



555GS, 545GS, 535GS, 525MAG

HIGH SPEED PERFORMANCE GRAPHITE SERIES

INSTRUCTION AND PARTS MANUAL PENN FISHING TACKLE MFG CO.



MODEL	GEAR RATIO	LINE CAP. (YDS./MONO) (MTR./DIA.)	WEIGHT (OZ.) (GMS.)
555GS	5.3-1	600/20 550/0.45	22 620
545GS	6-1	420/20 385/0.45	21 600
535GS	6-1	400/15 365/0.40	20 570
525MAG	6-1	275/15 250/0.40	18 510

NOTE: The super braided lines, with extremely thin diameters for their breaking strength, can dramatically increase the capacities of these or any other reels. Check with your local Penn dealer, and above all, use common sense if fishing with these lines to avoid any possible warranty problems.

GS SERIES QUALITY FEATURES

Graphite Frame. Provides light weight, strength and precision alignment of spool and other components. Won't corrode. Side plate rings for extra reinforcement. Corrosion resistant metal inserts protect frame from line chafe and add to overall frame strength. Stainless steel reel stand for strength and corrosion resistance.

Heavy Duty Gears. Stainless steel pinion gear and high strength bronze alloy main gear are precision machined. Special gear-forward design on GS Series reels allows oversized gears -- for heavy use and oversized fish.

Ball Bearing Smoothness. Four aircraft quality stainless steel ball bearings (six in the 525 MAG) permit long, even casts. Retrieves are smooth and quiet.

High Speed Retrieve. Fast gear ratios of up to 6-1 get your lure and line in lightning-fast. Great for specialized fishing techniques requiring high gear ratios. Gear kits are available to raise or lower the gear ratio of your Penn GS series reel. Part #513-525SP will convert gear ratio to 4.25-1. Part # 513-555SP will convert gear ratio to 5.3-1. Part # 513-545SP will convert gear ratio to 6-1. Check with your local Penn dealer or Penn's Parts Department for more information.

Aluminum Spool. Lightweight for easy casting, built strong in the Penn tradition, and anodized for protection against the elements.

Rod Clamp. Streamlined, low profile design. High strength, non-corrosive graphite composite clamp on all GS models. For those anglers using "cork tape" rods without a reel seat or for those simply wanting the extra security of a rod clamp. Be sure to install the rod clamp screws and nuts on the reel BEFORE filling it with line. If you forget to do this, then you will have to remove the left side plate and spool to get enough clearance to install the rod screws.

Insert the two rod clamp screws through the holes in the reel stand so that the screws will accept the rod clamp. Screw on the hex screws, but only finger tighten to allow for some adjustment when installing the rod clamp nuts. Depending on the diameter of your rod's reel seat, the clamp screws/hex nuts will need to be loosened to allow for some "wiggle room" when installing the rod clamp and rod clamp nuts. Install your GS reel on your rod, and then install the rod clamp and rod clamp nuts onto the rod clamp screws. Use the Penn wrench/screwdriver to tighten up the hex nuts and rod clamp nuts. Due to limited clearance, it may be easier for you to first tighten the hex nut closest to the gear box before installing the rod clamp. Tighten all nuts securely, but be sure not to overtighten.

OPERATING FEATURES

Sturdy Penn Handle. Powerful, counterbalanced, corrosion resistant shaft with large, comfortable soft grip knob. Penn GS reels feature exclusive two-position handle for leverage or speed. GS handles are shipped in the speed position. To adjust handle for power or speed setting, first carefully remove handle lock screw, handle nut lock cap and handle nut. See exploded view. Tighten down star wheel so bottom of flat on gear stud will be exposed when you remove handle. Remove handle from gear stud and carefully install in desired position. Keyed hole on handle shaft closer to soft grip knob is speed position; keyed hole closer to counterbalance is power position. Make sure flats in keyed hole are pushed down to bottom of flats on gear stud. Re-install handle nut, lock cap and screw.

The 525MAG features an "Infinite Anti-Reverse" for rock-solid hook-sets. One-way roller bearing design prevents handle kick-back.

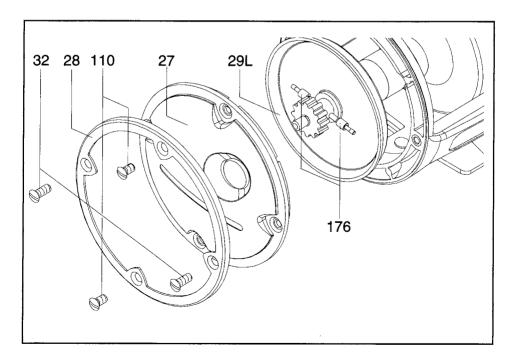
Classic Star Drag. Powerful and smooth, due to Penn's revolutionary HT100™ drag material. Resists effects of water, oil, salt and other contaminants. Special collar under star wheel helps keep those contaminants out. Turn star wheel clockwise (down) for more drag, counterclockwise (up) for less drag. Fine threads on star wheel allow for an ultra-wide range of drag settings. All GS series reels now feature the Versa-Drag™ function, which allows a choice of a light, medium or heavy drag range. See the Versa-Drag™ instructions under the Care and Lubrication section.

Eccentric Lever. Push lever forward (toward "retrieve" arrow) to engage gears, pull backward (toward "free spool" arrow) for free spool. Extra strong eccentric spring system in GS series makes for crisp, positive shifting.

Click Warning Device. Located on the left side plate of the reel, slide button toward center of side plate to engage click, push back to dis-engage click. Acts as a signal to alert you when a fish is taking line or as an anti-backlash aid when bait fishing or trolling. Use sparingly to prevent premature wear. Don't make the mistake of fishing with the click on all of the time - unless you want to be marked as an amateur!

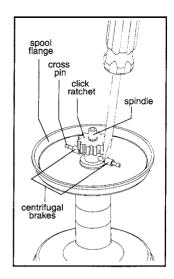
Spool Control (All GS Models). Regulates how easily the spool turns for casting. Mechanical spool tension control is located in center of right side plate. To adjust for casting, first fill your GS reel with good quality fishing line (tie your arbor knot around the knurls on the spool's arbor to prevent your line from slipping) and mount it on a properly matched rod. On the end of your line, attach a lure or weight representing the general weight you will be using. Hold the rod at an angle just above horizontal and put the reel in free spool. Allow the weight to fall to the ground and adjust the spool tension control (clockwise for more control, counter-clockwise for less control) so that the weight falls easily but the line does not backlash. Now try a cast suitable to your type of fishing. Depending on the nature and style of your particular casting, some trial-and-error casting and adjustment sequences are recommended to achieve backlash-free casting. Many experienced anglers adjust their spool so that they can barely feel an end-to-end play of the spool. Test by grasping spool with thumb and index finger and moving spool back and forth between side plates. For finer casting controls, see the following section on casting controls.

Casting Controls (555GS, 545GS, 535GS). Located inside the left side plate assembly on the 555GS, 545GS and 535GS is the GS Series centrifugal cast braking system. The 555GS, 545GS and 535GS Series reels are shipped from the factory with the centrifugal casting control dis-engaged. To activate, follow the steps below. When the casting control is engaged, during a cast, two opposing brakes on a cross pin attached to the spindle rotate outward to a drum flange in the left side plate. This helps reduce excessive spool speed and overruns. To dis-engage this system, push the brakes back toward the spindle until they snap into the recess in the pin.



1 - Remove left side plate by removing the four side plate screws. There are two long screws (frame post screws, key # 32), and two short screws (on top and bottom of the reel, key # 110). Remove left side plate and ring (key # 27, 28). If you so desire, you can carefully remove spool assembly (key # 29L).

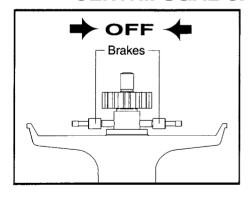
2 - Note the cross pin on the inside of the spool's left flange, underneath the click ratchet. Two small opposing brakes (key # 176) are in the recesses closest to the spindle, which is the dis-engaged position. To engage, move each brake outward, toward the spool flange, until they snap into the outer recesses. These brakes are held captive on the cross pin, no matter whether they are engaged or not. You cannot accidentally pull them free, unles you use excessive force. Use either a small screwdriver or your fingers to move the brakes.

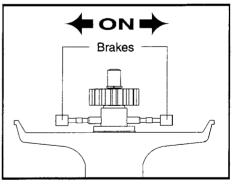


Make sure brakes are not fully extended on ends of cross pin. See illustration. Otherwise, you may damage cross pin when re-installing side plate..

3 - Re-install spool, side plate, ring and long and short side plate screws. Tighten screws securely, but be sure not to over-tighten. To dis-engage brakes, follow above procedure, but push brakes into recesses on the cross pin closest to the spindle.

CENTRIFUGAL CASTING CONTROL





CASTING CONTROL (525MAG only). For the finer casting control needed for extra-long casting distances, Penn features its exclusive MAG Control in its 525MAG. First follow the instructions for adjusting the spool pressure control for all GS models. Adjust the spool so that you can barely feel an end-to-end play of the spool. Test by grasping spool with thumb and index finger and moving spool back and forth between side plates. Now use the magnetic control slide to fine tune your 525MAG.

The Penn MAG Control features four rare earth magnets, which emit a magnetic field. This magnetic field, through a series of complex molecular interactions, alters the rotational speed of any metal passing through its field. Thus, the rotation of the 525MAG spool will be affected by this magnetic field. Sliding the MAG Control from 0 up to 8 will bring the magnets closest to the spool, providing maximum control of the spool's speed by slowing it down. Sliding the MAG Control from 8 down to 0 will move the magnets farther from the spool, providing less control and allowing the spool to revolve fast. The higher the number, the more the magnetic control slows the speed of the spool (higher number = slower spool speed = more control). The lower the number, the less the magnetic control there is on the spool, so the spool turns faster (lower number = faster spool speed = less control).

With the spool tension control properly adjusted (operating feature 1) and with the MAG Control slid up to 8 (slow), try a cast suitable to your type of fishing. If you feel that the 525MAG's controls are set too tightly and they are hampering your casting distance, slightly decrease either the spool tension control or slide the MAG Control toward the 0 (Fast) setting. Use the spool tension control as a general, overall control, and the MAG Control, anywhere from slow to fast) as a fine tuning control.

Depending on the nature and style of your particular casting, some trial-anderror casting and adjustment sequences are recommended to achieve backlashfree casting. There are many different casting techniques that vary according to regions, conditions and species sought. All successful casters aim for control of the spool's speed during a cast, and they always use a smooth delivery and follow through while casting.

CAUTION: Use extreme care when casting this or any conventional or spinning reel. Follow procedures detailed here on how to eliminate or reduce backlashes on your Penn GS Series reel. Under certain conditions, backlashes can cause the lure, weight or terminal tackle to spring back toward the caster, posing a potential threat of bodily harm. Treat your terminal tackle as a potentially harmful projectile when casting. To ensure the safety of yourself and others, be aware of your surroundings, both in front of you and behind you, while casting this or any fishing reel.

After fishing in salt water, wipe or wash reel with a fine spray of fresh water to remove any accumulated salt deposits. Dry excess moisture and sparingly lubricate all exposed areas. Many fishermen use a pressurized spray oil for quick, easy protection. Store reel in a cool, dry place. Do not store in a plastic bag, as condensation may develop and damage the reel. Periodically examine your reel and tighten any loose screws and fittings. Overhaul reel at least once a season.

Frequently lubricate all frictional points. For best results, use Penn's reel lube and a good quality waterproof grease, such as Penn's Muscle Grease. Remember, only a few drops or dabs are sufficient in most cases. Do not overlubricate!

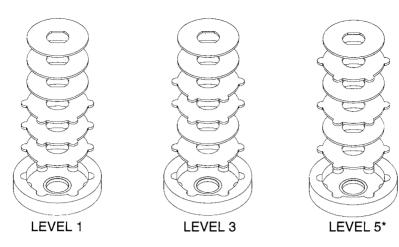
GS High Performance Oil. Since GS reels are high speed performance models, both spool bearings (keys 40 and 26) are lubricated with an exclusive high performance oil for superior castability. In order to maintain your GS reel at its peak performance, Penn recommends frequent lubrication of these precision stainless steel ball bearings located on either side of the spool.

Here's how to keep your GS reel casting to its fullest potential: first, refer to the exploded view and remove the left side plate screws (keys 32 and 110), left side ring (key 28) and left side plate (key 27). Locate the ball bearing in the center of the inside left side plate, wipe off any excess lubricant, then add ONLY A DROP of the special lubricant provided with your GS reel between the inner and outer races of the ball bearing. Work the inner race back and forth to distribute the lubricant evenly, then wipe off any excess. Next, remove the spool and locate the ball bearing in the inside center of the frame's right side. Wipe off any excess lubricant and add ONLY A DROP OR AT MOST TWO DROPS between the inner and outer races of this bearing. As above, work the inner race back and forth to work the lubricant in, then wipe off any excess. Note that the 525 MAG contains two additional ball bearings in the spool, which also need lubrication as described above. While you have your GS reel (not 525 MAG) apart, you may want to check or adjust the reel's adjustable casting control to suit your particular fishing technique. Reassemble spool and left side plate assembly. Remember, frequent lubrication of these precision bearings will keep your GS reel operating and casting in tip-top condition. Good casting!

For a more thorough, internal lubrication of your Penn GS Series reel, refer to the exploded view. Remove both side plate assemblies and spool for lubrication. Use only a few dabs to lubricate internal frictional surfaces. Lubricate main and pinion gear by sparingly smearing the teeth with a good quality waterproof grease, like Penn's Muscle Grease. When re-assembling, tighten screws securely, but be sure not to over-tighten and risk stripping threads.

VERSA-DRAG™ FUNCTION ON GS SERIES REELS

Penn's most recent innovation in the GS series is its Versa-Drag[™], which allows you to pre-adjust the drag range before fishing. By rearranging the sequence of keyed metal washers and eared friction washers, you can obtain a light, medium or heavy drag range. See illustration. To access the drag, use the exploded view as a guide. Remove the handle and right side plate assembly to access the drag washers. Work in an organized and well-lit area, and pay attention to the order in which you remove the parts. When reassembling, tighten all screws firmly, but do not overtighten and risk stripping the threads.



- Light Drag Range

- Medium Drag Range

- Heavy Drag Range

- 2-4 lbs. - 4-8 lbs.

- 6-12 lbs.

*All GS Series reels are shipped from the factory in the heavy drag range. Whether you rearrange the drag washers for a light or medium drag range, or leave your GS reel in the heavy range, rest assured Penn's proven HT-100™ drag system will deliver the smoothest performance possible, fish after fighting fish.

PENN SERVICE & PARTS PROCEDURE

Unlike many import companies, Penn prides itself in providing fast and excellent service at reasonable prices. This is possible because most Penn Products are made in the U.S.A. and Penn maintains a policy of designing models to maximize Product and part continuity. Penn does not change Products solely for the sake of change, but only when the change results in an improved Product. Many Penn Products have been in service for 40 years or more. Our customers marvel at their ability to easily obtain replacement parts to keep those models in service.

For the fastest repair service and spare parts, we suggest you contact your local Penn dealer. You may also return your Penn Product for factory service to one of the Penn Warranty Centers. Send it insured and include a short note describing the service you want. To avoid errors, make sure that your name and return address appear neatly and clearly on both your outside package and your note. Allow sufficient and reasonable time for Penn to receive and service your Product. Avoid our spring rush by sending your Penn Products in for service and repair during our fall or early winter.

Penn will notify you that your Product has been serviced, providing a reasonable charge for parts, labor and return postage, or you can request major credit card payment. Provide card type, name on card, card number, expiration date and daytime telephone number when paying by credit card.

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www.pennreels.com

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HOW TO ORDER PENN REEL PARTS

- By mail, please list model for which you are buying parts and order parts by name and number.
- 2. Include your legible, printed name, address and daytime telephone number (or e-mail or fax number if outside U.S.A.) with your order.
- 3. Penn will then send you an invoice, showing part prices plus shipping and handling charges.
- There is a minimum part order of \$2.00 and a shipping and handling charge of \$3.00 on a minimum order.
- Upon receipt of your payment (check or money order only), your order will be shipped to you via parcel post, air parcel post or U.P.S.
- 6. For faster service, you may also use your major credit card to mail in parts orders. Specify major credit card, account number and expiration date when ordering parts. Be sure to include information requested in Steps 1 & 2.
- You may also use your major credit card to place parts orders over the telephone. Call the Penn Parts Department at (215) 229-9415 between 8:30 and 4:30 pm U.S. East Coast time.
- 8. For fastest service, see your local Penn dealer. Check telephone directory or our site (www.pennreels.com) for dealer nearest you.

