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5. SEE PAGE 2 FOR TOP INLET INFORMATION.

SEE PAGE 3 FOR WEAR PART REPLACEMENT INSTRUCTIONS (CONVEYOR DETAIL OMITTED).
 SEE PAGE 4 FOR MOTOR REPLACEMENT INSTRUCTIONS (CONVEYOR DETAIL OMITTED.

REVISION HISTORY
DESCRIPTION
RELEASE
MAKE AUGER BAFFLE & LWR SCRN SPT REPLACEABLE.
ADD PAGES 3 & 4. APPROVED jlmoss jlmoss 9/26/2012 12/5/2013 11/6/2014 -57.44 [1458.9] EXTREME WIDTH-7.91 [201.0] 🕻 — -56.35 [1431.3] AUGER OUT UPWARD GUARD TO REAR (RT SIDE VIEW) 34.53 [877.1] EXTREME 5.46 [138.7] FLOOR TO _ BOX CLEARANCE AUGER OUT FORWARD GUARD TO REAR AUGER OUT REARWARD (BOTTOM VIEW) AUGER OUT FORWARD GUARD TO REAR GUARD TO FRONT (TOP VIEW) -37.28 [946.9] TYP.-(RT SIDE VIEW) AUGER OUT FORWARD GUARD TO REAR ALIGER OUT REARWARD (NE REAR ISOMETRIC VIEW) UARD TO FRONT 'RT SIDE VIEW) AUGER OUT FORWARD __.23 [5.7] & MOTOR NOT CENTERED ON CASING GUARD TO REAR AUGER OUT FORWARD GUARD TO REAR (TOP VIEW) AUGER OUT FORWARD GUARD TO REAR (BACK VIEW) ₽ -35.28 [896.2] EXTREME LENGTH-13.58 [344.8] \$ -19.70 [500.3] **¢** --9.38 [238.1] 32.54 [826.4] 🕻 -33.40 [848.3] 🕻 POWER IN 3/4 HP 18.38 [466.7] POWER IN 30HP - 56.35 [1431.3] -22.44 [570.0] ¢ POWER IN 3/4 HP ___26.43 [671.2] 🕻 ___ INFEED AUGER OUT FORWARD GUARD TO REAR 11.21 [284.7] 23.40 [594.3] 🕻 — AUGER OUT FORWARD GUARD TO REAR (LT SIDE VIEW) POWER IN 30HP AUGER OUT FORWARD AUGER OUT FORWARD GUARD TO REAR (RT SIDE VIEW) GUARD TO REAR (NW FRONT ISOMETRIC VIEW) This drawing is the property of the A.T. Ferrell Company, Inc and must be returned immediately upon request. No part of this drawing may be reproduced, stored in a retrieval system or CAD MIX-MIL NO MANUAL CHANGES **FARMATIC** TOLERANCES EXCEPT AS NOTED 1. DO NOT SCALE FROM DRAWING.
2. ALT DIMENSIONS [X.X] IN MILLIMETERS.
3. RECOMMENDED MAINTENANCE CLEARANCE; FRONT: 36.00 [914.4], SIDE & REAR: 24.00 [609.6]. 1:12 DMJ jlmoss retrieval system or ansmitted in any form 4. WEIGHT AS SHOWN WITH 30 HP DRIVE MOTOR: 657 LBS [298 KG].

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± 1/32

± 1/2"

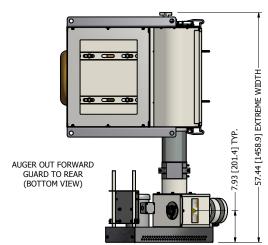
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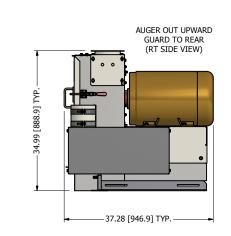
MILL ASSY, SIDE DISCHARGE, SENTRY 1030

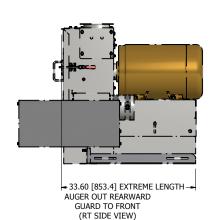
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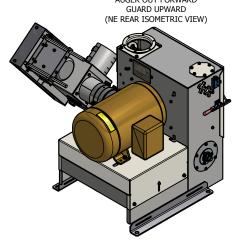
1 of 4

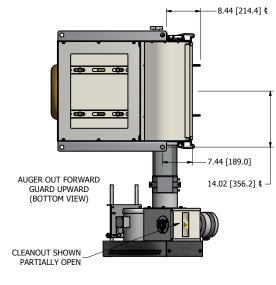
REVISION HISTORY
DESCRIPTION
RELEASE
MAKE AUGER BAFFLE & LWR SCRN SPT REPLACEABLE.
ADD PAGES 3 & 4. APPROVED jlmoss jlmoss DATE 9/26/2012 12/5/2013 11/6/2014 AUGER OUT FORWARD GUARD TO REAR AUGER OUT REARWARD GUARD TO FRONT (BOTTOM VIEW) (TOP VIEW) AUGER OUT FORWARD 5.46 [138.7] GUARD TO REAR FLOOR CLEARANCE (RT SIDE VIEW) -46.18 [1173.0]-—8.44 [214.4] **६** AUGER OUT FORWARD

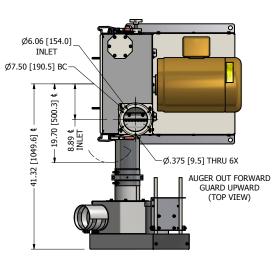


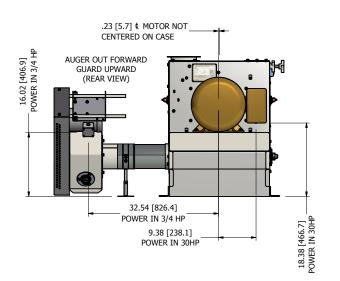


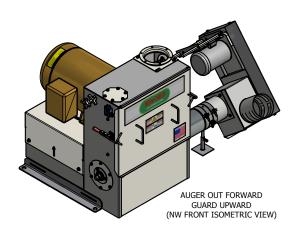


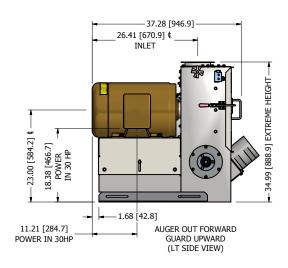


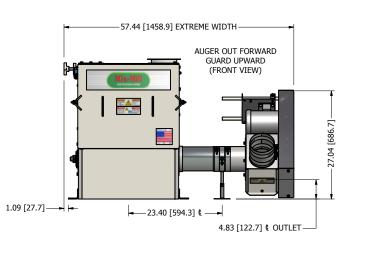


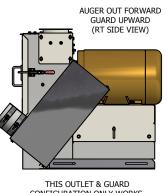












CONFIGURATION ONLY WORKS WITH TOP FEED SETUP

NO	TEC.	
IVO	LS.	

NOTES:

1. DO NOT SCALE FROM DRAWING.
2. ALT DIMENSIONS [X.X] IN MILLIMETERS.
3. RECOMMENDED MAINTENANCE CLEARANCE; FRONT: 36.00 [914.4], SIDE & REAR: 24.00 [609.6].
4. WEIGHT AS SHOWN WITH 30 HP DRIVE MOTOR: 657 LBS [298 KG].
5. SEE PAGE 1 FOR SIDE INLET INFORMATION.

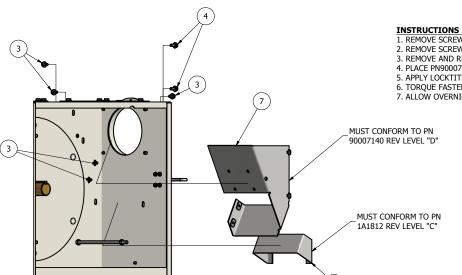
6. SEE PAGE 3 FOR WEAR PART REPLACEMENT INSTRUCTIONS (CONVEYOR DETAIL OMITTED).

7. SEE PAGE 4 FOR MOTOR REPLACEMENT INSTRUCTIONS (CONVEYOR DETAIL OMITTED).

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or by any means, without prior written	± 1/32	MILL ASSY, S			,	1030			
consent of the A.T. Ferrell Company, Inc	ANGULAR: ± 1/2	DATE: 7/12/2012	SIZE: D	PART NUMBE	920071:	10-I		SHEET: 2 of 4	4

		REVISION HISTORY			Г
REV	ECN	DESCRIPTION	DATE	APPROVED	Ĺ
Α	120054	RELEASE	9/26/2012	jlmoss	Ĺ
В	130150	Make auger Baffle & LWR SCRN SPT Replaceable.	12/5/2013	jlmoss	Ĺ
С	140146	ADD PAGES 3 & 4.	11/6/2014	jlmoss	Ĺ

CONVEYOR DETAIL OMITTED, THIS PAGE.



INSTRUCTIONS PN 90007140 REPLACEMENT:

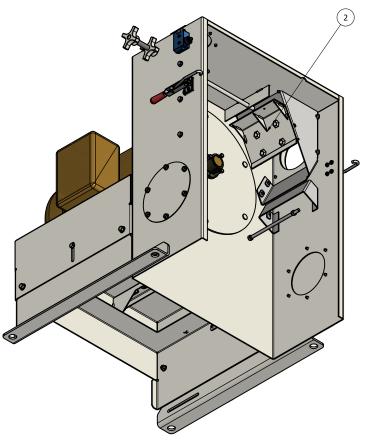
L. REMOVE SCREWS #65683817 ON SIDE OF MACHINE (ITEM #4, HOLDING 1/2 OF INLET FLANGE),

2. REMOVE SCREWS #65683812 ON REAR OF MACHINE (ITEM #3, HOLDING ONLY PN 90007140),
3. REMOVE AND REPLACE WEAR PART WLDMT (2A1461) ONTO NEW PN 90007140 (UNLESS REPLACING WEAR PART TOO),
4. PLACE PN90007140 (WITH WEAR PART WLDMT ATTACHED) BACK INTO PLACE IN MACHINE...TIGHT AGAINST TOP OF GRIND CHAMBER,

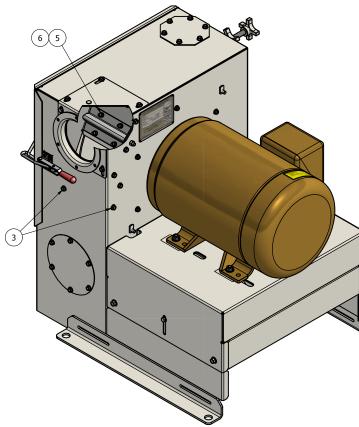
5. APPLY LOCKTITE #242 (BLUE) TO SCREWS FROM STEPS #1 & 2 ABOVE, AND REPLACE THEM,
6. TORQUE FASTENERS FROM STEPS #1 & 2 TO 11 FT-LB, WHILE HOLDING PN90007140 TIGHT TO TOP OF GRIND CHAMBER.
7. ALLOW OVERNIGHT FOR LOCKTITE TO DRY BEFORE OPERATING MACHINE.

- INSTRUCTIONS PN 1A1812 REPLACEMENT:

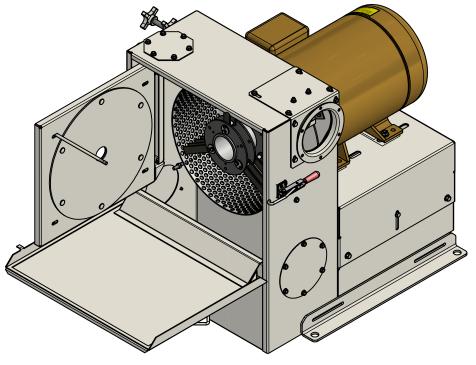
 1. REMOVE SCREWS #65683812 ON SIDE & REAR OF MACHINE (ITEM #3, WHICH HOLD ONLY PN 1A1812),
- 2. REMOVE WORN/DAMAGED PN 1A1812,
- 3. REPLACE W/ NEW PN 1A1812, 4. APPLY LOCKTITE #242 (BLUE) TO SCREWS #65683812 (ITEM #3 FROM STEP 1 ABOVE) AND REPLACE,
- 5. MOVE THE NEW PART UP/DOWN UNTIL THE HEADS OF THE SCREWS ALIGN IN THE SAME PLACE WHERE THEY WERE ORIGINALLY, BASED ON PAINT IMPRESSION ON OUTSIDE OF CASING, AND 6. TORQUE FASTENERS FROM STEPS #1/4 TO 11 FT-LB.
- 7. ALLOW OVERNIGHT FOR LOCKTITE TO DRY BEFORE OPERATING MACHINE.



FRONT SW 3-D VIEW FOR VISIBILTY ONLY)



REAR NW 3-D VIEW (TOP CORNER BROKEN OUT FOR INTERIOR VIEW)



FRONT NE 3-D VIEW

- INSTRUCTIONS PN 2A1461 REPLACEMENT:

 1. REMOVE NUTS #66083800 (ITEM #5) & WEDGE LOCK WASHERS #67193800 (ITEM #6) ON INSIDE OF PN90007140 AUGER BAFFLE 7 SET ASIDE FOR RE-USE,

 2. REMOVE WORN/DAMAGED PN 2A1461 WEAR PLATE WLDMT,
- 3. REPLACE W/ NEW PN 2A1461,
- 5. NEDGEC W, NEW FIX 221-01,
 4. REPLACE NUTS #66083800 & WEDGE LOCK WASHERS #67193800, ONE *WASHER PAIR* SET PER NUT,
 5. *OBSERVE PROPER CONFIGURATION WHEN PLACING WEDGE LOCK WASHER PAIR TOGETHER-ORIENT WEDGE-FACETED FACES TOWARD ONE-ANOTHER (INBOARD)*, &
 6. TORQUE FASTENERS FROM STEP #4 TO 11 FT-LB.

- 8. IF YOU LOSE **ANY** OF THE WEDGE LOCK WASHER SYSTEM, AND PROPERLY ORIENTING THE WASHERS ON INSTALLATION, LOCKTITE IS COMPLETELY UNNECESSARY*,

 8. IF YOU LOSE **ANY** OF THE WEDGE LOCK WASHERS, USE LOCKTITE #242 (BLUE) ON THAT FASTENER, AND ORDER A WEDGE LOCK WASHER SET FOR REPLACEMENT IMMEDIATELY ON RECEIPT FROM A.T. FERRELL COMPANY. BE SURE TO ORDER USING THE CORRECT PN 68193800. **FAILURE TO UTILIZE WEDGE LOCK WASHERS**

IN THIS CRITICAL LOCATION VOIDS THE WARRANTY. DO NOT FAIL TO ORDER THE WEDGE LOCK WASHER SET AND REPLACE THEM AS SOON AS THEY ARE RECEIVED.

7	90007140	1	AUGER BAFFLE WLDMT, 6", SENTRY 130
6	67193800	4	WASHER, WEDGE LOCK 316 SS .31"
5	66083800	4	NUT, HEX 5/16-18
4	65683817	2	HHCS, SERR WASHER HEAD, 5/16-18 X 3/4"
3	65683812	6	SCW, MACH HX WSH HD T/C 5/16-18 X 1/2"
2	2A1461	1	WEAR PLATE WLDMT, 6" AUGER BAFFLE, 188
1	1A1812	1	SUPPORT, LOWER SCREEN, 188 MILL
ITEM	PART NUMBER	QTY	DESCRIPTION

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transmitted in any form	xx ± .030				1:12	jlmoss	DMJ
or by any means, without prior written	± 1/32	MILL ASSY,			,	1030	
consent of the A.T.	ANGULAR:	DATE:	SIZE:	PART NUMBER	₹:		SHEET:
Ferrell Company, Inc	± 1/2°	7/12/2012	D		920071	10-I	3 of

- NOTES:

 1. DO NOT SCALE FROM DRAWING.

 2. ALT DIMENSIONS [X.X] IN MILLIMETERS.

 3. RECOMMENDED MAINTENANCE CLEARANCE; FRONT: 36.00 [914.4], SIDE & REAR: 24.00 [609.6].

 4. WEIGHT AS SHOWN WITH 30 HP DRIVE MOTOR: 657 LBS [298 KG].
- 5. SEE PAGE 1 FOR SIDE INLET INFORMATION. 6. SEE PAGE 2 FOR TOP INLET INFORMATION
- 7. SEE PAGE 4 FOR MOTOR REPLACEMENT INSTRUCTIONS (CONVEYOR DETAIL OMITTED).

Reference File: D'Unwentor Workspace Inventor

Reference File: D'Unwentor

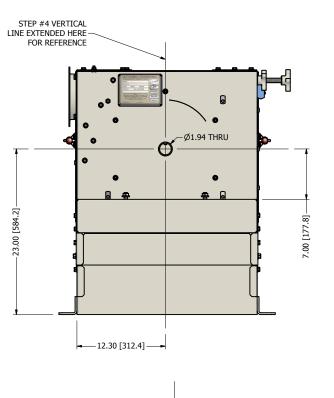
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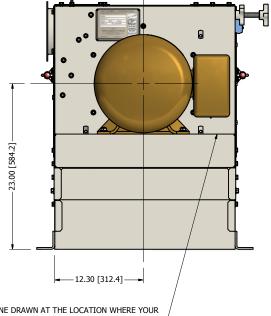
### 253 (CONVEYED AND SOLD A	Г		REVIS	ION HISTORY	Files\Mix-Mill\92007100-92007199\92007110.iam	
STEPS PM & 15 STEPS PM & 15 NULl PART POCUSEDOD SPE STEP 2/5 NULl PART POCUSEDOD SPE STEP 2/5 NULl PART POCUSEDOD SPE STEP 3/6 & 7		A 120054 B 130150	DESCRI RELE MAKE AUGER BAFFLE & LW	PTION EASE R SCRN SPT REPLACEABLE.	9/26/2012 jlmoss 12/5/2013 jlmoss	CONVEYOR DETAIL OMITTED, THIS PAGE.
NUT (PART #66783800) SEE STEPS #6 & 7 NOTES: 1. DO NOT SCALE FROM DRAWING.	В	STE	0° 11			
NUT (PART #66783800) SEE STEPS #6 & 7	₽	MOTOR SHAFT CENTER HEIGHT (SEE		& 11 THROUGH 13		
שני הבסטרות בוושבט בוויתו הבסטרות וויבין בוויתו השני ביוית ב	А	 DO NOT SCALE FR 	ROM DRAWING. [X.X] IN MILLIMETERS. IAINTENANCE CLEARANCE; FRONT: 36.00	[914.4], SIDE & REAR: 24.00 [609.6].		

REAR ELEVATION (SEE-THRU HOLE IN REAR FOR INTERIOR VIEW)

MOTOR CHANGE/INSTALLATION INSTRUCTIONS (READ ENTIRE PROCEDURE BEFORE COMMENCING):

- 1. START WITH PART #90007190 (BASE WLDMT, MOTOR, SENTRY 130) REMOVED, AND ALL ASSOCIATED HARDWARE REMOVED FROM THE MACHINE GRIND CHAMBER WEI DMENT:
- 2. PLACE YOUR REPLACEMENT MOTOR ON A FLAT SURFACE, AND MEASURE THE DISTANCE PERPENDICULAR TO THAT FLAT SURFACE TO THE CENTER OF THE SHAFT;
- 3. WRITE THAT DISTANCE DOWN FOR LATER REFERENCE (FOR MOTOR PART #30000715, THIS DISTANCE IS 7.00" [177.8];
- 4. USING A CARPENTER'S SQUARE, DRAW A VERTICAL LINE THROUGH CENTER OF THE Ø1.94" HOLE IN THE CENTER REAR OF THE GRIND CHAMBER ON THE OUTSIDE, BELOW THE CENTER HOLE, THAT EXTENDS A LITTLE FARTHER THAN THE DISTANCE YOU WROTE DOWN FROM THE CENTER OF THE Ø1.94" HOLE;
- 5. PLACING ONE LEG OF THE CARPENTER'S SQUARE ALONG THE VERTICAL OUTER SIDE OF THE GRIND CHAMBER, DRAW A HORIZONTAL LINE THAT PASSES THROUGH THE MARK YOU MADE THROUGH THE CENTER VERTICAL LINE (THIS LINE IS EVEN WITH WHERE YOUR MOTOR BOTTOM WILL SIT WHEN YOU ARE FINISHED INSTALLING THE MOTOR);
- 6. REMOVE THE NUT (PART #66783800) FROM THE REAR, BOTTOM STUD HOLDING THE INNER WEAR PLATE ON THE INSIDE OF THE GRIND CHAMBER:
- 7. SLIDE THE BASE WELDMENT (PN 90007190) DOWN OVER THE TOP OF THE MOTOR SUPPORT BASE WITH THE SLOT POINTING FORWARD TO ALLOW THE LOWEST WEAR PLATE STUD TO ENGAGE THE SLOT...THEN START THE NUT (PN 66783800) BY HAND BACK ONTO THE STUD;
- 8. PLACE THE TWO HHCS (PARTS #66583817) THROUGH THE VERTICAL HEIGHT ADJUSTMENT SLOTS ON THE MOTOR BASE SUPPORT WELDMENT AND START THEM BY HAND INTO THE WELD NUTS LOCATED AT THE SIDES OF THE MOTOR BASE SUPPORT WELDMENT;
- RAISE THE BASE WELDMENT UNTIL THE FRONT IS AT THE HEIGHT OF THE HORIZONTAL LINE YOU DREW ACROSS THE OUTSIDE OF THE GRIND CHAMBER BACK IN STEP #5;
- 10. HOLDING THE FRONT OF THE BASE WELDMENT EVEN WITH THIS LINE, TIGHTEN THE NUT (PN 66783800) FROM STEPS 6 & 7 UNTIL SNUG, BUT NOT FINAL TORQUE;
- 11. RETRIEVE THE CARPENTER'S SQUARE AND LIFT/LOWER THE REAR OF THE BASE WELDMENT AT EACH SIDE UNTIL IT IS PERPENDICULAR WITH THE MACHINE GRIND CHAMBER REAR, AND TIGHTEN THE HHCS (PN 66583817, FROM STEP #8) ON EACH SIDE IN ITS TURN TO SNUG, BUT NOT FINAL TORQUE.
- 12. VERIFY THE HEIGHT AT THE FRONT OF THE BASE WELDMENT IS EVEN WITH THE HORIZONTAL LINE FROM STEPS #5 & 9, THEN TIGHTEN THE NUT (PN 66783800) TO FINAL TORQUE (RECOMMEND 11 FT LB);
- 13. VERIFY EACH SIDE OF THE BASE WELDMENT IS PERPENDICULAR AND EVEN WITH THE LINE AT THE FRONT, THEN FINAL TORQUE (RECOMMEND 11 FT LB) THE HHCS (PN 65683817);
- 14. USING AN ELECTRIC DRILL AND Ø7/16" BIT, DRILL HOLES AT THE FOUR CORNERS IN THE SIDES OF THE BASE WELDMENT. FOR FIRST-TIME INSTALLATION, USE THE PUNCHED HOLES THAT ARE PROVIDED FROM THE FACTORY AS YOUR DRILL GUIDE. FOR SUBSEQUENT INSTALLATIONS OF A NEW MOTOR THAT LEAVES THE ALREADY DRILLED HOLES OUT OF ALIGNMENT, MARK AND DRILL AN ENTIRELY NEW HOLE (WITHIN AN INCH OF EACH OF 4 PUNCHED HOLES) THROUGH BOTH LAYERS OF SHEET METAL (CAUTION: MAKE SURE YOUR BASE WELDMENT IS PROPERLY LOCATED AND PERPENDICULAR TO THE REAR OF THE GRIND CHAMBER WHEN YOU DRILL THESE HOLES);
- 15. INSERT HHCS (PN 65684417) AND INSTALL NUT (PN 66784400) INTO EACH OF THE FOUR HOLES DRILLED IN STEP #14 (USE BLUE LOCKTITE #242 ON ALL 4);
- 16. FINALLY VERIFYING THAT YOUR BASE WELDMENT IS IN PROPERT POSITION, TIGHTEN THE FOUR 3/8-16 HHCS/NUT PAIRS TO FINAL TORQUE (RECOMMEND 20 FT-LB). YOU ARE NOW READY TO INSTALL THE MOTOR ONTO YOUR HAMMER MILL;
- 17. PLACE THE MOTOR ON TOP OF THE SECURE BASE WELDMENT, AND PUT THE FELT SEAL (PN 11221511) IN PLACE, HOLLOW FACE TOWARD THE MOTOR;
- 18. NOW SLIDE THE MOTOR FORWARD UNTIL ITS SHAFT PROTRUDES THROUGH THE Ø1.94" HOLE AND INTO THE GRIND CHAMBER. (NOTE: IF THE MOTOR IS OFF CENTER FROM THE HOLE, THEN STOP, DISMANTLE YOUR WORK, AND REINSTALL THE BASE WELDMENT PAYING CLOSER ATTENTION TO MEASURING AND MARKING THE MOTOR SHAFT CENTER DISTANCE FROM THE FLAT SURFACE IT SITS ON. <u>USE GOOD JUDGEMENT</u>...IF YOUR MOTOR IS OFF CENTER BY A TINY AMOUNT, ALL MAY BE WELL; BUT IF IT IS OFF CENTER ENOUGH TO CAUSE YOUR HAMMERS TO STRIKE EITHER THE SCREEN OR INTERNAL PARTS OF THE HAMMER MILL, THEN YOU MUST RE-LOCATE THE BASE WELDMENT). LOCATE THE MOTOR BY CHECKING THAT THE SHAFT INSIDE THE GRIND CHAMBER BACK OR WEAR PLATE, AND BE SURE THE MOTOR IS PUSHED UNTIL IT TIGHTLY COMPRESSES THE FEIT SFAI:
- 19. INSTALL THE MOTOR BASE SECURING HHCS AND NUT HARDWARE, AND TORQUE IN PLACE TO FINAL TORQUE (RECOMMEND 20 FT-LB). (HHCS PN: 62585226, FLAT WASHER PN: 66785200 & NUT PN: 66405200).
- 20. NOW INSTALL YOUR HAMMER HEAD ASSEMBLY AND A SCREEN, AND CHECK THAT THE HAMMERS CLEAR ALL INTERNAL PARTS BY TURNING THE HEAD IN PLACE WITH A HAMMER EXTENDED AT BOTH THE FRONT AND THEN THE BACK OF THE HEAD ASSEMBLY.
- 21. HOOK UP THE ELECTRICAL CONNECTIONS FOR YOUR MOTOR IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE AND PROPER PROCEDURES:
- 22. WITH THE MOTOR, HEAD AND SCREEN ASSEMBLED PROPERLY, AND CLEARANCE CHECKED, NOW PROPERLY CLOSE INNER AND OUTER DOORS AND TEST-RUN THE MACHINE BY BUMPING THE MOTOR ON AND OFF. IF THERE ARE NO LOUD NOISES DUE TO COLLISIONS INSIDE THE MACHINE, YOU ARE READY TO PROCEED WITH YOUR INSTALLATION OF CONVEYOR EQUIPMENT AND TEST-RUN THE MACHINE WITH PRODUCT.
- 23. ONCE YOUR MACHINE IS IN OPERATION, SET UP PREVENTIVE MAINTENANCE CHECK PROCEDURES TO ENSURE THAT NORMAL VIBRATION DURING RUNNING DOES NOT WORK YOUR VARIOUS BOLT AND NUT CONNECTIONS LOOSE. A CHECK OF NUT AND BOLT TIGHTNESS AT LEAST ONCE EVERY WEEK IS NECESSARY.





STEP #5 LINE DRAWN AT THE LOCATION WHERE YOUR MOTOR BASE SHOULD SIT...HERE THE BASE WELDMENT-IS SHOWN IN PROPER POSITION.

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7. SEE PAGE 3 FOR WEAR PART REPLACEMENT INSTRUCTIONS (CONVEYOR DETAIL OMITTED).

5. sEE PAGE 1 FOR SIDE INLET INFORMATION.

6. SEE PAGE 2 FOR TOP INLET INFORMATION.

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