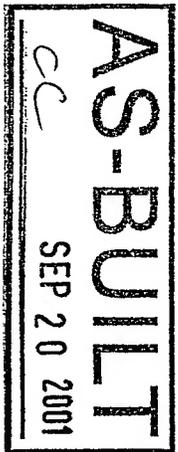


Collicutt Hanover

BILL OF MATERIALS - FH225



ENGINE: 7042GL
COMPRESSOR: JGK-4
CYLINDER (THROW 1): 9.625" K
CYLINDER (THROW 2): 9.625" K
CYLINDER (THROW 3): 5.875" K
CYLINDER (THROW 4): 5.875" K
COOLER: 144EH
SOUR CONTENT: SWEET (>100PPM)
OTHER:

PROCESS P&ID

CUST TAG CHS TAG/SPECIFICATIONS

MANUFACTURER NAME

Drawing Revision #: 2698A01-A REV 2

QTY MATERIAL REQ.

V1000
DIAMETER: 36"
S/S LENGTH: 72"
MAWP: 705 PSIG
TEMP: 150 F
CORR ALLOW: 0.125
RT- 3
S/N: V1000-01-0003
CRN: P5891.2

CHS-FABSHOP

1

LV1001
NORRISEAL 2220 1" NPT VALVE WITH SIZE 9 ACTUATOR 3/4" TRIM FAIL CLOSE

NORRISEAL

1

LC1002
CONTROL LEVEL 1001XL 2" NPT CS. BACK MOUNT. CW NORRISEAL PVC DISPLACER AND SWIVEL.

NORRISEAL

1

LSH1003
2" NPT SOR LEVEL SWITCH 316SS BODY AND FLOAT, 1500 PSI

SOR

1

LG1004
GAUGE LIQ LVL 19R20 VR 321 MM JERGUSON NACE

JERGUSON

1

PRV1005
0.25" NPT MODEL 67 SWEET SERVICE REGULATOR WITH INTERNAL FILTER AND RELIEF RANGE 0 - 35 PSI

FISHER

1

PROCESS P&ID

Drawing Revision #:

2698A01-A REV 2

FOI005 ORIFICE PLATE 8" X 300# SCH40 BORE 1

C.S. 1/8" THICK

1051 0.5" X 0.75" VALVE MDL JERG 146SG 1

JERGUSSON

(SET OF 2)

1052 BALL VALVE 0.5" NPT CS BODY 2000# PSI CW LOCKING HANDLE 1

LANCE

1053 BALL VALVE 0.5" NPT CS BODY 2000# PSI CW LOCKING HANDLE 1

LANCE

1054 BALL VALVE 1.5" NPT CS BODY 2000# PSI CW LOCKING HANDLE 1

NAVCO

1055 PISTON CHECK VALVE 1.5" NPT 800# API REDUCED BORE F6 TRIM 1

NAVCO

1055 BALL VALVE 1" CS BODY 2000 PSI CW LOCKING HANDLE A352-1CCNACE 2

NAVCO

V1100 CHS-FABSHOP 1

DIAMETER: 18"

S/S LENGTH: 66"

MAWP: 705 PSIG

TEMP: 150 F

CORR ALLOW: 0.125

RT- 3

S/N: V1100-01-0004

CRN: P5884.2

PCV1101 SUCTION CONTROL VALVE - 4" 300#RF FISHER 1051-V200 CONTROL VALVE 1

TCM BALL SEAL, 317 SST CHROME-PLATED V-BALL

AS PER SPARTAN QUOTE CQ49412

PRV1102 FISHER 67CER PRESSURE REGULATOR - 316 SST TUBING AND 316 SST SWAGelok FITTINGS 1

DO NOT ORDER - COMES WITH CONTROL VALVE PCV1101

TH1104 THERMOMETER 3" PLAIN GLASS FACE 0.5" BACK CONNECTED WITH NO RESET 9" STEM DUAL SCALE 0-250 F 1

TREND

1104 FISHER 3610J POSITIONER - 6-30 PSI INPUT 1

DO NOT ORDER - COMES WITH CONTROL VALVE PCV1101

PROCESS P&ID

Drawing Revision #: 2698A01-A REV 2

TW1105 THERMOWELL 1/2NPT X 3/4NPT X 7 1/2" U FOR 9" STEM LENGTH

TREND

1

PC1105 FISHER 4150KR PRESSURE CONTROLLER
316 SST TUBING AND SWAGelok FITTINGS
DO NOT ORDER - COMES WITH CONTROL VALVE PCV1101

CONSOLIDATED

1

PSV 1106 FLANGED 2.5" 300# X 4" 150# 'J' ORIFICE WCB BODY CLOSED TOP.
SET PRESSURE= 705PSIG
SWEET SERVICE
CONSOLIDATED

1152

2

BASKET STRAINER 6" X 600# CS SCHEDULE 160 FLOW AREA 150% MESH 40 REVERSE FLOW 316SS

CENTURY

1

1153 GAUGE VALVE A108 CW HARD SEAT MULTI-PORT 0.75" MNPT X 0.5 FNPT NEEDLE STEM O-RING VITON STEM SEAL

CHS-FABSHOP

1

V1200 DIAMETER: 18"
S/S LENGTH: 132"
MAWP: 800 PSIG
TEMP: 350 F
CORR ALLOW: 0.125
RT- 3
S/N: V1200-01-0004
CRN: P5886.2

CONSOLIDATED

1

PSV1201 FLANGED 2" -600# X 3"-150# H ORIFICE WCB BODY CLOSED TOP.
SET PRESSURE= 800PSIG
SWEET SERVICE
CONSOLIDATED

FOI202

1

6" 600RF FULL BORE ORIFICE PLATE, 1/8" THICK, C.S

TREND

1

TH1211 3" X 4" X 0.5" GBM 50-500F DUAL SCALE

TREND

1

TW1212 THERMOWELL 1/2NPT X 3/4NPT X 2 1/2" U FOR 4" STEM LENGTH

PROCESS P&ID

Drawing Revision #:

2698A01-A REV 2

TW1221	TREND	1
THERMOWELL 1/2NPT X 3/4NPT X 2 1/2"U FOR 4" STEM LENGTH		
TH1222	TREND	1
3" X 4" X 0.5" CBM 50-500F DUAL SCALE		
1253	CENTURY	1
NEEDLE VALVE A108 C/W HARD SEAT 0.75" MNPT X 0.5" FNPT BALL STEM PACKING TEFLOM STEM SEAL		
CYL1510		1
CYLINDER CLASS K BORE 9.625" X 1270 PSIG FLANGE 6" X 600 C/W VVCP		
PURGE PACKING		
5.5" STROKE		
S/N: C-52827		
FO1511		1
ORIFICE PLATE 6" X 600# X 3.25" ID 316SS MATERIAL		
FO1512		1
ORIFICE PLATE 6" X 600# X 3.375" ID 316SS MATERIAL		
TE1513		1
72" PYRO LEAD WITH 10" STRAIGHT PROBE 250 C TO 900 C FLEX ARMOR OVER FIBERGLASS		
TW1514	TREND	1
THERMOWELL 1/2NPT X 1/2NPT X 4 1/2"U FOR 6" STEM LENGTH		
CYL1520		1
CYLINDER CLASS K BORE 9.625" X 1270 PSIG FLANGE 6" X 600 C/W VVCP		
PURGE PACKING		
5.5" STROKE		
S/N: C-52828		
FO1521		1
ORIFICE PLATE 6" X 600# X 3.25" ID 316SS MATERIAL		
FO1522		1
ORIFICE PLATE 6" X 600# X 3.375" ID 316SS MATERIAL		
TE1523		1
72" PYRO LEAD WITH 10" STRAIGHT PROBE 250 C TO 900 C FLEX ARMOR OVER FIBERGLASS		
TW1524	TREND	1
THERMOWELL 1/2NPT X 1/2NPT X 4 1/2"U FOR 6" STEM LENGTH		

PROCESS PAID

Drawing Revision #: 2698A01-A REV 2

1551	TAG 1551 - VVCP FOR CYL 1510 "DO NOT ORDER, C/W CYLINDER"	ARIEL	1
1552	TAG 1552 - VVCP FOR CYL 1520 "DO NOT ORDER, C/W CYLINDER"	ARIEL	1
1554	1.00" x 4.00" 8TPI GR8 CAPSCREW		48
V2000	DIAMETER: 30" S/S LENGTH: 72" MAWP: 800 PSIG TEMP: 150 F CORR ALLOW: 0.125 RT-3 S/N: V2000-01-0003	CHS-FABSHOP	1
LV2001	NORRISEAL 2220 1" NPT VALVE WITH SIZE 9 ACTUATOR 3/4" TRIM FAIL CLOSE	NORRISEAL	1
LC2002	CONTROL LEVEL 1001 XL 2" NPT CS BACK MOUNT C/W NORRISEAL PVC DISPLACER AND SWIVEL	NORRISEAL	1
LSH2003	2" NPT SOR LEVEL SWITCH, 316SS BODY AND FLOAT, 1500 PSI	SOR	1
LG2004	GAUGE LIQ LVL 19R20 VR 321 MM JERGUSON NACE	JERGUSON	1
PRV2005	0.25" NPT MODEL 67 SWEET SERVICE REGULATOR WITH INTERNAL FILTER AND RELIEF RANGE 0 - 35 PSI	FISHER	1
FO2005	6" 600RF FULL BORE (5.761 IN) ORIFICE PLATE, 1/8" THICK, C.S	JERGUSON	1
2051	0.5" X 0.75" VALVE MDL JERG 146SG (SET OF 2)	JERGUSON	1
2052	BALL VALVE 0.5" NPT CS BODY 2000# PSI C/W LOCKING HANDLE	LANCIE	1
2053	BALL VALVE 1.5" NPT CS BODY 2000# PSI C/W LOCKING HANDLE	LANCIE	1

PROCESS P&ID

Drawing Revision #: 2698A01-A REV 2

2054	PISTON CHECK VALVE 1.5" NPT 800# API REDUCED BORE F6 TRIM	NAVCO	1
2055	BALL VALVE 1" CS BODY 2000 PSI CW LOCKING HANDLE A352-LCC NACE	NAVCO	2
V2100	DIAMETER: 16" S/S LENGTH: 66" MAWP: 800 PSIG TEMP: 150 F CORR ALLOW: 0.125 RT- 3 S/N: V2100-01-0004 CRN: P5888.2	CHS-FABSHOP	1
TW2101	THERMOWELL 1/2NPT X 3/4NPT X 2 1/2"U FOR 4" STEM LENGTH	TREND	1
TE2102	72" PYRO LEAD WITH 10" STRAIGHT PROBE 250 C TO 900 C FLEX ARMOR OVER FIBERGLASS	THERMO-KINETICS	1
TI2104	THERMOMETER 3" PLAIN GLASS FACE 0.5" BACK CONNECTED WITH NO RESET 9" STEM DUAL SCALE 0-250 F	TREND	1
TW2105	THERMOWELL 1/2NPT X 3/4NPT X 7 1/2"U FOR 9" STEM LENGTH	TREND	1
2152	CONE STRAINER 4" X 1500# CS SCHEDULE 160 FLOW AREA 150% MESH 40 REVERSE FLOW 316SS	CHS-FABSHOP	2
V2200	DIAMETER: 16" S/S LENGTH: 132" MAWP: 1440 PSIG TEMP: 350 F CORR ALLOW: 0.125 RT- 3 S/N: V2200-01-0003 CRN: P5889.2	ANDERSON GREENWOOD	1
PSV2201	FLANGED 2" 900# X 3" 300# 'G' ORIFICE WCB BODY CLOSED TOP, PILOT OPERATED SET PRESSURE= 1400PSIG SWEET SERVICE, Q#40270	ANDERSON GREENWOOD	1

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Drawing Revision #:

2698A01-A REV 2

FO2202	ORIFICE PLATE 4" X 900# FULL BORE C.S MATERIAL		1
TI2211	3" X 4" X 0.5" CBM 50-500F DUAL SCALE	TREND	1
TW2212	THERMOWELL 1/2NPT X 3/4NPT X 2 1/2"U FOR 4" STEM LENGTH	TREND	1
TI2221	3" X 4" X 0.5" CBM 50-500F DUAL SCALE	TREND	1
TW2222	THERMOWELL 1/2NPT X 3/4NPT X 2 1/2"U FOR 4" STEM LENGTH	TREND	1
2253	NEEDLE VALVE A108 C/W HARD SEAT 0.75" MNPT X 0.5" FNPT BALL STEM PACKING TEFLON STEM SEAL	CENTURY	1
CYL2510	CYLINDER CLASS K BORE 5.875" X 2050 PSIG FLANGE 4" X 1500 C/W VVCP		1
	PURGE PACKING		
	5.5" STROKE		
FO2511	ORIFICE PLATE 4" X 1500# X 2.25" ID 316SS MATERIAL		1
FO2512	ORIFICE PLATE 4" X 1500# X 1.625" ID 316SS MATERIAL		1
TE2513	72" PYRO LEAD WITH 10" STRAIGHT PROBE 250 C TO 900 C FLEX ARMOR OVER FIBERGLASS		1
TW2514	THERMOWELL 1/2NPT X 1/2NPT X 2 1/2"U FOR 4" STEM LENGTH	TREND	1
CYL2520	CYLINDER CLASS K BORE 5.875" X 2050 PSIG FLANGE 4" X 1500 C/W VVCP		1
	PURGE PACKING		
	5.5" STROKE		
FO2521	ORIFICE PLATE 4" X 1500# X 2.25" ID 316SS MATERIAL		1
FO2522	ORIFICE PLATE 4" X 1500# X 1.625" ID 316SS MATERIAL		1

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Drawing Revision #: 2698A01-A REV 2

TE2523	72" PYRO LEAD WITH 10" STRAIGHT PROBE 250 C TO 900 C FLEX ARMOR OVER FIBERGLASS			1
TW2524	THERMOWELL 1/2NPT X 1/2NPT X 2 1/2"U FOR 4" STEM LENGTH	TREND		1
2551	TAG 2551 - VVCP FOR CYL 2510 "DO NOT ORDER, C/W CYLINDER"	ARIEL		1
2552	TAG 2552 - VVCP FOR CYL 2520 "DO NOT ORDER, C/W CYLINDER"	ARIEL		1
2555	1.25" x 4.750" 8TPI GR8 CAPSCREW			32
PY4101	TRANSDUCER MODEL 546 1/P 6-30 PSI OUTPUT 4-20MA INPUT EXPLOSION-PROOF ENCLOSURE TAPPED VENT	FISHER		1
4151	TAG 4151 - ACTUATOR FOR 1ST STAGE LOUVERS. (INCLUDED WITH COOLER)	GARZO		1
PY4201	TRANSDUCER MODEL 546 1/P 6-30 PSI OUTPUT 4-20MA INPUT EXPLOSION-PROOF ENCLOSURE TAPPED VENT	FISHER		1
4251	TAG 4251 - ACTUATOR FOR 2ND STAGE LOUVERS. (INCLUDED WITH COOLER)	GARZO		1
TW7001	THERMOWELL 1/2NPT X 3/4NPT X 2 1/2"U FOR 4" STEM LENGTH	TREND		1
TE7002	72" PYRO LEAD WITH 10" STRAIGHT PROBE 250 C TO 900 C FLEX ARMOR OVER FIBERGLASS	THERMO-KINETICS		1
7051	4" 600RF CHECK VALVE, PISTON	DANIELS		1
PCV7100	2 X 1500# MODEL 657-D C/W SIZE 46 ACTUATOR NACE DOUBLE HEAT TREATED 17-4PH SST GUIDE BUSHING TFE PACKING LCC STEEL BODY NACE 1.00"	FISHER		1
	TRIM			
	SPARTAN Q# C CQ47550			
	CO # 02712			
7151	BALL VALVE 2" RF 900 ANSI REGULAR PORT C/W LOCKING HANDLE STANDARD	NUTTRON		2

Engineered by: CRAIG CLARK
Date: 09/18/2001

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Drawing Revision #: 2698A01-A REV 2

7152	BALL VALVE 3" RF 900 ANSI REGULAR PORT C/W LOCKING HANDLE STANDARD	NUTRON	1
PCV7200	1" NPT VALVE CONTROL MODEL 357 WCC BODY NACE 3/8" FAIL OPEN M-FORM TRIM AIR 0 - 35PSI		1
R07205	ORIFICE PLATE 2" X 1500# X 1.25" ID 316SS MATERIAL		1
7251	BALL VALVE 1" NPT 3000 PSI REGULAR PORT C/W LOCKING HANDLE STANDARD	NUTRON	2
7252	GLOBE VALVE 2" RF 900# ANSI REDUCED BORE 316L TRIM	NAVCO	1
7253	FLANGE 1.5" X 900/1500# RAISED FACE HUB 1" THD SA105N		1
7254	1.5" X 300 RAISED FACE HUB BLIND 1" THREADED SA105N NOTES: A,F,G		1

Collicutt Hanover

BILL OF MATERIALS - FH225

ENGINE: 7042GL
 COMPRESSOR: JGK-4
 CYLINDER (THROW 1): 9.625" K
 CYLINDER (THROW 2): 9.625" K
 CYLINDER (THROW 3): 5.875" K
 CYLINDER (THROW 4): 5.875" K
 COOLER: 144EH
 SOUR CONTENT: SWEET (>100PPM)
 OTHER:

9100 - MAJOR EQUIPMENT

Drawing Revision #:

2699A01-A REV 2

CUST TAG	CHS TAG/SPECIFICATIONS	MANUFACTURER NAME	QTY MATERIAL REQ.
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VS9101	VIBRATION SWITCH C/W MANUAL RESET, EXPLOSION PROOF, MURPHY, VS2EX, FOR ENGINE VIBRATION	MURPHY	1
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VS9102	VIBRATION SWITCH C/W MANUAL RESET, EXPLOSION PROOF, MURPHY, VS2EX, FOR COMPRESSOR VIBRATION	MURPHY	1
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VS9103	VIBRATION SWITCH C/W MANUAL RESET, EXPLOSION PROOF, MURPHY, VS2EX, FOR COOLER VIBRATION	MURPHY	1
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SE9104	MAGNETIC PICK UP 2" DYNALCO SPEED SENSOR MEASURES ENGINE RPM	MURPHY	1
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9121	ENGINE WAUKESHA L7042GL S/N: C-13710/1		1
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9122	IGNITION MODULE, CEC WAUKESHA, SUPPLIED W/ ENGINE		1
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9100 - MAJOR EQUIPMENT

Drawing Revision #:

2699A01-A REV 2

9124 THIS CARD LINKS TO A FABRICATED PART WORK ORDER FOR ALL MOUNTING HARDWARE FOR THIS DRIVER, INCLUDING STUDS, BLOCKS, AND GROUT BOXES
ENGINE GROUT BOX: 115A206A

9127 COUPLING GUARD ALUMINUM

9128 AIR FILTER ADAPTOR FOR 7042GL

9131 10" HUMP HOSE

9132 AIR INTAKE TUBING 12" O.D. X 12 GA.

9133 AIR INTAKE FLANGE, 12" X 150#

9134 GASKET, 12" X 150#

9135 BOLT, 7/8" DIAMETER, 2-1/2" LONG, GR. 5, CW LOCK WASHER & NUT

9136 EXHAUST FLEX, FOR 7042GL, SUPPLIED W/ ENGINE

9137 EXHAUST FLEX FLANGE, 8" X 150#, CS

9138 GASKET, 8" X 150#

9139 BOLT, 3/4" DIAMETER, 2-1/2" LONG, GR. 5, CW LOCK WASHER & NUT

1

1

2

2

1

2

2

24

1

1

1

8

9100 - MAJOR EQUIPMENT

Drawing Revision #:

2699A01-A REV 2

9140	EXHAUST CONCENTRIC REDUCER, 8" X 14", 12 GAUGE, CS	1
9141	EXHAUST ELBOW, 14" X 90 DEGREE, LONG RADIUS, CS	2
9143	EXHAUST SAMPLE POINT NEEDLE VALVE, WHITEY, 1/4"	1
9144	EXHAUST INSULATION & CLADDING	1
9145	EXHAUST INSULATION SPACER RINGS, TO FIT 14" O.D. TUBE	14
9146	EXHAUST TUBING, 14" O.D. X 12 GAUGE, CS	1
9147	EXHAUST FLANGE, 14" X 150#, CS	4
9148	GASKET, 14" X 150#	3
9149	BOLT, 1" DIAMETER, 2-1/2" LONG, GR. 5, C/W LOCK WASHER & NUT	36
9150	12" CANVAS WRAP FLEXIBLE CONNECTION C/W CLAMPS	1
9153	SILENCER, STODDARD, EISH-14	1
9154	FRAME JGK/4 C/W SHORT 2SC K GUIDE SUPPORTS S/N: F-16828	1

9100 - MAJOR EQUIPMENT

Drawing Revision #:

2699A01-A REV 2

9174

24 X 48 THERMCAT 2000 COMBI-SAFE 120V HEATER, CW REGULATORS, GRILL, & SHUT-OFF VALVES

2

9175

24 X 24 THERMCAT 2000 COMBI-SAFE 120V HEATER, CW REGULATORS, GRILL, & SHUT-OFF VALVES

1

9179

PAINT AS PER CUSTOMER SPECIFICATIONS

1

9180

16" AIR DIVERTER BOX WITH 12" CONNECTIONS

1

9181

AIR INTAKE TUBING 16" O.D. X 12 GA.

1

9182

AIR INTAKE TUBING 10" O.D. X 12 GA.

2



BILL OF MATERIALS - FH225

ENGINE: 7042GL
COMPRESSOR: JGK-4
CYLINDER (THROW 1): 9.625" K
CYLINDER (THROW 2): 9.625" K
CYLINDER (THROW 3): 5.875" K
CYLINDER (THROW 4): 5.875" K
COOLER: 144EH
SOUR CONTENT: SWEET (>100PPM)
OTHER:

9200 - FUEL AND START GAS
CUST TAG CHS TAG/SPECIFICATIONS MANUFACTURER NAME

Drawing Revision #: 2699A01-B REV 2
QTY MATERIAL REQ.

P19201 PRESSURE GAUGE 2.5" FACE X 0.25" BTM 0-300 PSI LIQUID FILLED SS CASE BRASS INTERNALS
W/KA

2

P19202 PRESSURE GAUGE 2.5" FACE X 0.25" BTM 0-100 PSI LIQUID FILLED SS CASE BRASS INTERNALS
W/KA

1

LG9204 SIGHT GLASS, 10" X 0.625", KENCO, EPG-10-HP, FOR FUEL GAS FILTER
KENCO

1

PRV9205 FUEL GAS REGULATOR, FISHER 627, CAST IRON BODY, 1/2" ORIFICE, 35-80 PSIG SPRING, SET @ 40 PSIG

1

PSV9206 THREADED SRV 1" MNPT X 1.5" FNPT F ORIFICE CS INLET WITH WCB BODY CLOSED TOP, MERCER, 75 PSIG SET PRESSURE, SWEET GAS SERVICE, VITON SEAT

1

TE9207 72" PYRO LEAD WITH 10" STRAIGHT PROBE 250 C TO 900 C FLEX ARMOR OVER FIBERGLASS, FOR INTAKE MANIFOLD TEMP

2

TW9208 THERMOWELL 1/2NPT X 1/2NPT X 1 3/8"U FOR 2 1/2" STEM LENGTH, FOR INTAKE MANIFOLD TEMP
TREND

2

9200 - FUEL AND START GAS

Drawing Revision #:

2699A01-B REV 2

PT9209 WIK-A
INTAKE MANIFOLD PRESSURE TRANSMITTER, WIK-A, -30 TO 30 PSI RANGE, P/N 892.13.500/30X30

WIK-A

2

EY9210
ASCO SOLENOID VALVE, SUPPLIED W/ ALLEN BRADLEY PANEL, FOR FUEL GAS VALVE

1

EY9211
ASCO SOLENOID VALVE, SUPPLIED W/ ALLEN BRADLEY PANEL, FOR START GAS RELAY VALVE

1

PSV9212
THREADED SRV 1" MNPT X 1" FNPT D ORIFICE CS INLET WITH WCB BODY CLOSED TOP. SET @ 165 PSIG, MERCER, SWEET GAS SERVICE, VITON SEAT

1

PSV9213
PSV, MERCER, 0.75" MNPT X 1" FNPT D ORIFICE, CS INLET WITH WCB BODY CLOSED TOP. SWEET GAS SERVICE, TEFLON SEAT, SET @ 175 PSIG

1

PSV9213
START GAS PSV, SIZE TBA

1

9251
BALL VALVE 2" RF 150 ANSI REGULAR PORT C/W LOCKING HANDLE STANDARD

NUTRON

4

9252
FLANGE 1" X 150# RAISED FACE WELD NECK SCH 80 SA105N

16

9253
P & ID TAG #: 9253
S/S LENGTH: 70"
MAWP: 275 PSIG
TEMP: 150 F
CORR ALLOW: NONE
RT: NONE

CHS-FABSHOP

1

9254
MURPHY FUEL GAS VALVE PNEUMATIC 2" NPT WITH VENTED PORT AND MANUAL OVERRIDE

MURPHY

1

9255
FLEX HOSE 2" NPT X 2' TMUN X 13.5" OVERALL LENGTH

3

9200 - FUEL AND START GAS

Drawing Revision #:

2699A01-B REV 2

9256	BALL VALVE 1.5" CS BODY 2000 PSI C/W LOCKING HANDLE A352-LCC NACE	NAVCO	1
9257	Y-TYPE STRAINER 2 X 150# FLANGED		1
9258	RELAY VALVE, IR, SRV-150	IRS	1
9259	FLEX HOSE 1.5" NPT X 1.5" TFUN X 13.5" OVERALL LENGTH		1
9260	STARTER, VANE TYPE, IR, SS810, INERTIA BENDIX	IRS	1
9261	STARTER LUBRICATOR, IR, HDL-2	IRS	1
9264	2" X 150# RAISED FACE TUBING FLANGE SA105N FOR 2" X 0.95" SAI78 GR2 TUBING.		16
9265	NEEDLE VALVE A108 C/W HARD SEAT 0.5" MNPT X 0.5" FNPT NEEDLE STEM ORING VITON STEM SEAL	CENTURY	1
9266	LEVEL GAUGE ISOLATION VALVE, KENCO, KTV-50-CS	KENCO	1
9267	BALL VALVE 0.5" CS BODY 2000 PSI C/W LOCKING HANDLE A352-LCC NACE	NAVCO	1
9270	BALL VALVE 1" CS BODY 2000 PSI C/W LOCKING HANDLE A352-LCC NACE	NAVCO	4
9271	NEEDLE VALVE A108 C/W HARD SEAT 0.25" MNPT X 0.25" FNPT NEEDLE STEM ORING VITON STEM SEAL	CENTURY	2

9200 - FUEL AND START GAS

Drawing Revision #: 2699A01-B REV 2

9273 FESTO
 FESTO SHUTTLE VALVE (OS-1/4B VALVE)-COMES WITH 3 ADAPTORS PART #36171 (FOR NEW WAUKESHA ENGINES ONLY) 2

9274
 SPIRAL WOUND 2" X 150# FLEX GASKET 316L 18

9275 M&Z IND.
 B7M STUD 0.625" X 3.25" X 11 TPI 80

9276
 0.625" X 2HM NUT 176

9277
 FLANGE 2" X 150# RAISED FACE SOCKET WELD SCH 80 SA105N 4

9278 NAVCO
 SWING CHECK VALVE 1" NPT 800# API REDUCED BORE 316L SS TRIM 1

9279
 2" X 150# SA516 GR70N SPEC BLIND 2

9280
 SWING CHECK VALVE, 2" X 150# RF 1

9281 M&Z IND.
 B7M STUD 0.625" X 4.5" X 11 TPI 8



BILL OF MATERIALS - FH225

ENGINE: 7042GL
 COMPRESSOR: JGK-4
 CYLINDER (THROW 1): 9.625" K
 CYLINDER (THROW 2): 9.625" K
 CYLINDER (THROW 3): 5.875" K
 CYLINDER (THROW 4): 5.875" K
 COOLER: 144EH
 SOUR CONTENT: SWEET (>100PPM)
 OTHER:

9300 - COOLANT UTILITIES

CUST TAG CHS TAG/SPECIFICATIONS MANUFACTURER NAME

Drawing Revision #:

2699A01-C REV 2

QTY MATERIAL REQ.

TI9301 THERMOMETER 3" PLAIN GLASS FACE 0.5" BACK CONNECTED WITH NO RESET 4" STEM DUAL SCALE 0-250 F TREND 2

 TW9302 THERMOWELL 3/4 NPT X 1/2 NPT X 2 1/2" U FOR 4" STEM LENGTH TREND 2

 TI9303 THERMOMETER 3" PLAIN GLASS FACE 0.5" BACK CONNECTED WITH NO RESET 2.5" STEM DUAL SCALE 0-250 F, FOR AUX WATER TEMP TREND 2

 TW9304 THERMOWELL 3/4 NPT X 1/2 NPT X 1 3/8" U FOR 2 1/2" STEM LENGTH TREND 2

 TE9305 72" PYRO LEAD WITH 10" STRAIGHT PROBE 250 C TO 900 C FLEX ARMOR OVER FIBERGLASS 1

 TW9306 THERMOWELL 1/2NPT X 1/2NPT X 1 3/8" U FOR 2 1/2" STEM LENGTH TREND 1

 LS9307 LEVEL SWITCH, MURPHY, L1200, 2" NPT, FOR SURGE TANK JACKET WATER LEVEL 1

9300 - COOLANT UTILITIES

Drawing Revision #: 2699A01-C REV 2

LS9308
LEVEL SWITCH, MURPHY, LI200, 2" NPT, FOR SURGE TANK AUX WATER LEVEL

1

LC9309
SIGHT GLASS, 5/8" REDLINE

REDLINE

2

PRV9310
0.25" NPT MODEL 67 SWEET SERVICE REGULATOR WITH INTERNAL FILTER AND RELIEF RANGE 0 - 125PSI

FISHER

1

9351
FLANGE 6" X 150# RAISED FACE WELD NECK SCH 40 SA105N

6

9352
SPIRAL WOUND 6" X 150# FLEX GASKET 316L

6

9353
B7M STUD 0.75" X 4" X 10 TPI

M&Z IND.

64

9354
PIPE 6" SCHEDULE 40 SEAMLESS - SA106B

1

9355
ELBOW 6" LONG RADIUS 90 DEGREE BUTT WELD SCHEDULE 40 SA234WPB

8

9356
6" DRESSER COUPLING, STYLE 38 LITE DUTY

DRESSER

2

9358
FLANGE 4" X 150# RAISED FACE WELD NECK SCH 40 SA105N

2

FLANGE 3" X 150# RAISED FACE WELD NECK SCH 40 SA105N

2

9359
SPIRAL WOUND 4" X 150# FLEX GASKET 316L

2

9300 - COOLANT UTILITIES

Drawing Revision #: 2699A01-C REV 2

9359 SPIRAL WOUND 3" X 150# FLEX GASKET 316L 2

9360 B7M STUD 0.625" X 3.5" X 11 TPI M&Z IND. 16

9361 CONCENTRIC REDUCER 4" X 2" BUTT WELD SCHEDULE 40/80 SA234WPB 2

9362 CONCENTRIC REDUCER 3" X 2" BUTT WELD SCHEDULE 40/80 SA234WPB 2

9363 FLEX 2" NPT X 2' TMUN 2

9364 AUX WATER THERMOSTAT, SUPPLIED W/ WAUKESHA ENGINE 1

9365 2" X 150# RAISED FACE TUBING FLANGE SA105N FOR 2" X 0.95" SA178 GR2 TUBING. 16

9366 SPIRAL WOUND 2" X 150# FLEX GASKET 316L 14

9367 B7M STUD 0.625" X 3.25" X 11 TPI M&Z IND. 56

9368 2" STRATA FLEX HOSE, C/W JIC FITTING & HOSE COUPLING 2

9369 DIAPHRAGM PUMP 1" NPT POLYPROPYLENE VALVE SEATS, FOR GLYCOL TRANSFER 1

9370 BALL VALVE 0.375" NPT CS BODY 2000# PSI C/W LOCKING HANDLE 1

9300 - COOLANT UTILITIES

Drawing Revision #: 2699A01-C REV 2

9370	DRESSER COUPLING 150 PSIG 2" ELBOW 90 DEGREE	DRESSER	2
9371	SURGE TANK, 16" O.D. X 67" S/S, TWO COMPARTMENT	CHS-FABSHOP	1
9372	2' RAD CAP C/W FILLER NECK		2
9373	1/2" X 5/8" BRASS CONBRACO SIGHT GLASS VALVE		2
9374	BALL VALVE 1" CS BODY 2000 PSI C/W LOCKING HANDLE A352-LCC NACE	NAVCO	7
9375	BALL VALVE 0.75" CS BODY 2000 PSI C/W LOCKING HANDLE A352-LCC NACE	NAVCO	6
9376	FLANGE 2" X 150# X 2" THREADED RAISED FACE SA105N		6
9377	0.75" X 2HM NUT	M&Z IND.	128
9378	0.625" X 2HM NUT		128
9379	0.75" BARB X 0.75 NPT BRASS HOSE FITTING		12
9380	3/4" HOSE, 10 FT.		1
9381	WAFER BLOCK VALVE, 6" X 150# RF		2

9300 - COOLANT UTILITIES

Drawing Revision #: 2699A01-C REV 2

9382
WAFER BLOCK VALVE, 2" X 150# RF 2

9383
JACKET WATER ADAPTOR FLANGE FOR WAUK 7042GL 2

Collicutt Hanover

BILL OF MATERIALS - FH225

ENGINE: 7042GL
COMPRESSOR: JGK-4
CYLINDER (THROW 1): 9.625" K
CYLINDER (THROW 2): 9.625" K
CYLINDER (THROW 3): 5.875" K
CYLINDER (THROW 4): 5.875" K
COOLER: 144EH
SOUR CONTENT: SWEET (>100PPM)
OTHER:

9400 - ENGINE OIL UTILITIES

CUST TAG CHS TAG/SPECIFICATIONS

Drawing Revision #: 2699A01-D REV 2
QTY MATERIAL REQ.

LC9401 OIL LEVEL CONTROLLER KENCO LCE-17 FOR VHP WAUKESHA ENGINES
KENCO

TE9402 72" PYRO LEAD WITH 10" STRAIGHT PROBE 250 C TO 900 C FLEX ARMOR OVER FIBERGLASS
TREND

TW9403 THERMOWELL 1/2NPT X 1/2NPT X 1 3/8" U FOR 2 1/2" STEM LENGTH
TREND

PT9404 ENGINE OIL PRESSURE TRANSMITTER, SUPPLIED W/ PANEL
FISHER

PRV9405 0.25" NPT MODEL 67 SWEET SERVICE REGULATOR WITH INTERNAL FILTER AND RELIEF RANGE 0 - 125PSI
FISHER

LG9406 SIGHT GLASS, 5/8" REDLINE, FOR OIL DAY TANK
REDLINE

9451 BALL VALVE 1" CS BODY 2000 PSI CM LOCKING HANDLE A352-1CC NACE
NAVCO

9400 - ENGINE OIL UTILITIES

Drawing Revision #: 2699A01-D REV 2

9452	BALDWIN OIL FILTER BASE		1
9453	BALL VALVE 0.5" CS BODY 2000 PSI C/W LOCKING HANDLE A352-LCC NACE	NAVCO	2
9454	ENGINE PRELUBE PUMP, SUPPLIED W/ WAUKESHA ENGINE		1
9455	BALDWIN OIL FILTER ELEMENT		1
9456	BALL VALVE 2" CS BODY 2000 PSI C/W LOCKING HANDLE	NAVCO	1
9458	1/2" X 5/8" BRASS CONBRACO SIGHT GLASS VALVE		1
9459	DIAPHRAGM PUMP 1" NPT ALUMINUM MOTOR & WETTED PARTS / POLYPROPYLENE VALVE SEATS		1
9460	BALL VALVE 0.375" NPT CS BODY 2000# PSI C/W LOCKING HANDLE		1
9461	2" X 150# RAISED FACE TUBING FLANGE SAI05N FOR 2" X 0.95" SAI178 GR2 TUBING.		8
9462	FLANGE 2" X 150# X 2" THREADED RAISED FACE SAI05N		8
9463	SPIRAL WOUND 2" X 150# FLEX GASKET 316L		8
9464	B7M STUJD 0.625" X 3.25" X 11 TPI	M&Z IND.	32

9400 - ENGINE OIL UTILITIES

9465
0.625" X 2HM NUT

BILL OF MATERIALS

Drawing Revision #:

2699A01-D REV 2

64

Engineered by: CRAIG CLARK

Date: 09/18/2001



BILL OF MATERIALS - FH225

ENGINE: 7042GL
 COMPRESSOR: JGK-4
 CYLINDER (THROW 1): 9.625" K
 CYLINDER (THROW 2): 9.625" K
 CYLINDER (THROW 3): 5.875" K
 CYLINDER (THROW 4): 5.875" K
 COOLER: 144EH
 SOUR CONTENT: SWEET (<100PPM)
 OTHER:

9500 - COMPRESSOR OIL UTILITIES

CUST TAG CHS TAG/SPECIFICATIONS

MANUFACTURER NAME

Drawing Revision #:

2699 A01-D REV 2

QTY MATERIAL REQ.

LC9501 KENCO
 OIL LEVEL CONTROLLER USED ON ALL ENGINE AND COMPRESSORS C/W UNIVERSAL MOUNTING BRACKET

TE9502
 72" PYRO LEAD WITH 10" STRAIGHT PROBE 250 C TO 900 C FLEX ARMOR OVER FIBERGLASS

TW9503
 THERMOWELL 1/2NPT X 1/2NPT X 1 3/8"U FOR 2 1/2" STEM LENGTH

PT9504
 OIL PRESSURE TRANSMITTER, SUPPLIED W/ PANEL

TI9505
 THERMOMETER 3" PLAIN GLASS FACE 0.5" BACK CONNECTED WITH NO RESET 2.5" STEM DUAL SCALE 0-250 F

TW9506
 THERMOWELL 1/2NPT X 1/2NPT X 1 3/8"U FOR 2 1/2" STEM LENGTH

PRV9507
 0.25" NPT MODEL 67 SWEET SERVICE REGULATOR WITH INTERNAL FILTER AND RELIEF RANGE 0 - 125PSI

9500 - COMPRESSOR OIL UTILITIES

Drawing Revision #:

2699A01-D REV 2

Part Number	Description	Quantity	Source
LG9509	SIGHT GLASS 5/8" REDLINE, FOR COMPRESSOR OIL DAY TANK	1	REDLINE
9551	BALL VALVE 1" CS BODY 2000 PSI C/W LOCKING HANDLE A352-LCC NACE	3	NAVCO
9552	BALDWIN OIL FILTER BASE	1	
9553	BALL VALVE 0.5" CS BODY 2000 PSI C/W LOCKING HANDLE A352-LCC NACE	1	NAVCO
9554	DIAPHRAGM PUMP 1" NPT POLYPROPYLENE VALVE SEATS, FOR COMPRESSOR PRELUBE	1	
9557	BALL VALVE 0.75" CS BODY 2000 PSI C/W LOCKING HANDLE A352-LCC NACE	2	NAVCO
9558	BALDWIN OIL FILTER ELEMENT	1	
9559	1/2" X 5/8" BRASS CONBRACO SIGHT GLASS VALVE	1	
9560	LUBRICATOR DISTRIBUTION BLOCK, FOR THROWS 1 & 3	1	

Collicutt Hanover

BILL OF MATERIALS - FH225

ENGINE: 7042GL
COMPRESSOR: JGK-4
CYLINDER (THROW 1): 9.625" K
CYLINDER (THROW 2): 9.625" K
CYLINDER (THROW 3): 5.875" K
CYLINDER (THROW 4): 5.875" K
COOLER: 144EH
SOUR CONTENT: SWEET (>100PPM)
OTHER:

9600 - PURGE PACKING / PACKING VENT
CUST TAG CHS TAG/SPECIFICATIONS

MANUFACTURER NAME

Drawing Revision #:

2699A01-E REV 2
QTY MATERIAL
REQ.

NON-TAGGED MATERIALS

CUST TAG CHS TAG/SPECIFICATIONS

MANUFACTURER NAME

QTY MATERIAL
REQ.

FLANGE 2" X 150# X 2" THREADED RAISED FACE SA105N
NOTES: AFG

2

2" NPT X 2" TFUN X 13.5" OL FLEX HOSE

1

INLET JACKET WATER HEADER, FOR 7042GL

1

MISC KITS FOR COMPRESSOR PACKAGE

1

304L SS

CHS-FABSHOP

1

ELECTRIC MOTOR, FOR COOLER FAN DRIVE, TECO WESTINGHOUSE, 600V, 75 HP, 1800 RPM, TERC, 36ST FRAME

1

COIL ADAPTOR KIT, FOR SHIELDED IGNITION SYSTEM

1

MISC FITTINGS

1

COMPRESSOR LUBE OIL THERMOSTATIC VALVE, FOR JGK-4 FRAME

1

SKID CONCRETE VOLUME TBA

1

MISC FITTINGS

1

ELECTRICAL FITTINGS KIT

1

BUILDING ELECTRICAL

1

MISC ELECTRICAL COMPONENTS

1

CONTRACTED LABOUR TO INSTALL ELECTRICAL

1

FORGED STEEL FITTING KIT FOR WAUKESHA MDLS 3521, 5790, 7042

1

MISCELLANEOUS MACHINED PARTS

1

COMPLETE TUBE FITTING INSTALLATION KIT SWAGELOK

1

MISCELLANEOUS FITTINGS

1

MISCELLANEOUS FLANGES

1

SPARE PARTS KIT

1

- 1 STARTER REPAIR KIT
- 2 SUCTION VALVES (9-5/8" CYLINDER)
- 2 DISCHARGE VALVES (9-5/8" CYLINDER)
- 2 SUCTION VALVES (5-7/8" CYLINDER)
- 2 DISCHARGE VALVES (5-7/8" CYLINDER)

CANCELLATION CHARGES FOR SS BYPASS VALVE PER SPARTAN QUOTE #CQ47550

1

CHANGE ORDER # 02733

FISHER 1051K SIZE 40 ACTUATOR, FAIL CLOSE
DO NOT ORDER - COMES WITH CONTROL VALVE PCV1101

1