



COYOTE

ENTERPRISES INC.
Parts and Machinery for the Abrasive Blast Industry

COYOTE ENTERPRISES, INC.

CBT2400 BLAST WHEEL

MAINTENANCE MANUAL



Parts & Machinery for the Abrasive Blast Industry

27301 East 121st Street • Coweta, Oklahoma 74429 • (918) 486-8411 • Fax (918) 486-8412

www.coyoteshotblast.com • E-Mail: coyotesales@tulsacoxmail.com • Toll Free: (877) 659-8040



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INTRODUCTION

These instructions are intended for maintenance personnel for the maintenance and/or repair of the indicated blast wheel assembly. Disassembly and reassembly requires expertise and must be performed by personnel that are knowledgeable about the assembly. Please contact Coyote should you have any questions.

GENERAL DESCRIPTION

The Blast Wheel Assembly is the most vital part of any airless blast cleaning system, thus the operating efficiency depends entirely upon the proper inspection, assembly, and adjustment of the Blast Wheel components. Due to the abrasive nature of the material handled by the Blast Wheel there will be constant wear on internal parts making periodic inspection and replacement essential.

It is important to keep in mind that the very nature of this device requires that some of the parts be extremely hard and wear resistant. This hardness cannot be attained without making the wear parts brittle. When handling these parts (blades, impeller, control cage and liners) they should be considered as cast glass. A sharp blow with a drift or pry bar can result in chips flying off with explosive force. Flying chips may also result from accidentally or carelessly knocking hardened parts together. When working with Blast Wheel components, always wear gloves and safety glasses.

The efficiency of this equipment, the blast cycle time and the production requirements will all depend largely on the conditions under which the Blast Wheel is operated and maintained. Compliance with the instructions and suggestions given in this manual should result in a highly efficient and productive blast cleaning system. In brief, the Blast Wheel assembly functions as follows: The abrasive valve feeds a controlled amount of abrasive (steel shot or steel grit) through the feed spout to the impeller. The impeller, revolving at a high speed, moves the abrasive through the control cage opening into the path of the revolving blades. The blades, by means of centrifugal force, throw a controlled pattern of abrasive at the work surface. The Blast Wheel by throwing millions of particles of abrasive per minute at a tremendous velocity provides an economical and thorough method of cleaning.

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INSPECTION OF THE WEARING PARTS

1. Open the manually operated disconnect at the control panel and tag switch so that the machine cannot be energized.
2. Remove blast housing cover by loosening nuts on each end of the cover, rotate clevis brackets and lift lid upward.
3. Remove the top liners to give access to the Blast Wheel assembly.
4. Rotate blades by hand and inspect them for wear. Vibration of the Blast Wheel when operating is usually an indication of excessive blade wear or a broken blade. Whenever vibration is excessive, all blades and springs should be removed and replaced. When blades are deeply grooved or worn to half their original thickness they should be replaced. Never attempt to replace anything less than a full set of blades and springs. The blades are carefully weighed and balanced in matched sets and should never be separated.
5. Make a visual inspection of the control cage opening. The sides of the opening are straight and when a groove or notch develops, the control cage should be replaced.
6. While rotating the blades by hand it is possible to see the leading edge of the impeller fingers. If fingers are grooved or worn to half their original size the impeller should be replaced.
7. The feed spout wears very slowly so the inspection of this part usually involves checking for cracks or other physical damage.
8. Blast Wheel liners should be replaced when they become worn to half their original thickness. If liners are allowed to wear through, serious damage could occur to the blast wheel housing.

Note: The wearing parts of the Blast Wheel should be inspected every 10-20 blast hours. This inspection can be done without any disassembly with the aid of a flashlight. Shine the flashlight up through the bottom of the Blast Wheel assembly and visually inspect the blades, rim, impeller and control cage. The liners can be inspected visually or by feeling the surface of the various liners.

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CHECKING THE ROTATING ASSEMBLY FOR BALANCE AND NOISE

The Blast Wheel assembly should always run smooth with very little vibration or noise. Excessive vibration of the Blast Wheel or unusual noise during operation should be investigated immediately. Vibration is an indication of an “out of balance” wheel. An “out of balance” Blast Wheel is caused by worn or broken blades, impeller, rim or damaged internal parts. When investigating an “out of balance” wheel, blades should be inspected first followed by impeller, and rim.

Damage to the internal rotating parts of the Blast Wheel usually occurs when blades become worn through or broken and abrasive enters the area behind the blade. To inspect and replace the blades and other parts of the rotating assembly it will be necessary to partially or completely disassemble the Blast Wheel depending on the cause and remedy of the vibration or noise.

Motor failure or improper motor rotation could also cause excessive vibration or noise. A qualified electrical serviceman should do any motor repairs or replacements.

BLAST WHEEL HOUSING LINERS

The Blast Housing Liners are identified as follows:

Top Liner: *Part Number: CBT54 (1 PC)*

End Liner Options: *Listed by Quantity of Pieces – Part Number – Length*

-(1 PC) CBT503 24" or CBT503A 26" or CBT503B 22.5"

-(2 PC) LOWER CBT50 14.5" or CBT50A 16.5" and (2 PC) UPPER 8.5"

Side Liners: *CBT45 Upper Right, CBT47 Lower Right, CBT48 Lower Left, CBT51 Upper Right*

The blast housing liners are identified as follows: top liners, end liners and sideliners. These liners are made of an extremely hard cast alloy. The Blast Wheel liners are positioned around the Blast Wheel to protect the Blast Wheel housing. Since these liners are in the path of abrasive, wear is to be expected. Thus liners should be inspected often to determine when replacement is necessary. All liners should be inspected on a regular basis. If liners are allowed to wear through, the housing itself will quickly develop wear holes causing abrasive leakage on and around the machine. ALWAYS OPEN ELECTRICAL DISCONNECT PRIOR TO LINER INSPECTION.

The top liner is located in the uppermost section of the housing and is held in place by the housing cover. The sideliners are located in the front and backsides of the housing. The end liners are located in the right and left ends of the Blast Wheel housing. End liners are a slip fit between the sideliners.

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BLAST WHEEL DISASSEMBLY

1. Make sure the Electric Power is open and tagged or locked open.
2. Remove Blast Housing Cover by loosening the nuts on each end of the cover, rotating clevis brackets outward and lifting lid upward.
3. Loosen the (2) Top Liner Retainer Bolts and remove the Top Liner.
4. Remove the Feed Spout by removing the (2) clamps that hold it in place.
5. Remove the (2) clamps that hold the Control Cage in place.
6. Unscrew the Impeller Bolt and remove the Impeller. If the Impeller appears jammed after the Impeller Bolt has been removed, tap it lightly on alternate sides of the outer edge with a soft drift or plastic mallet until it can be removed.
7. The Control Cage can now be removed.
8. Remove the Centering Plate by unscrewing the 4 Socket Head Cap Screws that connect it to the Blast Wheel Hub.
9. The Blast Wheel Blades can now be removed. If Blades are not badly worn, they can be used again, however, they must be numbered when removed and put back in the same sequence. To remove the Blade: unscrew the Pin Cover, remove the Pin, slide the Blade out and remove the Pin Bushing.
10. Inspect all parts that have been removed to determine whether they are worn or damaged to the extent that replacement is necessary.
11. Check Blast Wheel balance without the blades. Replace Top Liner and Housing Cover. Bolt cover in place and run Blast Wheel Assembly (**no abrasive**).

NOTE: *If the Assembly runs smoothly and there is no excessive noise or vibration disassembly will be necessary. The worn parts can be replaced and the Blast Wheel re-assembled. However, if vibration or noise is still present, it will be necessary to complete the disassembly and remove the remaining rotating parts.*

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However if vibration or noise is still present it will be necessary to complete the disassembly and remove the remaining rotating parts.

1. Lift housing cover, loosen the (2) Top Liner Retainer Bolts and remove the top liner
2. Loosen the compression cap screws on the right and left side of the blast housing. The end liners can now be removed through the top or bottom of the blast housing. Tap liner gently with a rubber or plastic mallet to ease removal.
3. Remove the four hex head cap screws holding the hub seal in place. The hub seal is in two pieces and contains a felt hub seal.
4. Remove the eight (8) socket head cap screws from the outer bolt circle. These socket head screws are accessible through a cutout at the top of the blast wheel housing.
5. Hold one of the blade blocks from inside the housing and remove the socket head screw that fastens it to the bare wheel. These screws are located on the inner bolt circle. Remove each of the remaining blade blocks in the same manner.
6. After all eight (8) blade blocks have been removed; the bare wheel will be free to fall away from the hub/rim. Tilt the bare wheel forward and remove it through the top of the housing.
7. Remove the two allen head screws in the taperlock bushing. When the rim is loose on the bushing, slide the taperlock assembly forward into the blast housing and off the end of the motor shaft

NOTE: See Attached Dodge Instructions as a reference for removal of Taper-Lock Bushing.

8. Remove the rim and key from the motor shaft.
9. Clean the motor shaft and all Blast Wheel components. Inspect the keyway in the motor shaft and the key for wear.
10. Inspect front and back sideliners for wear. If liners are worn to one half their original thicknesses they should be replaced. Remove the retaining bolts holding the front sidliner and remove. Repeat this step on the backside liner. The sideliners must be removed through the bottom of the blast housing.

NOTE: If the Blast Wheel motor runs smoothly the Blast Wheel can be re-assembled. All badly worn parts should be replaced to assure a smooth running final assembly. If vibration still exists, the motor may need to be repaired or replaced. Be sure all motor or electrical repairs or replacements are done by a qualified electrician or serviceman.

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WHEEL ASSEMBLY

To install the (4) Rear Side Liners in order following these steps:

- 1) Start by placing CBT45 inside the Blast Housing and aligning the 2 bosses with the holes on the upper left hand side of the Housing Rear.
- 2) Insert the (2) CBT161 Bolts into the bolt holes in the liner, align them so that they are centered in the (2) holes in the housing, and tighten the two ½" Nuts to secure the liner in place.
- 3) Place CBT51 in the upper right hand corner of the housing, align the overlapping and outer edges with CBT45
- 4) Insert the 2 CBT161 Bolts and tighten the two ½" Nuts.
- 5) Repeat this process with CBT48 and then CBT47. The result should be a seamless outer edge all the way around.

1. With the Motor Key in place, slide the Wheel Hub with the Taper Lock Bushing in it over the end of the Motor Shaft and push it back until it touches the Rear Liner Assembly.
2. **Do not install** the Bushing Set Screws at this time.
3. Install the (4) Front Side Liners in the same order as the Rear Side Liners.
4. Attach the Runnerhead Assembly to the Wheel Hub using the CBT154 Bolts.
5. Once all of the Bolts have been threaded, block the wheel rotation and tighten them securely.
6. Lightly oil the 2 Taper Lock Bushing Set Screw threads.
7. Start the Set Screws in the holes, which are diametrically opposite each other.
8. Position the face of the Taper lock bushing so that it is 6-9/16" from the front face of the Blast Housing. *NOTE: See Attached Dodge Instructions as a reference for removal of Taper-Lock Bushing.*

To install the Centering Plate:

- 1) Place the CBT150R into the groove around the Centering Plate.
- 2) Insert the Centering plate into the inner cavity of the Wheel Hub aligning the bolt hole in the Centering plate with the threaded holes in the Wheel Hub.
- 3) Insert the 4 Socket Head Cap Bolts into the threaded holes and tighten them securely.

To install the Cage Adapter:

- 1) Slide the Cage Adapter through the Stud Bolts on the front of the Blast Housing
- 2) Place a 5/16" Lock Washer and Nut on each of the Stud Bolts and tighten the Nuts.

To install the Control Cage:

- 1) Insert the Control Cage into the Cage Adapter. The pointer on the outer rim of the Control Cage should be facing 180 degrees away from the shot pattern.
- 2) Place the CBT6 Clamps across from one another diagonally and hold them in place using 3/8-16 x 1-1/2" Bolts with Flat and Lock Washers.
- 3) Position the Clamp so that the short leg is touching the Control Cage and tighten the bolts.

To insert the Impeller into the Control Cage:

- 1) Start by aligning the notches on the Impeller with the tabs on the Centering Plate.

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- 2) Insert the Impeller Bolt with lock washer through the center hole in the Impeller thread it into the motor shaft.
 - 3) Block the Blast Wheel rotation and tighten until the lock washer is flattened
9. Rotate the Blast Wheel assembly by hand and check for noise or binding.
 10. Install Top Liner and hold it in place using the top Liner Bolt on both ends of the Blast Housing.
 11. The End Liners have sides and ends that interlock. They are located in the right and left ends of the Blast Housing and are a slip fit between the Front and Rear Side Liners. The End liners can be installed from the top or bottom of the Blast Housing. The longer End Liner should extend from the bottom of the housing, facing in the direction of the blade rotation. When End Liners are in place tap lightly with a plastic mallet to insure proper fit against the Top Liner and tighten the Liner Bolts.
- To install the Feed Spout and Gasket:**
- 1) First, loosely install the Feed Spout Clamps.
 - 2) Place the Feed Spout Gasket into the groove on the Feed Spout.
 - 3) Finally, place the Feed Spout into the hole in the Control Cage and use the Clamps to hold it in place in the same way as the Control Cage.
12. **To install the matching set of Blades.**
 - 1) First, insert the threaded side of the Pin Bushing into the hole located in the blade groove of the Runnerhead.
 - 2) Then, slide the Blade Pin into the Pin Bushing with the grooved end on the outside of the Runnerhead.
 - 3) Next, slide the Blade into the groove.
 - 4) Finally, thread the Pin Cover over the Pin Bushing and tighten using a crescent Wrench.
 13. Rotate the Blast Wheel assembly by hand and check for noise or binding. If any, correct before proceeding.
 14. Proper rotation of the Blast Wheel Motor should always be checked during initial installation, after any change to electrical supply lines, electrical circuits or Blast Wheel motor.
 15. Whenever the Blast Wheel is started for the first time, be sure to jog (*momentarily start and stop*) the Blast Motor to insure that the direction or rotation is correct and that positioning of the Blades, Control Cage and Impeller are correct.
 16. Following the jog test, run a Blast Wheel “no load” test (*no abrasive*) checking for noise or vibration. Unit should run quietly with little or no vibration.
 17. Always check the blast pattern after installation of new rotating wear parts.

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ADJUSTING AND CHECKING THE BLAST PATTERN

The adjustment of the Blast Pattern is of the utmost importance. A poor adjustment will not only reduce cleaning efficiency but also increase maintenance and replacement costs. A Blast Pattern Test should be completed when the equipment is first put in operation, when any decrease in blast efficiency is noted, after any maintenance has taken place or if a change is made to the type (*or size*) of Abrasive material being used.

The Hot Spot is that area of the work surface receiving the greatest portion of the abrasive blast. It is visible by the discoloration caused by frictional heat. The Hot Spot should be directed toward the area of work to be blasted to give the most effective cleaning pattern. If not properly directed, abnormal wear of the equipment and parts may occur.

To check the location of the Hot Spot place a metal plate in the direct path of the Blast pattern at the average work height position. Blast the plate for 30 seconds and then immediately feel to locate the hottest spot. The plate is very hot after being blasted, it's important to be careful when feeling for the Hot Spot.

The Control Cage, located at the center of the Blast Wheel, receives the Abrasive from the Impeller through the static opening. The Control Cage, through the location of its opening, controls the point of delivery of the Abrasive to the Blast Wheel Blades. If the smaller line on the Control Cage rim face is set in a 12 o'clock position then each Blade will pick up Abrasive at this point and deliver it in a downward thrust at a point below the Blast Wheel (approximately 6 o'clock). The point of delivery may vary with different types and sizes of Abrasive.

To adjust the blast stream Hot Spot, the Control Cage must be rotated clockwise or counter-clockwise. The line on the Cage should always be facing approximately 180 degrees away from the blast pattern. Rotating the Control Cage in a clockwise direction will move the Hot Spot clockwise; moving the Control Cage in a counter-clockwise direction moves the Hot Spot counter-clockwise. Initial adjustment should begin with the line in the 12 o'clock position. Final adjustment will usually be less than 1" from this point.

The pattern must always be checked at initial set-up under the condition the equipment will be operating.

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ABRASIVE CONTROL VALVE

Correct adjustment of the Abrasive Control Valve is essential for maximum cleaning efficiency and maximum Blast Motor Life.

The Motor Load Amp Meter determines the abrasive flow adjustment. The Amp Meter registers the amperage load on the Blast Wheel Motor (*see Motor Manufacturer's Nameplate for full load rating information*). To obtain full Blast Wheel efficiency from an Amp Meter, the Amp Meter should always show a full load reading during the blast cycle. This reading can vary from one type of Abrasive to another.

When the Blast Wheel is running the Amp Meter reading should be constant and steady. Any severe fluctuations can be interpreted as an indication of bearing trouble, "drag" from moving parts of the Blast Wheel, Motor malfunction or electrical supply variances.

While the machine is in operation, any Amp Meter reading fluctuations should be investigated. Changes could indicate shortage of the Abrasive, stalled Elevator, clogged Screen or foreign objects in the Impeller. The Amp Meter serves as a prime indicator of proper or improper operation.

As the Abrasive Control Valve is opened, the amperage load will increase. The valve should be set so that the Motor will draw maximum rated amperage or run at 100 percent efficiency. Always run the Blast Motor at maximum efficiency (**never overload**). Monitor and adjust amperage as necessary.

An adjustable Stroke Air Cylinder operates the Valve Slide Plate. An Adjustment is made by loosening the jam nut and turning the Adjustment Bolt on the back of the cylinder. Turning the Bolt out allows more stroke by opening the Slide Plate which increases the abrasive flow and raises the amperage.

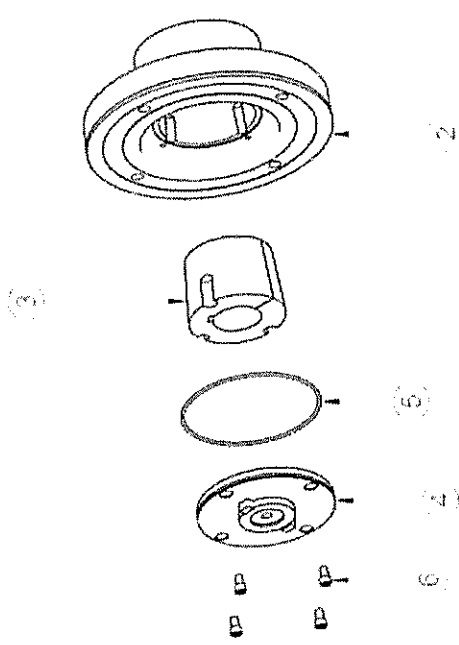
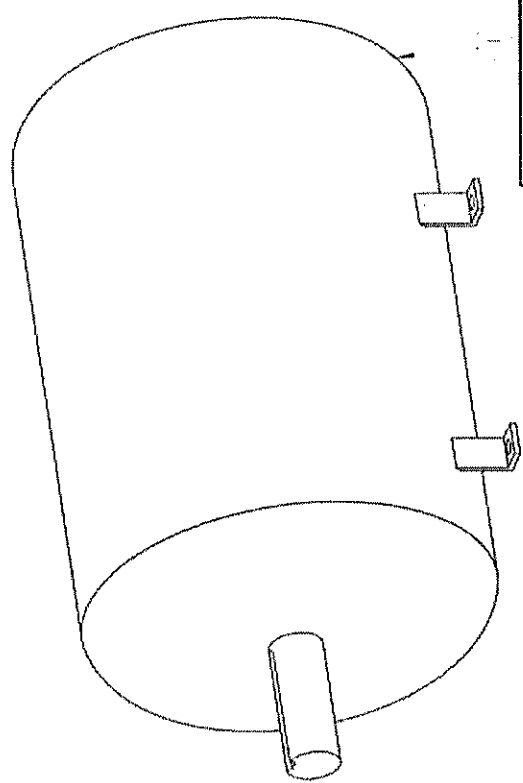
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REVISION HISTORY		
REV	DATE	BY

Taper Lock Bushings
 3000169 - Bushing T/L 1-5/8" 15/20HP
 3000170 - Bushing T/L 1-7/8" 25/30HP
 3000171 - Bushing T/L 2-1/8" 40/50HP
 3000172 - Bushing T/L 2-3/8" 60/75HP
 3000173 - Bushing T/L 2-7/8" 100HP

BW Motor Options
 CBT8000125 - Motor 25HP
 CBT8000130 - Motor 30HP
 CBT8000140 - Motor 40HP
 CBT8000150 - Motor 50HP
 CBT8001060 - Motor 60HP
 CBT8000069 - Motor 75HP
 CBT8000100 - Motor 100HP



Item	Doc Num	Title
1	BC80068	Motor-Blast Wheel
2	CBT15TL	Runnerhead Hub - Universal
3	SEE CHART	Bushing T/L
4	CBT15CP	Centering Plate - Universal Hub
5	CBT15OR	O-Ring - Centering Plate
6	C7003910	Socket Hd Cap Bolt - 5/16"-18 x 1/2

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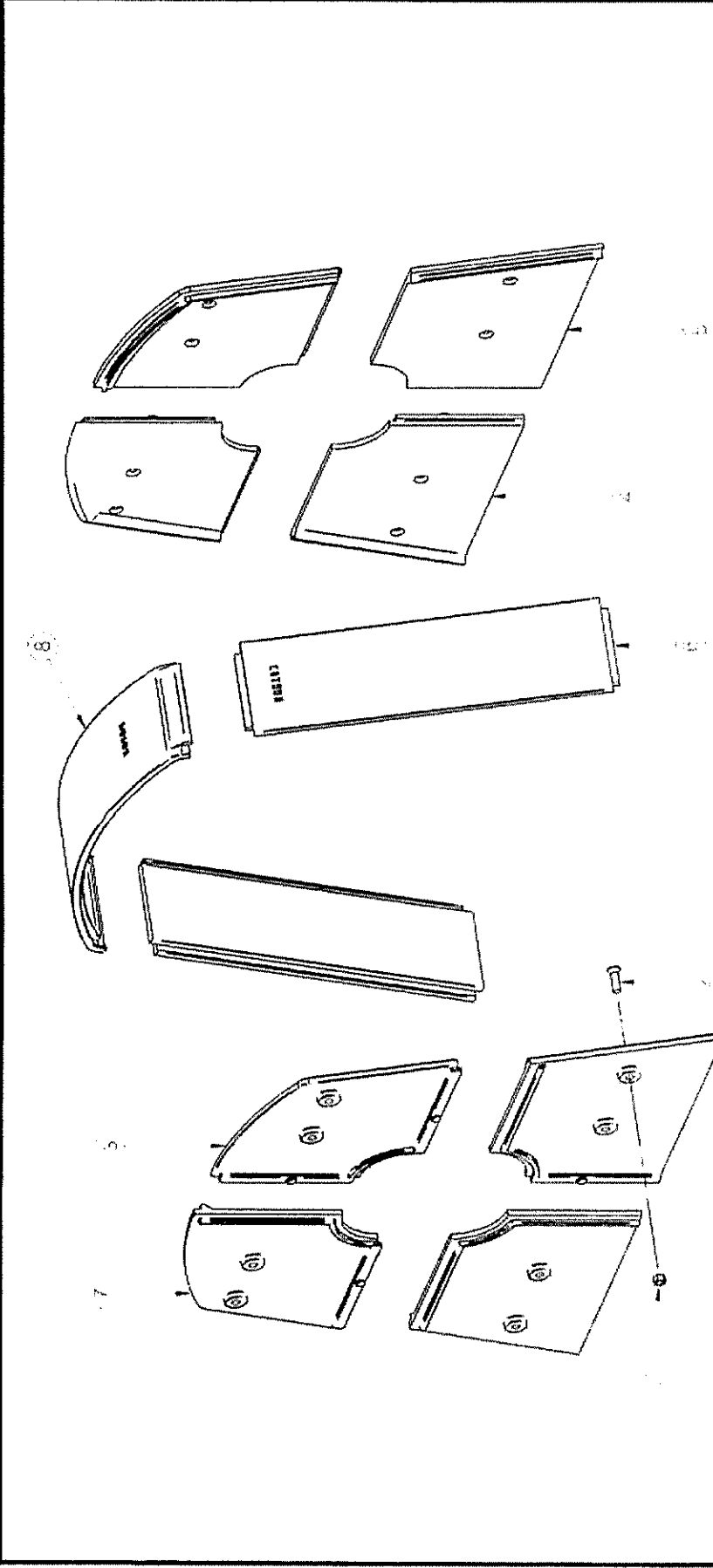
DWG NO
CBT2400

Coyote Enterprises, Inc.

TITLE	Universal Hub Assembly	CBT2400
DRAWN BY	DATE	APPROVED
REV	SIZE	SCALE
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MATERIAL

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. ANGLES IN DEGREES. FINISHES AS SHOWN.



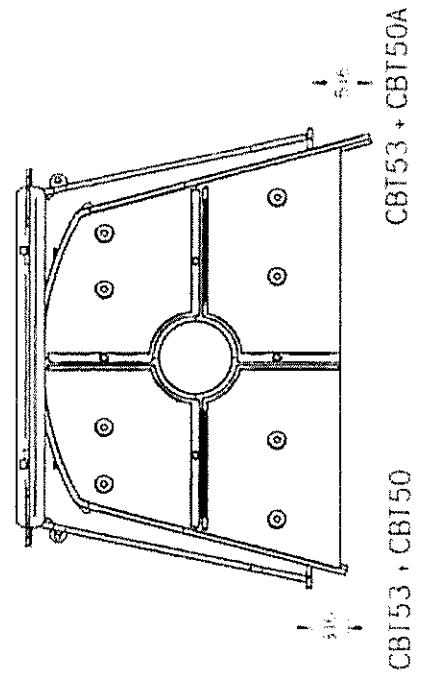
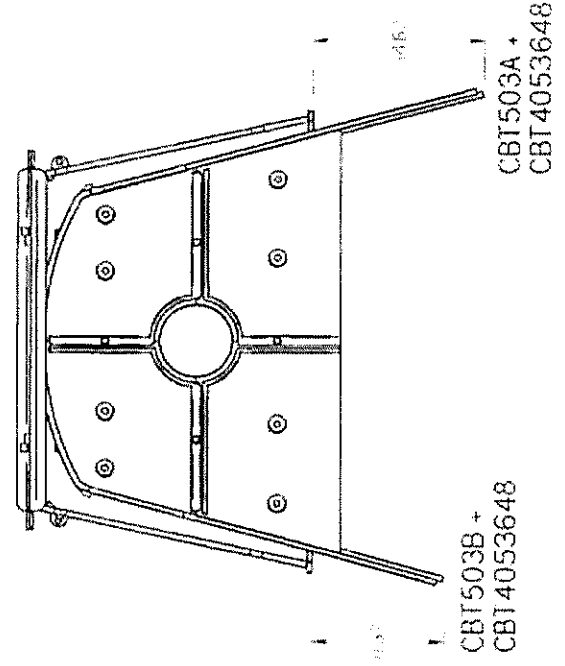
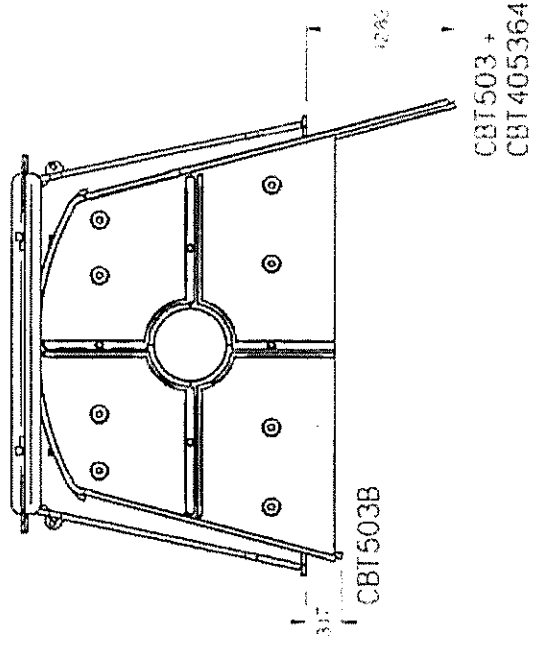
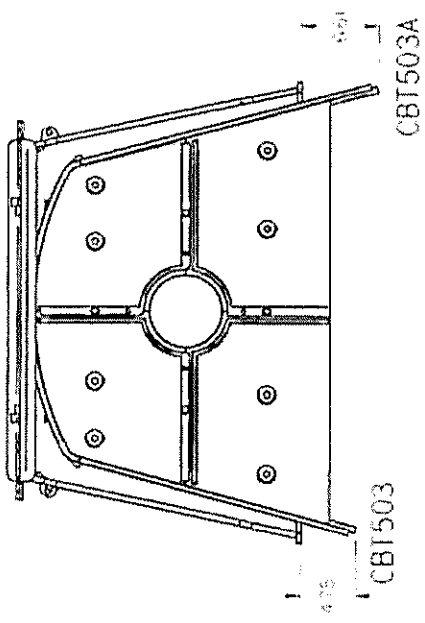
End Liner Options
 CBI50 - Liner, End Lower, 2Pc, 14.5" CBI
 CBI50A - Liner, End Lower, 2Pc, 16.5" CBI
 CBI53 - Liner, End Upper, 2Pc, 8.5"
 CBI53B - Liner, End Upper, 2Pc, 24" (shown)
 CBI503A - Liner, End L-Pc, 26"
 CBI503B - Liner, End L-Pc, 22.5"
 CBI4053648 - Liner, End Extender, 8.5" CBI

Item	Doc Num	Title
1	C7002904	1/2-13 MJL
2	CBT161	Bolt Wear-Less Liner Retention
3	CBT45	Side/Top 2 Quad Liner
4	CBT47	Side Liner Lower Quad 1
5	CBT48	Side Liner Lower Quad 2
6	See Chart	End Liner
7	CBT51	Side/Top Quad 1 Liner
8	CBT54	Top Liner

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DWG NO		CBT2400	
Coyote Enterprises, Inc.		CBI	
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REVISIONS			
REV	SYM	W/C	DATE



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Coyote Enterprises, Inc.			
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DRAWN BY	DATE	APPROVED	REV / SIZE
Q. Summers	7/18/2009		A / 1:1
MATERIAL			
UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES (DIMENSIONS IN PARENTHESIS ARE IN MILLIMETERS)			

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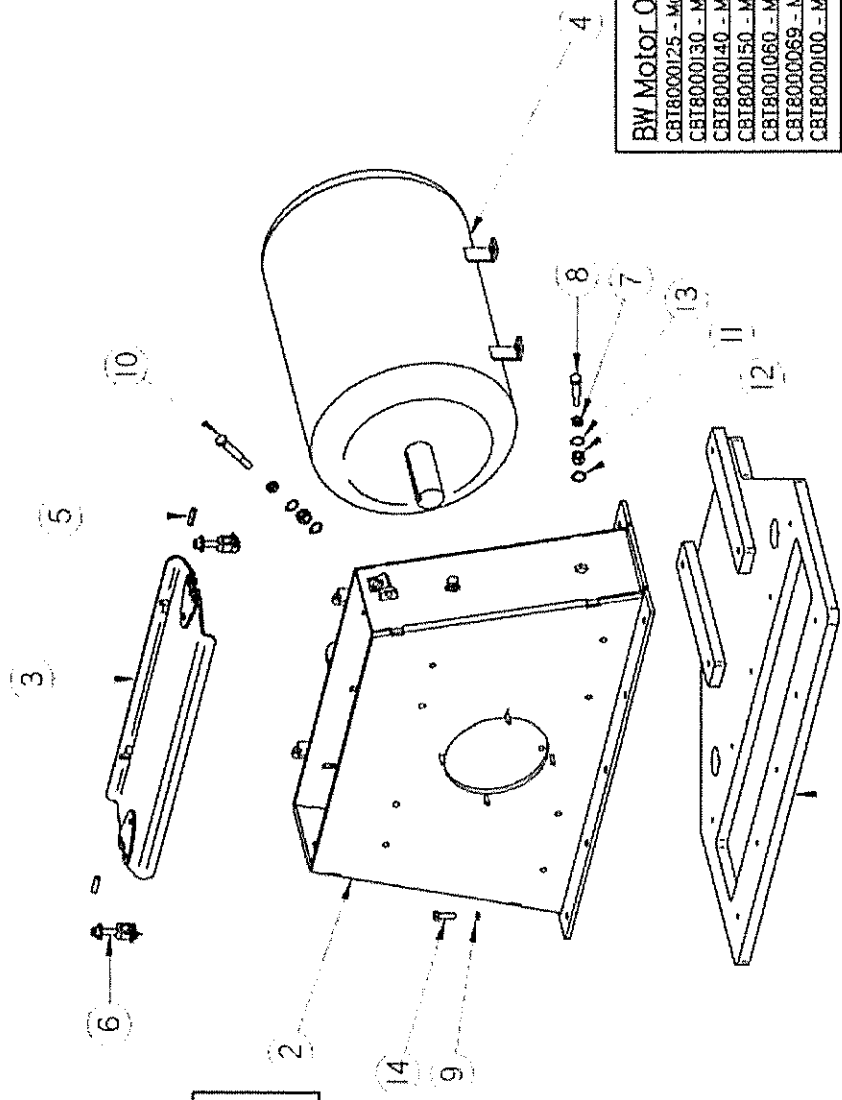
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DESIGNED BY	CSummers		A	1:1
MATERIAL				

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES UNLESS STATED OTHERWISE

BW Motor Options
 CBT8000125 - Motor 25HP
 CBT8000130 - Motor 30HP
 CBT8000140 - Motor 40HP
 CBT8000150 - Motor 50HP
 CBT8000160 - Motor 60HP
 CBT8000069 - Motor 7.5HP
 CBT8000100 - Motor 100HP

Base Plates
 4974056 - Base Plate CBT 25/30HP
 4974047 - Base Plate CBT 40/50HP
 4973815 - Base Plate CBT 60/75HP (shown)
 4003813 - Base Plate CBT 100HP

Housing Options
 CBT39A-I - BW Housing Assy. Base Midsil CBT
 CBT39AR - BW Housing Assy. Base AR CBT
 CBT39MA - BW Housing Assy. Manganese



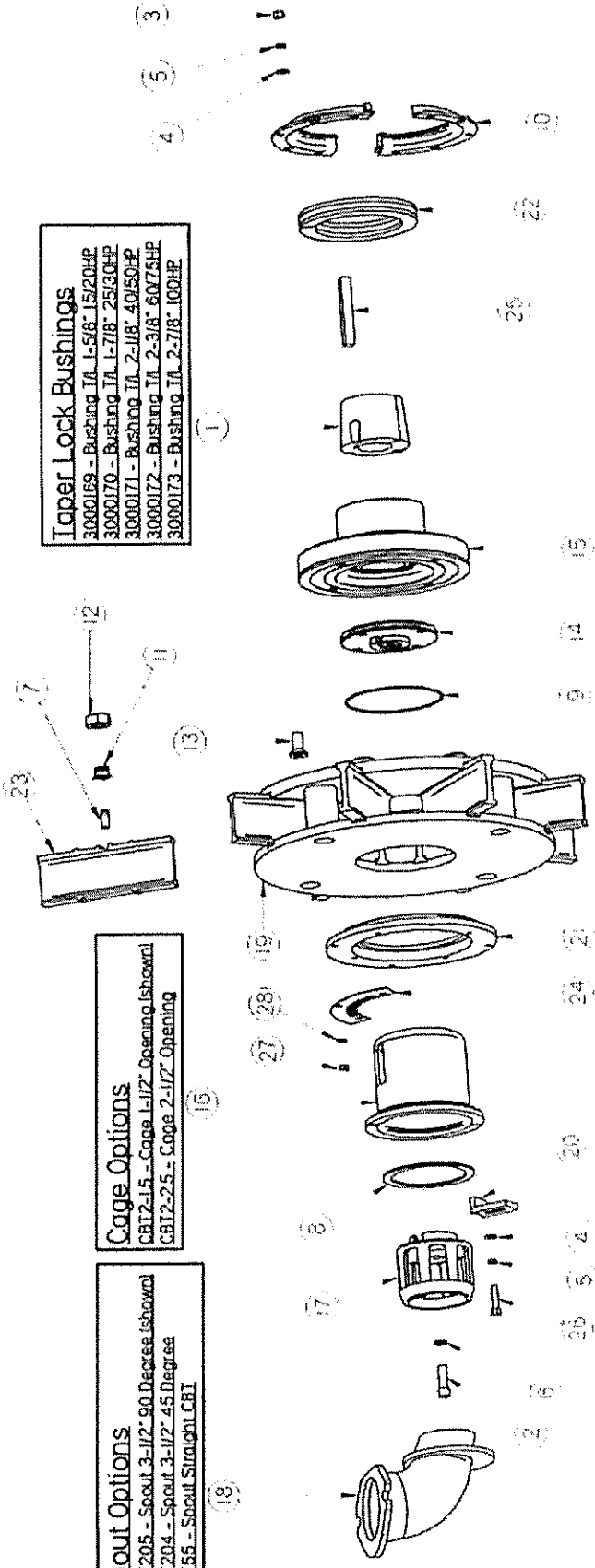
Item	Doc Num	Title
1	See Chart	Base Plate-CBT
2	See Chart	BW Housing-CBT
3	4973798	Lid-BW Housing
4	See Chart	Motor-Blast Wheel
5	CBT163	Roll Pin, BW Housing Lid
6	3000156	5 x 2.125in Clevis
7	CBT182	Jam Nut Liner Retainer
8	CBT151	Bolt-End Liner Retainer
9	C7003108	1/2" Lock Washer
10	CBT150	Bolt-Top Liner Retainer
11	4020853	Nut-Liner Clamp
12	Hardware	Large Retainer Clip
13	Hardware	Small Retainer Clip
14	Hardware	1/2" - 13 x 1-1/2" Long Bolt

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Taper Lock Bushings
 3000169 - Bushing I.A. 1-5/8" - 15/20HP
 3000170 - Bushing I.A. 1-7/8" - 25/30HP
 3000171 - Bushing I.A. 2-1/8" - 40/50HP
 3000172 - Bushing I.A. 2-3/8" - 60/75HP
 3000173 - Bushing I.A. 2-7/8" - 100HP

Cage Options
 CBT2-1.5 - Cage 1-1/2" Opening (shown)
 CBT2-2.5 - Cage 2-1/2" Opening

Spout Options
 CBT205 - Spout 3-1/2" 90 Degree (shown)
 CBT204 - Spout 3-1/2" 45 Degree
 CBT155 - Spout Straight CBI



Item	Doc Num	Title
23	CBT8	Blade - CBT8
24	CBT91	Dial Control Cage Position Indicator
25	Hardware	Key Stock
26	Hardware	Bolt 3/8 x 1-1/2" Long
27	HARDWARE	5/16-18 NUT
28	HARDWARE	5/16 LOCK WASHER

Item	Doc Num	Title
12	CBT11	Cover, Blade Pin
13	CBT154	Bolt, Runnerhead Retainer FHCS CBT
14	CBT15CP	Centering Plate - Universal Hub
15	CBT15TL	Runnerhead Hub - Universal
16	See Chart	Control Cage
17	CBT20	Impeller CBT
18	See Chart	Feed Spout
19	CBT24	Runner Head
20	CBT6	Spout Clamp CBT
21	CBT7	Control Cage Adapter
22	CBT70C-1	Seal Hub Poly-Felt (3-pc)

Item	Doc Num	Title
1	See Chart	Bushing I.A.
2	C70003914	Belt - Impeller Retainer
3	C7002707	3/8 - 16 Nut
4	C7003006	3/8 Flat Washer
5	C7003106	Lock Washer - 3/8
6	C7003108	1/2" Lock Washer
7	CBT012	Pin, Blade Lock CBT
8	CBT013	Seal Spout
9	CBT015OR	O-Ring - Centering Plate
10	CBT067	Rear Seal Retainer
11	CBT10	Bushing Blade Pin

DWG NO
CBT2400

Coyote Enterprises, Inc.

TITLE CBT2400 CBI

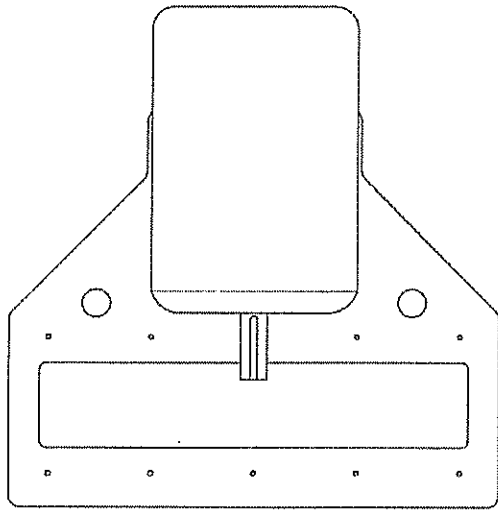
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12/21/2009			A	110	

MATERIAL

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND 1/8" = 1" 2P-401 3/10 0391

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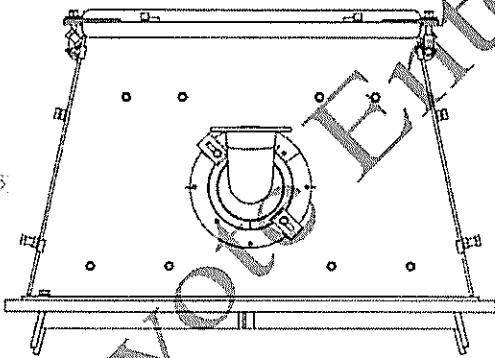
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REVISION HISTORY				
REV	SYM	WAS	NOW	DATE



7 1/2

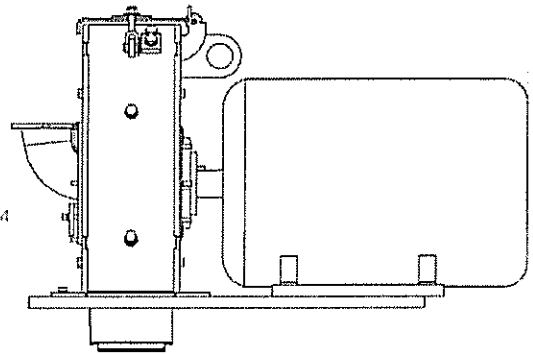
38

43 1/2



30 5/16

7 5/8



26 9/16

16 1/4

35" 25-75Hp
40-7/8 100Hp

MOTOR HP	B.W. DIAMETER	MOTOR TYPE	"L"
25	24 INCH	284T	30"
30	24 INCH	286T	30"
40	24 INCH	324T	33"
50	24 INCH	326T	33"
60	24 INCH	364T	35"
75	24 INCH	365T	35"
100	24 INCH	405T	40"

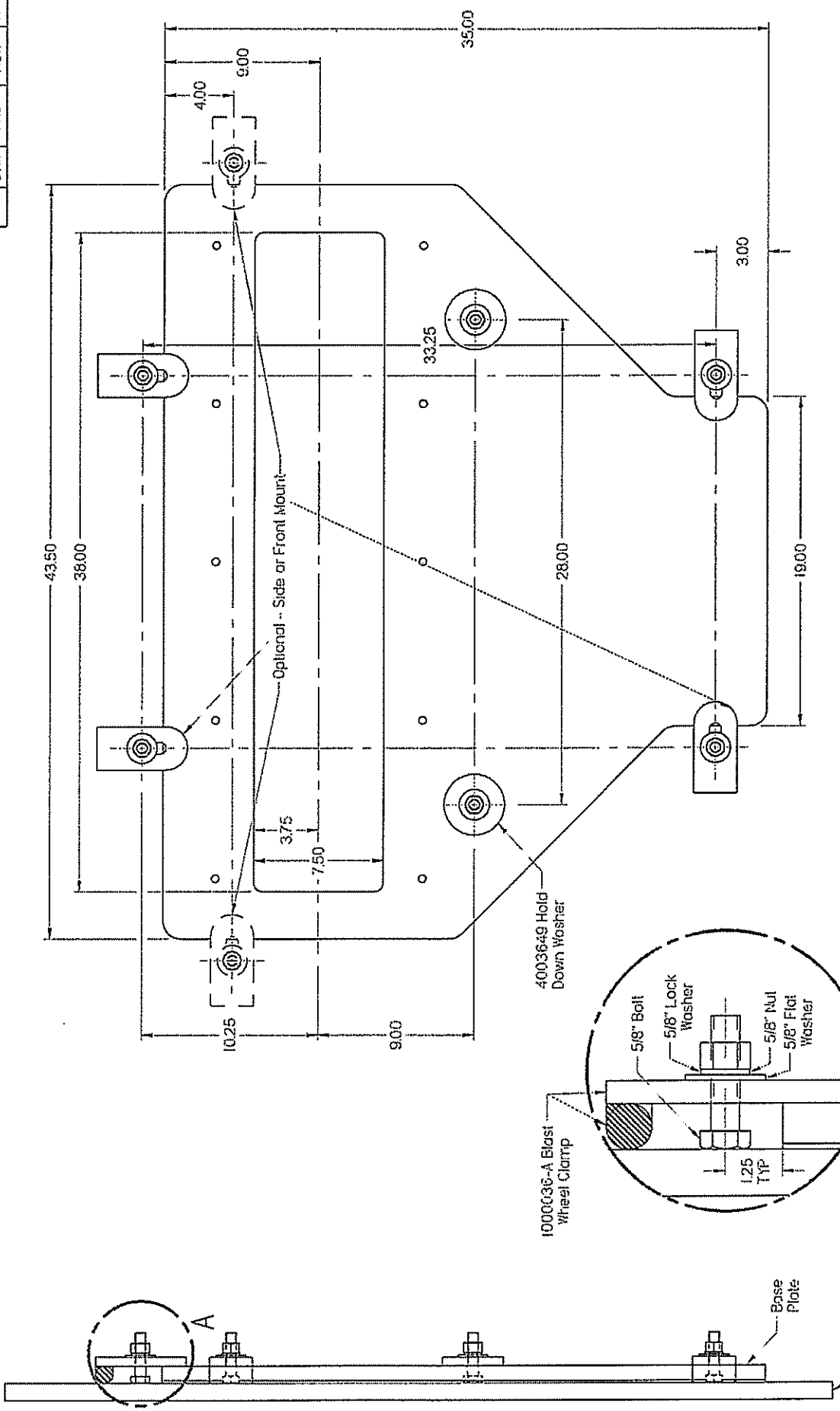
 Coyote Enterprises, Inc.

TITLE Plan View Drawing CBT2400

DRAWN BY	DATE	APPROVED	REV	SIZE	SCALE
CSummers	8/4/2011			A	NTS

MATERIAL

REVISION HISTORY				1 of 1
REV	SYM	WAS	NOW	DATE



DWG NO		Display	
Coyote Enterprises, Inc.			
TITLE Typical B.W. Clamp Layout CBT			
DRAWN BY	DATE	APPROVED	SCALE
CSummers	8/4/2011		1:8
MATERIAL :			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS - 1/2 PL. - 1/16 - 3 PL. - 1/32			

DETAIL A
B.W. CLAMP ASSEMBLY

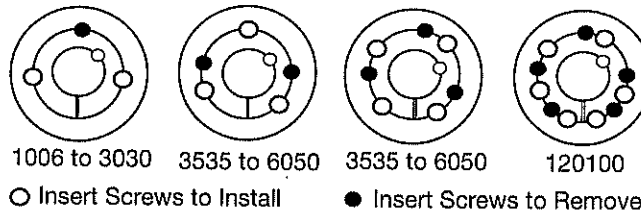
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TAPER-LOCK® Bushings

These instructions must be read thoroughly before installation or operation.

WARNING: To ensure that drive is not unexpectedly started, turn off and lock out or tag power source before proceeding. Failure to observe these precautions could result in bodily injury.

INSTALLATION:



1. Clean shaft, bore of bushing, outside of bushing and hub bore of all oil, paint and dirt. File away burrs.
2. Insert bushing into hub. Match the hole pattern, not threaded holes (each complete hole will be threaded on one side only).
3. "LIGHTLY" oil setscrews and thread into those half-threaded holes indicated by ○ on above diagram.

CAUTION: Do not lubricate the bushing taper, bushing bore, hub taper or the shaft. Doing so could result in breakage of the product.

4. Position assembly onto shaft allowing for the small axial movement which will occur during lightening procedure.
5. Alternately torque setscrews to recommended torque setting in chart below.

CAUTION: Do not use worn hex key wrenches. Doing so may result in a loose assembly or may damage screws.

6. To increase gripping force, lightly hammer face of bushing using drift or sleeve. (Do not hit bushing directly with hammer.)
7. Re-torque screws after hammering.

CAUTION: Where bushing is used with lubricated products such as chain, gear or grid couplings be sure to seal all pathways (where lubrication could leak) with RTV or similar material.

8. Recheck screw torques after initial run-in, and periodically thereafter. Repeat steps 5, 6 and 7 if loose.

WARNING: Because of the possible danger to person(s) or property from accidents which may result from the improper use of products, it is important that correct procedures be followed: Products must be used in accordance with the engineering information specified in the catalog. Proper installation, maintenance and operation procedures must be observed. The instructions in the instruction manuals must be followed. Inspections should be made as necessary to assure safe operation under prevailing conditions. Proper guards and other suitable safety devices or procedures as may be desirable or as may be specified in safety codes should be provided, and are neither provided by Baldor Electric nor are the responsibility of Baldor Electric. This unit and its associated equipment must be installed, adjusted and maintained by qualified personnel who are familiar with the construction and operation of all equipment in the system and the potential hazards involved. When risk to persons or property may be involved, a holding device must be an integral part of the driven equipment beyond the speed reducer output shaft.

DODGE®

TO REMOVE:

1. Remove all screws.
2. Insert screws in holes indicated by ● on drawing. Loosen bushing by alternately tightening screws.

NOTE: If two bushings are used on the same component and shaft, fully tighten one bushing before working on another. When installing bushing in sintered steel product (sheave, coupling, etc.) follow torque recommendation shown on product hub if present.

Recommended Installation Wrench Torque		
Bushing No.	Lb.-In.	Nm
1008	55	6,2
1108	55	6,2
1210	175	19,9
1215	175	19,9
1310	175	19,9
1610	175	19,9
1615	175	19,9
2012	280	31,8
2517	430	48,8
2525	430	48,8
3020	800	90,8
3030	800	90,8
3525	1000	114
3535	1000	114
4030	1700	193
4040	1700	193
4535	2450	278
4545	2450	278
5040	3100	352
5050	3100	352
6050	7820	888
7060	7820	888
8065	7820	888
10085	13700	1556
12010	13700	1556

NOTE: When using TAPER-LOCK bushings with conveyor pulleys, refer to the DODGE Instruction Manual for TAPER-LOCK, H.E. , and QD Conveyor Pulley Bushings.



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