CONVEYORS
for Loading Products into the Tumble Chiller

MODELS: ☐ CVY-220-T ☐ CVY-220-S ☐ CVY-320-T ☐ CVY-320-S

Cook/Chill Systems

ITEM NUMBER _____

JOB NAME / NUMBER _____

Cleveland Standard Features

Model: CVY-220-T & CVY-320-T

- Powered belt conveyor
- All stainless steel construction
- 16” wide USDA approved PVC belt with 4” high cleats
- Stainless steel ball bearings
- 3/4 Horse power TEFC motor with drive gearbox
- Variable belt speed
- Operator start/stop at loading area
- Emergency stop at tumble chiller area
- Level adjustable front roller conveyor with bag safety deflector
- Spring loaded rollers with stainless steel ball bearings
- Adjustable feet for bolting to floor

Model: CVY-220-S & CVY-320-S

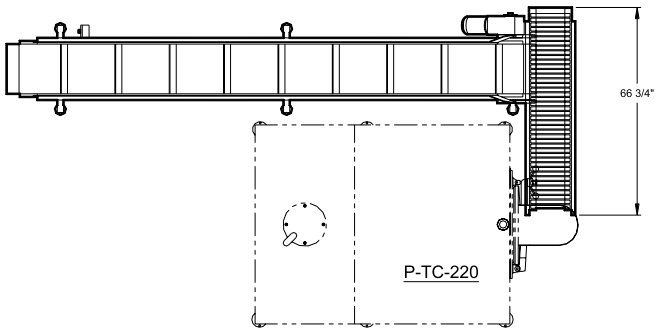
- Powered belt conveyor
- All stainless steel construction
- 16” wide USDA approved PVC belt with 4” high cleats
- Stainless steel ball bearings
- 3/4 Horse power TEFC motor with drive gearbox
- Variable belt speed
- Operator start/stop at loading area
- Emergency stop at tumble chiller area
- Adjustable feet for bolting to floor

MODEL: ☐ CVY-320-S

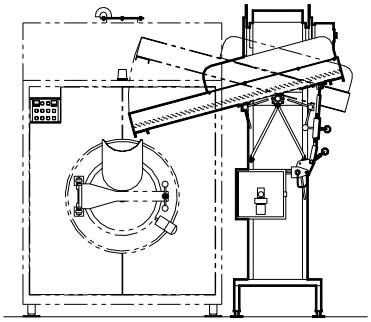
Short Form Specifications

Shall be CLEVELAND Model CVY-____- __, powered Belt Conveyor with 16" wide Belt with 4” high Cleats; all Stainless Steel construction; 3/4 HP TEFC motor with drive gearbox; Variable speed Belt; Start/Stop and Emergency Stop Switch.

Cleveland Range Inc.
1333 East 179th St., Cleveland, Ohio, U.S.A. 44110
Ph: 1-216-481-4900 **Fx**: 1-216-481-3782
Visit our Web Site at **www.clevelandrange.com**

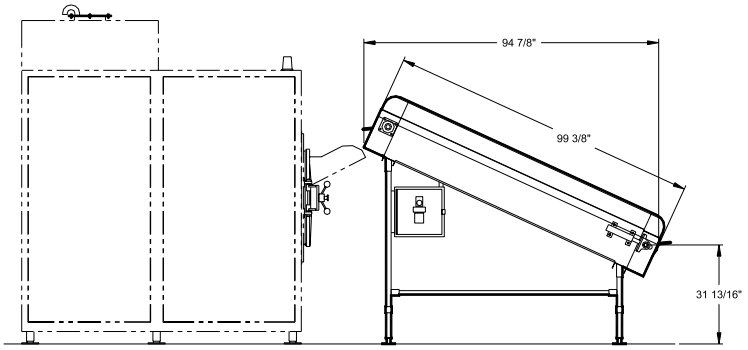


PLAN VIEW

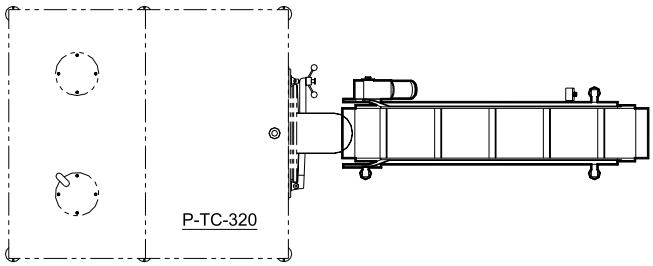


FRONT VIEW

CVY-220-T



SIDE VIEW



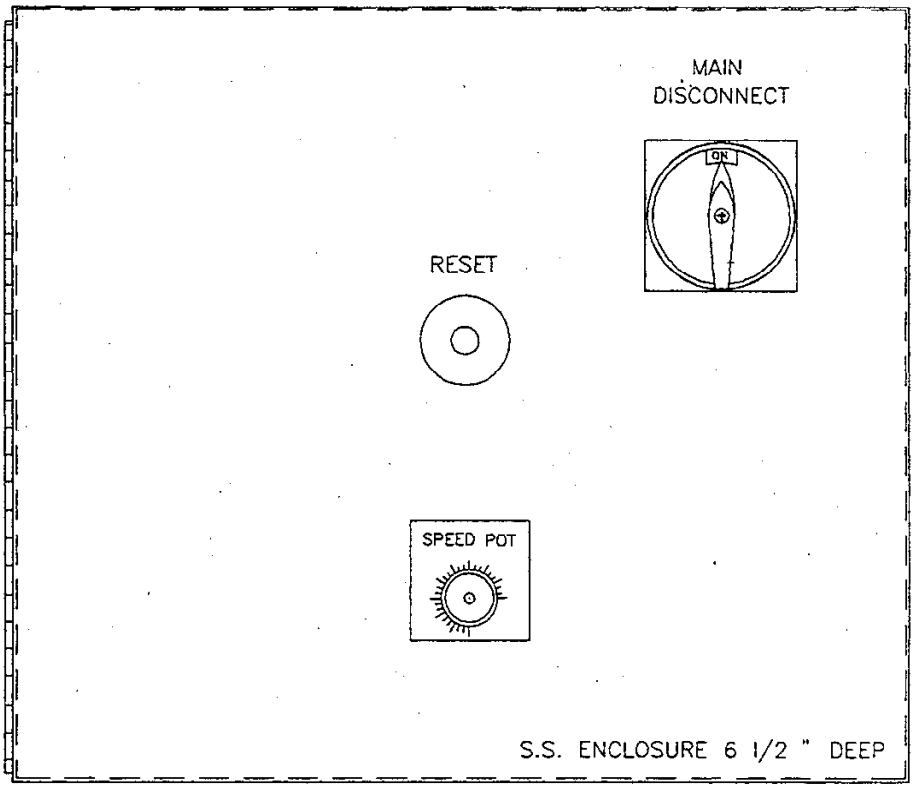
PLAN VIEW

CVY-320-S

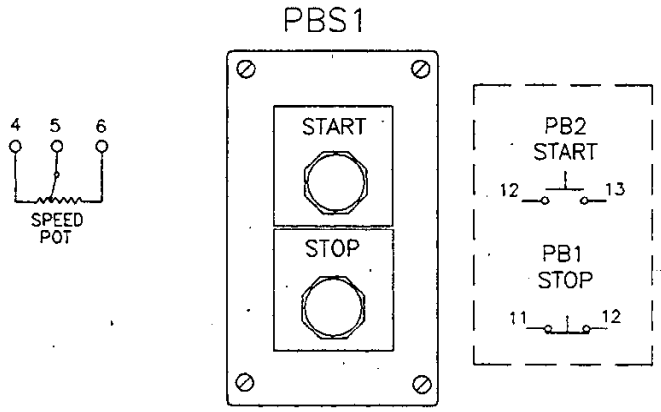
PIT CONVEYOR

MODEL	ELECTRICAL
	208V/ 3PH/60Hz
CVY-220S	3/4 HP – 5 AMPS
CVY-320S	3/4 HP – 5 AMPS
CVY-220	3/4 HP – 5 AMPS
CVY-320	3/4 HP – 5 AMPS

NOTE: CONVEYORS SHOWN ABOVE ARE FOR REFERENCE ONLY. SLOPE OF CONVEYOR IS DETERMINED ON SITE AND BASED ON PIT DEPTH AND THE EQUIPMENT LAYOUT.



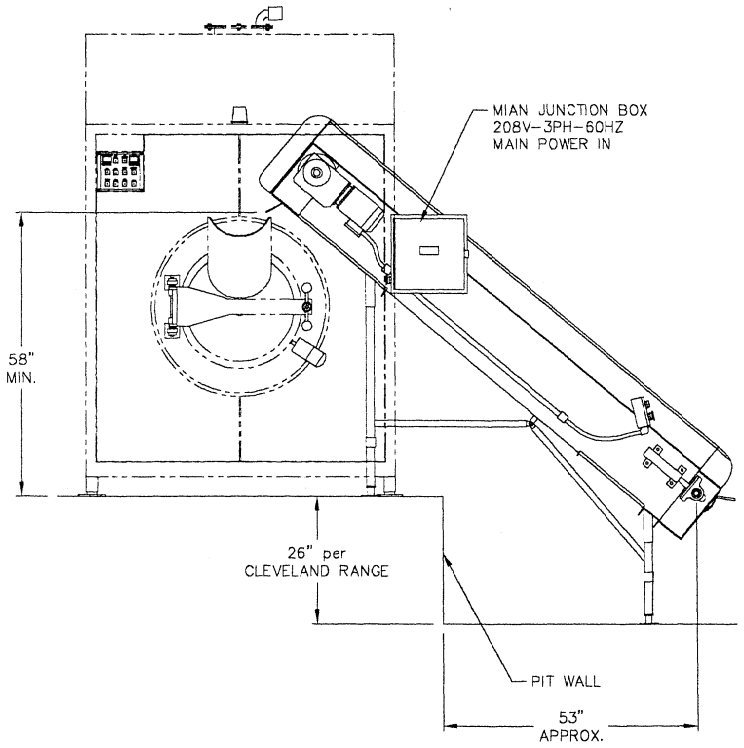
PANEL COVER

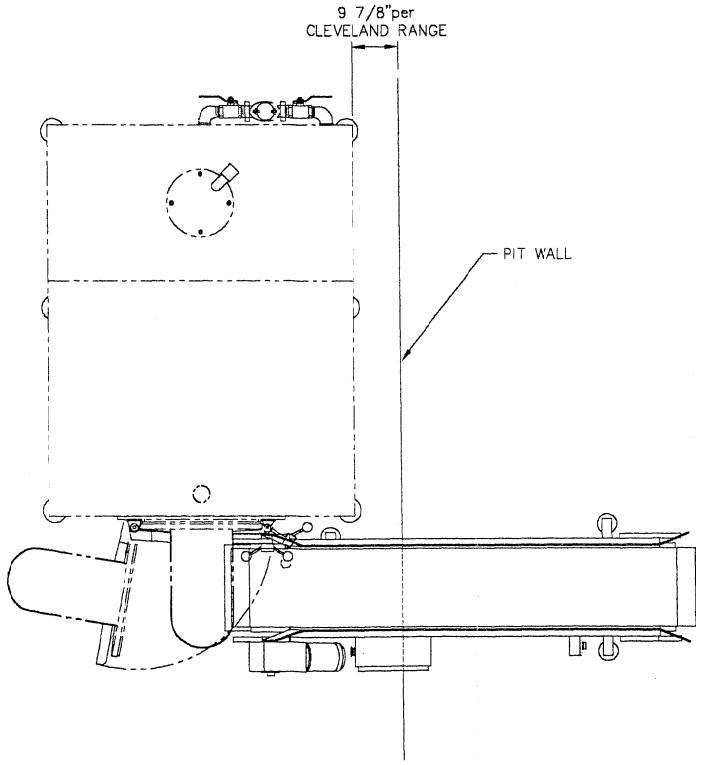


START/STOP P.B. STATION

(REFER TO CONVEYOR ASS.Y DWG.
PLAN FOR EXACT LOCATION)

VETERANS HOME OF CALIFORNIA
YOUNTVILLE, CALIFORNIA
JOB NO. 97-101C





REV.	DESCRIPTION	BY	DATE
	REVISIONS		

J.C.PARDO & SONS INC.
1250 REAMES RD. BALTO MD. 21220
PHONE (410) 391-3600 FAX (410) 391-9042

CHECKED BY:

APPROVED BY:

DRAWN BY: JES

DATE: 12/19/01

SCALE: NONE

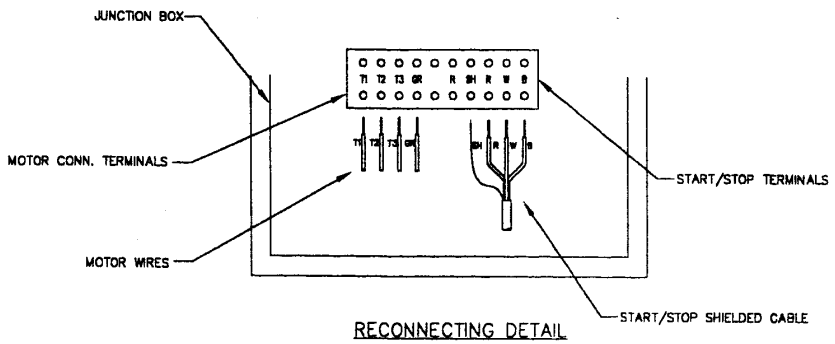
CONVEYOR INSTALLATION
AND UTILITY CONN'S.

SIZE: C

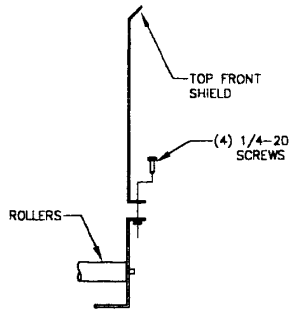
DRAWING NUMBER: 9123

REV.

SHEET 1 cf 1



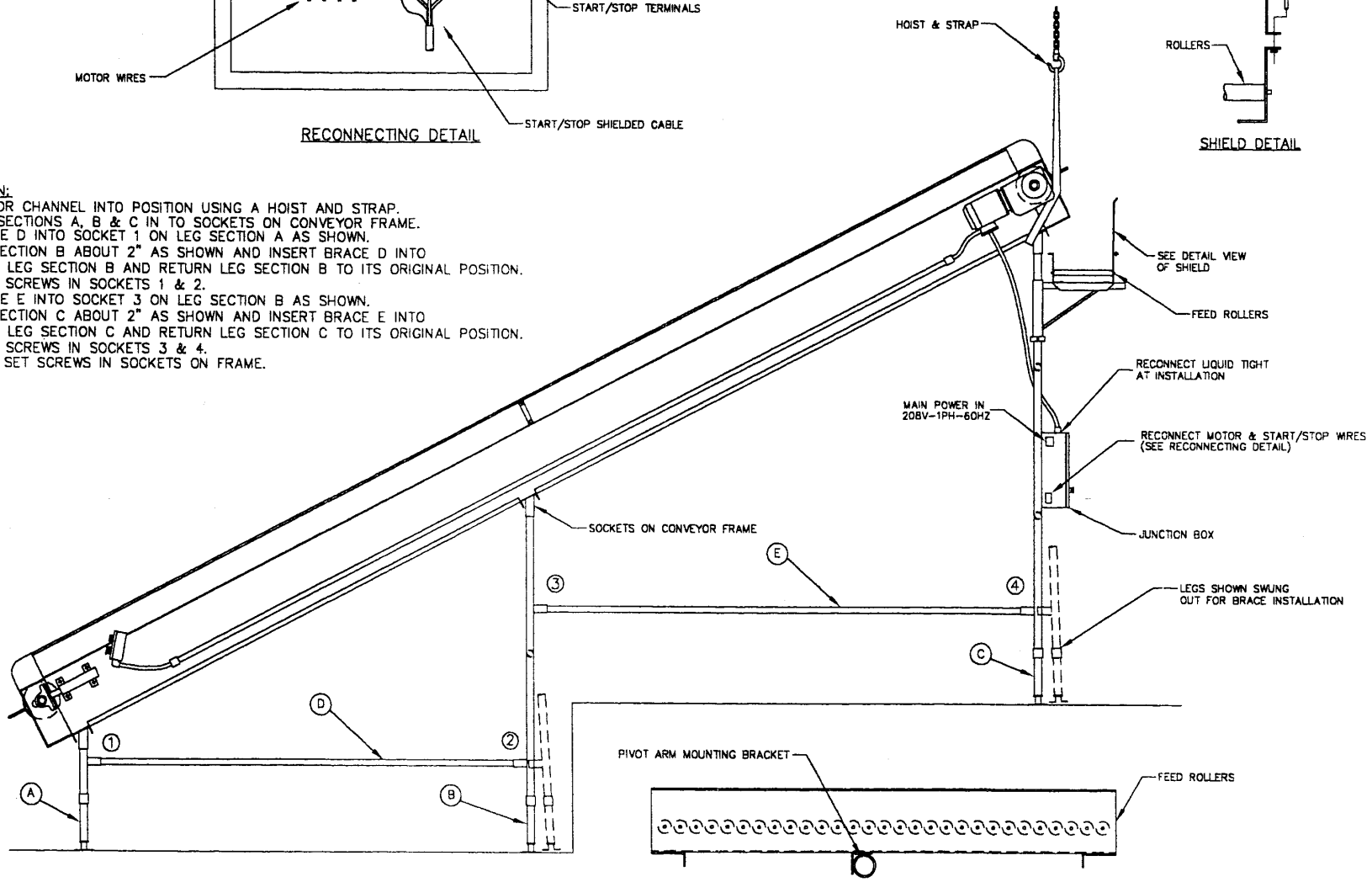
RECONNECTING DETAIL



SHIELD DETAIL

LEG INSTALLATION:

1. LIFT CONVEYOR CHANNEL INTO POSITION USING A HOIST AND STRAP.
2. INSERT LEG SECTIONS A, B & C IN TO SOCKETS ON CONVEYOR FRAME.
3. INSERT BRACE D INTO SOCKET 1 ON LEG SECTION A AS SHOWN.
4. SWING LEG SECTION B ABOUT 2" AS SHOWN AND INSERT BRACE D INTO SOCKET 2 IN LEG SECTION B AND RETURN LEG SECTION B TO ITS ORIGINAL POSITION.
5. TIGHTEN SET SCREWS IN SOCKETS 1 & 2.
6. INSERT BRACE E INTO SOCKET 3 ON LEG SECTION B AS SHOWN.
7. SWING LEG SECTION C ABOUT 2" AS SHOWN AND INSERT BRACE E INTO SOCKET 4 IN LEG SECTION C AND RETURN LEG SECTION C TO ITS ORIGINAL POSITION.
8. TIGHTEN SET SCREWS IN SOCKETS 3 & 4.
9. TIGHTEN ALL SET SCREWS IN SOCKETS ON FRAME.



FEED ROLLERS DETAIL

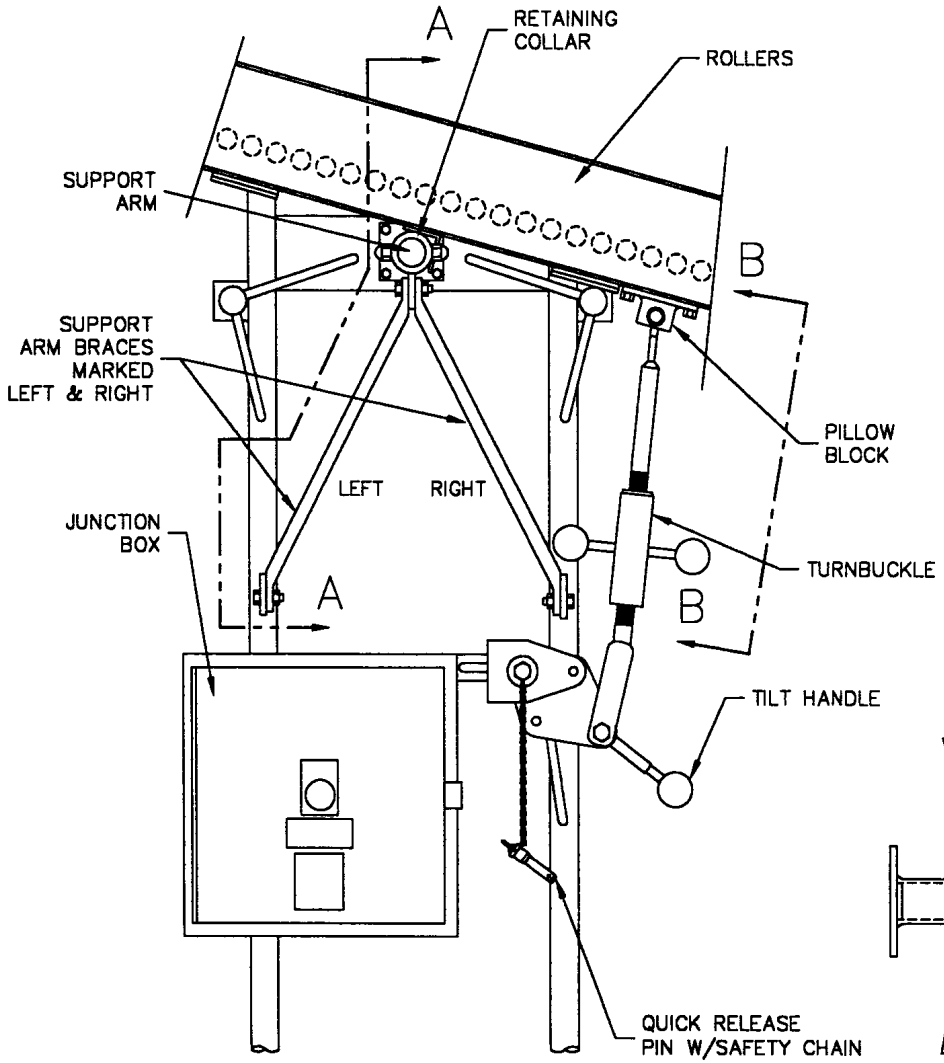
REV.	DESCRIPTION	BY	DATE
	REVISIONS		

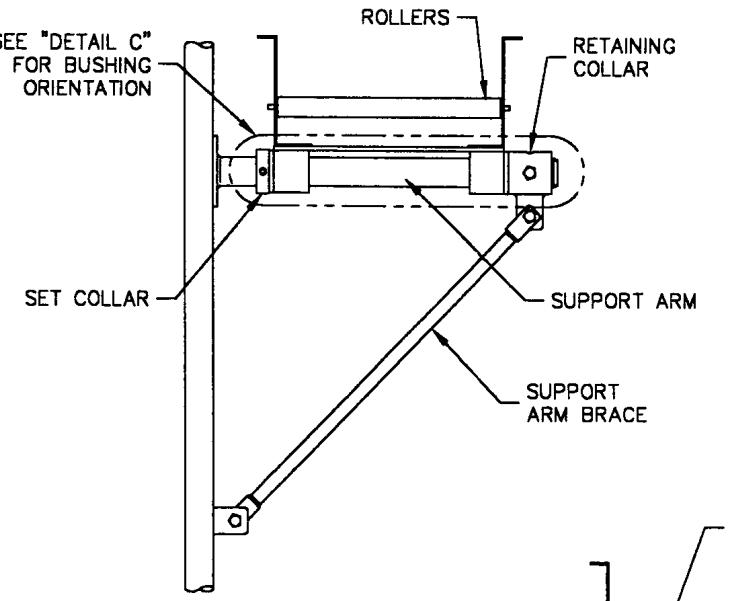
J.C.PARDO & SONS INC.
1250 REAMES RD. BALTO MD. 21220
PHONE (410) 391-3600 FAX (410) 391-9042

CHECKED BY:
APPROVED BY:
DRAWN BY: JES
DATE: 8-24-99
SCALE: NONE

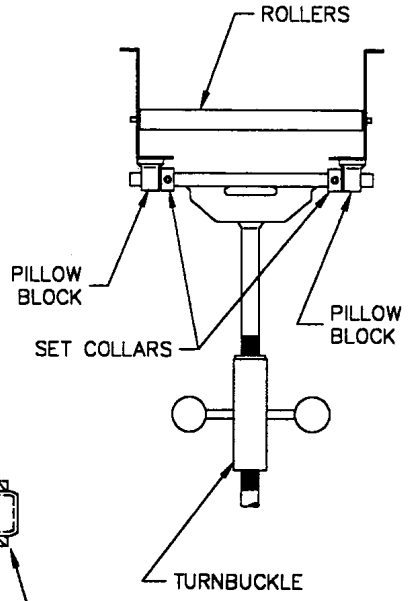
CVY-200/300 CONVEYOR INSTALLATION

SIZE: C
DRAWING NUMBER: 8930
REV.
SHEET: 1 of 1

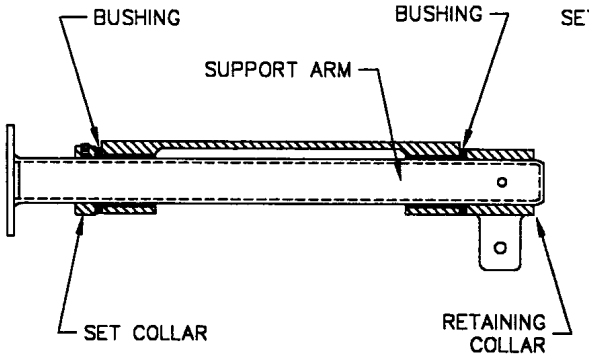




VIEW A–A



VIEW B–B



DETAIL C

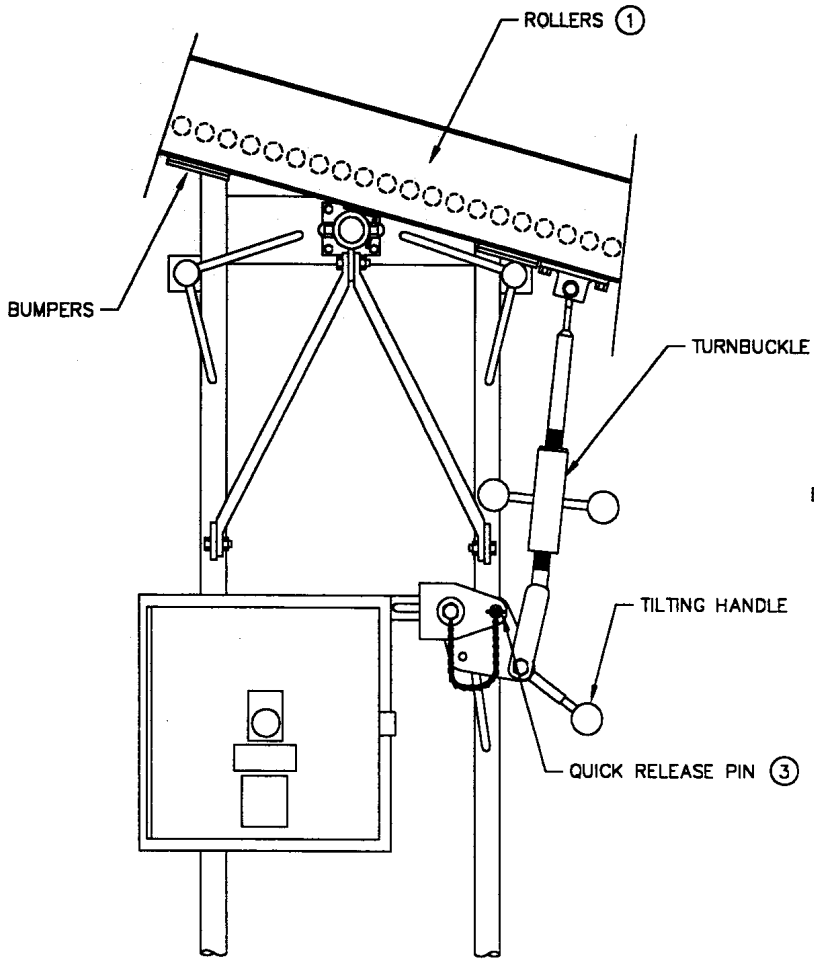
REV.	DESCRIPTION	BY	DATE
	REVISIONS		

J.C.PARDO & SONS INC.
1250 REAMES RD. BALTO MD. 21220
PHONE (410) 391-3600 FAX (410) 391-9042

CHECKED BY:
APPROVED BY:
DRAWN BY: JAY S.
DATE: 7-22-99
SCALE: NONE

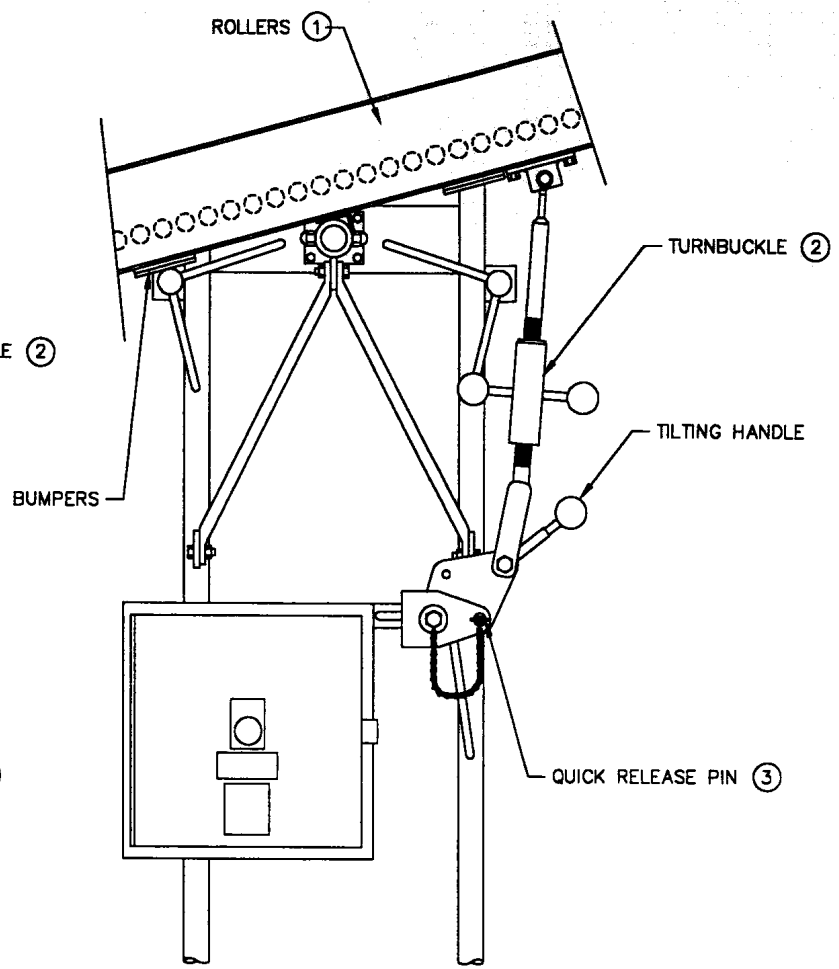
FEED ROLLER
TILTING MECHANISM ASSYEMBLY

SIZE: C
REV.:
DRAWING NUMBER: 8918
SHEET: 1 of 1



POSITION A

FOR RIGHT SIDE CHILLER



POSITION B

FOR LEFT SIDE CHILLER

TO TILT THE FEED ROLLERS (1), REMOVE THE TENSION ON THE ROLLERS USING THE TURNBUCKLE (2). REMOVE THE QUICK RELEASE PIN AND RAISE OR LOWER THE TILTING HANDLE AND REPLACE THE QUICK RELEASE PIN (3). ADJUST THE TURNBUCKLE TO PUT TENSION ON THE FEED ROLLERS SO THEY DO NOT BOUNCE AROUND DURING OPERATION. CAUTION: WHEN TILTING THE FEED ROLLERS TO POSITION A THE ROLLERS WILL WANT TO DROP. THIS WILL CAUSE DAMAGE TO THE ROLLER SECTION AND MAY INJURE SOMEONE STANDING NEAR THE END OF THE ROLLERS. ALWAYS MAINTAIN A GOOD HOLD ON THE TILTING HANDLE WHEN TILTING THE FEED ROLLERS.

REV.	DESCRIPTION	BY	DATE
	REVISIONS		

J.C.PARDO & SONS INC.
1250 REAMES RD. BALTO MD. 21220
PHONE (410) 391-3600 FAX (410) 391-9042

CHECKED BY:
APPROVED BY:
DRAWN BY: JAY S.
DATE: 7-22-99
SCALE: NONE

TILTING ROLLER OPERATION

SIZE: C
DRAWING NUMBER: 8919
REV.:
SHEET: 1 of 1

Cleveland Range, LLC.
1333 East 179th Street
Cleveland, OH 44110
Phone: (216) 481-4900
Fax: (216) 481-3782
http://www.clevelandrange.com

CONVEYOR

Electrical Requirements

- ☐ Voltage
- ☐ Phase
- ☐ Amp draw
- ☐ Wire Size
- ☐ Check motor rotation

Mounting

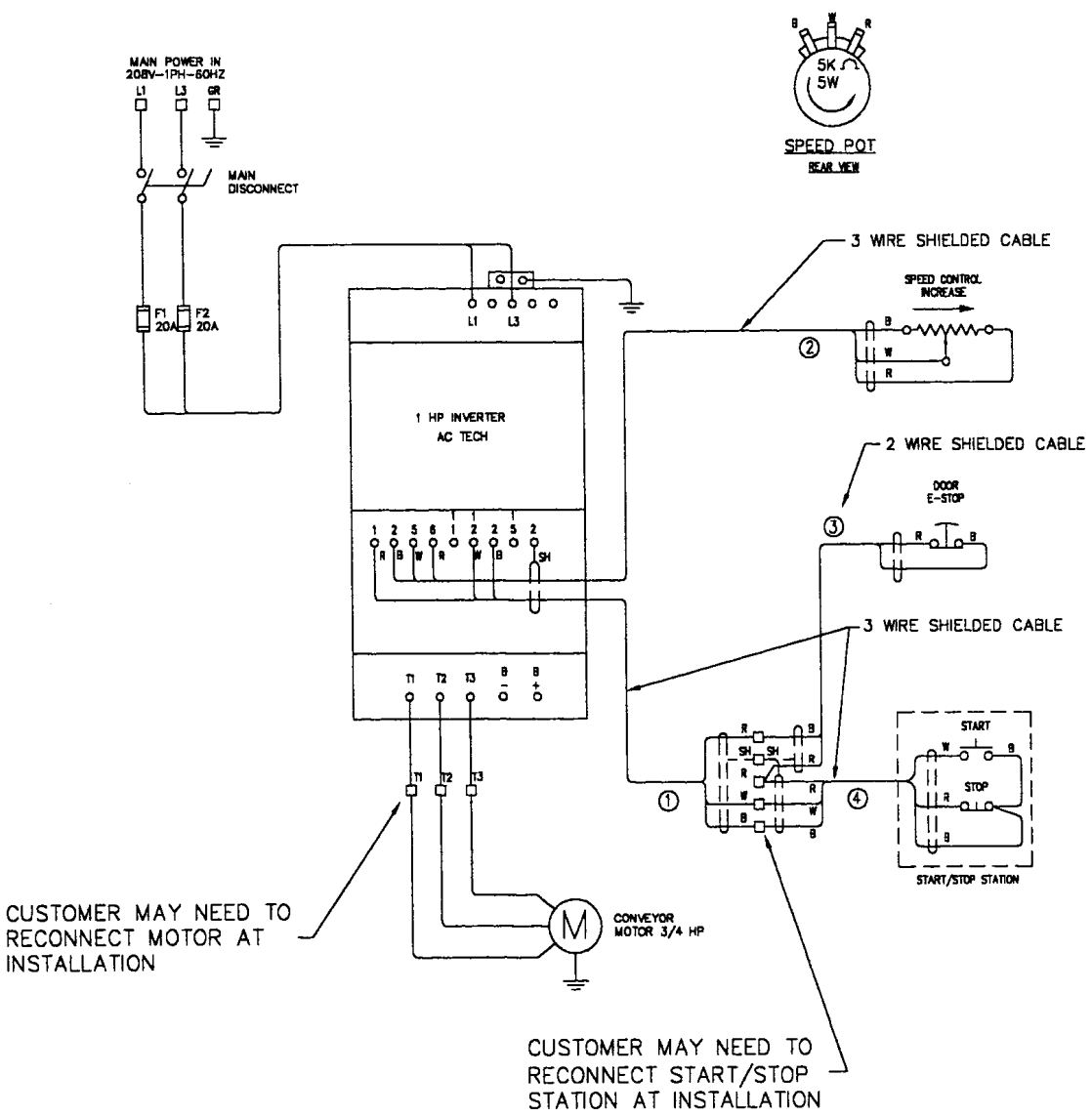
- ☐ Be sure conveyor and landing are secure before operation

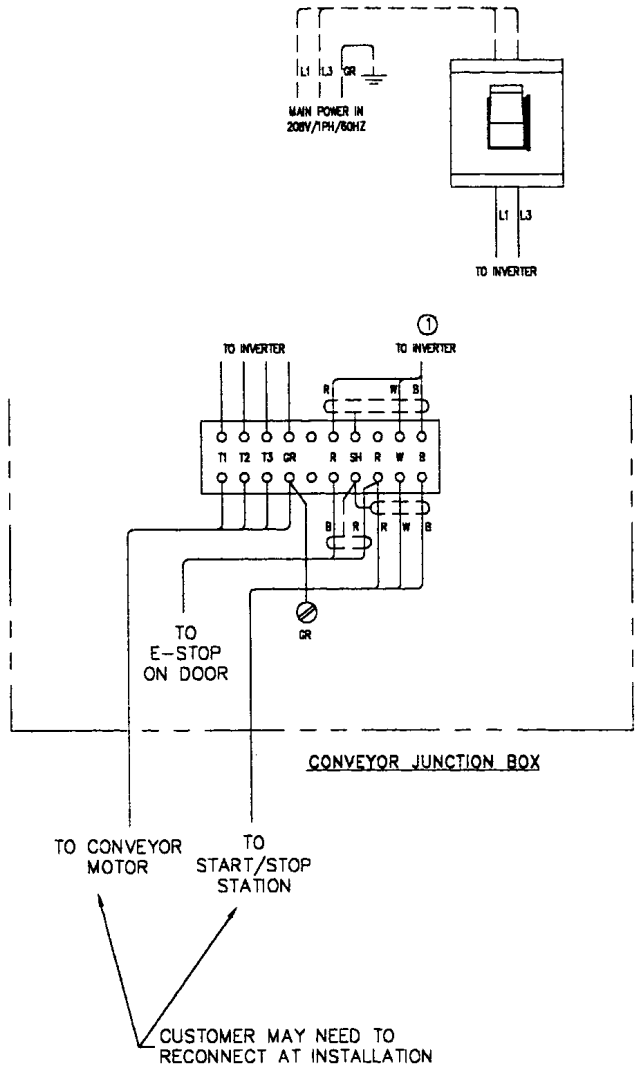
Belt Alignment

- ☐ Make sure belt travels freely (adjust accordingly)

Model no._____
Serial no._____

Comments:





FUSE NOTES:

FUSES F1–F3 KTK–R RATED 600 VOLTS.

REV.	DESCRIPTION	BY	DATE
	REVISIONS		

J.C.PARDO & SONS INC.

1250 REAMES RD. BALTO MD. 21220

PHONE (410) 391-3600 FAX (410) 391-9042

CHECKED BY:

APPROVED BY:

DRAWN BY: JES

DATE: 2/7/02

SCALE: NONE

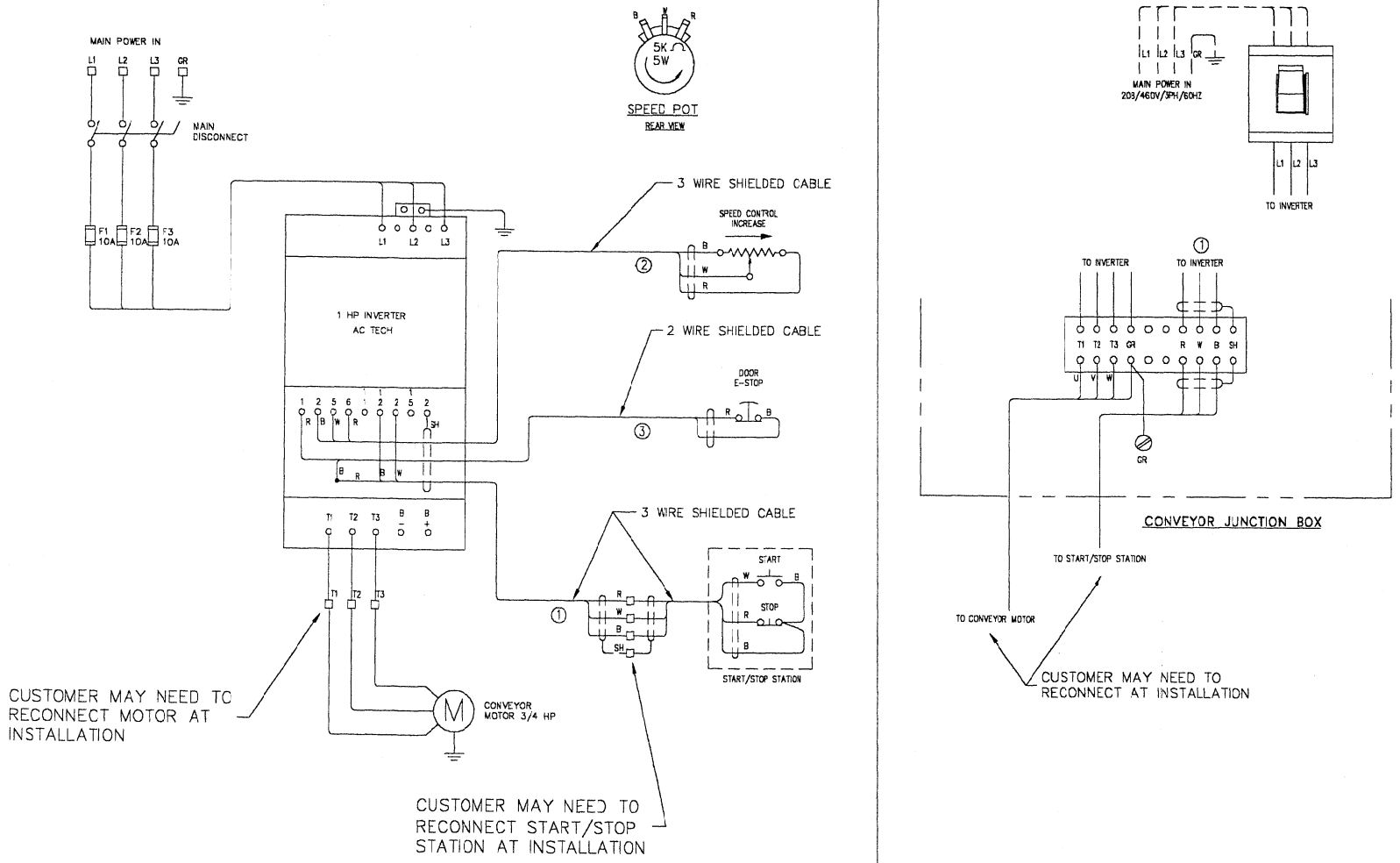
ELECTRICAL SCHEMATIC CONVEYOR
208V–1PH–60HZ

SIZE: C

DRAWING NUMBER: ES–0303

REV.

SHEET: 1 of 1



FUSE NOTES:

FUSES F1-F3 KTK-R RATED 600 VOLTS.

REV.	DESCRIPTION	BY	DATE
A	ADDED 208V & GEN. REV.	JES	12-01

REVISIONS

J.C.PARDO & SONS INC.

1250 REAMES RD. BALTO MD. 21220

PHONE (410) 391-3600 FAX (410) 391-9042

CHECKED BY:

APPROVED BY:

DRAWN BY: JES

DATE: 8/28/01

SCALE: NONE

ELECTRICAL SCHEMATIC CONVEYOR
208/460V-3PH-60HZ

SIZE: C

DRAWING NUMBER: ES-0236

REV. A

SHEET 1 of 1

NO.	PARAMETER NAME	RANGE OF ADJUSTMENT *Conveyor Program*	FACTORY DEFAULT (NOTE 1)	CUSTOMER SETTINGS
01	LINE VOLTAGE	HIGH (01), LOW (02)	HIGH (01)	02
02	CARRIER FREQUENCY	4kHz (01), 6 kHz (02), 8 kHz (03), 10 kHz (04)	6 kHz (02)	
03	START METHOD	NORMAL (01), START ON POWER UP (02), START WITH DC BRAKE (03), AUTO RESTART WITH DC BRAKE (04), FLYING RESTART 1 (05), FLYING RESTART 2 (06), FLYING RESTART 3 (07)	NORMAL (01)	01
04	STOP METHOD	COAST (01), COAST WITH DC BRAKE (02), RAMP (03), RAMP WITH DC BRAKE (04)	COAST (01)	03
05	STANDARD SPEED SOURCE	KEYPAD (01), PRESET #1 (02), 0-10 VDC (03), 4-20 mA (04)	KEYPAD (01)	03
06	TB-14 OUTPUT	NONE (01), RUN (02), FAULT (03), INVERSE FAULT (04), FAULT LOCKOUT (05), AT SET SPEED (06), ABOVE PRESET #3 (07), CURRENT LIMIT (08), AUTO SPEED (09), REVERSE (10)	NONE (01)	02
13	TB-15 OUTPUT		NONE (01)	
08	TB-30 OUTPUT	NONE (01), 0-10 VDC FREQ (02), 2-10 VDC FREQ (03), 0-10 VDC LOAD (04), 2-10 VDC LOAD (05)	NONE (01)	
09	TB-31 OUTPUT	NONE (01), 0-10 VDC LOAD (02), 2-10 VDC LOAD (03), DYNAMIC BRAKING (04)	NONE (01)	
10	TB-13A FUNCTION SELECT	NONE (01), 0-10 VDC (02), 4-20 mA (03), PRESET SPEED #1 (04), RUN REVERSE (05), START REVERSE (06), EXTERNAL FAULT (07), REMOTE KEYPAD (08), DB FAULT (09), AUXILIARY STOP (10), ACCEL/DECEL #2 (11)	NONE (01)	02
11	TB-13B FUNCTION SELECT	NONE (01), 0-10 VDC (02), 4-20 mA (03), PRESET SPEED #2 (04), DECREASE FREQ (05), JOG FORWARD (06), JOG REVERSE (07), AUXILIARY STOP (08)	NONE (01)	

NOTE 1: Factory defaults are shown for a 60 Hz base frequency. See Parameter 48 for 50 Hz base frequency.

TO PROGRAM AC TECH INVERTER:

1. PUSH MODE BUTTON 00 WILL APPEAR. W/ARROW KEY ENTER 22.5 PASSWORD.
2. PUSH MODE BUTTON TWO TIMES
3. PUSH ARROW KEY TO ENTER NEXT PARAMETER
4. PUSH MODE BUTTON ONCE
5. PUSH ARROW KEYS TO ENTER PARAMETER
6. REPEAT STEP 2 TO 5 FOR EACH SETTING
7. PUSH MODE BUTTON ONE TIME DASH LINES WILL DISPLAY. PROGRAM OK TO GO

PARAMETER MENU (CONT'D)

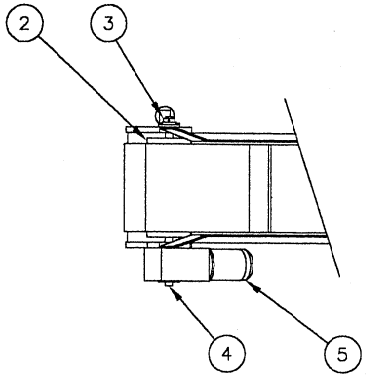
NO.	PARAMETER NAME	RANGE OF ADJUSTMENT	FACTORY DEFAULT (NOTE 1)	
12	TB-13C FUNCTION SELECT	NONE (01), 0-10 VDC (02), 4-20 mA (03), PRESET SPEED #3 (04), INCREASE FREQ (05), EXTERNAL FAULT (06), REMOTE KEYPAD (07), DB FAULT (08), ACCEL/DECEL #2 (09)	NONE (01)	
13	TB-15 OUTPUT	(SEE PARAMETER 6 - TB-14 OUTPUT)	NONE (01)	02
14	CONTROL	TERMINAL STRIP ONLY (01), REMOTE KEYPAD ONLY (02), TERMINAL STRIP OR REMOTE KEYPAD (03)	TERMINAL STRIP ONLY (01)	
15	SERIAL LINK	DISABLE (01), 9600, 8, N, 2 WITH TIMER (02), 9600, 8, N, 2 WITHOUT TIMER (03), 9600, 8, E, 1 WITH TIMER (04), 9600, 8, E, 1 WITHOUT TIMER (05), 9600, 8, O, 1 WITH TIMER (06), 9600, 8, O, 1 WITHOUT TIMER (07)	9600, 8, N, 2 WITH TIMER (02)	
16	UNITS EDITING	TENTHS OF UNITS (01), WHOLE UNITS (02)	WHOLE UNITS (02)	
17	ROTATION	FORWARD ONLY (01), FORWARD AND REVERSE (02)	FORWARD ONLY (01)	
19	ACCELERATION TIME	0.1 - 3600.0 SEC	20.0 SEC	06
20	DECELERATION TIME	0.1 - 3600.0 SEC	20.0 SEC	01
21	DC BRAKE TIME	0.0 - 3600.0 SEC	0.0 SEC	
22	DC BRAKE VOLTAGE	0.0 - 30.0 %	0.0 %	
23	MINIMUM FREQUENCY	0.0 - MAXIMUM FREQUENCY	0.0 Hz	40
24	MAXIMUM FREQUENCY	MINIMUM FREQ - 240.0 Hz (NOTE 2)	60.0 Hz	60
25	CURRENT LIMIT	30 - 160 % (NOTE 3)	160%	
26	MOTOR OVERLOAD	30 - 100 %	100%	

NOTE 1: Factory defaults are shown for a 60 Hz base frequency. See Parameter 48 for 50 Hz base frequency.
NOTE 2: Maximum setting is 999.9 Hz on drives with High Output Frequency option. Consult the factory.
NOTE 3: If LINE VOLTAGE is set to LOW, maximum setting is 150%.

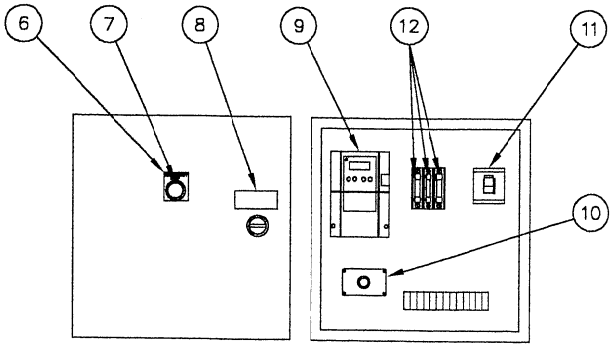
PARAMETER MENU (CONT'D)			
	RAMETER NAME	RANGE OF ADJUSTMENT	FACTORY DEFAULT (NOTE 1)
	BASE FREQUENCY	25.0 - 500.0 Hz (NOTE 4)	60.0 Hz
	FIXED BOOST	0.0 - 30.0 %	1.0 %
	ACCEL BOOST	0.0 - 20.0 %	0.0 %
0	SLIP COMPENSATION	0.0 - 5.0 %	0.0 %
1-37	PRESET SPEEDS	0.0 - MAXIMUM FREQUENCY	0.0 Hz
38	SKIP BANDWIDTH	0.0 - 10.0 Hz	0.0 Hz
39	SPEED SCALING	0.0 - 6500.0	0.0
40	FREQUENCY SCALING	3.0 - 2000.0 Hz	60.0 Hz
41	LOAD SCALING	10 - 200 %	200 %
42	ACCEL / DECEL #2	0.1 - 3600.0 SEC	20.0 SEC
43	SERIAL ADDRESS	1 - 247	1
44	PASSWORD	000 - 999	225
47	CLEAR HISTORY	MAINTAIN (01), CLEAR (02)	MAINTAIN (01)
48	PROGRAM SELECTION	USER SETTINGS (01), OEM SETTINGS (02), RESET OEM (03), RESET 60 (04), RESET 50 (05)	USER SETTINGS (01)
50	FAULT HISTORY	(VIEW-ONLY)	(N/A)
51	SOFTWARE CODE	(VIEW-ONLY)	(N/A)
52	DC BUS VOLTAGE	(VIEW-ONLY)	(N/A)
53	MOTOR VOLTAGE	(VIEW-ONLY)	(N/A)
54	LOAD	(VIEW-ONLY)	(N/A)
55	0-10 VDC INPUT	(VIEW-ONLY)	(N/A)
56	4-20 mA INPUT	(VIEW-ONLY)	(N/A)
57	TB STRIP STATUS	(VIEW-ONLY)	(N/A)
58	KEYPAD STATUS	(VIEW-ONLY)	(N/A)
59	TB-30 OUTPUT	(VIEW-ONLY)	(N/A)
60	TB-31 OUTPUT	(VIEW-ONLY)	(N/A)

NOTE 1: Factory defaults are shown for a 60 Hz base frequency. See Parameter 48 for 50 Hz base frequency.
NOTE 4: Maximum setting is 1300.0 Hz (factory default is 999.9) on drives with High Output Frequency option. Consult the factory.

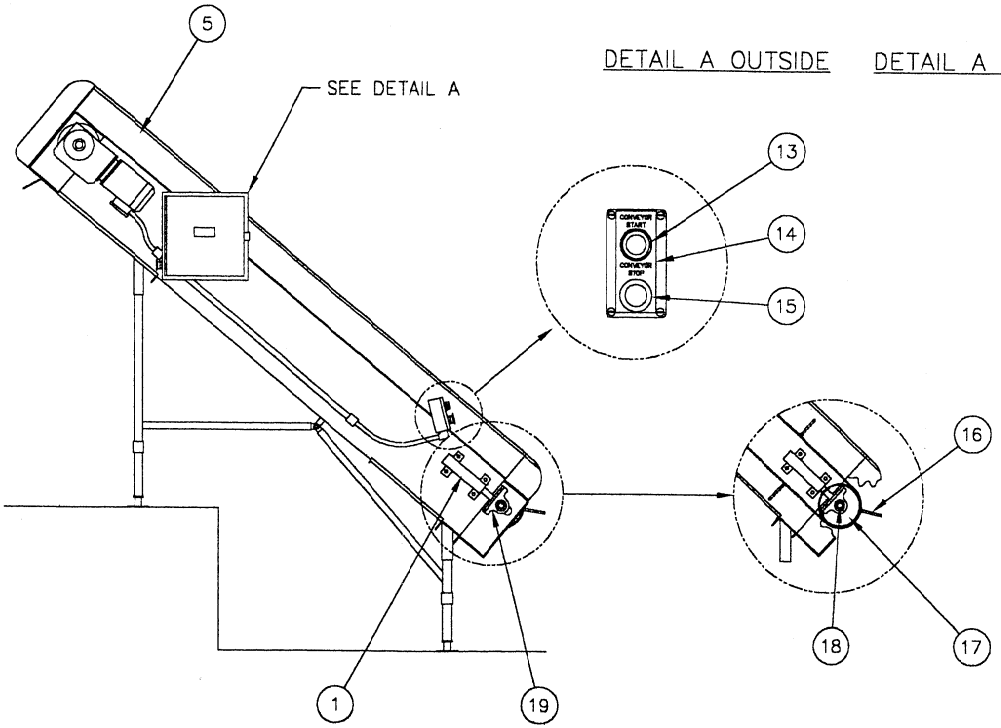
BOOST SETTINGS DEPENDS ON LOADS: THIS UNIT HAS (2) BOOST SETTINGS. FIXED BOOST AND ACCEL BOOST. BOTH CAN BE ADJUSTED IF UNIT TRIPS OUT.
MAKE ADJUSTMENT BY A FACTOR OF 1 UNTIL THE DRIVE WORKS CORRECTLY



TOP VIEW



DETAIL A OUTSIDE DETAIL A INSIDE



REV.	DESCRIPTION	BY	DATE
	REVISIONS		

J.C.PARDO & SONS INC.
1250 REAMES RD. BALTO MD. 21220
PHONE (410) 391-3600 FAX (410) 391-9042

CHECKED BY:

APPROVED BY:

DRAWN BY: JES

DATE: 3/18/02

SCALE: NONE

CVY-CASING CONVEYOR W/O ROLLERS
REPLACEMENT PARTS

SIZE: C

DRAWING NUMBER: 11651

REV:

SHEET: 1 of 2

REPLACEMENT PARTS

ITEM	PART NO.	DESCRIPTION
1	MSS00-0000005	TELESCOPER
2	HWS00-0000006	LAGGING DRIVE PULLEY
3	BGC01-3800002	FLANGE FACE BEARING
4	1FS01-3800001	DRIVE SHAFT
5	DUH00-7500001	COMPLETE DRIVE UNIT 208V
–	DU900-7500001	REPLACEMENT MOTOR FOR ITEM #5
–	DU901-3800002	REPLACEMENT GEARBOX FOR ITEM #5
6	NPYELLOW00220	NAMEPLATE
7	2EP00-8800019	MUSHROOM STOP BUTTON
8	NPREDOOOOO019	WARNING NAMEPLATE
9	ELH01-0000003	1HP INVERTER 208V
10	2EP00-0000005	SPEED CONTROL UNIT
11	ELPSW-0000001	HIGH VOLTAGE DISCONNECT
12	ELV06-0000016	15 AMP FUSE
13	2EP01-25A0020	GREEN PUSH BUTTON
14	NPYELLOW00221	NAMEPLATE
15	2EP01-25A0014	RED MUSHROOM PUSH BUTTON
16	MSD16-0000012	CONVEYOR BELT
17	HWS00-0000007	IDLER PULLEY
18	1FS01-2500004	IDLER END SHAFT
19	BGC01-2500002	PILLOW BLOCK BEARING

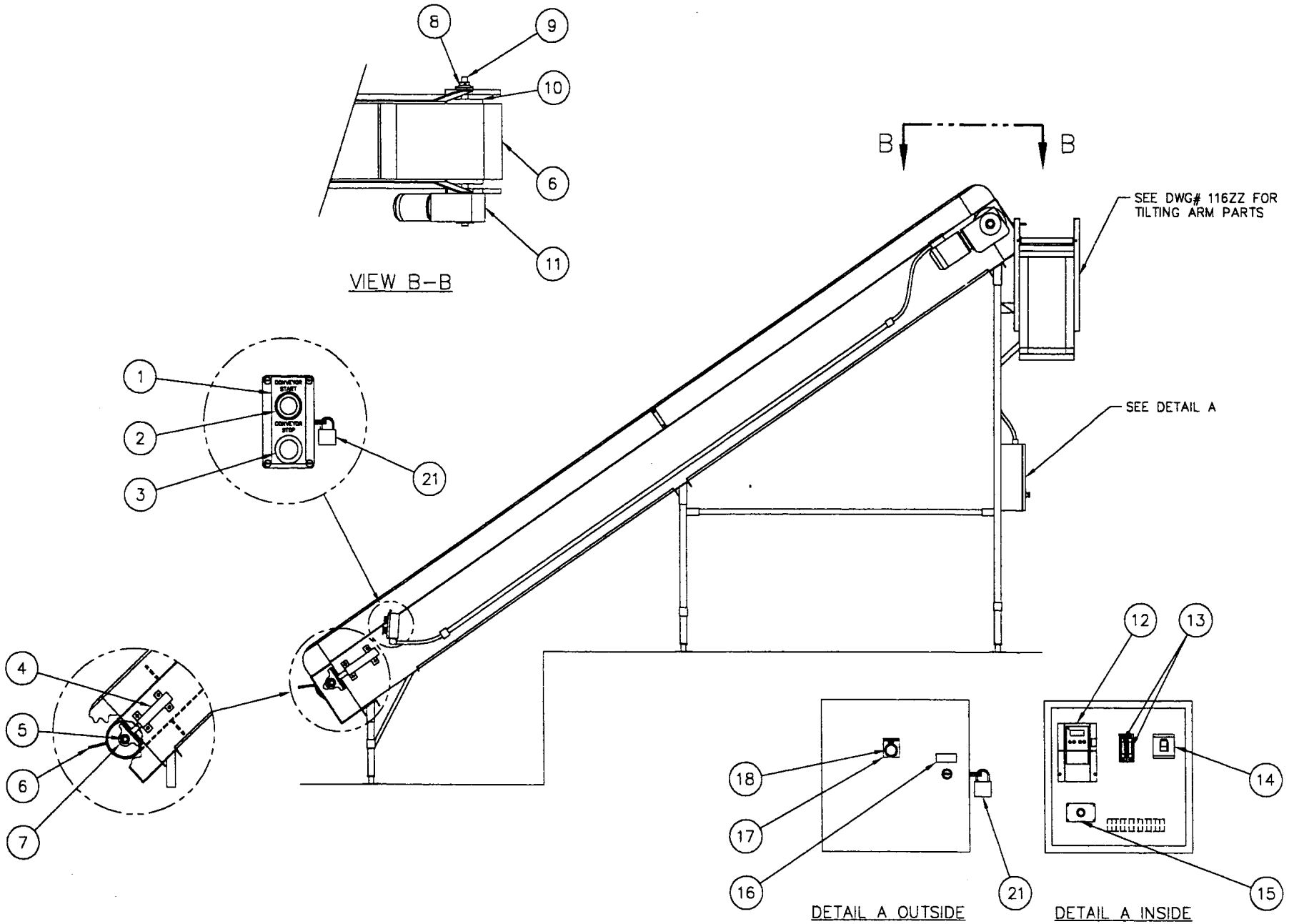
REV.	DESCRIPTION	BY	DATE
	REVISIONS		

J.C.PARDO & SONS INC.
1250 REAMES RD. BALTO MD. 21220
PHONE (410) 391-3600 FAX (410) 391-8042

CHECKED BY:
APPROVED BY:
DRAWN BY: JES
DATE: 3/18/02
SCALE: NONE

CVY- CASING CONVEYOR W/O ROLLERS
REPLACEMENT PARTS

SIZE: C
DRAWING NUMBER: 11651
REV.
SHEET: 2 of 2



REV.	DESCRIPTION	BY	DATE
	REVISIONS		

J.C.PARDO & SONS INC.
1250 REAMES RD. BALTO MD. 21220
PHONE (410) 391-3600 FAX (410) 391-9042

CHECKED BY:
APPROVED BY:
DRAWN BY: JAY S.
DATE: 3/22/02
SCALE: NONE

DUAL TILT CONVEYOR (1 PH POWER IN)
REPLACEMENT PARTS (MARICOPA ONLY)

SIZE: C
DRAWING NUMBER: 11654
REV.
SHEET: 1 of 2

REPLACEMENT PARTS

ITEM	PART NO.	DESCRIPTION
1	NPYELLOW00221	FUNCTION TAG
2	2EP01-25A0020	GREEN PUSH BUTTON
3	2EP01-25A0014	RED MUSHROOM PUSH BUTTON
4	MSS00-0000005	TELESCOPER
5	1FS01-2500004	IDLER END SHAFT
6	MSD16-0000005	CONVEYOR BELT
7	BGC01-2500002	PILLOW BLOCK BEARING
8	BGC01-3800002	FLANGE FACE BEARING
9	1FS01-3800001	DRIVE SHAFT
10	HWS00-0000006	LAGGING DRIVE PULLEY
11	DUH00-7500001	COMPLETE DRIVE UNIT
-	DU900-7500001	REPLACEMENT MOTOR FOR ITEM #11
-	DU901-3800001	REPLACEMENT GEARBOX FOR ITEM #11
12	ELH01-0000001	INVERTER
13	ELV06-0000010	10 AMP FUSE
14	ELPSW-0000001	HIGH VOLTAGE DISCONNECT
15	2EP00-0000005	SPEED CONTROL UNIT
16	NPREDO0000119	WARNING LABLE
17	NPYELLOW00220	FUNCTION TAG
18	2EP00-8800019	MUSHROOM STOP BUTTON
19	MSP01-1200001	ROLLERS
20	HWS00-0000007	IDLER PULLEY
21	HWLOCKS-00001	PADLOCK W/KEYS

REV.	DESCRIPTION	BY	DATE
REVISIONS			

J.C.PARDO & SONS INC.
1250 REAMES RD. BALTO MD. 21220
PHONE (410) 391-3600 FAX (410) 391-9042

CHECKED BY:
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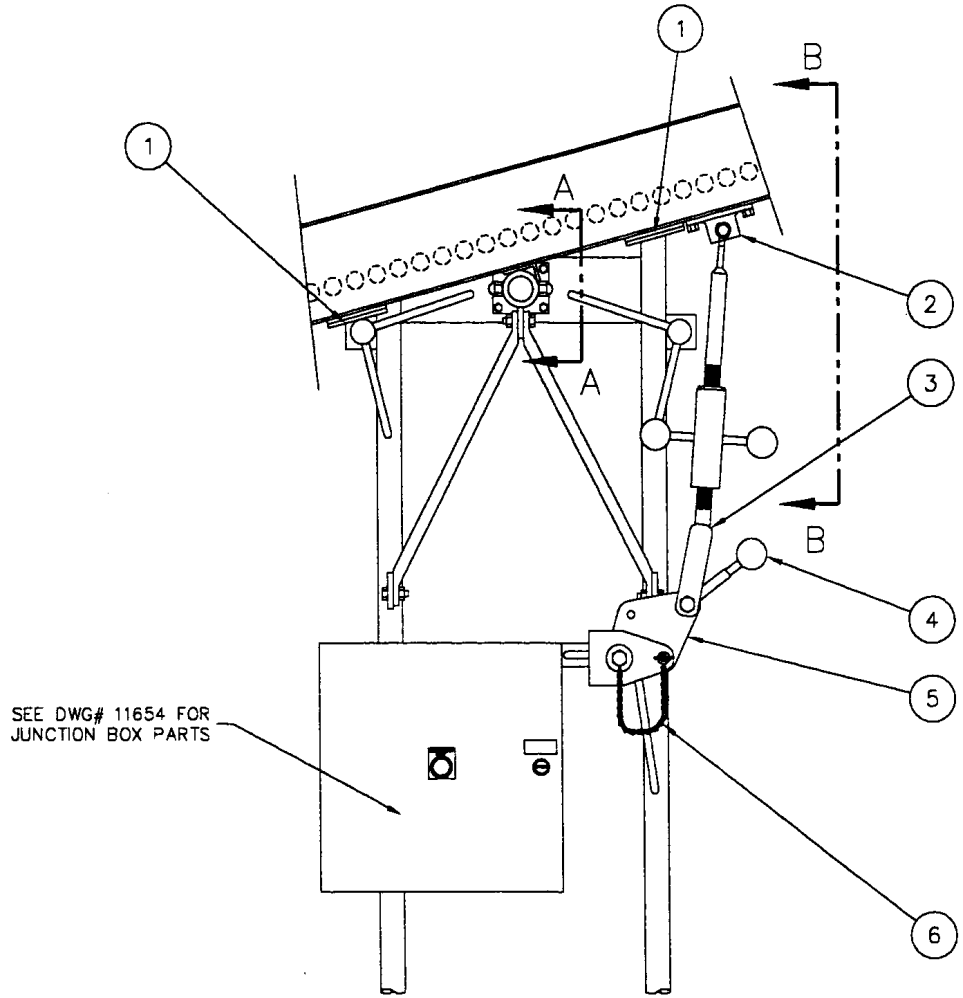
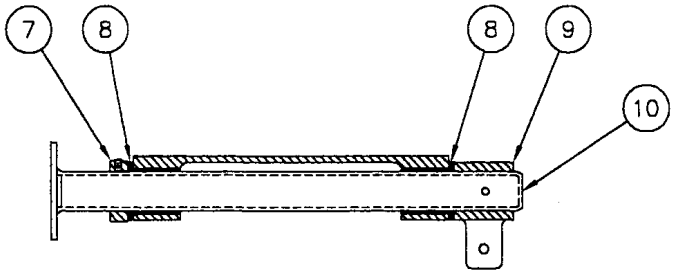
DRAWN BY: JAY S.
DATE: 3/22/02
SCALE: NONE

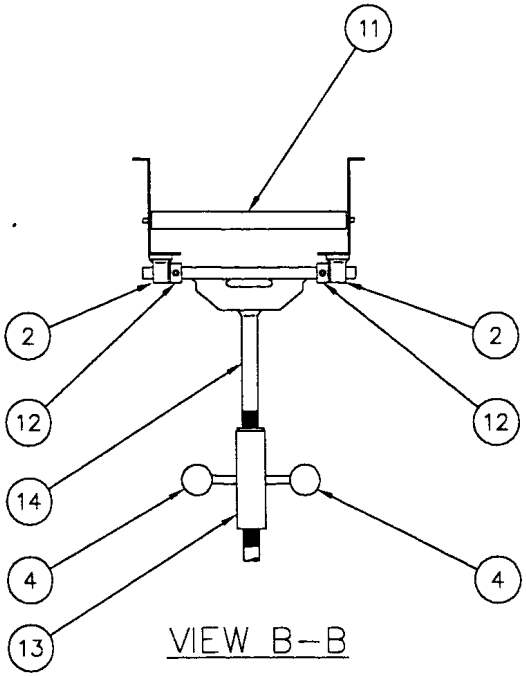
DUAL TILT CONVEYOR (1 PH POWER IN)
REPLACEMENT PARTS (MARICOPA ONLY)

SIZE: C
DRAWING NUMBER: 11654
REV.
SHEET: 2 of 2





VIEW A–A



VIEW B–B

REV.	DESCRIPTION	BY	DATE
	REVISIONS		

J.C.PARDO & SONS INC.
1250 REAMES RD. BALTO MD. 21220
PHONE (410) 391-3600 FAX (410) 391-9042

CHECKED BY:
APPROVED BY:
DRAWN BY: JAY S.
DATE: 3/22/02
SCALE: NONE

DUAL TILT ROLLER WITH TURNBUCKLE
REPLACEMENT PARTS (MARICOPA ONLY)

SIZE: C
DRAWING NUMBER: 11655
REV.:
SHEET: 1 of 2

REPLACEMENT PARTS

ITEM	PART NO.	DESCRIPTION
1	MSD00-0000001	RUBBER PADS
2	1FS00-0000019	PILLOW BLOCK
–	BGZ00-7500015	REPLACEMENT BUSHING FOR ITEM #2
3	1FS01-0000008	LOWER TURNBUCKLE RODEND
4	MSP02-0000001	RED KNOB
5	1FS00-0000021	TILTING ARM
6	1HS00-000001	QUICK RELEASE PIN W/CHAIN
7	MSS01-6200001	SET COLLAR
8	1FA02-3800001	PIVOT ARM BUSHING
9	1FS02-0000018	SLEEVE
10	1FS01-2500005	PIVOT ARM
11	MSP01-1200001	ROLLERS
12	MSS00-7500005	SET COLLAR
13	1FS00-0000020	TURNBUCKLE BODY
14	1FS00-0000018	TOP TURNBUCKLE RODEND

REV.	DESCRIPTION	BY	DATE
REVISIONS			

J.C.PARDO & SONS INC.
1250 REAMES RD. BALTO MD. 21220
PHONE (410) 391-3600 FAX (410) 391-9042

CHECKED BY:

APPROVED BY:

DRAWN BY: JAY S.

DATE: 3/22/02

SCALE: NONE

DUAL TILT ROLLER WITH TURNBUCKLE
REPLACEMENT PARTS (MARICOPA ONLY)

SIZE: C

DRAWING NUMBER: 11655

REV.

SHEET: 2 of 2

BILL OF MATERIAL

Project No. 97-101C Bill Of Material No.:

Project: VETERANS HOME OF CALIFORNIA Date:

Item No.:F11 Equipment: CASING CONVEYOR

Item	Q'ty	Part No.	Description
1	1	CDP3320	1/4 HP BALDOR MOTOR T.E.F.C. 90 VOLT D.C.
2	1	75W THIN'N'TUFF	SPARKS BELT 14"X 26'w/ 2"CLEATS ON 18" CENTERS
3	1	NO. 7	SPARKS ST.STL. ALLIGATOR LACING
4	1	SD SERIES	CHANTLAND PULLEY TYPE D CROWNED 16" LONG
			1" BORE NICKEL PLATED 6" DIA.
			ONE PIECE GUM ROUGHTOP LAGGING (AFTER PLATING)
5	1	SD SERIES	CHANTLAND PULLEY TYPE D CROUNED 16" LONG
			1" BORE NICKEL PLATED 6" DIA.
6	1	SK-2	DRIVE SHAFT
7	1	SK-2	TAIL SHAFT
8	4		NICKEL PLATED 1" PILLOW BLOCK BEARINGS
9	1	HMQ1206	GROVE GEAR REDUCER 80:1 RATIO 22.5 R.P.M.
10	1	12178	GROVE HOLLOW TIE ROD KIT
11	1	12247	GROVE HOLLOW SHAFT BUSHING KIT FOR 1" SHAFT
12	2	"TELESCOPER"	250-6-SS-QR-BP-SF LOWMAN TAKE-UP
13			
14			
15			
16			
17			
18			
19			
20			
21			

CCP 08

BILL OF MATERIAL

PROJECT# 97-101C ITEM# F.11 DATE: 4/23/97

PROJECT NAME: VETERANS HOME OF CALIFORNIA

ITEM DESCRIPTION:

CASING CONVEYOR CONTROL PANEL, 120V,1 PH.,L.H. HINGE HP 1/4

1 P.B. START/STOP STATION, SCR DRIVE,W/SPEED POT, CORD & PLUG

#	QTY	PART DESCRIPTION	MFG	PART NO.
1	1	ENCLOSURE, L.H. HINGE, 15"X15"X6.5", 18 GA. S.S.	GREITZER	
2	1	MOUNTING PANEL, 14"X14", 16 GA. S.S.	GREITZER	
3	1	DISCONNECT ACTUATOR CONTROL KNOB	A.B	194L-HE-6N-1751
4	1	DISCONNECT METAL SHAFT EXTENSION	A.B	194L-63393
5	1	DISCONNECT LOAD SWITCH ASSEMBLY	A.B	194L-A32-1753
6	2	FUSEBLOCK, 30 AMP, 1 POLE, (FB1)	MARATHON	R30A1SP
7	1	FUSE, (FU1)	FUSETRON	FRN-R
8	1	FUSE, (FU2)	FUSETRON	FRN-R
9	1	OVERLOAD RELAY	A.B	815-BOV4
10	1	OVERLOAD HEATER	A.B	N-16
11	1	RELAY, MANUAL RESET	CUTLER-HAMMER	1093-5H6
12	12	TERMINAL BLOCK (TB1)	BUCHANAN	O525
13	2	END PIECE, TERMINAL BLOCK	BUCHANAN	O530
14	1	RELAY, 120V, 4 POLE, 2P (N.O.), 2P (N.C.)	A.B	700-F220-A1
15	1	SCR SPEED CONTROL P.C. BOARD	SECO	MODEL 161
16	1	SPEED CONTROL POT	SECO	APT2026-00
17	1	START/STOP P.B. STATION BOX, NEMA 4	A.B	800H--2HZ4
18	1	START, P.B. SWITCH, GREEN	A.B	800H-R1A
19	1	STOP, P.B. SWITCH, RED	A.B	800H-R6A
20	1	LEGEND PLATE, START	A.B	800H-W126
21	1	LEGEND PLATE, STOP	A.B	800H-W371
22	1	POWER PLUG, 120V, 20 AMP, NEMA 5-20	HUBBELL	14W33
23	1	CONDUIT GRIP, FLEXIBLE METAL	KELLEMS	074-01-017

TROUBLE SHOOTING CHART

TROUBLE SYMPTONS:	CHECK POINTS:	CORRECTIVE ACTION:
Conveyor does not start (Motors not running)	1. Check disconnect switch on control panel cover. 2. Check all fuses inside control panel. 3. Check motor starter (ms1) inside panel. 4. Check emergency kill switch, if one exists 5. Check 208/120v transformer inside panel.	1. If switch is open, turn to close position. 2. Replace any blown fuses. 3. Replace starter if coil is open. 4. Close emergency kill switch, if open. (Pull out Red knob of switch) 5. Replace if burned out or open.
Conveyor does not start (Motor is running)	1. Check motor drive chain, & sprocket. 2. Check shear pin on motor if one exists. 3. Check conveyor belt for breaks or slipage.	1. Repair broken link or tighten sprocket. 2. Replace shear pin if broken. 3. Repair belt if broken, tighten if loose.
Conveyor stops running.	1. Check motor overload. 2. Check all fuses inside control panel. 3. Check emergency kill switch if existing. Someone might have pushed in switch. 4. Check 208/120v transformer inside panel.	1. Press Reset button on control panel cover. If motor stil dosn't start, there can be a serious overload problem. Check load. 2. Replace any blown fuses. 3. Close emergency kill switch if open. (To do this , pull out Red knob of switch) 4. Relace if burned out or open.
Conveyor belt creeping off rollers	1. Check Take up assembly located on sides of conveyor (Bottom end)	1. Belt can be adjusted left or right by turning rods on either side of take up.

4.2 TROUBLESHOOTING GUIDE SCR CONTROLLER

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
Control Blows Line Fuse F1	• Shorted Power Module, Field Supply Diode (D19 or D20), or Suppressor (Z)	• Replace Faulty Component
	• Controller or Motor Shorted to Ground	• Check for Short and Repair as Required
Control will not START	• Blown Fuse (F1)	• Replace Fuse
	• Defective Power Module	• Replace Faulty Component
	• Defective Component on Control Board	• Replace Faulty Component
	• Jumper missing from TB2-7 to TB2-8 (speed control) or TB2-4 to TB2-5 (Torque Control)	• Replace Jumper on Terminal Strip
Motor will not come up to speed	• Max. speed adjust, R27 is set too low	• Re-adjust R27 for correct Top Speed
	• Motor overloaded	• Check load and adjust as required
	• Torque adjust, R29 is set too low	• Re-adjust R29 for increased motor current
	• Current Programming Jumper J1 in wrong position	• Re-locate Jumper position for correct current range
	• Defective Power Module	• Replace Faulty Component
	• Defective Component on Control Board	• Replace Faulty Component
Motor will not stop with Speed Adjust pot at zero speed	• Min. Speed, R28, is set too high	• Re-adjust R28 for correct min. speed when reference is at the minimum value
	• Defective Speed Adjust pot	• Replace Faulty Component
	• SW1 in Tach. Position	• Select Arm Position
	• Tach generator polarity is incorrect	• Reverse tach generator leads
	• Defective Power Module	• Replace Faulty Component
	• Defective Component on Control Board	• Replace Faulty Component
Motor speed is unstable or Pulsates	• IR Comp. Adjust Pot. R26, is set too high (Armature Feedback only)	• Re-adjust R26 per 3.3.8
	• Motor is being Overhauled	• Check Load for Correct Operation
	• Defective Motor	• Repair or Replace Motor
	• Defective Component on Control Board	• Replace Faulty Component
	• Defective or Intermittent Tach Generator	• Replace Tach Generator
Motor will not Maintain Speed Under Load	• IR Comp. Adjust Pot R26 is set Too Low (Armature Feedback only)	• Re-adjust R26 3.3.8
	• Torque set too low	• Adjust Torque Pot
	• Motor Over Loaded	• Check Load for Correct Operation
	• Defective Component on Control Board	• Replace Faulty Component
	• Defective Power Module	• Replace Faulty Component

Cleveland

PREVENTIVE MAINTENANCE

CONVEYOR

A. **Daily**
- Conveyor belt should be cleaned with mild detergent
- Check to see that belt runs strait and does not rubs sides

B. **Monthly**
- Check belt for excessive slack
- Check drive chain for excessive slack
- Check all motor mounts, fasteners and adjustment bolts

C. **Quarterly**
- Grease pillow blocks
- Check motor oil level

D. **Yearly**
- Change oil in gear box

CONVEYORS

- **Conveyor belt should be cleaned with mild detergent**
- **Check to see that belt runs strait and does not rub sides**
- **Check belt for excessive slack**
- **Check drive chain for excessive slack**
- **Check all motor mounts, fasteners and adjustment bolts**
- **Grease pillow blocks**
- **Check motor oil level**
- **Change oil in gearbox per manufacture**