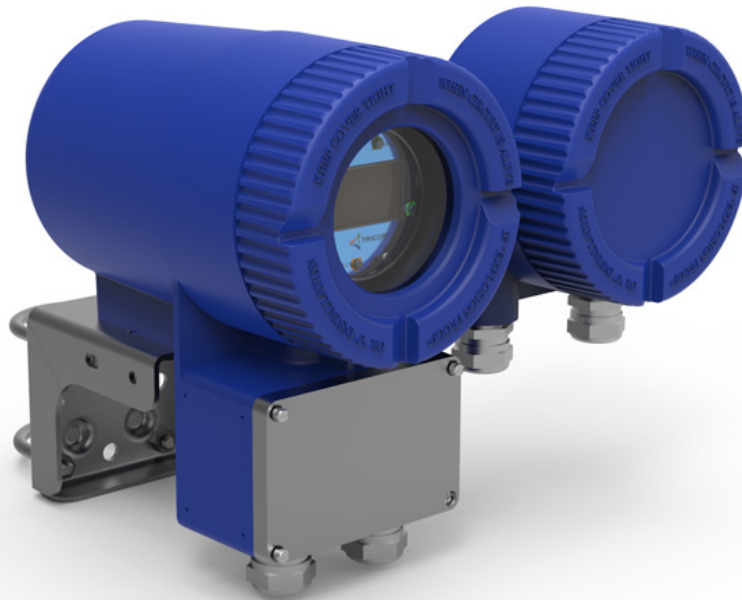


# Parts List

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TCE\_8501\_Parts\_M\_EN\_170308\_E001



## TRICOR<sup>®</sup> TCE 8501

## **Manual-Version**

TCE\_8501\_Parts\_M\_EN\_170308\_E001

## **SW-Version**

This manual is valid for

Main SW: Mv3.40 and higher

Display SW: Dv3.40 and higher

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## 1. Model Code DSP Coriolis Mass Flow Transmitter

	TCE	8501	-	X	X	X	X	X	-	X	X	X	X	-	XXX	-	X	X	X
<b>Communication Interface<sup>1</sup></b>																			
HART Communication Protocol				T															
Modbus Communication Protocol				M															
<b>Mass Flow Sensor</b>																			
Models TCM Mass Flow Sensor					B&D														
<b>Transmitter Mounting</b>																			
Remote Mounted Transmitter																			1
<b>Language</b>																			
English																			E
<b>Supply Voltage</b>																			
120/240 V AC, 50/60 Hz, Externally Powered I/O																			A
10 to 36 V DC, Externally Powered I/O																			B
<b>Display</b>																			
None																			A
Integral LCD Indicator with Keypad																			B
<b>Output and Power Cable Entrance</b>																			
1/2 NPT Connection (Two places)																			A
M20 Connection (Two places)																			B
<b>Interconnecting Cable Insulation Material</b>																			
No Cable																			N
IPVC Insulated Cable; Temperature Range from -4 °F to +176 °F (-20 °C to +80 °C)																			P
FEP Insulated Cable; Temperature Range from -40 °F to +185 °F (-40 °C to +85 °C)																			F
<b>Interconnecting Cable Length</b>																			
No Cable																			N
20 foot cable/6 meter cable																			G
50 foot cable/15 meter cable																			P
100 foot cable/31 meter cable																			H
<b>Electrical Safety</b>																			
ATEX flameproof with intrinsically safe flow sensor connections																			ADA
CSA/CSAus explosionproof with intrinsically safe flow sensor connections																			CDA
IECEX flameproof with intrinsically safe flow sensor connections																			EDA
No Certifications																			ZZZ
<b>Tamperproof Sealing</b>																			
Tamperproof Sealing for Housing and Terminal Block Covers																			S
<b>Paint Options</b>																			
Epoxy Paint <sup>2</sup>																			E
<b>Mounting Bracket Material and Pipe Size</b>																			
Stainless Steel																			F
Carbon Steel, 3-inch pipe																			G
Stainless Steel, 3-inch pipe																			H

<sup>1</sup> Factory default setting. Transmitters with display and keypad may be changed in the field.

<sup>2</sup> Epoxy paint finish option applies to the enclosure body; the enclosure covers use an epoxy paint finish as standard.

## 2. Parts

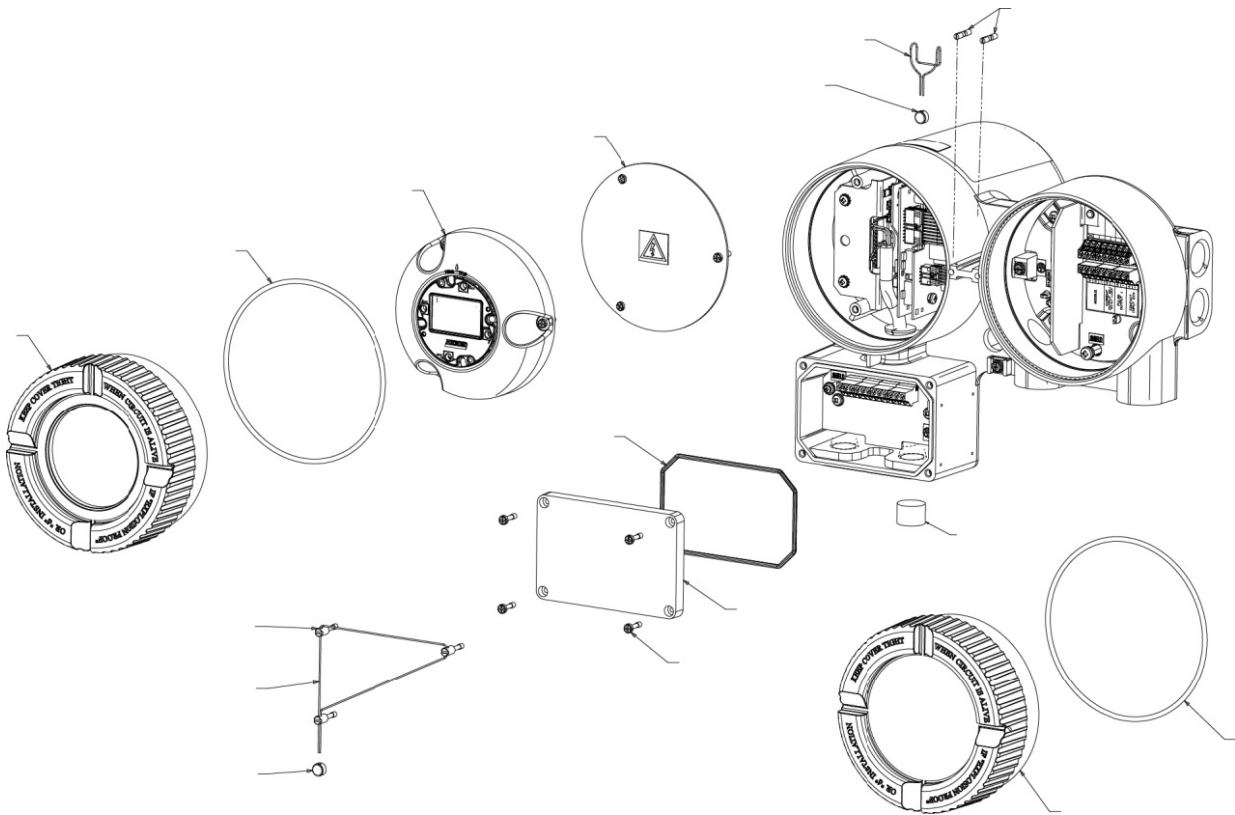


Fig. 1: Remote Mounted TCE 8501 Coriolis Mass Flow Transmitter

The lockout screws, sealing wire, and lead seals (Items 6, 24, and 25) are offered as a convenience for those users who did not order Tamperproof Sealing Options with the original sales order, but now wish to add this option in the field. Refer to the section on cover lock versions in TCE\_8501\_Overview\_M\_EN\_170308\_E001 for instructions on converting to Tamperproof Sealing Options and locking the TCE 8501 covers.

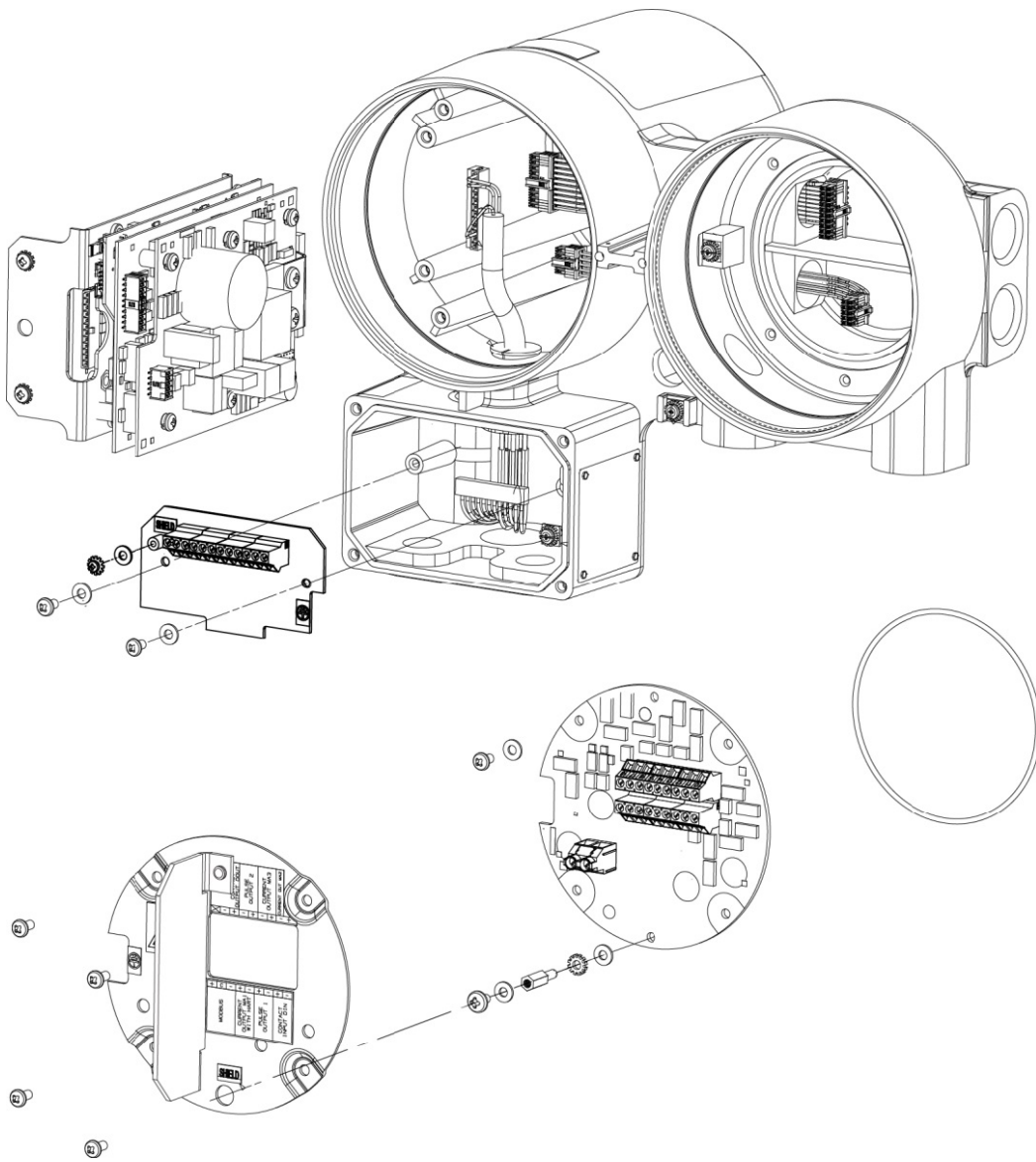


Fig. 2: Remote Mounted TCE 8501 Coriolis Mass Flow Transmitter (Continued)

Not Shown: Cable, Transmitter to Flow Sensor. See Table 1 for part numbers.

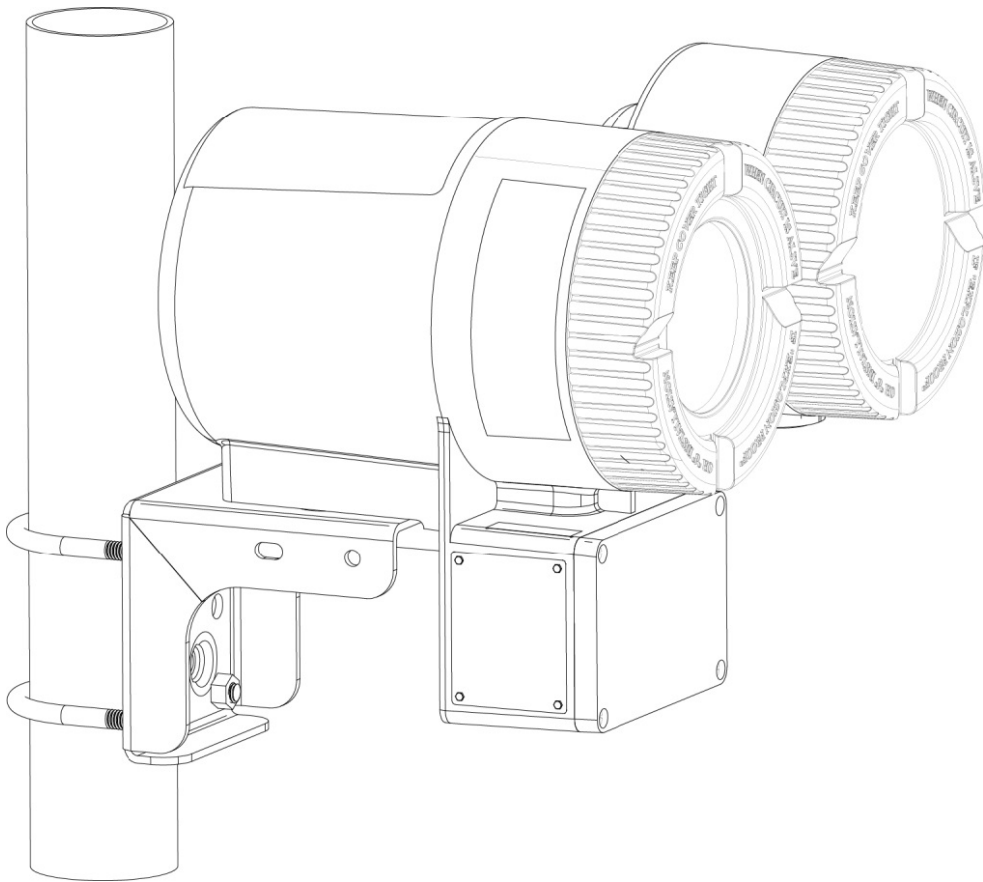


Fig. 3: Mounting Kit

Parts List for Remote Mounted TCE 8501 Coriolis Mass Flow Transmitter, Remote Mounted TCE 8501 Coriolis Mass Flow Transmitter (Continued), and Mounting Kit

Item	Part no.	Qty.	Part Name	Shown in
1	K0152VP	1	Cover, Blank Mach	Fig. 1
2	K0152VL	1	Cover, Window Assembly	Fig. 1
3	K0152NN	1	Rectangular Cover	Fig. 1
*4	X0144NF	2	O-ring, Cover, Round	Fig. 1
*5	X0201PA	1	O-ring, Cover, Rectangular	Fig. 1
6	X0173YZ	4	Captive Cover, Standard	Fig. 1
	K0153CQ	3	Screw, Special, lockout (for Options -S, -T, or -D)	
*7	K0163FR	1	Display Assembly	Fig. 1
8	K0153AX	1	Shield, Electronics Module (only for units without LCD Display)	Fig. 1
9	K0163FE	1	Sensor Termination Board PWA Kit	Fig. 2
	X0169CR		Screw, .132-32, Sems	
	0017206		Washer, Flat, #6	
10	X0173YA	5	Washer, Flat #8	Fig. 2
11	X0174EQ	4	Screw, .164-32, Sems	Fig. 2
*12	Below		Module Assembly (Also see Electronics Module Assembly Kits, Electronics Module Assembly Kits)	Fig. 2
	K0152NM	1	Module Assembly, AC Electronics	
	K0152NR	1	Module Assembly, dc Electronics	
13	Below	1	Customer Connection Kits	Fig. 2
	K0163FC	1	Customer Connection Kit, AC	
	K0163FD	1	Customer Connection Kit, dc	
14	D0177CF	1	Power, I/O Termination Board, PWA	Fig. 2
15	X0174EP	4	Screw, .164-32	Fig. 2
16	X0201MZ	1	Standoff, #8	Fig. 2
17	X0143SB	1	Washer, Star Washer #8	Fig. 2
18	X0144MZ	1	O-ring, Power I/O Board	Fig. 2
19	P0178NU	1	Cable, I/O	Fig. 2
20	P0178NT	1	Cable, Power	Fig. 2
21	See Table 3.	1	Cable, Transmitter to Flow Sensor	Not shown
22	D0162VJ	3	Ground Screw Assembly	Fig. 2
23	D0162WM	2	Screw, Cover Lock	Fig. 1
*24	S001806		Lead Seal	Fig. 1
*25	S001807		Wire, SS DIA 0.06"	Fig. 1
26	B0139CA		Conduit Plug	Fig. 1
27	Below		Mounting Kits	Fig. 3
	K0152TN	1	Carbon Steel Mounting Kit for 2-inch Pipe (Standard)	
	K0156NU	1	Stainless Steel Mounting Kit for 2-inch Pipe (Optional)	
	K0156NN	1	Stainless Steel Mounting Kit for 3-inch Pipe (Optional)	
	K0156NP	1	Carbon Steel Mounting Kit for 3-inch Pipe (Optional)	
28	X0169CR	1	Screw, .132-32, Sems	Fig. 2
29	0017206	1	Washer, Flat, #6	Fig. 2

Tab. 1: Parts List for Remote Mounted TCE 8501 Coriolis Mass Flow Transmitter, Remote Mounted TCE 8501 Coriolis Mass Flow Transmitter (Continued), and Mounting Kit



## Electronics Module Assembly Kits

Kit Number	Power Input	Protocol	Certification Type	Kit Contents
K0168AR	AC	Modbus	General	<ul style="list-style-type: none"> <li>AC Power Electronics Module (K0152NM)</li> <li>Instruction Document (TCM_Instr_09112015_V1)</li> <li>Label</li> </ul>
K0168AN		HART	General	
K0168AK	DC	Modbus	General	<ul style="list-style-type: none"> <li>DC Power Electronics Module (K0152NR)</li> <li>Instruction Document (TCM_Instr_09112015_V1)</li> <li>Label</li> </ul>
K0168AG		HART	General	

Tab. 2: Electronics Module Assembly Kits

**NOTE**

For Hazard area applications, consult factory.

Cable Length	Cable for TCM Flow Sensors <sup>3</sup>	
	PVC Insulation <sup>4</sup>	FEP Insulation <sup>5</sup>
20 feet	K0169JN	K0169JX
50 feet	K0169JM	K0169JW
100 feet	K0169JL	K0169JV
200 feet	Not Applicable	
500 feet		
750 feet		
1000 feet		
6 meters	K0169JN	K0169JX
15 meters	K0169KD	K0169KL
30 meters	K0169KC	K0169KK
60 meters	Not Applicable	
150 meters		
225 meters		
300 meters		

Tab. 3: Cable Length

<sup>3</sup> Five twisted pairs of insulated, 22 AWG stranded, tinned, copper wire. Each pair has an aluminum-polyester shield with drain wire.

<sup>4</sup> Twisted pairs are insulated with PVC. Cable has a chrome-PVC outer jacket with ambient temperature limits of -4 °F and +176 °F (-20 °C and +80 °C).

<sup>5</sup> Twisted pair are insulated with FEP. Cable has an FEP outer jacket with ambient temperature limits of -40 °F and +185 °F (-40 °C and +85 °C)

## Recommended Spare Parts Summary

Item Number	Part Number	Part Name	Number of Parts Recommended to			Figure Number
			1 Inst.	5 Inst.	20 Inst.	
4	X0144NF	O-ring, Cover, Round	2	4	4	Fig. 1
5	X0201PA	O-ring, Cover, Rectangular	1	2	2	Fig. 1
7	K0152RX	Display Assembly	1	1	2	Fig. 1
24	S001806	Seal, Lead (Options -S)	6	12	24	Fig. 1
25	S001807	Sealing Wire, ss; 0.06 in O.D., 40 in long (Option -S)	As required	As required	As required	Fig. 1
12	See Electronics Module Assembly Kits	Module Assembly, Electronics	1	1	4	Fig. 1

Tab. 4: Recommended Spare Parts Summary

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