

KINNEY®

Kinney®
Single-Stage, Triplex Rotary Piston Pump

Manual 1872 Rev B 001872 0000

WARNING: Do Not Operate Before Reading Manual

KT™ Filter Kit OPERATOR'S MANUAL

Models

KT-150 KT-300 KT-500 KT-850



800.825.6937 | www.kinneyvacuum.com

Original Instructions

Disclaimer Statement:

All information, illustrations and specifications in this manual are based on the latest information available at the time of publishing. The illustrations used in this manual are intended as representative reference views only. Products are under a continuous improvement policy. Thus, information, illustrations and/or specifications to explain and or exemplify a product, service or maintenance improvement may be changed at any time without notice.

Rights Reserved Statement:

No part of this publication may be reproduced or used in any form by any means - graphic, electronic or mechanical, including photocopying, recording, taping or information storage and retrieval systems - without the written permission of Kinney®.

Product information and specifications subject to change.

KT-150 Filter System Kit Components	1
KT-150 Filter Kit.....	1
Installation.....	2
Notes.....	2
Warnings.....	2
KT-150 Filter Kit Drawing.....	3
KT-150 Filter System Kit Parts List.....	4
KT-300 Filter System Kit Components	5
KT-300 Filter Kit.....	5
Installation.....	6
Notes.....	6
Warnings.....	6
KT-300 Filter Kit Drawing.....	7
KT-300 Filter System Kit Parts List.....	8
KT-500 Filter System Kit Components	9
KT-500 Filter Kit.....	9
Installation.....	10
Notes.....	10
Warnings.....	10
KT-500 Filter Kit Drawing.....	11
KT-500 Filter System Kit Parts List.....	12

KT-850 Filter System Kit Components 13

- KT-850 Filter Kit..... 13
- Installation 14
- Notes..... 14
- Warnings..... 14
- KT-850 Filter Kit Drawing..... 15
- KT-850 Filter System Kit Parts List 16

KT-150 FILTER SYSTEM KIT COMPONENTS

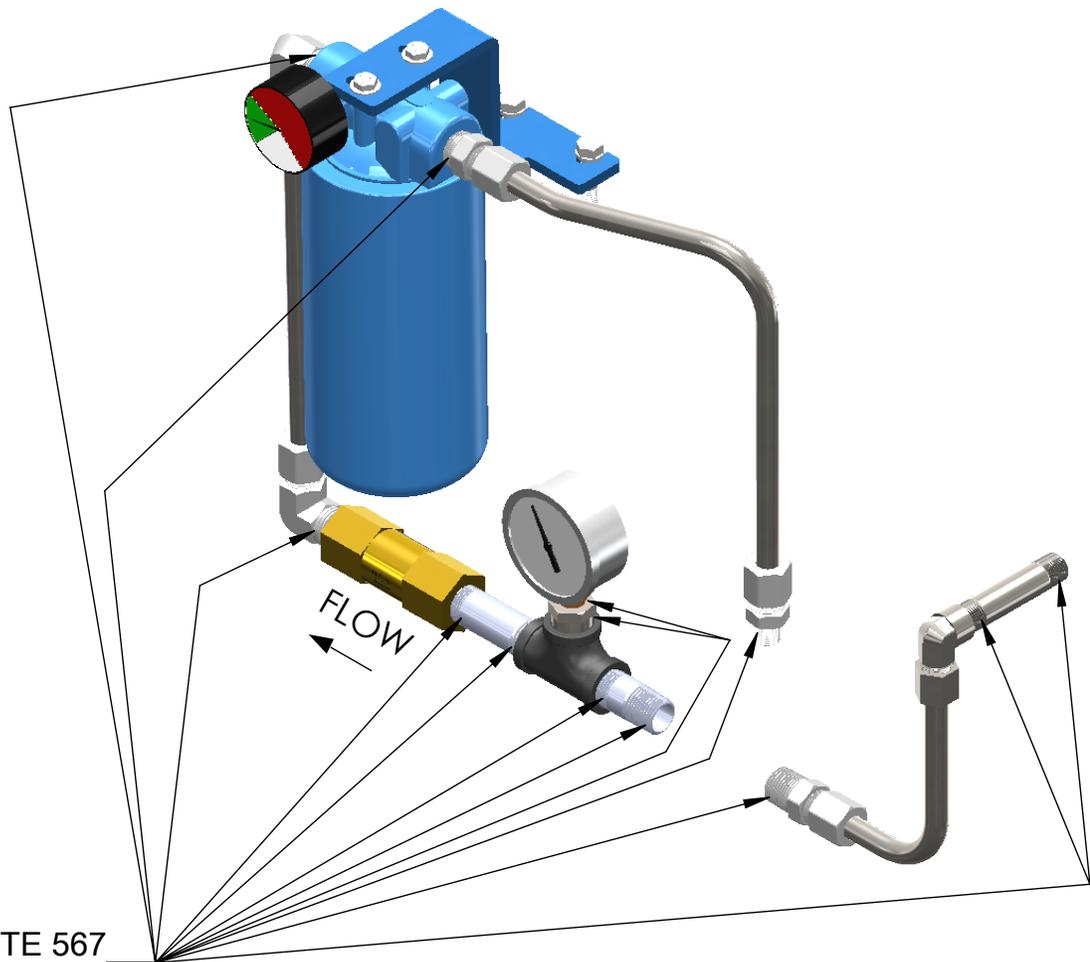


Figure 1-1 – KT-150 Filter Kit
(Retrofit Installation Only)

INSTALLATION:**(RETROFIT INSTALLATION ONLY)**

1. Lockout/Tagout machine. Use caution as oil & surfaces may be hot. Allow pump to cool to at least 100°F before proceeding to drain oil.
2. Remove all existing oil plumbing except for the oil pump.
3. Ensure remaining plumbing ports are free of debris.
4. Remove the two bolts in the separator housing where the bracket will be mounted (refer to FIGURE 1-2). These bolts will not be reused.
5. Loosely attach filter housing/bracket assembly using bolts and washers (#20 & #21 – FIGURE 1-2).
6. Install kit plumbing as shown in FIGURE 1-2 starting with #1 using the Loctite 567 on all NPT parts. Tighten NPT fittings, but leave tube fittings loose until assembled. Tubes may be shortened/cut using a standard tube cutter. Ensure check valve is orientated correctly with flow.
7. Once all plumbing is completely installed, tighten remaining tube fittings.
8. Refill oil per operators manual.

NOTES:

1. Use only genuine Kinney Replacement Oil Filter (part # 058379 0000). Contact your local Kinney distributor or email Customer Service to reorder replacement oil filters.
2. When starting KT Pump the green/red gage (#14 – FIGURE 1-2) needle may be in the red until the oil is above 140°F, this is normal. If gage needle is in the red when temperature is above 140°F, replace filter.

NOTICE

Ensure check valve is installed correctly with respect to flow. Incorrectly installed check valve can result in pump failure and require total rebuild.

NOTICE

Do not use Teflon tape. This may void warranty.

! WARNING

Vacuum pump housing and associated piping or accessories may become hot enough to cause major skin burns on contact as a result of process conditions.

! WARNING

Use lockout / tagout procedures to disable the electrical energy source before any service or work is done on the vacuum pumps.

! WARNING

Hot oil can cause severe burns. Never remove filter while pump is running.

NOTE: ENSURE YOU HAVE RECEIVED ALL PARTS INCLUDED IN PARTS LIST.

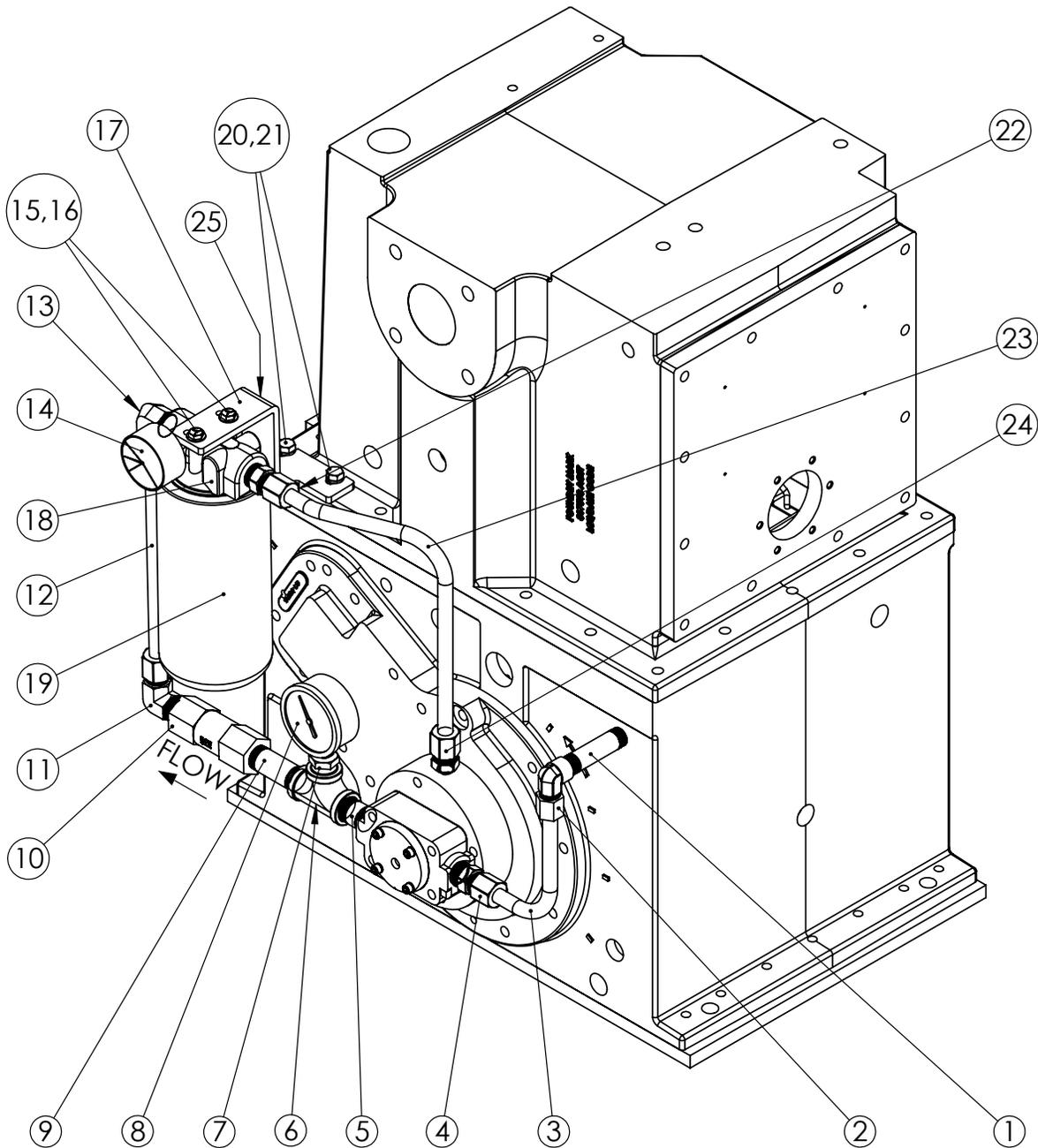


Figure 1-2 – KT-150 Filter Kit Drawing

KT-150 FILTER SYSTEM KIT PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	UNIT
1	057715 00ST*	NIPPLE 3/8 NPT X 3 LG, STEEL	1	EA
2	078064 00ST*	FEMALE ELBOW 1/2 X 3/8	1	EA
3	157163 00ST	1/2 O.D.HYDRAULIC STEEL TUBING	1	EA
4	078042 00ST*	MALE CONNECTOR 1/2 X 1/2	1	EA
5	057235 00ST*	NIPPLE 1/2 NPT X 2 LG STEEL	1	EA
6	057025 00MI*	TEE 1/2 NPT MALLEABLE IRON	1	EA
7	055004 00MI*	HEX HEAD BUSHING 1/2 X 1/4 NPT	1	EA
8	074510 0000	PRESSURE GAGE 0-160 PSIG 1/4 NPT BZ MT	1	EA
9	057237 00ST*	NIPPLE 1/2 NPT X 3 LG STEEL	1	EA
10	066673 00BR	VALVE SPRING CHECK 1/2 NPT BRASS	1	EA
11	078056 00ST*	MALE ELBOW 1/2 X 1/2	1	EA
12	157164 00ST	1/2 O.D.HYDRAULIC STEEL TUBING	1	EA
13	078056 00ST*	MALE ELBOW 1/2 X 1/2	1	EA
14	058377 0000	FILTER CHANGE INDICATOR/GAUGE	1	EA
15	052220 0STZ*	HEX HEAD CAP SCREW 1/4-20 X 5/8	2	EA
16	053132 0STZ*	PLAIN WASHER 1/4, ZINCCOATED STEEL	2	EA
17	074923 00ST	BRACKET,OIL FILTER KT150	1	EA
18	058378 0000	OIL FILTER HOUSING	1	EA
19	058379 0000	OIL FILTER SPIN-ON	1	EA
20	052112 0STZ*	HEX HEAD CAP SCREW 5/16-18 X 1-3/4	2	EA
21	053174 0STZ*	LOCKWASHER 5/16, REGULAR, SPRING	2	EA
22	078042 00ST*	MALE CONNECTOR 1/2 X 1/2	1	EA
23	157165 00ST	1/2 O.D.HYDRAULIC STEEL TUBING	1	EA
24	078101 00ST*	MALE CONNECTOR 1/2 X 1/4	1	EA
25	819924 0000*	LABEL, REPLACEMENT OIL FILTER	1	EA
26	819923 0000*	SEALANT, LOCTITE #567, THREAD SEAL 6ML TUBE	1	EA

NOTE: *Not available for individual purchase.

KT-300 FILTER SYSTEM KIT COMPONENTS

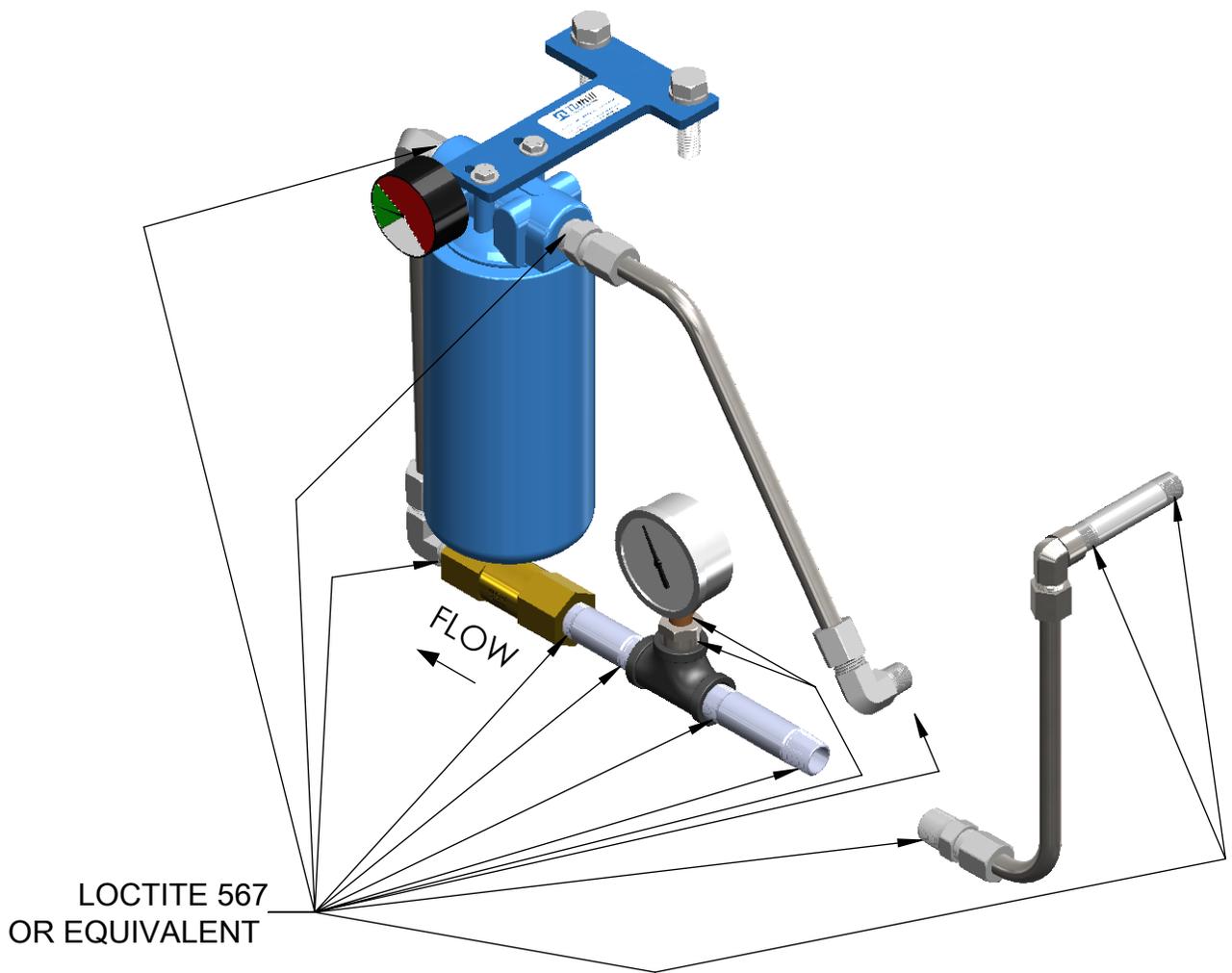


Figure 2-1 – KT-300 Filter Kit
(Retrofit Installation Only)

INSTALLATION:**(RETROFIT INSTALLATION ONLY)**

1. Lockout/Tagout machine. Use caution as oil & surfaces may be hot. Allow pump to cool to at least 100°F before proceeding to drain oil.
2. Remove all existing oil plumbing except for the oil pump.
3. Ensure remaining plumbing ports are free of debris.
4. Remove the two bolts in the separator housing where the bracket will be mounted (refer to FIGURE 2-2). These bolts will not be reused.
5. Loosely attach filter housing/bracket assembly using bolts and washers (#20 & #21 – FIGURE 2-2).
6. Install kit plumbing as shown in FIGURE 2-2 starting with #1 using the Loctite 567 on all NPT parts. Tighten NPT fittings, but leave tube fittings loose until assembled. Tubes may be shortened/cut using a standard tube cutter. Ensure check valve is orientated correctly with flow.
7. Once all plumbing is completely installed, tighten remaining tube fittings.
8. Refill oil per operators manual.

NOTES:

1. Use only genuine Kinney Replacement Oil Filter (part # 058379 0000). Contact your local Kinney distributor or email Customer Service to reorder replacement oil filters.
2. When starting KT Pump the green/red gage (#14 – FIGURE 2-2) needle may be in the red until the oil is above 140°F, this is normal. If gage needle is in the red when temperature is above 140°F, replace filter.

NOTICE

Ensure check valve is installed correctly with respect to flow. Incorrectly installed check valve can result in pump failure and require total rebuild.

NOTICE

Do not use Teflon tape. This may void warranty.

! WARNING

Vacuum pump housing and associated piping or accessories may become hot enough to cause major skin burns on contact as a result of process conditions.

! WARNING

Use lockout / tagout procedures to disable the electrical energy source before any service or work is done on the vacuum pumps.

! WARNING

Hot oil can cause severe burns. Never remove filter while pump is running.

NOTE: ENSURE YOU HAVE RECEIVED ALL PARTS INCLUDED IN PARTS LIST.

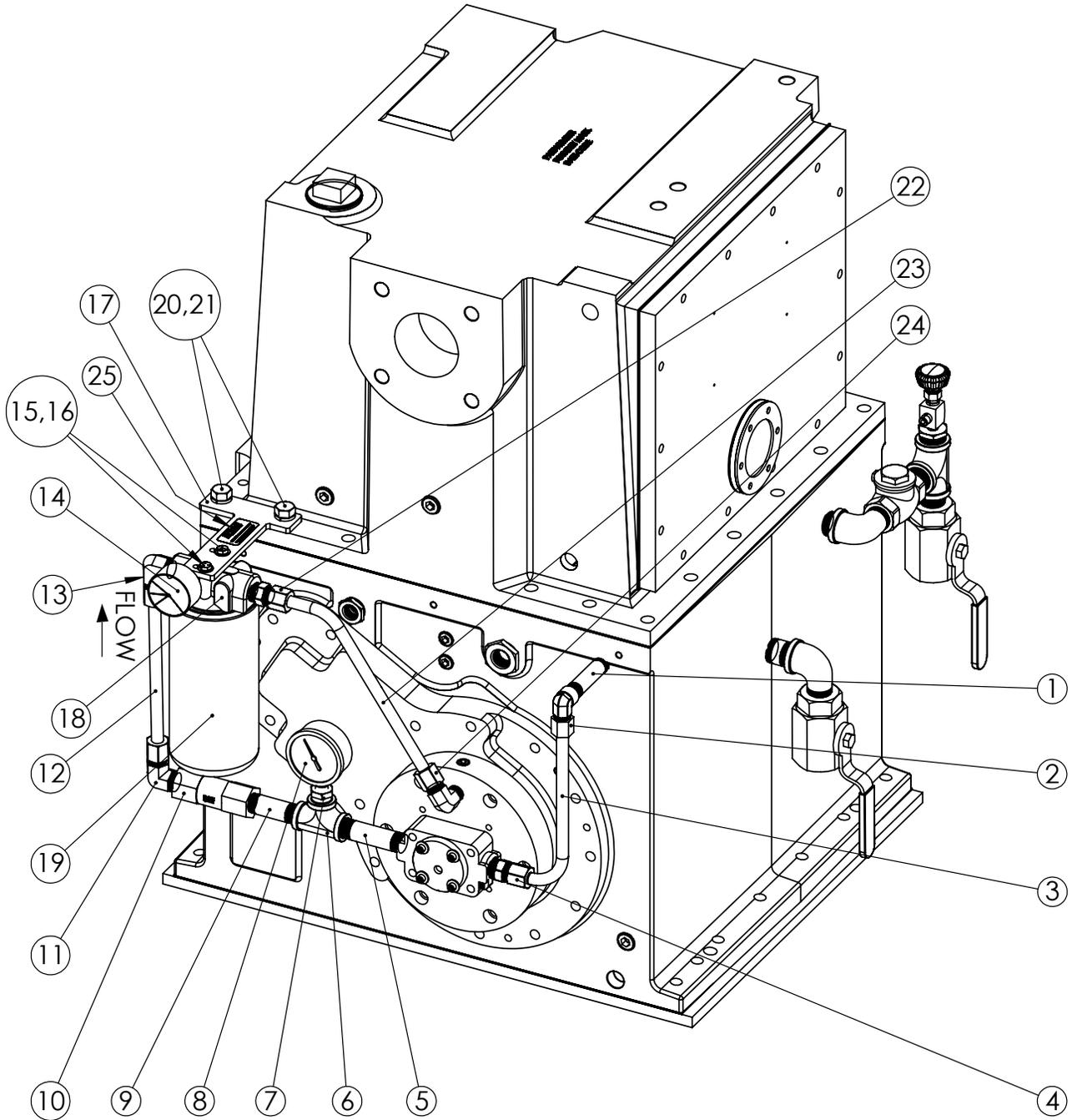


Figure 2-2 – KT-300 Filter Kit Drawing

KT-300 FILTER SYSTEM KIT PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	UNIT
1	057977 032F*	NIPPLE 3/8 NPT X 3-1/4 LG, STEEL	1	EA
2	078064 00ST*	FEMALE ELBOW 1/2 X 3/8	1	EA
3	157166 00ST	1/2 O.D.HYDRAULIC STEEL TUBING	1	EA
4	078042 00ST*	MALE CONNECTOR 1/2 X 1/2	1	EA
5	057239 00ST*	NIPPLE 1/2 NPT X 3-1/2 LG STEEL	1	EA
6	057025 00MI*	TEE 1/2 NPT MALLEABLE IRON	1	EA
7	055004 00MI*	HEX HEAD BUSHING 1/2 X 1/4 NPT	1	EA
8	074510 0000	PRESSURE GAGE 0-160 PSIG 1/4 NPT BZ MT	1	EA
9	057237 00ST*	NIPPLE 1/2 NPT X 3 LG STEEL	1	EA
10	066673 00BR	VALVE SPRING CHECK 1/2 NPT BRASS	1	EA
11	078056 00ST*	MALE ELBOW 1/2 X 1/2	1	EA
12	157167 00ST	1/2 O.D.HYDRAULIC STEEL TUBING	1	EA
13	078056 00ST*	MALE ELBOW 1/2 X 1/2	1	EA
14	058377 0000	FILTER CHANGE INDICATOR/GAUGE	1	EA
15	052220 0STZ*	--HEX HEAD CAP SCREW 1/4-20 X 5/8	2	EA
16	053132 0STZ*	--PLAIN WASHER 1/4, ZINCCOATED STEEL	2	EA
17	074924 00ST	BRACKET,OIL FILTER KT300	1	EA
18	058378 0000	OIL FILTER HOUSING	1	EA
19	058379 0000	OIL FILTER SPIN-ON	1	EA
20	052291 0STZ*	HEX HEAD CAP SCREW 1/2-13 X 1-3/4	2	EA
21	053173 0STZ*	LOCKWASHER 1/2 REGULAR, SPRING	2	EA
22	078042 00ST*	MALE CONNECTOR 1/2 X 1/2	1	EA
23	157168 00ST	1/2 O.D.HYDRAULIC STEEL TUBING	1	EA
24	078055 00ST*	MALE ELBOW 1/2 X 3/8	1	EA
25	819924 0000*	LABEL, REPLACEMENT OIL FILTER	1	EA
26	819923 0000*	SEALANT, LOCTITE #567, THREAD SEAL 6ML TUBE	1	EA

NOTE: *Not available for individual purchase.

INSTALLATION:**(RETROFIT INSTALLATION ONLY)**

1. Lockout/Tagout machine. Use caution as oil & surfaces may be hot. Allow pump to cool to at least 100°F before proceeding to drain oil.
2. Remove all existing oil plumbing except for the oil pump.
3. Ensure remaining plumbing ports are free of debris.
4. Remove the two bolts in the separator housing where the bracket will be mounted (refer to FIGURE 3-2). These bolts will not be reused.
5. Loosely attach filter housing/bracket assembly using bolts and washers (#20 & #21 – FIGURE 3-2).
6. Install kit plumbing as shown in FIGURE 3-2 starting with #1 using the Loctite 567 on all NPT parts. Tighten NPT fittings, but leave tube fittings loose until assembled. Tubes may be shortened/cut using a standard tube cutter. Ensure check valve is orientated correctly with flow.
7. Once all plumbing is completely installed, tighten remaining tube fittings.
8. Refill oil per operators manual.

NOTES:

1. Use only genuine Kinney Replacement Oil Filter (part # 058379 0000). Contact your local Kinney distributor or email Customer Service to reorder replacement oil filters.
2. When starting KT Pump the green/red gage (#14 – FIGURE 3-2) needle may be in the red until the oil is above 140°F, this is normal. If gage needle is in the red when temperature is above 140°F, replace filter.

NOTICE

Ensure check valve is installed correctly with respect to flow. Incorrectly installed check valve can result in pump failure and require total rebuild.

NOTICE

Do not use Teflon tape. This may void warranty.

! WARNING

Vacuum pump housing and associated piping or accessories may become hot enough to cause major skin burns on contact as a result of process conditions.

! WARNING

Use lockout / tagout procedures to disable the electrical energy source before any service or work is done on the vacuum pumps.

! WARNING

Hot oil can cause severe burns. Never remove filter while pump is running.

NOTE: ENSURE YOU HAVE RECEIVED ALL PARTS INCLUDED IN PARTS LIST.

KT500 FILTER SYSTEM

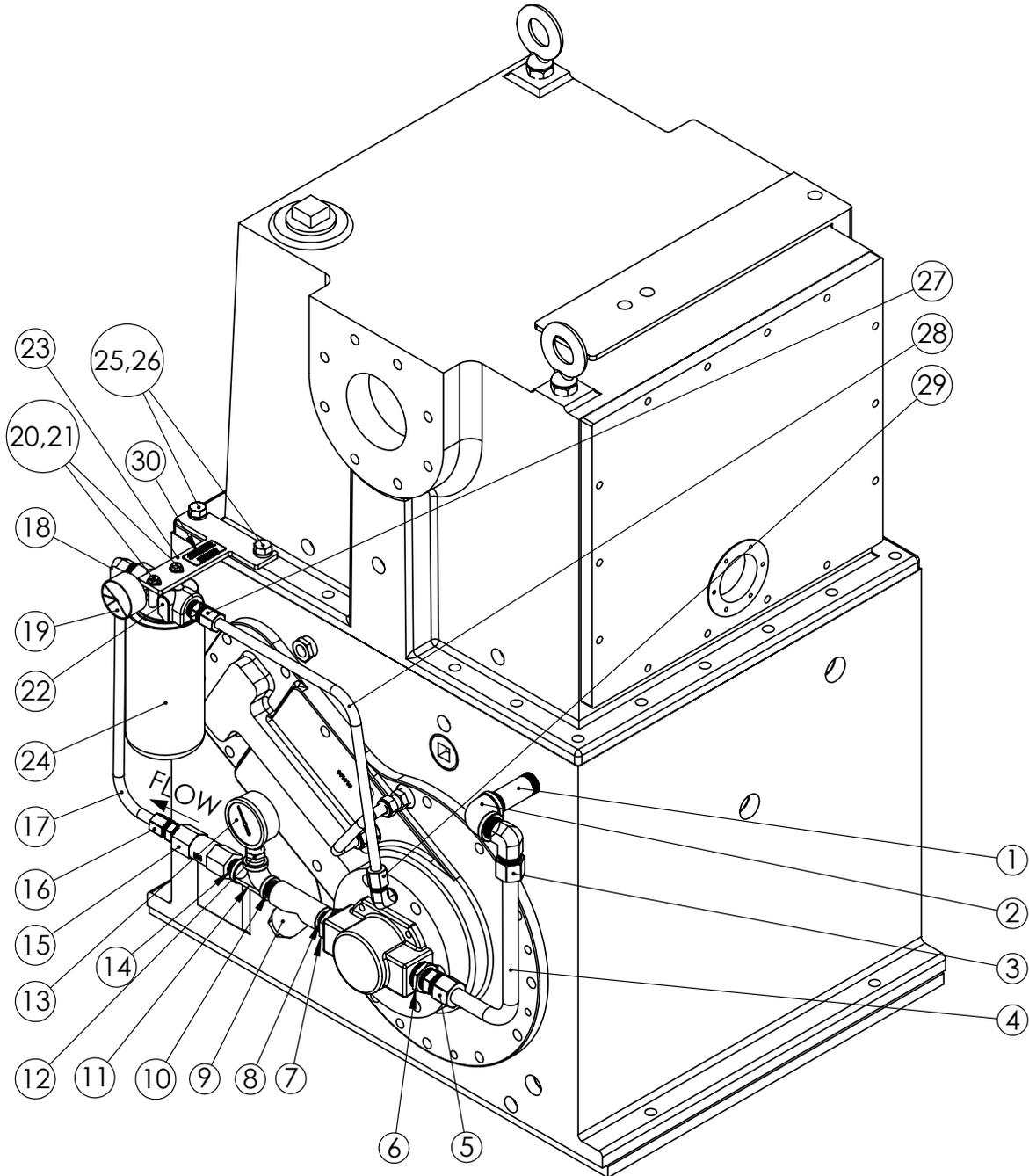


Figure 3-2 – KT-500 Filter Kit Drawing

KT-500 FILTER SYSTEM KIT PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	UNIT
1	057256 00ST*	NIPPLE 3/4 NPT X 3-1/2 LG STEEL	1	EA
2	057062 00MI*	ELBOW 90 X 3/4 NPT MALLEABLE IRON	1	EA
3	078129 00ST*	MALE ELBOW 3/4 X 3/4	1	EA
4	157169 00ST	3/4 O.D.HYDRAULIC STEEL TUBING	1	EA
5	078047 00ST*	MALE CONNECTOR 3/4 X 3/4	1	EA
6	055010 00MI*	HEX HEAD BUSHING 1 X 3/4 NPT	1	EA
7	055012 00MI*	HEX HEAD BUSHING 1 X 1/2 NPT	1	EA
8	057200 00ST*	NIPPLE 1/2 NPT X 1-1/8 LG STEEL	1	EA
9	057753 00CI*	Y-STRAINER 1/2, CAST IRON	1	EA
10	057200 00ST*	NIPPLE 1/2 NPT X 1-1/8 LG STEEL	1	EA
11	057025 00MI*	TEE 1/2 NPT MALLEABLE IRON	1	EA
12	055004 00MI*	HEX HEAD BUSHING 1/2 X 1/4 NPT	1	EA
13	074510 0000	PRESSURE GAGE 0-160 PSIG 1/4 NPT BZ MT	1	EA
14	057200 00ST*	NIPPLE 1/2 NPT X 1-1/8 LG STEEL	1	EA
15	066673 00BR	VALVE SPRING CHECK 1/2 NPT BRASS	1	EA
16	078042 00ST*	MALE CONNECTOR 1/2 X 1/2	1	EA
17	157170 00ST	1/2 O.D.HYDRAULIC STEEL TUBING	1	EA
18	078056 00ST*	MALE ELBOW 1/2 X 1/2	1	EA
19	058377 0000	FILTER CHANGE INDICATOR/GAUGE	1	EA
20	052220 0STZ*	HEX HEAD CAP SCREW 1/4-20 X 5/8	2	EA
21	053132 0STZ*	PLAIN WASHER 1/4, ZINCCOATED STEEL	2	EA
22	058378 0000	OIL FILTER HOUSING	1	EA
23	074925 00ST	BRACKET,OIL FILTER KT500	1	EA
24	058379 0000	OIL FILTER SPIN-ON	1	EA
25	052291 0STZ*	HEX HEAD CAP SCREW 1/2-13 X 1-3/4	2	EA
26	053173 0STZ*	LOCKWASHER 1/2 REGULAR, SPRING	2	EA
27	078042 00ST*	MALE CONNECTOR 1/2 X 1/2	1	EA
28	157171 00ST	1/2 O.D.HYDRAULIC STEEL TUBING	1	EA
29	078055 00ST*	MALE ELBOW 1/2 X 3/8	1	EA
30	819924 0000*	LABEL, REPLACEMENT OIL FILTER	1	EA
31	819923 0000*	SEALANT, LOCTITE #567, THREAD SEAL 6ML TUBE	1	EA

NOTE: *Not available for individual purchase.

KT-850 FILTER SYSTEM KIT COMPONENTS

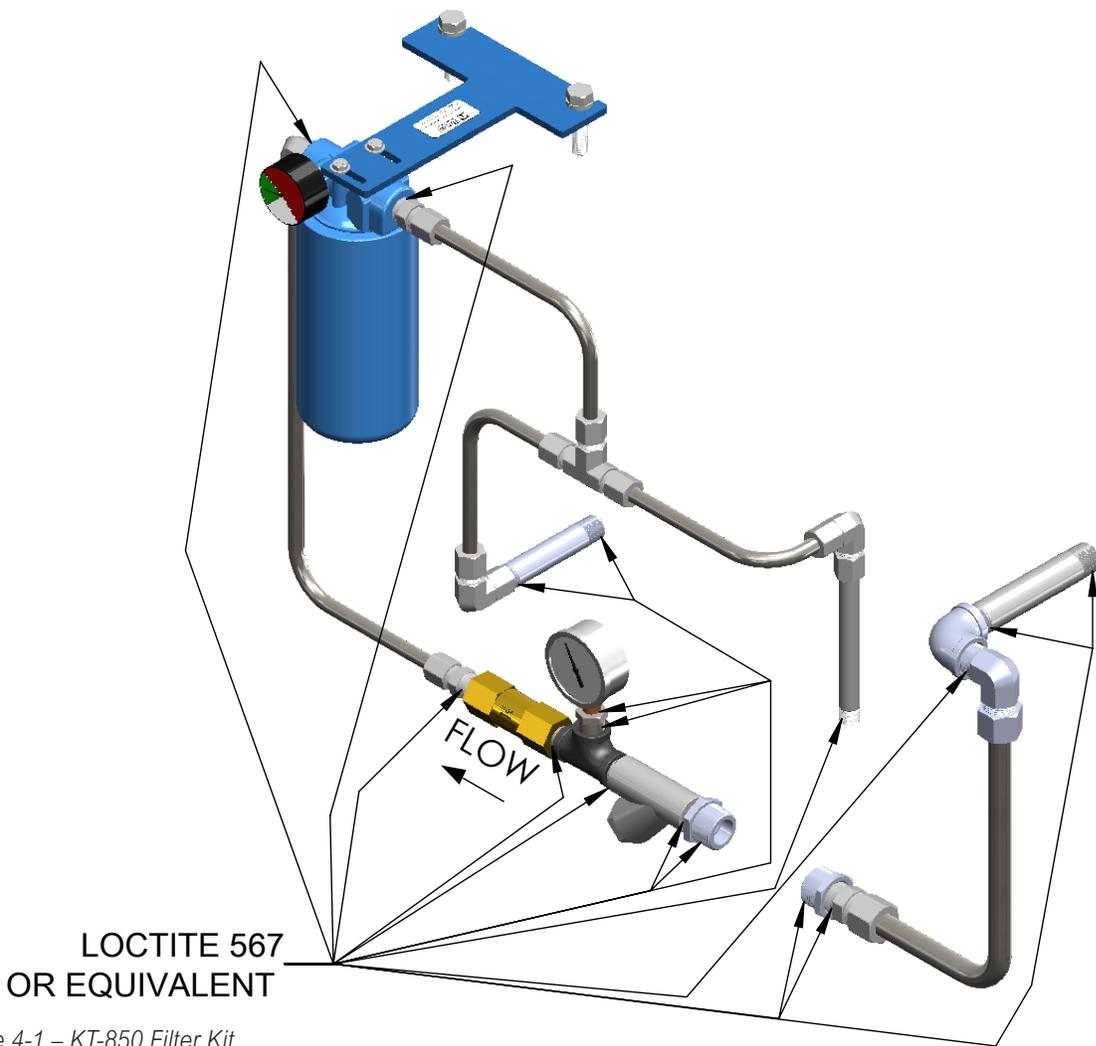


Figure 4-1 – KT-850 Filter Kit
(Retrofit Installation Only)

INSTALLATION:**(RETROFIT INSTALLATION ONLY)**

1. Lockout/Tagout machine. Use caution as oil & surfaces may be hot. Allow pump to cool to at least 100°F before proceeding to drain oil.
2. Remove all existing oil plumbing except for the oil pump.
3. Ensure remaining plumbing ports are free of debris.
4. Remove the two bolts in the separator housing where the bracket will be mounted (refer to FIGURE 4-2). These bolts will not be reused.
5. Loosely attach filter housing/bracket assembly using bolts and washers (#20 & #21 – FIGURE 4-2).
6. Install kit plumbing as shown in FIGURE 4-2 starting with #1 using the Loctite 567 on all NPT parts. Tighten NPT fittings, but leave tube fittings loose until assembled. Tubes may be shortened/cut using a standard tube cutter. Ensure check valve is orientated correctly with flow.
7. Once all plumbing is completely installed, tighten remaining tube fittings.
8. Refill oil per operators manual.

NOTES:

1. Use only genuine Kinney Replacement Oil Filter (part # 058379 0000). Contact your local Kinney distributor or email Customer Service to reorder replacement oil filters.
2. When starting KT Pump the green/red gage (#14 – FIGURE 4-2) needle may be in the red until the oil is above 140°F, this is normal. If gage needle is in the red when temperature is above 140°F, replace filter.

NOTICE

Ensure check valve is installed correctly with respect to flow. Incorrectly installed check valve can result in pump failure and require total rebuild.

NOTICE

Do not use Teflon tape. This may void warranty.

! WARNING

Vacuum pump housing and associated piping or accessories may become hot enough to cause major skin burns on contact as a result of process conditions.

! WARNING

Use lockout / tagout procedures to disable the electrical energy source before any service or work is done on the vacuum pumps.

! WARNING

Hot oil can cause severe burns. Never remove filter while pump is running.

NOTE: ENSURE YOU HAVE RECEIVED ALL PARTS INCLUDED IN PARTS LIST.

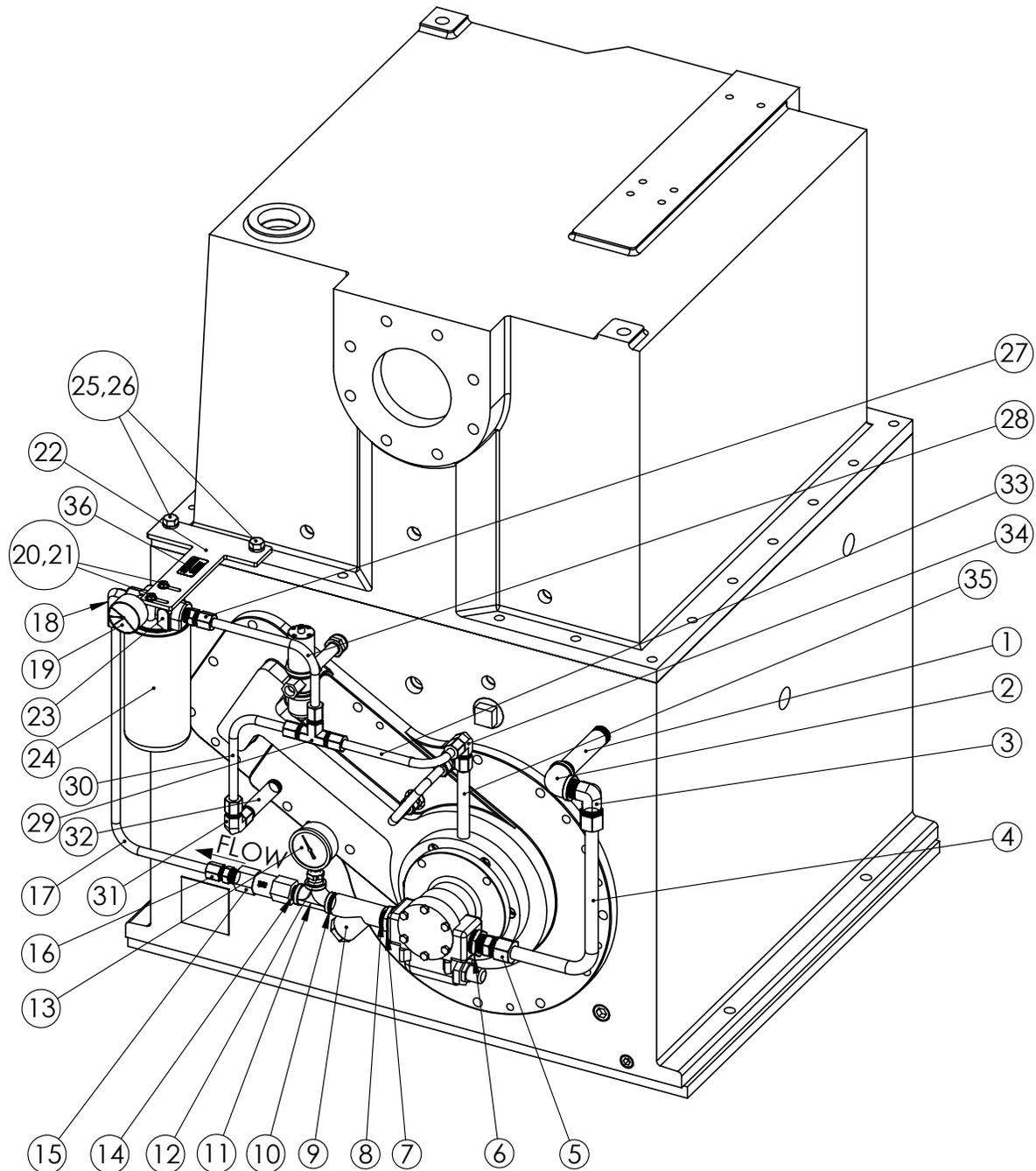


Figure 4-2 – KT-850 Filter Kit Drawing

KT-850 FILTER SYSTEM KIT PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	UNIT
1	057261 00ST*	NIPPLE 3/4 NPT X 5-1/2 LG STEEL	1	EA
2	057062 00MI*	ELBOW 90 X 3/4 NPT MALLEABLE IRON	1	EA
3	078129 00ST*	MALE ELBOW 3/4 X 3/4	1	EA
4	157172 00ST	3/4 O.D.HYDRAULIC STEEL TUBING	1	EA
5	078047 00ST*	MALE CONNECTOR 3/4 X 3/4	1	EA
6	055010 00MI*	HEX HEAD BUSHING 1 X 3/4 NPT	1	EA
7	055012 00MI*	HEX HEAD BUSHING 1 X 1/2 NPT	1	EA
8	057200 00ST*	NIPPLE 1/2 NPT X 1-1/8 LG STEEL	1	EA
9	057753 00CI*	Y-STRAINER 1/2, CAST IRON	1	EA
10	057200 00ST*	NIPPLE 1/2 NPT X 1-1/8 LG STEEL	1	EA
11	057025 00MI*	TEE 1/2 NPT MALLEABLE IRON	1	EA
12	055004 00MI*	HEX HEAD BUSHING 1/2 X 1/4 NPT	1	EA
13	074510 0000	PRESSURE GAGE 0-160 PSIG 1/4 NPT BZ MT	1	EA
14	057200 00ST*	NIPPLE 1/2 NPT X 1-1/8 LG STEEL	1	EA
15	066673 00BR	VALVE SPRING CHECK 1/2 NPT BRASS	1	EA
16	078042 00ST*	MALE CONNECTOR 1/2 X 1/2	1	EA
17	157173 00ST	1/2 O.D.HYDRAULIC STEEL TUBING	1	EA
18	078056 00ST*	MALE ELBOW 1/2 X 1/2	1	EA
19	058377 0000	FILTER CHANGE INDICATOR/GAUGE	1	EA
20	052220 0STZ*	HEX HEAD CAP SCREW 1/4-20 X 5/8	2	EA
21	053132 0STZ*	PLAIN WASHER 1/4, ZINCCOATED STEEL	2	EA
22	074926 00ST	BRACKET,OIL FILTER KT850	1	EA
23	058378 0000	OIL FILTER HOUSING	1	EA
24	058379 0000	OIL FILTER SPIN-ON	1	EA
25	052293 0STZ*	HEX HEAD CAP SCREW 1/2-13 X 2	2	EA
26	053173 0STZ*	LOCKWASHER 1/2 REGULAR, SPRING	2	EA
27	078042 00ST*	MALE CONNECTOR 1/2 X 1/2	1	EA
28	157174 00ST	1/2 O.D.HYDRAULIC STEEL TUBING	1	EA
29	078018 00ST*	UN TEE 1/2	1	EA
30	157175 00ST	1/2 O.D.HYDRAULIC STEEL TUBING	1	EA
31	078065 00ST*	FEMALE ELBOW 1/2 X 1/2	1	EA
32	057243 00ST*	NIPPLE 1/2 NPT X 4-1/2 LG STEEL	1	EA
33	157176 00ST	1/2 O.D.HYDRAULIC STEEL TUBING	1	EA
34	078064 00ST*	FEMALE ELBOW 1/2 X 3/8	1	EA
35	057673 00ST*	NIPPLE 3/8 NPT X 6 LG, STEEL	1	EA
36	819924 0000*	LABEL, REPLACEMENT OIL FILTER	1	EA
37	819923 0000*	SEALANT, LOCTITE #567, THREAD SEAL 6ML TUBE	1	EA

NOTE: * Not available for individual purchase.

This page intentionally blank

KINNEY®

**For Service & Repair, Technical
Support, or Product Sales contact:**

Kinney
4840 West Kearney Street
Springfield, Missouri USA 65803-8702
O 417.865.8715 800.825.6937
F 417.865.2950
www.kinneyvacuum.com



Manual 1872 Rev B 001872 0000

04/21