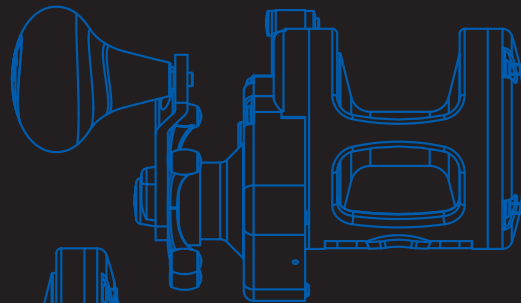


TORQUE

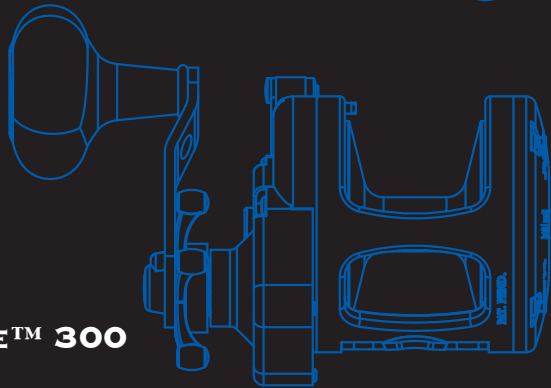
$$\tau = R \times F$$

TORQUE = ROTATION X FORCE

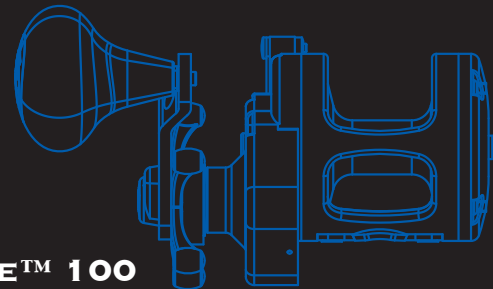
TORQUE™ 200



TORQUE™ 300



TORQUE™ 100



THE NEW PENN INTERNATIONAL® TORQUE™ SERIES

**THE ULTIMATE IN HIGH SPEED
FISH FIGHTING FORCE!**

MADE IN THE U.S.A.

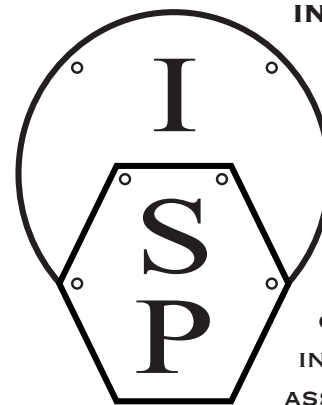


MATERIAL NO.		QTY. PER PIECE	QTY. REQ.
PENN FISHING TACKLE MFG. CO. PHILADELPHIA, PA. 19132			
NAME OF PART OR TOOL			
MATERIAL: International Torque Series			
MATERIAL SPEC: Highest Quality			
FINISH: Superior			
ALL PARTS TO CONFORM TO PENN. PROCESS SPECIFICATION PENN. PROCESS WILL CONTROL ALL RELEVANT REQUIREMENTS FOR FEATURES OR PARTS CONSTRUCTION. CONTROLLED BY PENN. PROCESS SPECIFICATION.			NO. REQ. PER UNIT
TOLERANCES UNLESS OTHERWISE SPECIFIED DECIMAL: ±.005 ANGULAR: ±1/2°			ENGINEERING DRAWING NO.
ALL MACHINED SURFACES BREAK ALL DIMENSIONARY SHARP CORNERS AND EDGES			MAKES PARTING
SCALE	DRAWN BY	DATE	CHECKED

INNOVATION, A NEW REEL CONCEPT IS BORN

INTRODUCING THE ULTIMATE BRAID-CAPABLE, STAR DRAG REEL FOR THE BLUEWATER ANGLER.

AFTER A LONG DAY OF FISHING OFF THE FLORIDA COAST TESTING PRODUCTS, A PENN ENGINEER AND PENN'S CEO WERE ENGAGED IN CONVERSATION. FOR YEARS, REEL COMPANIES MIMICKED PENN'S FOUNDER OTTO HENZE'S ORIGINAL 1933 PATENT OF USING A BRIDGEPLATE TO MOUNT THE GEAR STUD AND MAIN GEAR. AT THE TIME THIS WAS INNOVATION AND CREATIVITY AT ITS FINEST. HOWEVER, WITH THE GREAT ADVANCES IN MATERIALS AND MACHINING CAPABILITIES, THE QUESTION WAS POSED, WHY WERE COMPANIES USING DECADES OLD TECHNOLOGY WHEN A BETTER, STRONGER, AND MORE RELIABLE DESIGN COULD BE USED? A NEW, REVOLUTIONARY CONCEPT WAS QUICKLY SKETCHED ON THE BACK OF A NAPKIN AND A NEW PATENT WAS BORN. FROM THIS INNOVATIVE AND REVOLUTIONARY PATENT, PENN IS PROUD TO INTRODUCE A TRULY UNIQUE REEL DESIGN, AN INTEGRATED SIDE PLATE. THIS INTEGRATED SIDE PLATE (ISP) SERVES AS THE BASIS FOR A NEW SERIES OF REELS WHICH IS INTRODUCED OVER THE NEXT FEW PAGES. BUT BEFORE ITS INTRODUCTION, A BIT MORE DISCUSSION OF THE INTEGRATED SIDE PLATE DESIGN IS WARRANTED.



INNOVATION

INTEGRATED SIDE PLATE, THE NEW, UNIQUE, AND PATENTED DESIGN INTEGRATES RIGHT SIDE PLATE COMPONENTS INTO ONE RIGID ASSEMBLY. THIS

INNOVATION ENABLES

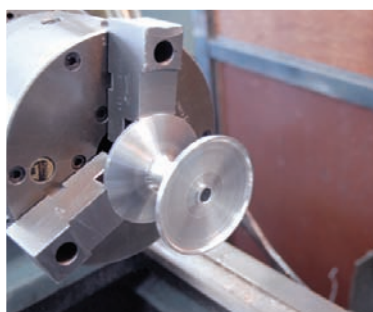
THE REELS TO ACHIEVE SUPER-HIGH DRAG CAPABILITIES WITH FEWER PARTS THAN A TRADITIONAL REEL. CRANK UP THE DRAG AND THE MACHINED SIDE PLATE ABSORBS ANY LOAD YOU CAN DISH OUT, ALL WITHOUT CAUSING ANY BINDING TO THE MAIN AND PINION GEAR. GEARS, PINIONS, AND HANDLE MAINTAIN PERFECT ALIGNMENT NO MATTER HOW HEAVY THE LOAD.

DESIGN

TRADITIONAL BRIDGE DESIGNS DO NOT LEND THEMSELVES FAVORABLY TO HIGH-SPEED GEARING AS THE INCREASED LOAD TENDS TO DISTORT AND MISALIGN THE GEAR STUD. SOME COMPANIES "MANUFACTURED" SLOP INTO THEIR GEAR STUDS, ALLOWING THE GEAR STUD TO SEMI-FLOAT AND MAINTAIN SOME ALIGNMENT, OR IS THAT MISALIGNMENT, WITH THE PINION AS LOAD AND PRESSURE INCREASED. WITH THE ISP DESIGN, HIGH-SPEED GEARS AND PINIONS ARE UNAFFECTED BY FORCE AND LOAD, THEREBY MAINTAINING PERFECT ALIGNMENT WITH THE PINION REGARDLESS OF THE PRESSURES EXERTED ON THE REEL. THE PATENTED INTEGRATED SIDE PLATE DESIGN ALLOWS FOR AN OVERSIZED, SUPER HIGH-SPEED GEAR FOR A UNIQUE COMBINATION OF POWER AND SPEED.



CUTTING THE SIDEPLATE FOR THE PROTOTYPE ISP CONCEPT



PENN TOOL MAKER AT WORK, PROTOTYPING THE INTEGRATED SIDEPLATE CONCEPT

PENN ENGINEERING

AS INNOVATIVE AND FORWARD-THINKING AS THE INTEGRATED SIDE PLATE DESIGN CONCEPT AND PATENT IS, INCORPORATING THIS DESIGN INTO A USEFUL AND MARKETABLE PRODUCT TOOK SIGNIFICANT STRIDES AND DEVELOPMENT BY THE PENN ENGINEERING DEPARTMENT. PENN ENGINEERS ARE AN INTEGRAL COMPONENT AND DRIVING FORCE BEHIND THE SUCCESS AND VIABILITY OF PENN PRODUCTS.

WHEN YOU HAVE THE FISH OF A LIFETIME HOOKED UP, WHAT GEAR WOULD YOU FEEL MORE COMFORTABLE WITH? THE PENN ISP ENGINEERED DESIGN ALLOWS FOR A LARGER GEAR ENGAGEMENT WITH THE PINION, ENSURING UNMATCHED CRANKING POWER.



GEAR OF A COMPETITOR'S MULTI-CAM \$700 LEVER DRAG REEL. WHEN WE WENT TO MEASURE THE HARDNESS, THEY WERE SO SOFT WE COULDN'T EVEN MEASURE IT ON THE SAME SCALE AS OUR GEAR.

GEAR OF A COMPETITOR'S STAR DRAG REEL. JUST AS SOFT AS THE \$700 REEL'S GEAR AND 40% SMALLER IN THICKNESS THAN OUR GEAR. THIS JUST DOESN'T CUT IT AT PENN.

GEAR OF THE PENN TORQUE. STAINLESS STEEL, AND AN INCREDIBLE AMOUNT OF ENGAGEMENT. DON'T BE FOOLED BY CLAIMS OF SMOOTHER GEARS. OURS FEEL SMOOTH WITH GREAT STRENGTH.

INTERNATIONAL® TORQUE™

- LIGHTWEIGHT AND STRONG ALUMINUM ALLOY; FORGED & MACHINED FRAME, SPOOL, AND SIDE PLATES
- INFINITE ANTI-REVERSE ROLLER BEARING PLUS DOUBLE DOG SYSTEM BACKUP
- PRECISION MACHINED STAINLESS STEEL MAIN GEAR (6.3:1 GEAR RATIO)
- HEAT-TREATED STAINLESS STEEL PINION GEAR FOR STRENGTH
- VERSA-DRAG, MULTIPLE DRAG-STACK ARRANGEMENT
- DISENGAGING PINION FOR SUPERIOR FREE SPOOL
- OVERSIZED SOFT-GRIP POWER HANDLE
- FIVE STAINLESS STEEL BALL BEARINGS
- STAINLESS STEEL REEL STAND
- ONE-PIECE, OPEN-TOP FRAME
- PENN POWER HANDLE



PENN CEO
ON THE WATER
“TESTING”
THE NEW
TRQ300,
EASILY
HANDLING
A QUALITY
AMBERJACK.

**Braid
Ready**



INTERNATIONAL® TORQUE™ REELS

	MONO CAPACITY	BRAID CAPACITY	NUMBER OF BEARINGS	MAX DRAG	GEAR RATIO	LINE RETRIEVE PER CRANK (IN)	WEIGHT (OZ)
TRQ100	450YDS/12LB	550YDS/30LB	5+1BB	25	6.3:1	31	16
TRQ200	450YDS/16LB	450YDS/50LB	5+1BB	32	6.3:1	41	20
TRQ300	360YDS/30LB	360YDS/80LB	5+1BB	32	6.3:1	48	29



THE FIRST FISH CAUGHT ON THE NEW PENN TORQUE, A 100-PLUS LB SPINNER SHARK CAUGHT OFF THE COAST OF FLORIDA.

PENN PRO STAFF, GREG BOGDAN, COMMENTED AFTER CRANKING IN A FEW SPINNER SHARKS BETWEEN 80 AND 150-POUNDS, THE PENN TORQUE WAS THE MOST VERSATILE AND POWERFUL REEL HE HAS EVER FISHED WITH. THIS REEL HAS UNBELIEVABLE TORQUE, CRANKING POWER AND DRAG CAPABILITIES. WONDER WHERE WE GOT THE IDEA FOR THE NAME?



BORROWING THE "LOOK" OF ANOTHER ICONIC PENN REEL, THE PENN INTERNATIONAL, THE REVOLUTIONARY TORQUE INCORPORATES AN INNOVATIVE DESIGN TO PRODUCE THE STRONGEST, MOST RELIABLE STAR DRAG REEL ON THE MARKET. A FULL METAL BODY, COUPLED WITH AN OVERSIZED STAINLESS GEAR AND POWER HANDLE PRODUCE INCREDIBLE CRANKING POWER AND PERFORMANCE. WITH A DISENGAGING PINION, CASTABLE FREE SPOOL, AND UNLIMITED POWER, THE PENN TORQUE IS AN IDEAL REEL FOR JIGGING (WEST-COAST YO-YOING), FREELINING BAITS, AND JUST ABOUT ANYTHING ELSE YOU CARE TO TRY. AND YES, IT WILL SWIM A JIG BETTER THAN ANYTHING OUT THERE.



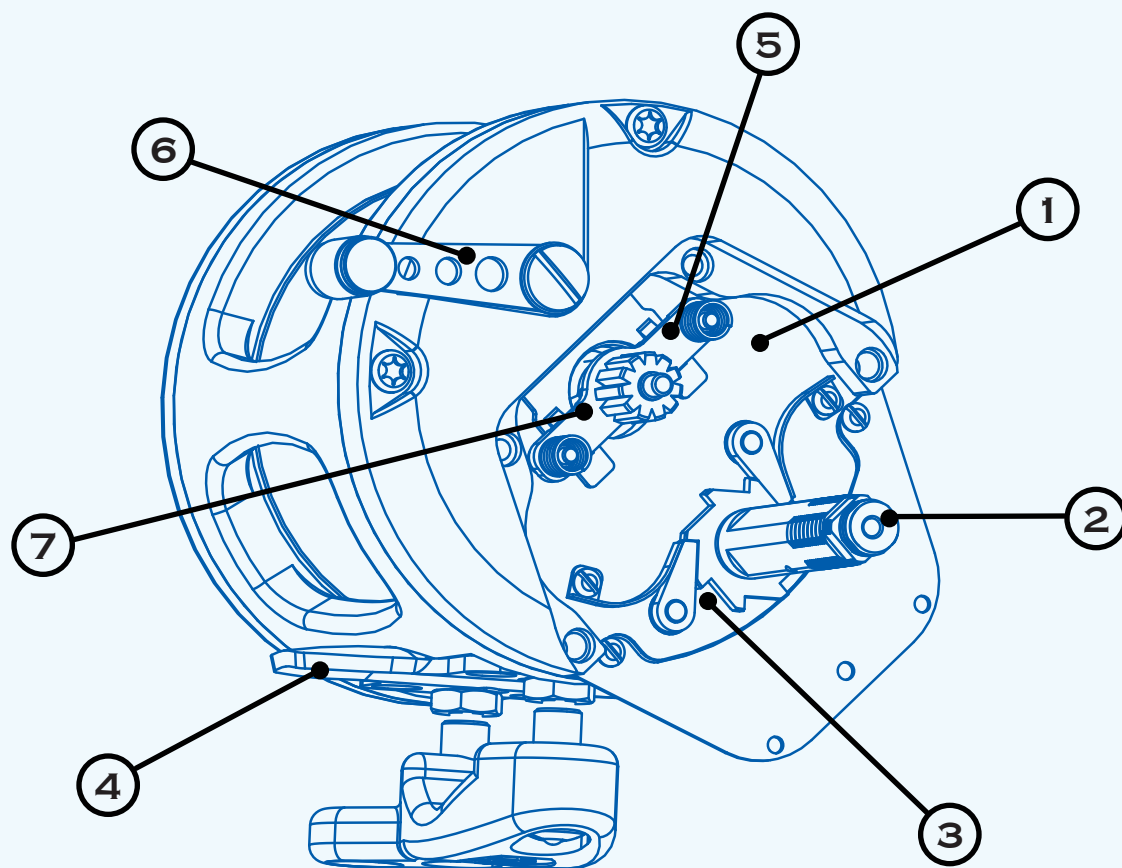
TRQ100



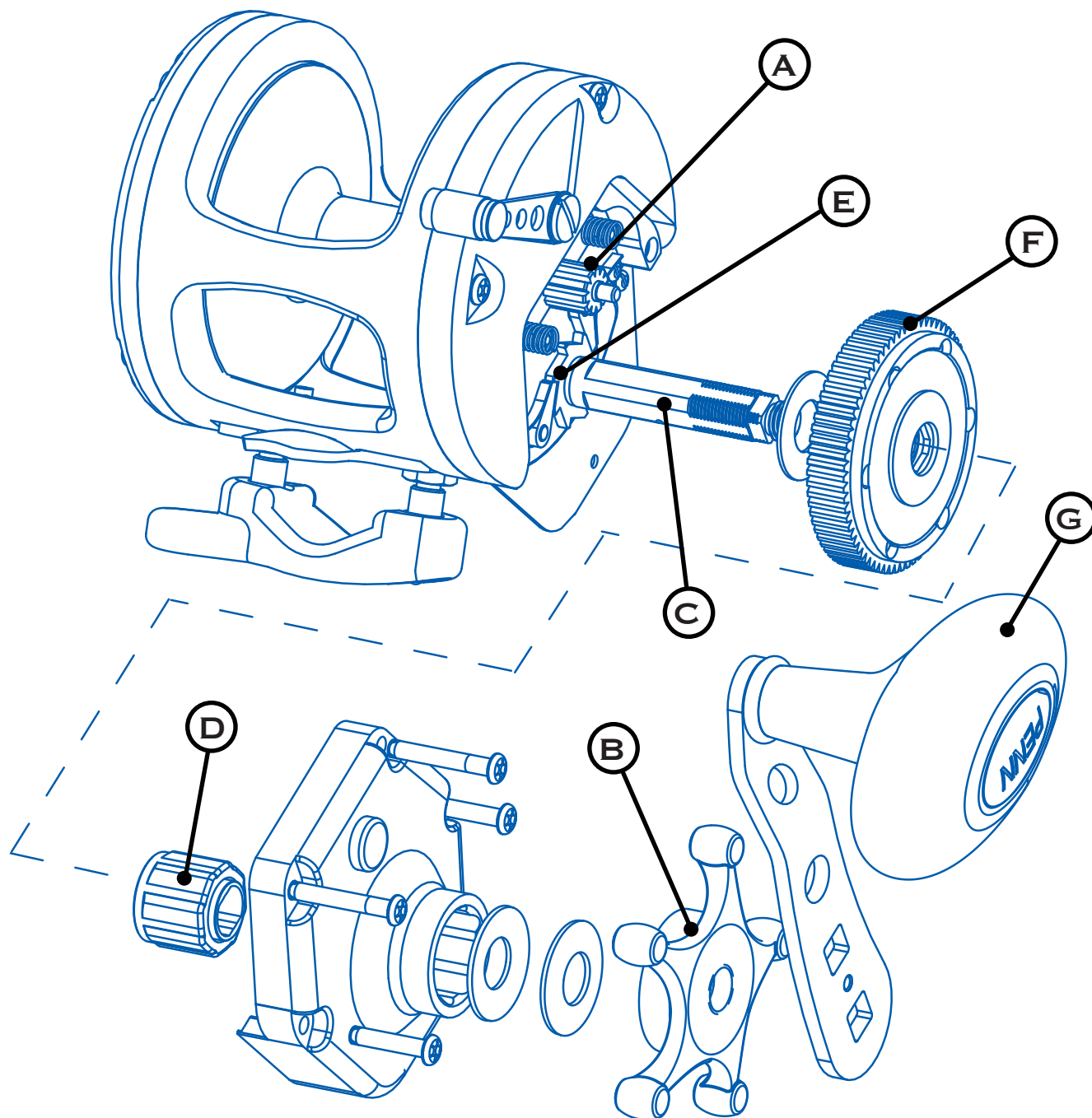
TRQ200



TRQ300



- ① **NEW AND PATENTED INTEGRATED SIDE PLATE (ISP) DESIGN.** THIS UNIQUE DESIGN INCORPORATES THE BRIDGE INTO A ONE-PIECE, FULLY MACHINED ALUMINUM SIDE PLATE FOR SUPERIOR STRENGTH AND RIGIDITY.
- ② **STAINLESS STEEL GEAR SLEEVE AND GEAR STUD.** THE DESIGN INCORPORATES THE USE OF STAINLESS STEEL WHEREVER THERE ARE STRONG FORCES AT PLAY. A TYPICAL STAR DRAG REEL MAY USE BRASS OR BRONZE.
- ③ **INTERNATIONAL STYLE DOUBLE DOG RATCHET SYSTEM.** THE REEL INCORPORATES THE TRIED AND TRUE DOUBLE DOG RATCHET SYSTEM FOUND IN PENN'S INTERNATIONAL BIG GAME REELS. THE DOUBLE DOGS SERVE AS A BACK-UP TO A POWERFUL ONE-WAY ROLLER BEARING.
- ④ **STAINLESS STEEL REEL SEAT.** STAINLESS STEEL REEL SEAT FOR STRENGTH AND RIGIDITY.
- ⑤ **HARDENED STAINLESS STEEL PINION GEAR.** HARDENED PINION GEAR FOR ADDED STRENGTH AND SUPERIOR WEAR RESISTANCE.
- ⑥ **STAINLESS STEEL ECCENTRIC LEVER.** THE ECCENTRIC LEVER HAS BEEN MADE OF STAINLESS STEEL TO PROVIDE SUPERIOR STRENGTH WHEN ENGAGING THE REEL INTO GEAR UNDER LOAD WITH A FISH TAKING LINE FROM THE REEL
- ⑦ **FULLY DISENGAGING PINION GEAR.** THE HARDENED STAINLESS STEEL PINION GEAR DISENGAGES FOR SUPERIOR CASTING ABILITY.



- (A) DISENGAGING STAINLESS STEEL PINION
- (B) STAINLESS STEEL STAR
- (C) STAINLESS STEEL GEAR STUD AND SLEEVE
- (D) STRONG STAINLESS STEEL ONE WAY ROLLER BEARING FOR INFINITE ANT-REVERSE
- (E) DOUBLE DOG ANTI-REVERSE BACKUP SYSTEM
- (F) STAINLESS STEEL MAIN-GEAR
- (G) OVER-SIZED RUBBER HANDLE KNOB