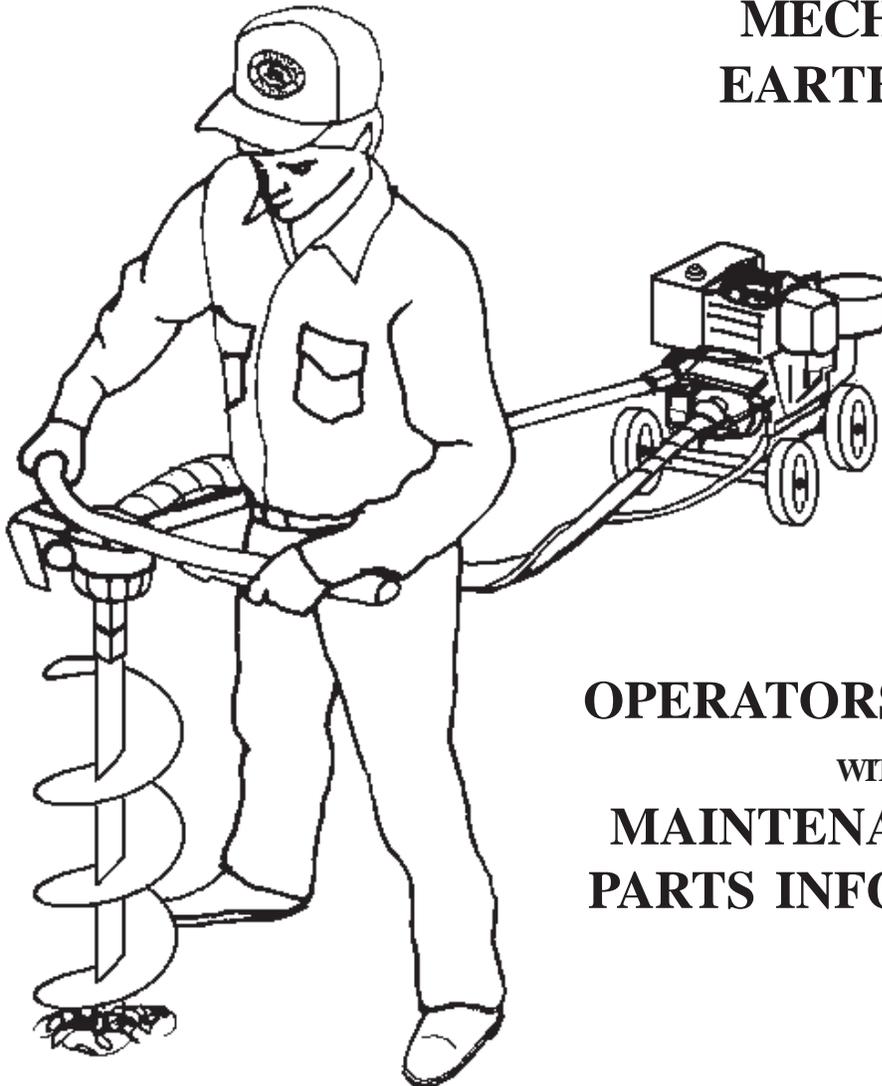


LITTLE BEAVER[®]

EARTH DRILLS & AUGERS

**MECHANICAL
EARTH DRILLS**



**OPERATORS MANUAL
WITH
MAINTENANCE AND
PARTS INFORMATION**



LITTLE BEAVER, INC.

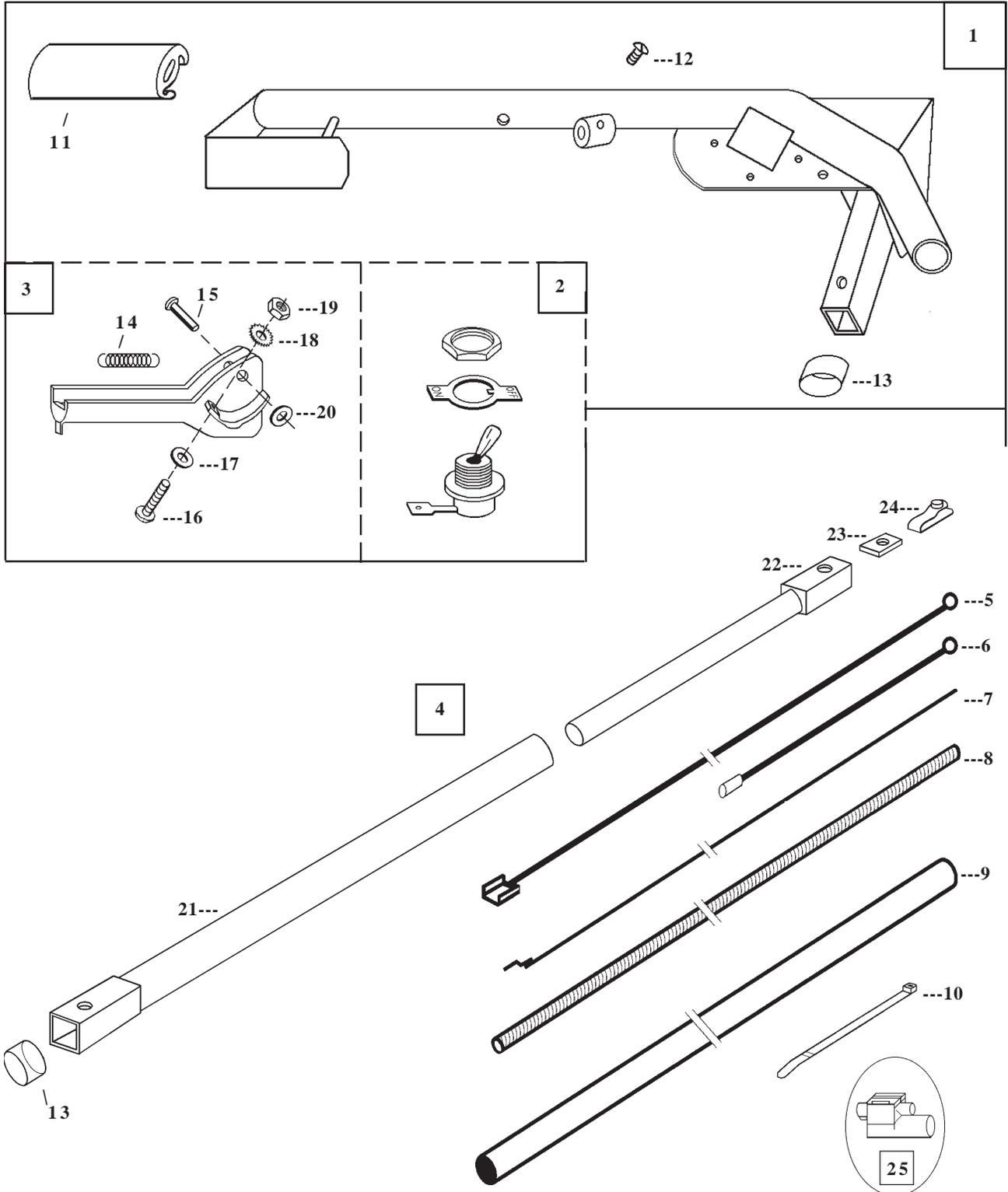
P.O. BOX 840 ● LIVINGSTON, TEXAS 77351

PHONE 936/327-3121 ● FAX 936/327-4025

Web: www.littlebeaver.com ● E-Mail: sales@littlebeaver.com

MFG. BY: LBEQUIPMENT, INC. - LIVINGSTON, TEXAS USA

HANDLE, TORQUE TUBE AND WIRES



HANDLE, TORQUE TUBE AND WIRES

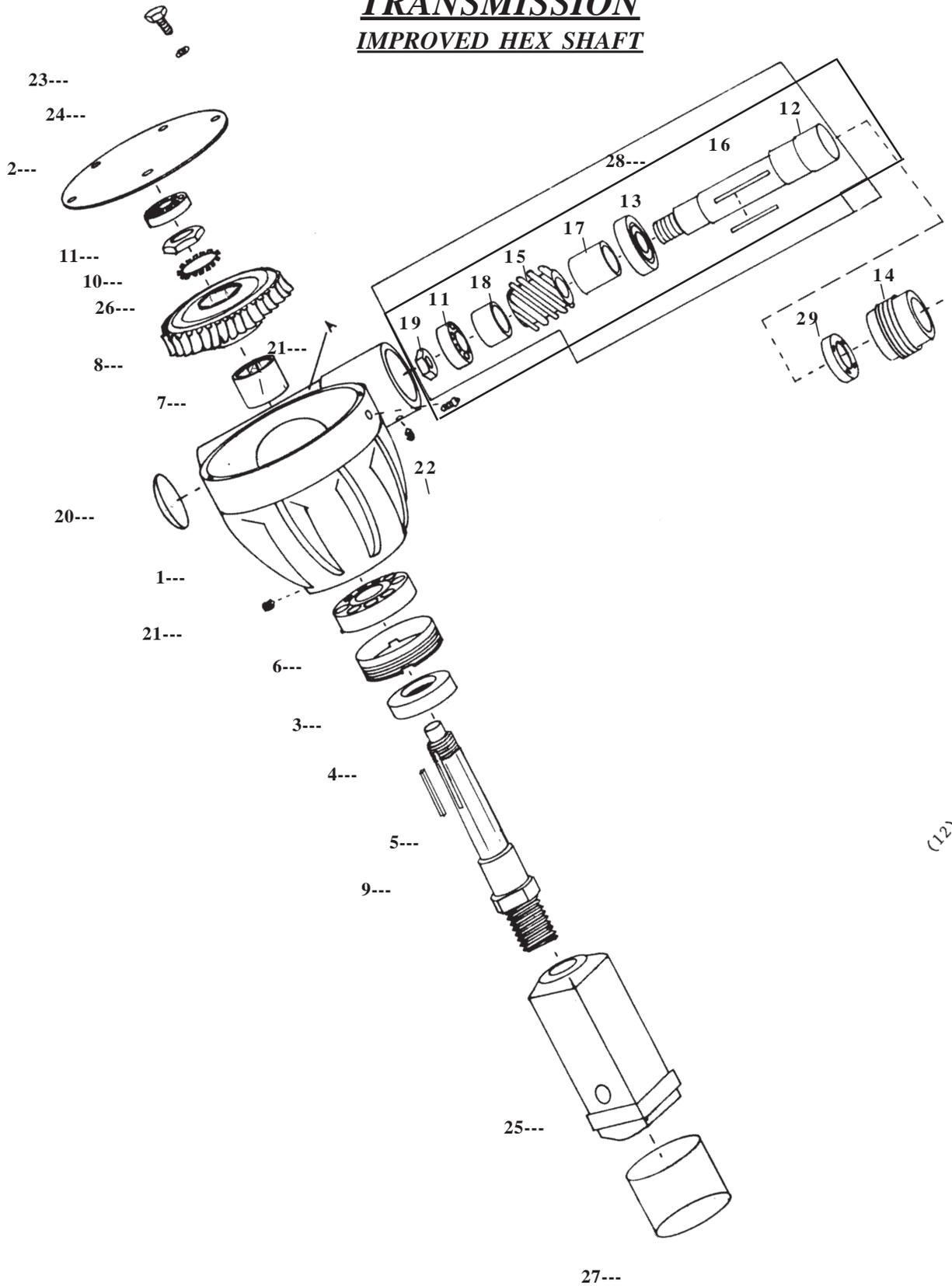
ITEM	PART #	DESCRIPTION	QTY
1	9020-TT	Handle Assembly	1
2	3007-4B	Kill Switch Assembly	1
3	4031-1	Throttle Lever Kit	1
4	9091	Torque Tube Assembly	1
5	3007-6	Kill Switch Wire (Long) 7HP B&S Only	1
	* 3007-6B	Kill Switch Wire (Long) 5HP B&S Only	1
	3007-8W	Kill Switch Wire (Long) 5HP & 7HP Wisconsin/Honda	1
6	3007-8	Kill Switch Wire (Short) B&S Only	1
7	3008	Throttle Wire Link	1
	* 3008-5IC	Throttle Wire Link, 5HP BIC Only	1
8	3009	Throttle Wire Housing	1
	* 3009-5IC	Throttle Wire Housing, 5HP BIC Only	1
9	3007-B5	Wire Loom, 5HP B&S Only	1
	3007-B	Wire Loom, 7HP BIC & All Wisconsin/Honda	1
10	3007-5	Plastic Tie	5
11	9034	Leg Pad	1
12	3010-8	Screw, 10-32 X 1/4"	1
13	9058-1	Button Shield	2
14	4041-2	Spring, Return, Throttle Lever	1
15	4033	Rivet	1
16	4034-A	Screw, 10-32 x 5/8"	1
17	4034-1	Flat Washer 3/16", 1/4" Standard	1
18	4034-2	Lock Washer #10 External Star	1
19	4034-3	Nut 10-32, Hex	1
20	4033-1	Flat Washer #10	1
21	9086	Torque Tube-Female (incl. #9058-1)	1
22	9080	Torque Tube-Male (incl. #9058)	1
23	9084-1	Spacer	1
24	9058	Spring & Button	1
25	9090-W	Wire Splicer, Wisconsin & Honda	1

*Standard Series SN#5-23132 and up

** IC Series SN#5-22950 and up



TRANSMISSION
IMPROVED HEX SHAFT



(12)



HEX TRANSMISSION

(Wheel Models)

ITEM	PART #	DESCRIPTION	QTY
	9000-AX	Transmission Assy. Less Handle w/Adaptor	1
1	9001	Transmission Housing (incl. #9019)	1
2	9002	Cover Plate	1
3	9003	Retainer - Grease Seal - Lower	1
4	9004	Seal - Main Shaft - Lower	1
5	9005-AHX	Main Shaft (incl. #9010-H, #9028-H & #9009-2)	1
6	9006	Bearing - Main Shaft - Lower	1
7	9007-X	Spacer - Main Shaft (incl. w/#9008-X)	1
8	9008-X	Bronze Gear, 3/4" face (incl. #9007-X)	1
	9008-X20	Bronze Gear, 3/4" face 20:1 (incl. #9007-X)	1
9	9009-2	Key, Hardened, Main Shaft	1
10	9010-H	Nut - Main Shaft	1
11	9011	Bearing - Main Shaft-Upper & Pinion Shaft	2
12	9012	Pinion Shaft (incl. #9018)	1
13	9013	Bearing - Pinion Shaft	1
14	9014-14	Retainer & Coupling (incl. #9014-S)	1
15	9015-2	Steel Gear, Ground & Polished	1
	9015-20:1	Steel Gear, Ground & Polished 20:1	1
12/88 16	9016	Key - Steel Gear	1
17	9017	Spacer - Pinion Shaft - Long	1
18	9017-1	Spacer - Pinion Shaft - Short	1
19	9018	Nut 7/16" SAE - Pinion Shaft	1
20	9019	Expansion Plug	1
21	9021	Allen Screw 1/4"-20 x 1/4"	2
22	9036	Grease Fitting	1
23	9024	Cap Screw 1/4"-20 x 7/8", Cover Plate	5
24	9025	Lock Washer 1/4"	5
25	9050-A	Adaptor-Transmission to Auger (incl. #9058-1)	1
	9050-HD	Adaptor, Heavy Duty - Optional	
	9051-GHAS	Adaptor, Groundhog Auger to LITTLE BEAVER Transmission - Optional	
26	9028-H	External Star Washer	1
27	9058-1	Button Shield	1
28	9012-A2	Pinion Shaft Assembly	1
29	9014-S	Seal - Pinion Shaft Retainer	1
	9003-1#	Retainer Wrench	

WHEN ORDERING TRANSMISSION PARTS BE SURE TO INCLUDE SERIAL NUMBER OF TRANSMISSION, LOCATED ON BOTTOM OF HOUSING

IMPORTANT: GREASING INSTRUCTIONS

When greasing transmission, remove cap screw (A) and pump grease into grease fitting #22 until grease comes out the hole. Replace cap screw (A) and lockwasher and torque to 10 ft. lbs.

THE TRANSMISSION SHOULD BE GREASED EACH DAY PRIOR TO OPERATION, AND DURING THE DAY AS CONDITIONS WARRANT.



WARNING: Failure to follow above instructions on replacing cap screw (A) may allow cap screw (A) to back out of the hole during operation. This could result in serious bodily injury to the operator or bystanders.



HEX TRANSMISSION - INSTRUCTIONS FOR DIS-ASSEMBLING AND ASSEMBLING

(Refer to key #'s on Page P-10)

TODIS-ASSEMBLE:

1. Uncouple throttle wire and housing.
2. Uncouple flexible drive shaft from retainer and coupling #14 by holding retainer with a pipe wrench and unscrewing drive shaft housing with a second pipe wrench. NOTE: the flexible drive shaft housing is black. The coupling is unpainted. Break loose where these items join.
3. Remove handle assembly and cover #2. Remove or wipe grease out of gear box.
4. Unscrew nut #10 from shaft #5.
5. Tap shaft #5 down through gear #8 and out the bottom of the transmission. If adaptor #25 is to be removed hold shaft by flats in a vise, and unscrew adaptor with a pipe wrench.
6. Remove bronze gear #8 and spacer #7, key #9 should fall free.
7. Remove set screw #21 holding retainer #3, unscrew retainer using retainer wrench (see pg.13). Remove bearing #6 by tapping out from top or pressing out.
8. Remove set screw #21, holding retainer #14. Unscrew retainer using pipe wrench.
9. Remove seal #29 from retainer #14 by pressing out from threaded end.
10. Drill hole in expansion plug #20 and pry out with punch or screwdriver. Tap against end of pinion shaft assy. #28 to remove it from housing #1.
11. Unscrew nut #19 from shaft #12 then remove bearing #11, spacer #18, gear #15, key #16, spacer #17 and bearing #13. **IMPORTANT: WHEN HOLDING SHAFT #12, BE CAREFUL NOT TO DAMAGE SURFACE WHICH CONTACTS SEAL #29. USE WOODEN CLAMPS TO HOLD SHAFT.**

TOASSEMBLE:

1. Press seal #4 into bearing retainer #3. Place bearing #6 into housing #1, then screw in bearing retainer and tighten using retainer wrench (see pg. 13). Replace set screw #21.
2. Place expansion plug #20 into housing #1. Flatten with ballpeen hammer to wedge in place.
3. Replace parts onto pinion shaft #12 in reverse order (see above). Screw nut #19 onto pinion shaft and torque to 50-60 lb. ft. Then stake nut to shaft by hitting junction of threads with a center punch in two places.
4. Place pinion shaft assy. #28 into housing #1. Place loctite on threads, then screw retainer and coupling #14 into housing and tighten with pipe wrench. This part is easily cross-threaded, so line up threads carefully. Tighten set screw #21 to secure retainer and coupling.
5. Hold transmission housing in one hand and push shaft #5 through seal #4 and bearing #6. Place spacer #7 onto shaft #5 and position parts so that spacer is against the bearing and end of shaft is flush with top of spacer.
6. Place gear #8 into housing so the teeth mesh with gear #15. Align key slot on shaft with keyway in gear. While holding gear tight against spacer #7, tap shaft #5 all the way through gear so that threads are exposed.
7. Tap in keys using a small hammer & punch.
8. Place washer #26 on shaft. Then screw nut #10 onto shaft and tighten to 140-150 lbs.ft. Stake nut to shaft as described above. Nut should be flush with threads on shaft.
9. Screw adaptor #25 onto shaft #5. It is not necessary to tighten this part.
10. Place bearing #11 onto shaft #5.
11. Fill transmission **with the recommended grease (see pg. 13)**. Rotate gears by turning adaptor so that the grease will fill all spaces.
12. Place cover plate #2 onto bearing and housing and tap into place. Align holes of cover plate and housing, replace handle and remount with lockwashers and bolts tightening to 10 ft. lbs.
13. Re-grease transmission using normal procedure (see pg. 13) after the first few minutes of operation.

***NOTICE: DO NOT CROSSTHREAD #9014-14.**

DOING SO WILL CAUSE THE END PIECE OF CORE TO BREAK!

