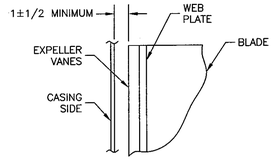
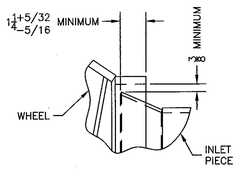
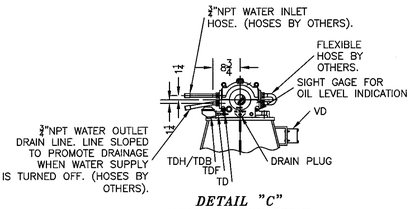


WHEEL CAP INSIDE CASING

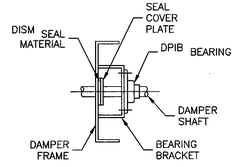
DETAIL "A"
NOTE: WHEEL MUST BE LOCATED SUCH THAT ALL EXPELLER VANES CLEAR CASING SIDE BY A MINIMUM OF 1" THRU 360°.



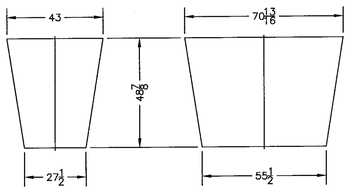
DETAIL "B"
NOTE: FIELD ADJUSTMENT MAY BE NECESSARY TO OBTAIN CLEARANCES LISTED ABOVE



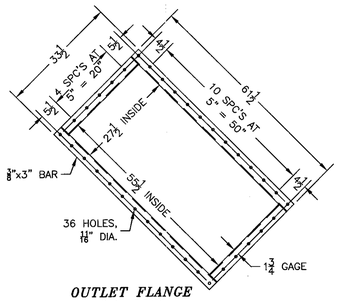
DETAIL "C"
TYPICAL BEARING DETAIL



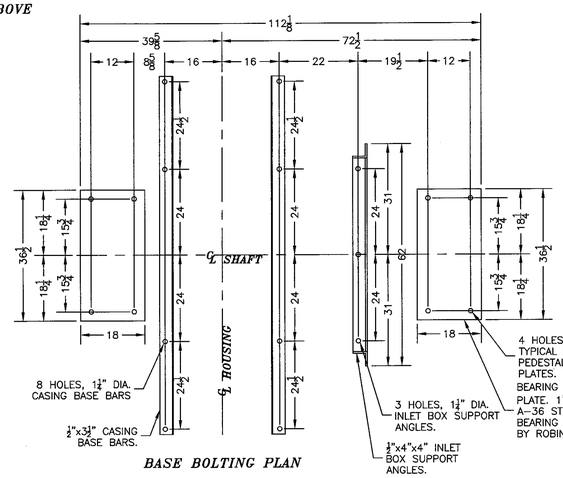
TYPICAL DAMPER SHAFT ASSEMBLY



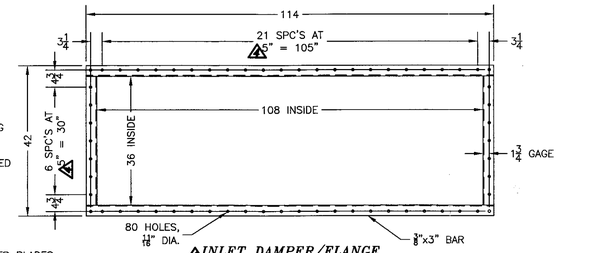
E REQUIRED OUTLET EVASE DIMENSIONS TO BE SUPPLIED BY OTHERS



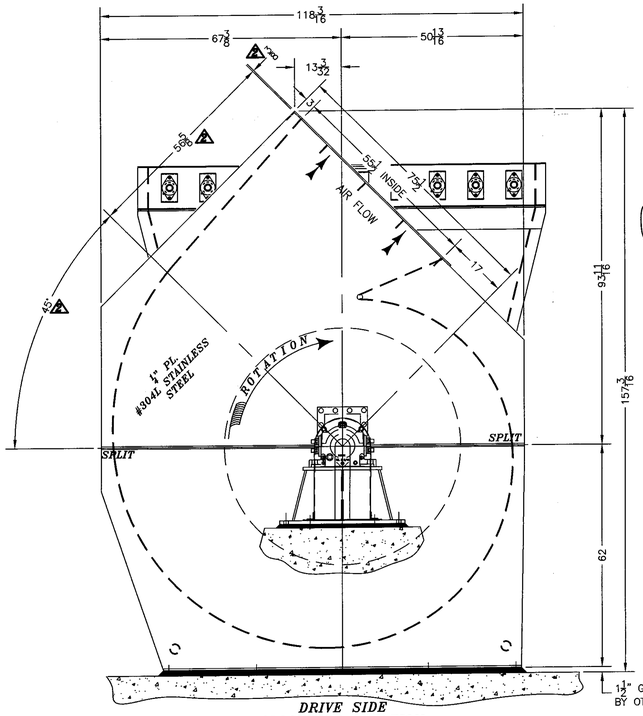
OUTLET FLANGE DRILLING



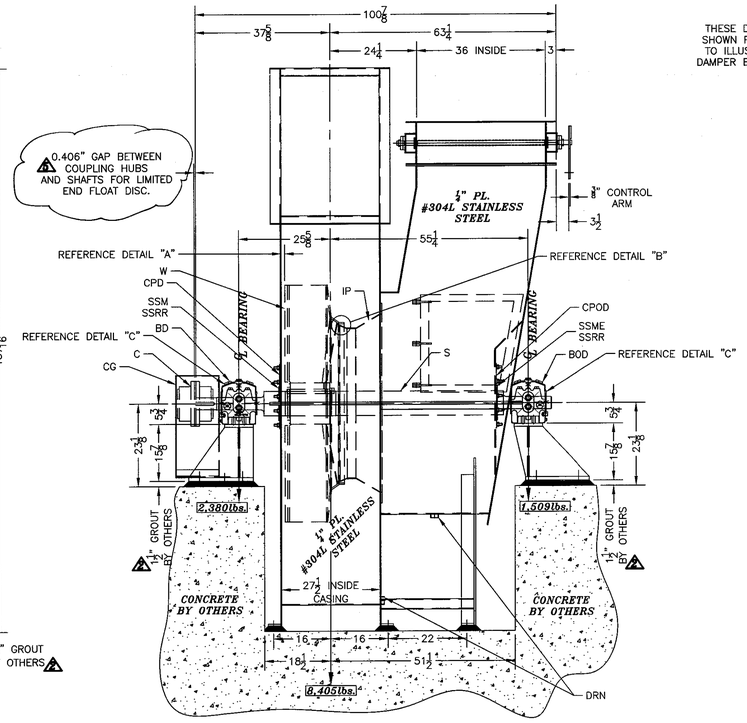
BASE BOLTING PLAN

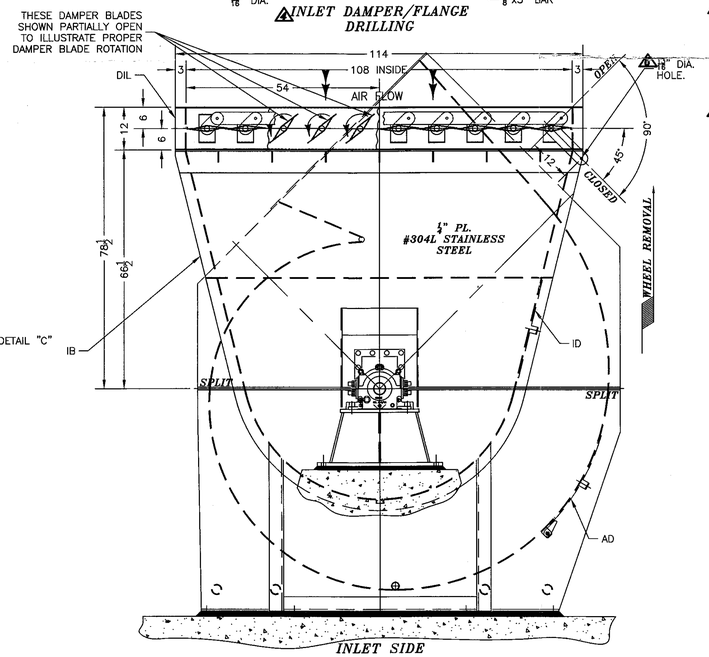


INLET DAMPER/FLANGE DRILLING



DRIVE SIDE
CLOCKWISE ROTATION





INLET SIDE

MATERIAL LIST

ITEM	QTY	DESCRIPTION
AD	1	ACCESS DOOR -24"sq, BOLTED & HINGED CONSTRUCTION, APPROX. WT.: 96lbs.
BD	1	(FIXED) BEARING, DRIVE SIDE - DODGE, "RTL", SLEEVEOIL, 3-7/16" DIA., COMPLETE WITH THRUST PLATE AND THRUST PLATE KIT, DRILLED 1/2" NPT FOR THERMOCOUPLE, STATIC OIL LUBRICATED, REF. NOTE #7 FOR RELUBRICATION SCHEDULE
BOD	1	(FLOAT) BEARING, DRIVE SIDE - DODGE, "RTL", SLEEVEOIL, 3-7/16" DIA., BEARING LINER TO BE UNDER CUT 50%, DRILLED 1/2" NPT FOR THERMOCOUPLE, STATIC OIL LUBRICATED, REF. NOTE #7 FOR RELUBRICATION SCHEDULE
C	1	COUPLING - FALK #1040G20 (GEAR) WITH LIMITED END FLOAT KIT. FAN HALF BORE 3.3725" +.0010/-.0000 KEYWAY 7/8" x 7/16" MOTOR HALF BORE 4.2465" +.0015/-.0000 KEYWAY 1" x 1/2"
CG	1	COUPLING GUARD - ASTM A36/A570 STEEL MATERIAL
CPD	1	COVER PLATE - DRIVE SIDE
CPOD	1	COVER PLATE - OPPOSITE DRIVE SIDE
DIL	1	DAMPER, INLET LOUVER DESIGN - #304L STAINLESS STEEL MATERIAL, APPROX. WT: 1050lbs.
DISM	10	DAMPER, INLET SHAFT SEAL - 1/4" THK., NEOPRENE
DPIB	10	DAMPER, PRIMARY INLET BEARING - DODGE, VSC,SET SCREW BALL BEARING, PART #126615, 1-1/2" DIA., GREASE LUBRICATED, REF. NOTE #X FOR LUBRICATION SCHEDULE
DRN	2	DRAIN - 1-1/2" #304 STAINLESS STEEL PIPE COUPLING
E	1	EVASE - SUPPLIED BY OTHERS
IB	1	INLET BOX - #304L STAINLESS STEEL MATERIAL.
ID	1	INSPECTION DOOR - 24"sq, BOLTED & HINGED CONSTRUCTION, APPROX. WT.: 96 lbs.
IP	1	INLET PIECE - #304L STAINLESS STEEL MATERIAL
ISIL	1	INLET SILENCER - DELETED FROM SCOPE OF SUPPLY
S	1	SHAFT - #316 STAINLESS STEEL MATERIAL.
SSM	1	SHAFT SEAL - 1/8"THK. GARLOCK #2900 MATERIAL
SSME	1	SHAFT SEAL, ELLIPTICAL - 1/8"THK. GARLOCK #2900 MATERIAL
SSRR	1	SHAFT SEAL RETAINING RING - #304 STAINLESS STEEL MATERIAL
TDB	2	TEMP. DETECTOR BLOCK - T-TEC, #1060-39
TDF	2	TEMP. DETECTOR FITTING - T-TEC #1060-33
TDH	2	TEMP. DETECTOR HEAD - T-TEC, #1060-34
TDP	2	TEMP. DETECTOR - T-TEC, #1060-A-12-S-A PLATINUM 100 OHM SINGLE 3-WIRE RTD.
VD	2	VIBRATION DETECTOR - VITEC, MODEL #438 c/w ADJUSTABLE ALARM & SHUT DOWN RELAYS, 4-20 mA OUTPUT FOR REMOTE INDICATION. (REMOTE INDICATOR BY
W	1	WHEEL - A-240 ALLOY 255

NOTES:

1. *FAN CASING, INLET PIECE, INLET BOX, TO BE CONSTRUCTED ENTIRELY FROM #304L STAINLESS STEEL. BEARING PEDESTALS AND COUPLING GUARD TO BE FABRICATED FROM ASTM #A-36 MATERIAL. WHEEL AND SHAFT MATERIALS AS NOTED ABOVE.*
2. *ALL MILD STEEL FAN COMPONENTS TO RECEIVE ONE COAT OF COLUMBIA PAINTS HIGH SOLIDS PRIMER. FINAL COLOR: RED*
3. *GASKET MATERIAL – ZETEX BOLT HOLE TAPE.*
4. *FAN SPLIT FOR WHEEL & SHAFT REMOVAL.*
5. *WHEEL & SHAFT WEIGHT TO BE APPROX: 2,128lbs.*
6. *TOTAL UNIT WEIGHT AS SHOWN TO BE APPROX: 12,294lbs.*
7. *FAN BEARINGS ITEMS BD AND BOD ARE STATIC OIL LUBRICATED WITH SAE 20 WEIGHT NON-DETERGENT OIL (SUS 327.0 AT 100°F AND 53.0 AT 210°F). WATER COOL BEARINGS USING POTABLE WATER, ITEM BD AND BOD REQUIRE 1.75 gal/min. PER BEARING AT A MAXIMUM INLET TEMP. OF 90°F FOR COOLING. REFERENCE DODGE BEARING INSTRUCTIONS #499970.*
8. *ROBINSON RECOMMENDS A MINIMUM CONCRETE MAT UNDER FAN TO BE APPROX 61,470lbs. THIS DOES NOT INCLUDE THE CONCRETE REQUIRED ABOVE GRADE FOR BEARING PEDESTALS, NOR DOES IT INCLUDE CONCRETE REQUIRED UNDER MOTOR.*
9. *EXPANSION JOINTS IN ALL DUCTWORK & PIPING TO & FROM FAN ARE REQUIRED. THESE JOINTS ARE TO BE IMMEDIATELY ADJACENT TO THE FAN. CUSTOMERS DUCTWORK MUST BE STRUCTURALLY ANCHORED WITHIN APPROX 24" OF EXPANSION JOINT.*
10. *BEARING TEMPERATURE DETECTORS SHOWN ABOVE ARE PICKUPS ONLY. MONITORS TO BE SUPPLIED & MOUNTED BY OTHERS.*
11. *VIBRATION DETECTORS SHOWN ABOVE ARE PICKUPS ONLY. MONITORS TO BE SUPPLIED & MOUNTED BY OTHERS.*
12. *DAMPER BEARINGS, ITEMS DPIB LISTED ABOVE ARE TO BE RELUBRICATED ON A 4 WEEK CYCLE WITH MOBILITH SHC-200 GREASE OR EQUAL.*
13. *REQUIRED DAMPER TORQUE: 567ft. lbs.*

FORCED DRAFT FAN
PROJECT NO.: 1440
EQUIPMENT TAG NO.: 1440-14020
SPECIFICATION NO.: 14020

Received from Robinson Vendor Rep. 5/04/06

WHEEL & SHAFT WR² = 3,771lbs. ft²

CADD DRAWING #3A205-103

UNITS PER ORDER ONE

NO.	REVISION	DATE	BY	CHECKED BY
1	REV. DAMPER CONTROL ARM HOLE PER CUST.	09-29-05	BK	
2	REV. COUPLING GAP AND "C"	08-19-05	BK	
3	REV. INLET FLANGE DRILLING	04-25-05	BK	
4	ADDED MOTOR BORE PER CUSTOMER	03-14-05	BK	MDV 04-14-05
5	GROUT, DIM'S, NOTE #2,PAINT & SP PER CUST. REQ.	03-03-05	BK	MDV 04-14-05
6	REMOVED SIL PER CUST., BRG UNDERCUT	03-02-05	BK	MDV 04-14-05

CAD GENERATED DRAWING, DO NOT CHANGE BY HAND

COMPONENT	SUFFIX
WHEEL	1
CASING	2
PEDESTAL	3
DAMPER	4
HUB	5
SHAFT	6

FOR ROBINSON IND. INC. INTERNAL USE ONLY

BEARINGS ARE DESIGNED FOR A MAXIMUM AMBIENT TEMPERATURE OF 100°F.

DO NOT USE SUBSTITUTE LUBRICANTS OR OVER LUBRICATE. WARRANTY WILL BE VOIDED UNLESS ROBINSON LUBRICATION INSTRUCTIONS ARE FOLLOWED.

FAN UNIT WILL BE SHIPPED ☐ ASSEMBLED ☑ DISASSEMBLED

FINAL ALIGNMENT OF BEARING, COUPLING, V-BELTS, WHEEL & SHAFT ASSY. MUST BE CHECKED BEFORE OPERATION OF THIS EQUIPMENT. NOTE ALL ITEMS ARE TO BE CHECKED FOR PROPER SETTINGS PER INSTRUCTIN MANUAL AND CERTIFIED DRAWING.

CERTIFIED FOR
YOUR ORDER 25589
OUR JOB NO. 206-103
BY BK DATE 01-19-05

TOLERANCES UNLESS OTHERWISE MARKED FRACTIONS±1/32",ANGLES±1°,DEC.±.005"
FAB TOLERANCE ON OVERALL DIMENSIONS UNDER 54"DIA. FAN ±1/8" 54"DIA. FAN & ABOVE +3/16"/-1/8"

MAXIMUM FAN DESIGN TEMPERATURE 210°F @ 1,780 RPM

1,780	123,000	57.00"	0.0587	160°F	1,130ft.	1,483
1,780	113,000	50.00"	0.0588	160°F	1,130ft.	1,335
RPM	CFM	SP	DENSITY	TEMP	ELEV	BHP

ROBINSON INDUSTRIES,INC
ZELIENOPLE, PENNSYLVANIA 16063

TYPE 66"sz10-1/4"RB1222,ARR. #3,CW @ 45deg DISCH,IRP @ 0deg,CL. #4,SWSI.
FOR ENERGY PRODUCTS OF IDAHO
COEUR D'ALENE, IDAHO

ALL DIMENSIONS ARE IN INCHES

	BY	DATE
DRAWN	BK	01-19-05
CHECKED	MDV	04-14-05

DA-66RB1222-106 REV 6