



72-105 CORPORATE WAY, P.O. BOX 970, THOUSAND PALMS, CA 92276

RANGE MATE® HILLY TERRAIN INLINE BALL PICKER

“FINER QUALITY FOR BETTER GOLF”

MANUAL SERVICE & USAGE

IMPORTANT!

PLEASE READ COMPLETE MANUAL PRIOR TO
ASSEMBLY & OPERATION!

PHONE: (760) 343-1050

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CUSTOMER _____

ACCOUNT # _____

MODEL # _____

DATE OF PURCHASE _____

\$12.00

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IMPORTANT!

**PLEASE READ COMPLETE MANUAL PRIOR TO
ASSEMBLY AND OPERATION!**

A - INTRODUCTION

CONGRATULATIONS ON YOUR NEW RANGE MATE[®] BALL PICKER MANUFACTURED BY WESTERN GOLF, INC.

AT WESTERN GOLF, WE BELIEVE THAT NO ONE BALL PICKER CAN FIT ALL TYPES OF RANGES.

THIS IS WHY WE OFFER THREE BALL PICKER FRAME DESIGNS WHICH HAVE BEEN CONFIGURED TO FIT YOUR TYPE OF RANGE. OUR NO WHEEL BALL PICKER IS FOR LEVEL RANGES WITH A GOOD TURF SURFACE. THE WHEEL BALL PICKER OFFERS STABILITY FOR RUTTED RANGES WITH STEEP SIDES. FINALLY, OUR HILLY TERRAIN BALL PICKER IS FOR RANGES WITH MINIMAL TURF, DEEPLY RUTTED AND UNDULATING SURFACES.

YOU ALSO HAVE THE CHOICE OF TWO TYPES OF DISCS: THE DURABLE NYLON DISCS WHICH ARE IDEAL FOR MOST RANGES AND THE ATD DISCS WHICH WESTERN GOLF, INC. DESIGNED SPECIFICALLY FOR ROUGH, ROCKY, AND STEEPLY GRADED RANGES.

BECAUSE OF OUR BELIEF THAT NO ONE BALL PICKER FITS ALL RANGES, OUR PERSONNEL ARE TRAINED TO INQUIRE ABOUT THE CHARACTERISTICS OF YOUR RANGE AND IT'S SURFACE.

THE INFORMATION WE RECEIVED FROM YOU WILL HELP ENSURE THAT YOU PURCHASE THE CORRECT BALL PICKER FOR YOUR RANGE.

I - UNPACKING AND INSPECTION

YOUR BALL PICKER IS SHIPPED PACKAGED IN A CARDBOARD GAYLORD BOX ATTACHED TO A PALLET, SHRINK WRAPPED AND STRAPPED DOWN.

- CHECK THE PACKAGING AND LOOK FOR ANY OUTWARD SIGNS OF DAMAGE.
- UNPACK AND INSPECT FOR HIDDEN DAMAGE.
- CHECK TO VERIFY ALL MOVING PARTS TURN FREELY.
- CHECK THAT ALL PARTS ARE INCLUDED IN YOUR SHIPMENT. IF NOT, NOTE THE MISSING PARTS ON THE CARRIERS BILL OF LADING AND CONTACT THE FREIGHT CURRIER IMMEDIATELY.

YOU ARE RESPONSIBLE FOR FILING ANY CLAIMS OF DAMAGE AGAINST THE FREIGHT CARRIER!

AVAILABLE HILLY TERRAIN BALL PICKERS

WAHT3S-2	3 SECTION ATD HILLY TERRAIN
WAHT5S-2	5 SECTION ATD HILLY TERRAIN
WAHT302S-2	3 SECTION ATD HILLY TERRAIN W/MINI FRAMES
WAHT504S-2	5 SECTION ATD HILLY TERRAIN W/MINI FRAMES
WRHT3S-2	3 SECTION NYLON HILLY TERRAIN
WRHT5S-2	5 SECTION NYLON HILLY TERRAIN
WRHT302S-2	3 SECTION NYLON HILLY TERRAIN W/MINI FRAMES
WRHT504S-2	5 SECTION NYLON HILLY TERRAIN W/MINI FRAMES

REQUIRED A-FRAME OPTIONS

WRHT030	8' ADJUSTABLE A-FRAME FOR USE WITH 6' PICKER AND 3 SECTION HILLY TERRAIN PICKER
WRHT050	10' ADJUSTABLE A-FRAME FOR USE WITH 5 SECTION HILLY TERRAIN PICKER

PACKING LIST

3 SECTION HILLY TERRAIN BALL PICKER

<u>QTY.</u>	<u>ITEM</u>
1	CENTER DRUM SECTION WITH WHEEL
2	OUTSIDE DRUM SECTIONS
4	CONNECTOR PINS
4	CONNECTOR PIN COLLARS
4	CONNECTOR PIN NUTS AND BOLTS
6	SPLIT BASKETS

5 SECTION HILLY TERRAIN BALL PICKER

ALL OF THE ABOVE PLUS:

<u>QTY.</u>	<u>ITEM</u>
2	OUTSIDE DRUM SECTIONS WITH SMALL WHEELS
4	CONNECTOR PINS
4	CONNECTOR PIN COLLARS
4	CONNECTOR PIN NUTS AND BOLTS
4	SPLIT BASKETS

SECTIONS COME ASSEMBLED WITH BALL COMBS, DISCS AND DEFLECTORS IN PLACE.

CENTER SECTION TIRE AND OUTSIDE SECTION TIRES ARE INFLATED TO PRESSURE.

IF ANY PARTS ARE MISSING, NOTE THIS IS ON THE TRUCK COMPANIES BILL OF LADING AND PLEASE CONTACT WESTERN GOLF, INC. IMMEDIATELY AT 1 (800) 443-4350.

A-FRAME

PURCHASED SEPARATELY, AVAILABLE IN 8' AND 10' LENGTHS.

OPTIONS

- TOP COVERS FOR SPLIT BASKET – 1 PER BASKET
- CART BRACKET
- A-FRAME
- MINI FRAMES (REPLACES DEFLECTORS, ONLY AVAILABLE WITH NYLON DISC)
- NYLON DISCS
- ATD DISCS

II - ASSEMBLY AND INSTALLATION

TOOLS REQUIRED:

- 7/16" OPEN END WRENCH
- PLIERS

ASSEMBLY 3 SECTION HILLY TERRAIN BALL PICKER

SELECT A LEVEL AREA WITH SUFFICIENT SPACE TO LAYOUT ALL PARTS.

1. REVIEW ASSEMBLY OVERVIEW ON PAGE 8.
2. PLACE LARGE WHEEL SECTION IN THE CENTER OF ASSEMBLY AREA.
3. REMOVE CONNECTOR PINS FROM CENTER SECTION USING THE 7/16" WRENCH AND PLIERS.
4. PLACE OUTSIDE SECTION ON EACH SIDE OF THE CENTER SECTION.
5. ATTACH OUTSIDE SECTIONS TO CENTER SECTION USING CONNECTOR PINS.
6. PLACE BASKETS INTO FRAMES.
7. ATTACH A-FRAME TO BALL PICKER. SEE A-FRAME ASSEMBLY (PAGE 7).

YOUR BALL PICKER IS NOW READY TO ATTACH TO YOUR PUSH VEHICLE!!

ASSEMBLY 5 SECTION HILLY TERRAIN BALL PICKER

8. FOLLOW THE ABOVE INSTRUCTIONS (1-7) FOR THE_3 SECTION BALL PICKER:
9. PLACE THE ADDITIONAL TWO OUTSIDE SECTIONS WITH SMALL FRONT WHEELS AT EACH END OF THE BALL PICKER.
10. ALIGN FRAMES AND REMOVE CONNECTOR PINS.
11. REMOVE COLLARS FROM ELBOWS.
12. ATTACH THE TWO OUTSIDE SECTIONS TO END SECTIONS USING THE CONNECTOR PINS.
13. PLACE BASKETS INTO FRAMES.
14. ATTACH A-FRAME TO BALL PICKER. SEE A-FRAME ASSEMBLY (PAGE 7).

YOUR BALL PICKER IS NOW READY TO ATTACH TO YOUR VEHICLE!!

A-FRAME

THE A-FRAME IS USED TO ATTACH THE BALL PICKER TO YOUR VEHICLE.

YOU HAVE A CHOICE OF TWO A-FRAMES FOR YOUR HILLY TERRAIN IN-LINE BALL PICKER. THE 8' A-FRAME IS FOR USE WITH THE 3-SECTION HILLY TERRAIN BALL PICKER ONLY.

IF YOU PLAN ON EXPENDING TO A 5-SECTION PICKER YOU SHOULD PURCHASE THE 10' A-FRAME WHICH WILL ACCOMMODATE BOTH THE 3-SECTION AND 5-SECTION HILLY TERRAIN BALL PICKER.

BECAUSE OF ITS DESIGN, THE A-FRAME ALLOWS YOU TO BACK-UP YOUR BALL PICKER SHOULD YOU FIND YOURSELF IN AN AWKWARD POSITION ON THE RANGE. THE BALL PICKER ROTATES AROUND THE FRONT ATTACHMENT POINT ON THE CENTER SECTION WITH AMPLE CLEARANCE BETWEEN THE PUSH VEHICLE AND THE BALL PICKER.

IF YOU HAVE AN A-FRAME FROM YOUR EXISTING BALL PICKER IT MAY BE USED ON THE RANGE MATE® HILLY TERRAIN BALL PICKER.

ATTACHING THE A-FRAME TO YOUR BALL PICKER IS SIMPLE! PLACE THE A-FRAME ONTO THE CART BRACKET'S BALL HITCH AND TIGHTEN THE TRAILER HITCH CARRIAGE ONTO THE BALL HITCH USING HAND PRESSURE ONLY. **DO NOT OVER TIGHTEN!**

HILLY TERRAIN ASSEMBLY OVERVIEW

III – VEHICLE ATTACHMENT BRACKET FOR ADJUSTABLE A-FRAMES



**EZ GO BRACKET
BRACKET**
WGWP20-A (4 Bolt)
(specify year & model)
24 lbs.



CLUB CAR BRACKET
WGWP23-A
26 lbs.



YAMAHA CAR*
WGWP24-A
ADAPTER BRACKET
25 lbs



UNIVERSAL
WGWP27-A
22 lbs.

IN ORDER TO ATTACH YOUR NEW BALL PICKER TO YOUR NEW OR EXISTING VEHICLE YOU WILL NEED AN ATTACHMENT BRACKET.

THE BRACKETS ARE DESIGNED TO ACCEPT TWO 1-7/8" BALL HITCHES. THESE BALLS ARE PLACED 3' APART (**DO NOT INCREASE THE SPACING OF BALLS OVER 3'**) AND POSITIONED SO THAT THE A-FRAME IS PARALLEL TO THE GROUND.

YOUR VEHICLE MAY ALREADY HAVE AN ACCEPTABLE BRACKET, IF SO, SIMPLY ATTACH THE A-FRAME TO THE BRACKET. IF NOT, CONTACT WESTERN GOLF AND PLEASE SPECIFY THE YEAR, MODEL AND MAKE OF THE VEHICLE WITH WHICH YOU INTEND TO PUSH YOUR BALL PICKER. BRACKETS ARE AVAILABLE FOR MOST MAJOR GOLF CARS.

IN MOST CASES THE ATTACHMENT BRACKETS BOLT ONTO YOUR VEHICLE USING EXISTING BOLT PATTERNS. HOWEVER, IN SOME INSTANCES CUSTOM INSTALLATION IS REQUIRED.

FOR UNCONVENTIONAL VEHICLES WESTERN GOLF, INC. PROVIDES A UNIVERSAL BRACKET THAT CAN BE WELDED TO THE EXISTING FRAME OR BUMPER BRACKETS. PLEASE MAKE SURE THAT THE BRACKET IS MOUNTED CORRECTLY AND THE A-FRAME IS LEVEL.

*YAMAHA WGWP24-A (FOR A-FRAME)

AVAILABLE: WGWP24G-A (G11 AND G16 SERIES) (FOR A-FRAME)

IV - OPERATIONS

THE INLINE HILLY TERRAIN PICKER OFFERS BENEFITS OVER THE TRIANGULAR SHAPED BALL PICKERS.

WITH THE HILLY TERRAIN BALL PICKER YOU CAN PICK BOTH UP-SLOPES AND DOWN-SLOPES AT THE SAME TIME. THE A-FRAME ATTACHMENT ALLOWS YOU TO BACK OUT OF TIGHT LOCATIONS. SIMPLY PLACE YOUR VEHICLE IN REVERSE AND AS YOU PULL BACK THE BALL PICKER WILL TURN 360 DEGREES BENEATH THE A-FRAME. **NOTE:** IF YOU SELECT THE MINI FRAME OPTION YOU SHOULD NOT BACK UP YOUR BALL PICKER.

VEHICLE

THERE ARE NUMEROUS VEHICLES AVAILABLE TO PUSH YOUR RANGE BALL PICKER. SOME IMPORTANT CONSIDERATIONS WHEN SELECTING A VEHICLE ARE:

- CONTOUR OF RANGE
- LOADED WEIGHT OF BALL PICKER
- VERSATILITY
- GAS OR ELECTRIC

BE SURE TO CHECK WITH THE VEHICLE MANUFACTURER TO PROPERLY SELECT THE RIGHT VEHICLE.

PICKING YOUR RANGE

- DO NOT EXCEED 8 MPH WHEN PICKING YOUR RANGE.
- DO NOT CHASE BALLS! USE A SYSTEMATIC PATTERN WHEN PICKING, SIMILAR TO CUTTING YOUR GRASS.
- PICK OFTEN TO AVOID A HEAVY CLUSTER OF BALLS IN ONE AREA.

IV – OPERATIONS - CONTINUED

- CONSIDER WEATHER CONDITIONS PRIOR TO PICKING, VEHICLES CAN AND DO SLIDE IN WET OR RAINY CONDITIONS.
- PICKING BALLS IN MUDDY CONDITIONS DAMAGES YOUR TURF AND BURIES RANGE BALLS!
- DISC ARE MANUFACTURED USING A SOFT NYLON MATERIAL AND **SHOULD NOT** BE DRIVEN ON HARD OR COARSE SURFACES. PREMATURE WEAR AND/OR FAILURE WILL RESULT FROM THESE TYPES OF SURFACES.
- THE GAP BETWEEN THE SECTIONS ARE COVERED BY AN ANGLED FLEXIBLE DEFLECTOR WHICH PUSHES THE RANGE BALLS TO EITHER SIDE. THIS FEATURE WILL DEFLECT 90% OF THE RANGE BALLS THAT ENTER THE GAP INTO THE DRUM SECTION.

THE OPTIONAL MINI FRAME WILL COVER 100% OF THE GAP BETWEEN THE SECTIONS. HOWEVER, WHEN USING THIS OPTION ON YOUR BALL PICKER YOU SHOULD NOT ATTEMPT TO BACK UP THE UNIT.

V - MAINTENANCE

1. PRIOR TO USE LUBRICATE FRONT AND SIDE WHEELS ON 5 SECTION BALL PICKERS USING THE ZERK FITTING ON THE RIMS HUB. USE A LITHIUM AXLE OR BEARING PACKING GREASE.
2. PERIODICALLY CHECK OIL LITE BRONZE BUSHING LOCATED ON THE FRONT WHEEL FORK. SEE PAGE 22, REPLACE IF NECESSARY.
3. CHECK ALL NUTS AND BOLTS (WESTERN GOLF, INC. USES NYLON NUTS TO ENSURE THAT NUTS DO NOT LOOSEN) AT LEAST ONCE A WEEK.
4. BALL COMBS (SEE PAGE 22) SHOULD BE CHECKED PRIOR TO PICKING. BENT BALL COMBS CAN RESULT IN MARKED BALLS OR MISSED BALLS WHEN PICKING. A SIMPLE REALIGNMENT USING A POLE FOR LEVERAGE WILL BEND THE COMBS BACK AND ENSURE THAT THE BALL COMBS REMAIN PROPERLY ALIGNED. REPLACEMENT BALL COMBS MAY BE PURCHASED AND ARE KEPT IN STOCK.
5. WASH OFF ALL EXCESSIVE DIRT, MUD, AND GRASS. SPACING BETWEEN DISCS IS VERY IMPORTANT AND COMBS SHOULD BE CENTERED BETWEEN DISC.
6. PLACE ON A PREVENTIVE MAINTENANCE SCHEDULE.

OFF SEASON STORAGE

WESTERN GOLF, INC. GOLD IRRIDITE PLATES ALL OF THEIR BALL PICKER FRAME AND ZINC PLATES THE BALL COMBS AND AXLES. THESE COATINGS ARE THE BEST INHIBITORS FOR RUST AND CORROSION.

HOWEVER, IN AREAS OF EXTREME WEATHER WE RECOMMEND THAT YOUR BALL PICKER BE DISASSEMBLED AND STORED IN AN ENCLOSED OR COVERED AREA DURING THE OFF SEASON.

REMOVAL FROM STORAGE

1. CHECK CONDITION OF TIRE AND THE TIRE'S AIR PRESSURE, REPLACE IF NECESSARY.
2. LUBRICATE FRONT WHEEL.
3. CHECK OIL LITE BRONZE BUSHINGS FOR WEAR, REPLACE IF NECESSARY.
4. CHECK BALL COMBS FOR ALIGNMENT, ALIGN IF NECESSARY.
5. CHECK DISC DRUMS (SEE DISC MAINTENANCE, PAGE 14).

VI - DISC MAINTENANCE AND REPLACEMENT

THE MOST IMPORTANT ELEMENT OF YOUR BALL PICKER ARE THE DRUM SECTIONS. BY PERFORMING A QUICK VISUAL CHECK EACH TIME YOU USE YOUR BALL PICKER YOU CAN EXTEND THE LIFE OF THE DISCS AND MAINTAIN EFFICIENT PICKING PERFORMANCE!

1. ALWAYS LOOK FOR WORN OR BROKEN DISCS AND REPLACE IF NECESSARY.
2. MANUALLY CHECK THE ADJUSTMENT OF YOUR DISCS BY PUSHING A GOLF BALL BETWEEN THE DISCS. THE DISCS SHOULD BE TIGHT ENOUGH TO OFFER RESISTANCE WHEN THE GOLF BALL IS INSERTED BETWEEN THE DISCS. IF THE BALL DOES NOT SNAP INTO THE DISCS YOU MUST TIGHTEN THE DRUM SECTION.
3. VISUALLY CHECK THE ALIGNMENT OF THE COMBS INTO THE DRUM TO ENSURE THAT THE COMBS ARE NOT HITTING THE DISC.

DISC ADJUSTMENT – ATD DISC

TOOLS REQUIRED

- 3/8" OPEN END WRENCH
- 3/8" BOX WRENCH
- RATCHET WRENCH WITH 1/2" SOCKET

1. REMOVE BASKETS
2. TO ADJUST YOUR DISCS FOR PROPER TENSION YOU MUST LOOSEN THE AXLE ADJUSTMENT BRACKETS LOCATED ON THE FRAME (SEE PAGE 22).

3. NEXT, WITH THE HELP FROM A SECOND PERSON, COMPRESS THE DISCS AND HOLD TOGETHER. PUSH THE ADJUSTMENT BRACKET, WHICH THE AXLE IS BOLTED TO, INWARD AND TIGHTEN.
4. PUSH THE OPPOSITE BRACKET INWARD AND TIGHTEN.
5. CHECK THE DISC FOR PROPER TENSION BY INSERTING A GOLF BALL BETWEEN THE DISCS. IF BALL DOES NOT SNAP INTO PLACE REPEAT ABOVE PROCEDURE.
6. REPEAT ABOVE PROCEDURES ON EACH DRUM SECTION.
7. ALIGN BALL COMBS SO THAT THEY ARE CENTERED BETWEEN DISCS BY LOOSENING THE CARRIAGE BOLT THAT SECURES THE COMB TO THE FRAME. TIGHTEN AFTER ADJUSTMENT.

DISC ADJUSTMENT-NYLON

TOOLS REQUIRED

- 5/16" OPEN END WRENCH
- 5/16" BOX END WRENCH
- RACHET WRENCH WITH ½" SOCKET

1. REMOVE BASKETS
2. THE NYLON DISCS ARE HELD TOGETHER WITH 4 TIE RODS (5/16" X 36-5/16") AND 8 NYLOC NUTS.
3. THE NYLOC NUTS AT ONE END OF THE TIE RODS HAVE BEEN CRIMPED TO SECURE THE NUT IN PLACE ON THE TIE ROD.

DISC ADJUSTMENT-NYLON - CONTINUED

4. LOCATE THE CRIMPED NUTS AND HOLD WITH A PAIR OF PLIERS.

5. USING A 5/16" BOX END WRENCH, TIGHTEN THE OPPOSITE NUT. **DO NOT OVER TIGHTEN!!!**
6. TIGHTEN ALL FOUR NUTS IN A CLOCKWISE DIRECTION WITH EQUAL TURNS.
7. CHECK DISC TENSION BY INSERTING A GOLF BALL BETWEEN THE DISCS, THE BALL SHOULD SNAP INTO PLACE.
8. REPEAT UNTIL PROPER TENSION IS ACHIEVED.
9. ALIGN BALL COMBS SO THAT THEY ARE CENTERED BETWEEN DISCS BY LOOSENING THE CARRIAGE BOLTS WITH A RATCHET WRENCH USING A 1/2" SOCKET.
10. TIGHTEN CARRIAGE BOLTS AFTER ALIGNMENT.
11. REPLACE BASKETS.

DISC REPLACEMENT-ATD

TOOLS REQUIRED

- 3/8" OPEN END WRENCH
- 3/8" BOX END WRENCH
- RATCHET WRENCH WITH 1/2" SOCKET

THE ATD DISCS WERE DESIGNED SPECIFICALLY FOR ROUGH RANGES WITH COARSE TERRAIN. BECAUSE OF THIS THE ATD DISCS SHOULD OUT LAST THE ABS AND NYLON DISCS THAT YOU WERE PREVIOUSLY USING BY TWO TO THREE TIMES.

1. REMOVE BASKETS
2. UNBOLT AXLE ADJUSTMENT BRACKETS (3/8" X 2-1/2" BOLT AND 3/8" NUT).
3. PROP UP THE FRAME SO THAT THE FRAME IS SUSPENDED OFF OF THE GROUND.
4. THE AXLE AND DISC WILL REMAIN ON THE GROUND INTACT, MOVE TO AN ACCESSIBLE WORK AREA.
5. KEEP AXLE IN PLACE AND REMOVE DISCS ONE AT A TIME (KEEP DISCS IN THE ORDER THAT THEY ARE REMOVED) UNTIL YOU REACH THE DAMAGED DISC.
6. REPLACE DAMAGED DISC WITH A NEW DISC AND RETURN USED DISC IN THE ORDER YOU REMOVED THE DISCS FROM THE AXLE.
7. PLACE COMPLETE DRUM SECTION BENEATH FRAME, LOWER FRAME AND BOLT AXLE ADJUSTMENT BRACKET TO FRAME.
8. USE AXLE ADJUSTMENT BRACKETS TO OBTAIN PROPER DISC TENSION (SEE DISC ADJUSTMENT PROCEDURE ON PAGE 16).
9. ALIGN BALL COMBS SO THAT THEY ARE CENTERED BETWEEN DISCS, USING THE RACHET WRENCH WITH A 1/2" SOCKET.
10. REPEAT AS REQUIRED ON EACH DRUM SECTION.

NOTE: END DISC MUST BE REVERSED SO THAT LOCKING KNOBS ON THE DISC FACE INWARD.

DISC REPLACEMENT-NYLON

TOOLS REQUIRED

- 5/16" BOX END WRENCH
- 3/8" OPEN END WRENCH
- 3/8" BOX END WRENCH
- PLIERS
- RATCHET WRENCH WITH A ½" SOCKET

1. REMOVE BASKET FROM FRAME
2. REMOVE DRUM SECTION FROM FRAME BY UNBOLTING THE FRAME ADJUSTMENT BRACKET USING 3/8" WRENCHES.
3. PLACE DRUM ON A WAIST HIGH WORK BENCH OR OTHER SURFACE.
4. THE NYLON DISCS ARE HELD TOGETHER WITH 4 TIE RODS (5/16" X 36-5/16") AND 8 NYLOC NUTS.
5. THE NYLOC NUTS AT ONE END OF THE TIE RODS HAVE BEEN CRIMPED TO SECURE THE NUT IN PLACE ON THE TIE ROD.
6. LOCATE THE CRIMPED NUTS AND HOLD WITH A PAIR OF PLIERS.
7. USING A 5/16" BOX END WRENCH REMOVE THE NUTS FROM THE TIE RODS.
8. AT THIS POINT TAKE TIME TO INSPECT THE COMPLETE SECTION OF DISCS.
9. THE DISCS HAVE BEEN DESIGNED WITH TWO TYPES OF END DISCS. ONE END DISC HAS ½" NOTCHES WHICH FIT ONTO CORRESPONDING SPACERS, THE OTHER HAS SPACERS ONLY.

DISC REPLACEMENT-NYLON - CONTINUED

10. DETERMINE WHICH END DISC YOU HAVE FOR EASE OF REASSEMBLY.
11. REMOVE ONE DISC AT A TIME AND KEEP THEM IN ORDER OF REMOVAL.
12. ONCE YOU HAVE REMOVED AND REPLACED THE DAMAGED DISC REINSTALL DISCS IN THE ORDER YOU REMOVED THE DISCS.
13. TIGHTEN THE NYLOC NUTS ONTO THE TIE RODS. BE SURE YOU HAVE PLACED THE PROPER END DISC ON THE DRUM SECTION!! **THERE SHOULD BE NO PROTRUDING ENDS!!**
14. TIGHTEN ALL FOUR NUTS IN A CLOCKWISE DIRECTION WITH EQUAL TURNS.
15. CHECK DISC TENSION BY INSERTING A GOLF BALL BETWEEN THE DISCS, THE BALL SHOULD SNAP INTO PLACE.
16. REPEAT UNTIL PROPER TENSION IS ACHIEVED.
17. REINSTALL REPAIRED DRUM SECTION ONTO FRAME.
18. ALIGN BALL COMBS SO THAT THEY ARE CENTERED BETWEEN DISCS USING THE RATCHET WRENCH AND ½" SOCKET TO LOOSEN THE ½" CARRIAGE BOLTS THAT SECURE THE BALL COMBS TO THE FRAME.
19. TIGHTEN CARRIAGE BOLTS.
20. REPLACE BASKETS.

VII - REPAIRS & REPLACEMENT PARTS

STANDARD HARDWARE IS USED ON ALL WESTERN GOLF, INC. BALL PICKERS AND IS AVAILABLE AT LOCAL HARDWARE STORES. PLEASE REFER TO THE TECHNICAL SECTION (PAGES 22-34) OF THIS MANUAL FOR INDIVIDUAL SPECIFICATIONS.

WESTERN GOLF, INC. DOES KEEP AN INVENTORY OF REPLACEMENT PARTS AND IN CASES OF IMMEDIATE NEED FOR PARTS WE DO OFFER SEVERAL NEXT DAY DELIVERY SERVICES. KEEP IN MIND THAT A PREMIUM IS CHARGED BY THE CARRIER FOR NEXT DAY OR OTHER IMMEDIATE DELIVERIES.

ALWAYS STATE THE MODEL OF THE BALL PICKER YOU ARE REQUESTING PARTS FOR AND REFER TO THE TECHNICAL SECTION FOR PROPER PART NUMBERS.

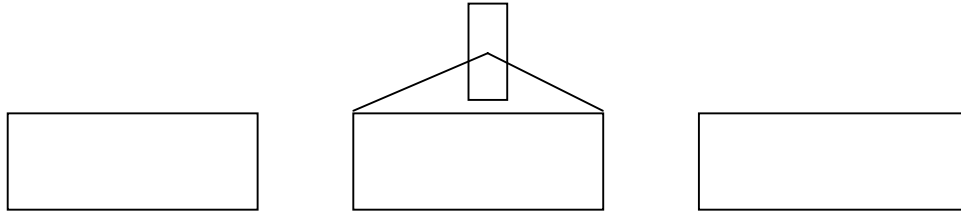
OUR CUSTOMER SERVICE REPRESENTATIVES CAN ASSIST YOU IN IDENTIFYING THE TYPE OF BALL PICKER YOU HAVE PURCHASED.

ALL WESTERN GOLF, INC. PRODUCTS HAVE BEEN DESIGNED SO THAT PERSONS WITH REASONABLE MAINTENANCE SKILLS CAN ACCOMPLISH ASSEMBLY AND REPAIRS.

WHEN WORKING WITH ANY MACHINERY, FUNDAMENTAL SAFETY RULES AND FUNDAMENTAL OPERATIONS SHOULD BE FOLLOWED.

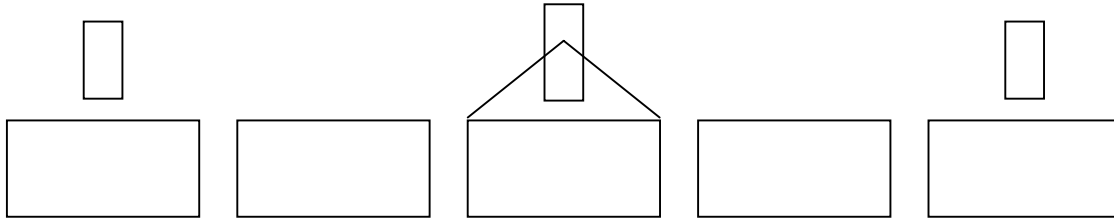
HILLY TERRAIN BALL PICKER

B1 - DIAGRAM AND SPECIFICATION CHART



WRHT3S-2
WAHT3S-2

3 SECTION HILLY TERRAIN – NYLON DISC
3 SECTION HILLY TERRAIN – ATD DISC



WRHT5S-25 SECTION HILLY TERRAIN – NYLON DISC
WAHT5S-25 SECTION HILLY TERRAIN – ATD DISC

PART #	OVERALL WIDTH	BALL CAPACITY	WEIGHT EMPTY	WEIGHT FULL
WRHT3S-2	10'7"	1500	280	460
WAHT3S-2	10'7"	1500	343	523
WRHT5S-2	17'7"	2500	380	680
WAHT5S-2	17'17"	2500	525	825

WITH MINI FRAMES

PART #	OVERALL WIDTH	BALL CAPACITY	WEIGHT EMPTY	WEIGHT FULL
WRHT3S-2	10'7"	2000	342	524
WAHT3S-2	10'7"	2000	405	587
WRHT5S-2	17'7"	3500	504	808
WAHT5S-2	17'17"	3500	649	949

HILLY TERRAIN CENTER SECTION SUB-ASSEMBLY

HILLY TERRAIN CENTER SECTION

SUB-ASSEMBLY

PARTS LIST

- | | | |
|-----|--------------------------|--|
| 1. | WGRM036
OR
WGRA026 | RANGE MATE [®] NYLON DISC (21 REQ.)

RANGE MATE [®] ATD DISC (17 REQ.) |
| 2. | WGRM025N | BALL COMB, NUT & BOLT – NYLON DISC |
| 3. | WGRM025 | BALL COMB-FLAT (10– TINES)
NYLON DISC |
| 4. | WGRM024 | DRUM AXLE (1“ DIA. X 39”L |
| 5. | WGRM024N | AXLE NUT & BOLT |
| 6. | WRHT005N | COLLAR NUT / BOLT |
| 7. | WGHT005C | COLLAR-CONNECTOR PIN |
| 8. | NO PART # | ATTACHMENT BRACKET
(WELDED TO FRAME) |
| 9. | WRHT005P | FRAME PIN |
| 10. | WRHT001
OR
WAHT001 | CENTER FRAME – NYLON DISC

CENTER FRAME – ATD DISC |
| 11. | WGRM216 | 1” COLLAR |
| 12. | WGRM005N | COLLAR NUT / BOLT |
| 13. | WGWP7 | 1” OIL LITE BRONZE BUSHING (2 REQ.) |

HILLY TERRAIN CENTER SECTION

SUB-ASSEMBLY

PARTS LIST - CONTINUED

- | | | |
|-----|----------------------------|---|
| 14. | WRHT017 | AXLE-FRONT WHEEL W/NUT |
| 15. | WRHT017W | WASHER - AXLE (2 REQ.) |
| 16. | WRHT016 | FRONT WHEEL - LARGE, COMPLETE |
| 17. | WGRM024W | SPACER - WASHER |
| 18. | WRHT015 | FORK-LARGE FRONT WHEEL |
| 19. | WGRA027 | DEFLECTOR W/SCREW |
| 20. | WGRM020S
OR
WGRM020 | SPLIT BASKET (250 BALLS)
LONG BASKET (400 BALLS) |
| 21. | NO PART # | DEFLECTOR BRACKET
(WELDED TO FRAME) |
| 22. | WGRM024B | ADJUSTABLE AXLE BRACKET (2) |
| 23. | WGRM024BB | NUT & BOLT – ADJUSTABLE AXLE
BRACKET |
| 24. | WGRA025N | BALL COMB, NUT & BOLT – ATD DISCS |
| 25. | WGRA025 | BALL COMB (2–TINES ATD DISC) |
| 26. | WGRA024W
OR
WGRM024W | AXLE WASHER - ATD DISC
AXLE WASHER - NYLON DISC |
| 27. | WGRM204 | HITCH BALL |

HILLY TERRAIN SIDE SECTION SUB-ASSEMBLY

HILLY TERRAIN SIDE SECTION SUB-ASSEMBLY

PARTS LIST

- | | | |
|-----|----------------------------|--|
| 1. | WGRM036
OR
WGRA026 | RANGE MATE [®] NYLON DISC (21 DISC)
RANGE MATE [®] ATD DISC (17 DISC) |
| 2. | WGRM024 | DRUM AXLE (1" DIA. X 39"L) |
| 3. | WAHT004
OR
WRHT004 | SIDE FRAME – ATD DISC
SIDE FRAME – NYLON DISC |
| 4. | WGRA024W
OR
WGRM024W | AXLE WASHER – ATD DISC
AXLE WASHER – NYLON DISC |
| 5. | WGRM025 | FLAT BALL COMB (10 TINES) NYLON DISC |
| 6. | WGRM025N | BALL COMB, NUT & BOLT - NYLON |
| 6A. | WGRA025N | BALL COMB, NUT & BOLT – ATD |
| 7. | WGRA025 | BALL COMB (2 TINES) ATD DISC |
| 8. | WRHT005P | CONNECTOR PIN-FRAME |
| 9. | WGRA027 | DEFLECTOR W/SCREW |
| 10. | NO PART # | DEFLECTOR BRACKET
(WELDED ON FRAME) |
| 11. | WRHT005N | COLLAR, NUT & BOLT |

HILLY TERRAIN SIDE SECTION - SUB ASSEMBLY

PARTS LIST - CONTINUED

- | | | |
|-----|-----------|---|
| 12. | WRHT005C | CONNECTOR PIN COLLAR - ONLY |
| 13. | WGRM024B | ADJUSTABLE AXLE BRACKET (2) |
| 14. | WGRM024N | NUT & BOLT AXLE |
| 15. | NO PART # | ATTACHMENT BRACKET
(WELDED TO FRAME) |
| 16. | WGRM024BB | NUT / BOLT-ADJUSTABLE AXLE BRACKET |

**HILLY TERRAIN OUTSIDE
WHEEL SECTION (SMALL WHEEL)
SUB-ASSEMBLY**

HILLY TERRAIN OUTSIDE WHEEL SECTION (SMALL WHEEL)

PARTS LIST

- | | | |
|-----|----------------------------|--|
| 1. | WGRA026
OR
WGRM036 | RANGE MATE [®] ATD DISC (17 REQ.)
RANGE MATE [®] NYLON DISC (21 REQ.) |
| 2. | WGRM024 | AXLE (1" DIA. X 39"L) |
| 3. | WGRA024W
OR
WGRM024W | AXLE WASHER – ATD DISC
AXLE WASHER – NYLON DISC |
| 4. | WGRM025 | FLAT BALL COMB (10 TINES)
NYLON DISC |
| 5. | WGRM025N
OR
WGRA025N | BALL COMB, NUT & BOLT – NYLON DISC
BALL COMB, NUT & BOLT – ATD |
| 6. | WGRA025 | BALL COMB (2 TINES) ATD DISC |
| 7. | WGRM216 | COLLAR – FORK |
| 8. | WGRM005N | NUT / BOLT – COLLAR |
| 9. | WRHT007
OR
WAHT007 | OUTSIDE DRUM FRAME (NYLON DISC)
OUTSIDE DRUM FRAME (ATD) |
| 10. | WGWP7 | 1" OIL LITE BRONZE BRUSHING (2 REQ.) |
| 11. | WGRM017 | AXLE W/NUT – SIDE WHEEL SECTION |
| 12. | WGRM016W | WASHER – SMALL FRONT WHEEL |
| 13. | WGRM016 | FRONT WHEEL (SMALL) COMPLETE |

HILLY TERRAIN OUTSIDE WHEEL SECTION **(SMALL WHEEL)**

PARTS LIST - CONTINUED

14.	WGRM024W	1" WASHER
15.	WGRM015F	FORK ONLY - SMALL
16.	WGRA027	DEFLECTOR W/SCREEN
17.	NO PART #	DEFLECTOR BRACKET
18.	NO PART #	ATTACHMENT BRACKET FOR ADJUSTABLE AXLE BRACKET (WELDED TO FRAME)
19.	WGRM024BB	NUT & BOLT – AXLE BRACKET
20.	WGRM024B	ADJUSTABLE AXLE BRACKET (2)
21.	WGRM024N	NUT & BOLT AXLE

A-FRAME SUB-ASSEMBLY

A-FRAME SUB-ASSEMBLY

PARTS LIST

1. WRHT051 HITCH CARRIER
2. WRHT030 8' A-FRAME - COMPLETE (3 SECTION)
3. WRHT050 10' A-FRAME - COMPLETE (5 SECTION)

OPTIONAL

MINI FRAME FOR HILLY TERRAIN BALL PICKER SUB-ASSEMBLY

OPTIONAL

MINI FRAME FOR INLINE **HILLY TERRAIN BALL PICKER** **SUB-ASSEMBLY**

PARTS LIST

- | | | |
|-----|----------|--|
| 1. | WGRM025 | FLAT BALL COMBS |
| 2. | WGRM804 | REPLACEMENT DRUM SECTION – NYLON |
| 3. | WRHT025E | DOUBLE ELBOW – MINI FRAME |
| 4. | WRHT027 | T-SWIVEL – MINI PICKER |
| 5. | WRHT026 | PILLOW BLOCK ATTACHMENT –
MINI PICKER |
| 6. | WGRM005C | COLLARS - ONLY |
| 7. | WGRM005N | COLLAR – NUT & BOLTS |
| 8. | WRHT021 | MINI FRAME |
| 9. | WGRM806 | AXLE – MINI MATE 1” |
| 10. | WGRM024N | AXLE – NUT & BOLT |
| 11. | WGRM025N | BALL COMB NUT & BOLT |

RANGE MATE HILLY TERRAIN BALL PICKER

WARRANTY

CONGRATULATIONS ON PURCHASING YOUR NEW RANGE MATE HILLY TERRAIN BALL PICKER FROM WESTERN GOLF, INC. WESTERN GOLF HAS BEEN SUPPLYING RANGE EQUIPMENT TO GOLF COURSES AND GOLF RANGES SINCE 1956. WE TAKE PRIDE IN OFFERING QUALITY PRODUCTS AT A FAIR PRICE.

90 DAY LIMITED WARRANTY

YOUR RANGE MATE[®] PICKER IS WARRANTED TO THE ORIGINAL PURCHASER FOR 90 DAYS AFTER THE DATE OF DELIVERY. CONTACT WESTERN GOLF, INC., PRIOR TO RETURNING DEFECTIVE PART(S).

WITHIN NINETY (90) DAYS AFTER PURCHASE, WESTERN GOLF, INC. WILL REPAIR OR REPLACE, AT OUR OPTION, THIS EQUIPMENT IF SENT **PREPAID** BY THE PURCHASER TO US, AND FOUND, IN OUR JUDGMENT, TO BE DEFECTIVE IN MATERIAL OR WORKMANSHIP. CONTACT WESTERN GOLF, INC. PRIOR TO RETURNING ANY EQUIPMENT.

DISC THE PLASTIC DISCS ARE WARRANTED AGAINST BREAKAGE TO ORIGINAL PURCHASER FOR MANUFACTURES DEFECT. DAMAGED PARTS MUST BE SHIPPED **PREPAID** TO WESTERN GOLF, INC. FOR EXAMINATION AND VERIFICATION BY WESTERN GOLF, INC.

WE DO NOT AUTHORIZE ANYONE TO MAKE ANY OTHER WARRANTY OR TO ASSUME FOR US ANY LIABILITY IN CONNECTION WITH THE SALE OF THE EQUIPMENT OTHER THAN THAT CONTAINED HEREIN. ANY AGREEMENTS OUTSIDE OF OURS ARE CONTRADICTORY TO THE FOREGOING AND ARE VOID AND OF NO EFFECT.

IF YOU HAVE ANY QUESTIONS OR PROBLEMS, PLEASE CALL OUR OFFICE AT **(800) 443-4350**. THANK YOU FOR SELECTING A WESTERN GOLF, INC. PRODUCT.

72-105 CORPORATE WAY THOUSAND PALMS, CA 92276-0970

