

Supplement to Yanmar Kit Installation Instructions

SAFETY

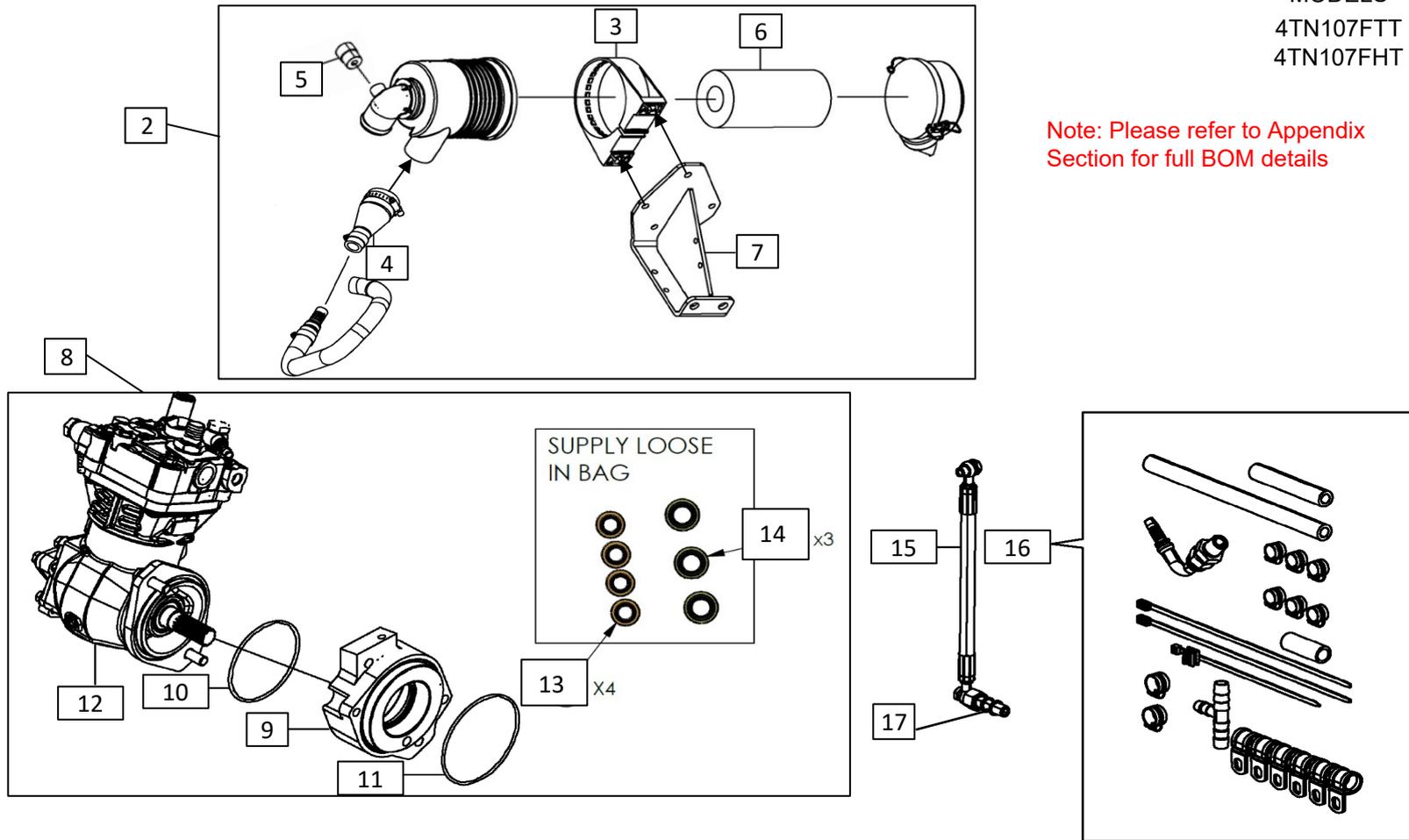
This product is designed and intended only for use with a YANMAR engine. All safety and warning information contained in the Yanmar Operation Manual and Service Manual is adopted and incorporated to apply to the components, accessories, and parts that are utilized with Yanmar engines. Follow all instructions and precautions before installing this product, before operating, during operation, and during periodic maintenance procedures for your safety, the safety of others, and to protect the performance of your engine.



Item	Lev.	O	Part No.	Description	Quantity	Remarks
1	*	*	729G90-31100	COMPRESSOR ASSY, AIR	1	
2	**	*	129G90-12200	CLEANER KIT, AIR KC1	1	
3	***		129G90-12300	BRACKET, AIR CLEANER	1	
4	***		129G90-12310	HOSE, INTAKE PRESSURE	1	
5	***	*	129G90-12320	INDICATOR, SERVICE	1	
6	***	*	129G90-12330	FILTER, AIR	1	
7	***		129G90-12340	BRACKET, AIR CLEANER	1	
8	**		129G90-31110	COMPRESSOR ASSY, AIR	1	
9	***		129G90-26050	BASE, COMPRESSOR	1	
10	***	*	129G90-26100	O-RING	1	
11	***	*	129G90-26110	O-RING	1	
12	***		129G90-31120	COMPRESSOR, AIR KC1	1	
13	***	*	22190-080002	WASHER, SEAL 8 (Rubber Lined Dowty)	4	
14	***	*	22190-120002	WASHER, SEAL 12 (Rubber Lined Dowty)	3	
15	**	*	129G90-39200	OIL SUPPLY, KIT KC1	1	
16	**	*	129G90-49100	HOSE KIT, KC1	1	
17	***	*	129G90-39210	M12x1.0 DOUBLE BANJO	1	

MODELS
4TN107FTT
4TN107FHT

Note: Please refer to Appendix Section for full BOM details



Note: Service parts are denoted by an asterisk in sec "O". To replace non-service parts, the entire kit will need to be purchased.



Installation Instructions

Hand tighten all bolts and nuts until assembly is completed, then torque according to specifications in Table 1. The numbers in () represent the item numbers.

Note: Parts included in the BOM listed above are shown as [X]

1. Remove & discard both the M12 banjo bolt and M12 washers securing the two oil tubes to the block near the starter. **See Figure 1**
2. Remove two M10 nuts from aux drive spacer; set nuts to side. Remove top M8 banjo bolt securing oil tube to aux drive spacer and remove oil tube; set banjo bolt, and tube to side. The two M8 o-ring seals on top banjo bolt can be discarded. **See Figure 2.**
3. Remove the aux drive spacer assembly from the gear housing. Then remove the HOP drive gear assembly and o-ring as shown in **Figure 4.** Set the HOP drive gear assembly to the side. When finished the aux drive should look like **Figure 3.**
4. Assemble the HOP drive gear assembly from **step 3** with the new air compressor spacer [9] replacing the original aux drive spacer. Discard the original aux drive spacer. Ensure the pre-assembled o-ring [11] is present in the compressor spacer. **See Figure 4**
5. Assemble the compressor spacer [9] and drive gear assembly to gear housing. Ensure lubrication port structure is on top. **See Figure 5.** Reinstall the M10 nuts that were removed in **step 2** to secure compressor spacer [9] to gear housing.
6. Ensure the pre-assembled o-ring [10] is present in the air compressor mount face. Remove the barbed fitting (M16 Banjo Bolt and Banjo) and two M16 copper washers from the front side of the compressor and set them to side. **See Figure 6**
7. Assemble the compressor [12] to the compressor spacer [9]. Secure the compressor using black M12 flange bolt (10.9T, apply 126 Nm) on top and shiny M12 flange bolt (8.8T, apply 88 Nm) on bottom. **See Figure 7.** Reinstall the barbed fitting with copper washers to compressor [12].
8. Using oil supply hose [15], install a rubber lined washer [14] to large M12 double banjo bolt [17], then install the engine block end of oil tube from **step 2** then install another rubber lined washer [14]. **See Figure 8.**
9. Install the assembly from **step 8** through oil tube into oil galley port using the last of three rubber lined washer [14] between block and tube. Tighten the large M12 double banjo bolt [17] (Apply precise 30Nm torque) first and then tighten the smaller M10 banjo bolt (Apply 20-25Nm torque). **See Figure 9**
10. Secure oil tube to compressor spacer [9] by reinstalling M8 banjo bolt from **step 2**. Install a rubber lined washer [13] around the bolt on both sides of the oil tube. **See Figure 10**
11. For the loose end of oil supply hose [15], place M10 copper seal washers included with the Oil Supply Kit [15] around the banjo bolt on both sides of the hose fitting. Install the banjo bolt into port on the side of the compressor. **See Figure 11**
12. Remove the rubber cap from coolant water port on right front side of engine and install 65mm 1/2" ID rubber hose with T fitting and clamps (Jubilee clips) as pictured in **Figure 12.** All parts are included with the hose kit [16]. Tighten both clamps.
13. Using the 550mm Hose with 2 clamps from [16], install one end to the bottom port of T fitting [16] and the other end to the barbed fitting on the compressor [12] as shown in **Figure 13.** Tighten both clamps. Use the remaining port of the T-fitting to route coolant line to the DEF header.
14. Remove 5/16 head size freeze plug from block on left front upper side of engine. **See Figure 14.** Insert the 90 deg insert on the 3/8" BSPT MA Adapter fitting included with [16] and wrap in plumbers tape and install the end with plumbers tape into the open freeze plug port (18-26 Nm).
15. Install 1550mm hose on barbed fitting 90deg joint from [16] and tighten clamp. Position the joint and route the hose along upper left side of engine behind from upper left corner of oil cooler, behind SCR bracket and intake throttle. All parts included with [16]. **See Figure 15 & 21**
16. Use 3 P-Clamps at the locations shown in **Figure 16,17 & 21** to secure the hose. Ensure the hose is at least 50mm away from all exhaust parts. Cut the hose to length and install to rear barbed fitting of the compressor with hose clamp. **See Figure 18**
17. Install Air Cleaner bracket [7] to engine using M12 bolts. Install Air Cleaner assembly [2] to the bracket [7] using M8 bolt, washers and nut. **See Figure 19.** All the bolts, nuts, washers etc. are included with Air Cleaner Kit [2].
18. Install the 19mm ID Breather hose [4] to barbed fitting on air cleaner assembly [2] and the other end of the breather hose to the rear top fitting on compressor [12] using hose clamps or Jubilee clip. All components available with [2] **See Figure 20**
19. For the YMR routing setup, we recommend using corrugated tubing on the coolant hose near the intake throttle and rear left ATD bracket to prevent rubbing, as shown in **Figure 22.** For customer routing, ensure similar protection against sharp edges and contact with hot ATD.

NOTE: Comply with torque standards in the table to avoid unexpected damage during installation or in the future. Some specific bolts and nuts, especially Banjo bolts, require special torque values listed above. Applying a standard torque to these critical fasteners may result in damage.

Table 1: Tightening Torque			
Diameter x Pitch	Kgf-m	Foot-lbf	N-m
M8 x 1.25	1.5 ~ 2.9	10.6 ~ 20.9	14.4 ~ 28.3
M10 x 1.50	4.5 ~ 5.5	32.5 ~ 39.8	44.0 ~ 54.0
M12 x 1.75	8.0 ~ 10.0	57.9 ~ 72.3	78.4 ~ 98.0



Installation Instructions

Figure 1



Figure 2

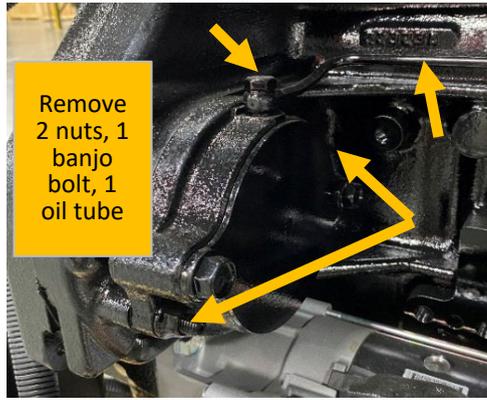


Figure 3



Figure 4



Figure 5

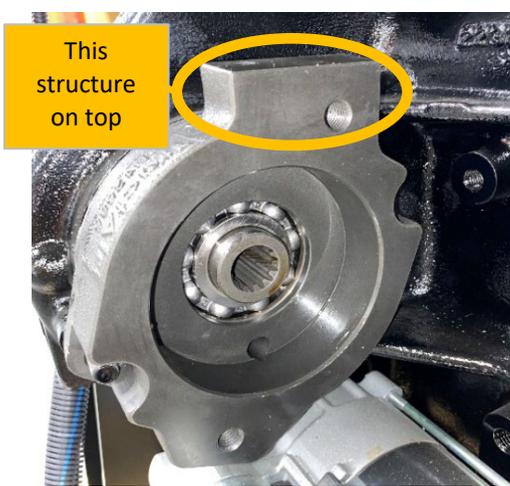


Figure 6



NOTE: Comply with torque standards in the table to avoid unexpected damage during installation or in the future.

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Diameter x Pitch	Kgf-m	Foot-lbf	N-m
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M12 x 1.75	8.0 ~ 10.0	57.9 ~ 72.3	78.4 ~ 98.0



Installation Instructions

Figure 7

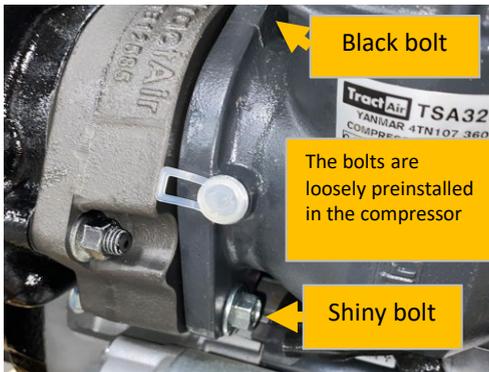


Figure 8



Figure 9

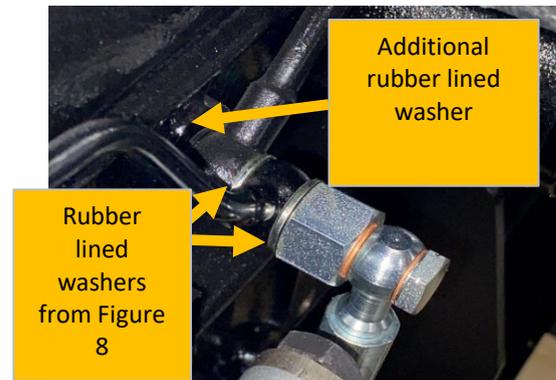


Figure 10



Figure 11

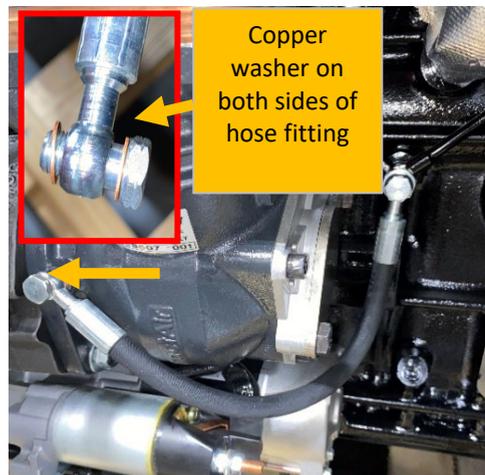


Figure 12



NOTE: Comply with torque standards in the table to avoid unexpected damage during installation or in the future.

Table 1: Tightening Torque			
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M10 x 1.50	4.5 ~ 5.5	32.5 ~ 39.8	44.0 ~ 54.0
M12 x 1.75	8.0 ~ 10.0	57.9 ~ 72.3	78.4 ~ 98.0



Installation Instructions

Figure 13

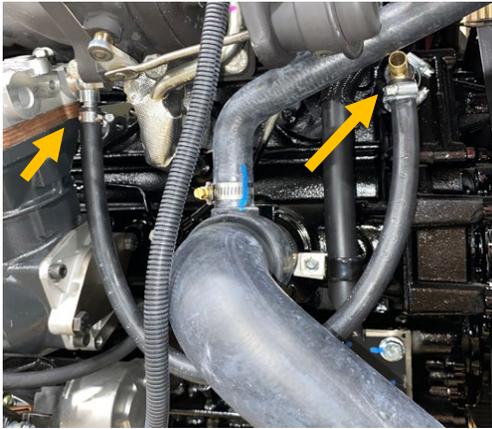


Figure 14

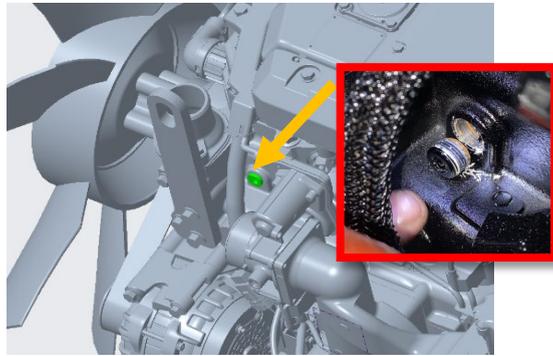


Figure 15

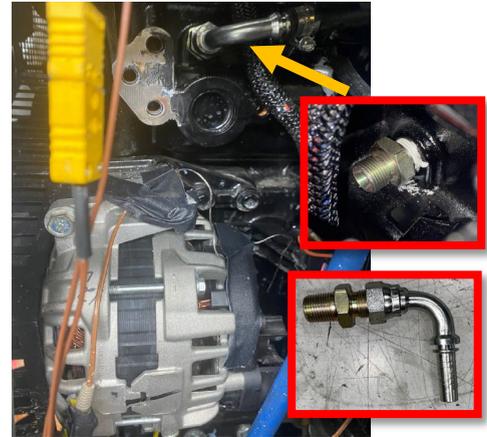


Figure 16

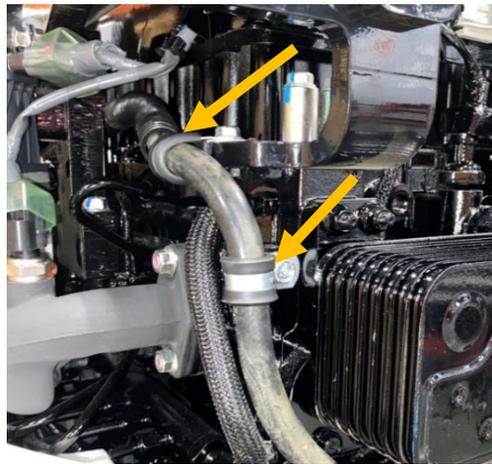


Figure 17

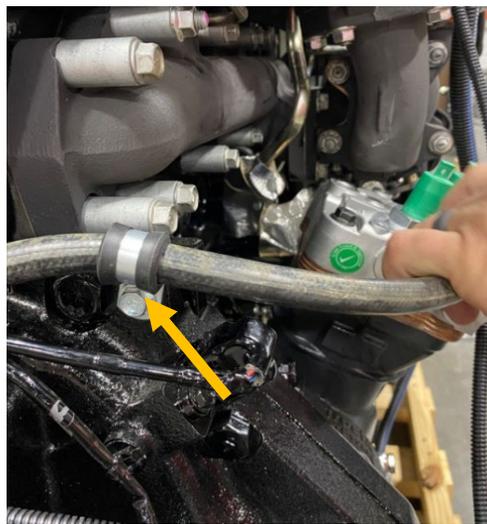


Figure 18



NOTE: Comply with torque standards in the table to avoid unexpected damage during installation or in the future.

Table 1: Tightening Torque			
Diameter x Pitch	Kgf-m	Foot-lbf	N-m
M8 x 1.25	1.5 ~ 2.9	10.6 ~ 20.9	14.4 ~ 28.3
M10 x 1.50	4.5 ~ 5.5	32.5 ~ 39.8	44.0 ~ 54.0
M12 x 1.75	8.0 ~ 10.0	57.9 ~ 72.3	78.4 ~ 98.0



Installation Instructions

Figure 19



Figure 20

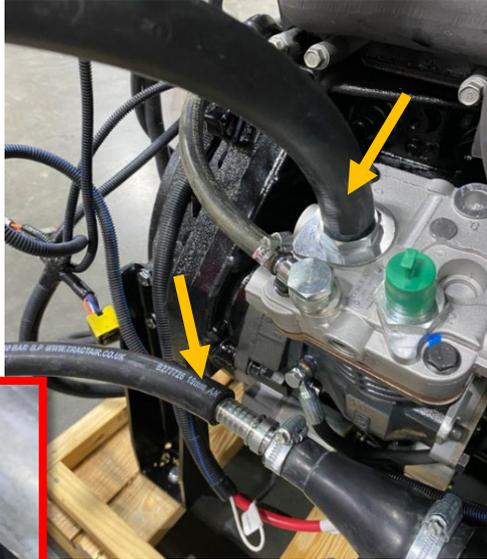


Figure 21

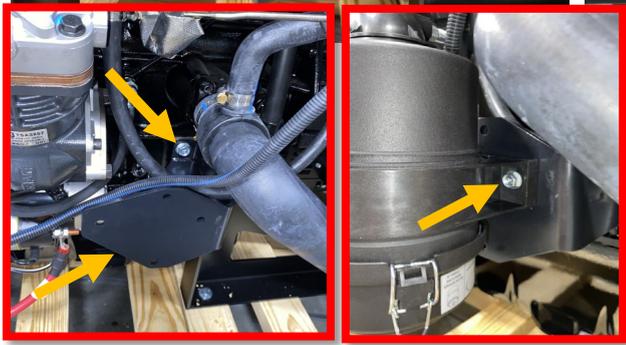
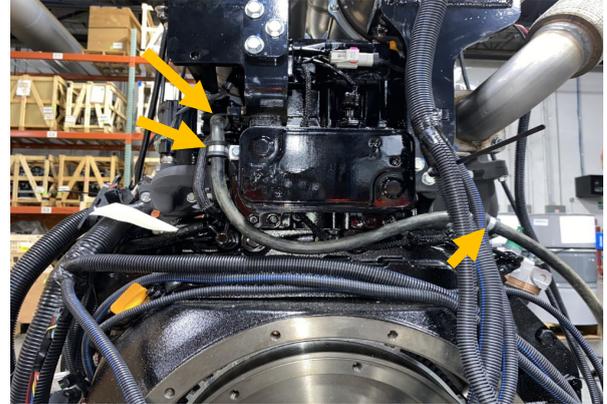
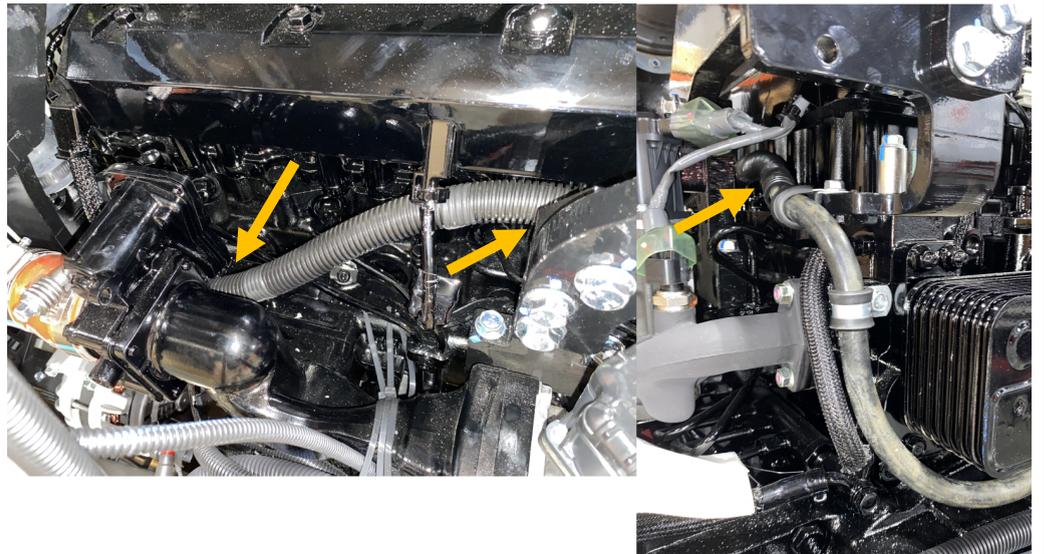


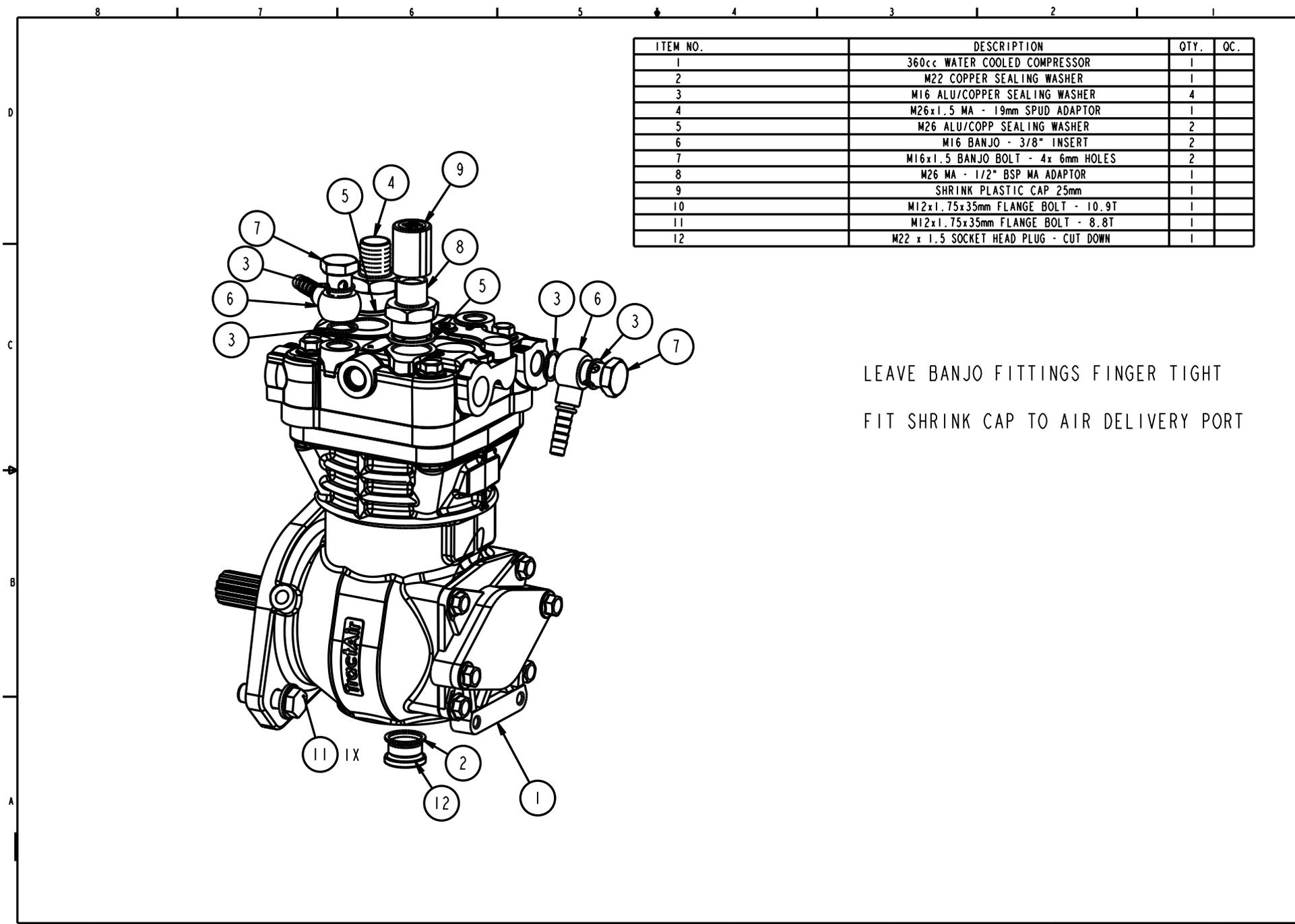
Figure 22



NOTE: Comply with torque standards in the table to avoid unexpected damage during installation or in the future.

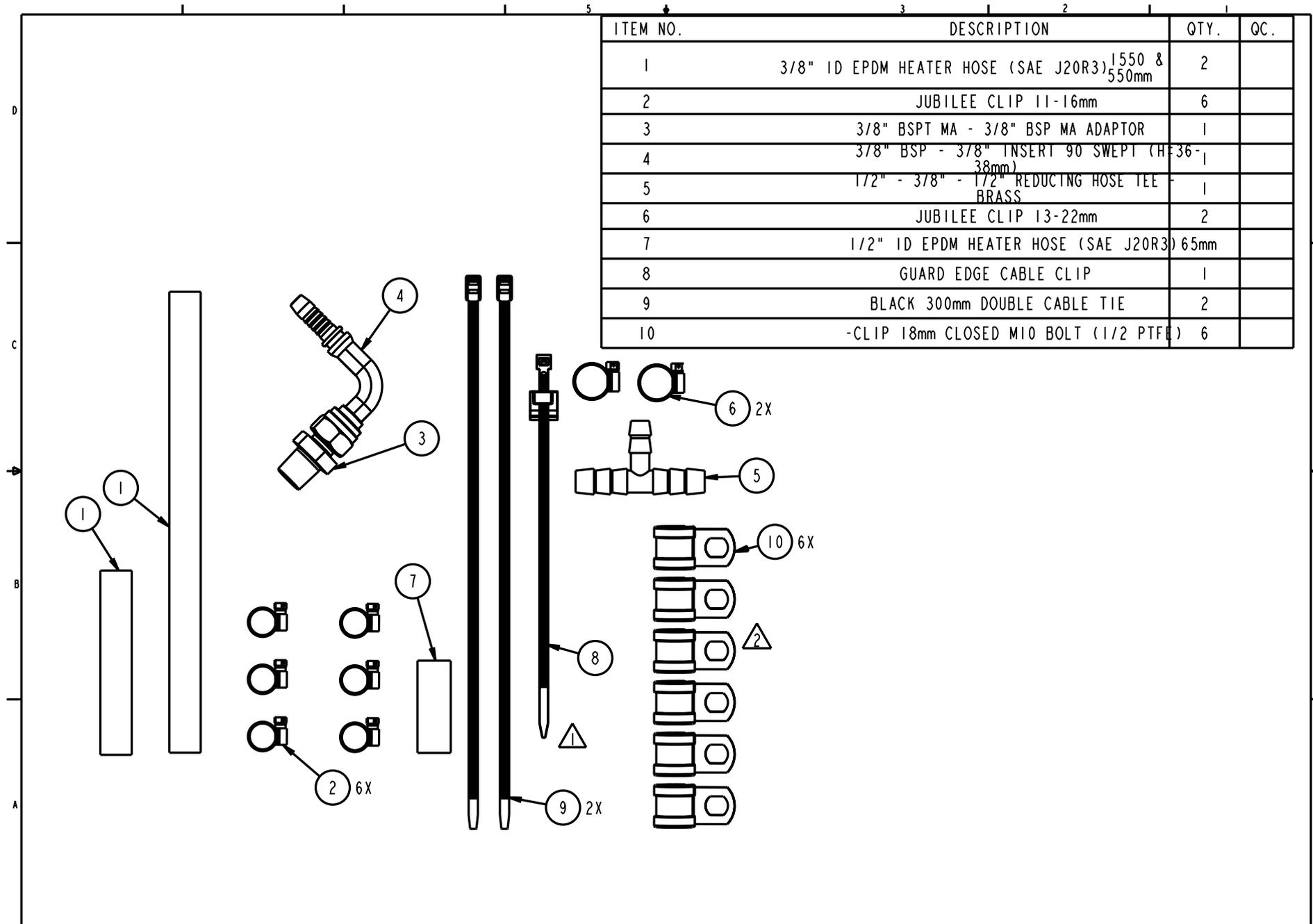
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M10 x 1.50	4.5 ~ 5.5	32.5 ~ 39.8	44.0 ~ 54.0
M12 x 1.75	8.0 ~ 10.0	57.9 ~ 72.3	78.4 ~ 98.0

Appendix



Detailed view of Item [12] from the BOM in page 1

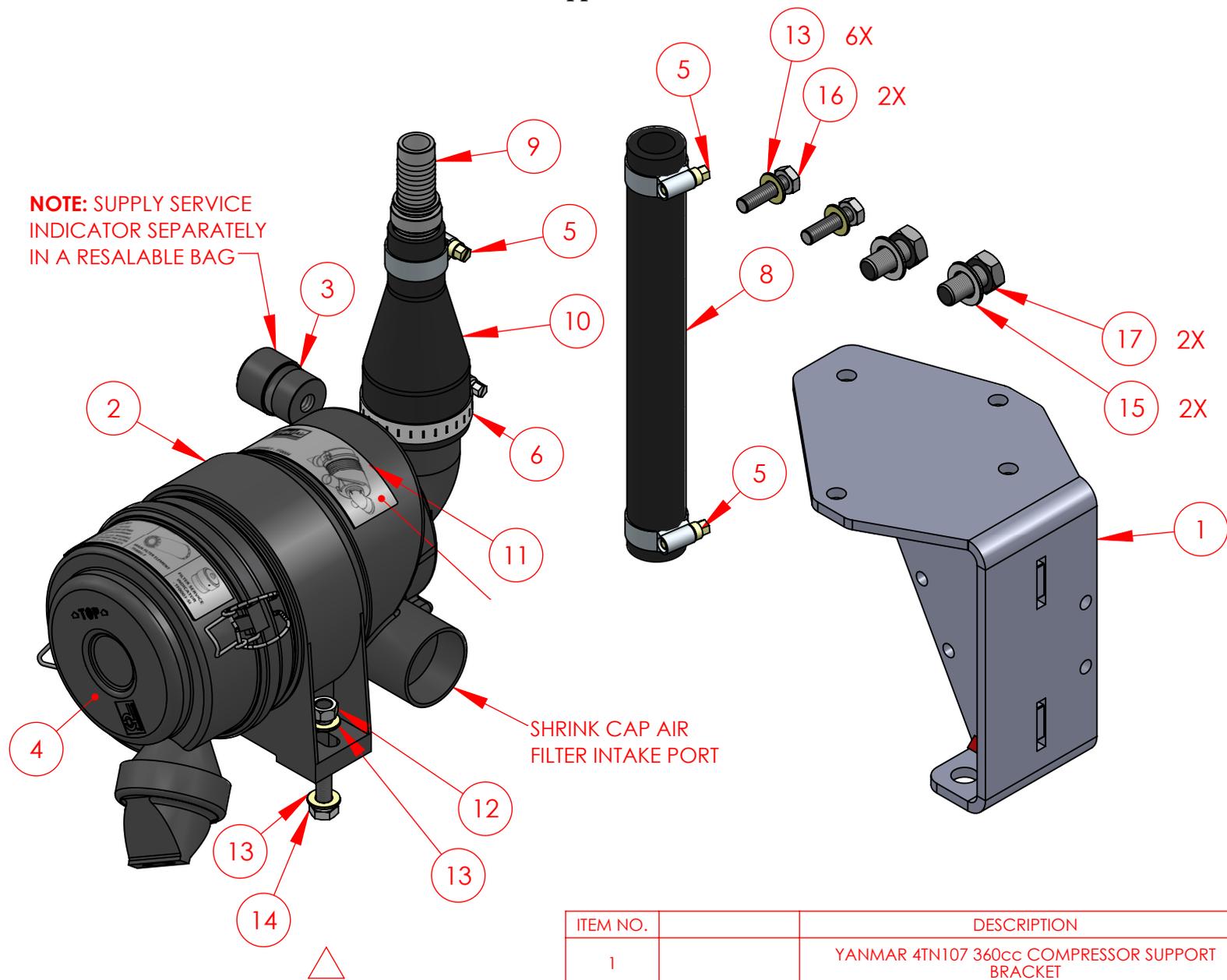
Appendix



ITEM NO.	DESCRIPTION	QTY.	QC.
1	3/8" ID EPDM HEATER HOSE (SAE J20R3) 1550 & 550mm	2	
2	JUBILEE CLIP 11-16mm	6	
3	3/8" BSPT MA - 3/8" BSP MA ADAPTOR	1	
4	3/8" BSP - 3/8" INSERT 90 SWEPT (HEF36-38mm)	1	
5	1/2" - 3/8" - 1/2" REDUCING HOSE TEE BRASS	1	
6	JUBILEE CLIP 13-22mm	2	
7	1/2" ID EPDM HEATER HOSE (SAE J20R3) 65mm		
8	GUARD EDGE CABLE CLIP	1	
9	BLACK 300mm DOUBLE CABLE TIE	2	
10	-CLIP 18mm CLOSED M10 BOLT (1/2 PTFE)	6	

Detailed view of Item [16] from the BOM in page 1

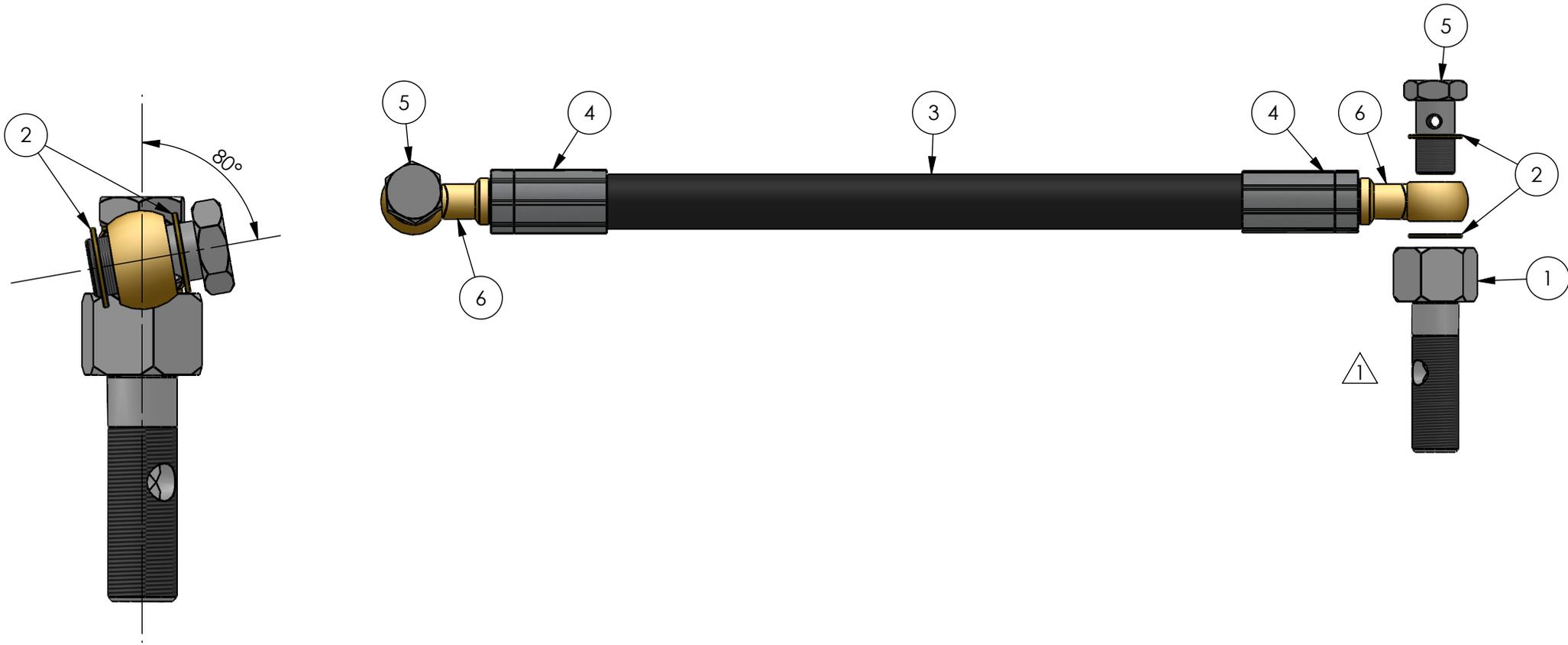
Appendix



ITEM NO.	DESCRIPTION	QTY.	QC.
1	YANMAR 4TN107 360cc COMPRESSOR SUPPORT BRACKET	1	
2	AIR CLEANER ASSEMBLY BRACKET	1	
3	AIR FILTER SERVICE INDICATOR	1	
4	COMPRESSOR AIR FILTER ASSEMBLY 90 DEG OUTLET	1	
5	19mm HOSE (OD 30mm) JUBILEE CLIP (20-32mm)	3	
6	HOSE CLIP 35-50mm	1	
7	1/8" NPT MA - MA ADAPTOR	1	
8	BREATHER HOSE 19mm I/D	3.0m	
9	3/4" OD HOSE JUNCTION - LONG	1	
10	44.5mm TO 19mm ONE PIECE INTAKE HOSE	1	
11	TF0004 TA FILTER LABEL	1	
12	M8x1.25 ZINC PLATED NUT	2	
13	M8 FLAT WASHER (FORM A) - 17mm OD	6	
14	M8x1.25x25mm BOLT - 8.8T	2	
15	M12 FLAT WASHER - 24mm OD (FORM A)	2	
16	M8x1.25x30mm BOLT - 8.8T	2	
17	M12x1.75x25mm BOLT - 8.8T	2	

Detailed view of Item [2] from the BOM in page 1

Appendix



ITEM NO.		DESCRIPTION	QTY.	QC.
1		YANMAR M12x1.0 DOUBLE BANJO (39mm) - M10x1.0 FE ADAPTOR	1	
2		M10 ALU COPPER SEAL	4	
3		1/4" 1 WIRE HOSE	275mm	
4		1/4" FERRULE 1 WIRE	2	
5		M10 x 1 BANJO BOLT	2	
6		M10 BANJO - 1/4" INSERT	2	

Detailed view of Item [15] from the BOM in page 1