



Super 6 PJ

Care and Use Instructions



Serial Number _____

Date Manufactured _____

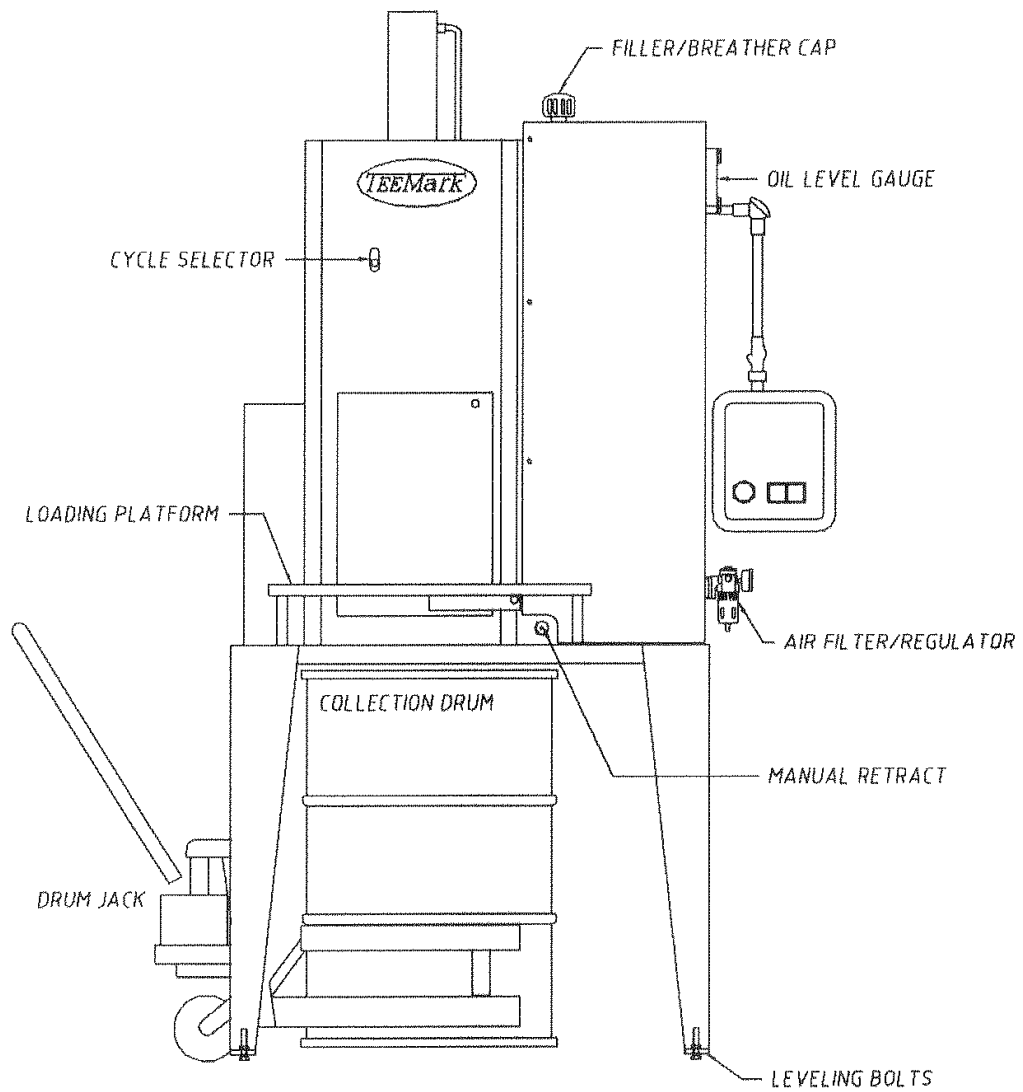
TEEMARK MANUFACTURING WARRANTY – TERMS OF SALE

Only the following conditions apply and shall be binding on the Seller regardless of any conditions contained in your inquiry or order. If the conditions stated herein are in any way unacceptable to you, please notify us at once; otherwise the following conditions will become the only conditions applicable to this transaction regardless of any conflicting terms or conditions contained in your inquiry or order.

1. **CONTRACT.** No order or quotation is binding on Seller and no contract is formed until Seller's formal acknowledgement of the order on Seller's own form is sent to Buyer. Any special terms or conditions noted on the face of Seller's quotation on which this order is based is incorporated herein by reference and made a part hereof as though specifically set forth herein.
 2. **DELIVERY.** Without prejudice to any of Buyer's other rights hereunder, title and risk of loss shall fall to buyer on delivery of goods hereunder by Seller to carrier regardless of who bears the cost of freight. Seller shall not be liable for any delays in or failures of delivery due to acts of God or public authority, labor disturbances, accidents, fires, floods, extreme weather conditions, failure of and delays by carriers, shortages of materials, delays of a supplier due to causes beyond its control, or any other causes beyond the control of the Seller. Seller shall notify Buyer of any such delays as soon as it becomes apparent. In no event shall Seller be liable for consequential or special damage arising out of a delay in or failure of delivery.
 3. **LIMITED WARRANTIES.** All goods sold hereunder are warranted to be free from defects in material and workmanship and/or to conform to applicable specifications, drawings, blueprints and/or samples. Seller's sole obligation under these warranties shall be to issue credit, repair or replace any item or part thereof which is proved to be other than as warranted. Seller shall have the sole right to determine whether such parts shall be repaired or replaced or whether credit shall be issued. No allowances shall be made for any labor charges of Buyer for replacement of parts, adjustments or repairs, or any other work unless advance, written authorization for such charges is given by Seller. In no event shall Seller be liable for collateral, consequential or contingent damages. If goods are claimed to be other than as warranted, Seller, upon notice promptly given, will either examine the goods at the Buyer's site or issue shipping instructions for return to Seller (transportation costs prepaid by Buyer), and if any goods are proved to be other than warranted, transportation costs (cheapest way) to and from Seller's plant will be borne by Seller and reimbursement or credit will be made for amounts so expended by Buyer. Every such claim for breach of the warranties herein contained shall be deemed to be Waived by the Buyer unless made in writing within 90 DAYS from the date of shipment of the goods to which such claims relates. These warranties shall not extend to any goods or parts thereof which have been subjected to misuse or neglect, damaged by accident, rendered defective by reason of improper installation or used for other than the express purpose for which it was designed and built, or by the performance of repairs or alterations outside of Seller's plant, except when performed under seller's specific authority. These warranties shall not apply to any goods or parts thereof furnished by Buyer or acquired from others at Buyer's request and/or to Buyer's specifications. In no event shall the Seller be liable for contingent or consequential damages. **This warranty is in lieu of all other warranties.**
 4. **CHANGES IN SPECIFICATIONS OR DESIGN.** Should Buyer request that changes be made in the specifications or design relating to any goods, delivery dates and schedules shall be revised accordingly, if necessary, and an equitable adjustment, upward or downward, be made in price so far as warranted.
 5. **TERMINATION, REDUCTION IN QUANTITY, RESCHEDULING DELIVERY.** In the event Buyer desires to terminate any part or all of the work to be done hereunder, reduce the quantity of goods ordered, or reschedule the delivery of any goods, fair compensation shall be made to the Seller. Seller shall recover without duplication the contract price for articles which have been completed, the actual costs incurred by Seller which are properly allocable or apportionable under recognized commercial accounting practices to terminated work (including cost of discharging liabilities) plus a reasonable profit, the increased cost incurred by Seller by reason of a revision in the delivery schedule.
 6. **BUYER'S PROPERTY.** Any patterns, equipment or materials furnished by Buyer shall be used only in the production of goods ordered by Buyer and not otherwise, unless by Buyer's written consent. Seller agrees to exercise reasonable care with respect to such property while in its possession and control, but shall not
- TeeMark Manufacturing, Inc. – 1132 Air Park Drive – Aitkin, MN 56431 – 1.800.428.9900

be responsible for loss or damage occurring without its fault or negligence or for ordinary wear and tear. When, for two (2) consecutive years, no orders are received from the Buyer for a particular product, any tooling or equipment, whether owned by Buyer or Seller, required for producing such product, as well as any inventory of such product, may be destroyed by seller without notice to buyer or liability to Seller.

7. **PATENT INFRINGEMENT.** Seller shall defend and save harmless the Buyer from any claim that any product or article sold to the Buyer hereunder in and of itself infringes any United States letters patent by reason of its sale provided Seller is notified in writing within ten (10) days after such claim is made against the buyer and provided further that seller is permitted to defend the same in Buyer's name if action brought. If the product or articles sold to the buyer hereunder is manufactured by the Seller according to a design or specification furnished by the Buyer, the Buyer will defend and save harmless the Seller from any claim of infringement of any letters patent.
8. **PATENT AND DATA RIGHTS.** Seller will comply with all applicable federal, state and local laws, provided however, that the Seller will not be bound by Armed Services Procurement Regulation 9-202, Rights in Data: Defense procurement Circular #24, or any other regulation requiring the Seller to provide Technical data, either limited or unlimited, to any representative of the federal government or agency thereof, unless affirmatively and specifically agreed to in writing by the Seller.
9. **PROPRIETARY DESIGN.** Unless the design for the goods shall have been furnished by the Buyer to the Seller and used by the Seller in manufacturing the goods, the design of the products supplied to the Buyer are proprietary. The Buyer agrees not to reproduce these products or their design for his own use or for resale, except where necessary for maintenance of said goods.
10. **BUYER SPECIFIED SOURCES.** Where Buyer supplies parts and/or materials to be used in connection with the work to be performed and materials to be furnished by the Seller, subcontract work of any kind is performed for Seller by a source specified or selected by Buyer, Buyer assumes, and Seller is correspondingly relieved from all responsibility where the merchandise supplied by Seller is other than as warranted and where the reason therefore is due to the work performed by the source so specified or selected by Buyer or parts supplied by Buyer. Buyer further agrees that in such instances Buyer will defend, at no cost to Seller, every suit which shall be brought against Seller by reason of the defects in such parts supplied by Buyer or operations so subcontracted at Buyer's request.
11. **TAXES.** Sales and use taxes, payable by Buyer, which are presently or may hereafter be imposed by any taxing authority, are not included in the sales price; any direct or excise tax, payable by Seller, which may hereafter be imposed by any taxing authority, upon the manufacture, sale or delivery of products covered by this order, or any increase in rate of any such tax now in force, shall be added to the sale price. If not collected at time of payment of sale price, Buyer will hold Seller harmless.
12. **APPLICABLE LAW.** This contract shall be governed by the law of the State of Minnesota. The invalidity of any one clause or portion of this contract shall have no effect on the validity of any other section or portion thereof. Failure at any time of Seller to enforce any provision of this contract, or to exercise an option hereunder, or to require performance by Buyer of an provision hereof, shall in no way be construed as a waiver nor in any way affect the right of Seller to thereafter enforce each and every provision. A waiver by Seller of a term or condition hereof shall not be deemed a waiver of any other term or condition hereof or as a future waiver thereof. Sites of the contract shall be deemed Seller's corporate offices.
13. **PREVAILING TERMS.** Seller's standard terms of sale shall supplement and compliment Buyer's terms and conditions of sale, and both shall form the contract. However, if there is a conflict on content, interpretation, construction, or on any other points, between Buyer's and Seller's terms and conditions of sale, Seller hereby expressly rejects such conflicting terms and/or conditions of Buyer, and Seller's terms and conditions shall prevail and Buyer's acceptance of Seller's terms and conditions as set forth herein.



SUPER 6 PJ

WARNING

EXPLOSION HAZARD

All TeeMark explosions proof can and drum crushers are manufactured in accordance with the National Electrical Code for **Class 1, Group D** hazardous locations.

It is the responsibility of the end user to properly install and operate the crusher in compliance with all local and national electrical codes for hazardous locations.

THIS MEANS

All sources of ignition must be a safe distance away from the crusher while it is being operated. (As determined by your insurance underwriter)

Sources of ignition include:

1. All forklift trucks. Propane, gas and electric powered.
2. All air compressors
3. Any motor control equipment not rated for hazardous locations (class 1, group D)
4. Any electrical equipment such as radios, tape players, etc.

Congratulations on choosing a TeeMark Super 6PJ Can & Pail Crusher.

The Super 6 PJ is designed to process a wide range of paint cans and pails. The liquid contents of the cans are collected in a 55 gallon drum directly under the machine. The crushed cans are collected in a second 55-gallon drum.

Your crusher has been thoroughly tested before leaving the factory.

SAFETY FEATURES

The Super 6PJ is equipped with a safety interlock system that is linked to the crushing chamber door. The interlock system prevents operator injury by stopping all functions of the machine in the event that the crushing chamber door is opened during the crushing process.

ELECTRICAL CONNECTION

The explosion proof motors, motor controls, and connections on your crusher are UL listed and CSA certified for Class 1, Group D, Hazardous locations. It is up to the purchaser to have the final connections made by a licensed electrical contractor in compliance with the appropriate local and national electrical codes.

Single Phase Motor Options

1-1/2 hp, 115/230 volt, 16/8 FLA (full load amps)

5 hp, 230 volt, 21 FLA

Three Phase Motor

5 hp, 230/460 volt, 13/6.5 FLA

(the motors stated above are the standards and you may have a different hp, volts, hertz, or phase)

SUPER 6PJ ASSEMBLY INSTRUCTIONS

Tools required are two (2) 9/16 inch wrenches, two (2) ½ inch wrenches, one 7-16 inch wrench, level, hammer, pry bar, alignment punch, small clevis, small chain, and a fork lift or overhead crane. The machine weighs approximately 1800 pounds. You will need approximately 9-1/2 feet of overhead clearance (more if using a forklift) to place the machine on the stand.

Dismantle crate and remove all the bolts fastening the machine to the crate.

Remove the stand and locate the front of the stand. Position the stand in your desired location leaving ample room around the machine to maneuver the drum jack and drum. Your stand is equipped with leveling bolts; level the stand before continuing. Check your stand height for clearance; if a drum will not fit under the stand, the leveling bolts may be used to raise the stand. It is recommended that the stand be anchored to the floor using the holes provided in the pads on the legs. These anchor bolts should be 3/8 or ½ inch by 4-1/2 inch long.

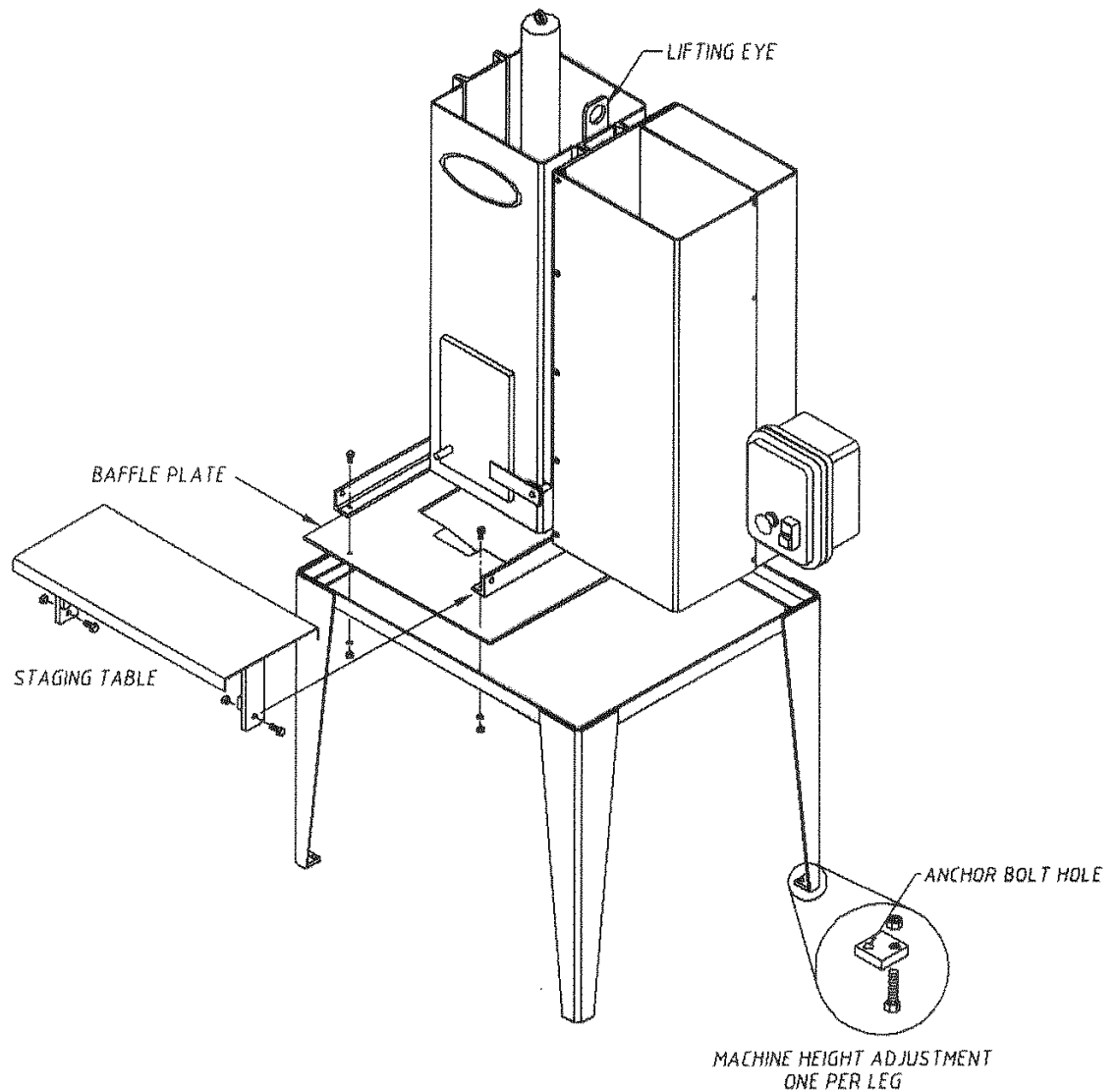
Remove baffle plate from the crate and position it on the top of the stand. This plate will drop down inside and you will need to check your orientation as the machine is not centered on the stand.

The machine is equipped with a lift eye located to the right of the hydraulic cylinder. Attach the crane or forklift to the lift eye using a clevis and chain. Lift machine and locate it with the door facing the front of the stand. An alignment punch will help to align bolt holes as the machine is lowered onto the stand. Once set into place, bolt the machine to the stand using the four 3/8-16x1-1/4 inch bolts and lock washers provided.

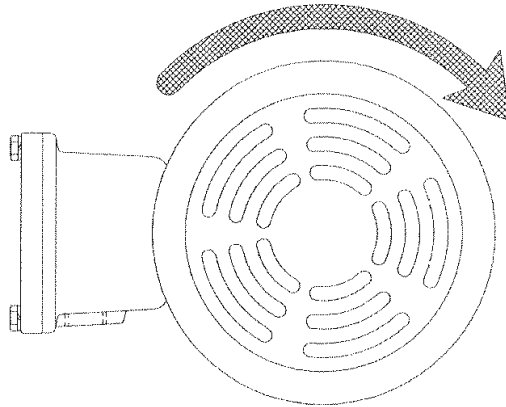
Attach the staging table to the machine in front of the door using the two 3/8-16x1 inch bolt, nuts and lock washers provided.

Once fully assembled an Electrician will need to complete the electrical hookup in accordance with local codes. See the following pages for wiring diagram.

SUPER 6 PJ ASSEMBLY



VERIFY CORRECT MOTOR ROTATION



**CRUSHER MOTOR ROTATION
BLOWER MOTOR ROTATION**

CLOCKWISE

**VIEWED FROM THE FAN END OF THE
MOTOR**

AIR REQUIREMENTS

The Super 6PJ uses less than 4 CFM and requires a maximum air pressure of 90 psi. All crushers are equipped with a filter/regulator (part # P01-0105). The pressure of the filter regulator must be set at 90 psi to insure proper machine performance.

HYDRAULIC FLUID

The hydraulic reservoir must be kept full to a level that is visible in the temperature/sight gauge throughout the complete ram cycle. Use a premium grade antiwear hydraulic oil, 150 viscosity grade 32 (mobile #DTE24 or equal). This is the same antiwear hydraulic fluid that is typically used in farm tractor and dump trucks. It should be available at most auto or farm supply stores. Total fluid capacity is approximately 20 US gallons.

OIL FILTER

A medium pressure, high performance 10 micron (absolute) oil filter is standard on all TeeMark Crushers. It should be changed after every 500 hours of operation.

For Machine Serial No. 20714 thru 20772: Part Number P02-0090

For Machine Serial No. 20619 thru 20713: Part Number P02-0088

For Machine Serial No. 20772 and greater; Part Number P02-0088

VALVE SETTINGS

All hydraulic and pneumatic valve components have been preset at the factory.

**DO NOT RE-ADJUST ANY VALVE SETTINGS
WITHOUT FIRST CONSULTING THE
MANUFACTURER.**

OPERATING INSTRUCTIONS

START UP PROCEDURE

Make certain that all necessary electrical connections are made before proceeding.

INITIAL WARMUP

IT IS RECOMMENDED THAT ALL CRUSHER RUN IDLE FOR 5-10 MINUTES TO ALLOW THE HYDRAULIC OIL TO REACH OPERATING TEMPERATURE. THIS IS ESPECIALLY IMPORTANT WHEN AMBIENT TEMPERATURE IS BELOW 65 F

1. Position an empty 55-gallon drum under the sealing flange just below the crushing chamber using the drum jack that is supplied with the crusher. Raise the drum until it contacts the sealing flange. **DO NOT LIFT THE DRUM PAST THE POINT OF CONTACT WITH THE SEALING FLANGE, THIS COULD CAUSE DAMAGE TO THE CRUSHER.**
2. Place a second 55-gallon drum below the vapor bonnet, to collect the crushed cans.
3. Open the crusher chamber door.
4. Begin by pulling out the red emergency stop button.
5. Start the crusher by pushing in start button on the control panel.
6. Place a can into the crushing chamber in an upright position, centered over the piercer opening.
7. Close the crushing chamber door and the crushing cycle will begin automatically. The crushed can will be ejected into the rear drum.
8. When the crushing cycle is complete the door will open automatically and the crusher is ready for the next crushing cycle.

DO NOT ATTEMPT TO OPEN THE DOOR BY HAND. THIS CAN RESULT IN A MALFUNCTION OF THE PNEUMATIC CONTROL SYSTEM.

RECOMMENDED REGULAR MAINTENANCE

KEEP A CLEAN MACHINE! Those who clean the crusher after each shift and prevent a buildup of dried paint, have better running machines than those who neglect this important task.

One method of cleaning involves saving the cans of thinner and other solvents until the end of the shift. This will clean the piercer area and the ejector bars. To remove a buildup of dried paint, a flat blade scraper works well as does a small pneumatic chisel.

Some crusher operators will apply a coating of grease to the inside of the crushing compartment this works well to prevent the buildup of paint.

GREASE There are four grease fittings on the crusher. These should receive one shot of grease every third shift. The fitting are located as follows:

1. On the left side of the crusher half way up the main channel.
2. Below the door shaft next to the manual retract button.
3. And one on either side of the ejector chute.

RECOMMENDED PERIODIC MAINTENANCE

1. Change the hydraulic oil filter element every 500 hours; more often if your system is in an extremely dirty atmosphere.
2. Change the hydraulic oil completely every 5000 hours or 5 years of operation, whichever comes first.
3. It is recommended that the piercer be sharpened periodically to prevent undue pressure buildup inside the cans.
4. Remember your machine is only as good as your maintenance.

*****CAUTION*****

Always turn the power off when servicing the crusher or
when not in use.

RETRACTING CYLINDER/SQUEEZE HEAD

In the event of the squeeze head becoming stuck at the bottom of the stroke, it may be necessary to retract the squeeze head manually.

1. On the front of the machine below the door shaft is a button marked manual retract.
2. With the hydraulic motor running, air supply turned on, and the door open.
3. Push in and hold the button, close the door and hold the button in until the cycle ends and the door opens.
4. The crusher is now set to resume normal crushing operations

Conditions that will cause the squeeze head to become stuck at the bottom of the stroke are

1. Inadequate power supply, causing the circuit breaker to trip when crusher reaches full crushing pressure.
2. Hydraulic system relief valve pressure drifts and causes the relief valve to open not allowing pressure valve to shift and retract the cylinder.
3. Interruption in the sir supply.

3 POSITION CYCLE SELECTOR SWITCH

Your Super 6 PJ is equipped with a cycle selector switch located on the front cover above the door.

The cycle selector switch enables the operator to change the length of the stroke by simply moving the switch lever to the desired setting.

In the FULL position you are able to process up to a 6-gallon container.

The SHORT position reduces the strike by 60% when processing 1-gallon and smaller.

The EJECTOR OFF position disables the ejector system. The crusher door will have to be opened manually at the end of the cycle when in the ejector off mode.

DO NOT OPEN THE DOOR UNTIL THE CRUSHING CYCLE IS COMPLETE AND THE SQUEEZE HEAD IS FULLY RETRACTED

*****CAUTION*****

Always turn the power off when servicing the crusher or
when not in use.

CLEANING THE EJECTOR CHUTE

***** CAUTION *****

ALWAYS TURN THE POWER OFF WHEN SERVICING
THE CRUSHER OR WHEN NOT IN USE.

The ejector chute area can be accessed for cleaning and for the clearing out cans.

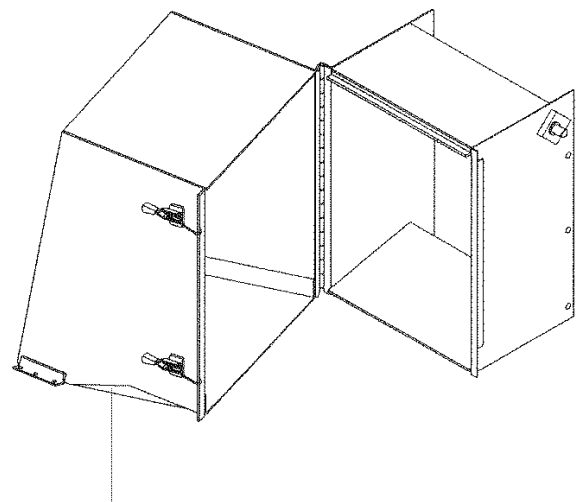
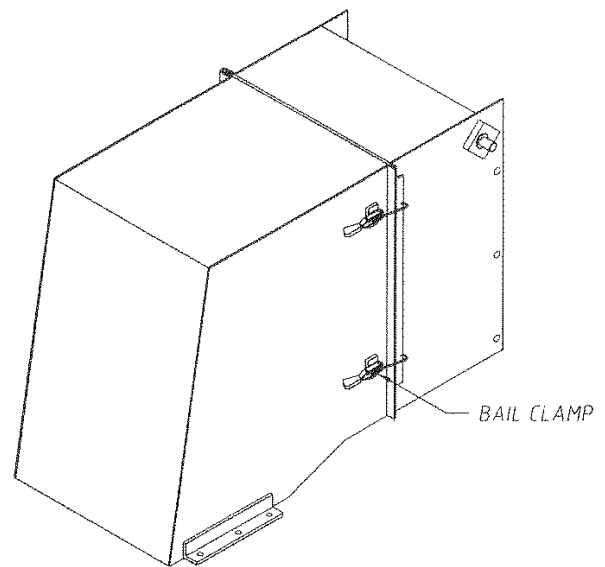
On the side of the ejector chute are 2 bail clamps (see illustration at right).

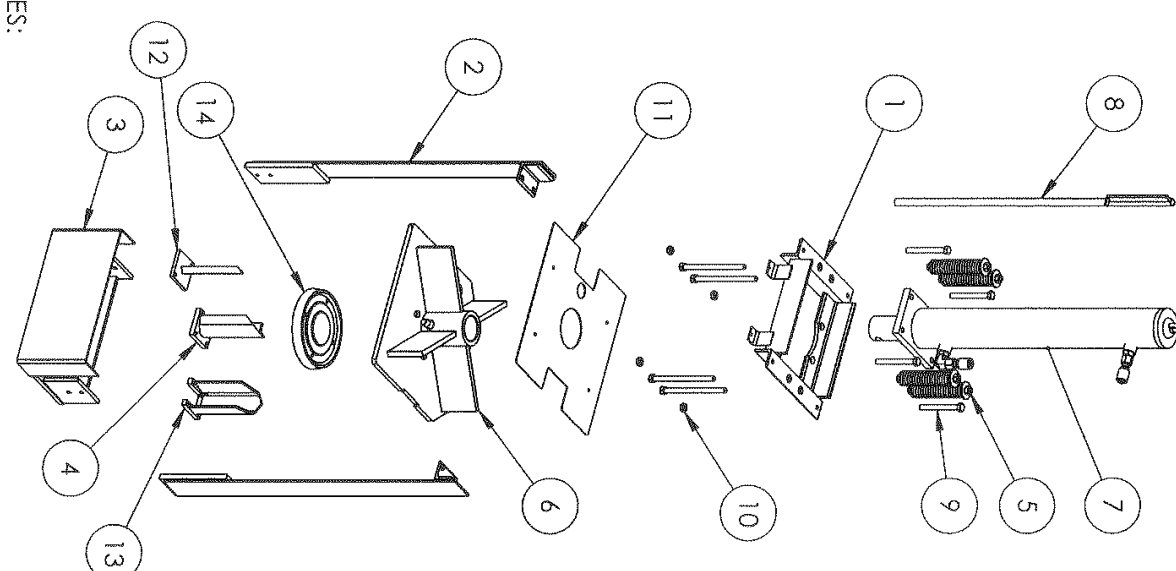
Unlatch the clamps, and swing the rear section of the chute away from the crusher.

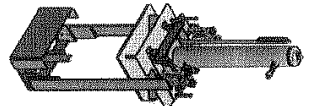
This will allow for the cleaning of the chute area and the back door.

The back door should be kept clean to prevent the buildup of paint. Paint buildup on the back door will increase the weight of the door and will lead to undue stress and premature failure of the door actuating components.

Also, paint buildup on the door will prevent the door from closing properly and will lead to excess paint leakage into the chute area, and consequently, excess paint will drip into the can collection drum.







NOTES:
1. MANDREL IS SHOWN UPSIDE DOWN FOR ILLUSTRATION PURPOSES

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	T9001583	CYLINDER CARRIAGE	1
2	T9001599	PIERCER CONNECTING STRAP	2
3	T9001595	PIERCER CARRIAGE	1
4	T9001606	PIERCER	1
5	T9001608	SPRING ASSEMBLY	4
6	T9001578	SQUEEZE HEAD	1
7	T9001674	HYDRAULIC CYLINDER	1
8	T9001614	FLAG POLE	1
9	BOLT	0.5" X 4.5"	4
10	NUT	0.5"	4
11	T9001627	PLATE, BAFFLE	1
12	T9001688	AEROSOL PIERCER	1
13	T9001692	XL PIERCER	1
14	T9001577	MANDREL	1

UNLESS OTHERWISE SPECIFIED: DRN BCA HYDRAULIC PIERCER ASSEMBLY

TOLERANCES ARE IN INCHES DATE 5/9/2014

FRACTIONAL: 1/16

ONE PLACE DECIMAL: ± .1

TWO PLACE DECIMAL: ± .02

THREE PLACE DECIMAL: ± .005

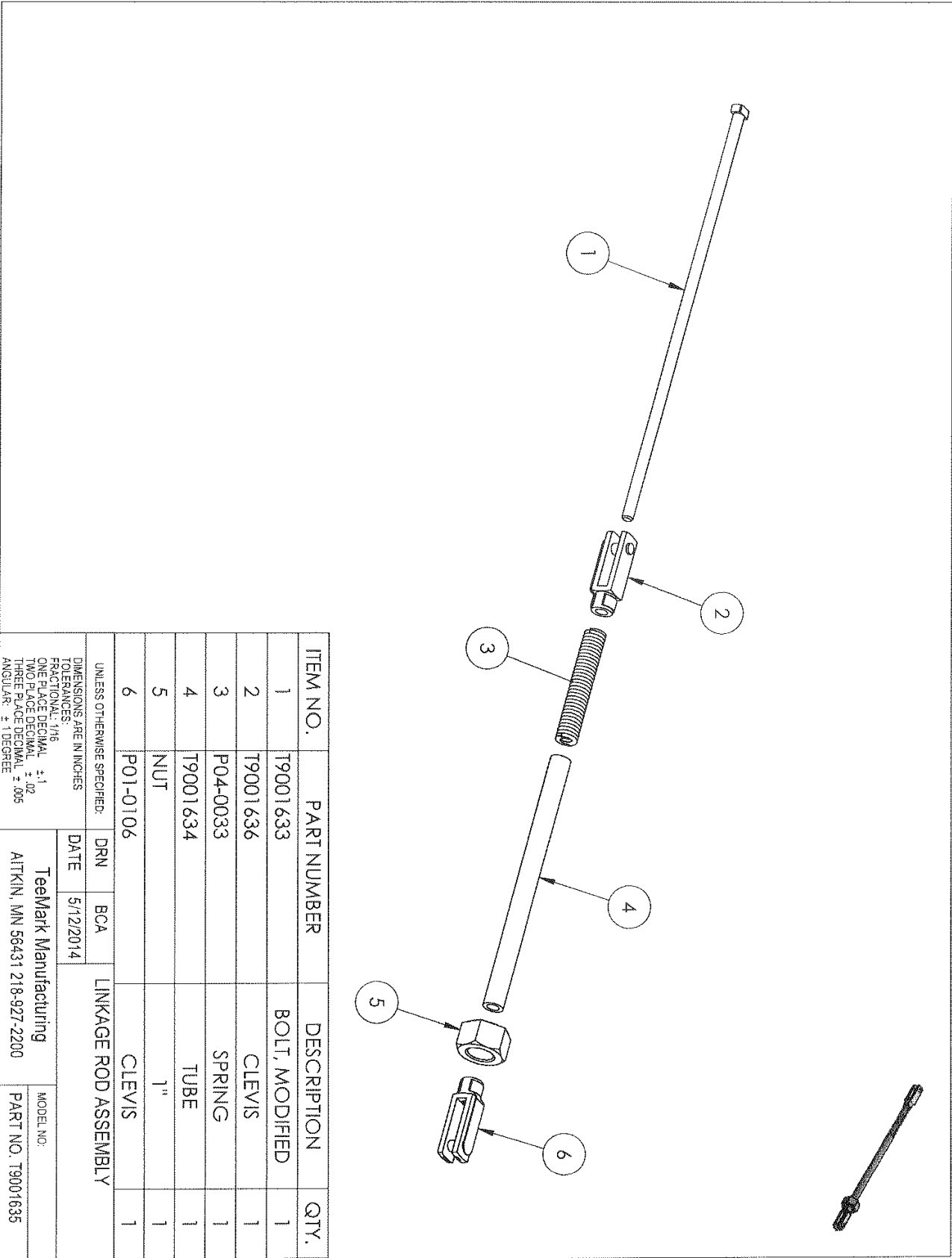
ANGULAR: ± 1 DEGREE

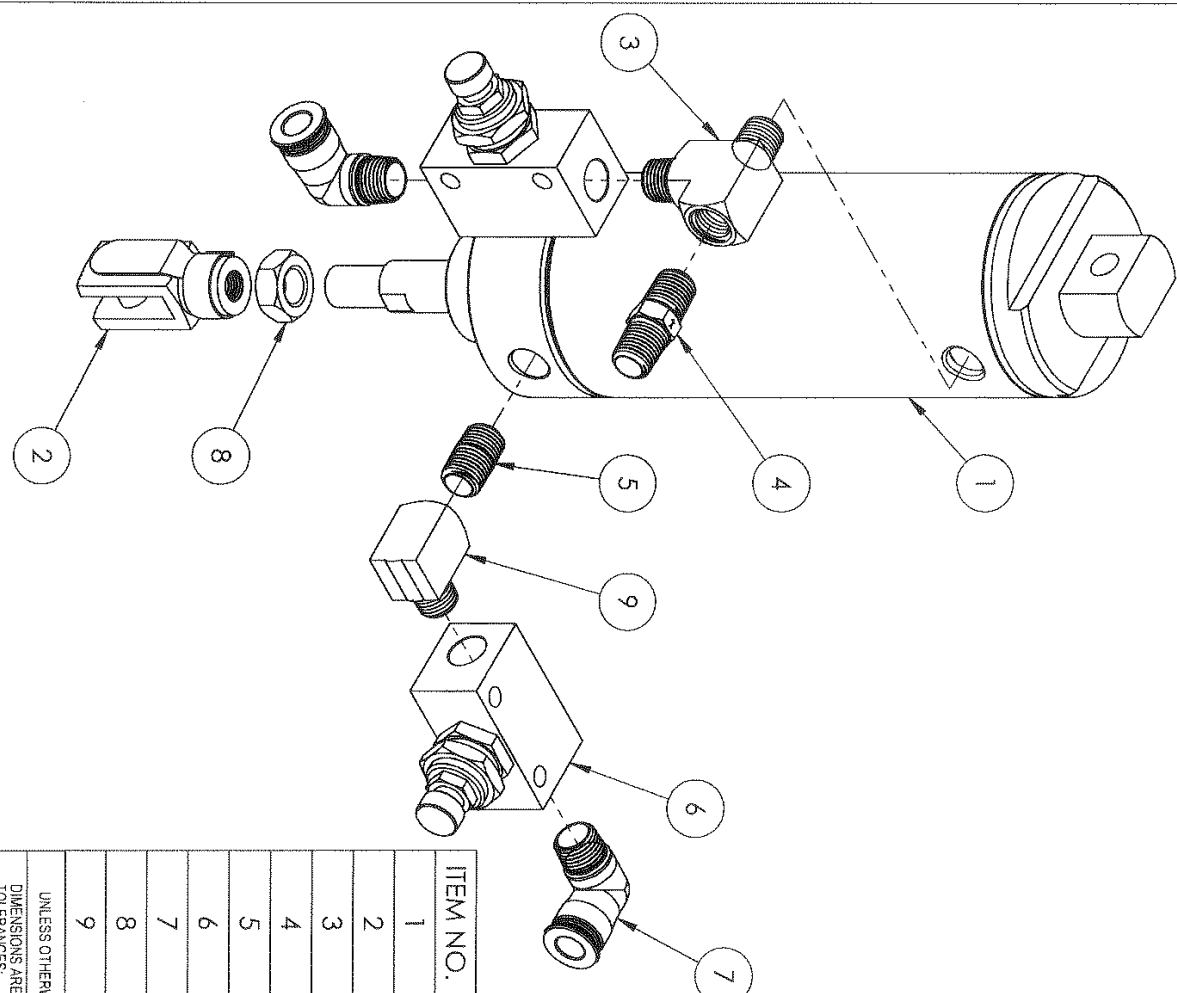
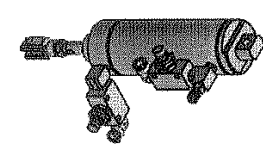
TeeMark Manufacturing

AITKIN, MN 56431 218-927-2200

MODEL NO.

PART NO. T9001610



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	P01-0038	AIR CYLINDER	1
2	P01-0109	CLEVIS	1
3	P01-0078	MALE TEE	1
4	P01-0019	MALE CHECK VALVE	1
5	P01-0082	NIPPLE	2
6	P01-0030	FLOW CONTROL VALVE	2
7	P01-0098	MALE ELBOW	2
8	NUT	0.5"	1
9	P01-0076	ELBOW	1

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES

TOLERANCES:

FRACTIONAL: 1/16

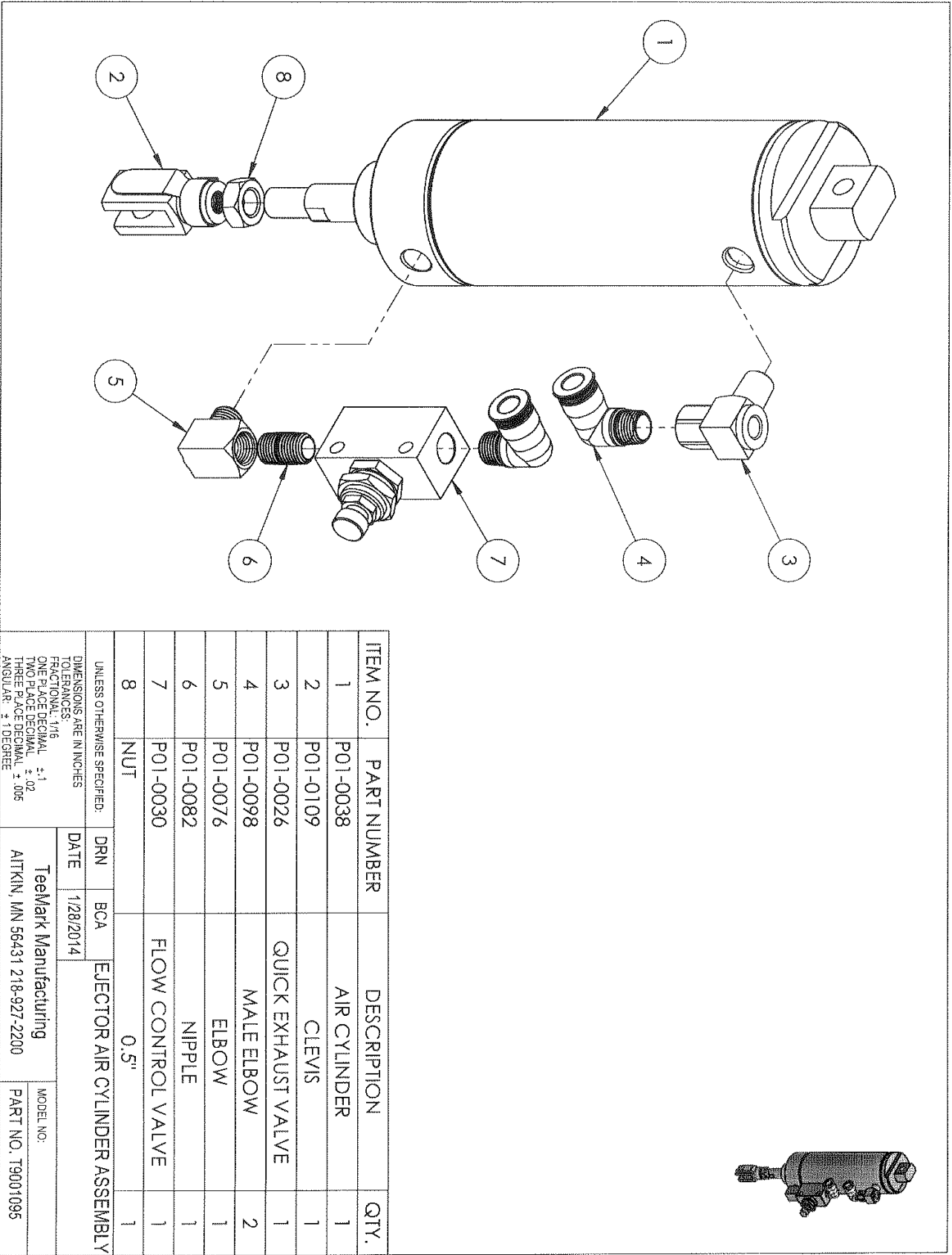
ONE PLACE DECIMAL: ±.1

TWO PLACE DECIMAL: ±.02

THREE PLACE DECIMAL: ±.005

ANGULAR: ± 1 DEGREE

TeeMark Manufacturing	MODEL NO:
AITKIN, MN 56431 218-927-2200	PART NO. T9001094



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	P01-0038	AIR CYLINDER	1
2	P01-0109	CLEVIS	1
3	P01-0026	QUICK EXHAUST VALVE	1
4	P01-0098	MALE ELBOW	2
5	P01-0076	ELBOW	1
6	P01-0082	NIPPLE	1
7	P01-0030	FLOW CONTROL VALVE	1
8	NUT	0.5"	1

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES

TOLERANCES:

FRACTIONAL: 1/16

ONE PLACE DECIMAL: ±.1

TWO PLACE DECIMAL: ±.02

THREE PLACE DECIMAL: ±.005

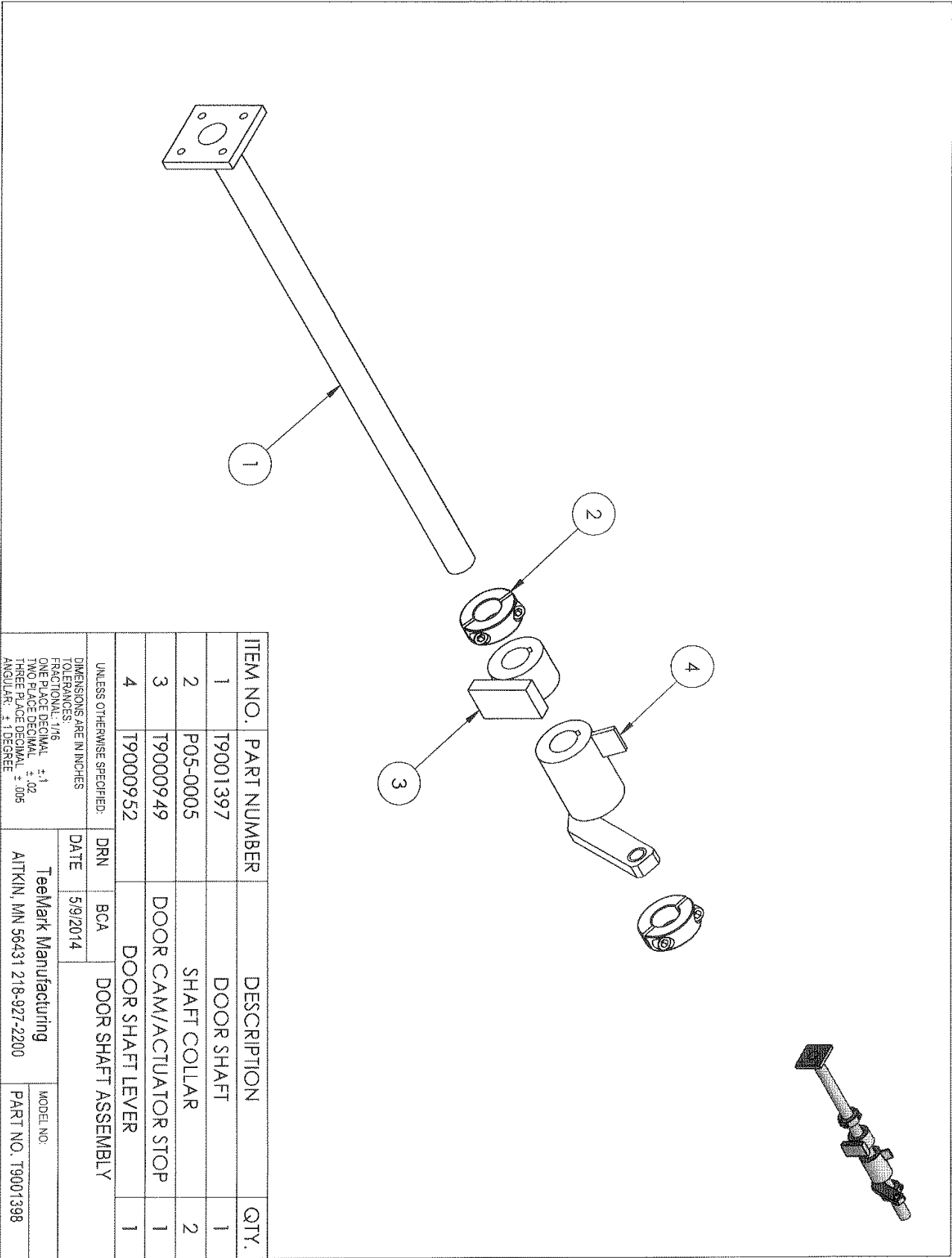
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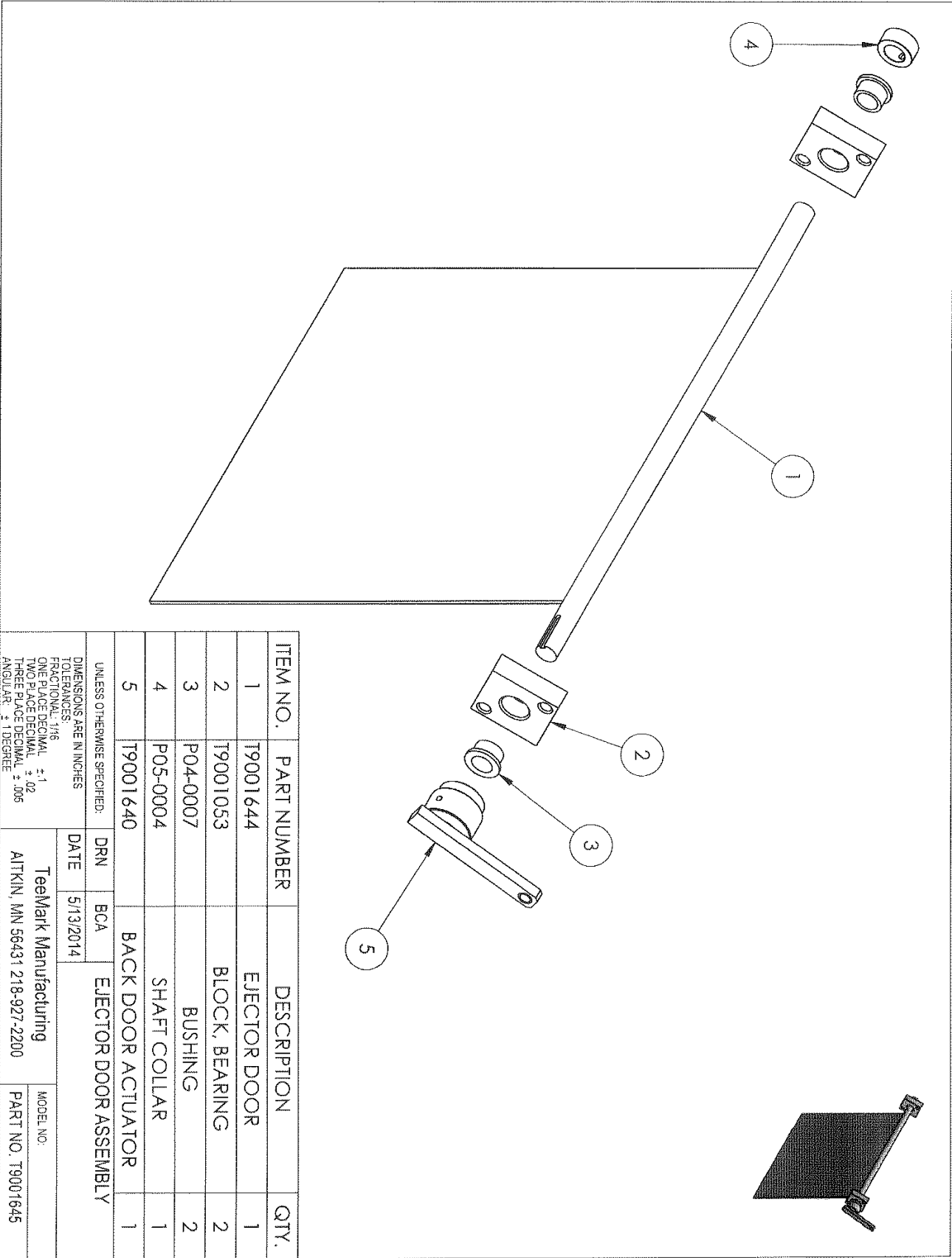
Teemark Manufacturing

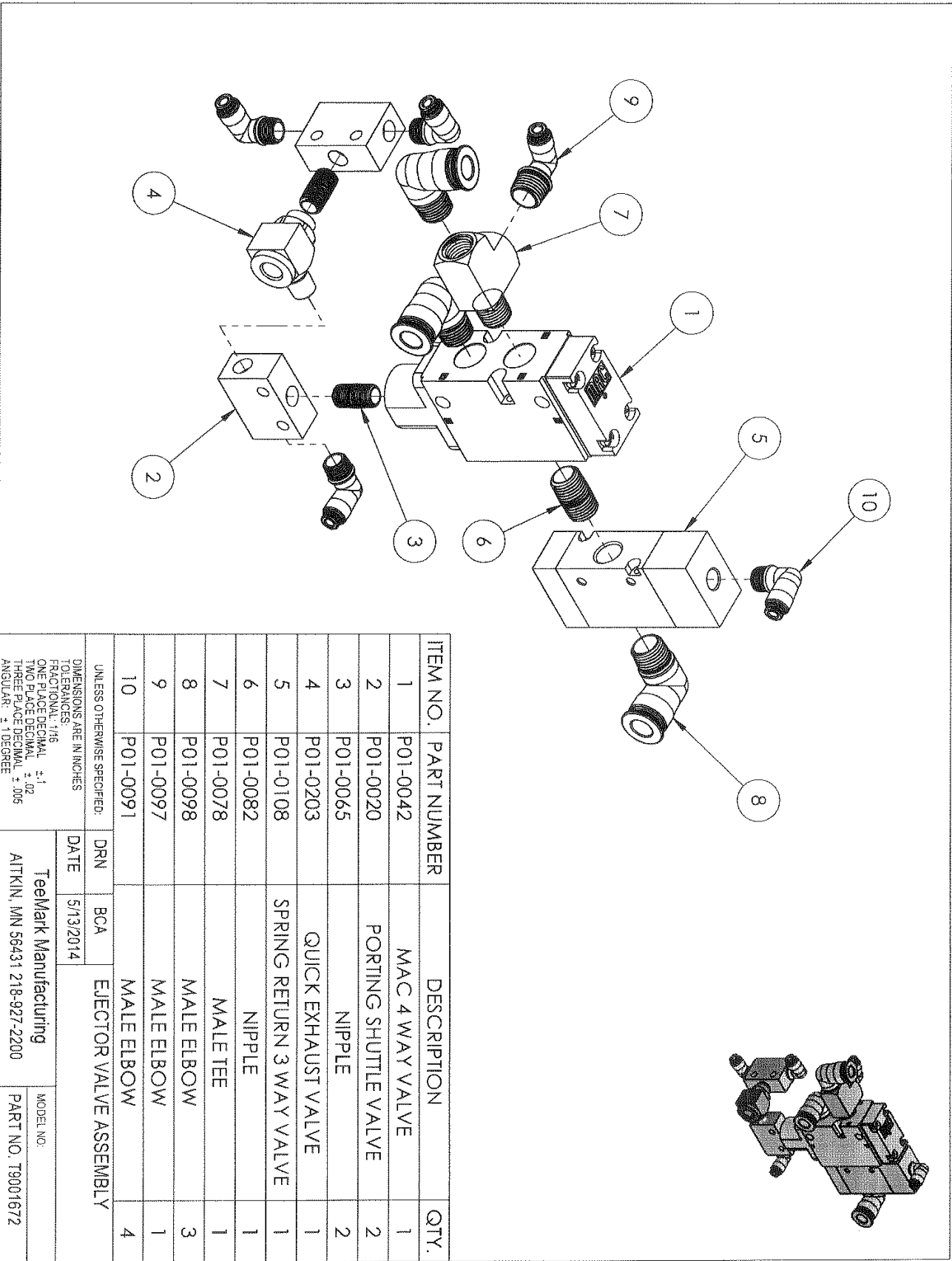
AITKIN, MN 56431 218-927-2200

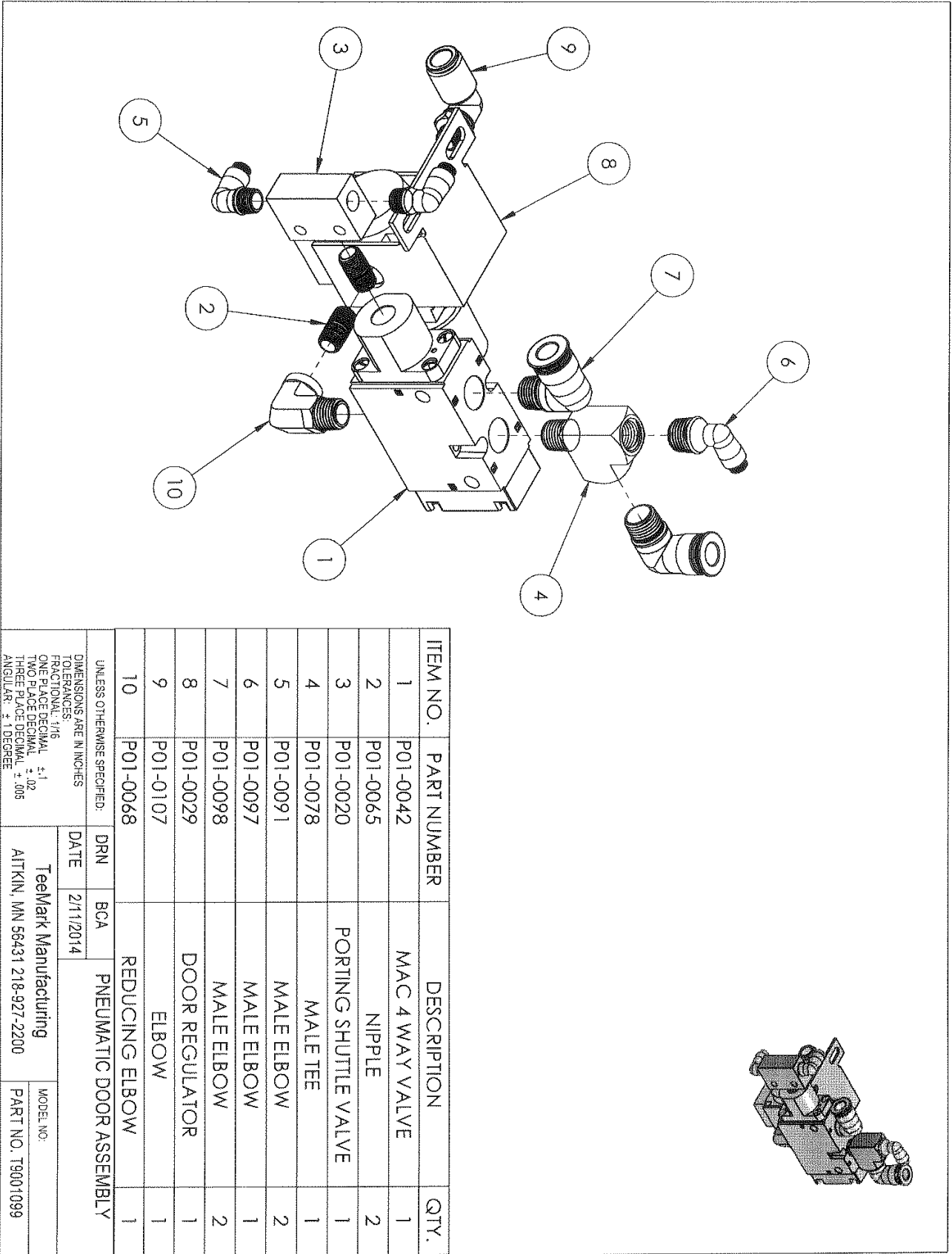
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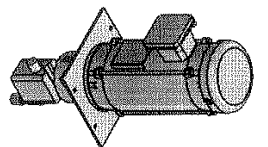
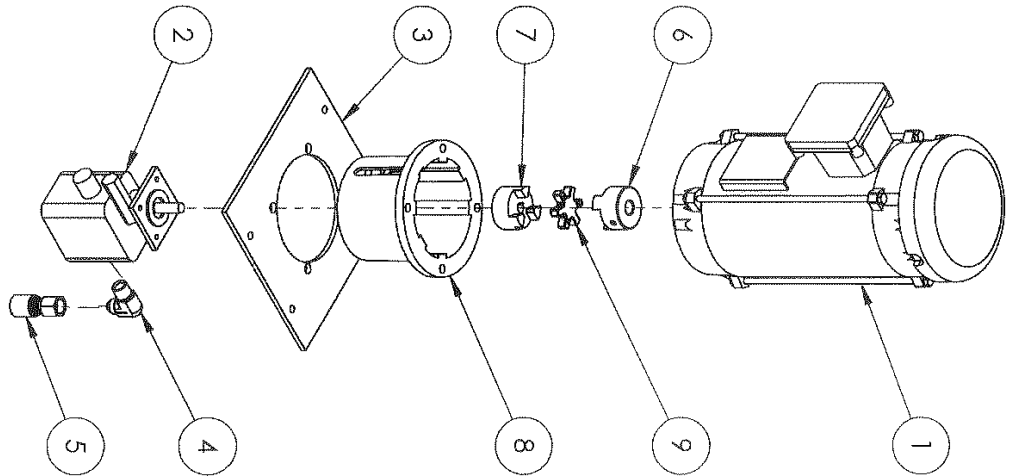
PART NO. T9001095







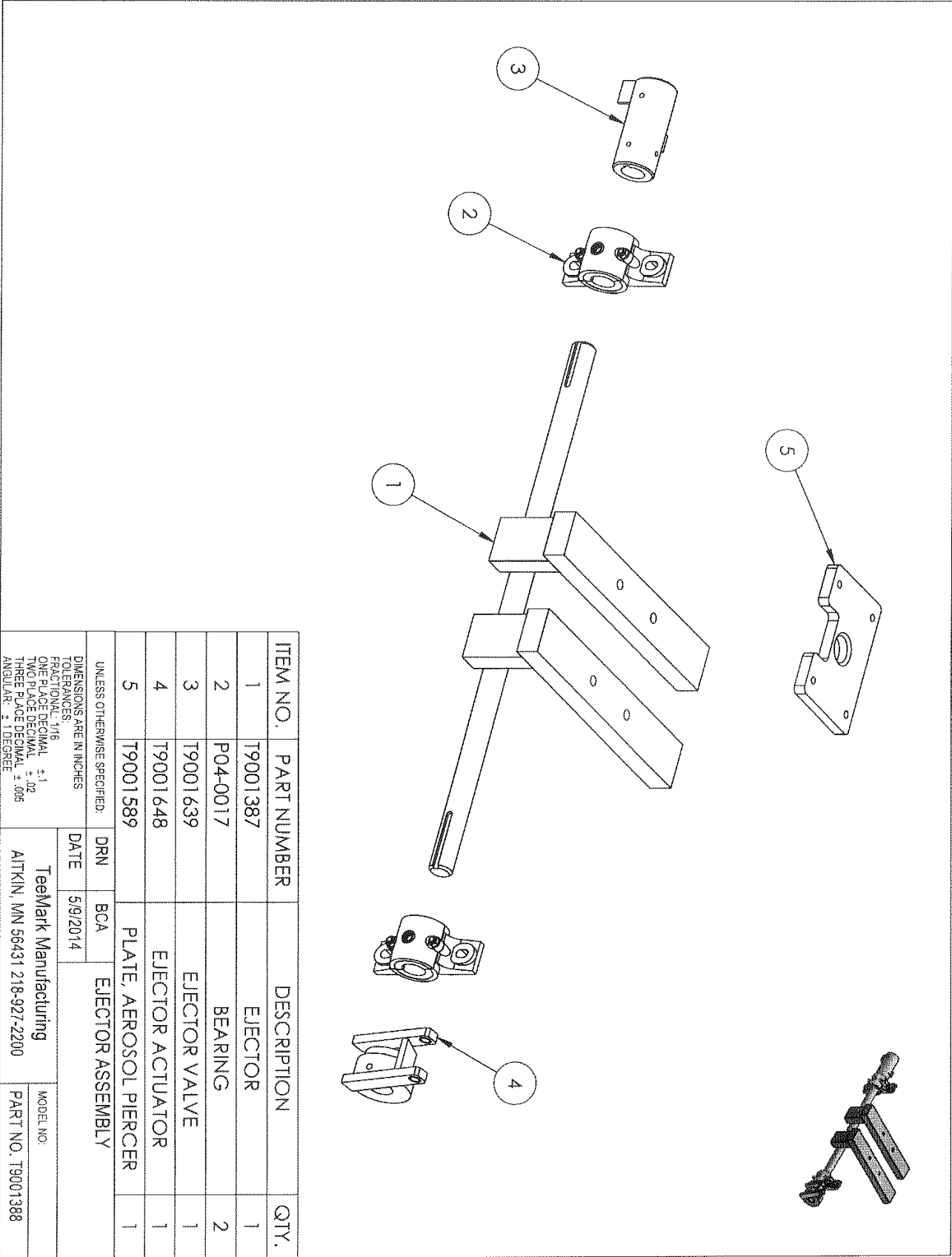




ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	T9001126	MOTOR	1
2	P02-0084	PUMP	1
3	T9001092	MOTOR MOUNT	1
4	P02-0020	ELBOW	1
5	P02-0001	HOSE COUPLING	1
6	P04-0024	COUPLING HUB	1
7	P04-0025	COUPLING HUB	1
8	P02-0348	PUMP MOTOR ADAPTER	1
9	P04-0028	COUPLING SPIDER INSERT	1

UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN INCHES
 TOLERANCES:
 FRACTIONAL: 1/16
 ONE PLACE DECIMAL: ±.1
 TWO PLACE DECIMAL: ±.02
 THREE PLACE DECIMAL: ±.005
 ANGULAR: ±1 DEGREE

DRN	BCA	DATE	MODEL NO.
TeeMark Manufacturing			PART NO. T9001119
AITKIN, MN 56431 218-927-2200			



SYMBOL	DESCRIPTION	TEEMARK P/N	P/N
ALCP	AIR LOGIC CONTROL PANEL	T9007520	N/A
LSDE	LIMIT SWITCH, DOOR OPEN	P01-0040	1113A-014
LSDR	LIMIT SWITCH, DOOR CLOSED	P01-0040	1113A-014
LSER	LIMIT SWITCH, EJECTOR RETRACTED	P01-0040	1113A-014
LSEM	LIMIT SWITCH, EJECTOR MIDWAY	P01-0040	1113A-014
LSSE	LIMIT SWITCH, EJECTOR EXTENDED	P01-0040	1113A-014
LSF	LIMIT SWITCH, FLAGPOLE	P01-0040	1113A-014
SS/FS/OFF	HYDRAULIC CYLINDER SHORT STROKE/FULL STROKE/EJECTOR OFF	P04-0150	VM151-N01-35BA
V1-1	DOOR CYLINDER VALVE	P01-0042	180001-112-0003
V1-2	EJECTOR CYLINDER VALVE	P01-0042	180001-112-0003
V1-3	DOOR INTERLOCK VALVE	P01-0042	180001-112-0003
SV-4	INLINE Y SHUTTLE VALVE	P04-0124	VR1210F-03
CD	DOOR CYLINDER	P01-0038	N/A
CE	EJECTOR CYLINDER	P01-0038	N/A
R1	AIR REGULATOR/FILTER	T9007521	N/A
RUN/STOP	PNEUMATIC ON/OFF SWITCH	P04-0147	M4L310-08 MNL
RESET	PNEUMATIC RESET SWITCH	P04-0148	VM130-N01-33A
M1	MANIFOLD	P01-0273	PC73CB-6
HC	HYDRAULIC CYLINDER	P02-0134	N/A
P1	PUMP	P02-0084	N/A
F1	HYDRAULIC FILTER	P02-0081	N/A
HMA	HYDRAULIC MANIFOLD ASSEMBLY	T9007519	N/A
PAV1	PRESSURE ACTIVATED VALVE 1	P04-0121	11007531
PAV2	PRESSURE ACTIVATED VALVE 2	P04-0120	11100031
Y1	CYCLE COUNTER	P01-0034	N/A

NOTES:
1. IF A CYCLE COUNTER (Y1) IS NOT USED PLUG PORT 28 ON AIR LOGIC CONTROL PANEL (ALCP).

_____ DENOTES 3/8" LINE
 ----- DENOTES 5/32" LINE
 _____ DENOTES HYDRAULIC LINE

UNLESS OTHERWISE SPECIFIED:		
DIMENSIONS ARE IN INCHES		
TOLERANCES:		
FRACTIONS: .125		
DECIMALS: .005		
HOLE PLACES: .005		
ANGLES: ± .0625°		
DRN:	BCA	S-6P/JVC HYDRAULIC/PNEUMATIC SCHEMATIC
DATE:	1/11/2018	
TeeMark Manufacturing Aitkin, MN 56431 (218)927-2200		MODEL: GEN III PART NO: TH1000023

SHEET 2 OF 2

SEQUENCE OF EVENTS

INITIAL STATE

Crusher Cylinder (HC) Retracted

- HC Cycle Select valve sets “Flagged LS”
 - Actuated Limit Sw ... Short Stroke LSF-1 or Full Stroke LSF-2

Ejector Cylinder (CE) Retracted

- Actuates Ejector Retracted Limit Sw LSER

Door Open Cylinder (CD) Extended

- Actuates Door Open Limit Sw LSDE

Run/Stop PB in RUN mode

MACHINE CYCLE – EJECTOR ON

1. Operator selects Short Stroke or Full Stroke via Cycle selector valve HC
2. Operator selects Ejector “On” using selector valve
3. Operator loads can
4. Operator Closes Door, releases Door Open Limit Sw LSDE
 - Door Cylinder (CD) fully Closed & Retracted
 - Actuates Door Closed Limit Sw LSDR
 - Activates HC-Valve pilot AP1
5. Crusher Cylinder (HC) Extends, releases flagged limit sw LSF-1 or LSF-2
6. Crusher Cylinder (HC) fully Extended
 - Actuates hydraulic pressure switch/valve PAV.1 (set @ desired crusher extend pressure)
 - Releases HC-Valve pilot AP1
 - Activates HC-Valve pilot AP2
7. Crusher Cylinder (HC) Retracts, releases hydraulic pressure switch/valve PAV.1
8. Crusher Cylinder (HC) continues to retract
 - Actuates “Flagged” Limit Sw ... Short Stroke LSF-1
 - or Actuates “Flagged” Limit Sw ... Full Stroke LSF-2
 - or Actuates hydraulic pressure switch/valve PAV.2 (set @ 1000psi crusher return pressure)
 - Release HC-Valve pilot AP2
 - Crusher cylinder (HC) stops
 - Releases hydraulic pressure switch/valve PAV.2
 - Ejector Cylinder (CE) Starts Extend, releases limit sw LSER
9. Ejector Cylinder (CE) Extended, actuates limit sw LSEE
 - Ejector Cylinder (CE) Starts Retract, releases limit sw LSEE
10. Ejector Cylinder (CE) Retracts, momentary actuates limit sw LSEM
 - Door Cylinder (CD) Extends, releases limit sw LSDR
11. Door Cylinder (CD) fully Extended, actuates Door Open limit sw LSDE
 - Door Cylinder (CD) Extend pressure is released.
12. Ejector Cylinder (CE) fully Retracted, actuates limit sw LSER
13. Cycle Complete
14. Repeat at step 1 above

MACHINE CYCLE – EJECTOR OFF

1. Operator selects “Flagged LS” Short or Full Stroke using HC Cycle Select valve
2. Operator selects Ejector “Off” using selector valve
3. Operator loads can
4. Operator Closes Door, releases Door Open Limit Sw LSDE
 - Door Cylinder (CD) fully Closed & Retracted
 - Actuates Door Closed Limit Sw LSDR
 - Activates HC-Valve pilot AP1
5. Crusher Cylinder (HC) Extends, releases flagged limit sw LSF-1 or LSF-2
6. Crusher Cylinder (HC) fully Extended
 - Actuates hydraulic pressure switch/valve PAV.1 (set @ desired crusher extend pressure)
 - Releases HC-Valve pilot AP1
 - Activates HC-Valve pilot AP2
7. Crusher Cylinder (HC) Retracts, releases hydraulic pressure switch/valve PAV.1
8. Crusher Cylinder (HC) continues to retract
 - Actuates “Flagged” Limit Sw ... Short Stroke LSF-1
 - or Actuates “Flagged” Limit Sw ... Full Stroke LSF-2
 - or Actuates hydraulic pressure switch/valve PAV.2 (set @ 1000psi crusher return pressure)
 - Release HC-Valve pilot AP2
 - Crusher cylinder (HC) stops
 - Releases hydraulic pressure switch/valve PAV.2
 - Door Cylinder (CD) Extends, releases limit sw LSDR
9. Door Cylinder (CD) fully Extended, actuates Door Open limit sw LSDE
 - Door Cylinder (CD) Extend pressure is released.
10. Cycle Complete
11. Repeat at step 1 above

MACHINE CYCLE – STOP / RESET

Run/Stop Select Valve in STOP mode (Pushed)

- Exhausts pilot supply to “V2” Ejector Air Supply Valve & HC Valve Pilots AP1/AP2
- Exhausts Control Air supply to Air Logic modules and relay circuit
- Exhausts all air pilot signals
- Enables Reset PB

RESET PB

- Air Logic modules are reset to initial state for new Cycle start mode
- Activates HC-Valve pilot AP2
 - HC cylinder retracts while holding RESET PB
 - Note: HC cylinder will only retract when Door is Closed
 - Note: Anytime operator releases RESET PB the HC cylinder will stop
- Operator must manually open Door prior to returning to RUN mode
 - System will not start a new cycle until the door has been opened after a reset condition.