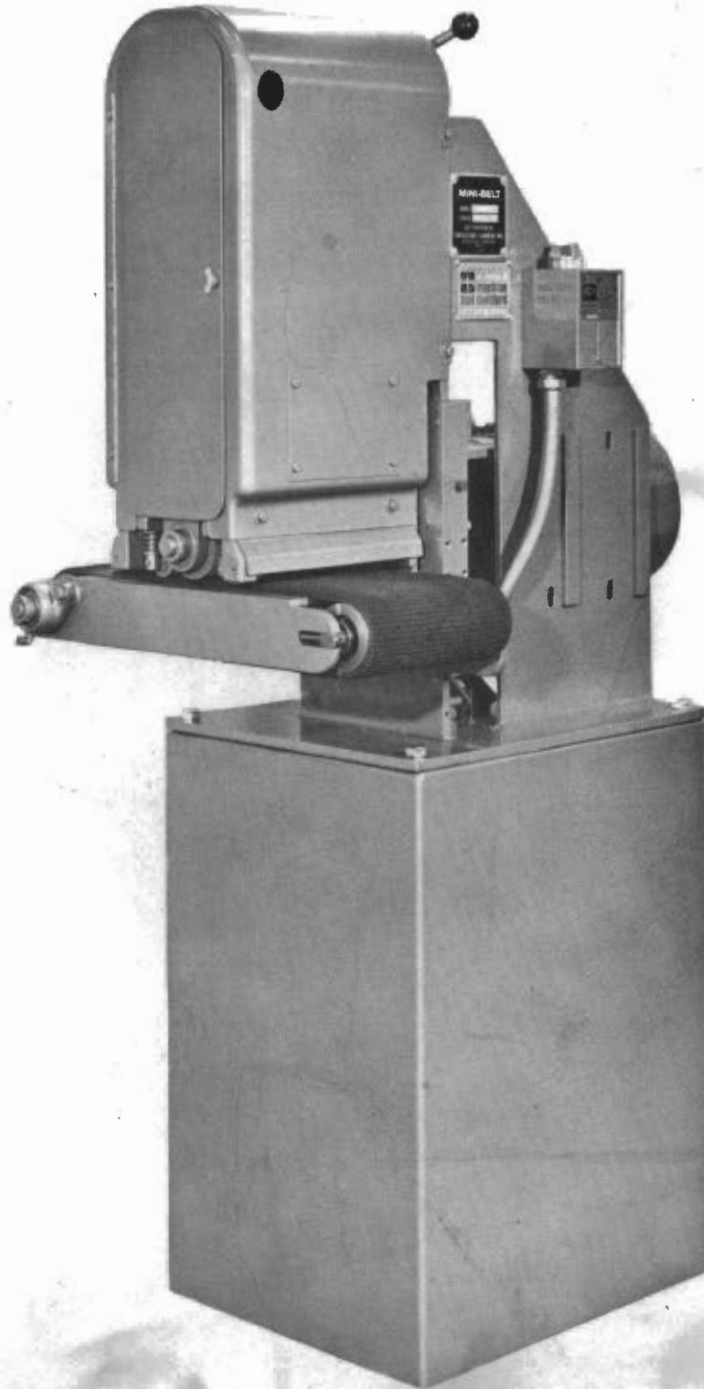


# OWNERS MANUAL

for the

## MINI-BELT SANDER



DISTRIBUTED BY



**TIMESAVERS, INC.**

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SANDER DIVISION - TIMESAVERS, INC.

MINI-BELT SANDER

STANDARD FEATURES

- Automatic spring tensioning and manual tracking.
- Spring loaded holddown rolls on 5" centers.
- 3-1/4" diameter contact drum.
- 1500 or 3000 SFPM of abrasive belt.
- Abrasive belt run "with or against feed".
- (648) TEFC motor - 3 HP, 3600 RPM.
- (948) TEFC motor - 5 HP, 3600 RPM.
- Reversing drum switch for emergency stop.
- (648) 3" dust hood outlet, 250 CFM, 5000 velocity required.
- (948) 4" dust hood outlet, 400 CFM, 5000 velocity required.

OPTIONAL FEATURES

- Double spring loaded holddown rolls.
- Magnetic chuck in feed bed.
- 28" high welded metal stand.
- Feed bed with quick belt change feature.
- Separate feed motor "constant speed".
- Separate feed motor "DC drive variable speed".
- 0-8" opening.

6/4/71

# INSTRUCTION MANUAL

## INSTALLATION

Place your Mini-Belt sander on an adequate table or base. The machine should be bolted to the table or base using the holes provided in the base of the main frame.

If the optional metal base is purchased with the machine, mounting bolts and leveling screws will be included.

If you are using dust collection, connect the dust hood outlet to your dust collection system with the properly sized supply lines to provide 250 CFM for 648 and 400 CFM for 948 at 5,000 FPM velocity. A clean machine increases belt life and eliminates a cause of irregular feeding due to accumulated dust.

## CHANGING THE ABRASIVE BELT

To change or install an abrasive belt, compress the spring, tensioning the idler roll, by rotating the cam tension handle clockwise. The cam handle is located at the top, backside of the machine. This will force the idler roll down taking the spring tension off the abrasive belt. Slide the abrasive belt on or off the idler roll and contact drum through the open side of the machine.

Be careful not to nick or tear the edge of the abrasive belt. The direction of rotation is stamped on the inside of the abrasive belt and should be installed so it operates in the correct direction. When the abrasive belt is in position, release the cam tension handle and the spring loaded idler roll will apply the correct tension on the abrasive belt.

The contact drum should be turned by hand a few revolutions to see that tension is evenly distributed and the alignment of the abrasive belt on the idler roll and contact drum is correct.

Jog the motor several revolutions until you are sure that the belt is running true before applying full power. The reversing drum switch can be used as a brake.

## TRACKING THE ABRASIVE BELT

The abrasive belt tracking is controlled by the knurled knob located on the back side of the machine just below the cam tension handle. If the sanding belt tends to run toward the closed side of the machine, turn the knurled knob in a counter-clockwise direction. If the sanding belt tends to run towards the open side of the machine, turn the knurled knob in a clockwise direction.

## CONVEYOR BELT TENSION AND TRACKING

The tensioning and tracking of the conveyor belt is controlled by two adjustment screws located on the infeed end of the machine. If the conveyor belt is running too far to the left, turn the left hand adjusting screw clockwise. If the conveyor belt is running too far to the right, turn the right hand adjusting screw clockwise.

## CHANGING THE CONVEYOR BELT

Conveyor belts are easily changed by loosening both adjusting screws and removing the left adjusting screw. The conveyor belt can now be slid off starting at the infeed end. (Abrasive belts 48" long can be used as conveyor belts when close dimensioning is required.)

## SETTING THE SANDING PRESSURE

The sanding pressure is determined by raising or lowering the conveyor bed. This is accomplished with a ratchet on the back side of the machine. Place the material to be sanded directly under the contact drum (drum not running) and slowly raise the conveyor bed, by turning the ratchet in a clockwise direction. At the same time, turn the sanding belt by hand and continue to raise the conveyor bed until a heavy drag is felt on the sanding belt.

Check to see that the pinch rolls are set approximately .030 lower than the contact drum to assure positive feed and no slipping of the stock being fed into the machine. The drum switch can now be turned to the forward position and the part will feed through the machine.

Feed with care. Do not overlap pieces.

To true up or remove glaze from the feeding surface of the rubber conveyor belt, raise the conveyor bed (while running with an 80 grit or finer sanding belt) until light contact is made with the conveyor belt. Be careful to only kiss grind or lightly touch the conveyor belt enough to true up the surface as belt damage may result if too much covering is removed.

If these steps have been taken, the machine can now be put into operation.

## BASIC MACHINE FOR 648

Quantity

Print No.	Unit Quan.	Total Quan.	Description	Unit Cost	Total Cost
A-38258-1	2		Slide rail		
A-38259-2	2		Gib		
A-38260-2	2		Spacer		
B-38262-4	1		Idler shaft		
A-38271-1	1		Bearing retainer		
B-38693-1	1		Idler roll		
A-38695	1		Reducer mounting plate		
C-38702-3	1		Contact drum bracket		
A-38712-2	1		Mod. sheave "Motor"		
A-38777	1		Name plate		
A-39119-1	1		Adj. ratchet		
C-39122-3	1		Dust hood nozzle		
B-39923	1		Drive roll		
	1				
A-41054-1	1		Angle tie bar		
A-43531-2	1		Hole cover		
A-43955	4		Clevis		
A-43957	4		Pivot arm		
A-43960-1	2		Pinch roll shaft		
A-43961-1	2		Pinch roll (Neoprene)		
A-44014	1		Spring bracket		
A-44095	1		Mod. sheave		
A-44098	1		Idler shaft		
A-44099	2		Support arm		
A-44283	1		Cam		
A-44305	1		Spacer		
A-44432	1		Idler adj. knob		
D-46771	1		Main frame		
A-46773	2		Slide rail		
A-46774	2		Spacer		
A-46775	2		Slide rail		
A-47633	1		Cam handle		
D-48342	1		Dust hood door		
A-51386	2		Pinch roll guard		
C-54138	1		V-belt guard		
A-59801	4		Dust cover mounting pad		

## BASIC MACHINE FOR 648

Quantity

Print No.	Unit Quan	Total Quan	Description	Unit Cost	Total Cost
	2		Fafnir bearing 308-NPP		
	1		Fafnir bearing RCJT 3/4"		
	2		Fafnir bearing RAO 14 NPP		
	4		Fafnir bearing KP 54		
	2		Fafnir bearing S5PP		
	1		Nice bearing 607		
	4		Lee spring LC085K-1		
	2		Lee spring LE-063E-8		
	1		Danly spring #9-1628-36		
	4		3/32 dia. x 5/8 lg. roll pin		
	12		Flat washer SAE 3/8		
	8		Jam nut (HICX) 3/8-16 NC		
	4		Shoulder screw Reid SS-7		
	4		Hex bolt 5/16-18NC 1-1/4 lg.		
	2		Hex head mach. screw 3/8-16 NC x 3-1/2" lg.		
	2		Hex head bolt 1/4-20 NC x 1-1/2" lg.		
	2		Hex head bolt 1/4-20 NC x 1" lg.		
	2		Lock washer 1/4" ID		
	2		Round head screw #6-32 x 1/2" lg.		
	1		Coupling - Lovejoy L099 3/4 B. to 1-1/8 B. w/key & SS		
	1		Furnas starter #14CF33BC (If 230 or 460)		



Print No.	Unit Quan.	Total Quan.	Description	Unit Cot	Total Cost
C-39074-4	1		Dust hood		
	1		Winsmith reducer, Unit 1-DB-1 R-L Assembly, Left hand worm with shaft rotating in opposite direction 50:1 ratio Side wall mount (High speed shaft up)		
	4		5/16-18 x 1" lg. socket head cap screw		
	4		5/16 lock washer		
C-39074-7	1		DELETE: Dust hood		







Print No.	Unit Quan.	Total Quan.	Description	Unit Cost	Total Cost
			ADD:		
B-40372	1		Side plate		
B-40373	1		Side plate		
B-40374	1		Conveyor plate		
B-40375	1		Conveyor plate		
A-40376-1	1		Spacer		
A-40376-2	1		Spacer		
A-67626	2		Spacer		
C-40377	1		Magnetic chuck		
A-40378	2		Tie bar		
			DELETE:		
C-39094	1		Conveyor bed		

DOUBLE PINCH ROLL ASSEMBLY - 648 - B-46178-1

Print No.	Unit Quan.	Total Quan.	Description	Unit Cost	Total Cost
			<u>ADD:</u>		
A-43955	4		Clevis		
A-43957	4		Pivot arm		
A-43960-1	2		Pinch roll shaft		
A-43961-1	2		Pinch roll		
B-45341-1	2		Double pinch roll bracket		
	4		Bearing - Fafnir KP5A		
	4		Spring Lee LC085 K-1		
	8		Hex jam nut		
	12		Flat washer - 3/8 nom.		
	4		3/32 dia. x 5/8 lg. roll pin		
	4		Hex bolt 3/8-16 NC x 3" lg.		
			<u>DELETE:</u>		
A-51386	2		Pinch roll guard		

Print No.	Unit Quan	Total Quan	Description	Unit Cost	Total Cost
A-39119-3	1		Adj. ratchet		
B-41408	1		Belt guard		
A-43339-2	1		Angle tie bar		
A-43780	2		Reducer spacer		
C-43781	1		Motor plate		
D-46776	1		Main frame		
	1		Maurey variable pulley #8325 x 1/2 Bore		
	1		Maurey sheave AX 55 w/ 1/2 Bore		
	1		V-Belt 4L-300		
	1		1/3 HP 1800 RPM motor FR K48 TENV 230-460/3/60		
	1		C.H. Drum switch 9441-H281		
			DELETE:		
A-38695	1		Reducer mounting plate		
A-38712-2	1		Motor sheave		
B-39107-2	1		V-Belt guard		
A-39119-1	1		Ratchet adj.		
A-39121-1	2		Spacer		
A-41054-1	1		Angle tie bar		
A-44095	1		Mod. sheave		
A-44098	1		Idler shaft		
A-44099	2		Support arm		
D-46771	1		Main frame		
	1		Fafnir bearing S5PP		
	2		Round head screw 6-32 x 1/2" lg.		
	2		Hex head bolt 1/4-20 NC x 1" lg.		
	2		Lock washer 1/4" ID		
	2		Lee Spring LE-063 E8		
	2		Shoulder screw Reid SS-3		
	1		Browning belt 4L-410		



Print No.	Qty.	Description
		<u>ORDER</u>
Ref. -1		1800 RPM motor, Special Spec's, See requisition
	1	Browning sheave AK41 w/ 1/2 Bore KW-SS
	1	Browning belt 4L350

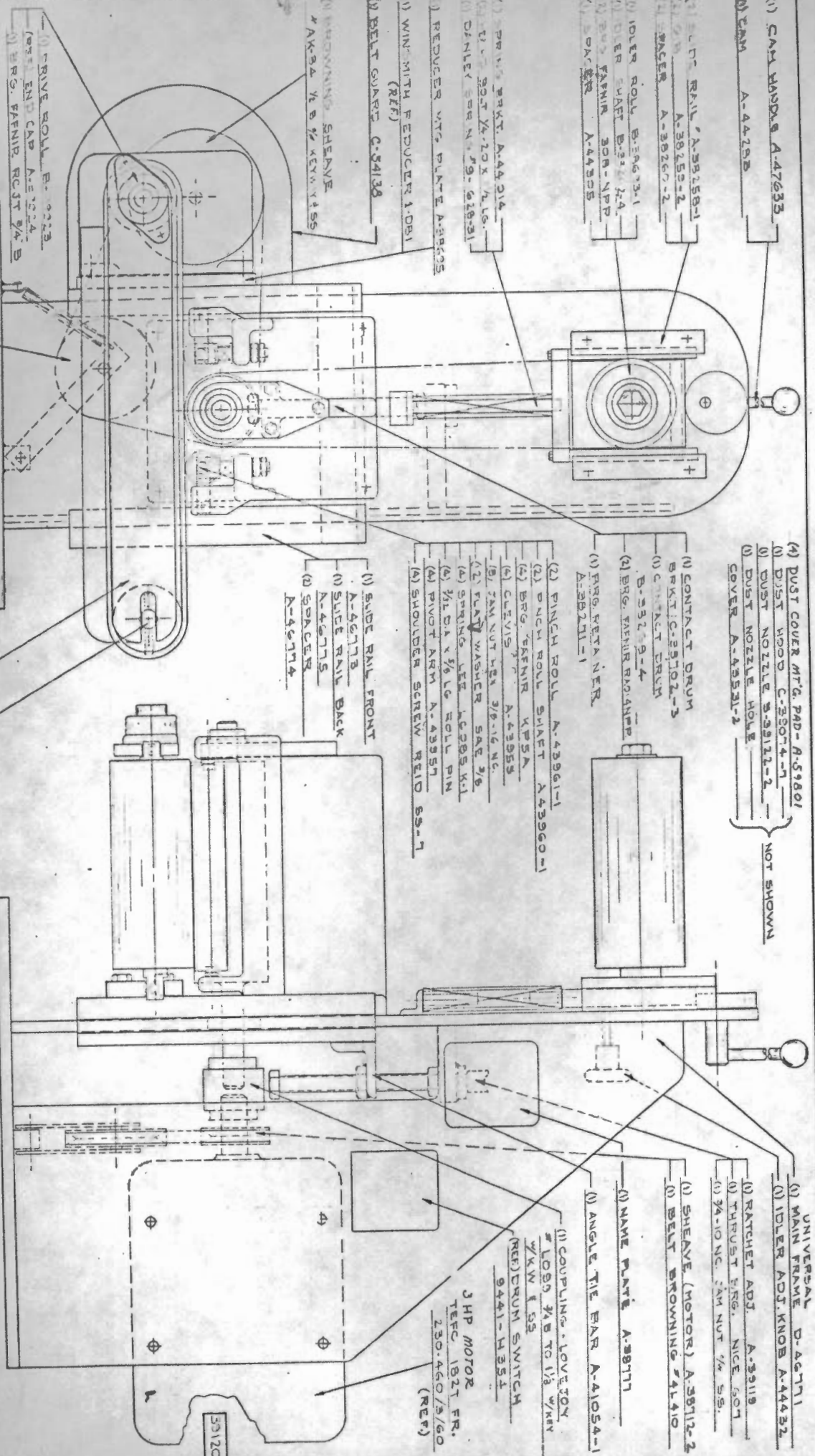






Part No.	Qty.		Description
			ADD:
	1		Reliance 3/4 HP DC motor #T5663200, TEFC, FR. 56C
	1		Reliance Impak Controller #8C54
	1	**	Maurey variable pulley 8325 x 1/2 Bore
	1	**	Maurey pulley AC33 x 5/8 Bore
	1	**	V-belt 4L230
A-41054-2	1	**	ANGLE TIE BAR
B-41408-2	1		Belt guard
A-43780-	2	**	Reducer spacer
C-43781-3	1	**	Motor plate
B-65637	1	**	Belt guard
B-65470	1.	**	Control plate
	4		5/16-18 x 1-1/4 long socket head cap screw
	4		5/16 Lock washer
	4		3/8 Lock washer
	4		3/8-16 Hex nut
	4		3/8-16 x 1" long hex head cap screw
			DELETE:
	1		Browning sheave AK-84 x 1/2 Bore
	2		Bearing - Fafnir S5PP
	2		Lee spring LE-063E-8
	2		Round head screw 6-32-1/2
	2		Hex bolt 1/4-20-1
	2		Shoulder screw Reid SS-3
	1		Belt - Browning 4L410
A-41054-1	1		ANGLE TIE BAR
A-38712-2	1		Motor sheave
B-39107-2	1		Belt guard
A-41053	1		Reducer mounting plate
A-44095	1		Modified sheave
A-44098	1		Idler shaft
A-44099	2		Support arm

Items denoted by \*\* require work orders and/or requisitions.



- (1) CAM WIPPER A-47633
- (2) CAM A-44298

- (1) IDLER RAIL A-39158-1
- (2) ROLLER A-38459-2
- (3) ROLLER A-38267-2
- (4) IDLER ROLL B-38673-1
- (5) IDLER SHAFT B-38424
- (6) IDLER SHAFT 308-NPP
- (7) CAM B-44325

- (1) DRIVE ROLL A-44214
- (2) DRIVE ROLL 20 X 7 LG.
- (3) DRIVE ROLL 19-618-31
- (4) REDUCER WTS. PLATE A-39235
- (5) WIND-UP WITH REDUCER 1081 (REF)
- (6) BELT GUARD C-54138

- (1) BROWNING SHEAVE A-4384
- (2) AX-34 1/2 B 1/2 KEYWAY 1155

- (1) DRIVE BOLL B-3213
- (2) END CAP A-31224
- (3) BRG. FAFNIR RC3T 9/4 B

- (1) VOLT SHEAVE A-44325
- (2) IDLER SHAFT A-44098
- (3) SUPPORT ARM A-44098
- (4) BRG. SEE FIG. 093E-9
- (5) 10 S' NEW 2 X 1/2 LG.

- (4) DUST COVER MFG. PAD-A-59801
  - (1) DUST HOOD C-35074-1
  - (2) DUST NOZZLE B-38112-2
  - (3) DUST NOZZLE HOSE COVER A-43531-2
- NOT SHOWN

- (1) CONTACT DRUM B-31021-3
- (2) CONTACT DRUM B-31021-4
- (3) BRG. FAFNIR RC3T 9/4 B
- (4) BRG. RETA NER A-38271-1

- (1) PINCH ROLL A-43961-1
- (2) PINCH ROLL SHAFT A-43960-1
- (3) BRG. FAFNIR KP5A
- (4) CLEVIS A-43985
- (5) TAN CUT HEX 3/8-16 NC
- (6) FLAT WASHER SAE 3/8
- (7) SPRING WEE A-385 K-1
- (8) 3/16 DIA X 1/2 LG ROLL PIN
- (9) PIVOT ARM A-43957
- (10) SHOULDER SCREW REID SS-1

- (1) SIDE RAIL FRONT A-46173
- (2) SIDE RAIL BACK A-46175
- (3) SPACER A-46174

- (1) TAKE-UP ROLL A-42948 (REF)
- (2) TAKE-UP SHAFT A-33189-2 (REF)
- (3) FAFNIR BRG. 1014 KR 7/8 BORE (REF)
- (4) HEX HD. WASH SCREW 3/8-16 X 1 1/2 LG.
- (5) CONVENOR BELT A-44325 (REF)

- (1) CONVEYOR ROLL C-33094 (REF)

- UNIVERSAL D-46771
- (1) IDLER ADJ. KNOB A-44432
- (2) RATCHET ADJ. A-33119
- (3) THRUST BRG. NICE 507
- (4) 3/4-10 NC. 5/8 INUT 1/4 SS.
- (1) SHEAVE (MOTOR) A-38712-2
- (2) BELT BROWNING 74140

- (1) NAME PLATE A-38717
- (2) ANGLE TIE BAR A-41054-1
- (1) COUPLING - LOVEJOY 1/2 LOSS 3/8 TO 1/2 W/KRY W/KRY 1 55 (REF) DRUM SWITCH 9441-H351
- 3 HP MOTOR TEC 182T FR. 230.460/5/60 (REF)

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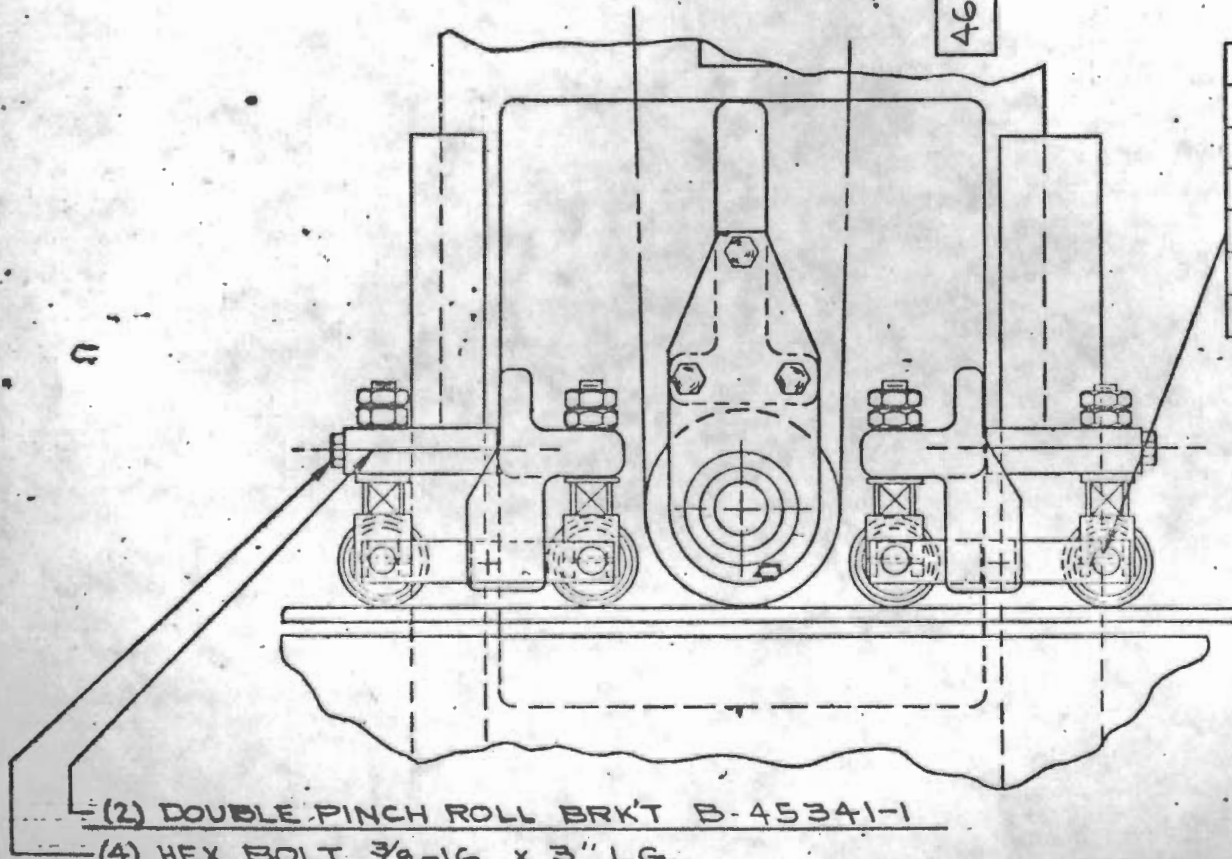
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- (2) PINCH ROLL A-43961-1
- (2) PINCH ROLL SHAFT A-43960-1
- (4) PIVOT ARM A-43457
- (4) CLEVIS A-43457
- (4) BEARING FAFNIR® KP5A.
- (4) SPRING LEE LCOB5K-1
- (12) FLAT WASHER SAE 3/8
- (4) 3/32 DIA x 5/8" LG. ROLL PIN

- (2) DOUBLE PINCH ROLL BRKT B-45341-1
- (4) HEX BOLT 3/8-16 x 3" LG.

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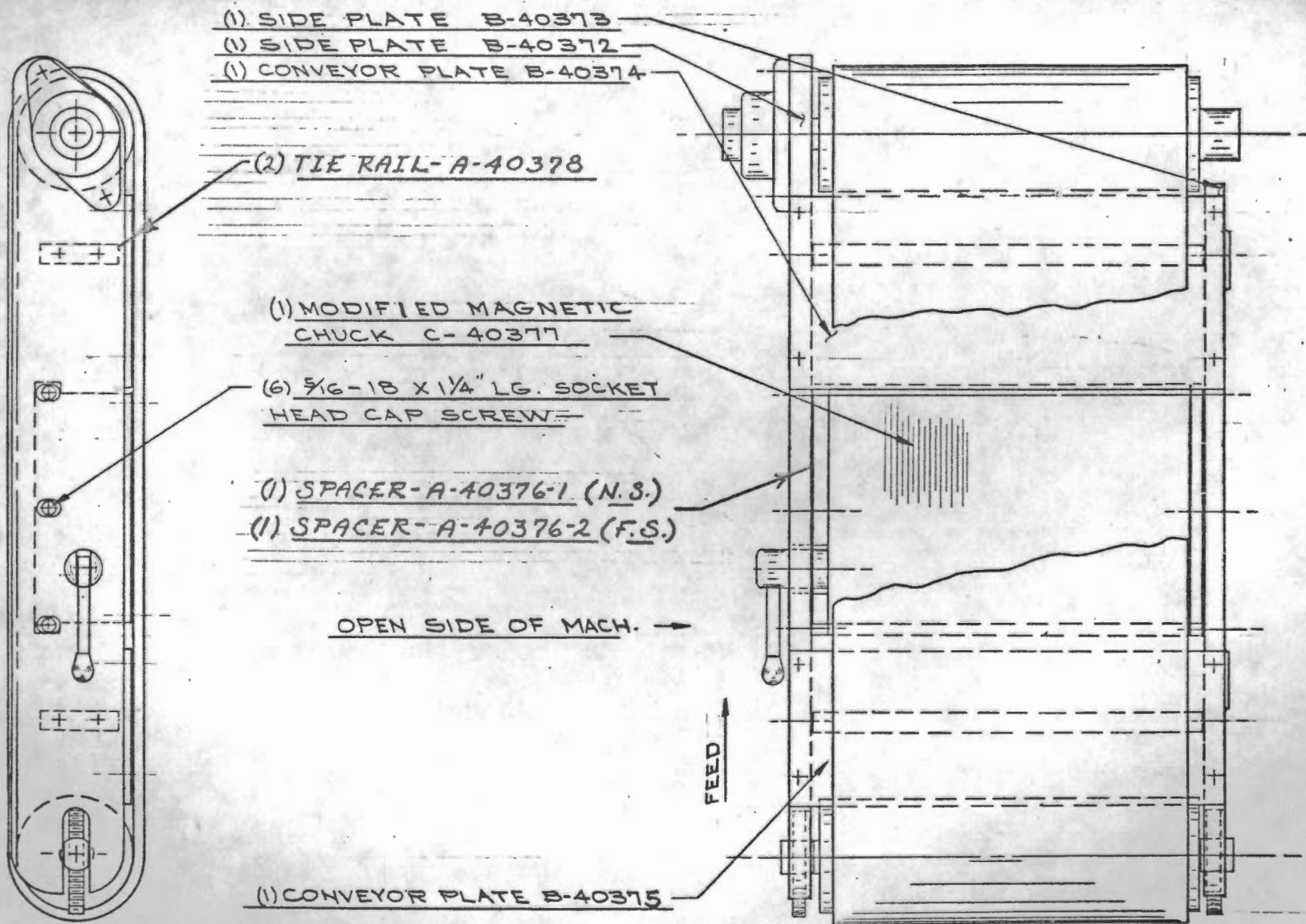
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**NOTE:**

FOR FIELD INSTALLATION, REMOVE COMPLETE CAST CONVEYOR BED. REPLACE WITH MAG. CHUCK ASSY, USING EXISTING CONVEYOR DRIVE ROLL, TAKE-UP ROLL AND CONVEYOR BELT.

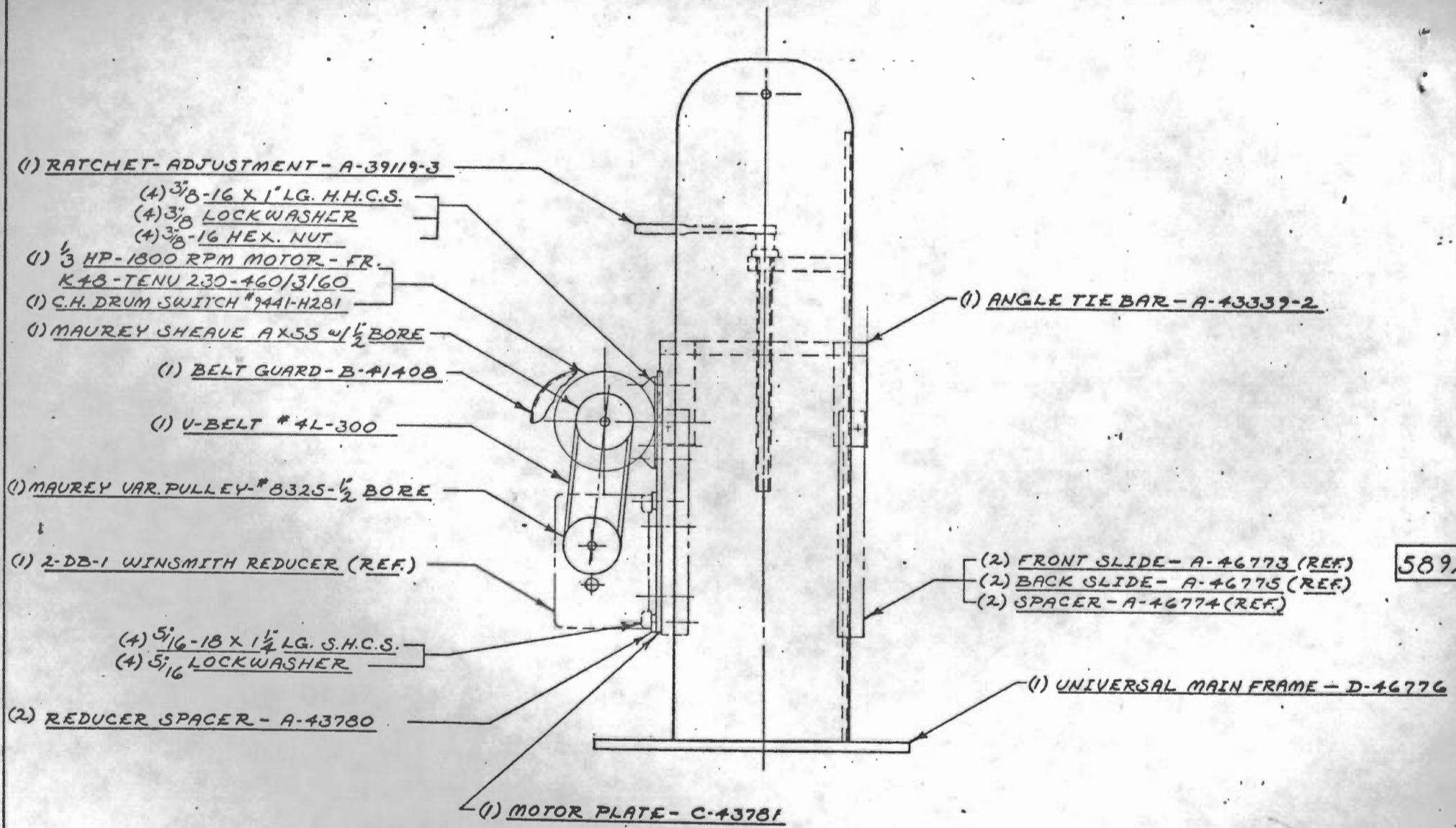
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