Owner's Manual

C165-A2 Remote Steel Squeeze Off Tool



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DO NOT OPERATE THESE TOOLS UNLESS THESE INSTRUCTIONS HAVE BEEN CAREFULLY READ AND UNDERSTOOD

SAFETY WARNING:

DO NOT OPERATE THESE TOOLS UNLESS THESE INSTRUCTIONS HAVE BEEN CAREFULLY READ AND UNDERSTOOD. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN DAMAGES, INCLUDING WITHOUT LIMITATION DEFECTS, DETERIORATION, WEAR, ERROR, FAILURE OF THE SQUEEZE OFF TOOL, OR INJURY, INCLUDING WITHOUT LIMITATION DEATH AND INCAPACITATION. FOOTAGE TOOLS INC. EXPRESSLY DISCLAIMS ANY AND ALL LIABILITY FOR DIRECT, INDIRECT, INCIDENTAL, SPECIAL, BODILY, EXEMPLARY OR DAMAGES OF ANY KIND, WHETHER FORESEEABLE OR UNFORESEEABLE, ARISING OUT OR IN CONNECTION WITH THE FAILURE TO COMPLY WITH THIS OWNER'S MANUAL.

WARNING:

- DO NOT EXCEED THE RECOMMENDED SQUEEZE AND RELEASE RATES. TEMPERATURES BELOW 32°F (0°C) REQUIRE SLOWER SQUEEZES AND RELEASES. RELEASES ARE MORE CRITICAL THAN SQUEEZES; THUS, SLOWER RATES ARE REQUIRED. CONSULT YOUR LOCAL UTILITY REGARDING THEIR SPECIFIC RECOMMENDATIONS FOR THIS PROCEDURE.
- WHEN PERFORMING A SQUEEZE, STAY A MINIMUM OF 3 TIMES THE PIPE DIAMETER FROM FITTINGS, FUSIONS, OR PREVIOUSLY SQUEEZED PIPE.
- ENSURE THE GROUNDING SYSTEM IS PROPERLY PLANTED IN THE SOIL TO REDUCE THE CHANCES OF STATIC DISCHARGE.
- DO NOT MODIFY OR ALTER THE TOOL IN ANY WAY. ONLY USE FOOTAGE TOOLS REPLACEMENT PARTS PROVIDED BY THE MANUFACTURER OR AUTHORIZED DISTRIBUTOR.
- USE EXTREME CAUTION WHEN OPERATING THE TOOL NEAR LIVE ELECTRICAL WIRES, BURIED UTILITIES, OR OTHER HAZARDS.
- IN CASE OF MALFUNCTION, IMMEDIATELY STOP USING THE TOOL AND CONTACT A QUALIFIED TECHNICIAN FOR INSPECTION AND REPAIR.
- WHEN OPERATING THIS TOOL, SAFETY EQUIPMENT, INCLUDING SAFETY GLASSES, ARE REQUIRED.
- BEFORE PERFORMING A SQUEEZE, CLEAN THE POCKETS ON THE UNDERSIDE OF THE LOWER BAR AND WHERE THE SIDE SHAFTS/CYLINDER RODS WILL CONTACT THE LOWER BAR. REINSPECT AFTER THE TOOL IS LOWERED INTO POSITION ON THE PIPE, JUST PRIOR TO SQUEEZE.

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SAFETY WARNING:

WARNING:

- FOR HYDRAULIC SQUEEZE TOOLS: INSPECT HYDRAULIC HOSES FOR SIGNS OF DAMAGE OR CUTS AND REPLACE IF NECESSARY. ENSURE HYDRAULIC FITTINGS ARE FULLY ENGAGED.
- BEFORE PERFORMING A SQUEEZE, ENSURE THE PIPE IS CENTRED BETWEEN SIDE SHAFTS/CYLINDER RODS AND THE TOOL IS IN AN UPRIGHT POSITION.
- FOR HYDRAULIC SQUEEZE TOOLS: BEGIN TO ENGAGE THE SAFETY LOCK DOWN BOLTS WHEN THE UPPER BAR IS APPROXIMATELY ONE INCH FROM TOUCHING THE GAUGE STOP.
- FOR HYDRAULIC SQUEEZE TOOLS: ENSURE YOU READ AND UNDERSTAND HOW TO OPERATE THE NEEDLE VALVE IF INSTALLED ON HYDRAULIC PUMP.
- WHEN SQUEEZING STEEL PIPE, DUE TO THE NATURE OF THE MATERIAL AND POTENTIAL CORROSION, THE PIPE CAN EITHER SHEAR OR SPLIT WITH NO WARNING. ALSO, BUBBLE-TIGHT RESULTS CANNOT BE GUARANTEED.
- WHEN SQUEEZING HDPE PIPE, DUE TO THE NATURE OF THE MATERIAL, IT MAY BE NECESSARY TO DOUBLE SQUEEZE AND VENT TO ATMOSPHERE BETWEEN THE SQUEEZED SECTIONS IN ORDER TO ACHIEVE FLOW CONTROL.
- KEEP AWAY FROM ANY HIGH-PRESSURE HYDRAULIC LEAKS. A HIGH-PRESSURE JET OIL CAN CAUSE SERIOUS INJURY. REPAIR IMMEDIATELY.

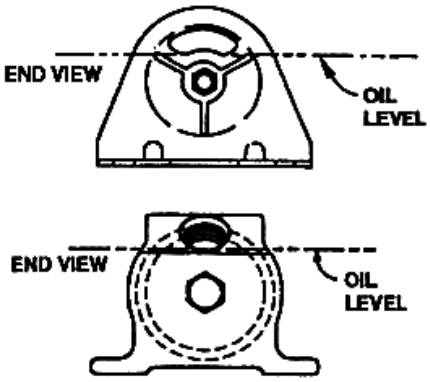
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This Footage Tools' Hydraulic Squeeze-Off Tool is offered with manual release only. The pump is also equipped with a one way safety valve, which can assist in preventing the tool from opening accidentally – turn clockwise to engage. During the squeezing and releasing process, this valve should be kept open a minimum of two turns. The hand pump contains a 2-position control knob. Rotating the control knob fully clockwise will allow oil to be pumped through the hose into the tool, to control the squeeze operation. Similarly, rotating the control knob fully counterclockwise will allow oil to be pumped to release (open) the tool. A bypass valve, set at 10,000 PSI, is built into the pump to prevent over-pressurization.



PRELIMINARY ASSEMBLY:

A. Pump



1. Ensure the hand pump is filled with good quality, ISO 32, hydraulic oil. To check or refill, connect the pump to the tool, retract the cylinder, and release system pressure. (Failure to follow this instruction may result in overfilling the reservoir – this could result in reservoir failure due to excessive pressure and possible injury.) Remove the cap and fill to the indicated level with the pump level and resting horizontally on the base. Then recap securely. Cleanliness is critical while checking and refilling. Use a funnel with a filter. Do not allow any dirt to enter the reservoir.

B. Optional Side Guides

If guide stops will be used (in case of key-hole application, etc.), please follow the instructions below for installation and proper setting.

1. If necessary, clean the holes and the socket portion of the Set Screws (item #32) prior to removal. Remove the Set Screws by using the 3/16" Allen Key provided *(Figure 1).* Repeat this operation for the other side of the tool. After the Set Screws are removed, ensure the threaded holes are clean from any debris.



Figure 1

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PRELIMINARY ASSEMBLY:

2. Install the guide stop (item #44) to the tool *(Figure 2).* Use the Screws (Item #46) and the 1/4" Allen Key provided to secure in place. Repeat this step for the other side of the tool.

3. After both guide stops are installed, the position of these stops requires adjustment according to the pipe size to be squeezed. To do this, unscrew the Screws (Item #46) until the guide stop is free to slide. Identify the pipe to be squeezed. Set the guide stop so that the red painted step aligns with the arrow coming from the engraving on the tool body, which matches the pipe size needed *(Figure 3),* 1 ¼" SCH40 in this case. Repeat this operation for the other side of the tool.

NOTE: In any of the three positions, the head of one of the two screws on each side of the tool should match the appropriate counterbore into the guide.

⚠ WARNING: Ensure both guide stops are installed in the same position, to prevent tool or pipe damage.



Figure 2

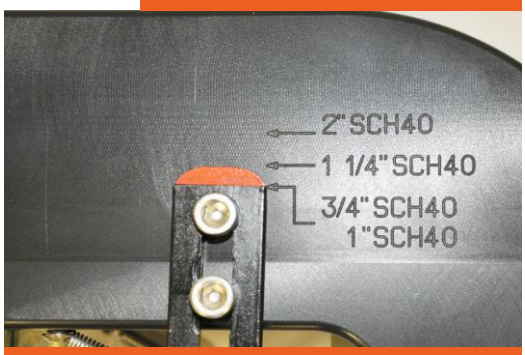


Figure 3

OPERATING INSTRUCTIONS:

A. Installation on Pipe

1. Inspect the tool to ensure that it is clean and free from any dirt that may hinder proper operation. Pay particular attention to the slot in the guiding plate, where the sliding bar is guided *(Figure 4).* It is critical that this slot is clean and free of debris. Clean if necessary.



Figure 4

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OPERATING INSTRUCTIONS:

A. Installation of Pipe

2. Carefully inspect the hydraulic hose to ensure there are no cuts or leaks. Ensure the hydraulic couplings are clean, then connect the hydraulic hose from the hand pump to the squeeze-off tool *(Figure 5).* To eliminate any possibility of accidental disconnection, the threaded collar must be fully threaded on, to enable pressure to reach the tool.

3. Open the tool by turning the pump control knob to the release position.

4. Install the Handle Assembly into the Front Outside Pipe Assembly with the pipe connector. Secure it in place using the pin and wire *(Figure 6).* Then install the Pipe Connector to the tool according to the position of the pipe to be squeezed – 180°, 45° or 90° *(Figure 8).*

5. For extended remote use, remove the Handle Assembly from the Front Outside Pipe Assembly and install it onto the Rear Outside Pipe Assembly. Then install the Rear Outside pipe Assembly to the Front Outside Pipe Assembly. Secure it in place using the pin and wire *(Figure 7).* Set the pipe connector according to the position of the pipe to be squeezed – 180°, 45° or 90° *(Figure 8).*

6. Set the length of the pipe handle as follows: Loosen the indexed handle, slide the outer pipe as much as necessary, and lock it in the new position by tightening the indexed handle *(Figure 8).*



Figure 5



Figure 6



Figure 7



Figure 8

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OPERATING INSTRUCTIONS:

B. Squeezing the Pipe

1. Position the tool centrally over the pipe to be squeezed, so that the pipe is in contact with the centering devices located on both sides of the tool. This will place the pipe in the middle of the jaws, which will provide a proper squeeze and will prevent damage of the tool.

2. If it is necessary to perform a squeeze on a pipe that was previously squeezed, position the tool far enough from the squeezed area, so that both centering devices are in contact with a round section of the pipe *(Figure 10).*

3. Set the control knob on the hydraulic pump to the squeeze position and pump the handle to advance the squeeze bars toward the pipe. Ensure the tool remains positioned centrally and perpendicular to the pipe. If this is not done, tool and pipe damage may result. During the squeeze off, keep the tool at right angles to the pipe. *(Figure 9 and 10)*

4. Continue squeezing the pipe until the flow is shut down. When squeezing a ¾" SCH40 steel pipe, the hydraulic pressure SHOULD NOT EXCEED 7500 PSI. If this pressure is exceeded, the pipe may be cut and tool damage may result *(Figure 11).* When squeezing 1" to 2" SCH40 steel pipe, the hydraulic pressure should be 10,000 PSI.

5. Fully close the one-way safety valve to hold the desired pressure.

6. Perform the desired work on the pipe.

NOTE: For squeezing all types and sizes of Anodeless Service Line Risers, the customer SHOULD DETERMINE THE REQUIRED PRESSURES BEFOREHAND TO AVOID CUTTING THE PIPE.



Figure 9



Figure 10



Figure 11

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OPERATING INSTRUCTIONS:

C. Releasing the Pipe

With the pipe squeezed and the pump's control knob in the squeeze position; carefully turn the control knob to the open position then very slowly turn the control knob towards the release position while watching the tool bars. As soon as the squeeze bars start to move, return the control knob to the squeeze position. This will stop the bars from releasing *(Figure 12).* At this moment, any media left in the pipe will be released. If the flow stops shortly after this, the tool can be safely removed from the pipe. Leave the control knob in release position and allow the tool jaws to open.



Figure 12

Once the jaws are fully open, the tool should now be in its most open position possible. Failure to fully open may either be from the return spring in the cylinder, weakening with age or from an excessive quantity of oil in the pump reservoir.

To remove the tool from the pipe, slide it backward until it is no longer engaged with the pipe. After this, the tool may be safely removed from the working area.

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MAINTENANCE

This section contains maintenance instructions for the tool. Do not attempt any maintenance which you do not fully understand, nor that you cannot do accurately and safely with the tools and equipment available to you. If you encounter a problem that you do not understand or cannot solve, contact your Footage Tools dealer.

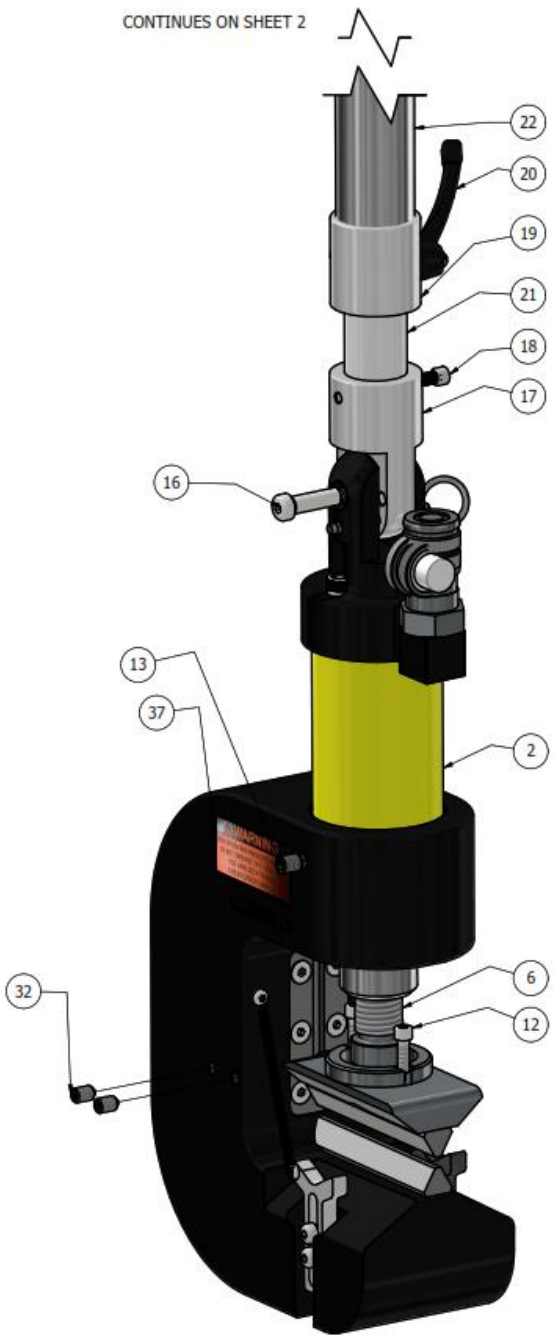
Ensure the tool is in good operating order by routinely:

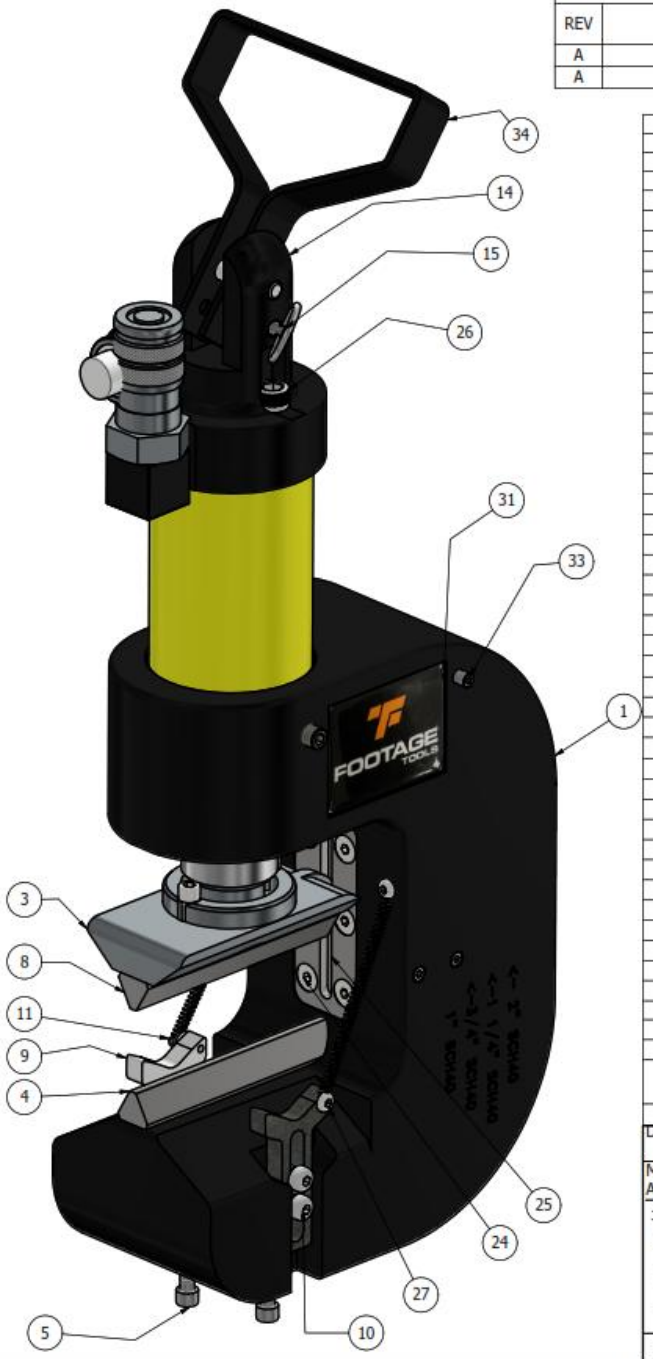
Inspect pump fluid level (See Fig. on pg. 4)	*Top up as needed*
Bleed air from hydraulic system.	*Position tool lower than the pump. Without squeezing a pipe, open and close the tool several times to release any air into the reservoir. Top up the pump fluid level.*
Drain, flush and fill pump reservoir.	*Remove filler cap, drain fluid. (Removing filter will result in breakage.) Re-fill and re-cap.*
Inspect hydraulic cylinder for damage.	*Replace hydraulic cylinder if needed.*
Inspect tool, pump, valves and hoses for oil leakage.	*Tighten, repair or replace as required*
Inspect squeeze bars for damage.	*Replace if needed*
Inspect guiding plate slot for dirt and damage	*Replace and clean as needed*

SPECIFICATIONS

GENERAL	***C165***
Max Steel SCH40 Pipe Diameter:	*2”*
Weight: tool including 16 ft handle	*50 lbs.*
Operating Pressure (max):	*10,000 psig*
OPTIONAL ACCESSORIES	
Extra-Long 20” Hose	*C177-20*
Guide Stop Kit	*C165-21K1*
Needle Valve Kit	*C165-23K*

CONTINUES ON SHEET 2





REVISION HISTORY

REV	DESCRIPTION	ECN	DATE	BY	REVIEWED BY
A	ISSUED FOR PRODUCTION	1982	2018-03-07	NN	
A	IT #37, LABEL-008 WAS 009	D2589	2020-05-09	JLN	

QTY	PART NUMBER	DESCRIPTION	MASS (lb)	ITEM
1 REF	T-KEY-6-32	ALLEN KEY 5-32"- C165-2AKA	.000	47
4 REF	99-106-01-0510	SHCS, 5/16-18 X 5/8" LG SS- C165-2AKA	.000	46
1 REF	T-KEY-6-04	ALLEN KEY 1/4"- C165-2AKA	.000	45
1 REF	C165-21	GUIDING STOP- C165-2AKA	.000	44
1	BOX-C165	BOX, C'BOARD FOR C165 HANDLES	.000	43
1	BOX-30-30-210	BOX, CARDBOARD, RIDGID	.000	42
2	C165-58	SPLIT KEY RING 0.9700D X 0.8021D	.001	41
2	C165-39	ROUND PLUG	.029	40
2	99-140-00-0004	LOCK WASHER 1/4"	.002	39
2	99-105-00-0406	BHSC, 1/4-28 X 3/8" LG	.001	38
1	LABEL-008	WARNING LABEL	.010	37
1	C165-BOX1	SHIPPING CONTAINER - FOR C165	.000	36
1	T-KEY-6-03	ALLEN KEY 3/16"	.005	35
1	C165-15	SHORT HANDLE	.520	34
1	99-150-S0-0408	SHCS, 1/4-20 X 1/2" LG SS	.001	33
4	99-150-S0-0508	SHSS 5/16-18 X 1/2" LG SS	.001	32
1	LABEL-011	FOOTAGE NAME PLATE-NEW	.016	31
2	C165-40	3/8" PIN W. WIRE	.020	30
1	C165-44	REMOVABLE HANDLE ASM	1.218	29
2	C165-57	CABLE, FOR PIN W. WIRE	.001	28
4	99-105-01-9004	SCREW, BUT. H. C. #10-32 X 1/4 LG	.004	27
2	99-106-01-0610	SHCS 3/8-16 X 5/8 LG, SS	.005	26
1	C165-16	GUIDING PLATE	.372	25
6	99-110-01-0412	FHCS, 1/4-20 X 3/4" SS	.010	24
3	C165-09	NIPPLE- INSIDE PIPE	.108	23
2	C165-36	OUTSIDE PIPE HANDLE- 4FT	2.796	22
1	C165-38	INSIDE HANDLE FRONT - 4FT	1.825	21
2	C165-19	INDEXED HANDLE W. 5/16-18 MALE	.029	20
2	C165-11	LOCKING CLAMP	.254	19
1	99-106-01-0428	SHCS 1/4-20 X 1 3/4LG, SS	.003	18
1	C165-12	PIPE CONNECTER	.498	17
1	99-114-01-0512	SH BOLT S.S, 3/8 X 1-1/4 LG	.063	16
1	99-169-233-271	1/4" 2.3"LG HITCH PIN	.034	15
1	C165-08	PISTON CONNECTOR	.787	14
2	99-150-01-0608	SHSS, 3/8-16 UNCx0.5 LG, SS	.002	13
2	99-106-01-0412	SHCS 1/4 - 20 X 0.75" LG, SS	.017	12
2	C200-20	SPRING, SPEC # E0240-034-2500	.005	11
4	99-114-01-0404	5/16 X 0.5" LG, SH. BOLT, SS	.024	10
2	C165-13	CENTERING DEVICE	.152	9
1	C165-04	SLIDING BAR INSERT	.350	8
1	C165-37	INSIDE PIPE HANDLE REAR - 4FT	2.117	7
1	C165-25	HOLD DOWN SCREW-FOR SLIDING BAR	.404	6
2	99-106-01-0420	1/4 - 20 UNC - 1 1/4 SS SHCS	.024	5
1	C165-05	STATIONARY BAR INSERT	.327	4
1	C165-26	LOCATED SLIDING BAR	1.420	3
1	C165-02	15 TON HY CYLINDER - 4.13" STROKE	13.854	2
1	C165-01	MAINBODY	19.147	1

FOOTAGE PART LIST

DRAWN TA 2025-07-08

MANUFACTURING APPROVAL

TOLERANCES:
TIR 0.004
RMS 63 MAX
.X ± .02
.XX ± .01
.XXX ± 0.005

MASS 50.1 lbmass

SCALE 1 / 1.5
SIZE C

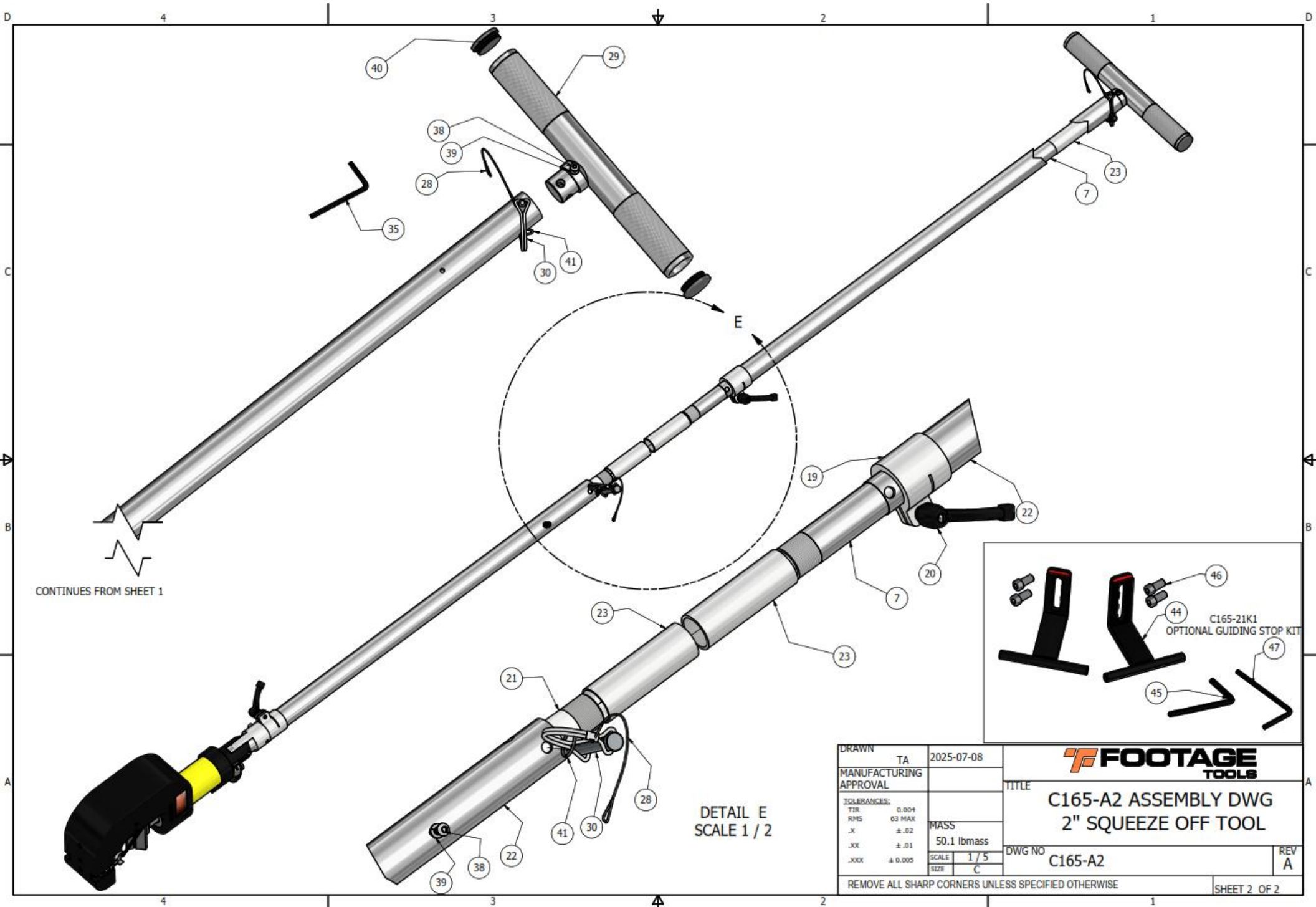
FOOTAGE TOOLS

TITLE
C165-A2 ASSEMBLY DWG
2" SQUEEZE OFF TOOL

DWG NO C165-A2

REV A

REMOVE ALL SHARP CORNERS UNLESS SPECIFIED OTHERWISE



DRAWN	TA	2025-07-08	FOOTAGE TOOLS
MANUFACTURING APPROVAL			TITLE: C165-A2 ASSEMBLY DWG 2" SQUEEZE OFF TOOL
TOLERANCES: TIR 0.004, RMS 63 MAX, .X ± .02, .XX ± .01, .XXX ± 0.005		MASS 50.1 lbmass	DWG NO C165-A2 REV A
		SCALE 1 / 5, SIZE C	
REMOVE ALL SHARP CORNERS UNLESS SPECIFIED OTHERWISE			SHEET 2 OF 2

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FOOTAGE TOOLS INC. LIMITED LIFETIME WARRANTY

FOOTAGE TOOLS INC, hereinafter sometimes referred to as "Manufacturer" warrants each new industrial product of its own manufacture to be free from defects in material and workmanship, under normal use and service for the life of the tool. **Warranty is void unless warranty registration form is completed either online or manually and returned to FOOTAGE TOOLS INC. within thirty (30) days from the date of purchase.** This warranty and any possible liability of **FOOTAGE TOOLS INC.** hereunder are in lieu of all other warranties, expressed, implied, or statutory, including, but not limited to, any warranties of merchantability or fitness for a particular purpose.

The parties agree that the Buyers **SOLE AND EXCLUSIVE REMEDY** against Manufacturer, whether in contract or arising out of warranties, representations, instructions, or defects shall be for the replacement or repair of defective parts as provided herein. In no event shall Manufacturers liability exceed the purchase price of the product. The Buyer agrees that no other remedy (including, but not limited to, in incidental or consequential loss) shall be available to him. If during the warranty period, any product becomes defective by reason of material or workmanship and Buyer immediately notifies Manufacturer of such defect, Manufacturer shall, at its option, supply a replacement part or request return of the product to its plant in Toronto, Canada. No parts shall be returned without prior written authorization and a return goods authorization number from Manufacturer, and this Warranty does not obligate the Manufacturer to bear any transportation charges in connection with the repair or replacement of defective parts. The Manufacturer will not accept any charges for labor and/or parts incidental to the removal or remounting of parts repaired or replaced under this Warranty.

This Warranty shall not apply to any part or product which shall have been installed or operated in a manner not recommended by **FOOTAGE TOOLS INC**, nor to any part or product which shall have been neglected, or used in any way which, in the manufacturers opinion, adversely affects its performance; nor negligence of proper maintenance or other negligence, fire, or other accident: nor if the unit has been altered or repaired outside of a **FOOTAGE TOOLS INC.** authorized dealership in a manner of which, in the sole judgement of **FOOTAGE TOOLS INC.** affects its performance stability or reliability: nor to any product in which parts not manufactured or approved by **FOOTAGE TOOLS INC.** have been used, nor to normal maintenance services or replacement of normal service items. Equipment and accessories not of our manufacture are warranted only to the extent of the original Manufacturers Warranty and subject to their allowance to us, if found to be defective by them.

The original purchaser, user is responsible for "downtime" expenses and all business costs and losses resulting from a warrantable failure. **FOOTAGE TOOLS INC.** specifically disclaims any responsibility for any damages of any kind or description, whether to property or person, in any way connected with or arising out of the use of **FOOTAGE TOOLS INC.** products. The Buyer expressly acknowledges that this Limited Lifetime Warranty does not apply to any part or product not directly purchased from the Manufacturer.

FOOTAGE TOOLS INC reserves the right to modify, alter, and improve any product or parts without incurring any obligation to replace any product or parts previously sold with such modified, altered, or improved product or part.

No person is authorized to give any other Warranty, or to assume any additional obligation on the Manufacturers behalf unless made in writing, and signed by an officer of the Manufacturer.