

NORMAN FILTER COMPANY, L.L.C.

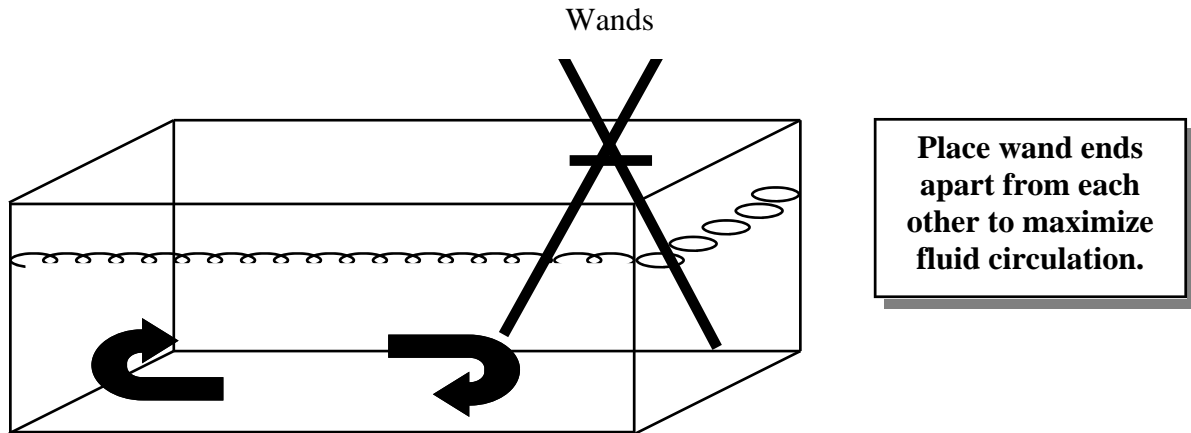
FILTER PANEL MANUAL

NEF05



Operating Instructions

- 1) Insert the inlet wand assembly into the supply fluid drum/reservoir.
The inlet wand is connected to the “Y” strainer prior to the pump.
- 2) Insert the outlet wand assembly into the transferring drum/reservoir. If filtering oil on existing equipment reservoirs, locate the inlet wand away from the outlet wand to prevent a direct flow path.



- 3) Verify that the ON/OFF switch is OFF and plug the cord into a 115VAC 10A grounded outlet (3wire).
- 4) Turn switch to ON position and check outlet wand to verify for oil flow. Allow approximately 30 seconds for filters to fill with oil on the initial start up.
- 5) The condition of the filter elements should be monitored by the gauges located on the filter head. When the differential pressure gauges read in the red area turn OFF the filter cart and replace filter elements.
- 6) The Y strainer located before the pump should be periodically examined and cleaned if needed.

TROUBLE SHOOTING

PROBLEM	CAUSE	SOLUTION
Unit does not start?	ON/OFF switch	Turn switch ON, replace if defective.
	No electrical power	Check power supply.
	Defective motor overload	Replace motor overload (located in switch housing)
	Defective motor	Replace motor.
No oil flow?	"Y" strainer	Check "Y" strainer for contamination blockage.
Erratic pump noise?	Defective pump or suction leak.	Replace pump. Check hose for loose connections.
Gauges read in yellow or red zone?	Element reaching max. Dirt holding capacity.	Install new element
	Oil is extremely cold or viscous.	Change element to coarser micron.

APPLICATIONS:

- Transferring new fluid from drums or storage tank to system reservoir.
- Complementing existing system filtration on a preventative maintenance program.
- Filtering new fluid before putting into service.
- Removing water from hydraulic or lube oils.
- For use with fluids such as hydraulic, gear, lube oil, water soluble fluids and coolants. Call factory regarding compatibility.

Norman Filter Carts are an ideal way to pre-filter and transfer fluids from one container to another or to recirculate fluid (kidney loop filtration) in a reservoir to remove particulate and water contaminants in existing systems.

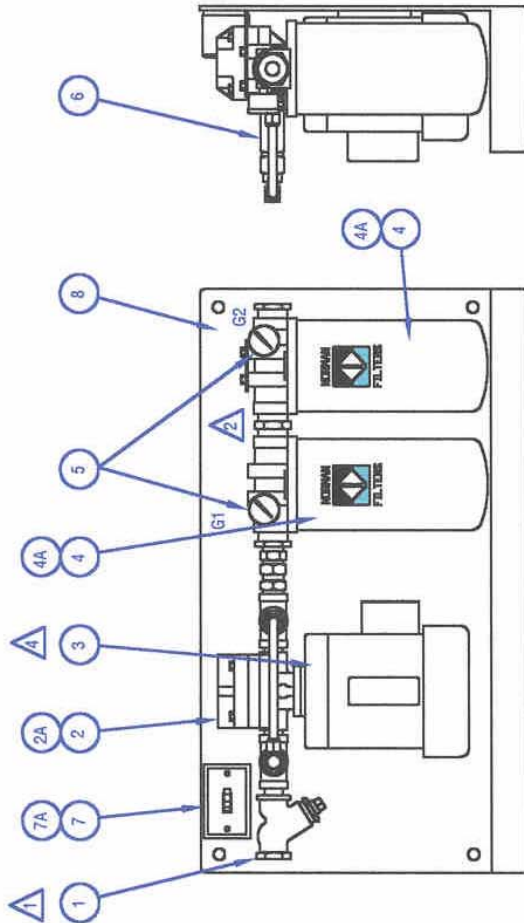
New fluid should always be filtered before putting into use. New barreled oil on average contains 7 grams of dirt. Most new fluids are unfit for use due to high initial contamination levels. Contamination, both particulate and water, may be accidentally added to a new fluid during processing, mixing, handling and storage.

Norman Filter Carts can also remove water by the use of aqua absorbing filter elements, which can remove up to 29 ounces of water from hydraulic oil, while filtering particulate down to 3 micron absolute.

The Norman Filter Carts utilize two stage filtration. The primary stage for larger particles, the secondary stage for finer particles. The “Y” strainer, located at the pump inlet, protects the pump from all visible contaminants prior to filtering.

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OVERALL DIMENSIONS - 32" L. x 10" W. x 18" H.
MOUNTING HOLES - 14" x 30" (3/8" DIA. BOLT HOLE)



PRIMARY FILTER
SECONDARY FILTER

- 1 STRAINER SHOULD BE CLEANED PRIOR TO USE
- 2 FILTER CHANGE INSTRUCTIONS:
WHEN THE DIFFERENTIAL PRESSURE EXCEEDS 20 PSI BETWEEN GAUGES 1 & 2, THE FILTER ELEMENT BETWEEN THE GAUGES MUST BE CHANGED.
- 3 PRIMARY FILTER ELEMENT NUMBER SHOULD BE GREATER THAN OR EQUAL TO SECONDARY FILTER ELEMENT NUMBER.
- 4 VITON SEAL KIT OPTION: NFC # 41250278

ORIGINAL

NEF05FP BILL OF MATERIALS

ITEM	QTY	NFC PART #	DESCRIPTION
1	1	41250314	3/4" Y-STRAINER
2	1	41250339	5.3 GPM GEAR PUMP
2A	1	41250313	PUMP & MOTOR COUPLER
3	1	41250340	1/2 HP MOTOR
4	2	41250072	FILTER HEAD
4A	2	SEE BELOW	FILTER ELEMENT
5	2	41250811	PRESSURE GAUGE
6	1	41250321	RELIEF VALVE
7	1	41250322	MOTOR SWITCH
7A	1	41250323	OVERLOAD SWITCH
8	1	41250437	PANEL

REPLACEMENT FILTERS (CELLULOSE)

MODEL #	NFC PART #	DESCRIPTION
603	26013779	3 MICRON
603AQ	26054451	3 MICRON WATER REMOVAL
610	26013675	10 MICRON
610AQ	26013677	10 MICRON WATER REMOVAL
625	26013676	25 MICRON
6100	26054169	141 MICRON S.S. MESH

REPLACEMENT FILTERS (MICROGLASS)

MODEL #	NFC PART #	DESCRIPTION
601M	26054413	1 MICRON ABSOLUTE
603ACM	26064883	3 MICRON ABSOLUTE WATER REMOVAL
603M	26052658	3 MICRON ABSOLUTE
606M	26052655	6 MICRON ABSOLUTE
612M	26052657	12 MICRON ABSOLUTE
625M	26052656	25 MICRON ABSOLUTE

UNLESS OTHERWISE NOTED
DIMENSIONS ARE IN INCHES DO NOT SCALE

TOLERANCES:
.00 ± .030 .000 ± .010
ANGLES: ± .30°
BREAK CORNERS: .005 TO .010
INTERNAL RADI: .006 TO .010
DIMENSIONING PER ANSI Y14.5 1982

DATE: 09/15/96
DRAWN: RAM
CHECKED:
APPROVED:

NORMAN FILTER
COMPANY, L.L.C.

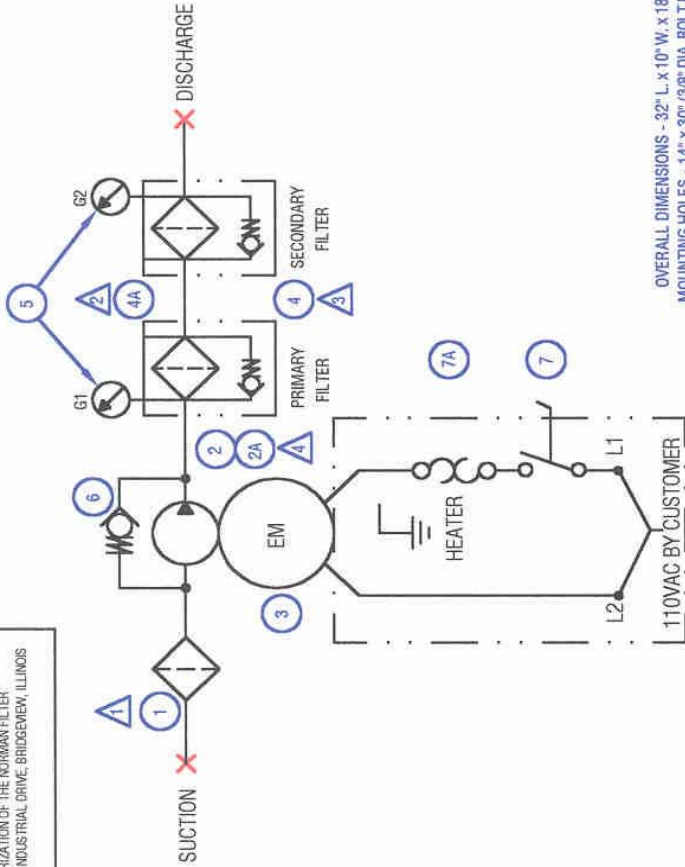
FILTER PANEL

CODE/DEPT. NO.	59165	PART NO.	NEF05FP-XXX-XXX-N
SIZE	A	DWG. NO.	A-10-7596
DATE		SCALE: N/A	BDM DRAWING
REV			SHEET 1 OF 1

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REPLACEMENT FILTERS (CELLULOSE)

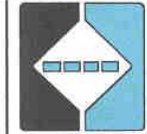
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COMPANY, L.L.C.**



FILTER PANEL

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TOLERANCES: .00 ± .000 .000 ± .010 ANGLES: ± 30° BREAK CORNERS .005 TO .010 INTERNAL RADIUS .005 TO .010 DIMENSIONING PER ANSI Y14.5 1982	
MATERIAL	DATE 09/16/96
HEAT TREAT	CHECKED
FINISH	APPROVED

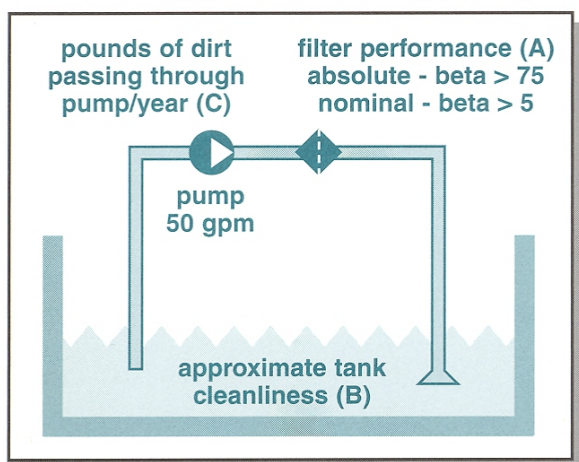
ORIGINAL

CODE IDENT NO.	59165	PART NO.	NEF05FP-XXX-XXX-N
SIZE	A	DWS. NO.	A-2-7594
REV	A	SCALE	N/A
DESCRIPTION	BOM SCHEMATIC DRAWING		
BY	KSL		
DATE	02/06/03		
REV	A		
DESCRIPTION	SHEET 1 OF 1		

Recommended Fluid Cleanliness ISO Levels

	12/9	14/11	16/13	18/15	20/17	22/19	24/21	26/23
Hydraulic Fluids	Very Clean		Clean		Dirty			
Gear Oils			Very Clean		Clean			Dirty
Engine Lubes			Very Clean		Clean		Dirty	
Turbine Oils	Very Clean		Clean	Dirty				

At ISO 21/18, this hydraulic system passes 136 50-lb. bags of dirt through the teeth of the pump in one year.



REF. NORIA CORP.

Filter (A)	ISO Code (B)	Dirt (lbs.) (C)	50 LB bags	Relative Pump life
25 micron nominal	21/18	6784	136	1
10 micron nominal	19/16	1809	36	1.9
10 micron absolute	16/13	211	4.2	4.4
6 micron absolute	14/11	53	1	8.8
3 micron	12/9	14	0.28	15

**Contact Norman Filter Company
For a "FREE ISO FLUID ANALYSIS"
On your Hydraulic, Lube or Gear Oil System!
(708) 233-5521**

Norman Filter Company: "Filtration Housings, Systems and Replacement Elements"



Norman Filter Company, L.L.C. • 9850 South Industrial Drive • Bridgeview, IL 60455 • Phone (708) 233-5521 • Fax (708) 430-5961