

# OWNER'S MANUAL



## ***1 1/2 YD CLAMSHELL BUCKET***

OPERATION, MAINTENANCE, AND PARTS

**CUSTOMER:** \_\_\_\_\_

**CLAMSHELL MODEL:** 1 1/2 – 106D0430 **SERIAL:** \_\_\_\_\_

**MACHINE MAKE/MODEL:** \_\_\_\_\_

**MACHINE SERIAL:** \_\_\_\_\_

**Parts / Product Support**

Toll Free (North America) 1-800-208-2217

Phone (250) 286-9500 | Fax (250) 286-9501

**Factory / Head Office**

5791 Duncan Bay Road

Campbell River, BC. V9H 1N6

[www.tmarequipment.com](http://www.tmarequipment.com)

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# T-MAR Attachments – Limited Warranty Certificate

**General Provisions** – T-MAR Industries Ltd. (hereinafter referred to as “T-MAR”) warrants its attachments (hereinafter referred to as the “Product”) against defects in material or factory workmanship, subject to all terms and conditions stated herein, to the T-MAR Authorized Dealer (hereinafter referred to as the “Dealer”).

**Warranty Coverage** – All parts of the T-MAR product covered by this warranty which proves to be defective in material or workmanship. This warranty applies to all used, maintained, and serviced as intended, in compliance with/as directed in all applicable guidelines and instructions as set forth in the product manual. This warranty applies for a period of twelve (12) months, from the first day in service, so long as the first day in service is not later than eighteen (18) months from delivery to the dealer.

The warranty includes the labor performed by T-MAR or T-MAR Dealer. Proof of defect must be submitted within ten (10) days from the date of failure or defect discovery and any claim must be submitted within thirty (30) days from the date of submission of proof of failure or defect. The warranty extends only to the original purchaser (hereinafter referred to as the “Buyer”) of the Product and not to other purchasers or transferees unless agreed to in writing by T-MAR.

**What is Not Warranted** – T-MAR is not responsible for the following: (1) used Products; (2) defects caused by an alteration or modification of the Product not approved in writing by T-MAR; (3) depreciation or damage caused by normal wear; lack of reasonable and proper maintenance; failure to meet/comply with specifications and guidelines outlined by T-MAR; misuse; lack of proper protection during storage; or accident; (4) normal maintenance parts, fluids and service; (5) labor in diagnosis of a breakdown; (6) any defects resulting from the modification of factory pre-set pressures; and (7) expenses for miles or kilometers travelled.

**Unintended or Unusual Use or Operation of the Product** – The Product is designed and manufactured by T-MAR for use in certain specific applications, by properly qualified and trained personnel, in compliance with T-MAR’s manuals and all controlling federal, provincial and industry guidelines and regulations. Any other such use(s) or operation of the product shall be approved beforehand in writing by T-MAR.

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**Warranty Service** – In the event of any failure caused by a defect in material or in factory workmanship covered by this warranty, the Buyer shall: (1) notify T-MAR of the nature of the problem without a delay; and (2) stop using or operating the Product, unless authorized in writing by T-MAR. All warranty service shall be performed at the point of purchase of the Product either by T-MAR or a T-MAR Dealer using parts provided by T-MAR.

If the product was purchased directly from T-MAR, the Buyer shall return the Product or the defective parts “prepaid” to T-MAR without delay. If T-MAR deems that the parts are defective, it shall repair or replace the parts.

If the product was purchased from a Dealer, T-MAR shall provide the replacement parts to the Dealer. The Dealer shall install the parts and return the replaced parts to T-MAR, “prepaid” by the Buyer, within thirty (30) days of the repairs. The parts and their installation shall be without charge to the Buyer providing that the replaced parts are proven defective to T-MAR’s satisfaction. In all cases, all costs related to the transportation of parts or the Product to and from T-MAR or the Dealer, any premium charged for overtime labor requested by the Buyer or for any service and/or maintenance shall be the sole responsibility of the Buyer.

All parts replaced under warranty shall remain the property of T-MAR.

If the buyer fails to follow any of the above procedures or if the parts are not proven to be defective to T-MAR’s satisfaction, the Buyer shall not benefit from the warranty.

**Limitation of Implied Warranties and Other Remedies** – To the extent permitted by law, T-MAR does not make any warranties, representations or promises as to the quality, performance, or freedom from defect of the Product covered by this warranty. Implied warranties of merchantability and fitness for a particular purpose, to the extent applicable shall be limited in duration to the applicable period of warranty set forth herein. The Buyer’s only remedies of any warranties implied by a provincial and/or state law as hereby limited, the foregoing warranty is exclusive and replaces all other warranties, guarantees, agreements and similar obligations of T-MAR with respect to the repair or replacement of any part. In no event shall T-MAR be liable for incidental or consequential damages.

**No Dealer Warranty** – The Dealer has no authority to make any representation or promise on behalf of T-MAR, or to modify the terms or limitations of the warranty in any way.

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# T-MAR Spare Parts (New & Remanufactured) – Limited Warranty Certificate

**General Provisions** – T-MAR Industries Ltd. (hereinafter referred to as “T-MAR”) warrants its Spare Parts (hereinafter referred to as the “Product”) against defects in material or factory workmanship, subject to all terms and conditions stated herein, to the T-MAR Authorized Dealer (hereinafter referred to as the “Dealer”).

**Warranty Coverage** – Structural component(s) of the T-MAR Product covered by this warranty which prove(s) to be defective in material or workmanship. This warranty applies to T-MAR manufactured components used, maintained and serviced as intended, in compliance with/as directed in all applicable guidelines and instructions as set forth in the product manual. This warranty applies for the period of six (6) months from the date of purchase. Proof of defect must be submitted within ten (10) days from the date of failure or defect discovery and any claim must be submitted within thirty (30) days from the date of submission of proof of failure/defect. The warranty extends only to the original purchaser (hereinafter referred to as the “Buyer”) of the Product and not to other purchasers or transferees unless agreed to in writing by T-MAR.

**What is Not Warranted** – T-MAR is not responsible for the following: (1) used Products; (2) defects caused by an alteration or modification of the Product not approved in writing by T-MAR; (3) depreciation or damage caused by normal wear; lack of reasonable and proper maintenance; failure to meet/comply with specifications and guidelines outlined by T-MAR; misuse; lack of proper protection during storage; or accident; (4) normal maintenance parts, fluids and service; (5) labor in diagnosis of a breakdown; (6) any defects resulting from the modification of factory pre-set pressures; and (7) expenses for miles or kilometers travelled.

**Unintended or Unusual Use or Operation of the Product** – The Product is designed and manufactured by T-MAR for use in certain specific applications, by properly qualified and trained personnel, in compliance with T-MAR’s manuals and all controlling federal, provincial/state and industry guidelines and regulations. Any other such use(s) or operation of the product shall be approved beforehand in writing by T-MAR.

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**Warranty Service** – In the event of any failure caused by a defect in material or in factory workmanship covered by this warranty, the Buyer shall: (1) notify T-MAR of the nature of the problem without a delay; and (2) stop using or operating the Product, unless authorized in writing by T-MAR. All warranty service shall be performed at the point of purchase of the Product either by T-MAR or by a Dealer using parts provided by T-MAR.

If the product was purchased directly from T-MAR, the Buyer shall return the Product or the defective parts “prepaid” to T-MAR without delay. If T-MAR deems that the parts are defective, it shall repair or replace the parts.

If the product was purchased from a Dealer, T-MAR shall provide the replacement parts to the Dealer. The Dealer shall install the parts and return the replaced parts to T-MAR, “prepaid” by the Buyer, within thirty (30) days of the repairs. The parts and their installation shall be without charge to the Buyer providing that the replaced parts are proven defective to T-MAR’s satisfaction. In all cases, all costs related to the transportation of parts or the Product to and from T-MAR or the Dealer, any premium charged for overtime labor requested by the Buyer or for any service and/or maintenance shall be the sole responsibility of the Buyer.

All parts replaced under warranty shall remain the property of T-MAR.

If the buyer fails to follow any of the above procedures or if the parts are not proven to be defective to T-MAR’s satisfaction, the Buyer shall not benefit from the warranty.

**Limitation of Implied Warranties and Other Remedies** – To the extent permitted by law, T-MAR does not make any warranties, representations or promises as to the quality, performance, or freedom from defect of the Product covered by this warranty. Implied warranties of merchantability and fitness for a particular purpose, to the extent applicable shall be limited in duration to the applicable period of warranty set forth herein. The Buyer’s only remedies of any warranties implied by a provincial and/or state law as hereby limited, the foregoing warranty is exclusive and replaces all other warranties, guarantees, agreements and similar obligations of T-MAR with respect to the repair or replacement of any part. In no event shall T-MAR be liable for incidental or consequential damages.

**No Dealer Warranty** – The Dealer has no authority to make any representation or promise on behalf of T-MAR, or to modify the terms or limitations of the warranty in any way.

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# T-MAR INDUSTRIES LTD.

## FORESTRY ATTACHMENTS WARRANTY REGISTRATION

**IMPORTANT:**

*This form must be completed and on file at T-MAR for warranty claims to be considered –  
EMAIL TO: [warranty@t-mar.com](mailto:warranty@t-mar.com)*

**ATTACHMENT**

MODEL NUMBER:	SERIAL NUMBER:
CARRIER MAKE & MODEL:	SERIAL NUMBER:
<b>DELIVERY/FIRST USE DATE:</b>	

**DEALER**

NAME:	BRANCH:
CONTACT:	PHONE NUMBER:

**OWNER**

NAME:	CITY:
CONTACT:	PHONE NUMBER:

**DEALER ACKNOWLEDGEMENT**

Dealer: The Warranty Registration, signed by the End User, must be submitted within 30 **days** of the Delivery Date to register the attachment in the T-MAR warranty system. Along with a copy of Bill of Sale, Rental agreement or other supporting document. Claims will not be considered without registration. The Warranty period begins on first use or delivery to customer.

**OWNERS ACKNOWLEDGEMENT**

I confirm that the above identified attachment, was delivered complete with:

Warranty Certificate \_\_\_\_  
Operator, Maintenance & Parts Manual \_\_\_\_

The safe and proper operation and maintenance of the attachment and the correct use of all controls has been completely explained including how to flush the system before installing the attachment.

I have read and understand both the Certificate and the Registration.

Customer Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Print Name: \_\_\_\_\_

## FLUSH SYSTEM BEFORE CONNECTING GRAPPLE

The following steps will replenish the hydraulic lines with fresh oil and deliver any contaminants to the return filter on the machine. This procedure should be performed any time a new attachment is fitted on a machine.

1. Connect the open and close hoses together at the tip of the stick.
2. Run the open or close function for thirty (30) seconds in one direction.
3. Repeat steps 1 & 2 with the rotation hoses.

Additional steps should be taken when a failed hydraulic component is replaced on an attachment. In this case, the lines should be looped where they would normally attach to the failed component, such that the entire circuit is flushed back to tank before the replacement component is installed. If a failed component introduced metal contamination to the open-close system, both cylinders should also be disassembled and thoroughly cleaned to remove and accumulated contamination.

**SYSTEM CONTAMINATION IS THE LEADING CAUSE OF COMPONENT FAILURE. MOST OIL IN THE GRAPPLE CIRCUIT DOES NOT CIRCULATE BACK TO THE TANK DURING REGULAR OPERATION.**

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## SAFE OPERATION

- **Operators must read and understand the information provided in this manual before attempting to operate this attachment.**
- **Failure to follow these instructions may void warranty and may result in equipment damage and/or injury or death.**
- **This attachment and the machine to which it is attached should only be operated by trained personnel who are familiar with the use of this type of equipment.**
- **Do not lift, carry or suspend loads near people or equipment, or in a way that a dropped load could strike a person or equipment.**
- **Do not operate this equipment near overhead powerlines.**
- **Do not operate this equipment under the influence of drugs or alcohol.**
- **The attachment and base machine shall be inspected before every use. Any deficiencies found during inspection that could affect the safe use of the system shall be corrected before the machine is used.**
- **This attachment is designed for excavation and road building. The attachment is not designed for any other use.**



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## INSPECTION

- **The attachment and base machine shall be inspected before every use. Any deficiencies found during inspection that could affect the safe use of the system shall be corrected before the machine is used.**
- **Check all surfaces and weld joints for signs of cracks or deformation.**
- **Ensure that all guards are installed.**
- **Check that all fasteners are present and tight.**
- **Inspect all pin bores for bushing wear. Signs of wear include excess clearance between the pin and the bushing or an oval shaped bore.**
- **Ensure that all grease fittings are present, undamaged and functional.**
- **Inspect the hydraulic fittings and components for any signs of leakage.**
- **Inspect the hydraulic hoses for wear or deformation.**

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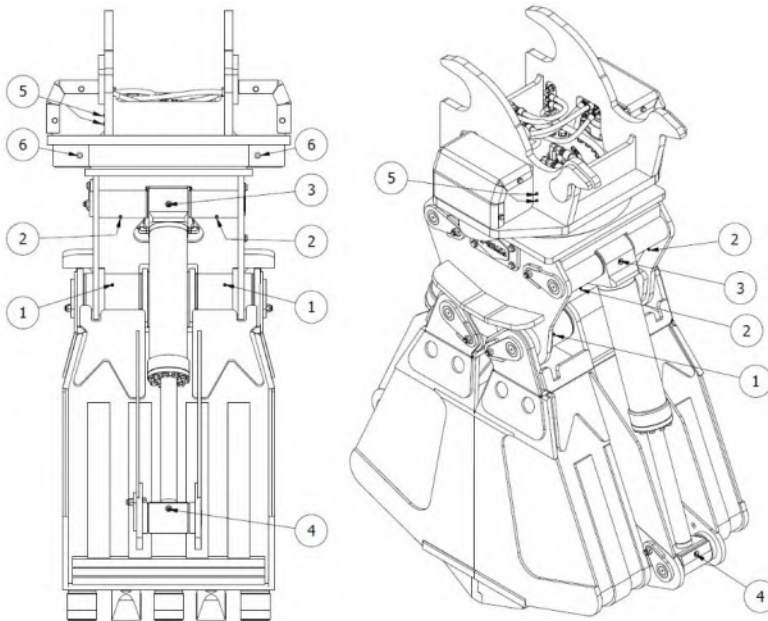
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# MAINTENANCE

- Regular maintenance is essential to the longevity and safe use of this attachment. Failure to follow these instructions voids warranty and may result in equipment damage, injury, or death.
- Never attempt a repair that you are not qualified to perform or do not fully understand.
- It is recommended that only T-MAR genuine parts are used in the repair and maintenance of this attachment. Use of unapproved components may void warranty.
- All components must be lubricated with the specified lubricant at the intervals in the below chart:



LOCATION	QUANTITY	LUBRICANT	FREQUENCY
1- BUCKET PINS	4 FITTINGS	MOLY EP GREASE	TWICE DAILY
2- CYLINDER PIN BOSSES	4 FITTINGS	MOLY EP GREASE	WEEKLY
3- UPPER CYLINDER PINS	2 FITTINGS	MOLY EP GREASE	TWICE DAILY
4- LOWER CYLINDER PINS	2 FITTINGS	MOLY EP GREASE	TWICE DAILY
5- ROTATE BEARING	2 FITTINGS	MOLY EP GREASE	DAILY
6- PINION GEARS	2 PORTS	DRY MOLY SPRAY	TWICE DAILY

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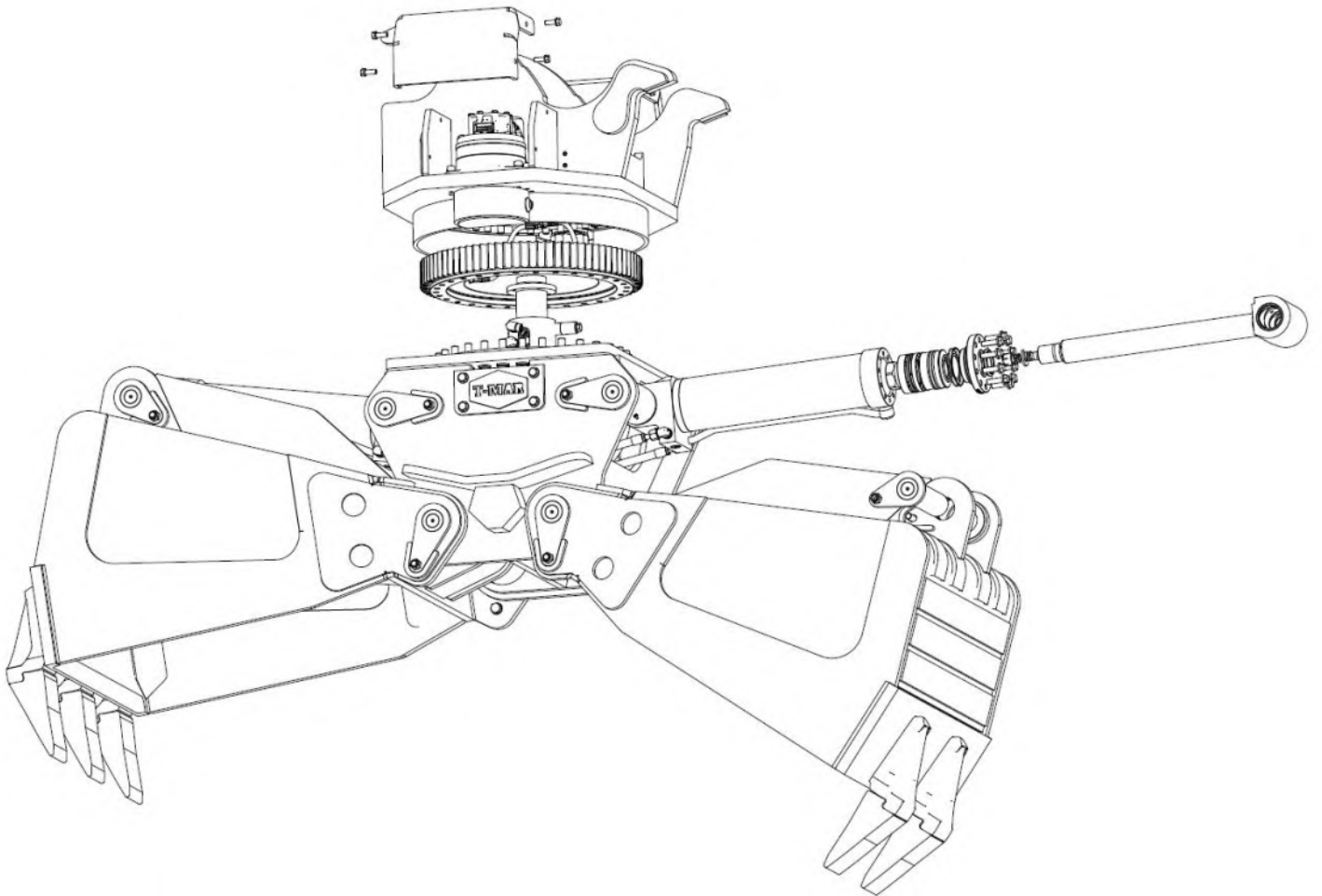
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# PARTS MANUAL PAGES

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**1 1/2 YD Clamshell Bucket Assembly**

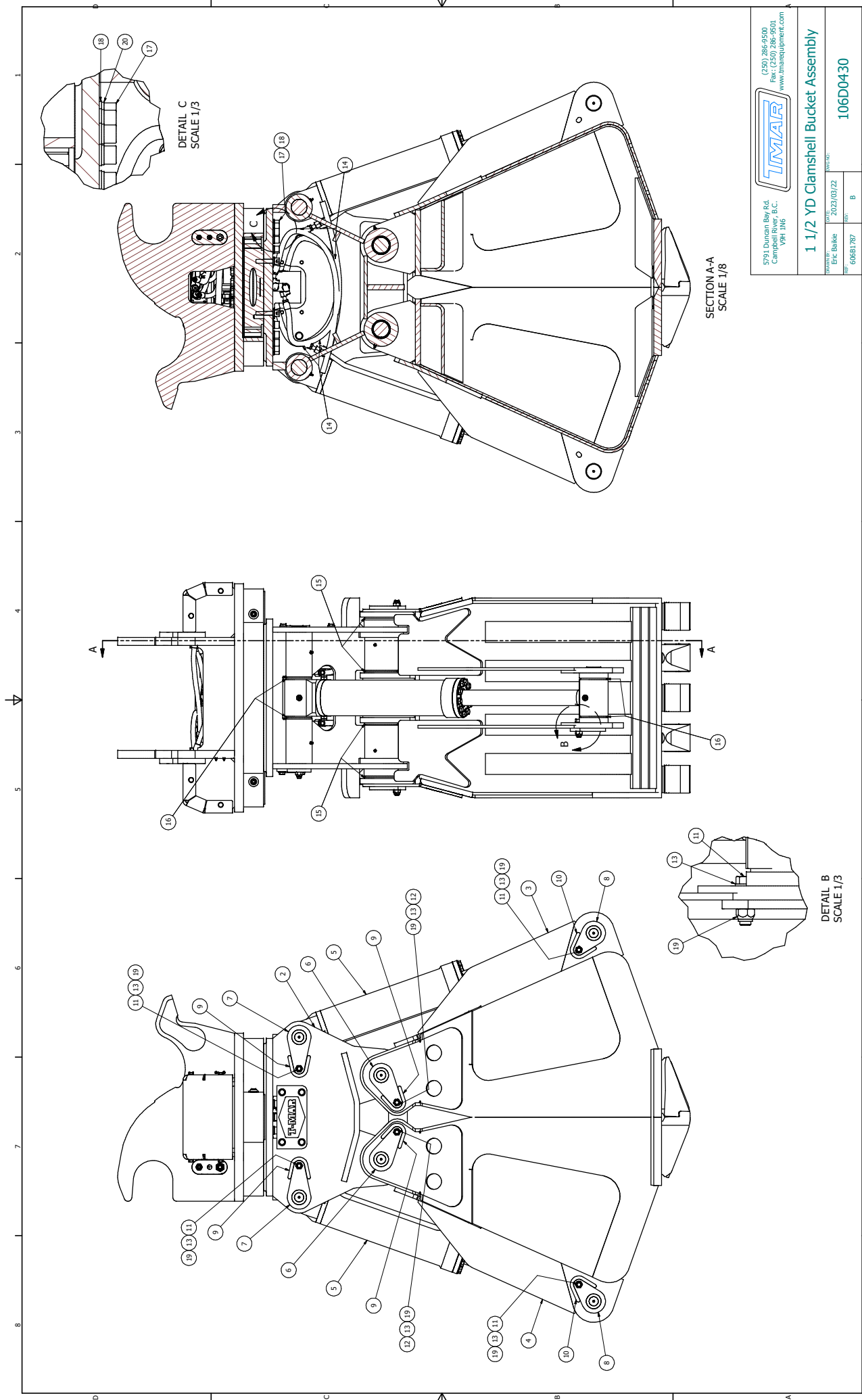
**Ref. No:**


**606B1787**

**Rev. 0**

**Note: All fasteners are steel, and grade 8/10.9 minimum, unless explicitly noted.**

<b>Item</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty.</b>
---	106D0430	1 1/2 YD Clamshell Bucket Assembly	---
1	206D0417	Tophead Assembly	1
2	206D0433	Midsection Assembly	1
3	306D0429	Bucket Weldment, 2 Tooth	1
4	306D0432	Bucket Weldment, 3 Tooth	1
5	270C0106	Cylinder Assembly	2
6	340B0316	Leg Pin	4
7	340B0320	Upper Cylinder Pin	2
8	340B0321	Lower Cylinder Pin	2
9	406B1696	Pin Retainer	6
10	406B1695	Pin Retainer	2
11	SHP.40783	HEX HD CAPSCREW M20 X 2.5 X 75	4
12	SHP.11113782	HEX HD CAPSCREW M20 X 2.5 X 85	4
13	SHP.11103688	FLAT WASHER M20, HARD	8
14	72A6050 CL36	Hose, Open/Close R13-JS-JS-10-10-10 CL36	4
15	306B1764	Machined Leg Shim	8
16	306B1765	Machined Cylinder Shim	8
17	SHP.39767	HEX SOCKET HD CAPSCREW M22 X 2.5 X 90	30
18	SHP.34884	FLAT WASHER M22, THRU HARD	30
19	SHP.1140187	NYLOCK HEX NUT M20 X 2.5	8
20	SHP.40259	LOCKWASHER M22	30




  
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**1 1/2 YD Clamshell Bucket Assembly**  
 DATE: 2022/03/22  
 DRAWN BY: Eric Bekke  
 PART NO: 106D0430  
 REV: 60681792

Parts Department: 1-800-208-2217

**Tophead Assembly**

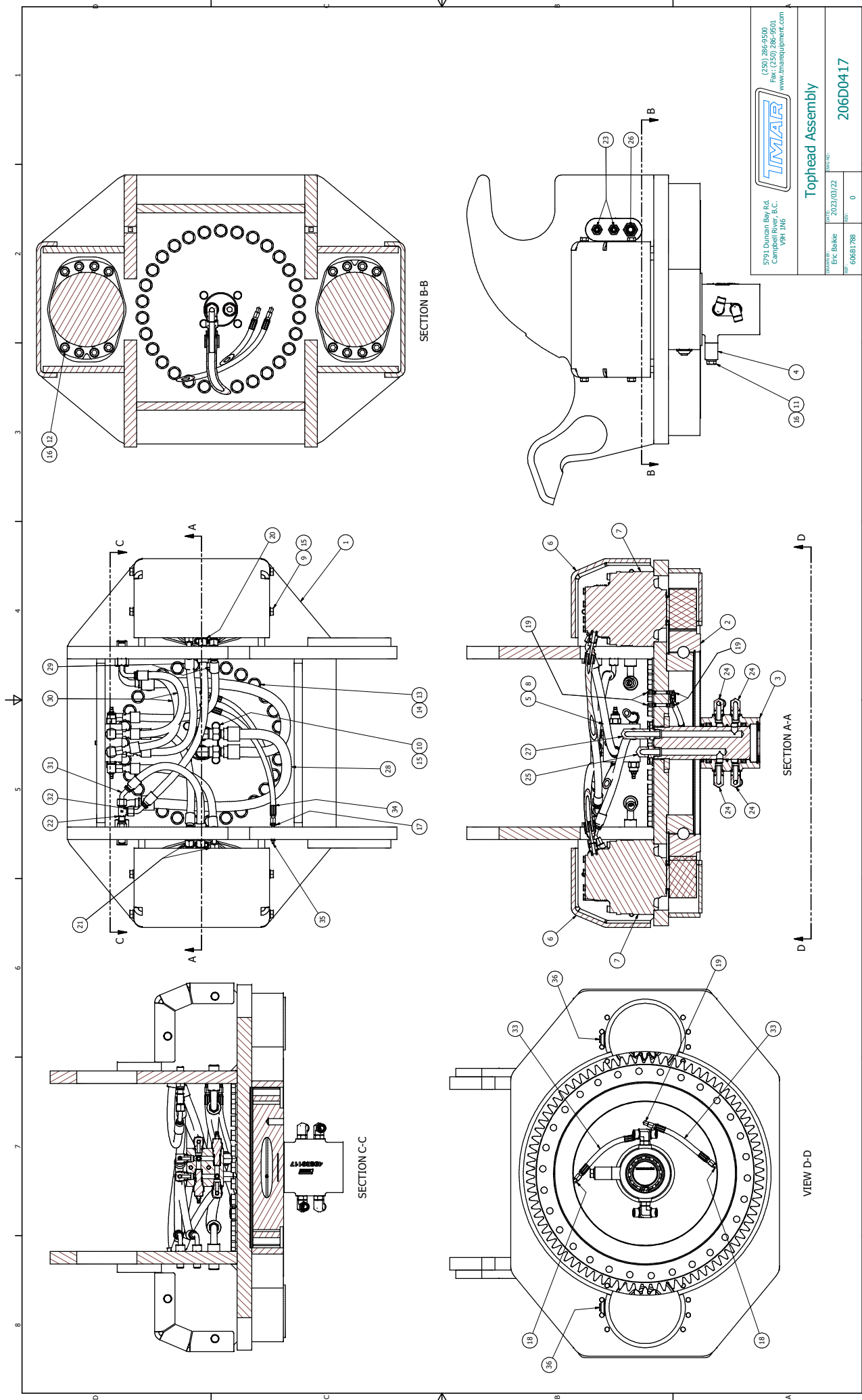
Ref. No:


**606B1788**

Rev. 0

**Note: All fasteners are steel, and grade 8/10.9 minimum, unless explicitly noted.**

Item	Part No.	Description	Qty.
---	206D0417	Tophead Assembly	---
1	306D0446	Tophead Weldment	1
2	343B0012	Rotate Bearing	1
3	206B1204	High Pressure Swivel Assembly	1
4	306B1605	Anti-Rotate Bar	1
5	371B0330	Rotate Cross-Port Relief Valve Assembly	1
6	406B1639	Formed Plate, Motor Cover	2
7	371A0527	Rotation Motor	2
8	SHP.39626	HEX SOCKET HD CAPSCREW M10 X 1.5 X 70	2
9	SHP.40736	HEX HD CAPSCREW M14 X 2.0 X 40	8
10	SHP.40738	HEX HD CAPSCREW M14 X 2.0 X 50	4
11	SHP.40764	HEX HD CAPSCREW M16 X 2.0 X 80	1
12	SHP.1139719	HEX SOCKET HD CAPSCREW M16 X 2 X 55	16
13	SHP.11114488	HEX HD CAPSCREW M22 X 2.5 X 70	29
14	SHP.34884	FLAT WASHER M22, THRU HARD	29
15	SHP.40255	LOCKWASHER M14	12
16	SHP.40256	LOCKWASHER M16	17
17	1030-2-4	Adapter, 1/8 MNPT to -4 MJIC	2
18	1031-2-4	Elbow, 45, -2 MNPT to -4 MJIC	2
19	1032-2-4	Elbow 90, 1/8 MNPT to -4 MJIC	4
20	5650-8-8	Straight Fitting, -8 MORB to -8 MORF	2
21	5650-8-12	Straight Fitting, -12 MORB to -8 MORF	4
22	58T56-8-8	Tee, -8 MFFO to -8 FFFOS Run to -8 MFFO	1
23	5655-8-8	Bulkhead, -8 MFFO to -8 MFFO	3
24	5652-10-10	Elbow, 90, -10 MORF to -10 MORB	4
25	5652-12-12	Elbow, 90 degree, -12 ORB -12 ORFS	1
26	5655-12-12	Bulkhead, -12 MFFO to -12 MFFO	2
27	5652L-12-12	Elbow, Long, 90 Degree, -16 MORB to -16 MFFO	1
28	72A6057 CL29	Hose, Open/Close, R13-JS-J9-12-12-12 CL29	2
29	72A6058 CL15.5	Hose, Rotate, R13-JS-J7-08-08-08 CL15.5	4
30	72A6056 CL16	Hose, Rotate, R13-JS-J9-08-08-08 CL16	2
31	72A2088 CL15.5	Hose, Case Drain, R1-JS-J7-08-08-08 CL15.5	1
32	72A2088 CL20	Hose, Case Drain, R1-JS-J7-08-08-08 CL20	1
33	72A2004 CL8	Hose, Rotek Grease, R1-06-06-04-04-04 CL8	2
34	72A2004 CL16	Hose, Rotek Grease, R1-06-06-04-04-04 CL16	2
35	345A0068	1/8" NPT Grease Fitting	2
36	10HP-8	Hex Socket Plug, -8 MNPT	2



  
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REVISED:	DATE:	BY:	APP:
0	2022/03/22	Eric Bekke	60681788

**Tophead Assembly**  
 PART NO: 206D0417

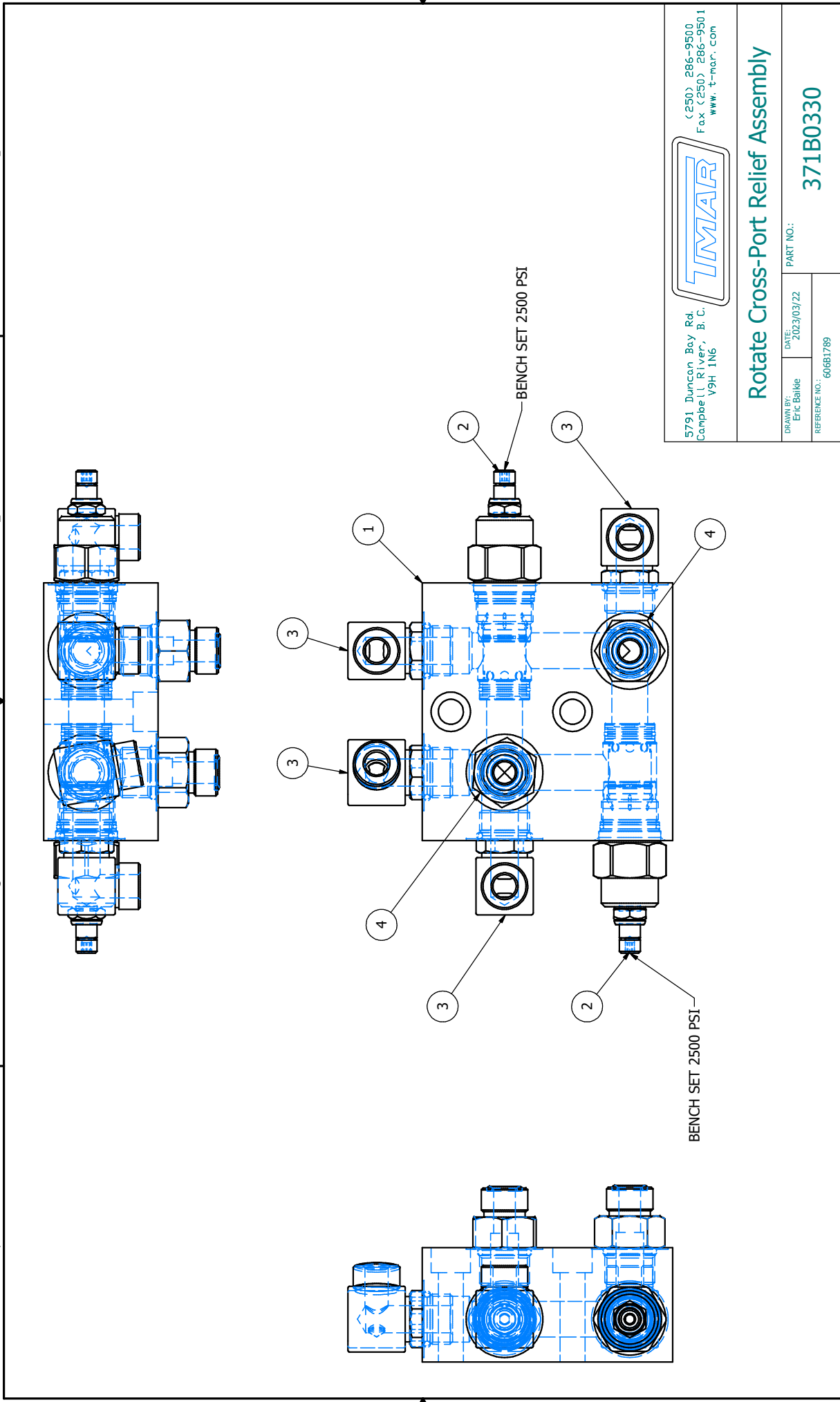
Parts Department: 1-800-208-2217



**Rotation Cross-Port Relief Manifold Assembly****Ref. No:****606B1789****Rev. 0****Note: All fasteners are steel, and grade 8/10.9 minimum, unless explicitly noted.**

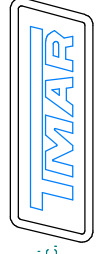
<b>Item</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty.</b>
---	371B0330	Rotation Cross-Port Relief Manifold Assembly	---
1	371B0331	Cross-Port Relief Manifold	1
2	371A0516	Relief Valve Cartridge	2
3	5652-8-10	Elbow 90, -8 MFFO to -10 MORB	4
4	5650-8-10	Adapter, -8 MORF to -10 MORB	2

1 2 3 4



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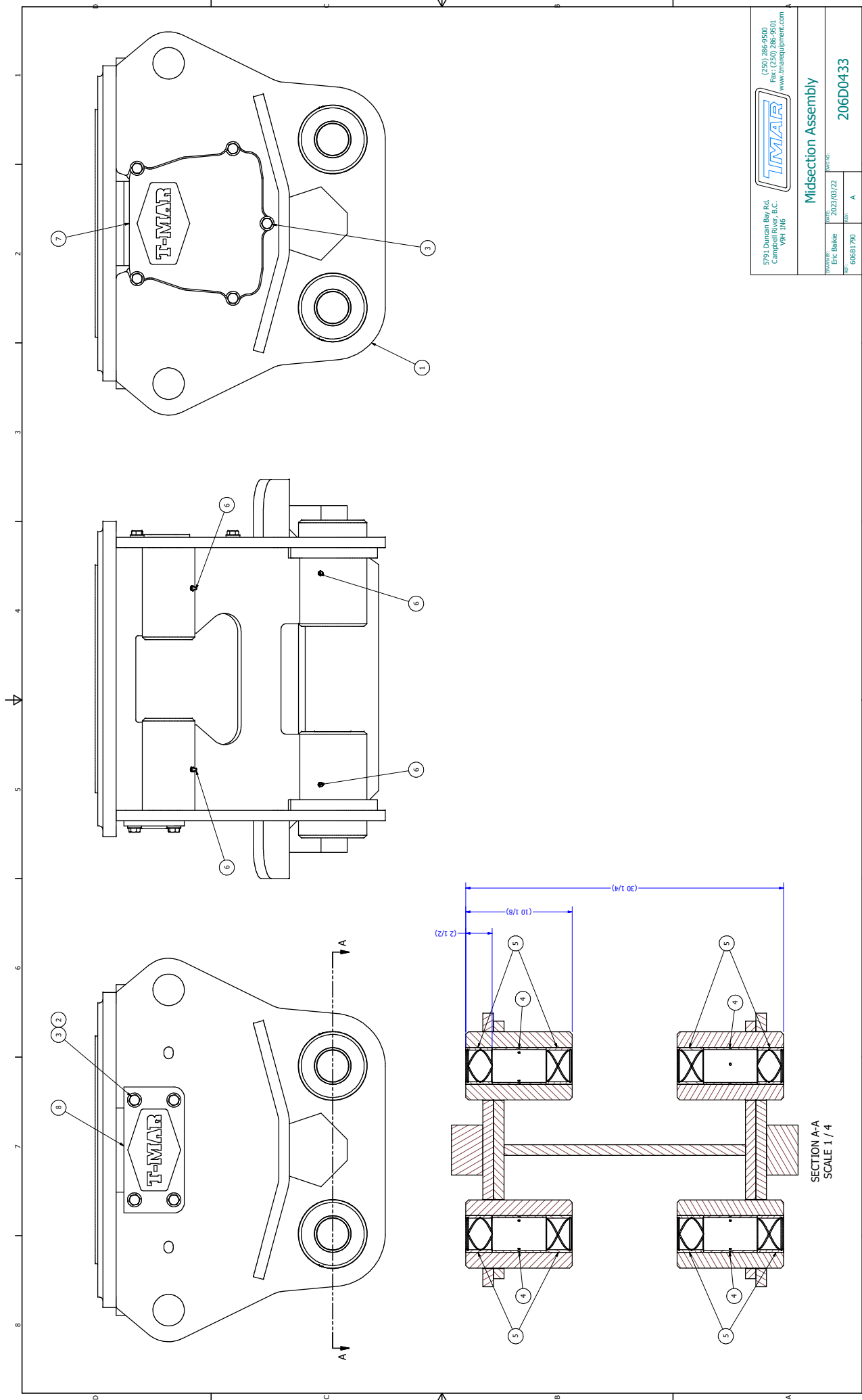


**Rotate Cross-Port Relief Assembly**

DRAWN BY: Eric Balke	DATE: 2023/03/22	PART NO.:
REFERENCE NO.:	606B1789	371B0330

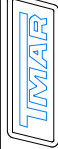
**Midsection Assembly****Ref. No: 606B1790****Rev. 0****Note: All fasteners are steel, and grade 8/10.9 minimum, unless explicitly noted.**

<b>Item</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty.</b>
---	206D0433	Midsection Assembly	---
1	306D0431	Midsection Weldment	1
2	SHP.34882	FLAT WASHER M16, HARD	9
3	SHP.40758	HEX HD CAPSCREW M16 X 2.0 X 50	9
4	342B0073	Spacer Tube	4
5	342B0058	Bushing	8
6	345A0068	1/8" NPT Grease Fitting	8
7	306B1772	Large Door	1
8	306B1773	Small Door	1



SECTION A-A  
SCALE 1 / 4

5701 Duncan Bay Rd.  
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V9H 1N6  
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Midsection Assembly

REV:	DATE:	BY:	APP:
001	2022/03/22	Eric Bekke	A
QTY:	REF:		
60681790			

206D0433

**Cylinder Assembly**

Ref. No:

**606B1791**

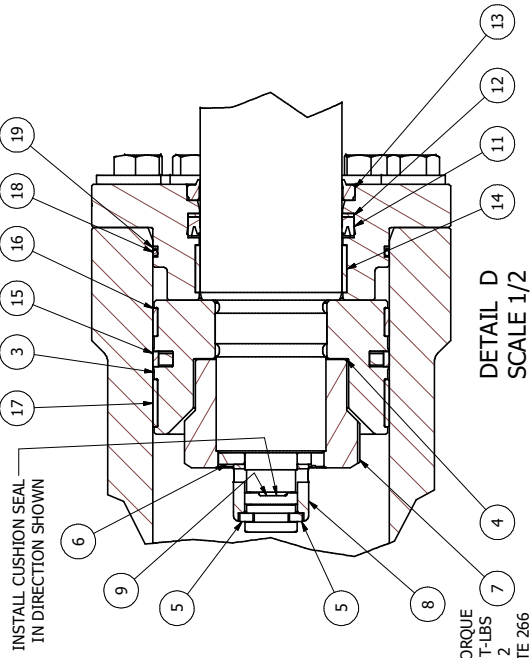
Rev. 0

**Note: All fasteners are steel, and grade 8/10.9 minimum, unless explicitly noted.**

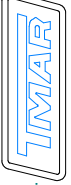
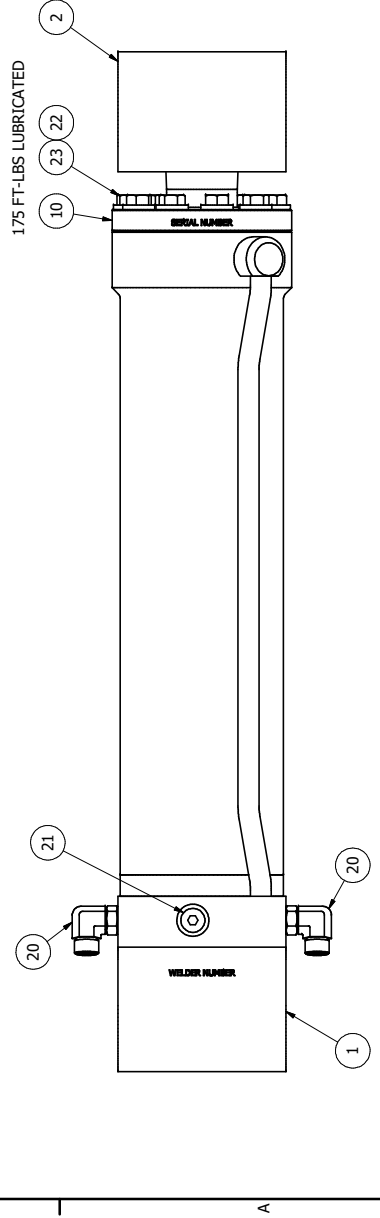
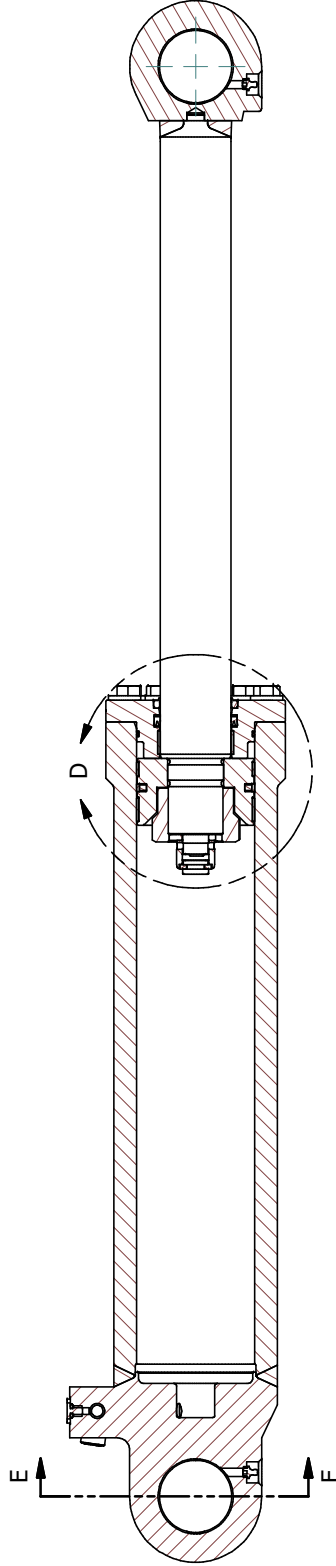
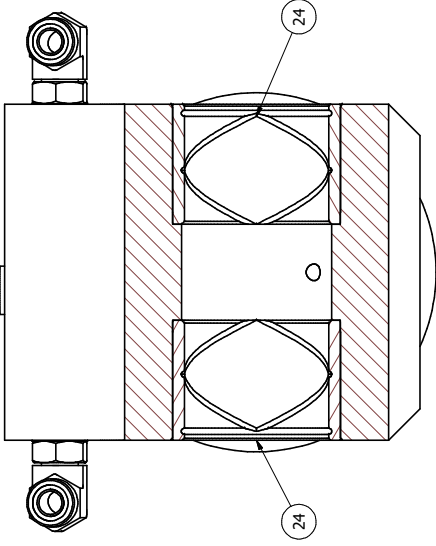
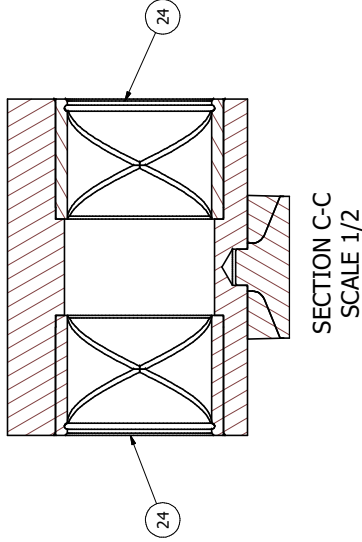
Item	Part No.	Description	Qty.
---	270C0106	Cylinder Assembly	---
1	370C0107	Cylinder Barrell Weldment, 125mm	1
2	370B0296	Rod, Cylinder	1
3	370C0092	Piston, Cylinder	1
4	370A0055	Shim	1
5	370A0068	Stopper	2
6	370A0099	Ring Spacer	1
7	370B0161	Nut, Piston	1
8	370A0065	Ring, Cushion	1
9	347A0180	Cushion Seal	1
10	370C0086	Gland, Cylinder	1
11	347A0235	Rod Seal	1
12	347A0236	Backup Ring	1
13	347A0172	Rod Wiper	1
14	347A0237	Wear Ring, Rod	1
15	347A0314	Seal Assembly	1
16	347A0345	Wear Ring, 15mm	1
17	347A0346	Wear Ring, 25mm	1
18	347A0315	O-ring	1
19	347A0316	Back Up Ring	1
20	5652-10-10	Elbow, 90, -10 MORF to -10 MORB	2
21	50HP-10	Hex Socket Plug, -10 ORB	1
22	SHP.34882	FLAT WASHER M16, HARD	10
23	SHP.0122078	HEX HD CAPSCREW M16 X 2.0 X 60	10
24	342B0058	Bushing	4
25	270A0086	Fastener Kit	1
26	247A0347A	Seal Kit, Piston & Gland	1

**Notes:**

1. Exchange cylinders are available on a cost-of-repair basis.



NUT TORQUE  
4400 FT-LBS  
M58 X 2  
LOCTITE 266



5791 Duncan Bay Rd.  
Compton, CA 92626  
1981 INC

(259) 286-9500  
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www.tmar.com

Cylinder Assembly - 1 1/2 YD Clamshell

DATE: 2022/03/22  
DRAWN BY: Eric Banks  
PART NO.: 270C0106  
REFERENCE NO.: 6068791

**Assembly, Swivel (HP)**

**Ref. No: 606B1314**

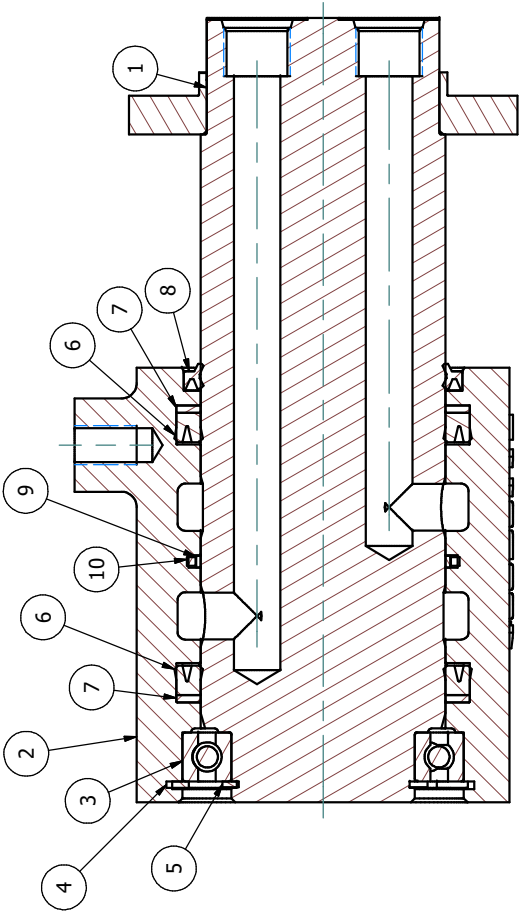
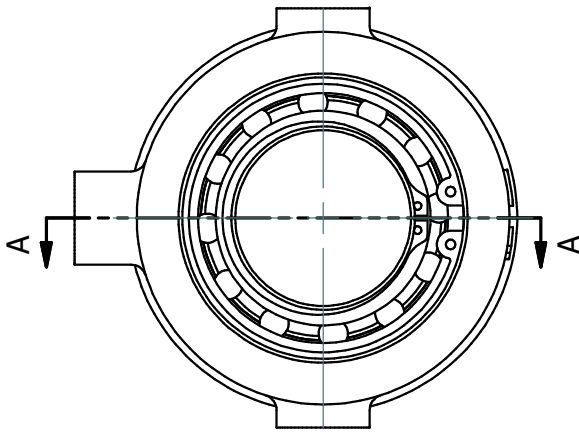
**Rev. 0**

<b>Ref.</b>	<b>Part No:</b>	<b>Rev.</b>	<b>Description</b>	<b>Qty.</b>
---	206B1204		Complete Assembly	---
1	306B0512		Swivel Core Weldment	1
2	306D0351		Housing, Swivel Outer	1
3	343A0015		Bearing	1
4	348A0023		Retaining Ring, Internal	1
5	348A0012		Retaining Ring, External	1
6	347A0013		Seal, U-Cup	2
7	347A0014		Backup Ring	2
8	347A0015		Wiper, Metal Clad	1
9	347A0188		Seal Ring, Carbon Teflon	1
10	347A0189		Seal, Square Ring	1
11	206A0658		Seal Kit (Includes Items 4-10)	1

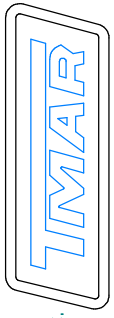
**Notes:**

- 1.) Exchange swivels are available on a cost-of-repair basis.
- 2.) Swivel core top ports: -12 ORB x 2.
- 3.) Swivel housing side ports: -10 ORB x 4.
- 4.) Mounting Hardware:
  - SHP.40738 (M14 X 2.0 X 50) x 4
  - SHP.40386 (M14 Lock Washer) x 4
  - GTSOR-10 #10 ORB O-rings x 4
  - GTSOR-12 #12 ORB O-rings x 2

1 2 3 4



SECTION A-A



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# Assembly, Swivel (HP), -10 Ports

DRAWN BY: Eric Baikie	DATE:	05/07/2018
	REF:	606B1314
DWG NO:		206B1204

1 2 3 4



**1 1/2 YD Bucket, 3 Tooth**

**Ref. No:**

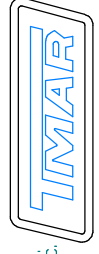
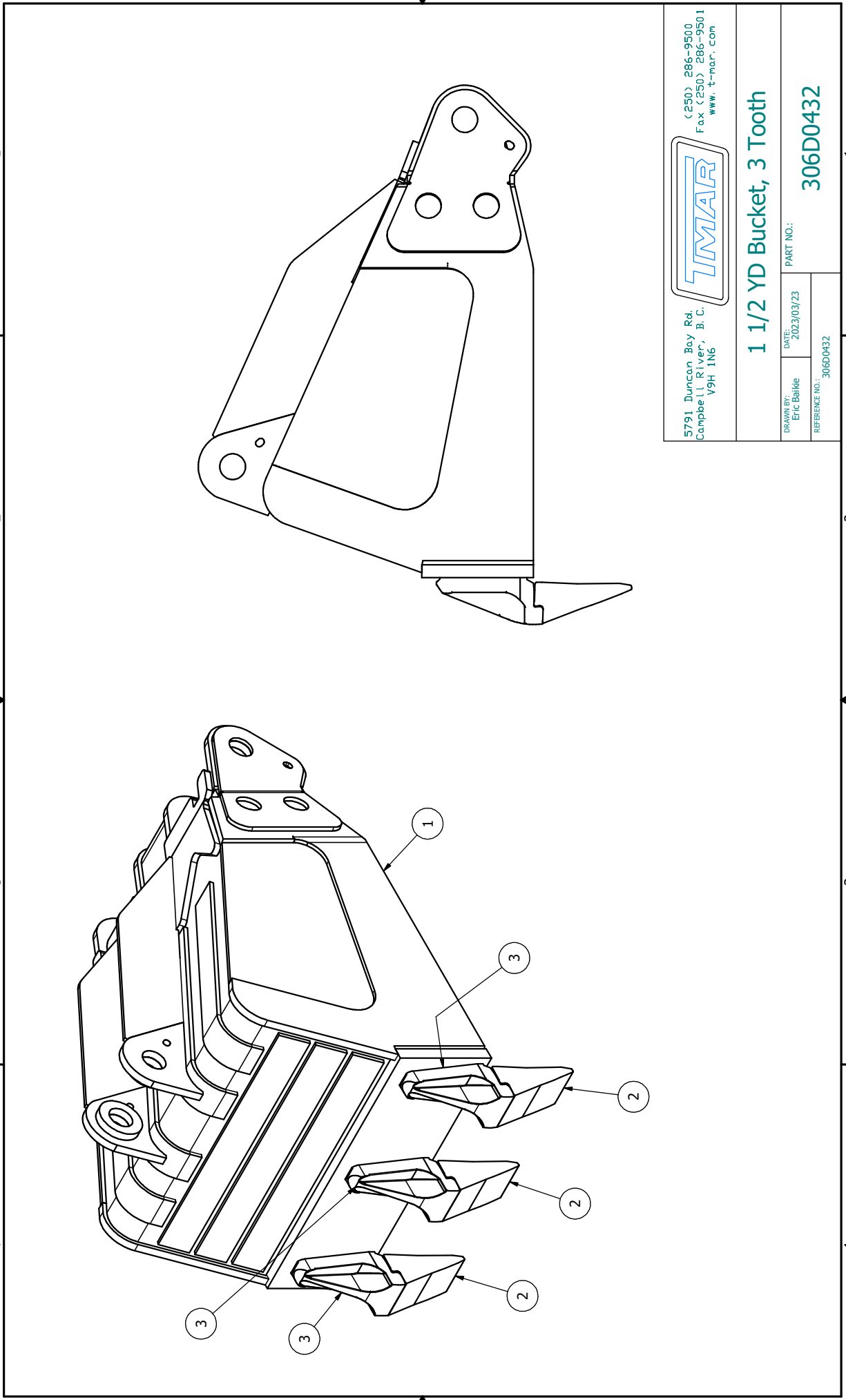
**606B1792**

**Rev. 0**

**Note: All fasteners are steel, and grade 8/10.9 minimum, unless explicitly noted.**

<b>Item</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty.</b>
---	306D0432	1 1/2 YD Bucket, 3 Tooth	---
1	406D0450	Bucket Weldment	1
2	306A0777	Bucket Tooth	3
3	306A0773	Tooth Adapter	3

1 2 3 4



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**1 1/2 YD Bucket, 3 Tooth**

DRAWN BY: Eric Balke	DATE: 2023/03/23	PART NO.:
REFERENCE NO.:	306D0432	

**306D0432**

1 2 3 4

**1 1/2 YD Bucket, 2 Tooth**

**Ref. No:**

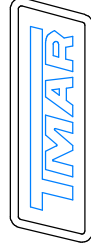
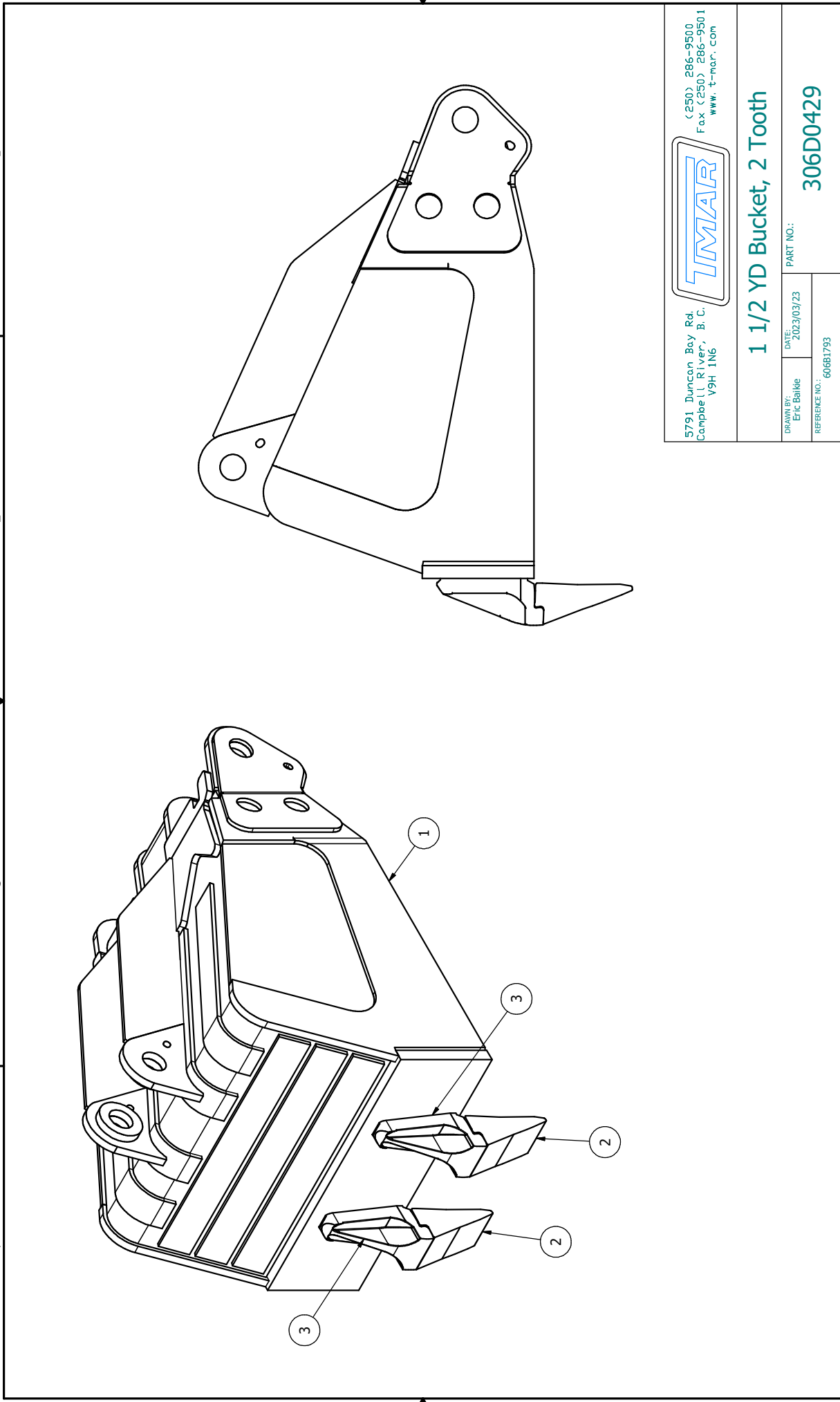
**606B1793**

**Rev. 0**

**Note: All fasteners are steel, and grade 8/10.9 minimum, unless explicitly noted.**

<b>Item</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty.</b>
---	306D0429	1 1/2 YD Bucket, 2 Tooth	---
1	406D0450	Bucket Weldment	1
2	306A0777	Bucket Tooth	2
3	306A0773	Tooth Adapter	2

1 2 3 4



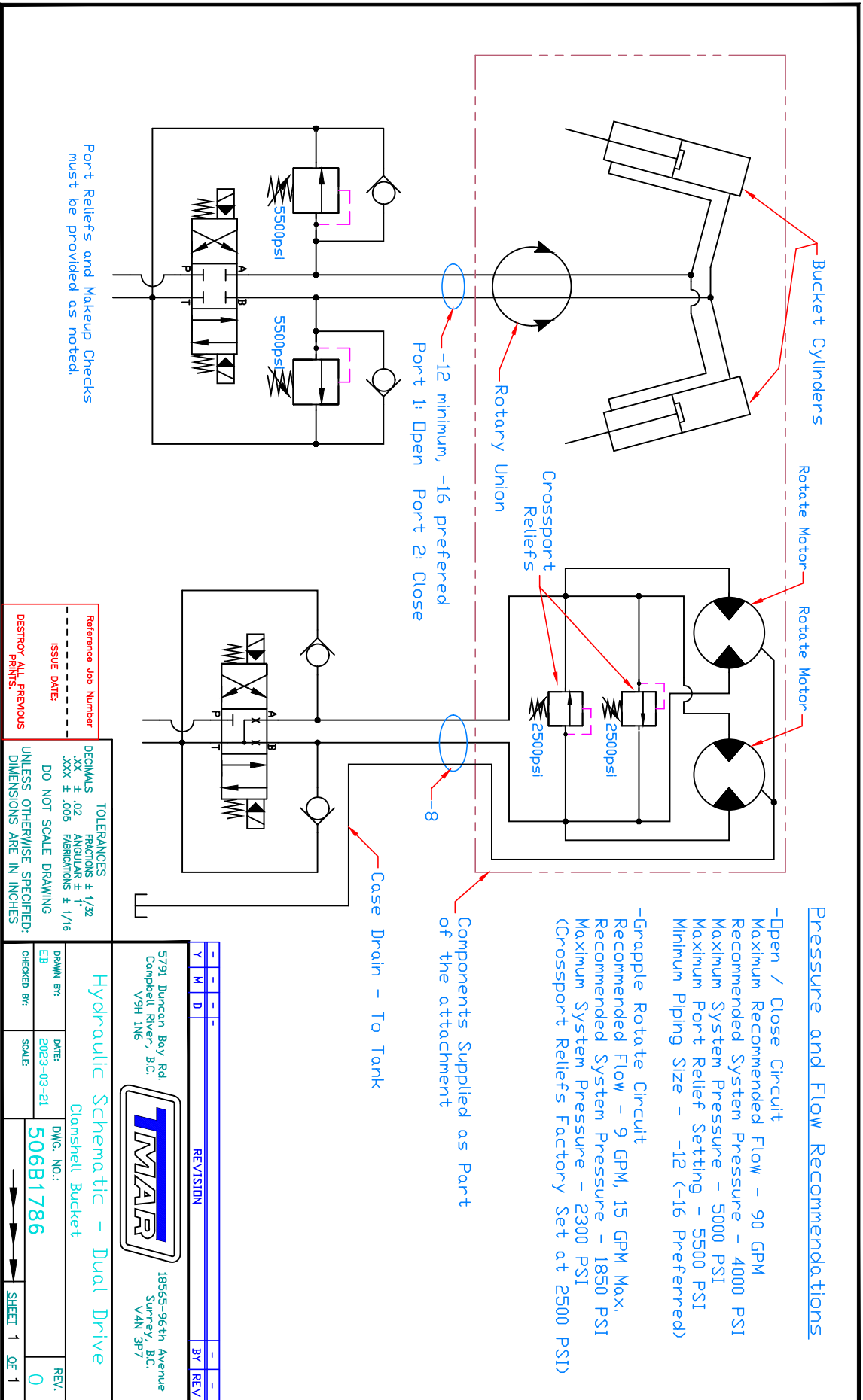
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V9H 1N6  
(250) 286-9500  
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**1 1/2 YD Bucket, 2 Tooth**

DRAWN BY: Eric Balke  
DATE: 2023/03/23  
PART NO.: 306D0429

REFERENCE NO.: 606B1793

1 2 3 4



Reference Job Number  
 ISSUE DATE:  
 DESTROY ALL PREVIOUS PRINTS.

TOLERANCES  
 DECIMALS FRACTIONS ± 1/32  
 .XX ± .02 ANGULAR ± 1°  
 .XXX ± .005 FABRICATIONS ± 1/16  
 DO NOT SCALE DRAWING  
 UNLESS OTHERWISE SPECIFIED:  
 DIMENSIONS ARE IN INCHES

Y	M	D	BY	REV
-	-	-	-	-

5791 Duncan Bay Rd.  
 Campbell River, B.C.  
 V9H 1N6

**IMAR**

18565-96th Avenue  
 Surrey, B.C.  
 VAN 3P7

Hydraulic Schematic - Dual Drive  
 Clamshell Bucket

DRAWN BY: EB DATE: 2023-03-21  
 CHECKED BY: SCALE: 50681786  
 REV: 0

SHEET 1 OF 1