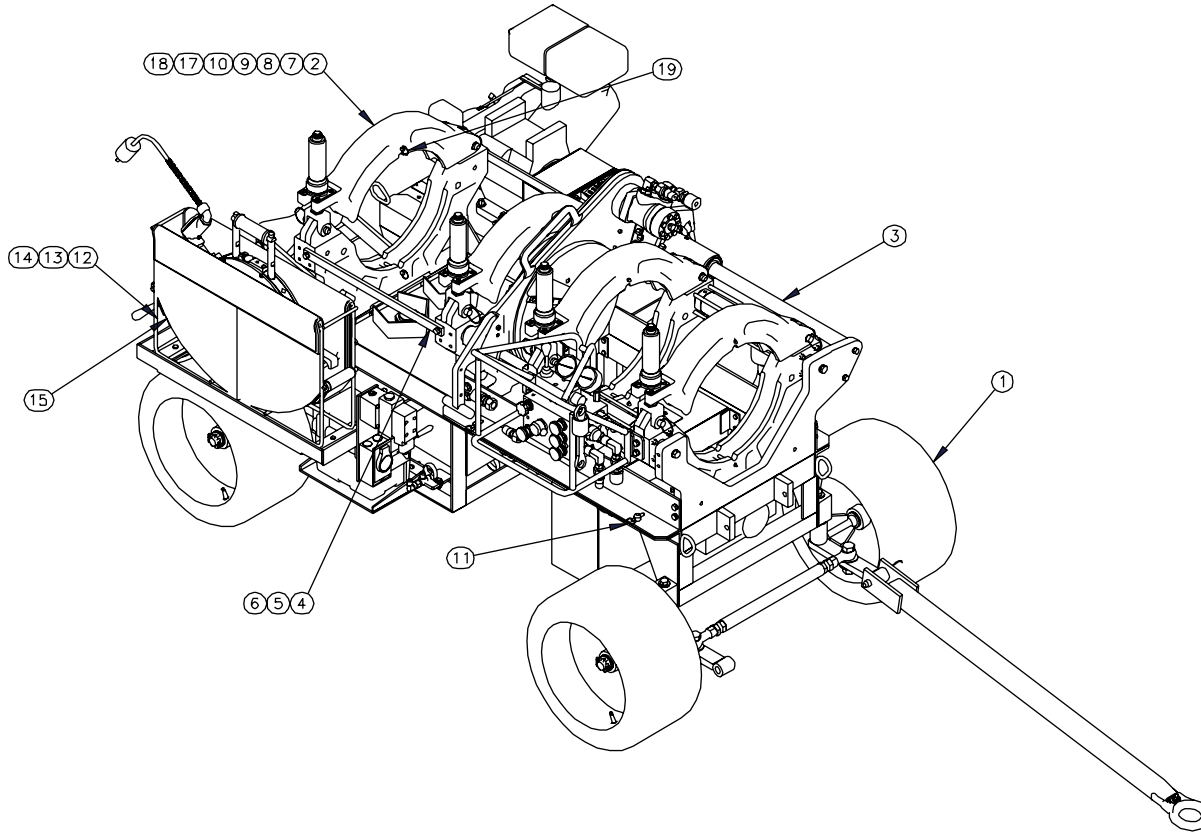


NOTES:



SIZE	MAIN ASSEMBLY USAGE							SUB-ASSEMBLY USED ON			
	10CQ	20CQ	10EP	20EP	10HP	20HP	40	QTY	ASSEMBLY	QTY	ASSEMBLY
4
8
14
18
24
36

APPROX. WEIGHT: 1,332 LBS

APPR: _____ DATE: _____
 CHECKED: _____ DATE: _____

REV		DESCRIPTION	DATE	APPROVED
1	1	101205		
2	1	200460		
3	1	200461		
4	2	200482		
5	4	00-0203-0600-10		
6	4	HWD019		
7	2	200481		
8	4	00-0203-0800-12		
9	8	00-0203-0600-14		
10	8	00-0003-0003-00		
11	4	00-4274-0408-00		
12	1	600082		
13	2	00-1179-0014-00		
14	2	V00321		
15	1	600012		
16	1	600211		
17	4	00-0436-0006-00		
18	4	00-0238-0005-00		
19	8	00-4274-0530-00		
20	1	700128		
21	2	00-2905-0300-03		
22	2	700113		
23	1	00-3081-0068-00		
24	1	V01028		
25	1	00-3302-0023-00		
26	1	00-5000-0600-00		
27	1	00-8684-0003-00		
28	1	00-3795-0243-00		
29	16	00-0436-0004-00		

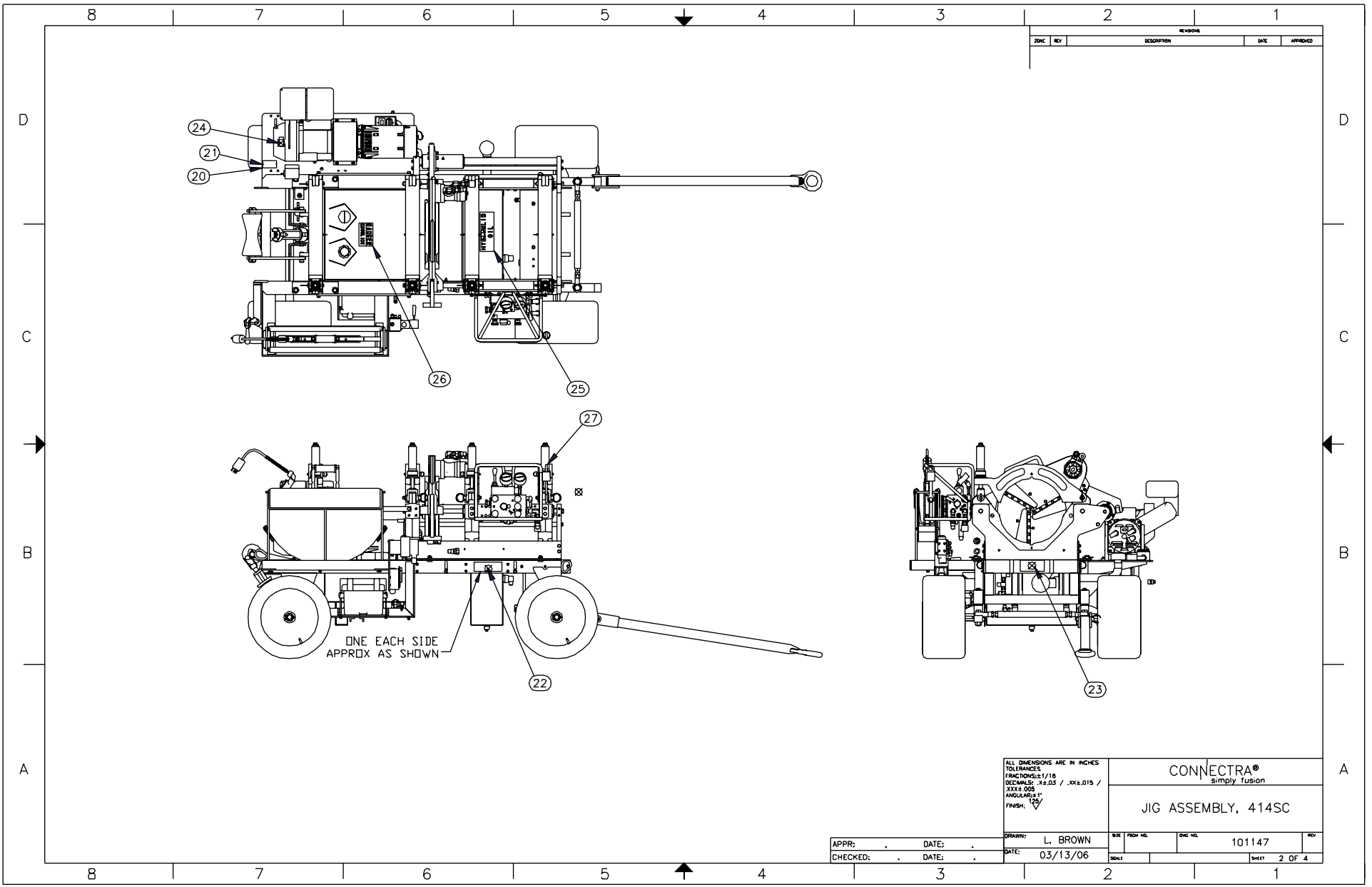
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	101205	CART/ENGINE ASSEMBLY, 414SC
2	1	200460	CLAMP ASSEMBLY, 414
3	1	200461	3 CLAMP ASSEMBLY, 414
4	2	200482	STRAP, BASE SIDE, 414
5	4	00-0203-0600-10	BOLT, HEX HD .375-16 X 1.25" SAE GR 5-ZINC PL-REPLCS HB0007
6	4	HWD019	WASHER, LOCK, 3/8 HIGH COLLAR
7	2	200481	ANGLE, BASE SIDE, 414
8	4	00-0203-0800-12	BOLT, HEX HD .50-13 X 1.5" SAE GR 5-ZINC PL-REPLCS HB0045
9	8	00-0203-0600-14	BOLT, HEX HD .375-16 X 1.75" SAE GR 5-ZINC PL-REPLCS HB0008
10	8	00-0003-0003-00	NUT, ESNA 3/8"-16NC-3 LGT STD HGT PLTD
11	4	00-4274-0408-00	FASPIN, .250 X 0.8" GRIP
12	1	600082	HEATER STAND, 14"
13	2	00-1179-0014-00	PIN, CLEVIS STAINLESS, 3/8 X 1.312
14	2	V00321	PIN, COTTER, RUE RING, #RUE-14-S
15	1	600012	HEATER BAG, 14"
16	1	600211	HEATER ASSEMBLY, 14", 240VAC
17	4	00-0436-0006-00	WASHER, FL STD SAE PL 1/2" REPLCS HW0001
18	4	00-0238-0005-00	WASHER, LK SAE STD MED 1/2" PL REPLCS HW0015
19	8	00-4274-0530-00	PIN, QUICK RELEASE, .312 DIA X 3.00 GRIP
20	1	700128	NAMEPLATE, 414SC 240 VAC
21	2	00-2905-0300-03	SCREW, DR RD HD TYPE U #2 X 3/16
22	2	700113	DECAL, CONNECTRA 2.00 X 6.00 WHITE / GRAY LETTERS
23	1	00-3081-0068-00	LABEL, WARNING DO NOT EXCEED 10 MPH
24	1	V01028	LABEL, CAUTION, TURN OFF HEATER
25	1	00-3302-0023-00	DECAL, HYDRAULIC OIL
26	1	00-5000-0600-00	DECAL, DANGER/GASOLINE
27	1	00-8684-0003-00	WRENCH, RATCHETING BOX
28	1	00-3795-0243-00	FUSION PRESSURE CALCULATOR
29	16	00-0436-0004-00	WASHER, FL STD SAE PL 3/8" REPLCS HW0014

ALL DIMENSIONS ARE IN INCHES
 TOLERANCES:
 FRACTIONS: ±1/16
 DECIMALS: .XX, .05 / .XX, .015 /
 .XX, .005
 ANGULAR: ±1°
 FINISH: 125

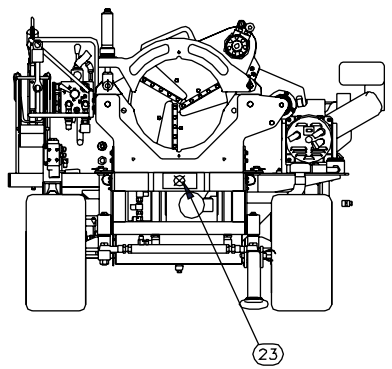
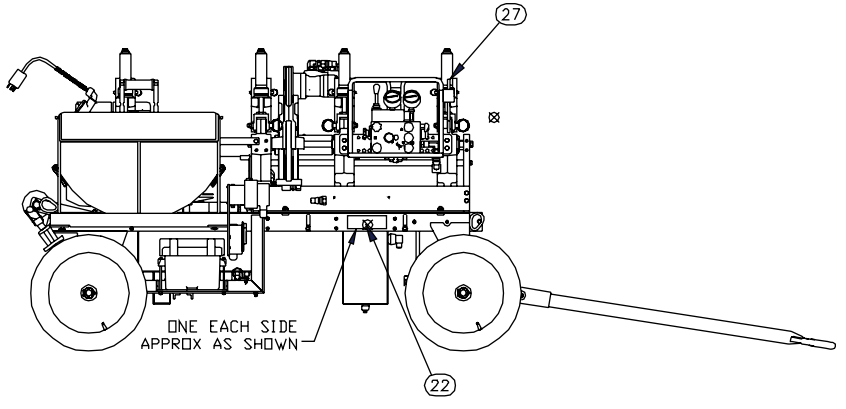
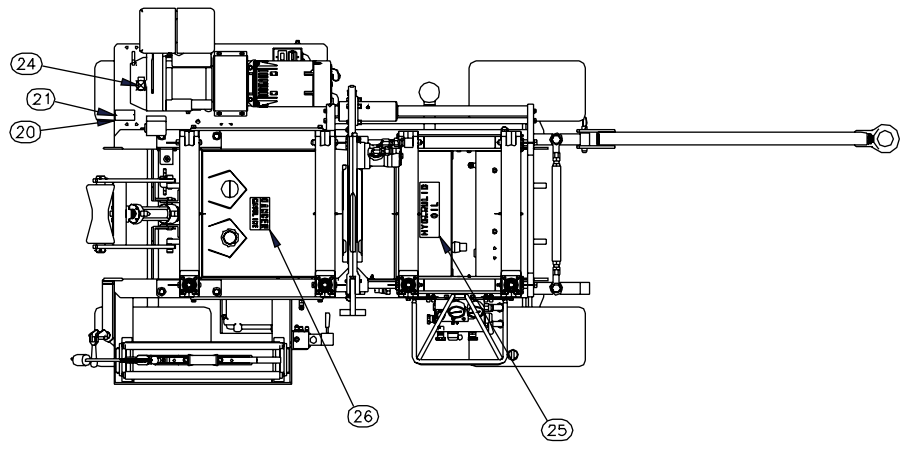
DRAWN: L. BROWN		REV	
DATE: _____	DATE: _____	DWG NO.	101147
CHECKED: _____	DATE: _____	DATE: 03/13/06	SHEET 1 OF 4

CONNECTRA®
 simply fusion

JIG ASSEMBLY, 414SC



REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



ALL DIMENSIONS ARE IN INCHES
 TOLERANCES
 FRACTIONS: 1/16
 DECIMALS: .X3, .03 / .XX & .015 /
 .XXX & .005
 ANGULAR: ± 1°
 FINISH: √

CONNECTRA®
 simply fusion
JIG ASSEMBLY, 414SC

APPR:	DATE:	DRAWN: L. BROWN	REV	FROM NO.	ONE NO.	101147	REV
CHECKED:	DATE:	DATE: 03/13/06	SHEET			SHEET	2 OF 4

8

7

6

5

4

3

2

1

NOTES:

1. REMOVE PAINT TO ENSURE PROPER GROUND.

ZONE		REV	DESCRIPTION	DATE	APPROVED

ITEM	QTY	PART NUMBER	DESCRIPTION
80	2	00-0699-0008-00	ADAPTER, HOSE ASSY 90DEG ELBOW
81	1	V00708	FITTING, HYD, COUPLING, 6FP-6FP
82	1	00-6982-0001-00	COUPLING, 375 QUICK
83	1	00-6982-0002-00	COUPLING, 375 QUICK
84	2	V00493	HOLLOW HEX PLUG, NO. 4
85	1	310056	HOSE ASSEMBLY 1/2" X 12.00"HOSE ASSEMBLY 1/2" X 12.00"HOSE ASSEMBLY 1/2" X 12.00"
86	1	310095	HOSE ASSEMBLY 3/8" X 34.00"
87	1	310096	HOSE ASSEMBLY 3/8" X 43.00"
88	1	310097	HOSE ASSEMBLY 3/8" X 40.00"
89	1	310098	HOSE ASSEMBLY 3/8" X 9.00"
90	1	310099	HOSE ASSEMBLY 3/8" X 37.00"
91	1	310100	HOSE ASSEMBLY 3/8" X 20.00"
92	1	310102	HOSE ASSEMBLY 3/4" X 48.00"
93	1	310103	HOSE ASSEMBLY 3/4" X 16.50"
94	1	310104	HOSE ASSEMBLY 3/8" X 32.00"
95	1	310105	HOSE ASSEMBLY 3/8" X 12.00"
96	1	00-3617-0014-00	CABLE, BATTERY, 4AWG 3/8" LUG TO 3/8" LUG X 48"
97	1	00-3617-0013-00	CABLE, BATTERY, 4AWG 3/8" LUG TO 3/8" LUG X 12"
98	1	00-0699-0336-00	90 DEG PIPE X BARB (1/4"-18 NPT X 1/4" BARB - BHB)
99	1	V00711	FITTING, HYD, PLUG, 4MP-P
100	2	00-7115-0004-00	FITTING, BARB, 1/4" X 1/8NPT
101	00	00-7115-0006-00	FILTER, FUEL
102	1	00-7115-0005-00	FITTING, BARB, REDUCING COUPLING 1/4" X 1/8"
103	41	00-7115-0003-00	HOSE, FUEL LINE
104	7	00-0780-0011-00	CLAMP, B25" ID
105	1	V00718	CORD, ELEC, 10-3 SO 600"
106	2	V01033	FUSEHOLDER, INLINE
107	2	V01034	FUSE, BLADE TYPE, ATC-5
108	1	00-5000-0605-00	TUBING, CORRUGATED 6.00"
109	7	V01035	STRAP, 1-1/2" GALVANIZED
110	1	300485	COOLER, FILTER, ASSEMBLY 4145C
111	1	400085	VOLT / HOUR METER ASSY
112	1	28-8561-0320-20	KEYSTOCK, .187" SQ 12" LG STL
113	1	41-7503-0012-02	WIRE, RED 12 AWG, 10.00"
114	1	00-5000-2600-53	PLUG, SNAP 3M #SPV-14-156L
115	1	00-5005-2600-54	RECEPTACLE, SNAP 3M #SR-14-156L
116	1	V01036	BOOT, TAB INSULATOR, RED, B TO 2 go.

ITEM	QTY	PART NUMBER	DESCRIPTION
46	1	300311	HYDRAULIC SUBPLATE
47	4	00-0823-0400-20	SHCS 1/4-20 X 2-1/2" ZINC PL REPLCS HS0022
48	1	V00450	VALVE, DIRECTIONAL SPRING CENTERED
49	4	00-0823-0300-26	SHCS #10-24 X 3-1/4" ZINC PL REPLCS HS0004
50	1	400084	ELECTRICAL T-BOX
51	1	V00257	COVER, RECEPTACLE SINGLE W/GASKET, W/104CV
52	1	V00258	RECEPTACLE, FLUSH, #2820, 30A-250V
53	1	V00033	CONNECTOR, CORD, .50-.62
54	4	00-0823-0400-04	SHCS 1/4-20 X 1/2" ZINC PL REPLCS HS0018 #28-8501-0900-10
55	4	HW0017	WASHER, LOCK, 1/4 HIGH COLLAR
56	12	00-0435-0004-00	WASHER, FL STD SAE PL 3/8" REPLCS HW0014
57	4	00-0203-0600-14	BOLT, HEX HD .375-16 X 1.75" SAE GR 5-ZINC PL-REPLCS HB0008
58	8	00-0238-0001-00	WASHER, LK SAE STD MED 1/4" PL REPLCS HW0006
59	2	00-0203-0600-34	BOLT, HEX HD .375-16 X 4.25" SAE GR 5-ZINC PL
60	8	00-0238-0003-00	WASHER, LK SAE STD MED 3/8" PL REPLCS HW0013
61	2	00-0823-0500-20	SHCS 5/16-18 X 2-1/2" ZINC PL REPLCS HS0069
62	3	00-0003-0002-00	NUT, ESNA 5/16"-18NC-3 LT STD FULL HGT PLTD
63	5	00-0435-0003-00	WASHER, FLAT, 5/16
64	1	00-0203-0500-20	BOLT, HEX HD .312-18 X 2.5" SAE GR 5-ZINC PL-REPLCS HB0011
65	4	00-0823-0600-24	SHCS 3/8-16 X 3.00" ZINC PL
66	10	00-0823-0400-06	SHCS 1/4-20 X 3/4" ZINC PL REPLCS HS0019 #28-8501-1300-10
67	2	HP0012	PIN, HAIR, CLIP, 3.00
68	1	V01027	PUMP ASSY, FUEL
69	3	00-0036-0001-00	NUT, FIN HEX 1/4-20NC-2 Z-PLTD A-307
70	1	V00449	VALVE, DUEL PILOT OPERATED CKECK, #BX9151-01G
71	4	HH0020	STRAIGHT 4 BOSS/ 6 37 FLARE
72	1	HH0017	90 4 BOSS / 8 37 FLARE
73	1	00-0699-0134-00	ADAPTER, HOSE ASSY 90 DEG EL (JIC/NPT)
74	1	00-0699-0284-00	ELBOW, 90 DEG SAE O-RING BOSS
75	1	00-0699-0329-00	ELBOW, 90 DEGREE, 3/4-14 NPT EXT 1.062-12, 37 DEGREE FLR
76	1	00-0699-0040-00	ADAPTER, HOSE ASSY SAE O-RING BOSS
77	1	HH0048	STRAIGHT 12M BOSS / 8M 37 FLARE
78	1	HH0059	TEE 6M 37 FLARE / 6M 37 FLARE / 6M 37 FLARE
79	1	HH0018	90 6M 37 FLARE / 6FS 37 FLARE

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	101170	WELDMENT, 414 PIPE LIFTER
2	1	28-8218-3860-20	ROLLER, CF-618
3	1	101150	CART ASSEMBLY, 4145C
4	30	00-0203-0400-08	BOLT, HEX HD .250-20 X 1" SAE GR 5-ZINC PL-REPLCS HB0004
5	1	000730	WELDMENT, HYDRAULIC TANK, 414EP/SC
6	31	00-0003-0001-00	NUT, ESNA 1/4"-20NC-3 LT STD HGT PLTD
7	1	000725	WELDMENT, FUEL TANK, 4145C
8	1	V00251	CAP FILLER, BREAKER PRESSURE, 1" MNPT
9	1	28-8218-5016-10	CAP W/GAUGE 9" 4145C
10	1	28-8218-5013-10	CAP, GAS W/O GAGE
11	1	300185	PIPE LIFTER CYLINDER ASSEMBLY
12	1	V00483	PIN, CLEVIS STAINLESS, 3/4 X 3.00
13	1	V00485	PIN, COTTER, RUE RING, #RUE-365
14	1	100624	PIN, PIVOT
15	1	28-8218-5620-20	SHAFT-ROLLER, CF-618
16	2	00-0046-0029-00	PIN, COTTER 3/16" X 2" L
17	2	HB0124	BOLT, SHOULDER, 3/4 X .750 ZINC PLATED
18	2	V00103	FITTING, HYD, PLUG, 6MP-P
19	1	V00082	LEVEL, SIGHT GLASS, HX 1/2" NPT
20	1	V00387	STRAINER, TANK, 1 1/4" NPT X 8.17" L
21	1	00-0691-0051-00	ENGINE, HONDA 4145C 13HORSPWR 0X390-U1-GAE2
22	1	00-4193-4141-00	GENERATOR, MODIFIED, 4145C
23	1	V00984	OVERHUNG LOAD ADAPTER 210-12
24	1	V00985	OIL GEAR, P/M-011-BIUV-RSAT-P-INNSN
25	1	101176	MOUNT, PUMP
26	1	00-0640-0006-00	KEY, 1/4" SD 2" LONG
27	1	V00989	PULLEY, MOTOR P36-BM-30-1610
28	1	V00990	TAPER LOCK BUSHING 1610 1
29	1	V01041	JAW COUPLING 1"
30	1	V01042	JAW COUPLING 7/8"
31	1	V01043	JAW COUPLING INSERT
32	1	101177	SPACER, GENERATOR FRONT
33	1	101178	SPACER
34	1	V00988	TAPER LOCK BUSHING 2517 1
35	1	V00987	PULLEY, PUMP P72-BM-30-2517
36	1	00-0640-0003-00	KEY, 1/4" SD 1 3/4" LONG
37	1	V00992	BELT DODGE HT150 B80-BM-30 PART NO. 142395
38	1	V00986	BATTERY BOX MCM #69999K81
39	1	00-3616-0007-00	BATTERY EXIDE GT-X 300 CCA 360 CA
40	1	101180	GUARD, UPPER BELT, WELDMENT
41	1	101190	GUARD, LOWER BELT, WELDMENT
42	4	00-0203-0600-10	BOLT, HEX HD .375-16 X 1.25" SAE GR 5-ZINC PL-REPLCS HB0007
43	6	00-0003-0003-00	NUT, ESNA 3/8"-16NC-3 LGT STD HGT PLTD
44	2	00-0823-0400-44	SHCS 1/4-20 X 5-1/2" ZINC PL
45	18	00-0435-0002-00	WASHER, FL STD SAE PL 1/4" REPLCS HW0012

MAIN ASSEMBLY USAGE						SUB-ASSEMBLY USED ON					
SIZE	10CQ	20CQ	10EP	20EP	10HP	20HP	14sc	QTY	ASSEMBLY	QTY	ASSEMBLY
4	1 (1)	1	(1) 101147	.	.
8
14
18
24
36

APPROX. WEIGHT 861 LBS

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONS: ±1/16
DECIMALS: ±.03 / .XX.015 /
XXX.005
ANGULARS: ±1°
FINISH:

CONNECTRA®
simply fusion

CART/ENGINE ASSEMBLY,
4145C

APPR: .	DATE: .	DRAWN: L. BROWN	SHEET NO.:	REV:
CHECKED: .	DATE: .	DATE: 12/20/06	101205	1 OF 10

8

7

6

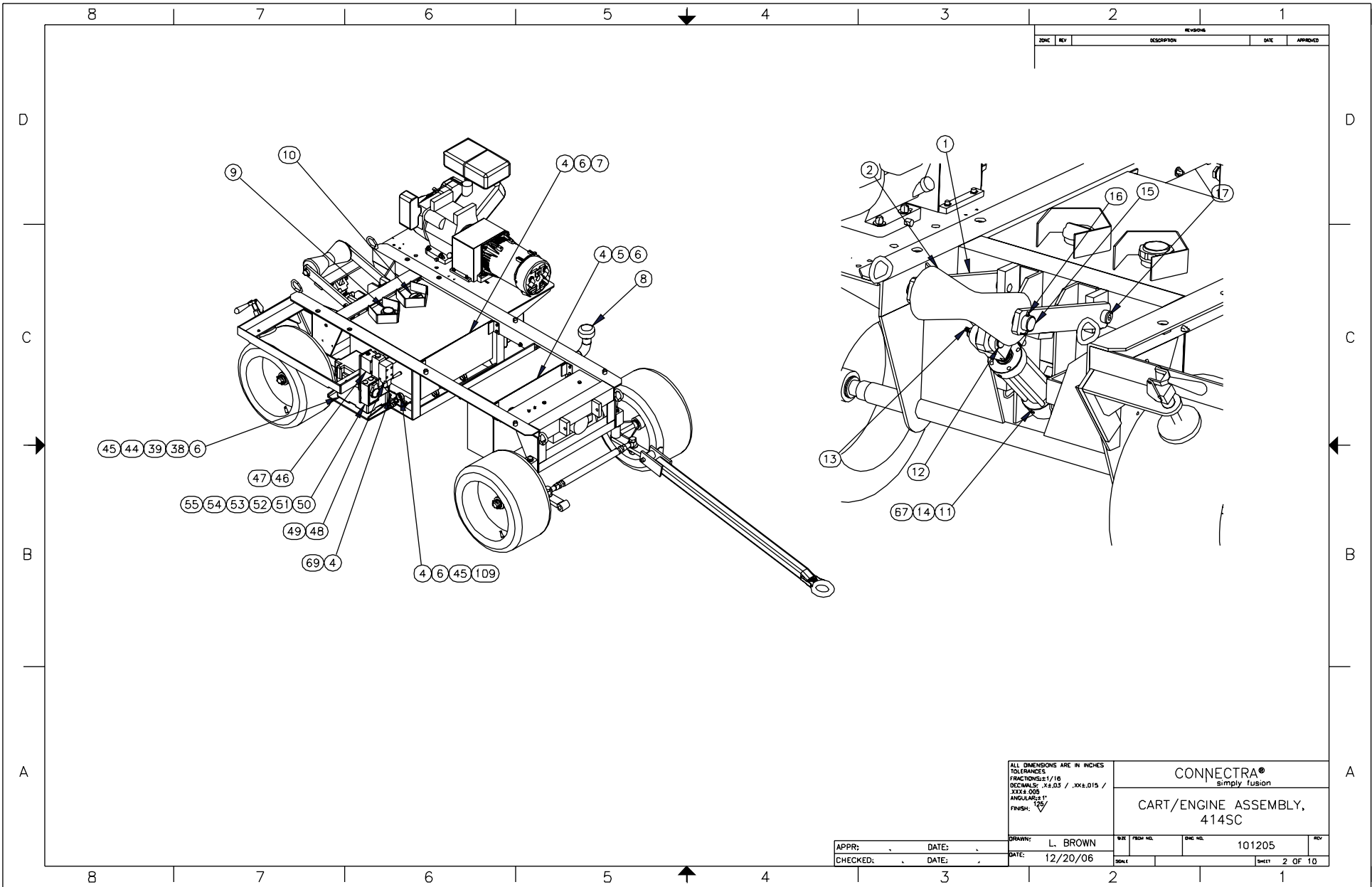
5

4

3

2

1



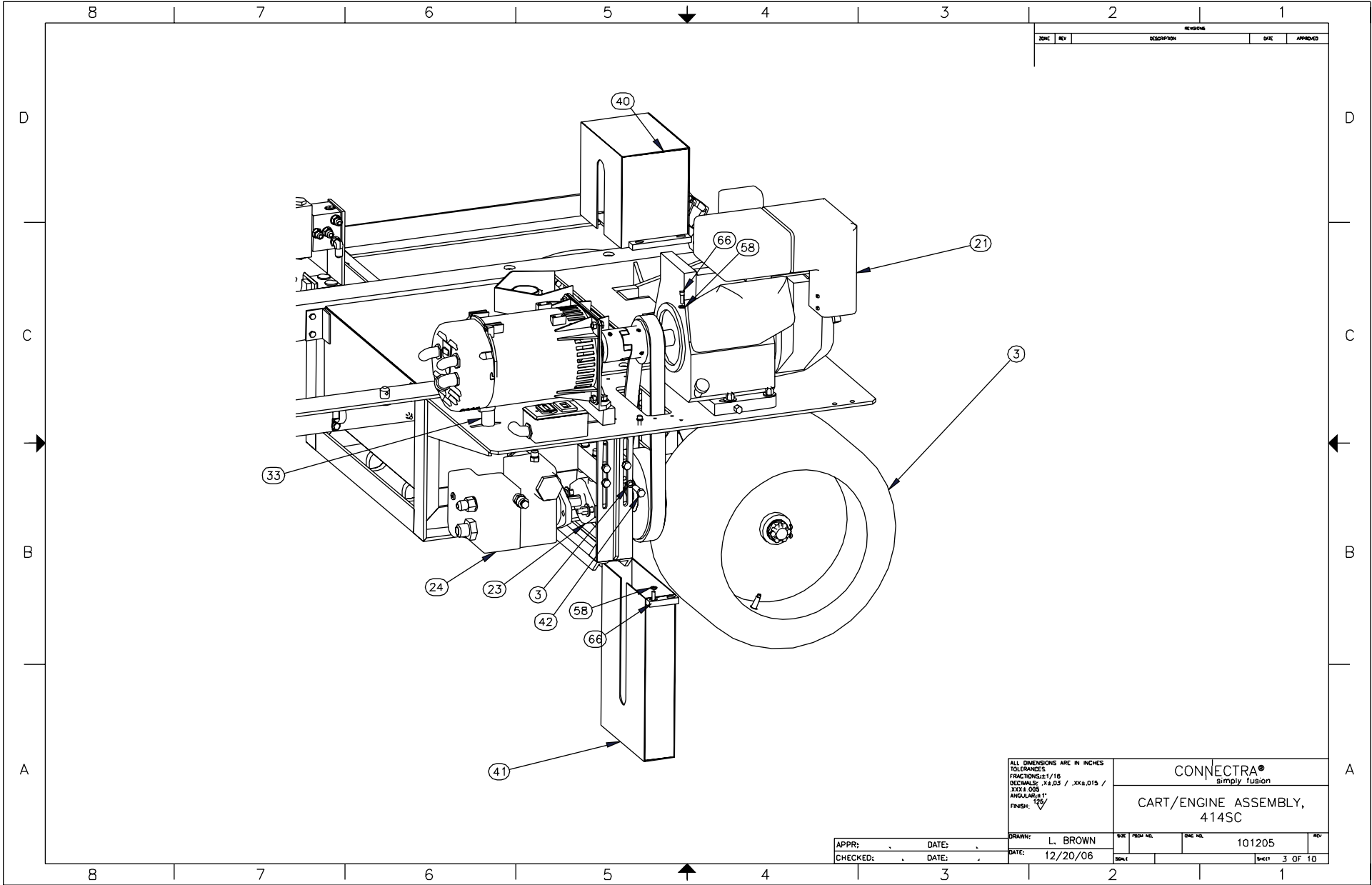
ZONE		REV	DESCRIPTION	DATE	APPROVED

ALL DIMENSIONS ARE IN INCHES
 TOLERANCES:
 FRACTIONS: 1/16
 DECIMALS: .XX & .015 / .XX & .015 /
 XXX & 005
 ANGLES: 1°
 FINISH: 125

CONNECTRA®
 simply fusion

CART/ENGINE ASSEMBLY,
414SC

APPR: _____	DATE: _____	DRAWN: L. BROWN	REV: _____	ENG. NO. 101205	REV: _____
CHECKED: _____	DATE: _____	DATE: 12/20/06	SCALE: _____	SHEET 2 OF 10	

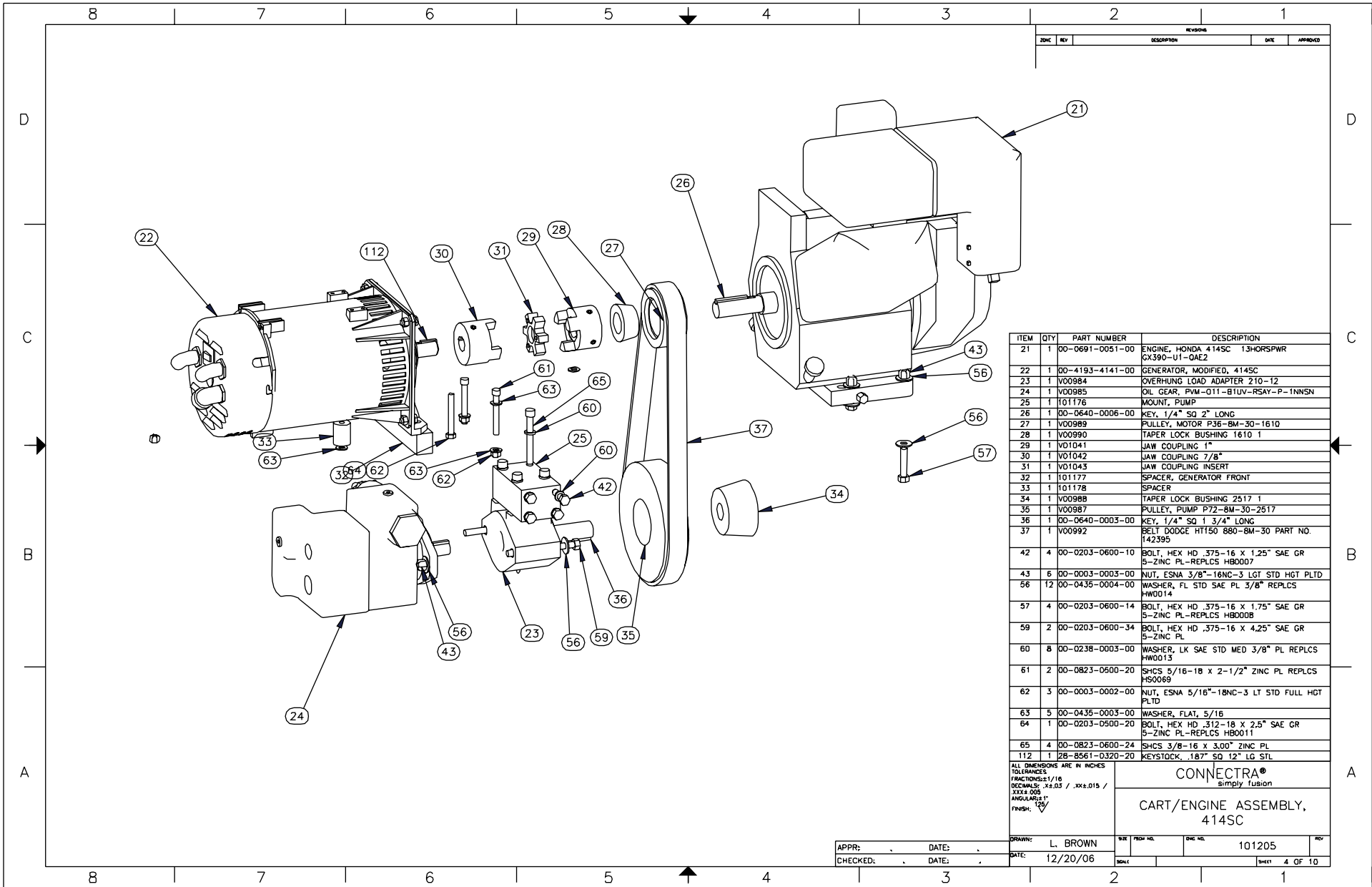


REV		DESCRIPTION	DATE	APPROVED

ALL DIMENSIONS ARE IN INCHES
 TOLERANCES
 FRACTIONS: ±1/16
 DECIMALS: ±.05 / .XX ±.015 /
 XXX ±.005
 ANGULAR: ±1°
 FINISH: 125

CONNECTRA®
 Simply Fusion
**CART/ENGINE ASSEMBLY,
 414SC**

APPR:	DATE:	DRAWN: L. BROWN	REV:	FRSH. NO.:	ENG. NO.:	NO.:
CHECKED:	DATE:	DATE: 12/20/06	DATE:	DATE:	DATE:	DATE:
			SHEET		3 OF 10	



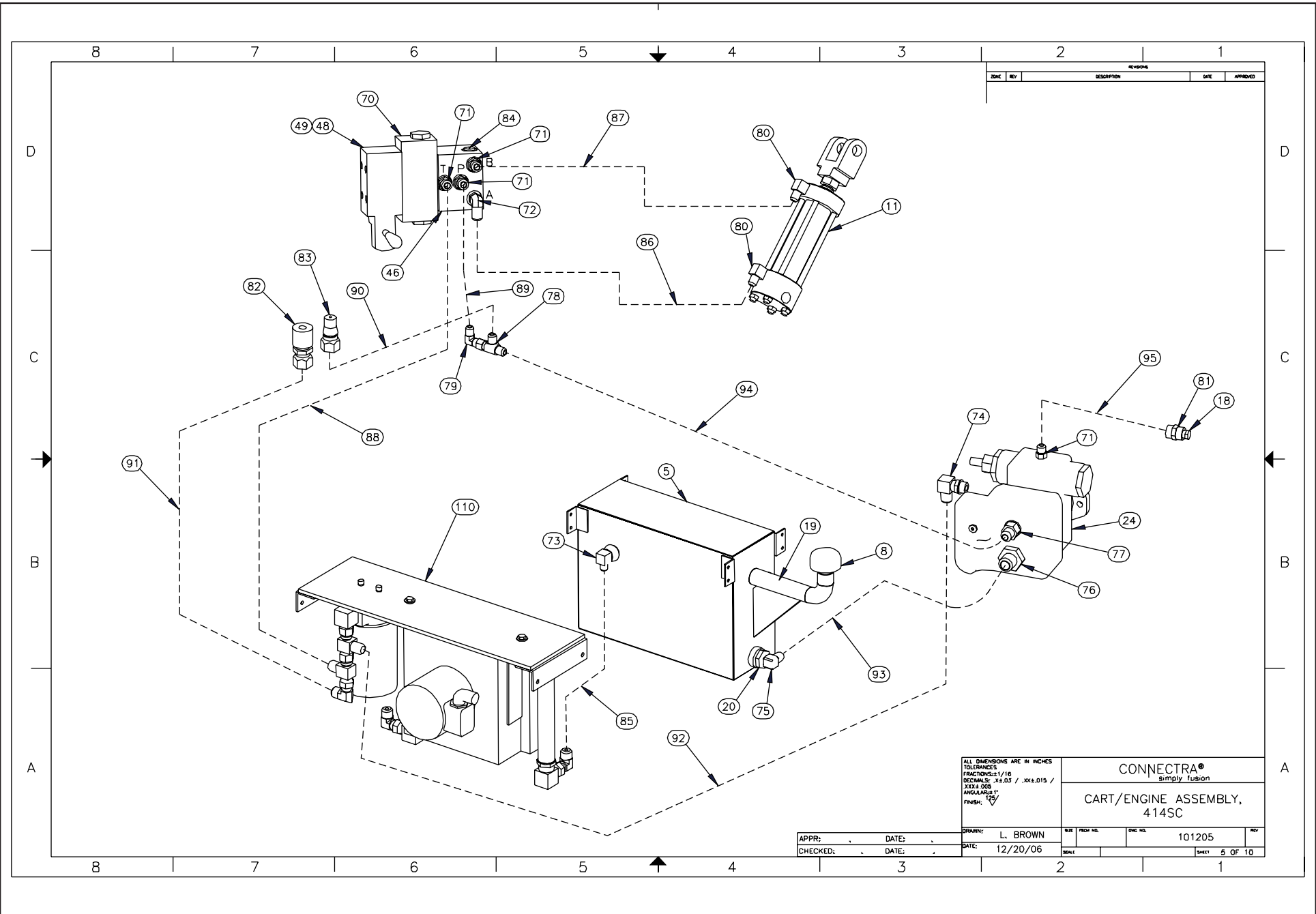
REV		DESCRIPTION	DATE	APPROVED

ITEM	QTY	PART NUMBER	DESCRIPTION
21	1	00-0691-0051-00	ENGINE, HONDA 4145C 1.3HORSPWR GX390-U1-0AE2
22	1	00-4193-4141-00	GENERATOR, MODIFIED, 4145C
23	1	V00984	OVERHUNG LOAD ADAPTER 210-12
24	1	V00985	OIL GEAR, PVM-011-B1UV-RSAY-P-INNSN
25	1	101176	MOUNT, PUMP
26	1	00-0640-0006-00	KEY, 1/4" SQ 2" LONG
27	1	V00989	PULLEY, MOTOR P36-BM-30-1610
28	1	V00990	TAPER LOCK BUSHING 1610 1
29	1	V01041	JAW COUPLING 1"
30	1	V01042	JAW COUPLING 7/8"
31	1	V01043	JAW COUPLING INSERT
32	1	101177	SPACER, GENERATOR FRONT
33	1	101178	SPACER
34	1	V00988	TAPER LOCK BUSHING 2517 1
35	1	V00987	PULLEY, PUMP P72-BM-30-2517
36	1	00-0640-0003-00	KEY, 1/4" SQ 1 3/4" LONG
37	1	V00992	BELT DODGE HT150 880-BM-30 PART NO. 142395
42	4	00-0203-0600-10	BOLT, HEX HD .375-16 X 1.25" SAE GR 5-ZINC PL-REPLCS HB0007
43	6	00-0003-0003-00	NUT, ESNA 3/8"-16NC-3 LGT STD HGT PLTD
56	12	00-0435-0004-00	WASHER, FL STD SAE PL 3/8" REPLCS HW0014
57	4	00-0203-0600-14	BOLT, HEX HD .375-16 X 1.75" SAE GR 5-ZINC PL-REPLCS HB0008
59	2	00-0203-0600-34	BOLT, HEX HD .375-16 X 4.25" SAE GR 5-ZINC PL
60	8	00-0238-0003-00	WASHER, LK SAE STD MED 3/8" PL REPLCS HW0013
61	2	00-0823-0500-20	SHCS 5/16-18 X 2-1/2" ZINC PL REPLCS HS0069
62	3	00-0003-0002-00	NUT, ESNA 5/16"-18NC-3 LT STD FULL HGT PLTD
63	5	00-0435-0003-00	WASHER, FLAT, 5/16
64	1	00-0203-0500-20	BOLT, HEX HD .312-18 X 2.5" SAE GR 5-ZINC PL-REPLCS HB0011
65	4	00-0823-0600-24	SHCS 3/8-16 X 3.00" ZINC PL
112	1	28-8561-0320-20	KEYSTOCK, .187" SQ 12" LG STL

ALL DIMENSIONS ARE IN INCHES
 TOLERANCES
 FRACTIONS: ±1/16
 DECIMALS: .005 / .010 / .015 / .020 / .030 / .040 / .050 / .060 / .070 / .080 / .090 / .100 / .125 / .150 / .175 / .200 / .250 / .300 / .375 / .400 / .500 / .625 / .750 / .875 / 1.000 / 1.250 / 1.500 / 1.750 / 2.000 / 2.500 / 3.000 / 3.500 / 4.000 / 4.500 / 5.000 / 5.500 / 6.000 / 6.500 / 7.000 / 7.500 / 8.000 / 8.500 / 9.000 / 9.500 / 10.000
 ANGULAR: ±.005 / .010 / .015 / .020 / .030 / .040 / .050 / .060 / .070 / .080 / .090 / .100 / .125 / .150 / .175 / .200 / .250 / .300 / .375 / .400 / .500 / .625 / .750 / .875 / 1.000 / 1.250 / 1.500 / 1.750 / 2.000 / 2.500 / 3.000 / 3.500 / 4.000 / 4.500 / 5.000 / 5.500 / 6.000 / 6.500 / 7.000 / 7.500 / 8.000 / 8.500 / 9.000 / 9.500 / 10.000
 FINISH: 125

CONNECTRA®
 simply fusion
CART/ENGINE ASSEMBLY, 4145C

APPR:	DATE:	DRAWN:	L. BROWN	SHEET NO.:	101205	REV:
CHECKED:	DATE:	DATE:	12/20/06	SHEET:	4 OF 10	



REV		DESCRIPTION	DATE	APPROVED

ALL DIMENSIONS ARE IN INCHES
 TOLERANCES
 FRACTIONS: /16
 DECIMALS: ±.03 / .XX±.015 /
 ANGULARS: 1°
 FINISH: 125

CONNECTRA®
 simply fusion

**CART/ENGINE ASSEMBLY,
 414SC**

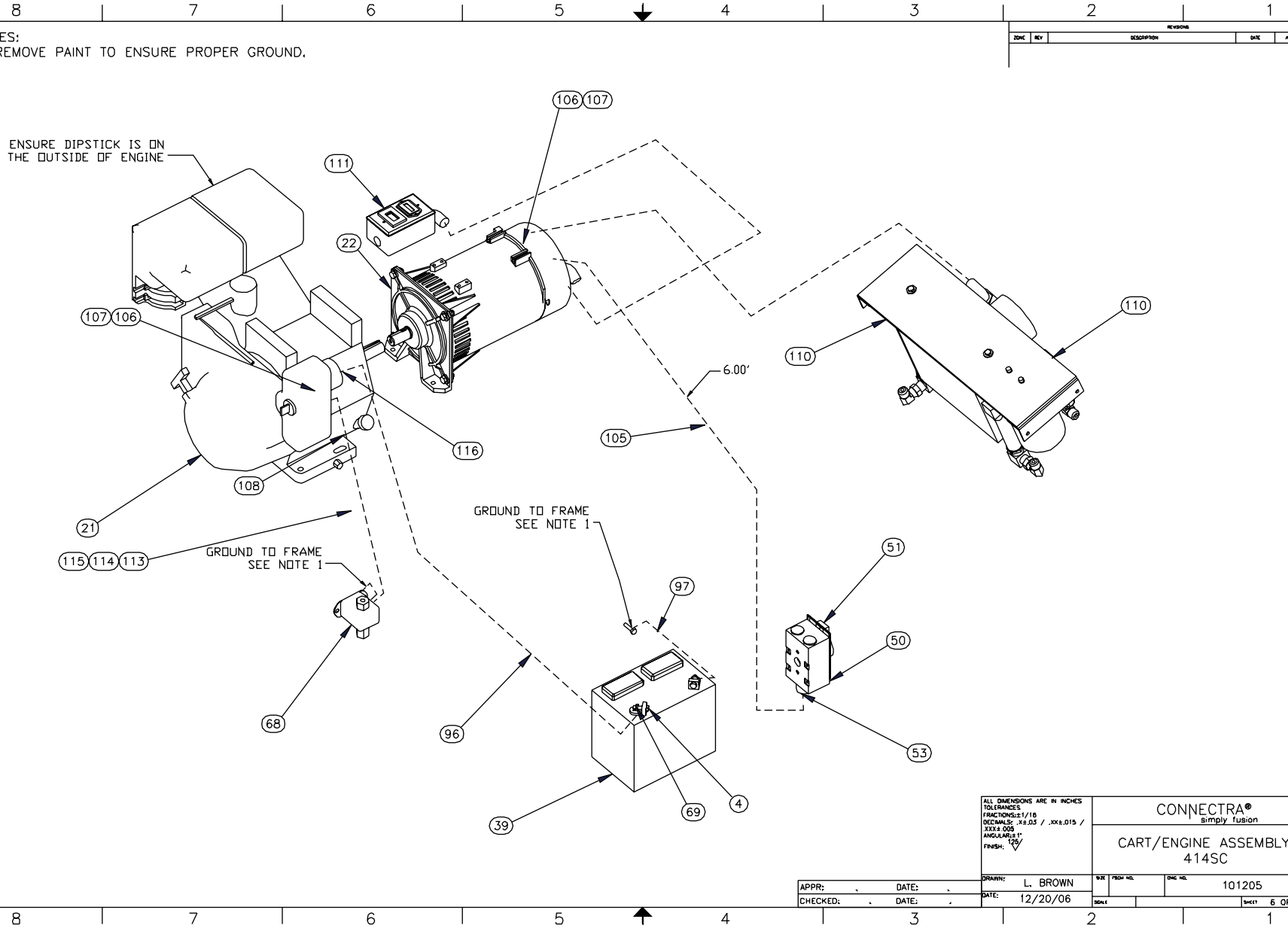
APPR:	DATE:	DRAWN: L. BROWN	SIZE FROM NO.	ENG. NO.	REV
CHECKED:	DATE:	DATE: 12/20/06	NO.	101205	5 OF 10

NOTES:
1. REMOVE PAINT TO ENSURE PROPER GROUND.

REV		DESCRIPTION	DATE	APPROVED

D
C
B
A

D
C
B
A

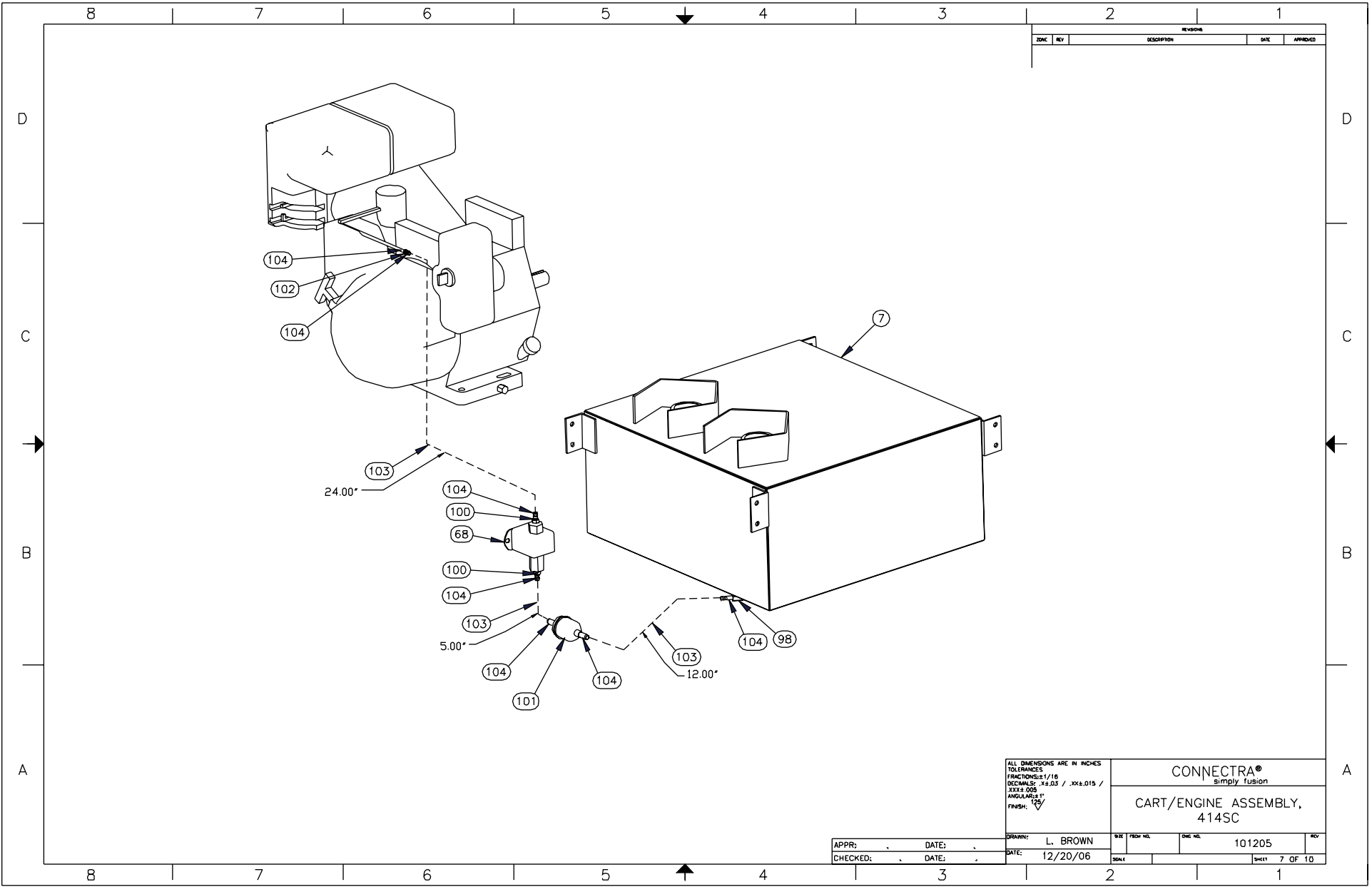


ALL DIMENSIONS ARE IN INCHES
TOLERANCES
FRACTIONS: ±1/16
DECIMALS: ±0.03 / .XX±0.15 /
XXX±.005
ANGULARS: ±1°
FINISH: ✓

CONNECTRA®
Simply Fusion

**CART/ENGINE ASSEMBLY,
414SC**

APPR:	DATE:	DRAWN:	L. BROWN	SIZE:	FRSH. NO.:	QTY. NO.:	101205	REV:
CHECKED:	DATE:	DATE:	12/20/06	SHEET:	6 OF 10			

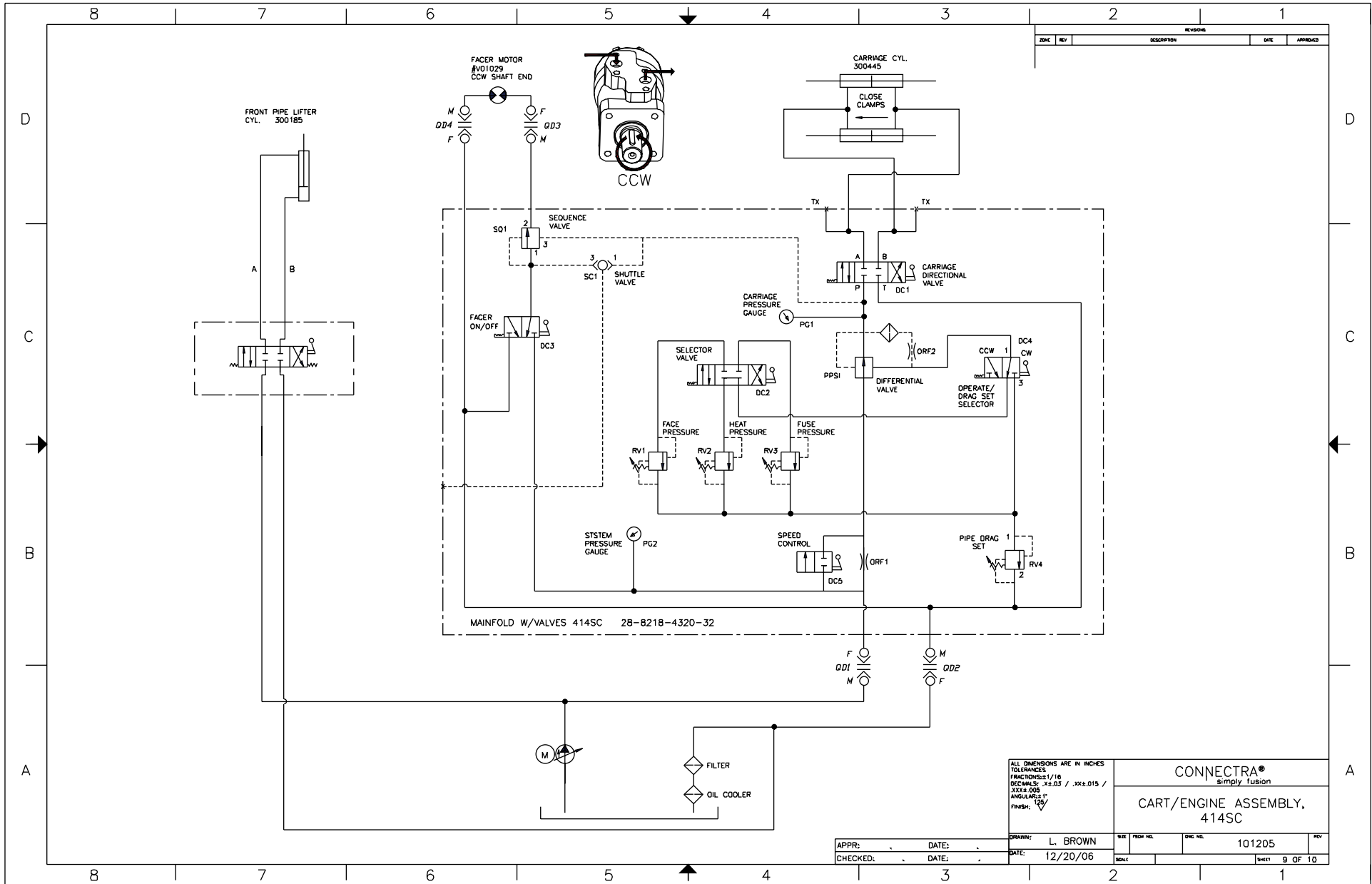


REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED

ALL DIMENSIONS ARE IN INCHES
 TOLERANCES:
 FRACTIONS: 1/16
 DECIMALS: +0.03 / -.015 /
 XXX±.005
 ANGLES: ±1°
 FINISH: 125

CONNECTRA®
 simply fusion
CART/ENGINE ASSEMBLY,
414SC

APPR:	DATE:	DRAWN: L. BROWN	TRG:	FRSH NO.:	ENG. NO.:	101205	REV:
CHECKED:	DATE:	DATE: 12/20/06	SCALE:				SHEET 7 OF 10



REV		DESCRIPTION	DATE	APPROVED

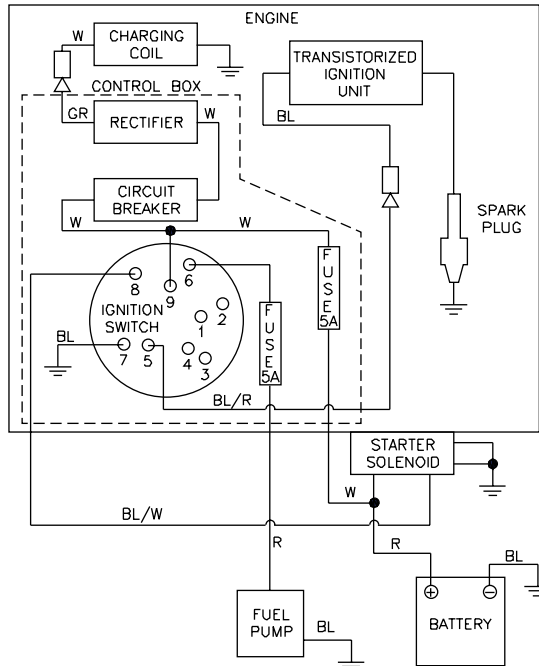
ALL DIMENSIONS ARE IN INCHES
 TOLERANCES
 FRACTIONS: ±1/16
 DECIMALS: .XX, .03 / .XX, .015 /
 .XXX, .005
 ANGULARS: ±1°
 FINISH: 125

CONNECTRA®
 simply fusion
**CART/ENGINE ASSEMBLY,
 414SC**

APPR: L. BROWN	DATE: 12/20/06	DWG NO. 101205	REV
CHECKED:	DATE:	SHEET 9 OF 10	

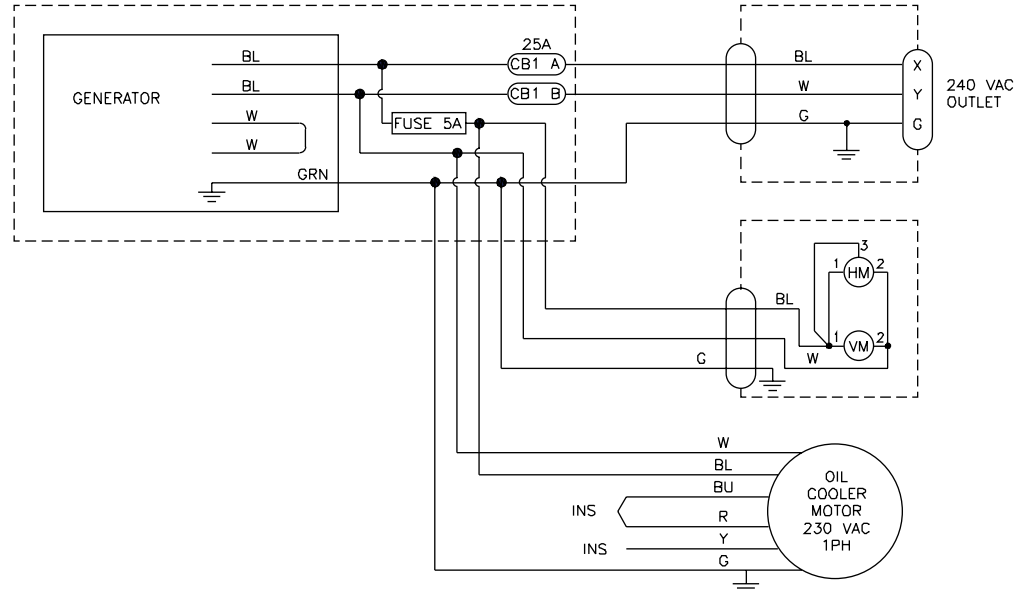
NOTES:
 1. SOLDER FUSE HOLDER WIRE TO #6 TERMINAL OF THE IGNITION SWITCH FOR FUEL PUMP.

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



WIRE COLOR	
BL	BLACK
Y	YELLOW
BU	BLUE
W	WHITE
G	GREEN
GR	GRAY
R	RED

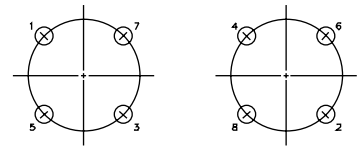
IGNITION SWITCH	IG	E	ST	BAT	FUEL
OFF	○	○			
ON	○	○		○	○
START			○	○	○



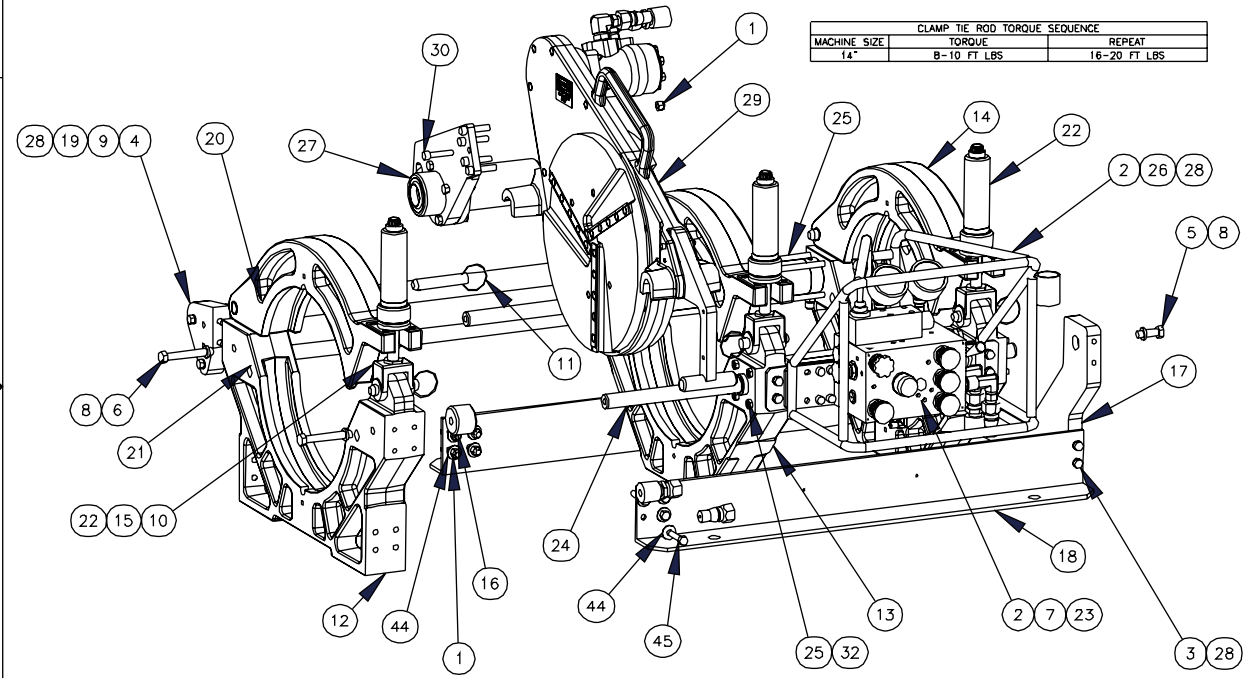
ALL DIMENSIONS ARE IN INCHES
 TOLERANCES:
 FRACTIONS: 1/16
 DECIMALS: ±0.03 / .XX±.015 /
 XXX±.005
 ANGLES: 1°
 FINISH: 125

CONNECTRA® Simply Fusion			
CART/ENGINE ASSEMBLY, 414SC			
APPR:	DATE:	DRAWN: L. BROWN	REV: 101205
CHECKED:	DATE:	DATE: 12/20/06	SHEET 10 OF 10

NOTES:



CLAMP TIE ROD TORQUE SEQUENCE		
MACHINE SIZE	TORQUE	REPEAT
14"	8-10 FT LBS	16-20 FT LBS



SIZE	MAIN ASSEMBLY USAGE					SUB-ASSEMBLY USED ON					
	10CQ	20CQ	10EP	20EP	14SC	14EP	14HP	QTY	ASSEMBLY	QTY	ASSEMBLY
4	1	(1) 101147	.	.
8
14
18
24
36

APPROX. WEIGHT: 404 LBS

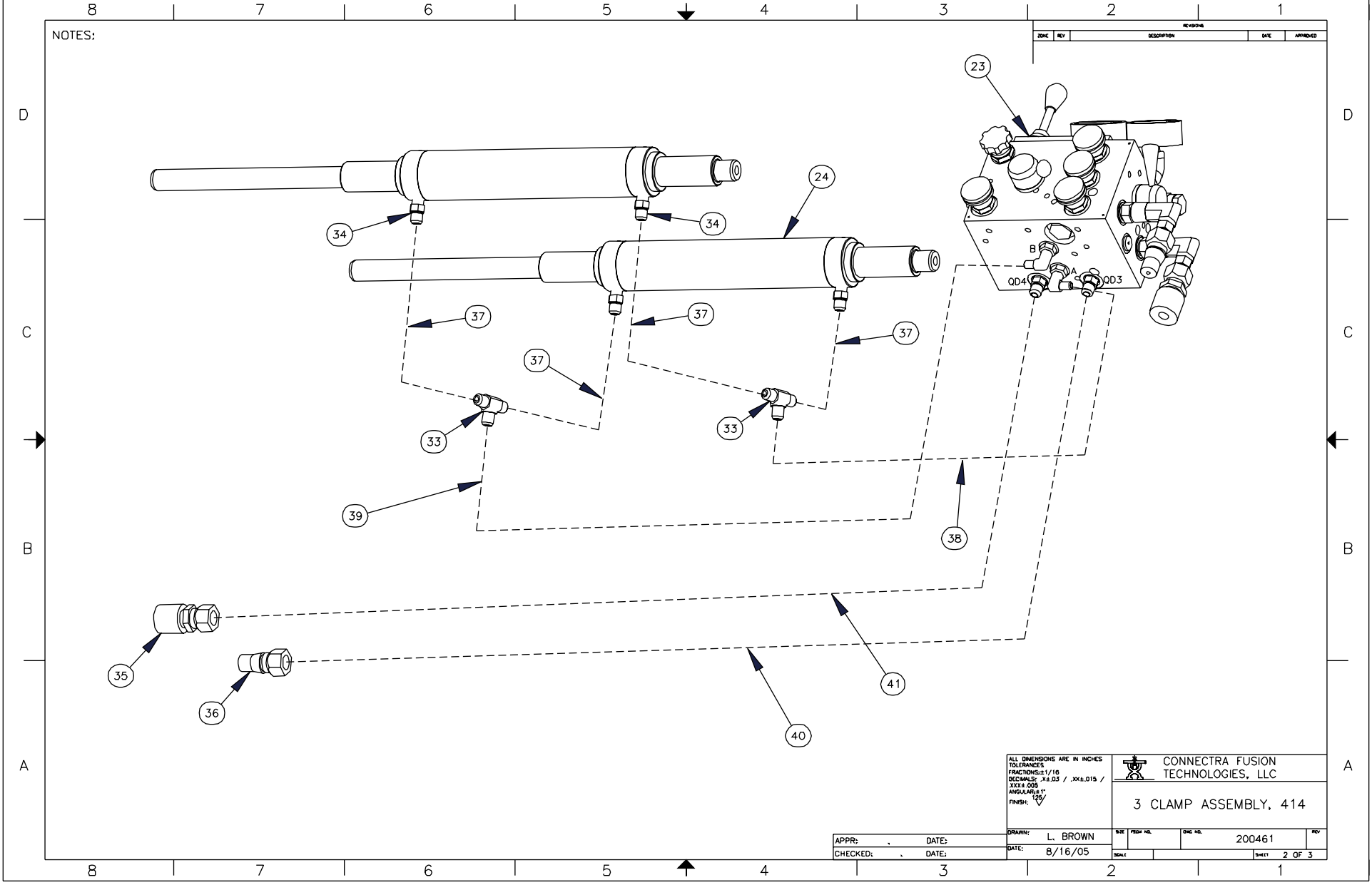
APPR: _____ DATE: _____
 CHECKED: _____ DATE: _____

		REVISION			
QTY	REV	DESCRIPTION	DATE	APPROVED	
1	13	00-0003-0003-00	NUT, ESNA 3/8"-16NC-3 LGT STD HGT PLTD		
2	6	00-0203-0600-08	BOLT, HEX HD .375-16 X 1" SAE GR 5-ZINC PL-REPLCS HB0089		
3	4	00-0203-0600-06	BOLT, HEX HD .375-16 X 3/4" SAE GR 5-ZINC PL-REPLCS HB0006		
4	4	00-0203-0600-12	BOLT, HEX HD .375-16 X 1.5" SAE GR 5-ZINC PL-REPLCS HB0045		
5	2	00-0203-0800-12	BOLT, HEX HD .50-13 X 1.5" SAE GR 5-ZINC PL-REPLCS HB0045		
6	2	00-0203-0800-28	BOLT, HEX HD .50-13 X 3.5" SAE GR 5-ZINC PL-REPLCS HB0031		
7	2	00-0238-0003-00	WASHER, LK SAE STD MED 3/8" PL REPLCS HW0013		
8	4	00-0238-0005-00	WASHER, LK SAE STD MED 1/2" PL REPLCS HW0015		
9	2	00-0823-0600-10	SHCS 3/8-16 X 1-1/4" ZINC PL REPLCS HS0042		
10	3	00-4274-1225-00	FASPIN, 750" X 2.5" GRIP MCM#98320A745		
11	3	00-4274-1230-00	FASPIN, 750" X 3.0" GRIP MCM#98320A610		
12	1	200465	LOWER STATIONARY CLAMP ASSEMBLY, 414		
13	2	200466	LOWER SLIDING CLAMP ASSEMBLY, 414		
14	3	200467	TOP CLAMP ASSEMBLY, 414		
15	3	200475	WELDMENT, 414 SWING BOLT		
16	2	200478	SPACER, CYLINDER MOUNT, 414		
17	1	200479	PLATE, END		
18	1	200480	ANGLE, CARRIAGE, OPERATOR SIDE, 414		
19	1	200487	PLATE, FACER SLIDE MOUNT		
20	1	200488	ROD, FACER SLIDE, 414		
21	1	200489	ROD, FACER PIVOT STOP, 414		
22	3	28-8218-4150-30	HANDLE ASSEMBLY, CF-818		
23	1	300484	MANIFOLD ASSEMBLY, 414		
24	2	300445	CARRIAGE CYLINDER ASSEMBLY, 414		
25	8	300448	WELDMENT, CLAMP ROD, 414		
26	1	310300	CAGE ASSEMBLY 414		
27	1	500365	FACER SLIDE ASSEMBLY, 414		
28	12	HW0019	WASHER, LOCK, 3/8 HIGH COLLAR		
29	1	500370	FACER ASSEMBLY, HYDRAULIC, 414HP		
30	5	00-0823-0600-14	SHCS 3/8-16 X 1-3/4" ZINC PL REPLCS HS0073 & 28-8501-4420-10		
31	1	200484	ANGLE, CARRIAGE, FACER SIDE, 414		
32	8	28-8523-3020-10	NUT, 3/8-16 UNC, FLEX-TOP LOCKNUT		
33	2	HH0059	TEE 6M 37 FLARE / 6M 37 FLARE / 6M 37 FLARE		
34	4	HH0060	STRAIGHT 4 MNPT/6M37 FLARE		
35	1	00-8982-0001-00	COUPLING, 375 QUICK		
36	1	00-8982-0002-00	COUPLING, 375 QUICK		
37	4	310090	HOSE ASSEMBLY 3/8" X 11.00"		
38	1	310091	HOSE ASSEMBLY 3/8" X 17.00"		
39	1	310092	HOSE ASSEMBLY 3/8" X 19.00"		
40	1	310093	HOSE ASSEMBLY 3/8" X 62.00"		
41	1	310094	HOSE ASSEMBLY 3/8" X 64.00"		
42	1	VD1006	LABEL, WARNING, OVER PRESSURING FACER		
43	1	V00752	STICKER PINCH POINT, 1.75 X 2.50		
44	16	00-0435-0004-00	WASHER, FL STD SAE PL 3/8" REPLCS HW0014		
45	8	00-0203-0600-14	BOLT, HEX HD .375-16 X 1.75" SAE GR 5-ZINC PL-REPLCS HB0008		

ALL DIMENSIONS ARE IN INCHES
 TOLERANCES:
 FRACTIONS: 1/16
 DECIMALS: .04, .05 / .XX, .015 /
 XX.X 005
 ANGLES: 12°
 FINISH: 125

CONNEXTRA FUSION TECHNOLOGIES, LLC
 3 CLAMP ASSEMBLY, 414

DRAWN: L. BROWN DATE: 8/16/05
 SHEET 1 OF 3



NOTES:

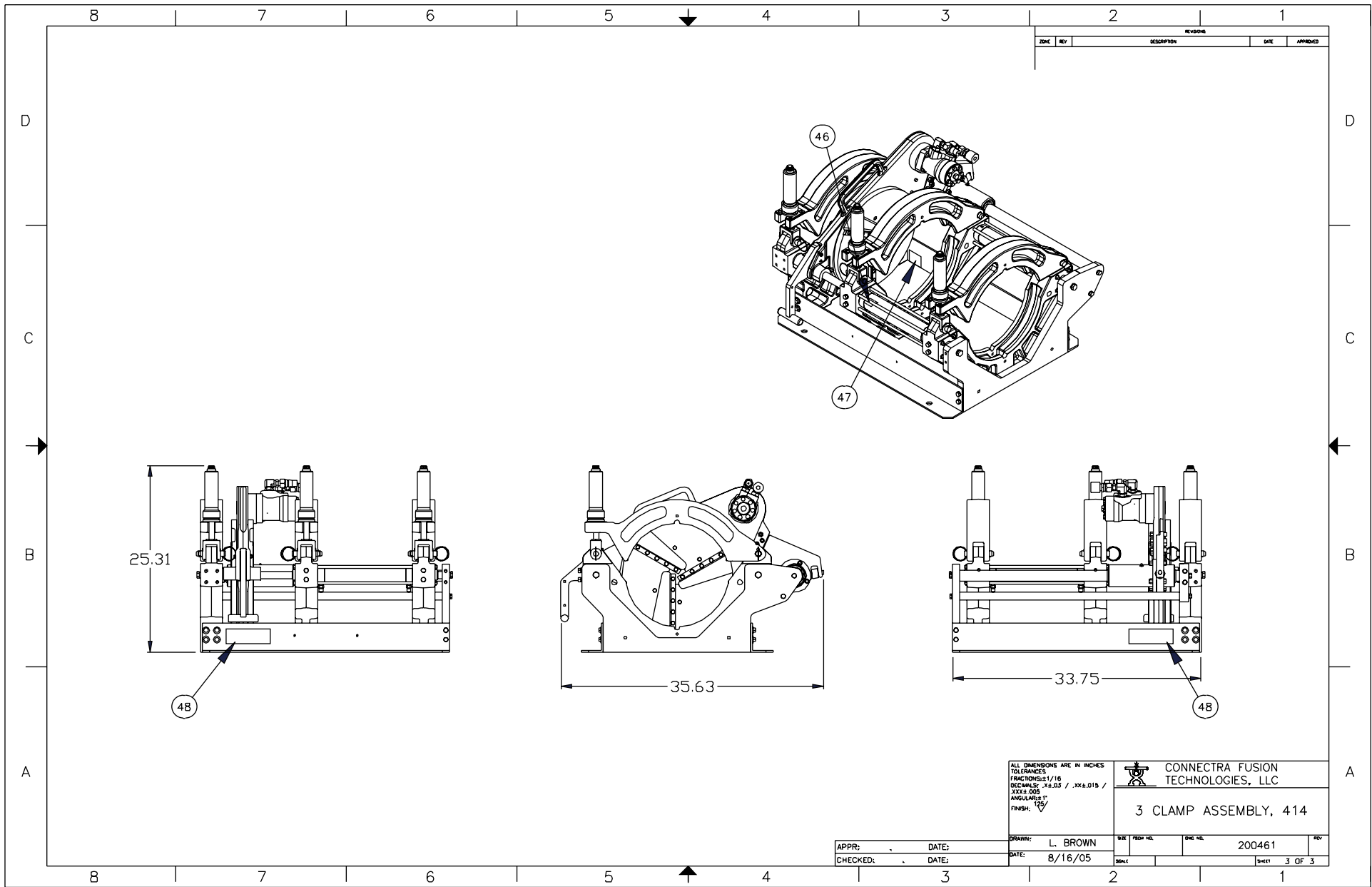
ZONE	REV	DESCRIPTION	DATE	APPROVED

ALL DIMENSIONS ARE IN INCHES
 TOLERANCES
 FRACTIONS: ±1/16
 DECIMALS: ±.03 / .05 / .015 /
 .005
 ANGLES: ±1°
 FINISH: 125

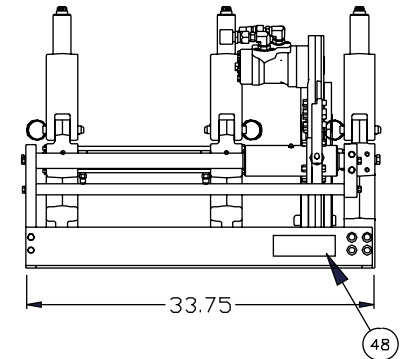
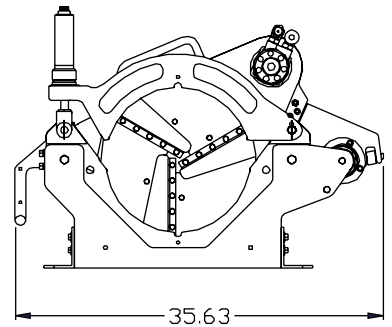
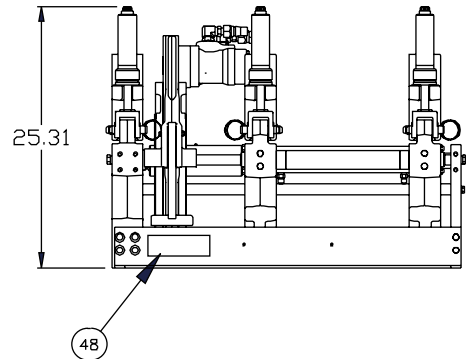
 CONNECTRA FUSION
 TECHNOLOGIES, LLC

3 CLAMP ASSEMBLY, 414

APPR:	DATE:	DRAWN:	L. BROWN	SIC	TRCH. NO.	ENG. NO.	200461	REV
CHECKED:	DATE:	DATE:	8/16/05	SHEET	2 OF 3			



REV		DESCRIPTION	DATE	APPROVED



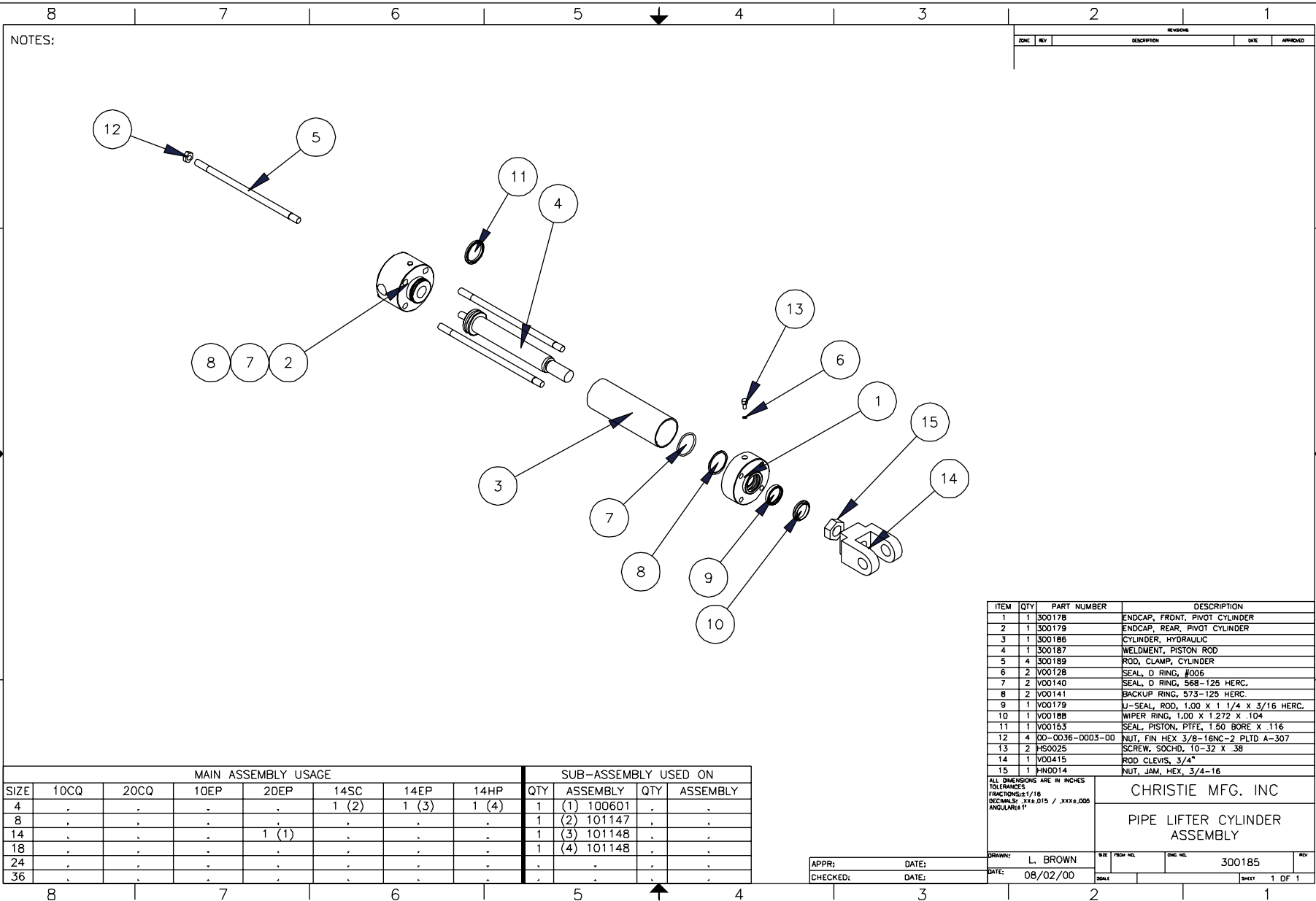
ALL DIMENSIONS ARE IN INCHES
 TOLERANCES:
 FRACTIONS: ±1/16
 DECIMALS: .XX, .05 / .XX, .015 /
 XX.X ± .005
 ANGULARS: ±1°
 FINISH: 125

 CONNECTRA FUSION
 TECHNOLOGIES, LLC

3 CLAMP ASSEMBLY, 414

APPR: L. BROWN	DATE: 8/16/05	SIZE: FROM NO.	DWG. NO. 200461	REV.
CHECKED:	DATE:	SCALE:	SHEET 3 OF 3	

NOTES:



SIZE	MAIN ASSEMBLY USAGE						SUB-ASSEMBLY USED ON				
	10CQ	20CQ	10EP	20EP	14SC	14EP	14HP	QTY	ASSEMBLY	QTY	ASSEMBLY
4	1 (2)	1 (3)	1 (4)	1	(1) 1006D1	.	.
8	1	(2) 101147	.	.
14	.	.	.	1 (1)	.	.	.	1	(3) 101148	.	.
18	1	(4) 101148	.	.
24
36

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	300178	ENDCAP, FRONT, PIVOT CYLINDER
2	1	300179	ENDCAP, REAR, PIVOT CYLINDER
3	1	300186	CYLINDER, HYDRAULIC
4	1	300187	WELDMENT, PISTON ROD
5	4	300189	ROD, CLAMP, CYLINDER
6	2	V00128	SEAL, O RING, #006
7	2	V00140	SEAL, O RING, 568-125 HERC.
8	2	V00141	BACKUP RING, 573-125 HERC.
9	1	V00179	J-SEAL, ROD, 1.00 X 1 1/4 X 3/16 HERC.
10	1	V00188	WIPER RING, 1.00 X 1.272 X .104
11	1	V00153	SEAL, PISTON, PTFE, 1.50 BORE X .116
12	4	00-0036-0003-DD	NUT, FIN HEX 3/8-16NC-2 PLTD A-307
13	2	H50025	SCREW, SOCHD, 10-32 X .38
14	1	V00415	ROD CLEVIS, 3/4"
15	1	HND0014	NUT, JAM, HEX, 3/4-16

ALL DIMENSIONS ARE IN INCHES
 TOLERANCES: FRACTIONS: 1/16
 DECIMALS: .015 / .XXX4.005
 ANGULAR: ± 1°

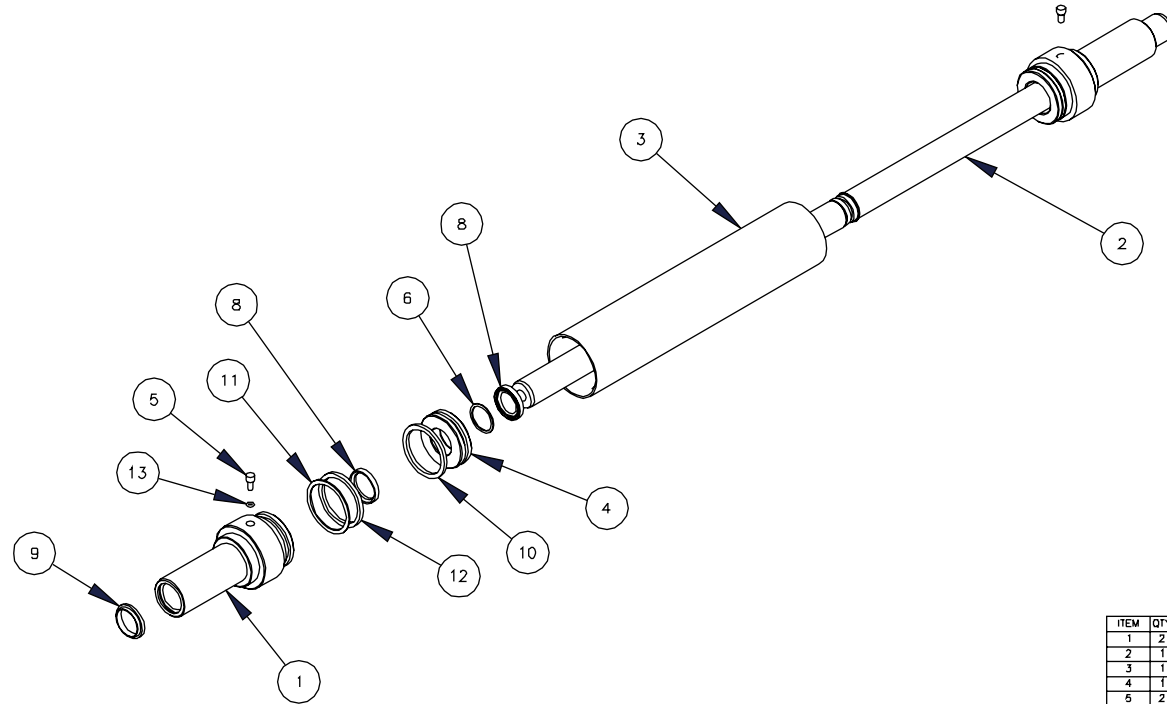
CHRISTIE MFG. INC
 PIPE LIFTER CYLINDER
 ASSEMBLY

DRAWN: L. BROWN
 DATE: 08/02/00
 SHEET 1 OF 1

APPR: DATE: CHECKED: DATE:

NOTES:

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



SIZE	MAIN ASSEMBLY USAGE							SUB-ASSEMBLY USED ON			
	10CQ	20CQ	10EP	20EP	14SC	14EP	14HP	QTY	ASSEMBLY	QTY	ASSEMBLY
4	-	-	-	-	-	-	-	1	(1) 200466	-	-
8	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-
36	-	-	-	-	-	-	-	-	-	-	-

ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	300446	ENDCAP, CARRIAGE CYLINDER, 414
2	1	300447	ROD, PISTON
3	1	300135	CYLINDER, HYDRAULIC
4	1	300136	PISTON, CARRIAGE CYLINDER
5	2	HS0025	SCREW, SOCHD, 10-32 X .38
6	2	V00120	RING, SPIRAL RETAINING, 1.00" I.D.
7	1	V00139	SEAL, O RING, 568-117 HERC.
8	2	V00179	U-SEAL, ROD, 1.00 X 1 1/4 X 3/16 HERC.
9	2	V00188	WIPER RING, 1.00 X 1.272 X .104
10	1	V00211	SEAL, PISTON, PTFE, 2.00 BDRE X .073
11	2	V00212	BACKUP RING, 573-224 HERC.
12	2	V00213	SEAL, O RING, 568-224 HERC.
13	2	V00128	SEAL, O RING, #006

ALL DIMENSIONS ARE IN INCHES
 TOLERANCES: FRACTIONS: 1/16
 DECIMALS: +0.02 / -.004, 0.015 /
 XXXX.005
 ANGLES: 1°
 FINISH: 125

CONNECTRA FUSION TECHNOLOGIES, LLC

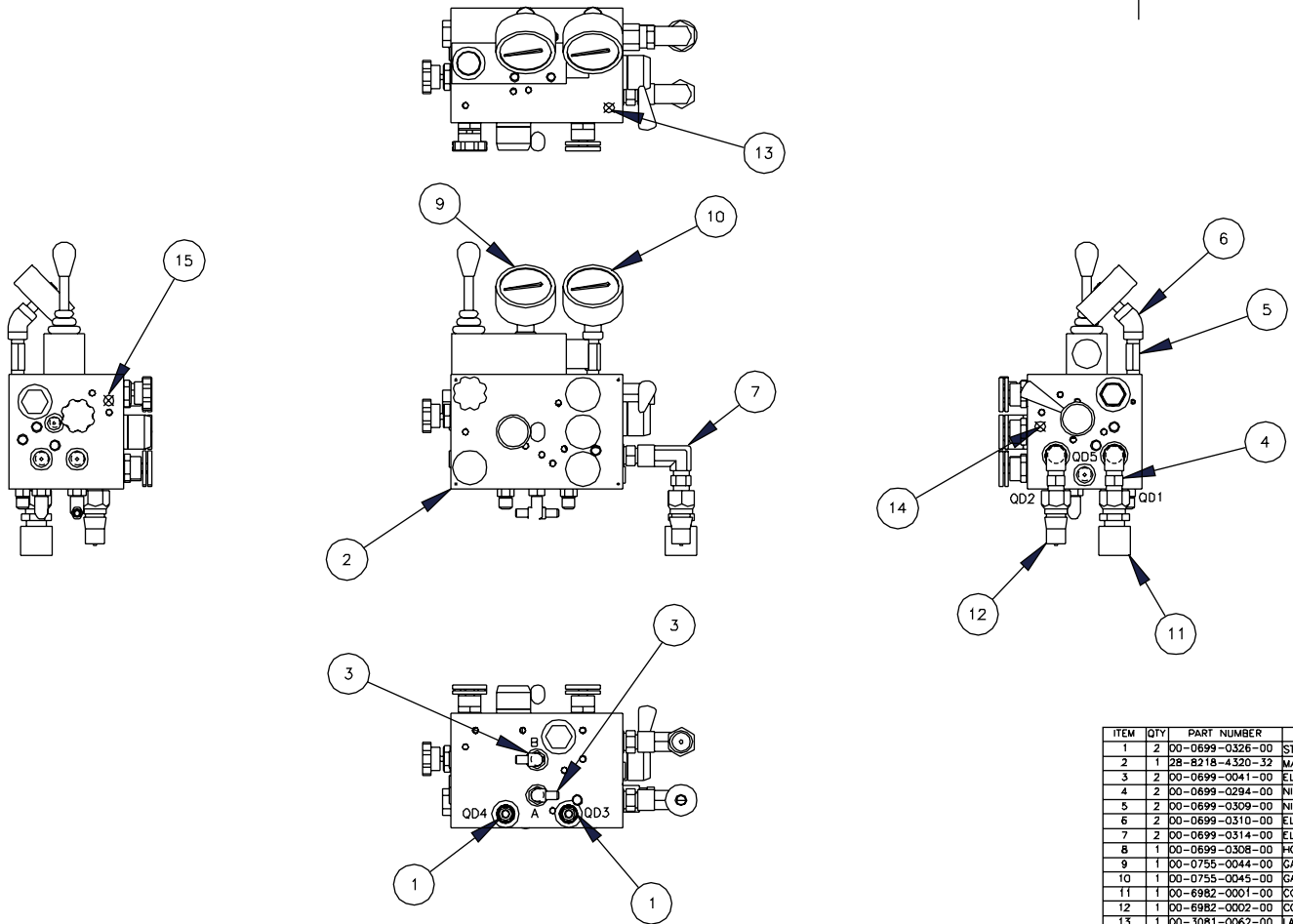
CARRIAGE CYLINDER ASSEMBLY, 414

DRAWN: D.L.WEST
 DATE: 06/10/04
 PART NO. 300445
 SHEET 1 OF 1

APPR: _____ DATE: _____
 CHECKED: _____ DATE: _____

NOTES:

REVIEWS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	00-0699-0326-00	STRAIGHT 8 BOSS/ 6 37 FLARE
2	1	28-8218-4320-32	MANIFOLD W/VALVES, CF-618
3	2	00-0699-0041-00	ELBOW, 90 DEGREE, SAE O RING
4	2	00-0699-0284-00	NIPPLE, PIPE, 6MP-6MP
5	2	00-0699-0309-00	NIPPLE HX STL .25 NPT X 2.00 LG EXT PIPE
6	2	00-0699-0310-00	ELBOW, 45 DEG 25-NPT INTERNAL
7	2	00-0699-0314-00	ELBOW, 90 DEGREE
8	1	00-0699-0308-00	HOLLOW HEX PLUG, NO. 6
9	1	00-0735-0044-00	GAUGE, PRESSURE 0-3000 PSI
10	1	00-0735-0045-00	GAUGE, PRESSURE 0-1500 PSI
11	1	00-6882-0001-00	COUPLING, .375 QUICK
12	1	00-6882-0002-00	COUPLING, .375 QUICK
13	1	00-3081-0062-00	LABEL, MANIFOLD CONTROLS, TOP
14	1	00-3081-0063-00	LABEL, MANIFOLD CONTROLS, MOTOR CONTROL
15	1	00-3081-0066-00	LABEL, MANIFOLD CONTROLS, HI-LO SPEED

ALL DIMENSIONS ARE IN INCHES
 TOLERANCES
 FRACTIONS: ±1/16
 DECIMALS: .xx, ±.03 / .xx, ±.015 /
 ANGLES: ±30°
 FINISH: 125

CONNECTRA FUSION TECHNOLOGIES, LLC

MANIFOLD ASSEMBLY, 414

DATE: 02/01/07
 DRAWN: L. BROWN
 SHEET: 1 OF 1

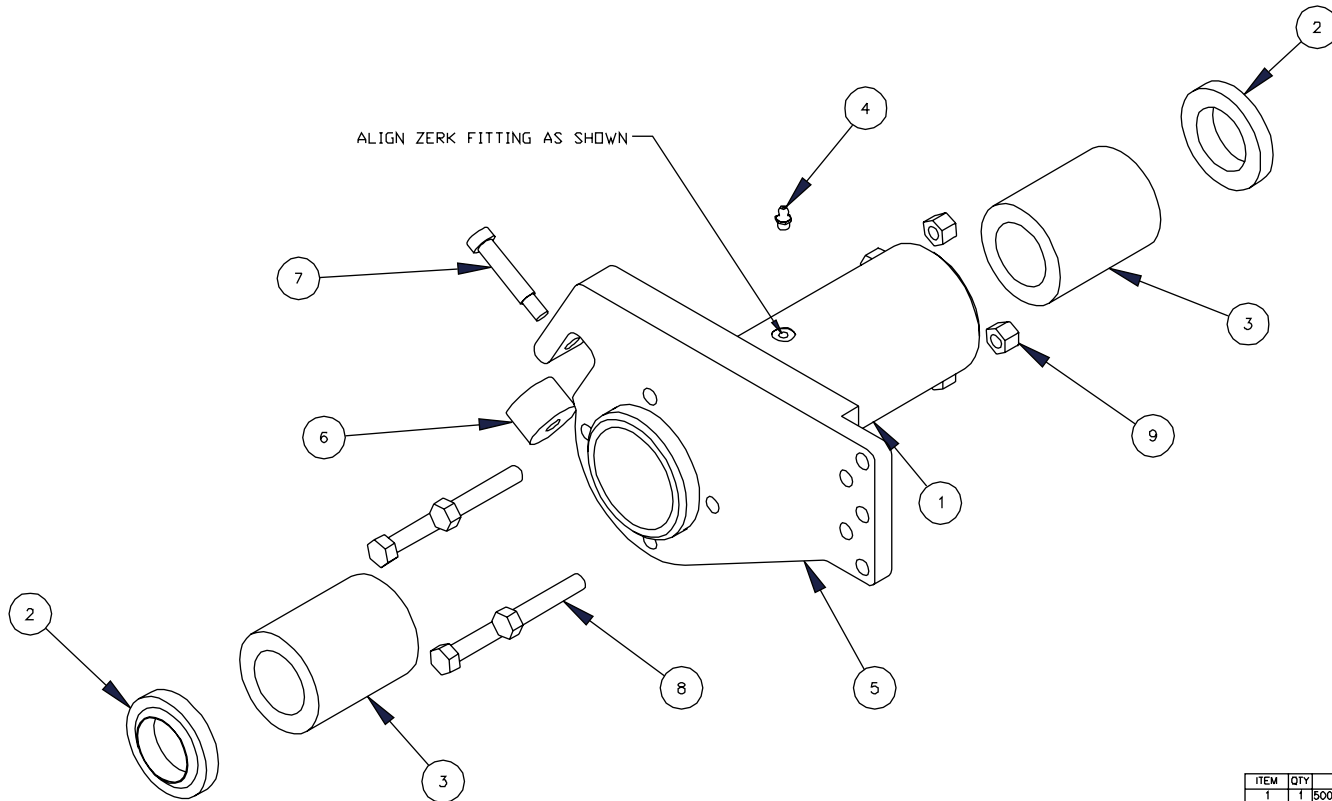
SIZE	MAIN ASSEMBLY USAGE							SUB-ASSEMBLY USED ON			
	10CQ	20CQ	10EP	20EP	14SC	14EP	14HP	QTY	ASSEMBLY	QTY	ASSEMBLY
4	1 (1)	.	.	1	(1) 200461	.	.
8
14
18
24
36

APPR:	DATE:	DRAWN:	L. BROWN	DATE:	02/01/07	SHEET:	1 OF 1
CHECKED:	DATE:	DATE:		DATE:			

NOTES:

REV		DESCRIPTION	DATE	APPROVED

ALIGN ZERK FITTING AS SHOWN



ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	500366	WELDMENT, FACER SLIDE, 414
2	2	00-1119-0017-00	WIPER, ROD
3	2	00-6998-0001-00	BEARING, LINEAR, 2.375 O.D. X 1.500 I.D.
4	1	V00057	FITTING, ZERK, 1/4"-2B 1641-B
5	1	500329	PIVOT, FACER, 414
6	1	V00001	BEARING, CAM ROLLER, CYR1 1/4S
7	1	HB0034	BOLT, SHOULDER, 3/8 X 1.50
8	4	00-0203-0600-16	BOLT, HEX HD .375-16UNC X 2" SAE GR 5-ZINC PL-REPLCS HB0091
9	4	00-0003-0003-00	NUT, ESNA 3/8"-16NC-3 LGT STD HGT PLTD

ALL DIMENSIONS ARE IN INCHES
 TOLERANCES:
 FRACTIONS: 1/16
 DECIMALS: .XX, .03 / .XX, .015 /
 XXXX .005
 ANGULAR: ±1°
 FINISH: 125

CONNECTRA®
 Simply Fusion
FACER SLIDE ASSEMBLY, 414

DRAWN: D.L.WEST DATE: 06/21/05 SHEET 1 OF 1

MAIN ASSEMBLY USAGE SUB-ASSEMBLY USED ON

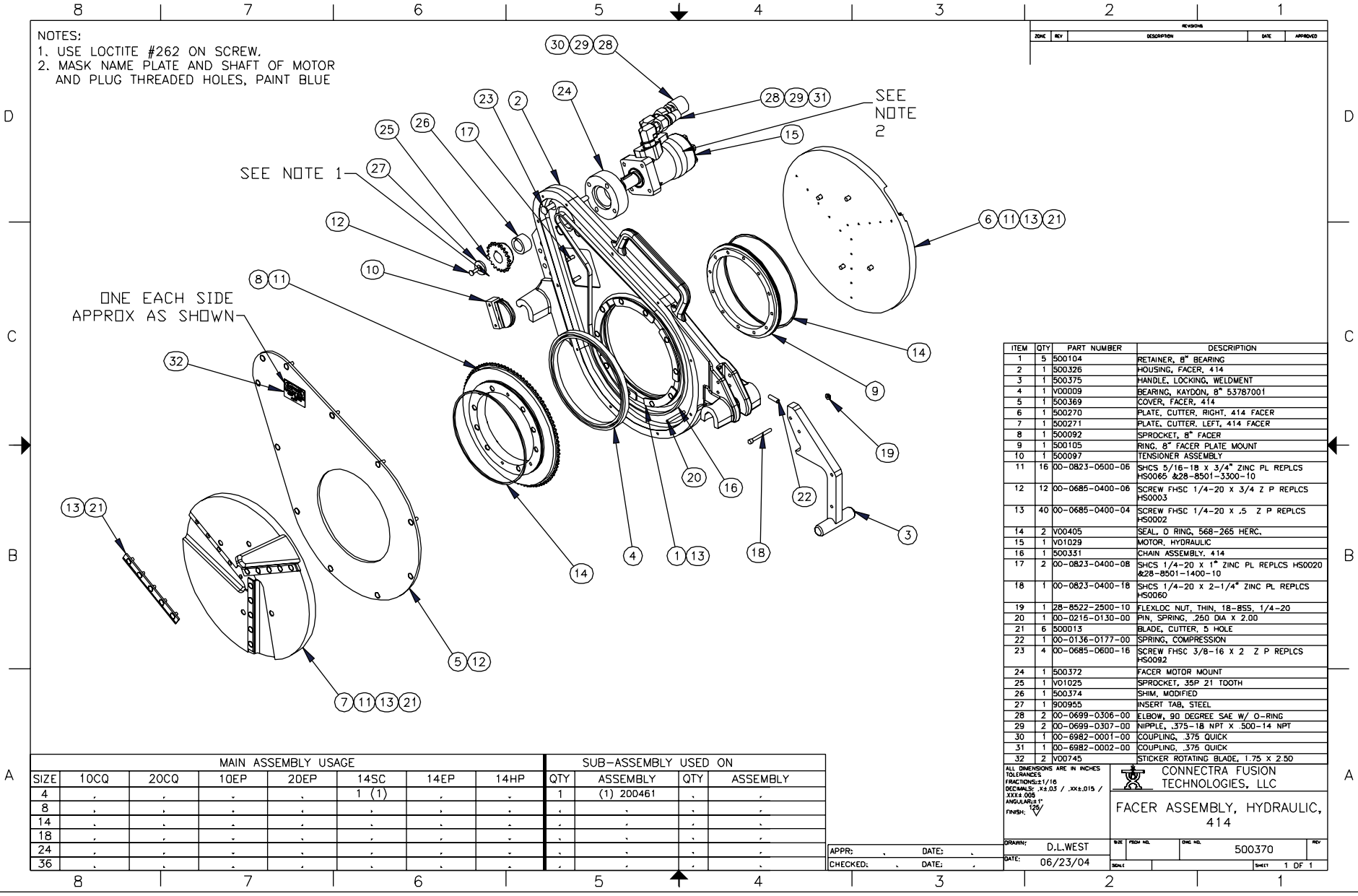
SIZE	10CQ	20CQ	10EP	2DEP	14SC	14EP	14HP	QTY	ASSEMBLY	QTY	ASSEMBLY
4	1 (1)	1 (1)	1 (2)	1	(1) 200461	.	.
8	1	(2) 200463	.	.
14
18
24
36

APPR: DATE: CHECKED: DATE:

NOTES:

1. USE LOCTITE #262 ON SCREW.
2. MASK NAME PLATE AND SHAFT OF MOTOR AND PLUG THREADED HOLES, PAINT BLUE

ZONE	REV	DESCRIPTION	DATE	APPROVED



ITEM	QTY	PART NUMBER	DESCRIPTION
1	5	500104	RETAINER, 8" BEARING
2	1	500326	HOUSING, FACER, 414
3	1	500375	HANDLE, LOCKING, WELDMENT
4	1	V00009	BEARING, KAYDON, B" 53787001
5	1	500369	COVER, FACER, 414
6	1	500270	PLATE, CUTTER, RIGHT, 414 FACER
7	1	500271	PLATE, CUTTER, LEFT, 414 FACER
8	1	500092	SPROCKET, 8" FACER
9	1	500105	RING, 8" FACER PLATE MOUNT
10	1	500097	TENSIONER ASSEMBLY
11	16	00-0823-0600-06	SHCS 5/16-18 x 3/4" ZINC PL REPLCS H50065 #28-8501-3300-10
12	12	00-0685-0400-06	SCREW FHSC 1/4-20 x 3/4 Z P REPLCS H50003
13	40	00-0685-0400-04	SCREW FHSC 1/4-20 x .5 Z P REPLCS H50002
14	2	V00405	SEAL, O RING, 568-265 HERC.
15	1	V01029	MOTOR, HYDRAULIC
16	1	500331	CHAIN ASSEMBLY, 414
17	2	00-0823-0400-08	SHCS 1/4-20 x 1" ZINC PL REPLCS H50020 #28-8501-1400-10
18	1	00-0823-0400-18	SHCS 1/4-20 x 2-1/4" ZINC PL REPLCS H50060
19	1	Z8-8522-2500-10	FLEXLOC NUT, THIN, 18-BSS, 1/4-20
20	1	00-0215-0130-00	PIN, SPRING, .250 DIA X 2.00
21	6	500013	BLADE, CUTTER, 5 HOLE
22	1	00-0136-0177-00	SPRING, COMPRESSION
23	4	00-0685-0600-16	SCREW FHSC 3/8-16 X 2 Z P REPLCS H50092
24	1	500372	FACER MOTOR MOUNT
25	1	V01025	SPROCKET, 35P 21 TOOTH
26	1	500374	SHIM, MODIFIED
27	1	900955	INSERT TAB, STEEL
28	2	00-0699-0306-00	ELBOW, 90 DEGREE SAE W/ O-RING
29	2	00-0699-0307-00	NIPPLE, .375-18 NPT X .500-14 NPT
30	1	00-6982-0001-00	COUPLING, .375 QUICK
31	1	00-6982-0002-00	COUPLING, .375 QUICK
32	2	V00745	STICKER ROTATING BLADE, 1.75 X 2.50

ALL DIMENSIONS ARE IN INCHES
 TOLERANCES
 FRACTIONS: ±1/16
 DECIMALS: .005 / .015 / .030 / .015 /
 ANGLES: ±1'
 FINISH: 125

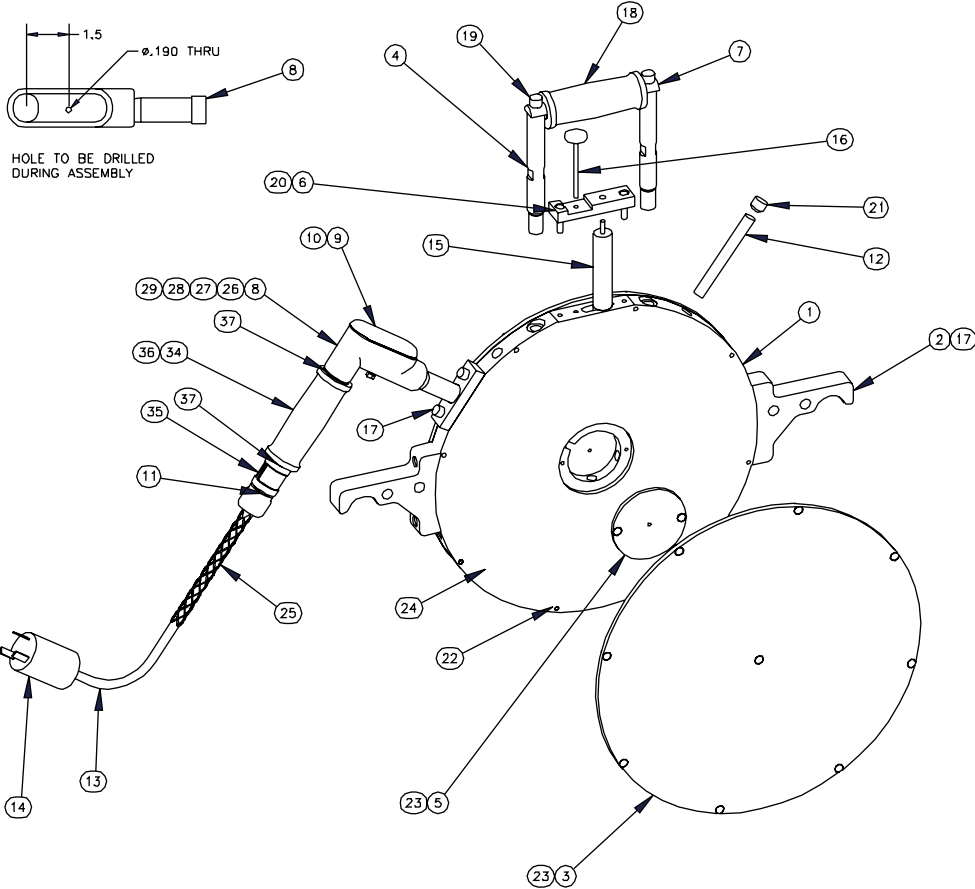
CONNECTRA FUSION TECHNOLOGIES, LLC

FACER ASSEMBLY, HYDRAULIC, 414

SIZE	MAIN ASSEMBLY USAGE						SUB-ASSEMBLY USED ON				
	10CQ	20CQ	10EP	20EP	14SC	14EP	14HP	QTY	ASSEMBLY	QTY	ASSEMBLY
4	1 (1)	.	.	1	(1) 200461	.	.
8
14
18
24
36

APPR: D.L.WEST	DATE: 06/23/04	REV: 1
CHECKED:	DATE:	SHEET 1 OF 1

- NOTES:
 1. USE APPROX 10 FEET OF CORD, ITEM 13.
 2. USE APPROX 18" OF TAPE, ITEM 29.
 3. FINISH: NONE.



ZINC	REV	DESCRIPTION	DATE	APPROVED
.	A	CHANGED V00033 TO 00-5005-2600-86, ADDED 00-5005-2600-87	12/22/04	
.	B	ADDED HANDLE	06/20/07	

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	600213	CORE, HEATER, 14"
2	2	600008	EAR, HEATER
3	2	600205	BUTT PLATE, HEATER, 14"
4	2	600004	UPRIGHT, HANDLE
5	2	600214	DISC, CENTER, HEATER, 14"
6	1	600006	COVER, THERMOSWITCH
7	1	600007	MOUNT, HANDLE
8	1	600294	WIRE OUTLET ASSY 14"
9	1	V00065	GASKET, OUTLET, 1/2" 571
10	1	V00042	COVER, OUTLET, 1/2" 170F
11	1	V00033	CONNECTOR, CORD, .50-.62
12	5	V00027	HEATER, CARTRIDGE, 240V, 500W-.5 X 4.00
13	1	28-8405-1100-14	WIRE, 12/3 TYPE SOW (BLACK)
14	1	V00104	PLUG, ELEC, #2621, 30A-250V, M
15	1	V00169	THERMOSWITCH, LARGE, 17052-0
16	1	V00168	THERMOMETER, 4" X 1/4"-2B, 0-750 F
17	6	00-0823-0500-08	SHCS 5/16-18 X 1" ZINC PL REPLCS HS0031
18	1	V00069	HANDLE, WOOD, 1410
19	2	00-0823-0600-08	SHCS 3/8-16 X 1" ZINC PL REPLCS HS0027 &28-8501-4200-10
20	2	00-0823-0400-08	SHCS 1/4-20 X 1" ZINC PL REPLCS HS0020 &28-8501-1400-10
21	5	HS0015	SCREW, SET, 5/8-11 X .50
22	16	V00642	HELICOIL 10-24 X .285
23	22	HS0045	SCREW, FLTHD, BRASS, 10-24 X .44
24	1	V00673	TUBING, HIGH TEMP, #6 SUFLEX, GRADE C, WHITE
25	1	00-5005-2600-87	WIRE MESH STRAIN RELIEF
26	1	28-8408-0510-10	ROUND NON-INSULATED EYELET
27	1	00-3366-0800-12	SCREW, RD HD #8-32 X .375" LG
28	1	00-0003-0012-00	NUT, 8-32 UNC, ESNA
29	1	00-1300-0005-00	WASHER, #B STAR
30	2	28-8408-0300-10	CONNECTOR, 14-16 GA
31	1	28-8412-0400-14	TAPE, FIBERGLASS (24")
32	4	28-8412-0100-10	INSULATING SLEEVE, 1.63 LG
33	2	28-8408-0100-10	CONNECTOR, 10-12 GA
34	1	V01039	NIPPLE, 1/2" NPT, 5 1/2" LG, GALVANIZED
35	1	V01040	COUPLING, 1/2" NPT, GALVANIZED
36	1	600293	HANDLE, MODIFIED
37	2	28-8153-0100-10	WASHER, HEATER HANDLE, TD-3

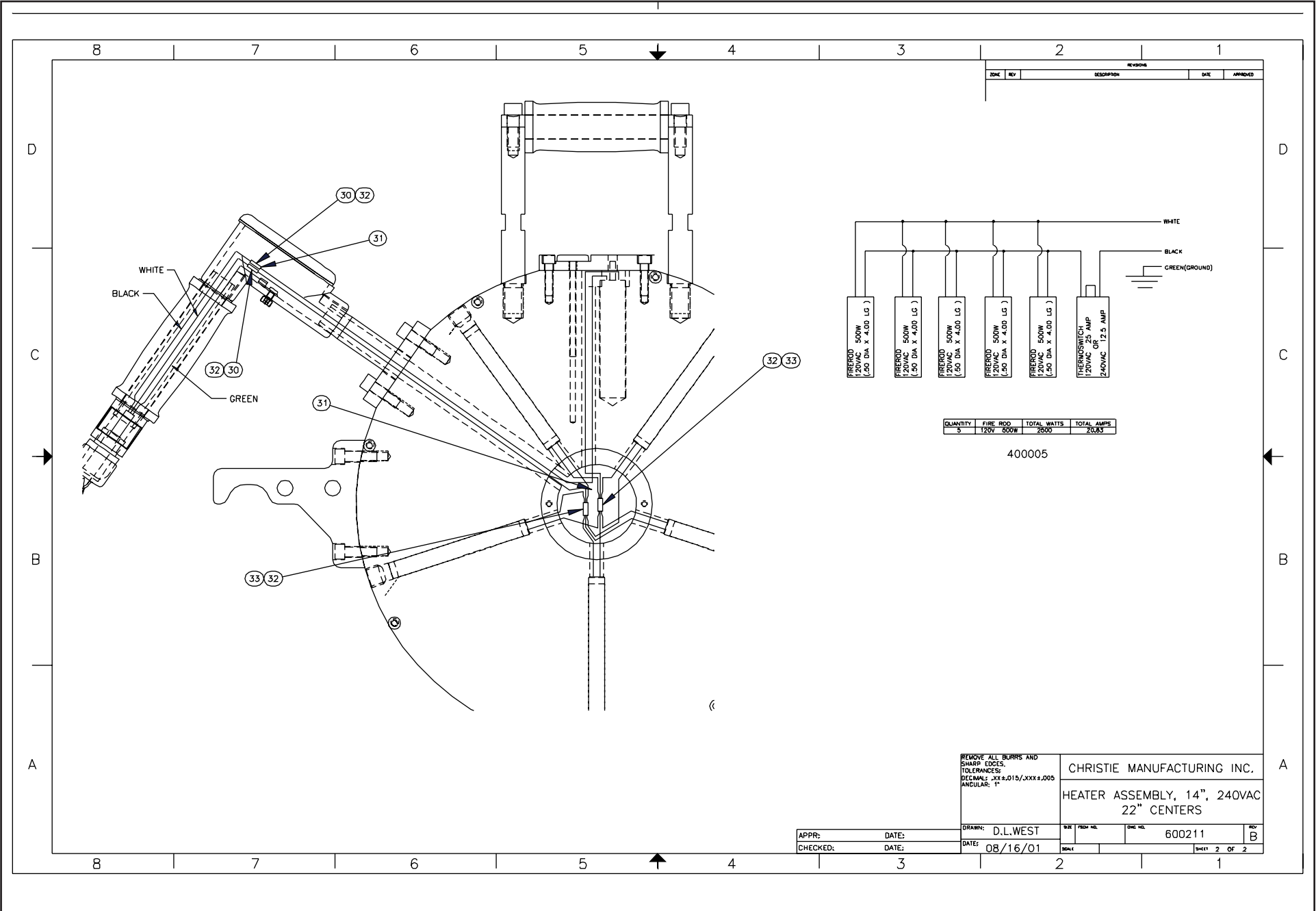
SIZE	MAIN ASSEMBLY USAGE							SUB-ASSEMBLY USED ON			
	10CQ	20CQ	10EP	20EP	10HP	20HP	20CP	QTY	ASSEMBLY	QTY	ASSEMBLY
4	1	(1) 100423	.	.
8
14	.	.	.	1 (1)
18
24
36

REMOVE ALL SHARP EDGES. TOLERANCES: DECIMAL: .XX ±.015/.XXX ±.005 ANGULAR: °

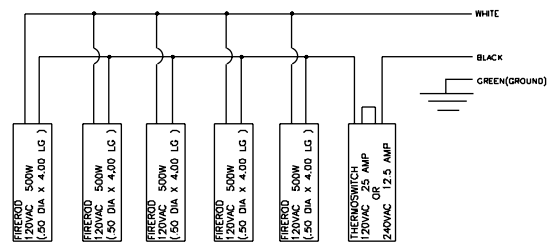
CHRISTIE MANUFACTURING INC.
 HEATER ASSEMBLY, 14", 240VAC
 22" CENTERS

DRAWN: D.L.WEST
 DATE: 08/16/01
 SHEET 1 OF 2

APPR:	DATE:	DRAWN:	D.L.WEST	REV	B
CHECKED:	DATE:	DATE:	08/16/01	SHEET	1 OF 2



REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



QUANTITY	FIRE ROD	TOTAL WATTS	TOTAL AMPS
5	120V 500W	2500	20.83

400005

REMOVE ALL BURRS AND SHARP EDGES.
 TOLERANCES:
 DECIMAL: .XX ±.015 / .XXX ±.005
 ANGULAR: 1°

CHRISTIE MANUFACTURING INC.
 HEATER ASSEMBLY, 14", 240VAC
 22" CENTERS

APPR:	DATE:	DRAWN: D.L.WEST	REV: B
CHECKED:	DATE:	DATE: 08/16/01	ONE NO. 600211
		SHEET 2 OF 2	