

# TECHNICAL MANUAL

## MODEL D82 OVERTORQUE PROTECTOR

### Purpose

The purpose of the Model D82 Overtorque Protector is to prevent equipment damage by limiting the amount of operating torque that can be applied.

### Applications

Handwheels, Chainwheels, Shaft-to-Shaft Couplings, etc.

### Operation

Operating torque is applied through a handwheel or other means and transmitted through the Shaft (10) or Coupling to the Detent Plate (1), and Drive Balls (2), to the Body (6), then to the driven equipment. If excessive torque is applied, the Drive Balls will rise out of the Detents against the force of the Springs (11) and disengage the drive. See cutaway drawing on page 2. Re-engagement at the pre-set trip torque is automatic in either direction of rotation.

### Construction and Corrosion Protection

The drive mechanism is permanently lubricated and hermetically sealed inside a rugged housing that is corrosion protected by epoxy coating inside and outside. The body, mounting screws and calibration screws are austenitic stainless steel. See cutaway drawing on page 2.

### Trip Torque Range

Standard Model D82 trip torque range is 3 lbft to 100 lbft. Higher capacity models are available.

### Calibration

Model D82 units are shipped fully calibrated to user specifications. To recalibrate: Turn each Calibration Screw, 13, an equal amount, not more than 1/2 turn at a time. Turn inward to increase trip torque or outward to decrease. After adjustment, apply a drop of Loctite 290 to each adjusting screw to seal the threads.

### Mounting

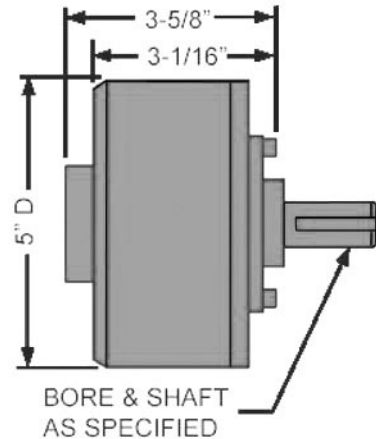
Model D82 units are shipped fully calibrated and ready to mount. For handwheel applications: Remove handwheel. Mount D82 in its place. Mount handwheel on D82. For shaft-to-shaft applications: Mount D82 on either shaft, then connect to other shaft. Model D82 can be driven from either end.

### Maintenance

No maintenance is required.

### To Order

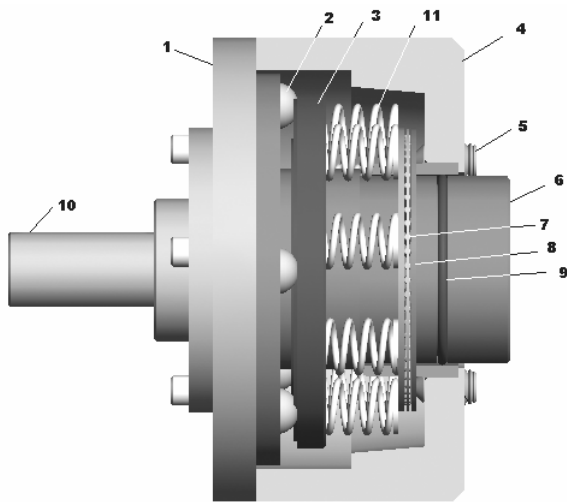
Specify Trip Torque and End Connections.



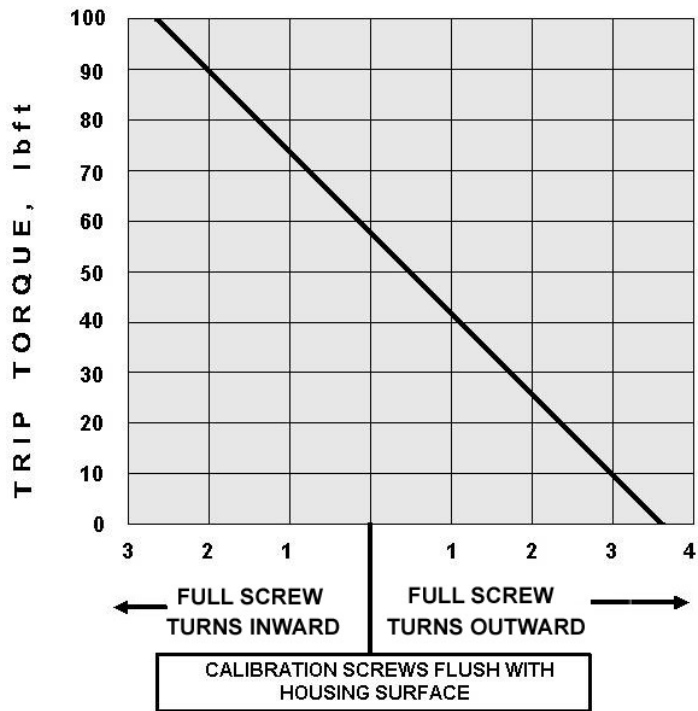
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Number	Component
1	Detent Plate
2	Bearing Ball
3	Spring Seat
4	Housing
5	Calibration Screw
6	Body
7	Roller Bearing
8	Bearing Washer
9	O-Ring Seal
10	Shaft
11	Spring



### TRIP TORQUE vs CALIBRATION SCREW POSITION

The calibration information above is representative of all Model D82TM and D82 Models. Contact factory if more precise calibration of individual units is desired.

To calibrate, turn each calibration screw an equal amount in or out, not more than 1/2 turn at a time.

**Aunspach Controls Company, Inc**