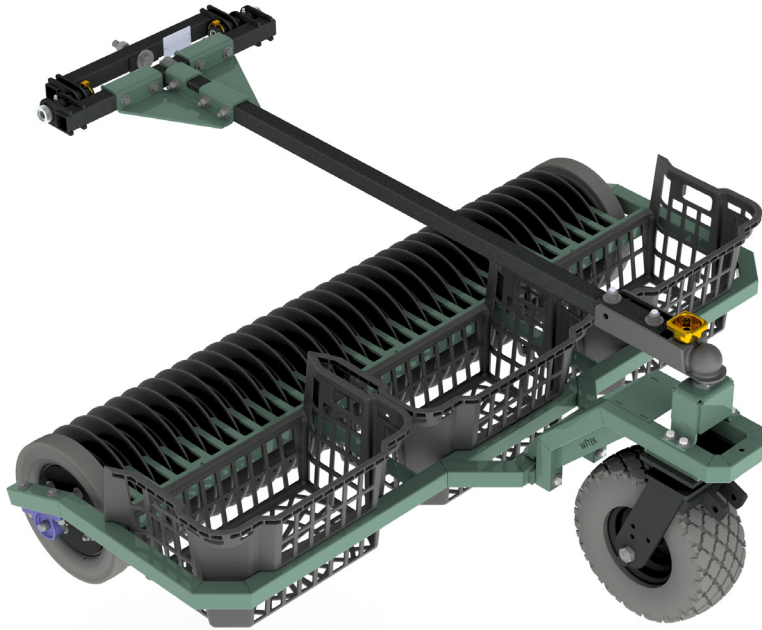


SL90

Straight Ace Manual



Straight Ace Picker



**Black Discs
(SA01B)**



**White Discs
(SA01W)**

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

SL 90 Straight Ace



Unpacking and Inspection

SL90 Straight Ace Picker (One Section - Three Baskets)

One crate contains:

- 1 – Picker sections complete with Hardware
- 3 – Picker Baskets
- 1 – Gooseneck with Swivel and Caster Fork complete
- 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 Straight Ace Picker*

Assemble the picker on level ground.

Installing the front wheel fork (if not already installed):

1. Remove bolts and washers from Swivel Caster
[1in Long Bolts, 3/8" Flat Washer (x4)]
2. Align Swivel Caster Fork with Mount Plate
on bottom of Gooseneck.
3. Install and secure washers and bolts through
Caster into Gooseneck Mount Plate

Installing the picker sections:

1. Remove the 3/8" Nuts and Bolts from the picker section.
 2. Place picker section centered behind the front Swivel Caster Fork.
 3. Slide the Gooseneck assembly onto the Center Tube of Picker frame.
 4. Align the holes and replace and secure 3/8" Nuts and Bolts.
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Be sure the picker baskets are secured in their position!

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.

Draw Bar: Used if the picker is going to be pushed only

One (1) standard 2" Hitch Coupler is attached to the end of the Draw Bar. Mount the Vehicle Attachment Bar to the pushing vehicle. Use Universal Bullet Pins to attach Draw Bar to Vehicle Attachment Bar.

DO NOT OVER TIGHTEN BOLT ON VEHICLE ATTACHMENT BAR!

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 5-7 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, inner tire rim, tire, and outer tire rim.

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 plastic baskets, are subject to wear and deterioration and may eventually require replacement.

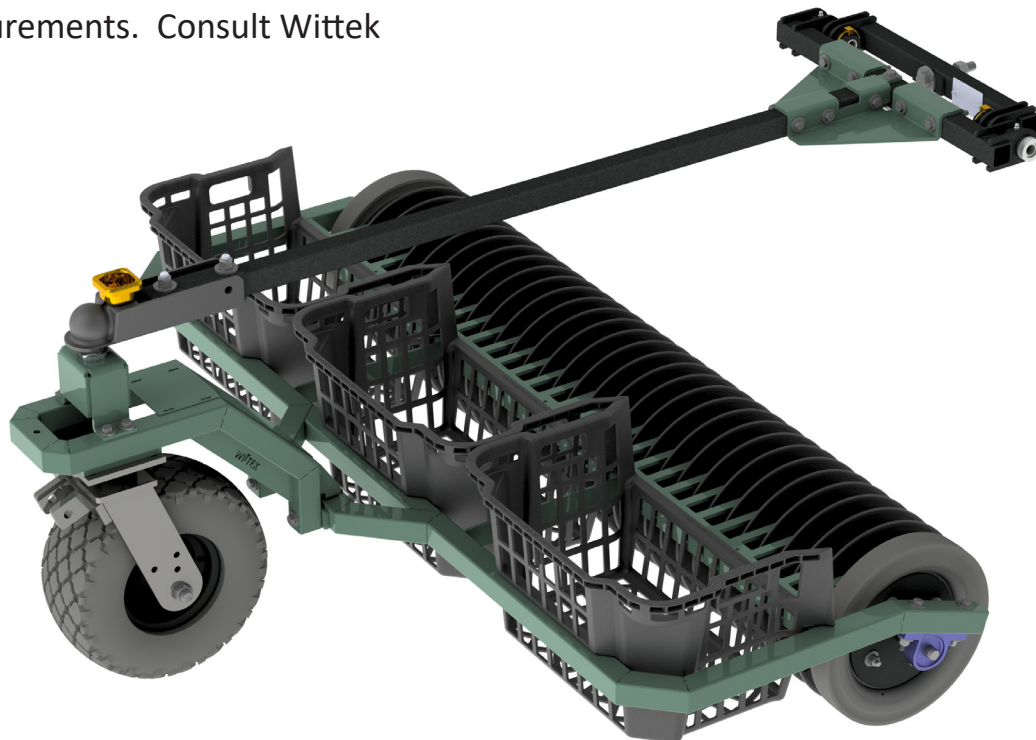
Many components of the SL90 picker (combination discs, drum wheel, etc.) are maintained in stock at Wittek for immediate delivery. In emergency cases, parts can be shipped via Next Day delivery.

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.

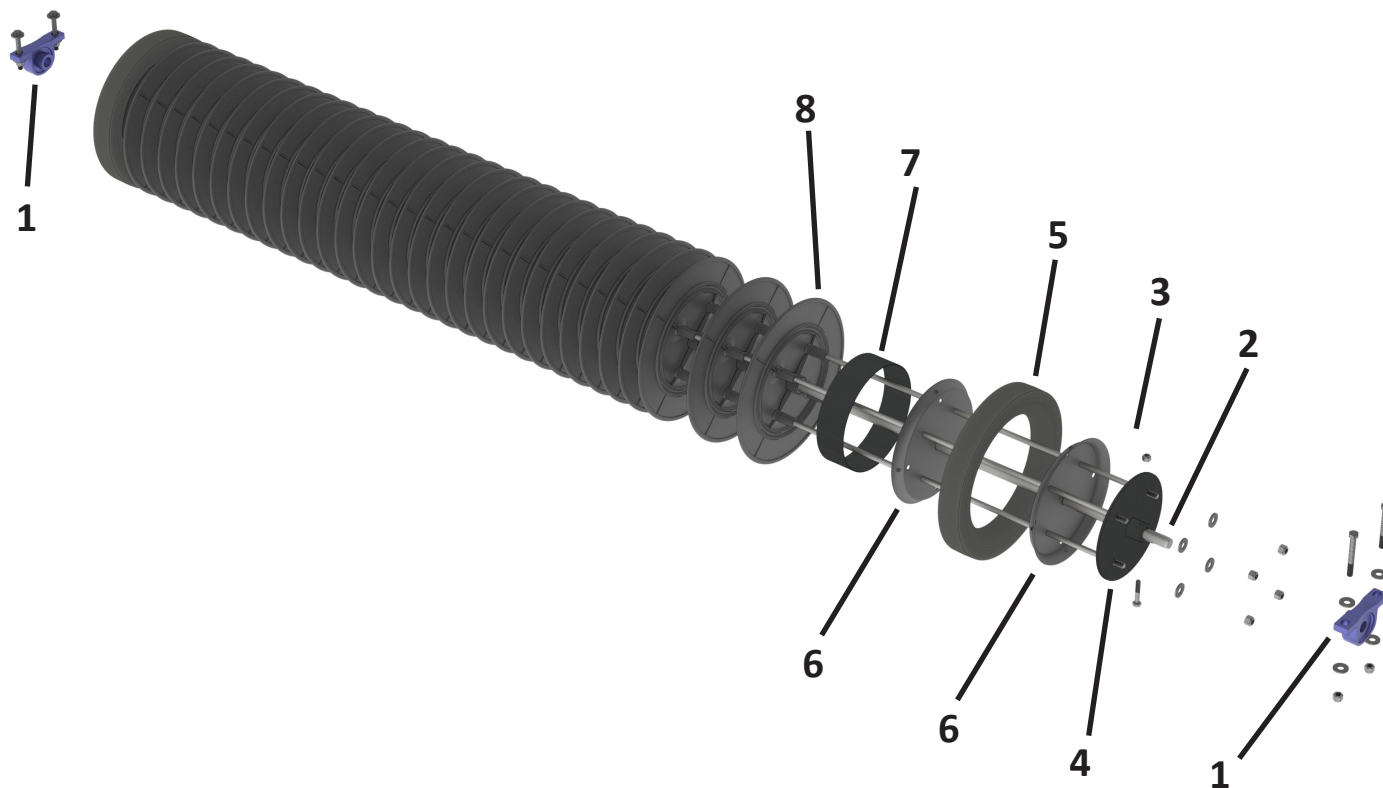


Drum Replacement Parts for SL90 Straight Ace Picker

Drum Section Parts List

Key #	PART NO.	Item Description / Quantity
1	71801	3/4" Pillow Block Bearing (2 Per Drum)
2	S0008	3/4" Axle
3	S0009	Tie Rod 3/8" (4 Per Drum)
4	71916	End Plate (2 Per Drum)
5	71808	Drum Section Tire (2 Per Drum)
6	71978	Tire Rim (looks Like Pie Plate- 4 Per Drum)
7	71959	Spacer (2 Per Drum)
8	71932	Plastic Disc- Black (31 Per Drum)

PART NO.	Item Description / Quantity
S-003	Replacement Straight Ace 5 ft. Drum Section
S0008	3/4" Axle
S0009	Tie Rods 3/8"
71916	Metal End Plate
71808	Tire only for Drum Section
71978	Tire Rim (4 per Drum Section)
71932	Plastic Disc (Black)
71932W	Plastic Disc (White)



Replacement Parts for SL90 Straight Ace Picker

Assembly Parts List

Key #	PART NO.	Item Description / Quantity
1	S-001	Gooseneck with Tall Hitch Mount
2	71798	2" Hitch Ball
3	71936	SL90 Swivel Caster Fork
4	71989	SL90 Front Wheel/Tire/Bearings/Axle Complete
5	71941	SL90 Axle for Front Wheel
6	71950	Bearings for SL90 Front Wheel
7	RS-001	SL90 Drawbar (for pushing Picker)
8	71770-NG1	Coupler for Draw Bar
9	S0007	Rear Cross Bar
10	RES0002	Rear Cross Bar Mount Plate
11	RES0007	Vehicle Attachment Bar
12	RES0011	Universal Bullet Pin
13	S0004	SL90 Straight Ace Frame Only (No Drum Section)
14	S-003	Replacement 5' Picker Drum (No Bearings)
15	71801	3/4" Pillow Block Bearings (Pair)
16	71912	Plastic Picker Basket
	71796	SL90 Pull Bar (for pulling Picker)

