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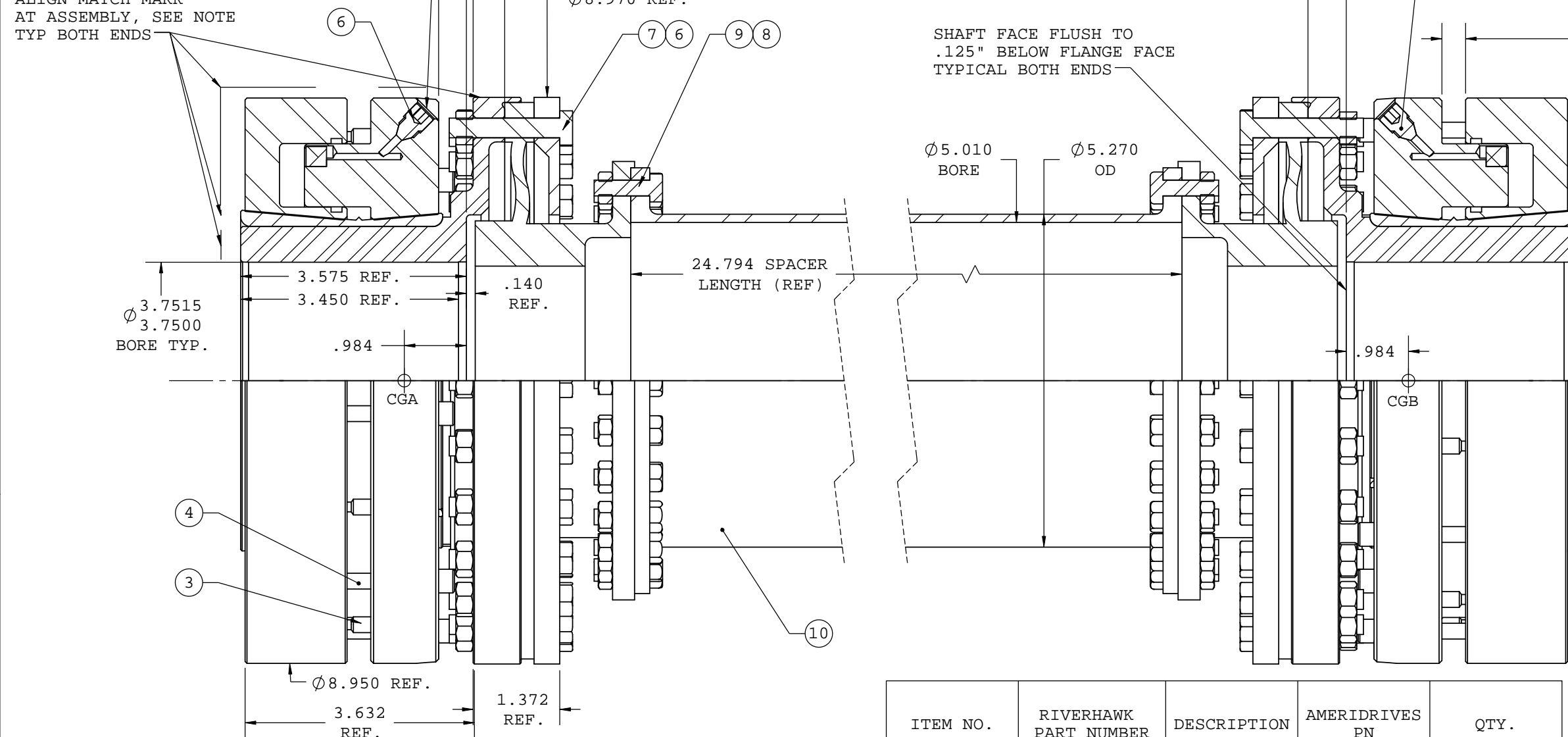
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REVISIONS				
ECN	REV	DESCRIPTION	DATE	APPROVED
CNR	A	FINALIZED COUPLING DATA	12/16/08	RJD
CNR	B	CHG NOTES, UPDATE MASS DATA, ADD SHEET 2, UPDATE BOM	12/22/08	RJD
CNR	C	ADD REF DIMENSIONS	1/21/09	RJD
CNR	D	SHORTEN HUB, UPDATE SHEET 2	1/29/09	RJD
CNR	E	ADD REF DIMS, CORRECT ITEM #'S	2/17/09	RJD
CNR	F	CHG TORS SP. RATE, W, WR2 & CG	04/01/09	CNR

HYDRAULIC PORT, (2) PLUGS PN 2001299
 USE RIVERHAWK FITTING 2001992 TO CHARGE
 NOTE: AFTER CLAMP IS SET, OIL MUST BE PURGED USING COMPRESSED AIR FOR PROPER BALANCE REMOVE PLUGS FOR OPERATION

ALIGN MATCH MARK AT ASSEMBLY, SEE NOTE TYP BOTH ENDS



SEE MANUAL FOR CORRECT GAP SETTING PROCEDURE
 INITIAL GAP TO LOCK = _____
 GAP GROWTH AFTER LOCK = .231
 TOTAL REQUIRED GAP = _____
 DO NOT EXCEED A TOTAL OF .375

SCRIBED "7500472-X" WHERE "X" MUST MATCH HUB TYP. BOTH ENDS

SCRIBED "7500473-X" WHERE "X" MUST MATCH HYDRAULIC CLAMP TYP. BOTH ENDS

APPLICATION DATA:
 GEARBOX TO COMPRESSOR
 SPEED 3,217 RPM
 POWER 4,000 HP
 CONTINUOUS TORQUE 78,170 IN-LB
 PEAK TORQUE 204,791 IN-LB

HYDRAULIC CLAMP DATA:
 SLIP TORQUE AT SPEED 309,134 IN-LB
 SLIP TORQUE FACTOR 1.5

REQUIREMENTS FOR SHAFTS:
 SIZE: ϕ 3.750 TYP. (2)
 MINIMUM YIELD STRENGTH = 80,000 PSI

COUPLING SPACER DATA:
 MANUFACTURER AMERIDRIVES INTERNATIONAL
 CONTINUOUS TORQUE RATING 170,000 IN-LB
 SERVICE FACTOR 2.17
 PEAK TORQUE RATED 265,000 IN-LB
 AXIAL DEFLECTION 0.052 IN
 ANGULAR CAPACITY PER ELEMENT = 1/4°
 PARALLEL OFFSET = .124 IN
 LATERAL CRITICAL SPEED 39,234 RPM
 AXIAL STIFFNESS 7,700 IN-LB
 BENDING STIFFNESS 3,080 IN-LB/DEG PER END
 LATERAL STIFFNESS 5.8E6 LB/IN PER END

OVERALL MASS ELASTIC DATA:
 TOTAL WEIGHT 134.6 LB
 DRIVE HALF WEIGHT 67.31 LB @ CGA
 LOAD HALF WEIGHT 67.31 LB @ CGB
 INERTIA 1466 LB-IN²
 TORSIONAL STIFFNESS 4.74E6 IN-LB/RAD

ITEM NO.	RIVERHAWK PART NUMBER	DESCRIPTION	AMERIDRIVES PN	QTY.
1	7500472	HYDRAULIC CLAMP ASSEMBLY	--	2
2	7500473	HUB	--	2
3	2010017-C04016	SET SCREW	--	8
4	2010012-04032	RETRACTION SCREW	--	8
5	2001299	HYDRAULIC PLUG	--	4
6	7500470-3	FLANGE BOLT	071325-012	48
7	7500470-4	NUT	063482-024	48
8	7500470-5	SPACER BOLT	071202-001	48
9	7500470-6	NUT	063482-022	48
10	7500470	COUPLING SPACER	--	1

- NOTES:**
- SPECIFY WEIGHT MATCHED SETS WHEN ORDERING HARDWARE
 - FOR HTC INSTALLATION AND MAINTENANCE SEE RIVERHAWK MANUAL IM183
 - HTC/HUB ASSEMBLY BALANCED TO U=10W/N, N=SPEED(RPM), W=WEIGHT (LB)
 - HUB AND HYDRAULIC CLAMP ARE MATCHED AT BALANCE AND MUST MATCH AT ASSEMBLY.
 - COUPLING AND SPACER COMPONENT BALANCED TO U=4W/N.
 - FOR CORRECT BALANCE ALIGN ALL FOUR MATCH MARKS ON HYDRAULIC CLAMP AND HUB BEFORE CHARGING
 - DO NOT EXCEED HTC PRESSURE OF 8,000 PSI OR GAP OF .375" (SEE ABOVE)

		HTC/FLEX COUPLING ASSY	
		DRAWN DATE DRB 11/25/08	SIZE DWG NO. B HC-4291
ENG APPR DATE RJD 12/2/08	REV F	7500471	SHEET 1 OF 2

4

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ECN	REV	DESCRIPTION	DATE	APPROVED
-	-	See Sheet 1	-	-

CAUTION: OBTAIN AND READ INSTALLATION AND MAINTENANCE MANUAL FORM 367-SH BEFORE INSTALLING COUPLING. IMPROPER INSTALLATION MAY RESULT IN COUPLING FAILURE.

SECTION #1- INSTALLATION DIMENSIONS

-MEASURE ACTUAL INSTALLED LENGTH BETWEEN FLANGE FACES. (NOM. "F" = 28.786 IN.)
 CALCULATE "F" BY ADDING THE FOLLOWING:
 S = MEASURED FREE LENGTH OF PACK FACE TO DO PACK FACE (NOM. "S" = 28.786 IN.)
 P = PRE-STRETCH (8.000 IN.) TO BE SPECIFIED BY CUSTOMER.
 -IF "F" IS LESS THAN +/- .02 IN, NO ADJUSTMENT IS REQUIRED
 -IF "F" EXCEEDS +/- .15 IN, ADJUST EQUIPMENT BEFORE INSTALLING COUPLING.
 -IF "F" EXCEEDS +/- .02 IN BUT NOT +/- .15 IN, ADJUST SHIM SETS ACCORDINGLY

SECTION #2- RECOMMENDED BOLT TIGHTENING TORQUE

ITEM	AS PLATED	PLATED/OILED
#4	250 IN-LB	200 IN-LB
#8	125 IN-LB	100 IN-LB

SECTION #3- FOR SHIPPING AND INSTALLATION ONLY

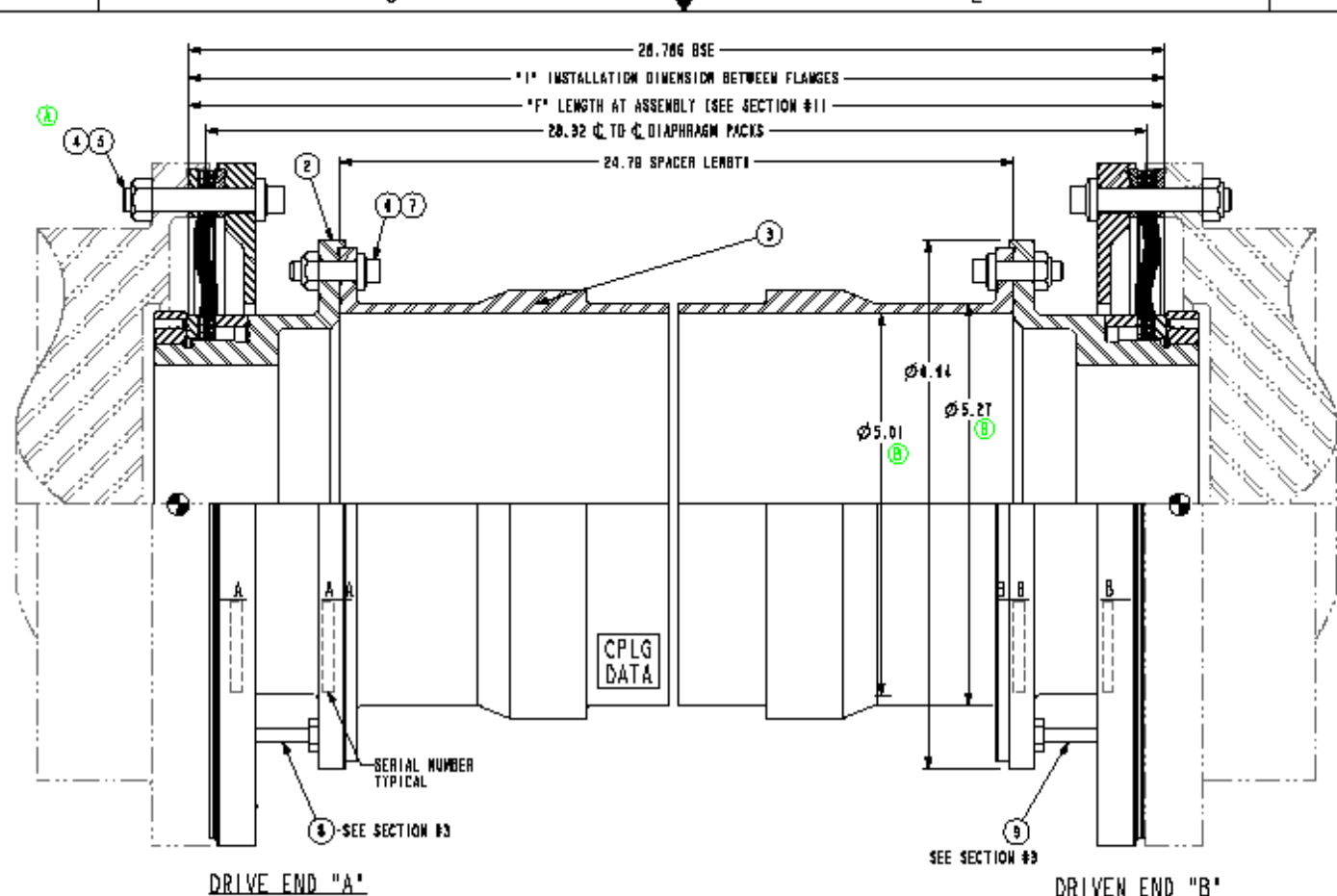
-CAPSCREWS AND JAM NUTS ON EACH FLANGE ARE USED FOR SHIPPING AND SPACER INSTALLATION.
 -THE USE OF SCREW LENGTHS OTHER THAN SPECIFIED MAY DAMAGE THE DIAPHRAGM.
 -DRAW UP SCREWS EVENLY UNTIL DIAPHRAGM PACK SUB-ASSEMBLY PILOTS CLEAR SPACER.
 DRAW-UP = .07 IN. EACH END
CAUTION: DO NOT EXCEED RECOMMENDED DRAW-UP. COUPLING DAMAGE MAY RESULT.
CAUTION: SHIPPING SCREWS MUST BE REMOVED PRIOR TO OPERATING COUPLING.

SECTION #4- MARKING

-DIAPHRAGM PACK SUB ASSEMBLIES AND SPACER ARE ENDS "A" AND "B".
 <END TO END ALIGNMENT NOT NECESSARY>
 -IDENTICAL COUPLING PARTS WITH DIFFERENT SERIAL NUMBERS ARE INTERCHANGEABLE
 -MARKINGS ON SPACER TO BE ELECTRO-ETCHED ONLY.

SECTION #5- APPLICATION SPECIFICATIONS

-THIS COUPLING IS MANUFACTURED AND BALANCED IN ACCORDANCE WITH API-671 4th ed. 1150 (0441), WITH THE EXCEPTION OF PARAGRAPH 9.3.3.
 -THE MAJOR COMPONENTS OF THIS COUPLING ARE BLACK OXIDED.
 -REFER TO P10-61-27 FOR AXIAL FORCE AND BENDING MOMENT DIAGRAMS.



OPERATING CONDITIONS:	APPLICATION REQUIREMENT	COUPLING CAPACITY
POWER: NORMAL	4.000	
CHFI MAX. CONT.		
SPEED: NORMAL	3.211	RATED 0.000
(RPM) MIN. CONT.		
MAX. CONT.	3.211	
TRIP		
TORQUE: NORMAL	18.985	RATED 170.000
(IN-LB) MAX. CONT.		
SELECTION	117.548	
MAX. TRANSIENT	244.781	RATED 265.000
SERVICE FACTOR	1.50	ACTUAL 2.17
AXIAL DEFLECTION FROM NEUTRAL (IN)		RATED .032
ANGULAR MISALIGNMENT (DEGREES)		RATED .250
EQUIVALENT PARALLEL OFFSET (IN)		RATED .124

⊕ DENOTES INFORMATION TO BE SUPPLIED BY CUSTOMER, IF APPLICABLE

COUPLING CHARACTERISTICS

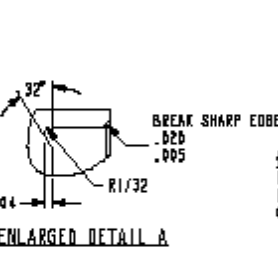
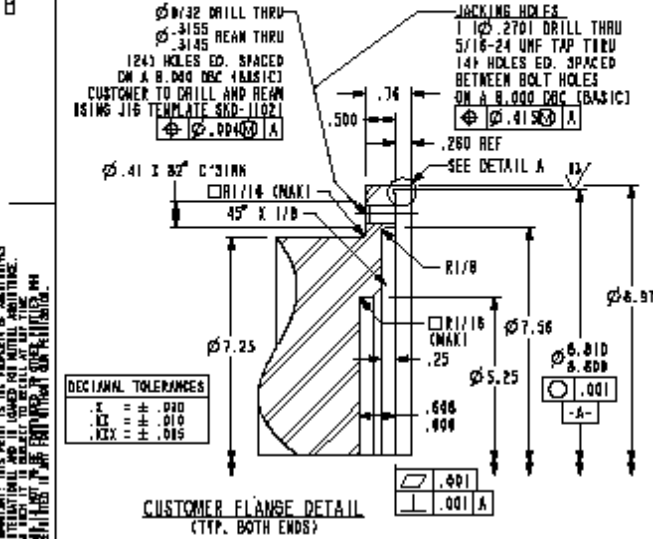
- LATERAL CRITICAL SPEED (RPM)	38.737
- AXIAL STIFFNESS (TOTAL CPLG.) (LB/IN)	7.700
- BENDING STIFFNESS (IN-LB/DEG), PER END	3.080
- LATERAL STIFFNESS (C10° LB/IN), PER END	5.0
- TOTAL WEIGHT (LB)	44.5
- TOTAL WR ² (LB-IN ²)	418
- TORSIONAL STIFFNESS (C11° IN-LB/RAD)	5.35

CENTER OF GRAVITY

END "A" (LB)	22.25	⊕ (IN)	+0.30
END "B" (LB)	22.25	⊕ (IN)	+0.30

BALANCING

- COMPONENT BALANCED



CUSTOMER FLANGE NOTE
 F.A.O. UNLESS OTHERWISE SPECIFIED.
 DIMENSIONS SHOWN ASSUME FLANGE MATERIAL OF AISI-4140 HT WITH A MINIMUM HARDNESS OF 301 BHN.
 ⊕ DENOTES RADII FOR MAX AND MIN DIAMETERS.
 IF FINISHED DIAMETERS DIFFER, USE APPROPRIATE RADII.

+ DENOTES RECOMMENDED SPARE PARTS
 ⊕ DENOTES QUANTITY REQUIRED. 10% EXTRA FURNISHED

ITEM	QTY	PART NO.	NAME	MATERIAL	MATL. SPEC.	DESCRIPTION	WT. LB	WR ² LB-IN ²
1	4	-	SHIPPING SCREW	STEEL	-	#10-32 UNF X 1.25 LG BMS (WHITE)	-	-
2	4	-	SHIPPING SCREW	STEEL	-	#10-32 UNF X 1.25 LG BCS (YELLOW)	-	-
3	4	903402-022	BUT (HEX)	ALLOY STEEL	GRADE C	1/4-20 UNF (SELF LOCKING)	2 (TOT.)	2 (TOT.)
4	4	071202-041	BOLT (1/2 PT)	ALLOY STEEL	GRADE B	1/4-20 UNF X .80 LG (COAT. PLATED)	1.2 (TOT.)	12 (TOT.)
5	4	064402-024	BUT (HEX)	ALLOY STEEL	GRADE C	7/16-24 UNF (SELF LOCKING)	4 (TOT.)	8 (TOT.)
6	4	071325-012	BOLT (1/2 PT)	ALLOY STEEL	GRADE B	3/16-24 UNF X 1.75 LG (COAT. PLATED)	3.0 (TOT.)	48 (TOT.)
7	1	432043-106	SPACER	STEEL	AISI-4140	-	16.3	111
8	2	411402-001	DIAPHRAGM PACK SUB-ASSEMBLY	VARIOUS	-	-	25.4 (TOT.)	250 (TOT.)
9	1	413737-001	COUPLING ASSEMBLY	-	-	CONSISTS OF ITEMS 02 THRU 07	44.5	418

LIST OF MATERIAL

REVISED OPERATING DATA SPACER	TWS	NAG	NAG	31-Mar-08	
ITEM #4: 071325-012 HAS 071325-005, AIRER CUSTOMER PDB.	TWS	NAG	NAG	12-Jan-08	
REV	DESCRIPTION	DRAWN	CHECKED	APPROVED	DATE
CUSTOMER: RIVERHAWK					
CUST. PO NO. 13430			ORDER NO. 712653		
APPLICATION: TORQ					
REV	DRAWN	CHECKED	APPROVED	DATE	SCALE
	SAN	NAG	NAG	12-Dec-08	NTS
SIZE: #8-7 SERIES: RR AMERIFLEX COUPLING					
DRAWING NUMBER: DB-413737					
AMERIDRIVES INTERNATIONAL - COUPLING PRODUCTS - EXIE, PA. U.S.A. 19512					

NOTE: THE DRAWING ABOVE REPRESENTS ONLY THE FLEXIBLE COUPLING USED FOR THIS APPLICATION FOR CURRENT REVISION OF THE DRAWING ABOVE, CONTACT AMERIDRIVES

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Riverhawk Company
 215 Clinton Road
 New Hartford, New York 13413

HTC/FLEX COUPLING ASSY

DRAWN	DATE	SIZE	DWG NO.	REV
DRB	11/25/08	B	4291HC	F
ENG APPR	DATE			
RJD	12/2/08			

SHEET 2 OF 2