	Process:	Dum	p Cylinde	r Valve Ass	sembly Ins	tallation	
		Department:	ALL	Doc. No.:		Author:	Zachery Mullally
	WORK INSTRUCTION	Area:	ALL	Revision #:	Initial Release	Approved (Eng):	
		Section:	ALL	Revision Date:	Draft	Approved (Qty):	Keith Borchers
	ME-PFC-003-F-001 Visual Work Instruction Template Rev 10	Reference Doc:	Blank	Page:	1 of 12	Approved (OPS):	
	12/3/2018		Blank			Approved (PM):	
Quality Policy	Schwarze industries and its employees are comm Reliability; Customer Satisfaction, Designing to			•	0		•
PPE			Caution	38			
Equipment / Materials	Tools: 5/8" Socket/Wrench, 1/2" Socket/Wrench						
	Illustration			Г — — — — — — — — — — — — — — — — — — —	Instru	ction Details	
, , ,		1 1 The	50			t instruction before b direction from your	
				Source all parts 206D12 before	s and materials lis the beginning th	sted on the Work Ord is build.	ler and Drawing
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WORK INSTRUCTION Area: ALL Revision #: Initial Release Approved (Eng): Section: ALL Revision Date: Draft Approved (Qty): Reference Doc: Blank Page: 2 of 12 Approved (Supv): Quality Policy Schwarze industries and its employees are committed to continued process improvement by maintaining focus to achieve: Superior Quality and Reliability; Customer Satisfaction, Designing to our Customer's needs; Competitive lead time and Comprehensive Training and Technical Support. PPE Image: Caution Image:		Process:	Dun	np Cylinde	r Valve As	sembly Ins	stallation		
Section: Draft Approved (Op): Reference Doe: Blank Page: 2 of 12 Approved (Supv): Quality Policy Schwarze industries and its employees are committed to continued process improvement by maintaining focus to achieve: Superior Quality and Reliability: Customer Satisfaction, Designing to our Customer's needs: Competitive lead time and Comprehensive Training and Technical Support. PPE Image: Image: Image: Image: Image: Image: Image: Fundity: Tools: Image: Image: Image: <td colsp<="" th=""><th></th><th></th><th>Department:</th><th>ALL</th><th>Doc. No.:</th><th></th><th></th><th>Zachery Mullall</th></td>	<th></th> <th></th> <th>Department:</th> <th>ALL</th> <th>Doc. No.:</th> <th></th> <th></th> <th>Zachery Mullall</th>			Department:	ALL	Doc. No.:			Zachery Mullall
Reference Doe: Blank Page: 2 of 12 Approved (Sapry): Quality Policy Schwarze industries and its employees are committed to continued process improvement by maintaining focus to achieve: Superior Quality and Reliability: Customer Satisfaction, Designing to our Customer's needs; Competitive lead time and Comprehensive Training and Technical Support. PPE Image: Design the improvement by maintaining focus to achieve: Superior Quality and Reliability: Customer Satisfaction, Designing to our Customer's needs; Competitive lead time and Comprehensive Training and Technical Support. PPE Image: Design the improvement by maintaining focus to achieve: Superior Quality and Reliability: Customer Satisfaction, Designing to our Customer's needs; Competitive lead time and Comprehensive Training and Technical Support. PPE Image: Design the improvement by maintaining focus to achieve: Superior Quality and Reliability: Tools: Illustration Instruction Details Instruction Details Masher: Statistical Support. Note: Support Support of the improvement by maintaining provement by maintaining needs to achieve the improvement by maintaininining needs to		WORK INSTRUCTION	Area:	ALL					
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Equipment / Materials Tools: Instruction Details Instruction Details Instruction Details Bolts: 13155 - Bolt - 7/16" · 13 x 1" (2ca) 11061 - Bolt - 5/16" · 13 x 2" (4ea) Washers: 33010 - Flat Washer - 7/16" (4ea) 115451557 - Flat Washer - 5/16" (8ca) Nuts: 37018 - Lock Nut - 7/16" · 13 (2ea) 37021 - Lock Nut - 5/16" · 18 (4ea) Decument Control Waiver Bocument control Waiver Scennent Control Waiver	- •								
Material Itous: Instruction Details Hardware Required: Bolts: Instruction Details 13155 - Bolt - 7/16"-13 x 1" (2ca) 11061 - Bolt - 5/16"-18 x 2" (4ca) Instruction Details Washers: 33010 - Flat Washer - 7/16" (4ca) 115451557 - Flat Washer - 5/16" (8ca) Instruction Details Nuts: 37018 - Lock Nut - 7/16"-13 (2ca) 37021 - Lock Nut - 5/16"-18 (4ca) Decument Control Waiver uprietary Nutice us document contains information proprietary to Schwarze Industries, Inc. Any disclosure or use is expressly prohibited. It is not to Decument Control Waiver	PPE			Caution	38				
Hardware Required: Bolts: 13155 - Bolt - 7/16"-13 x 1" (2ea) 11061 - Bolt - 5/16"-18 x 2" (4ea) Washers: 33010 - Flat Washer - 7/16" (4ea) 115451557 - Flat Washer - 5/16" (8ea) Nuts: 37018 - Lock Nut - 7/16"-13 (2ea) 37021 - Lock Nut - 5/16"-18 (4ea) Decument Control Waiver Document Control Waiver opprietary Notice is document contains information proprietary to Schwarze Industries, Inc Any disclosure or use is expressly prohibited. It is not to be at The Company's official stamp	Equipment / Materials	Tools:			1			I	
Boits: 13155 – Bolt – 7/16°-13 x 1° (2ca) 11061 – Bolt – 5/16°-18 x 2° (4ca) Washers: 33010 – Flat Washer – 7/16° (4ca) 115451557 – Flat Washer – 5/16° (8ca) Nuts: 37018 – Lock Nut – 7/16°-13 (2ca) 37021 – Lock Nut – 5/16°-18 (4ca) Opprietary Notice is document contains information proprietary to Schwarze Industries, Inc Any disclosure or use is expressly prohibited. It is not to Document Control Waiver Documents that do not bear The Company's official stamp		Illustration				Instru	ction Details		
Boits: 13155 – Bolt – 7/16°-13 x 1° (2ca) 11061 – Bolt – 5/16°-18 x 2° (4ca) Washers: 33010 – Flat Washer – 7/16° (4ca) 115451557 – Flat Washer – 5/16° (8ca) Nuts: 37018 – Lock Nut – 7/16°-13 (2ca) 37021 – Lock Nut – 5/16°-18 (4ca) Opprietary Notice is document contains information proprietary to Schwarze Industries, Inc Any disclosure or use is expressly prohibited. It is not to Document Control Waiver Documents that do not bear The Company's official stamp		Hardware Requ	ired:						
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Introduction proprietary to Schwarze Industries, Inc. Any disclosure or use is expressly prohibited. It is not to Documents that do not bear The Company's official stamp									
33010 - Flat Washer - 7/16" (4ea) 115451557 - Flat Washer - 5/16" (8ea) Nuts: 37018 - Lock Nut - 7/16"-13 (2ea) 37021 - Lock Nut - 5/16"-18 (4ea) oprietary Notice is document contains information proprietary to Schwarze Industries, Inc Any disclosure or use is expressly prohibited. It is not to Document Control Waiver Documents that do not bear The Company's official stamp									
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37021 – Lock Nut – 5/16"-18 (4ea) Proprietary Notice is document contains information proprietary to Schwarze Industries, Inc Any disclosure or use is expressly prohibited. It is not to Documents that do not bear The Company's official stamp		Nuts:							
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					rohibited. It is not to			y's official stamps	

	Process:	Dum	p Cylinder	Valve As	sembly I	nstallation	
		Department:	ALL	Doc. No.:		Author:	Zachery Mullall
SCHWARZE IMDUSTRIES	WORK INSTRUCT		ALL	Revision #:	Initial Release	Approved (Eng):	
		Section:	ALL	Revision Date:	Draft	Approved (Qty):	
		Reference Do		Page:	3 of 12	Approved (Supv):	
			Blank			Approved (PM):	
Quality Policy	Schwarze industries and its emple Reliability; Customer Satisfaction						
PPE			Caution	S.			
Equipment / Materials	Tools: 5/8" Socket/Wrench				I		
	Illustra	ntion			Instru	ction Details	
330	155 - Bolt - 7/16-13 x 1" 010 - Flat Washer - 7/16 (2ea) 018 - Lock Nut - 7/16-13			Install (5225 Using:	566) Manifold M	lount onto Sub Fra	me, Secure
		Hydraul	ic Manifold Mount	33010 - Flat	- 7/16"-13 x 1" Washer - 7/16" (Nut - 7/16"-13	2ea)	
roprietary Notic	ce ntains information proprietary to Schwarr			33010 - Flat 37018 - Lock	Washer - 7/16" (Nut - 7/16"-13	ol Waiver	v's official stamps

	Process:	Dump	Cylinder	Valve As	sembly I	nstallation	
		Department:	ALL	Doc. No.:	WI-A9-001	Author:	Zachery Mullally
	WORK INSTRUCTION	Area:	ALL	Revision #:		Approved (Eng):	
		Section:	ALL	Revision Date:	Draft	Approved (Qty):	
	*	Reference Doc:	Blank	Page:	4 of 12	Approved (Supv):	
	5/29/2018		Blank			Approved (PM):	
Quality Policy	Schwarze industries and its employees are comn Reliability; Customer Satisfaction, Designing to				-	_	
PPE			Caution	S.			
Equipment / Materials	Tools: 5/8" Socket/Wrench	•					
	Illustration				Instru	ction Details	
	3301 37	9155 - Bolt - 7/16" 0 - Flat Washer - 7 018 - Lock Nut - 7 When the second seco	7/16" (2ea) 7/16"-13	13155 - Bolt 33010 - Flat V	66) Manifold M - 7/16"-13 x 1" Washer - 7/16" (Nut - 7/16"-13	1ount to Sub Frame 2ea)	e, Secure Using:
Proprietary Notic		A use die 1	1		Document Contro		v'a official -t-
	ntains information proprietary to Schwarze Industries, Industries in duced in any form unless specifically permitted otherwise b			omonea. It is not to	considered "Uncor		y s official stamps al

	Process:	Dump	Cylinder	Valve As	sembly I	nstallation	
		Department:	ALL	Doc. No.:		Author:	Zachery Mullall
SCHWARZE INDUSTRIES	WORK INSTRUCTION	Area:	ALL	Revision #:	Initial Release	Approved (Eng):	
		Section:	ALL	Revision Date:	Draft	Approved (Qty):	
	ME-PFC-003-F-001 Visual Work Instruction Template Rev 08	Reference Doc:	Blank	Page:	5 of 12	Approved (Supv):	
	5/29/2018		Blank			Approved (PM):	
Quality Policy	Schwarze industries and its employees are comn Reliability; Customer Satisfaction, Designing to						
PPE			Caution	S.			
Equipment / Materials	Tools: 1/2" Socket/Wrench						
	Illustration				Instru	ction Details	
	Sun H	69960 ECJ Valve Body		Cylinder Mou 11061 - Bolt -	int Bracket, Sec - 5/16"-18 x 2" ([2ea)	566) Dump
a contraction of the second seco	11061 - Bolt - 5/16"-18 x 2" (2ea) 11545157 - Flat Washer - 5/16" (4ea) 37021 - Lock Nut - 5/16"-18 x 2" (2ea)	THA OOFAA2 AV	A redu		lat Washer - 5/1 Nut - 5/16"-18		
oprietary Noti	11545157 - Flat Washer - 5/16" (4ea) 37021 - Lock Nut - 5/16"-18 x 2" (2ea)	LIA OOLAS	F	37021 - Lock	Nut - 5/16"-18 Document Contro	x 2" (2ea) ol Waiver	r's official stars

			Department:	ALL	Doc. No.:	Į.	nstallation	Zachery Mullal
SCHWARZE	WORK INST	RUCTION	Area:	ALL	Revision #:		Approved (Eng):	
INNUSTRIES		Rection	Section:	ALL	Revision Date:	Draft	Approved (Qty):	
	ME-PFC-003-F-001 Visual Work	Instruction Template Rev		Blank	Page:	6 of 12	Approved (Supv):	
	5/29/20			Blank			Approved (PM):	
Quality Policy	Schwarze industries and i Reliability; Customer Sat							
PPE				Caution	\$			
Equipment / Materials	Tools: 1/2" Socket/Wrencl	1				1	1	
		Illustration			T	Instru	ction Details	
			62812) Sun ECJ Valv int Bracket, Sec	re Body onto (5225	

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		Dump	Cylinder	Valve As	sembly I	nstallation	
		Department:	ALL	Doc. No.:	WI-A9-001	Author:	Zachery Mullal
WORK	INSTRUCTION	Area:	ALL	Revision #:	Initial Release	Approved (Eng):	
		Section:	ALL	Revision Date:	Draft	Approved (Qty):	
ME-PFC-003-F-001 V		8 Reference Doc:	Blank	Page:	7 of 12	Approved (Supv):	
	5/29/2018		Blank			Approved (PM):	
			Caution	*			
Tools:						1	
	Illustration			1	Instru	ction Details	
6484 90 to Left Hose		Hose 526486 Connects Bottom 7 bottom 90	the second second	Front T. Connect Hose Connect Hose Rear Fitting Connect Hose Manifold All Ho INSTALL	e (525098) to Le e (526487) from e (526486) from <u>WA</u> sees are to be C. ATION. Failur	eft 90° Fitting. T on Bottom 90° ⁻ T on Bottom 90° ⁻ RNING:	to Bottom T on to 90° on Right MPLETE
	A484 90 to Left	5/29/2018 Schwarze industries and its employees are con Reliability; Customer Satisfaction, Designing to Image: Colspan="2">Image: Colspan="2" Image: Colspan="2"	Schwarze industries and its employees are committed to continue Reliability; Customer Satisfaction, Designing to our Customer's r Image: Section 1000 Section 100	Signal Blank Blank Signal Signation Description Illustration Illustration	Blank Blank Schwarze industries and its employees are committed to continued process improvement by mainted Reliability; Customer Satisfaction, Designing to our Customer's needs; Competitive lead time and the continued process improvement by mainted for an end of the content	Signal Blank Blank Section distribution of the section of the sect	Standard Approved (PM): Schwarze industries and its employees are committed to continued process improvement by maintaining focus to achieve: Superior Q Reliability; Customer Satisfaction, Designing to our Customer's needs; Competitive lead time and Comprehensive Training and Tech Image: Comparison of the second state of the second stat

	Process:	Dump	Cylinder	Valve As	sembly In	nstallation	
		Department:	ALL	Doc. No.:	WI-A9-001	Author:	Zachery Mullall
SCHWARZE INDUSTRIES	WORK INSTRUCTION		ALL	Revision #:	Initial Release	Approved (Eng):	
		Section:	ALL	Revision Date:	Draft	Approved (Qty):	
	ME-PFC-003-F-001 Visual Work Instruction Temp	blate Rev 08 Reference Doc:	Blank	Page:	8 of 12	Approved (Supv):	
	5/29/2018		Blank			Approved (PM):	
Quality Policy	Schwarze industries and its employees Reliability; Customer Satisfaction, Des						
PPE			Caution	%			
Equipment / Materials	Tools:				I		
	Illustration			1	Instru	ction Details	
Hose 526486 Connects to Lef	A Contraction of the second seco	From To	Iose 526485 p 90 to Top Front T n Right Side	on Front T. Connect Hose	e (525098) to Ri e (526486) from	Top 90° Fitting to ight 90° Fitting. T on Bottom 90° 1 RNING:	
Manifold		Hose 525098		INSTALL	ses are to be C. ATION. Failur	APPED until COM e to comply may n amage to Hydraul	esult in FOD

	Process:	Dump	Cylinder	Valve As	sembly I	nstallation	
		Department:	ALL	Doc. No.:	WI-A9-001	Author:	Zachery Mullall
	WORK INSTRUCTION	Area:	ALL	Revision #:	Initial Release	Approved (Eng):	
		Section:	ALL	Revision Date:	Draft	Approved (Qty):	
	ME-PFC-003-F-001 Visual Work Instruction Template Rev 08	Reference Doc:	Blank	Page:	9 of 12	Approved (Supv):	
	5/29/2018		Blank			Approved (PM):	
Quality Policy	Schwarze industries and its employees are comm Reliability; Customer Satisfaction, Designing to						
PPE			Caution	*			
Equipment / Materials	Tools:		I		I		
	Illustration			Instru	ction Details		
	Hose (526485) From Right Manifold Front T Fitting	Hose (526484) From Left Manifold Hose (525097) Iose Pressure Supp from Manifold		Front T. Connect Hose Front T. Connect Hose	e (526484) Fron	n Right Manifold T n Left Manifold To e Pressire Supply f T.	op 90° fitting to
roprietary Notic	ce			L	Document Contro	ol Waiver	
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	ntains information proprietary to Schwarze Industries, In	c Any disclosure or	use is expressly pro	ohibited. It is not to	Documents that do	o not bear The Compan	y's official stamps

	Process:	Dump	Cylinder	Valve As	sembly I	nstallation	
		Department:	ALL	Doc. No.:		Author:	Zachery Mullally
SCHWARZE INDUSTRIES	WORK INSTRUCTION	Area:	ALL	Revision #:	Initial Release	Approved (Eng):	
		Section:	ALL	Revision Date:	Draft	Approved (Qty):	
	ME-PFC-003-F-001 Visual Work Instruction Template Rev 08	Reference Doc:	Blank	Page:	10 of 12	Approved (Supv):	
	5/29/2018		Blank			Approved (PM):	
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PPE			Caution	\$			
Equipment / Materials	Tools:				I		
	Illustration				Instru	ction Details	
	Hoses are not change	Hose (5250 From Left Ma	anifold	Connect Hose T on Rear T H Connect Hos	Fitting.	anged. Left Manifold to S n Return Tank to B	
		Hose (525097 Tank Return Ho					
Proprietary Notic	ce ntains information proprietary to Schwarze Industries, Industri	Tank Return Ho	ose • •		Document Contro		

		Process:		Dump	Cylinder	Valve As	sembly I	nstallation	
				Department:	ALL	Doc. No.:	WI-A9-001	Author:	Zachery Mullall
SCHWARZE	WORK IN	STRUCTI	ON	Area:	ALL	Revision #:	Initial Release	Approved (Eng):	
				Section:	ALL	Revision Date:	Draft	Approved (Qty):	
	ME-PFC-003-F-001 Visual V	Work Instruction 7	Template Rev 08	Reference Doc:	Blank	Page:	11 of 12	Approved (Supv):	
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Quality Policy	Schwarze industries an Reliability; Customer (•	0	-	•
PPE					Caution	S.			
Equipment / Materials	Tools:								
		Illustrat	ion				Instru	ction Details	
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