



IS-F35-1V-S50  
01/05

## FILTER INSTRUCTION SHEET

ATD-7781, 7782, 7823, 7824, 7825, 7826, 7827, 7828, 7829, 7830, 7865, 7866,  
ATD-7867, 7870, 7871, 7872, 7873, 7883, 7884, 7885, 7917, 7918

Bowl	Max. Pressure	Temperature Range
Plastic	150 psi	40°F to 125°F
Metal	250 psi	40°F to 200°F
w/Sight	250 psi	40°F to 160°F

**WARNING!** For compressed air service only. Do not use on life support systems or breathing air systems. Never use polycarbonate plastic bowls with air supplied by a compressor lubricated with synthetic oils or oils containing phosphate esters or chlorinated hydrocarbons. They can carry over into the air distribution system and chemically attack and possibly rupture the bowl. On these applications use a metal bowl. Also, do not expose the polycarbonate plastic bowl to materials such as trichlorethylene, acetone or paint thinner. Cleaning fluids or other harmful materials will craze and/or rupture the bowl. If materials harmful to polycarbonate are present either outside or inside the bowl, use a metal bowl. For any additional information regarding chemical compatibility please contact: General Electric Plastics, One Plastic Avenue, Pittsfield, MA..

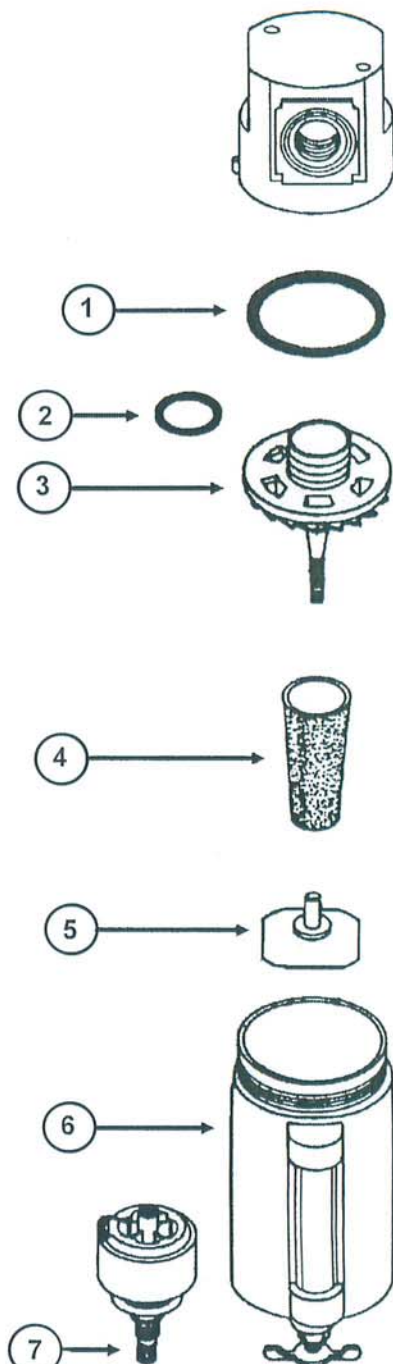
**INSTALLATION:** Install units so the air flow is in the direction as indicated on the head of the unit. Install filter upstream of regulators and lubricators, and as close as possible to the pneumatic tools or appliances being service. Do not install polycarbonate bowl in pressure that exceeds 150psi or where there is a presence of solvents harmful to polycarbonate. In these cases, use a metal bowl.

**MAINTENANCE AND OPERATION:** Filtering out of dirt and foreign particles, and the separation of moisture is automatic with air flow. There are no moving parts and no adjustments are necessary. Accumulated sludge and moisture should be drained off. Sediment should not be permitted to fill above the lower baffle.

Wash filter element at intervals with naphtha to maintain filtering efficiency. To clean element, depressurize system, unscrew polycarbonate bowl, and unscrew element from head. Dry filter element thoroughly before reassembling. Clean filter bowl(s) only with soapy water. Inspect O-ring, replacing if damaged or distorted. Reassemble with care to avoid stripping threads on bowl. After a metal bowl with sight is tightened, it may be rotated up to 180° for proper viewing.

Item	Description	Kit Number	Contents
4	Element Kit	EK35	40 Micron Sintered Bronze Element
		EK35-5	5 Micron Sintered Bronze Element
		EK35-3	3 Micron Absolute Element
2, 3, 5	Repair Kit	RKF35	Retainer/Vane Assembly, O-Ring, Baffle
Not Shown	Bowl Kit (Optional)	BKF35	Polycarbonate Plastic Bowl with push Drain, O-Ring, Bowl Guard
		BKF45M (6 oz.)	Metal Bowl without Sight, Drain Cock, O-Ring
1, 6	Bowl Kit	BKF45W (6 oz.)	Metal Bowl Sight, Drain Cock, Ball, O-Ring
		BKF46W (9 oz.)	Metal Bowl w/Sight, Drain Cock, Ball, O-Ring
Not Shown	Replacement Sight Kit	WK45	Sight, Retainer, Indicator Ball, O-Ring
7	Auto Drain (Optional)	5200	Float Drain Assembly, Bowl Insert, O-Ring, Retainer Ring
8	Overnight Drain	CKFK	Overnight Drain Assembly, Bowl Insert, O-Ring, Retainer Ring

**Model 5200 Internal Float Drain Available (item #7).** To Be used for pressures from 30 psi to 175 psi and from 40°F to 120°F. To order filter with float drain assembled, add suffix "F" to filter model number.



IS-F45/55-1V-S50  
01/05

## COALESCING FILTER INSTRUCTION SHEET

COALESCING (.03 or .01 micron)

ATD-7785, 7833, 7834, 7835, 7836,

ATD-7867, 7883, 7884, 7885

Bowl	Max. Pressure	Temperature Range
Metal	250 psi	40°F to 200°F
w/Sight	250 psi	40°F to 160°F
w/Auto Drain	30 psi to 175 psi	40°F to 120°F

**WARNING!** For compressed air service only. Not to be used on life support systems or breathing air systems. Metal bowl sight is made of polycarbonate, which will craze and or crack if exposed to chemical incompatible with polycarbonate. For any additional information regarding chemical compatibility please contact: General Electric Plastics, One Plastic Avenue, Pittsfield, MA..

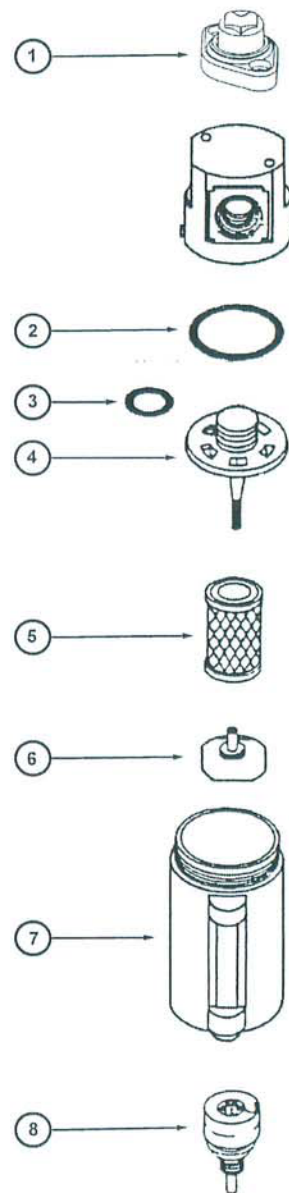
**INSTALLATION:** Install units so the air flow is in the direction as indicated on the head of the unit. Filter should be installed upstream of regulators. If an air dryer is being used, install the filter downstream from the dryer. In most cases a particulate pre-filter with a 3 micron absolute element is recommended to greatly extend the life of the coalescer element. When the coalescer element becomes clogged with dirt, it must be replaced. If it is kept free from dirt, it will coalesce oil indefinitely. A pre-filter will remove water and dirt before it reaches the coalescer, and will reduce maintenance costs. The coalescer filter is then free to remove oil, oil vapors, and submicron sized particles without prematurely clogging with large particles of dirt and scale.

**WARNING!** Units are die cast aluminum, do not torque while installing. Also, pressurize unit slowly after installation of unit or new element to avoid damage to element.

**OPERATION ADJUSTMENTS:** If the filter is installed properly, it should give long trouble-free service. The pressure drop across the filter should not exceed 10 psi. If the pressure drop exceeds 10 psi, either the filter element needs to be replaced or the unit is being operated beyond its capacity and a larger size unit is required. Operating the filter at a pressure drop in excess of 10 psi will greatly reduce the efficiency of the filter.

If oil appears downstream: 1) check downstream air lines to be sure that they are free of residual oil; 2) check to see that the filter element and O-ring are in good condition and installed properly.

**DIFFERENTIAL PRESSURE INDICATOR MAINTENANCE (#1 on drawing):** When the filter is depressurized, periodically clean and grease the piston O-ring with a non-silicon ring grease (see item 1 in drawing).



**NOTE:** Optional Automatic Float Drain is used for pressure from 30 psi to 175 psi, and from 40°F to 120°F

Item	Description	Kit Part Number	Contents
1	Indicator Sight Kit	DPK-05	Screws, Sightglass, Spring Bracket, O-Ring Inner & Outer Cylinders, Sight Dome
2, 7	Bowl Kit	BKF45M (6 oz.)	Metal Bowl w/Drain Cock, O-Ring
		BKF45W (6 OZ.)	Metal Bowl w/Sight, Drain Cock, O-Ring
3, 4, 6	Repair Kit	RKF45	Retainer, O-Ring, Baffle
5	Element Kit	EK55	.03 Micron Coalescing Element (STD)
		EK55A	.01 Micron Coalescing Element
7	Auto Float Drain Kit (optional)	5200	Float Drain Assembly, Bowl Insert, O-Ring, Retaining Ring
Not Shown	Sight Kit (replacement only)	WK45	Indicator Ball, Sight Tube, Retainer, O-Ring





Desiccant Dryer Instruction Sheet  
P/N ATD-7761, ATD-7762, ATD-7763,  
ATD-7888, & **ATD-7889**

Bowl  
Metal w/Sight

Max. Pressure  
250 psi

Temperature Range  
40°F to 160°F

**WARNING!** For compressed air service only. Do not use on life support systems or breathing air systems. Metal bowl sight is made of polycarbonate resin that will crack if exposed to solvents or oils containing ethyl acetate, methylenedichlorobenzene or any partially halogenated or aromatic hydrocarbons. For any additional information regarding chemical compatibility please contact: General Electric Plastics, One Plastic Avenue, Pittsfield, MA..

**INSTALLATION:** Install dryer so that air flow is in the direction indicated by the arrow on the head of the unit. A prefilter combination is always required upstream of the dryer. First stage filtration with a particulate filter will remove water and solid particles down to 40 microns in size. Second stage filtrations with an coalescing filter will remove oil and water particles down to 0.03 microns.

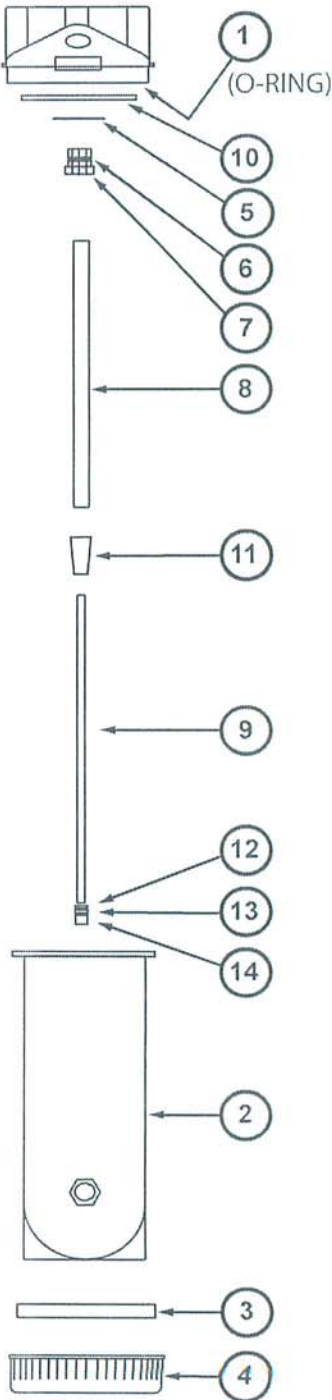
**NOTE:** Used desiccant material be regenerated by spreading the desiccant in a thin layer in a shallow pan and then heating it in a convection oven at 275°F until a complete color change occurs, usually within about 3 hours. Caution - avoid excessive temperatures.

**MAINTENANCE AND OPERATION:** Care must be taken to change or regenerate the dryer desiccant material once it appears pink in color. The following steps are to be taken when recharging the dryer: 1) Shut off air supply and bleed system. 2) Unscrew bowl ring and remove bowl assembly. 3) Remove used desiccant. 4) Unscrew lead-in bullet from threaded rod. 5) Remove exhaust tube, exhaust element and gasket. 6) Inspect and clean inside of exhaust tube if necessary and then reassemble the main assembly. 7) Remove sight retainer and sight o-ring. 8) Discard used desiccant within the sight body. 9) Fill sight body with new or regenerated desiccant. 10) Secure sight and o-ring by hand-tightening sight dome retainer. 11) Fill bowl with new or regenerated desiccant to 1/2" from top bowl flange. Replace bowl assembly and hand-tighten bowl ring. **CAUTION: Do not remove sight retainer while bowl is under pressure.**

**STORAGE:** Store replacement desiccant in a dry area making certain that the jar is tightly sealed with a shelf life noted.

Item	Description	Kit Number			Contents
		ATD-7761	ATD-7762	ATD-7889	
1, 2,	Bowl Kit	BKD1204	BKD1204XL	BKD1206	Bowl O-Ring, Bowl Assembly w/Sight
3, 4					Bowl Adapter, Bowl Ring
5, 6, 7,	Repair Kit	RKD1204	RKD1204XL	RKD1206	Ext. Retaining E-Ring, Lead-In O-Ring,
8, 9, 13,					Lead-In Bullet, Exhaust Tube,
14					Threaded Rod, Drain Plug Adapter O-Ring
10, 11,	Element Kit	EKD1204	EKD1204XL	EKD1206	Dispersion Filter, Exhaust Element Gasket
12					
Not Shown	Sight Kit	SKD10	SKD10	SKD10	Sight Body, O-Rings, Retaining Nut, Sight Dome, Dome Retainer

**NOTE:** To prevent excessive pressure drop, it is recommended that the exhaust element be replaced whenever the desiccant is replaced or recharged.





IS-B75-1-S50  
01/05

## FILTER/REGULATOR INSTRUCTION SHEET

**ATD-7790**, 7853, 7854, 7855, 7856, 7857, 7858, 7859, 7860,  
ATD-7860, 7876, 7877, 7878, 7879, 7883, 7884, 7885

Bowl	Max. Pressure	Temperature Range
Plastic	150 psi	40°F to 125°F
Metal	250 psi	40°F to 200°F
w/Sight	250 psi	40°F to 160°F
w/Auto Drain	30 psi to 175 psi	40°F to 120°F

**WARNING!** For compressed air service only. Do not use on life support systems or breathing air systems. Never use polycarbonate plastic bowls with air supplied by a compressor lubricated with synthetic oils or oils containing phosphate esters or chlorinated hydrocarbons. They can carry over into the air distribution system and chemically attack and possibly rupture the bowl. On these applications use a metal bowl. Also, do not expose the polycarbonate plastic bowl to materials such as trichlorethylene, acetone or paint thinner. Cleaning fluids or other harmful materials will craze and/or rupture the bowl. If materials harmful to polycarbonate are present either outside or inside the bowl, use a metal bowl. For any additional information regarding chemical compatibility please contact: General Electric Plastics, One Plastic Avenue, Pittsfield, MA..

**INSTALLATION:** Install units so the air flow is in the direction as indicated on the head of the unit. Filter/regulator should be installed upstream of regulators and lubricators. Unit should be installed as close as possible to the pneumatic tools or appliances being serviced. Do not install polycarbonate bowl in pressure that exceeds 150 psi or where there is a presence of solvents harmful to polycarbonate. In these cases, use a metal bowl.

### MAINTENANCE AND OPERATION:

**FILTER:** Filtering out of dirt and foreign particles, and the separation of moisture is automatic with air flow. There are no moving parts and no adjustments are necessary. Accumulated sludge and moisture should be drained off. Sediment should not be permitted to fill above the lower baffle.

Wash filter element at intervals with naphtha to maintain filtering efficiency. To clean element, depressurize system, unscrew polycarbonate bowl, and unscrew element from head. Dry filter element thoroughly before reassembling. Clean filter bowl(s) only with soapy water. Inspect O-ring, replacing if damaged or distorted. Reassemble with care to avoid stripping threads on bowl. After a metal bowl with sight is tightened, it may be rotated up to 180° for proper viewing.

**REGULATOR:** The regulator will accurately control secondary pressure between 2 and 125 PSI. The self-bleed venting feature permits use on dead-end applications.

After the regulator is installed, back off pressure adjusting knob before the air is turned on. Turn on the air supply and regulate the adjusting knob until pressure gauge shows the desired pressure. To lock adjusting knob, push down until knob snaps into locking groove. To make regulator tamper-resistant, remove adjusting knob from unit. Regulator may be readjusted by replacing knob.

**IMPORTANT!** Use care to avoid screwing fittings too far into body of units as it may close internal ports. Normally finger tight plus one turn will seal.

**TAMPER-RESISTANT OPTION:** The tamper-resistant cap (P/N 75104) has been provided in the plastic bag to ensure that the reduced pressure cannot be tampered with. To make the unit "tamper-resistant", proceed as follows:

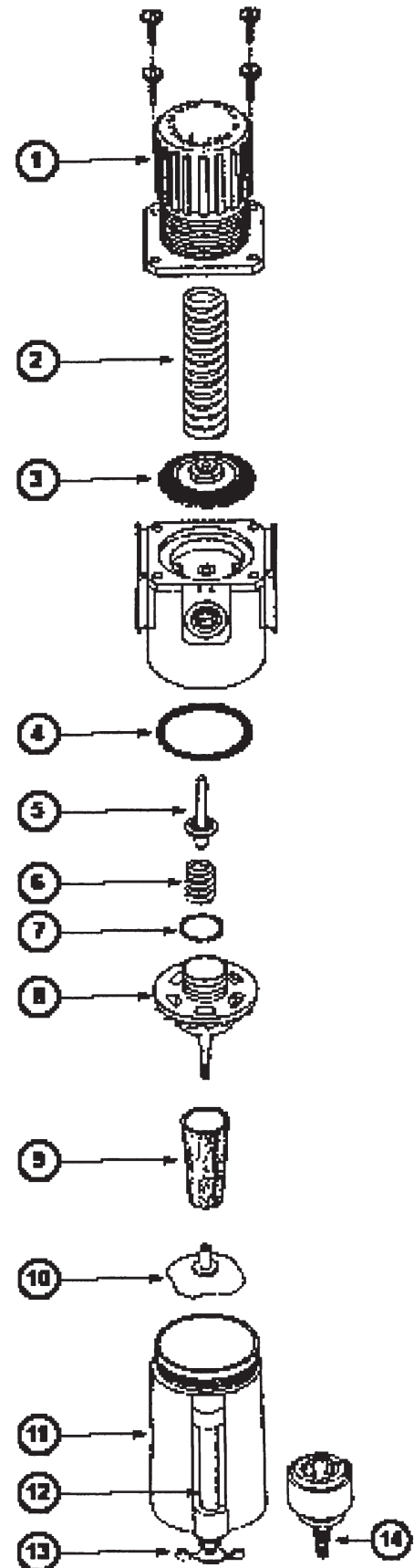
Turn the adjustment knob until the desired reduced pressure is reached. Remove the adjustment knob by pulling upward. Install the tamper-resistant cap in its place.

**NOTE:** To make permanently tamper-resistant-, LOCTITE the cap into place.

**CAUTION:** By permanently loctiting the tamper-resistant cap into place, the pressure adjustment cannot be changed.



Item	Description	Kit Number	Contents
1	Regulator Bonnet Repair Kit	SC35 SC35T ( T-handle)	Cap, Bonnet Lock Screws
2	Adjusting Spring Kit	Sk35 SK35L SK35H	Adjusting Spring, 2-125 psi Adjusting Spring, 2.60 psi Adjusting Spring, 2-250 psi
3	Diaphragm Repair Kit	DK35 DK35N	Valve Assembly, O-Ring, Spring, Gasket, Back Cap
9	Element Kit	EK35 EK35-5	40 Micron Sintered Bronze Element 5 Micron Sintered Bronze Element
Not Shown	Bowl Kit	BKF35	Polycarbonate Plastic Bowl with push Drain, O-Ring, Bowl Guard
4, 11, 13		BKF45M (6 oz.)	Metal Bowl without Sight, Drain Cock, O-Ring
4, 11, 12, 13		BKF45W (6 oz.)	Metal Bowl Sight, Drain Cock, Ball, O-Ring
4, 11, 12, 13		BKF46W (9 oz)	Metal Bowl Sight, Drain Cock, Ball, O-Ring
Not Shown	Overnight Drain (Optional)	CKFK	Overnight Drain Assembly, Bowl Insert, O-Ring, Retainer Ring
14	Auto Drain Kit (Optional)	5200	Float Drain Assembly





IS-IK50-S50  
01/05

## MODULAR CONNECTOR INSTRUCTION SHEET

### Assemble and Disassemble Units Quickly and Easily



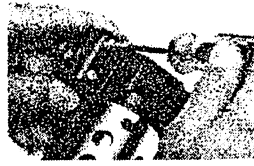
Install the end port O-ring in the end port. O-ring groove provided on each product end port.



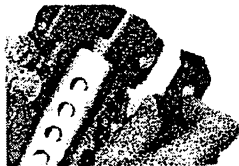
Slide the insert onto the product end port. The insert will now be held in place by the end port safety bars.



Align the insert lock plate assembly with the insert plate holes.



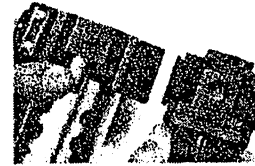
Tighten to snug fit which will mechanically lock the insert in place and form a wedge O-ring seal with the end port.



When assembling combinations together use a connector insert kit or diverter insert kit



Slide the insert against the O-ring seal on product.

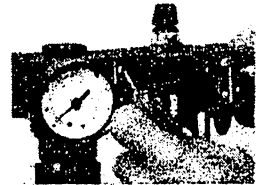


Then repeat this process with the end port seal on the next product keeping in mind the direction of flow.

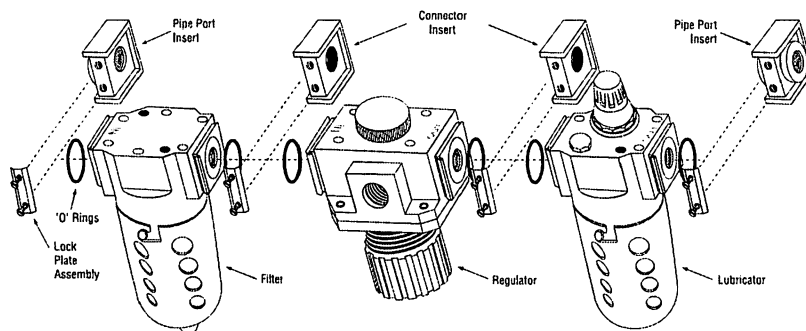


Lock up the insert plate and simply repeat this process for linking up additional product.

Change Units  
On-Line Without  
Disturbing Piping



Simply unscrew lock plates and slide unit out. Reverse the procedure to install.



This exploded view drawing illustrates the engineering uniqueness of the modular system. Components shown can be ordered as a total system, or as individual items.

Item	Kit Description	Kit Number	Contents
2, 3, 4	Modular Connector Insert Kit	IK50	Modular insert, cover plate assembly, (2) O-Rings
1, 3, 4	1/4 NPT Pipe Port Kit	IK52	(2) 1/4 NPT Modular Pipe Ports, (2) Cover Plate Assemblies, (2) O-Rings
	3/8 NPT Pipe Port Kit	IK53	(2) 3/8 NPT Modular Pipe Ports, (2) Cover Plate Assemblies, (2) O-Rings
	1/2 NPT Pipe Port Kit	IK54	(2) 1/2 NPT Modular Pipe Ports, (2) Cover Plate Assemblies, (2) O-Rings
	3/4 NPT Pipe Port Kit	IK56	(2) 3/4 NPT Modular Pipe Ports, (2) Cover Plate Assemblies, (2) O-Rings
Not Shown	1/4 NPT Diverter Modular Kit	DK52	(1) 1/4 NPT Diverter Module, (2) Cover Plate Assemblies, (2) O-Rings
	3/8 NPT Diverter Modular Kit	DK53	(1) 3/8 NPT Diverter Module, (2) Cover Plate Assemblies, (2) O-Rings
	1/4 NPT - 3 Port Diverter Modular Kit	DK54	(1) 1/4 NPT - 3 Port Diverter Module, (1) Cover Plate Assembly, (1) O-Ring