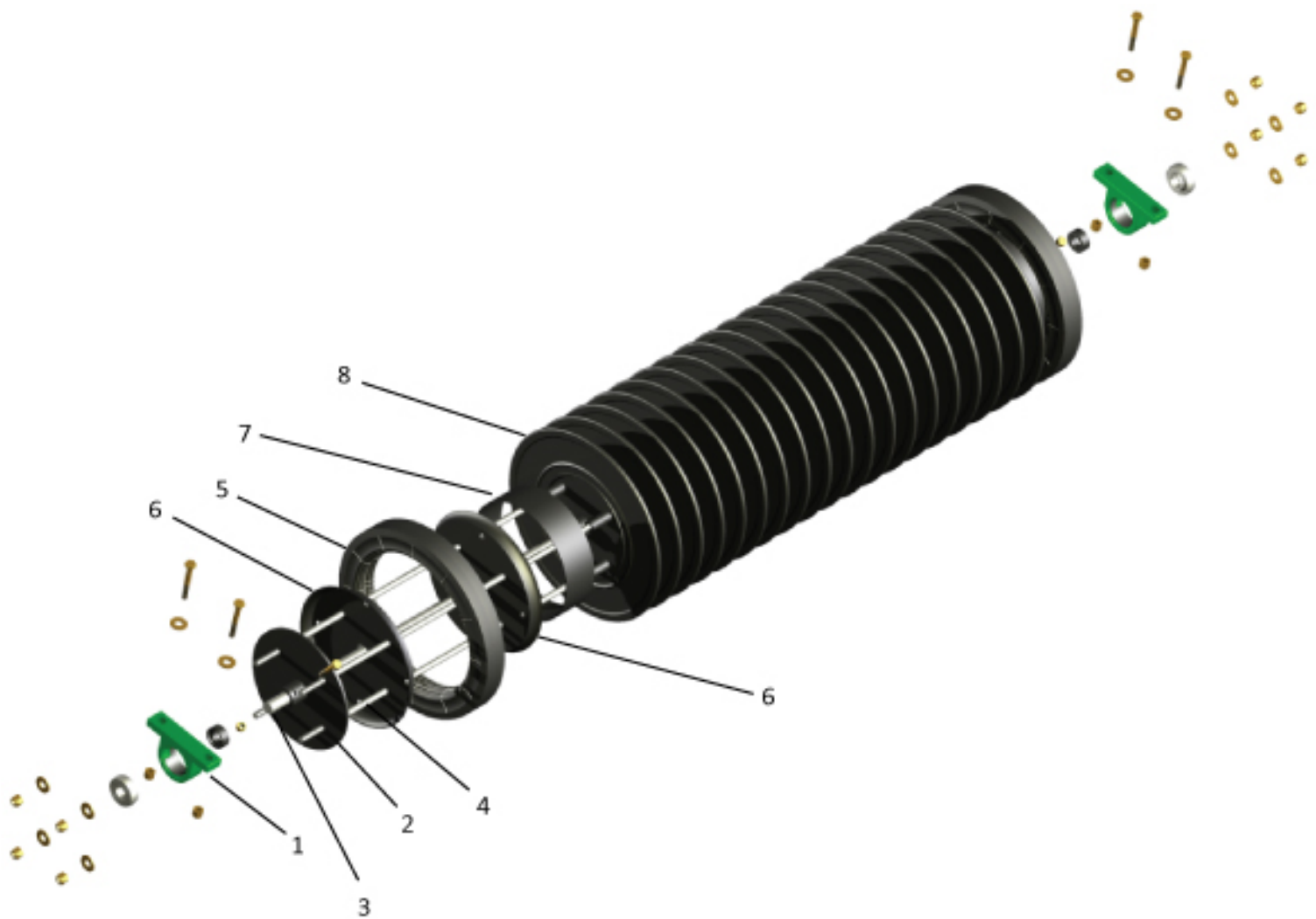
SL90 Light Weight Ball Picker Replacement Parts

Draw Bar Parts List

- 71715 – Small Swivel and Caster Fork (for Super Picker Outriggers)
- 71725 – Small Front Wheel, Tire, Tube, and Axle (for Super Picker Outriggers)
- 71755 – Small Front Wheel (no tire) with Bearings and Axle (for Super Picker Outriggers)
- 71765 – Small Tire / Tube (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 Outrigger Bar Only **(SPECIFY MALE OR FEMALE ENDS)**
- 71814 – Left SL90 Outrigger 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
- 71933 – SL90 Front Wheel with Bearings
- 71934 – SL90 Front Wheel / Tire Complete
- 71936 – SL90 Swivel and Caster Fork
- 71937 – SL90 Axle for Front Wheel
- 71967 – Bearings for 2000 SL90 Front Wheel

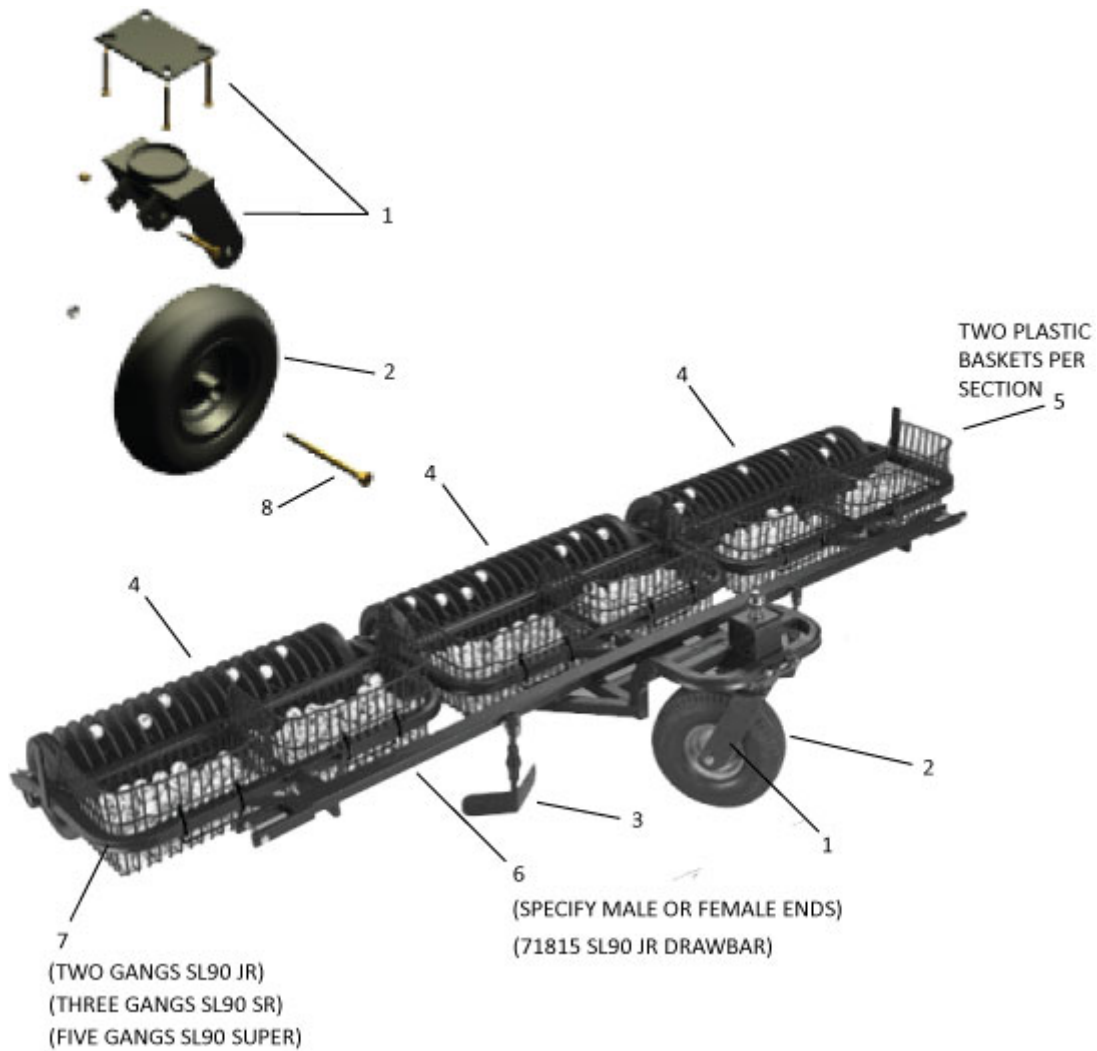
Drum Section Parts List

- 71801 – Pillow Block Bearings $\frac{3}{4}$ "
- 71805 – Axle $\frac{3}{4}$ "
- 71808 – Tire only for Drum Section
- 71916 – Metal End Plate
- 71919 – Tie Rods $\frac{3}{8}$ "
- 71920 – Replacement 3 ft. Drum Section
- 71821 – SL90 Frame for 2000 LT Ball Pickers
- 71931 – Ball Hawk Sure Catch Hopper – Black
- 71932 – 2000 Plastic Disc for LT Ball Pickers
- 71959 – Steel End Spacer (2 per Drum Section)
- 71978 – Steel Wheel Only (4 per Drum Section)



Key Number / Item Description / Quantity / Part Number

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 (19 PER DRUM)



Key Number / Item Description / Quantity / Part Number

Key Number	Item Description	Quantity	Part Number
1	SL90 SWIVEL CASTER FORK		71936
2	FRONT WHEEL/TIRE ASSEMBLY		71989
3	SL90 DEFLECTOR		71817
4	REPLACEMENT 3' DRUM SECTION (NO BEARINGS)		71920
5	PLASTIC PICKER BASKET	TWO PLASTIC BASKETS PER SECTION	71912
6	SL90 SENIOR DRAWBAR	(SPECIFY MALE OR FEMALE ENDS)	71816
7	SL90 FRAME ONLY (NO DRUM SECTION)	(TWO GANGS SL90 JR) (THREE GANGS SL90 SR) (FIVE GANGS SL90 SUPER)	71821
8	SL90 AXLE FOR FRONT WHEEL		71937