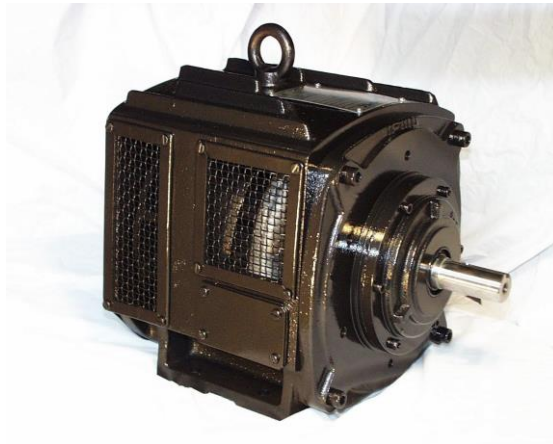


# **TORSPEC™** EDDY CURRENT BRAKE INSTALLATION AND MAINTENANCE INSTRUCTIONS

## **TORSPEC MODEL 225TCD/6 MKIII 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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*Manufacturers & Suppliers of World Class Quality Variable Speed Drives & Controls*

# TORSPEC MODEL 225TCD/6 MKIII 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 drive wires. **EXTREME CAUTION** should be exercised with the small wires going to the tach generator, as they can be easily broken.  
*Hint: (Look for broken wires, or poor connections.)*
- D2: Remove the backplate by removing four bolts and grilles, then remove set screws from torque tube assembly to allow the torque tube to slide off the shaft.
- D3: Remove the four bolts holding the output assembly to the main casing. Remove the output assembly while feeding wires through the hole. Once the wires are free, the output assembly can be completely removed.
- D4: The polewheel is removed by removing 2 bolts in the side of the stator body.
- D5: The coil is held in place by circlip at the back and silicone sealant at the front. After removing the circlip, it is necessary to use a thin blade to break the sealant between the coil form and the front of the output assembly. **Care must be used, as the former is breakable.** *Hint: (Look for physical damage and signs of overheating. The coil should be approximately 22.5 ohms. Low resistance will cause the control fuses to blow, too high will result in poor performance.)*
- D6: To separate the coil and the tach wires, cut waxed string and **carefully** slide the rubber tube off. If the tach is being replaced, a string or small wire tied to the old tach wires before removing, can be used to assist in pulling the new wires. *Hint: (Look for broken wires, tach should be 220 ohms.)*
- D7: Remove the tach mounting plate and tach stator. **Be sure not to damage the magnetic strip.**
- D8: Remove the rear bearing clamp plate and draw the shaft out of the assembly from the polewheel side, by pressing on the tach side of the shaft. Remove the front bearing inner race and bearing spacer. Remove the front bearing outer race.
- D9: Remove the locknut/washer and outer rear bearing spacer. The two rear ball bearings can now be pressed off.

# **TORSPEC MODEL 225TCD/6 MKIII ASSEMBLY INSTRUCTIONS**

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

- A1: Mount pregreased front outer roller bearings into stator flange. Place the inner front bearing spacer onto the shaft, press front bearing inner race onto shaft. Place outer front bearing spacer against front bearing inner race and set screw in place. Place the inner rear bearing spacer onto the rear of the shaft. Press rear ball bearings onto shaft. Place bearing clamp plate against rear bearings. Place debris shield and lockwasher on shaft then tighten locknut onto the threaded portion of the shaft. Bend one of the fingers of the lockwasher over the locknut. Load shaft through the back end of the stator body. Once the rear bearings are completely sealed, bolt the bearing clamp to the stator body.
- A2: Bolt tach generator to the tacho plate, then tacho plate to the stator flange. Feed the tach wire through the stator flange and bolt output cover to stator body.
- A3: Apply silicone rubber to the front of the main coil and push the coil onto the output assembly. Install the coil circlip. Push the tach wires, then the coil wires onto the rubber sleeving. Tie off with a piece of waxed string as close to the coil as possible.
- A4: Bolt the polewheel onto the stator body.
- A5: Insert the output assembly into the casing while feeding the wires through the hole. Bolt into place on the main casing.
- A6: Fit torque tube assembly onto shaft. For fan on tube to be properly positioned, the distance between the outside surface at fan (rotor) and the casing outside surface should be 20mm. Refer to the drawing. Fit with 1-M10X20 cup point set screw and 1-M10X20 cone point set screw.
- A7: Fit backplate to the back of casing. Fit grilles.
- A8: For terminal box fitting:
- 1) Fit gasket
  - 2) Fit terminal box
  - 3) Fit gasket
  - 4) Fit lid
  - 5) Fit four M5 self locking nuts

# TORSPEC 225TCD/6 MKIII PARTS LIST

PART NO.	DESCRIPTION
6001	CASING
6002	STATOR FLANGE FIXED BY 4-M16X50 HEX HD. CAP
6004	OUTPUT COVER FIXED BY 4-M8X20 SOCKET HD. CAP
6005	TERMINAL BOX FIXED BY 4-M5X12 SOCKET HD. CAP
6006	TERMINAL BOX LID FIXED BY 4-M5X12 PHILLIPS PAN HD.
6009	TACH MOUNTING PLATE FIXED BY 8-M5X16 SOCKET HD. CAP
6014	TERMINAL BOX LID GASKET
6015	TERMINAL BOX GASKET
6018	INNER FRONT BEARING SPACER
6019	OUTER FRONT BEARING COLLAR FIXED BY 3-M5X8 CUP POINT GRUB SCREWS
6020	INNER REAR BEARING SPACER
6022	BEARING FRONT NU313B
6024	BEARING CLAMP PLATE FIXED BY 8-M5X16 SOCKET HD. CAP
6028	OIL SEAL 85X62X10
6030	COIL RETAINING RING
6034	EYEBOLTS 2-M16
6035	PLASTIC PLUGS 2- #13 CODES T1, T2
6038	OIL SEAL 90X62X10 CODE F?
6065	HP COIL FIXED BY PART NO. 6030
6273	TORQUE TUBE FIXED BY 1-M10X16 CUP POINT GRUB SCREW, 1-M10X16 CONE POINT GRUB SCREW
6116	MESHED GRILLES SMALL INLET FIXED BY 4-M6X12 SLOTTED PAN HD.
6117	MESHED GRILLES LARGE OUTPUT FIXED BY 8-M6X12 SLOTTED PAN HD.
6300	FLANGE SPACER CODES F?
6433	POLEWHEEL FIXED BY 1-M16X40 SHC
6431	STATOR BODY FIXED BY 6-M16X90 SOCKET HD. CAP
6434	DEBRIS SHIELD
6435	BACKPLATE FIXED BY SHC 4-20X30
6436	LOCKNUT
6437	LOCKNUT WASHER
9008	TACH GENERATOR ASSY. FIXED BY 4-M4X16 SOCKET HD. CAP, 4-M4 FLAT WASHERS
9026	BEARING GREASE UNIREX N3 HIGH TEMPERATURE GREASE OR EQUIVALENT
9039	NAMEPLATE FIXED BY 4-6X1/4 TAPPING SCREWS
9306	TERMINAL BLOCK 6 WAY FIXED BY 1-M4X12 SOCKET HD. CAP CODES B? Y?
9501	ARMATURE STRIP EPOXIED TO SHAFT
6050M	KEYSTOCK
6113N	ROTOR HUB
6314M	D200 OUTPUT FLANGE RING CODE F3
6315M	D225 OUTPUT FLANGE RING CODE F1
6350M	KEYSTOCK METRIC D225 18X11X110 CODE S1
6432M	METRIC SHAFT
6123	REAR BEARING FAG 7212 B.MP.UA (USED AS A PAIR- DO NOT SUBSTITUTE WITH OTHER BRG MFR.)

# TORSPEC MODEL 225TCD/6 MKIII PARTS DIAGRAM

