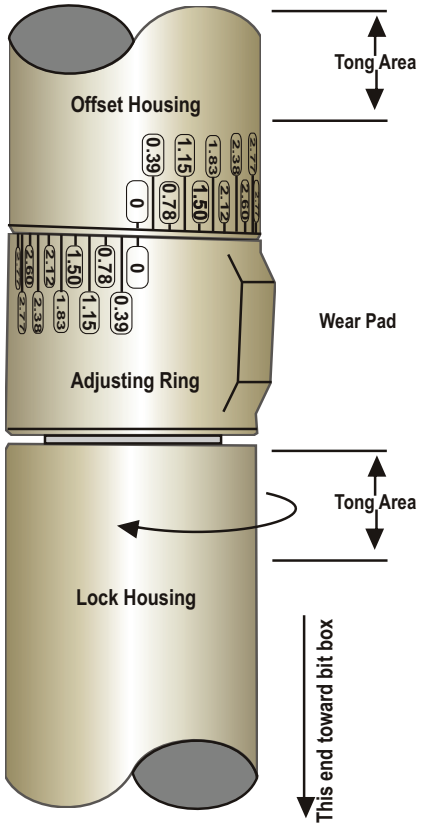
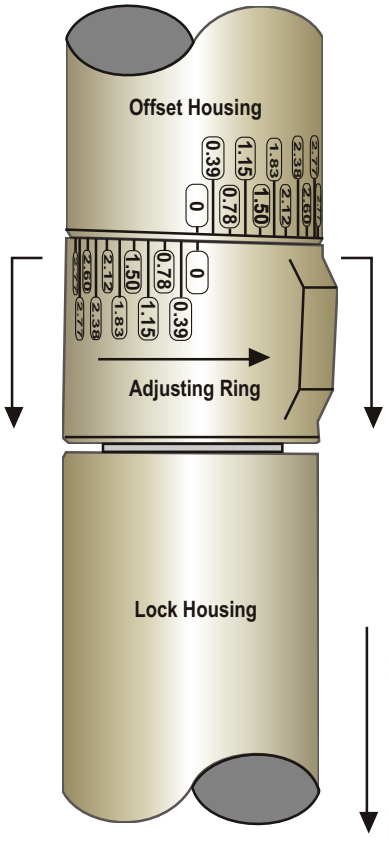
Martec Solutions

Adjustable Bend Housing Operation

The J-TEC motor adjustable bend housing (ABH) allows for quick and easy bend angle adjustments from zero (0) to three (3) degrees. Below is the procedure for setting the J-TEC motor ABH.



1. Place the jaws of tongs in the tong areas shown and break the tool joint.
2. While keeping the Adjusting Ring teeth engaged with the mated slots in the offset housing, unscrew the lock housing two to four complete turns in the clockwise direction (unthread).



3. Slide the Adjusting Ring down to disengage the teeth in the ring and the Offset Housing.
4. To adjust the bend angle of the bent housing, rotate the Adjusting Ring clockwise until the desired bend-angle marking matches the bend angle marking on the Offset Housing.

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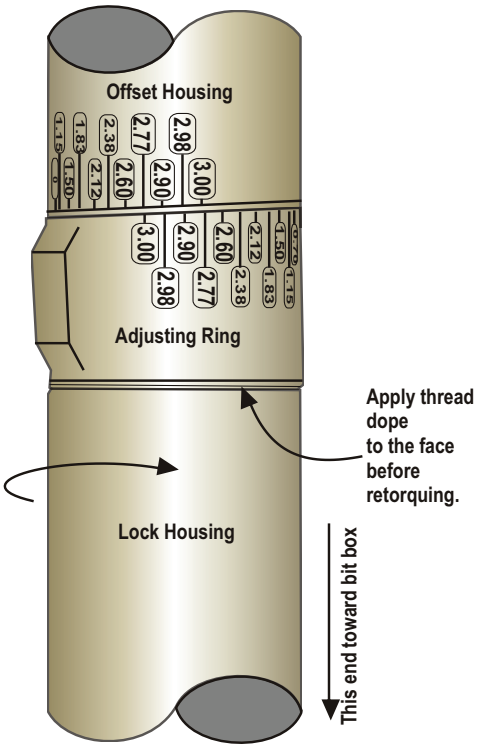
Adjustable Bend Housing Operation (continued)

5. Engage the teeth of the Adjusting Ring and the Offset Housing at the desired bend angle.
6. Apply thread dope to the mated faces of the lock housing and the Adjusting Ring.
7. Screw the Lock Housing and the Adjusting Ring together and apply the torque value listed in the chart below. The matching markings on the OD of the Offset Housing and the Adjusting Ring indicate the bend angle selected as well as the high side marks to identify the high side of the tool.



Adjustable Torque Guide Table

MOTOR SIZE	TORQUE AMOUNT	TORQUE AMOUNT (METRIC)
2-7/8” (287)	3,650 lbs - ft	4,950 N-m
3-1/8” (312)	3,650 lbs - ft	4,950 N-m
3-1/2” (350)	4,100 lbs - ft	5,560 N-m
3-3/4” (375)	4,800 lbs - ft	6,300 N-m
0 - 1.00 DEG	50 RPM No Greater	
1.00 - 2.00 DEG	Short Period 40 RPM or less	
2.00 - 3.00 DEG	Not Recommended	

Rotating the rotary higher than the specified recommendations may result in damage to motor or failure.

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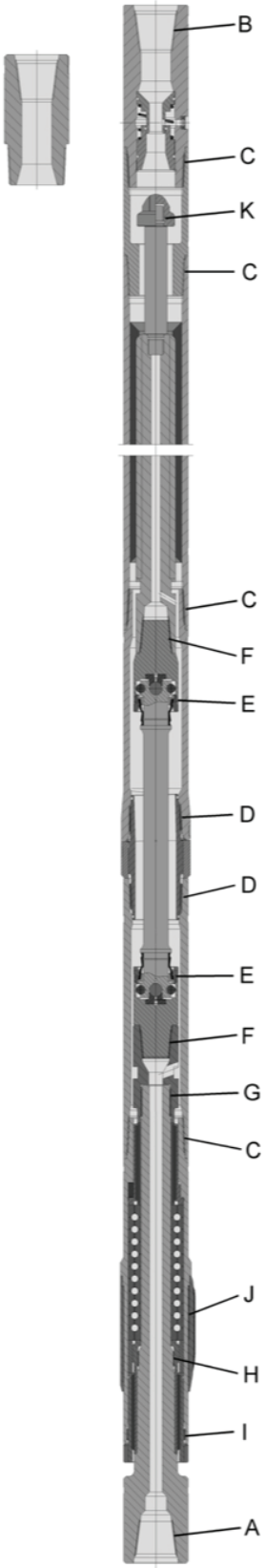
MOTOR ASSEMBLY

- J-TEC motors and components are produced in USA
- OD sizes range from 1.5” to 3.5”
- J-TEC motors are compatible with WBM, OBM, and can be operated with nitrogen levels up to 50% depending on specific power section configuration, stator selection, temperature, and well environment.
- Motor assembly options include:
  - Conventional or even-wall power sections
  - Straight, ABH, or Fixed
  - Slick or Stabilized (for larger ODs)
- Maintenance redress training is available with purchase of motors

NOTE: OPERATION OF MOTOR ASSEMBLIES WITH OBM OR NITROGEN REQUIRE POST RUN STATOR REPLACEMENT

	THREAD CONNECTION
A	Bit Box Connection
B	Upper Box Connection
C	Stator / Outer Housings
D	ABH
E	Upper lock ring Lower lock ring – *left hand*
F	Coupling
G	Diverter cap (or) Integrated diverter cap
H	Safety retention nut – *left hand*
I	Lower stationary bearing – *left hand*
J	Changeable stabilizer
K	Catch Nut – *left Hand*



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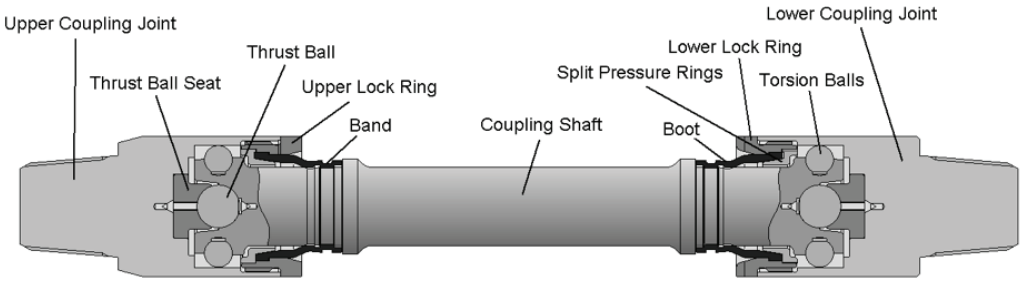
- J-TEC motor transmission employs ROLLER BALL technology

Roller Ball Transmission



BEARING ASSEMBLY DETAILS

- Bearing assembly consists of S2 tool steel thrust stack and tiled carbide radial bearings
- The bearing assembly is a proven design concept with tens of thousands of successful run hours
- Most other components are manufactured from 4145 and/or 4330 v mod materials.
- Transmission components are a heat treated 4340.

BEARING ASSEMBLY