

# **TORSPEC™ EDDY CURRENT BRAKE**

## **INSTALLATION AND MAINTENANCE INSTRUCTIONS**

### **TORSPEC MODEL 100TCD/5 METRIC**



#### **WARNING**

*Disconnect all incoming power before working on this equipment.  
Follow power lockout procedures.  
Use extreme caution around electrical equipment.  
Do not touch the circuit board while power is applied.*

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# TORSPEC MODEL 100TCD/5 DISMANTLING INSTRUCTIONS

**CAUTION** - BE SURE TO DISCONNECT POWER AND FOLLOW LOCK-OUT PROCEDURES AS SPECIFIED BY LAW ***BEFORE*** OPENING ANY TERMINAL BOXES OR TOUCHING ANY WIRING.

D1: Open the terminal box and disconnect the tach and coil wires. **EXTREME CAUTION** should be exercised with the small wires going to the tacho generator, as they can be easily broken. *Hint: (Look for broken wires or poor connections.)*

D2: Remove the back plate and grilles from the side of the casing.

D3: Remove the tube from the rotor hub. Remove the rotor hub from the shaft.

D4: Unbolt the stator body assembly and remove from casing.

D5: Remove the polewheel. Remove rubber tube from the coil and tach wires.

D6: Remove coil retainer ring, cut silicon sealant holding the coil to the stator body and remove the coil. **Extreme caution should be exercised as not to break coil former.**

D7: Remove the output cover or output flange from the stator body assembly.

D8: Remove tacho generator from the stator body assembly and remove rear shaft circlip.

D9: Press the shaft out of the stator body from the rear.

D10: Remove tach magnet and star tolerance ring from the shaft.

D11: Remove the front bearing from the shaft.

D12: Remove the rear bearing retaining ring from stator.

D13: Remove the rear bearing.

# **TORSPEC MODEL 100TCD/5 ASSEMBLY INSTRUCTIONS**

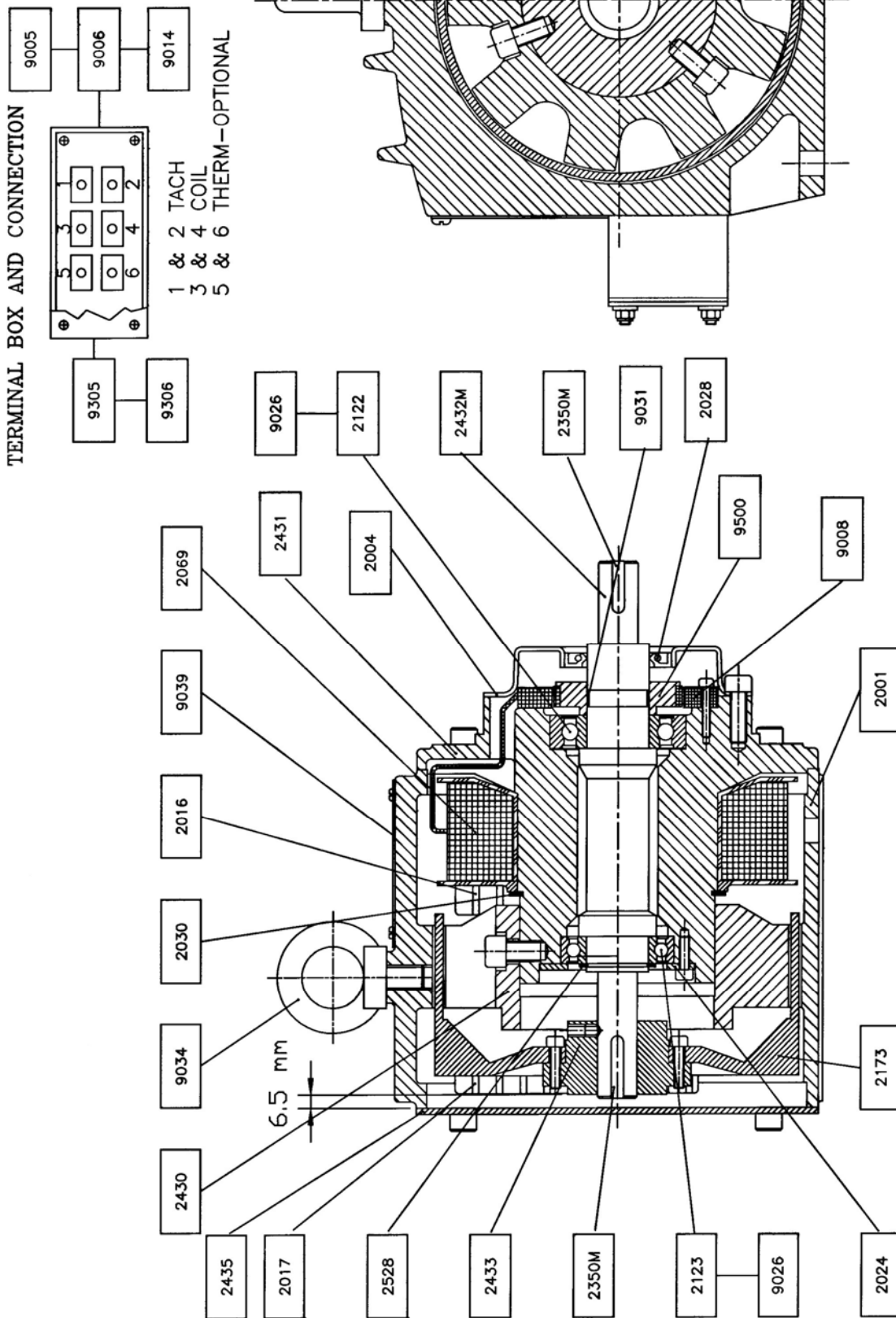
## **USE A THREAD LOCKING COMPOUND ON ALL BOLTS**

- A1: Press the pre-greased rear bearing into the rear of the stator body. Fit the rear bearing retainer plate using 4- M5X12 cap head bolts.
- A2: Press pre-greased front bearing onto the output end of the shaft. Fit the star tolerance ring to the shaft and press the shaft into the stator body through the output end of stator body. Fit circlip to the rear of the shaft and press the tach magnet onto the star tolerance ring on the shaft. Assemble tach generator to stator body using 4- M4X16 cap.
- A3: Fit the oil seal to the tach cover using 4- 8X20 cap head bolts. If output flange is to be assembled, fit the oil seal to the output flange and assemble using 4- M8X30 cap head bolts and sealant on mating faces.
- A4: Apply silicone sealant to the inner face of the stator body flange and fit coil onto the stator body. Secure with coil retainer ring. Fit rubber tube to tach wire and coil wire. Tie off with waxed twine and silicon the end at coil.
- A5: Fit the polewheel to the stator body using 1- M10X20 cap head bolt.
- A6: Fit the stator body assembly to the casing. Ensure that coil and tach wires go through the hole in the side of the casing and bolt the stator assembly to the casing using 4-M8X20 cap head bolts.
- A7: Fit the rotor hub to the shaft (rear of unit). Align grub screw hole with existing dimple on shaft and secure using 1- M6X6 flat grub screw and 1- 6X6 cone grub screw dimple shaft. The distance between the hub outside surface and the casing outside surface should be 6.50 mm. Refer to the drawing. Fit the tube to the rotor hub and secure using 6-M5X20 cap head bolts. Spin the output shaft to check for rub on tube to casing and polewheel.
- A8: Fit the back plate to the casing using 4-M10X16 cap head bolts.
- A9: Fit the terminal block and connect tach and coil wires. Fit terminal box.
- A10: Fit grilles to the casing using 16- M5X8 slotted pan head screws.

## TORSPEC MODEL 100TCD/5 PARTS LIST

PART NO.	DESCRIPTION
2001	CASING
2004	TACH COVER FIXED BY 4-M8X20 SOCKET HD. CAP
2016	GRILLES SMALL INLET FIXED BY 4-M5X8 PAN HD. SLOTTED
2017	GRILLES LARGE OUTLET FIXED BY 4-M5X8 PAN HD SLOTTED
2022	BEARING FRONT 6206Z
2023	BEARING REAR 6006Z
2024	BEARING REAR RETAINER PLATE FIXED BY 4-M5X12 SOCKET HD. CAP
2028	OIL SEAL 30X52X7
2030	COIL RING
2069	HP COIL FOR 4/.75KW, 4/1.1KW, 2/1.1KW, 2/1.5KW, 2/2.2KW FIXED BY PART NO 2030 CODES H10, H20, N1, N2
2073	TORQUE TUBE/ROTOR ASSY. 4 POLE FIXED BY 4-M5X20 SOCKET HD. CAP
2430	POLEWHEEL 1-M10X20SHC
2431	STATOR BODY ASSY. FIXED BY 4-M8X20 SOCKET HD. CAP
2433	ROTOR HUB 19MM FIXED BY 1-M6X10 CUP POINT GRUB SCREW, 1-M6X10 CONE POINT GRUB SCREW
2435	BACK PLATE FIXED BY 4-M10X20SHC
2501	HOSEPROOF COVER LEFT HAND FIXED BY 4-M5X12 SOCKET HD. CAP BOLT
2503	HOSEPROOF COVER RIGHT HAND FIXED BY 4-M5X12 SOCKET HD. CAP BOLT
9005	TERMINAL BOX FIXED BY 4-M5X60 STUDS, 4-M5 RUBBER WASHERS, 4-M5 FLAT WASHERS, M5 LOCKNUT
9006	TERMINAL BOX LID X2
9008	TACHO GENERATOR ASSY. FIXED BY 4-M4X16 SOCKET HD. CAP, 4-M4 FLAT WASHER
9014	TERMINAL BOX GASKET X 3 FOR CODES H10, H20, N1, N2, T1, T2
9026	BEARING GREASE UNIREX N3 HIGH TEMPERATURE GREASE OR EQUIVALENT
9031	STAR TOLERANCE RING
9034	EYEBOLT M12
9039	NAMEPLATE FIXED BY 4-M6X3.5MM TAPPING SCREWS
9305	TERMINAL BLOCK 4 WAY FIXED BY 1-M5X16 SOCKET HD. CAP
9306	TERMINAL BLOCK 6 WAY FIXED BY 1-M5X16 SOCKET HD CAP CODES B?, Y?
9500	TACH ARMATURE FIXED BY PART NO. 9031
2314M	D80 OUTPUT FLANGE FIXED BY 4-8X30 SOCKET HD. CAP BOLTS
2350M	KEYSTOCK METRIC D80 6X6X25 X2
2432M	METRIC KEYSTOCK SHAFT

# TORSPEC MODEL 100TCD/5 PARTS DIAGRAM



NOT SHOWN (OPTIONAL):  
2301, O3 DEBRIS COVERS  
2115N OUTPUT FLANGE