

CLEAR VIEW FILTRATION 4" HI-FLOW FILTER DIRECTIONS

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CLEAR VIEW FILTRATION'S PATENTED SEE THROUGH FILTER ASSEMBLY ALLOWS THE USER TO VISUALLY SEE THE FLUID PUMPING THROUGH THE FILTER WHICH HELPS DETERMINING THE CONDITION OF THE FLUID. WHEN FLUID IS NOT BEING PUMPED THROUGH THE FILTER, IT CAN BE QUICKLY DRAINED USING COMPRESSED AIR, EXPOSING THE FILTER ELEMENT AND ANY PARTICLES FILTERED OUT OF THE OIL SYSTEM. EVEN WHEN FILTERING NON TRANSPARENT FLUID LIKE ENGINE OIL. VISUAL INSPECTION OF THE FILTERED PARTICLES HELPS THE USER TO DETERMINE IF THE CONTAMINANTS AND PARTICLES ARE FROM NORMAL USE OR FROM PARTS EXCESSIVELY WEARING IN MACHINERY OR IN THE ENGINE SUPPLYING THE FILTER ASSEMBLY. ENGINE OR MACHINERY INSPECTION DONE IN SECONDS AND WITHOUT DRAINING OR LEAKING ANY FLUID OR OIL, UNBOLTING OR LOOSENING ANY FASTENERS OR FITTINGS AND WITHOUT THE LOSS OF FLUID OR OIL OUT OF THE SYSTEM, WHICH SAVES USERS AND BUSINESS'S TIME AND MONEY!

SEE THROUGH OIL FILTERS ARE RATED FOR 150 PSI MAXIMUM PRESSURE AT A MAX FAHRENHEIT TEMP OF 200 DEGREES

**4"HI-FLOW
FILTER ASSEMBLY
PART #410-60
PART #410-60-B
PART #410-115
PART #410-115-B**

**FILTER BRACKET MOUNTING HOLES
BRACKET CAN BOLT TO EITHER SIDE**

**# 8 O-RING BOSS PRESSURE PORT
(CAN ALSO OIL TURBO)**

**3/8" X 5/8" LONG
ALLEN HEAD
MOUNTING BOLTS
(INCLUDED IN KIT)**

**OIL PRESSURE OR
TURBO CHARGER
PORT THREADED FOR
3 O-RING BOSS
USES PART# 169 FITTING
3 O-RING BOSS TO # 4 AN**

**INLET & OUTLET PORTS
USE #12 O-RING BOSS
FITTINGS**

**FILTER BRACKET CENTER TO CENTER
MOUNTING HOLE SPACING IS 2.600"
THREADED FOR 3/8" COARSE BOLTS**

**FILTER BRACKET (INCLUDED IN KIT)
FILTER NEEDS TO BE MOUNTED
WITH SEE THROUGH TOP UP AND LEVEL**

**MACHINED POCKETS
IN FILTER AND BRACKET FOR LITE WEIGHT**

**FILTER NUT USES 7/16" 12 POINT SOCKET
TIGHTEN TO ONLY 5 FOOT POUNDS JUST UNTIL TOP AND BOTTOM
OF FILTER ARE SEATED FIRMLY TOGETHER DO NOT OVER TIGHTEN**

FILTER NUTS AND BRACKET ALLEN BOLTS NEED TO BE TIGHTENED BEFORE FILTER IS RAN USE BLUE LOC TIGHT ON BRACKET MOUNTING BOLTS AND ANTI-SEIZE OR OIL ON FILTER NUTS. THE FILTER ELEMENT SEALS NEED TO BE PRE-OILED BEFORE TIGHTENING THE FILTER TOP

#12 JIC INTLET FITTING

**FILTER ELEMENT
SEAL MACHINED
GROOVES**

WINDOW RETAINER

**RADIAL GROOVE
OPENINGS**

**FILTER TOP
ASSEMBLY**

**#10 ALLEN HEAD
WINDOW RETAINER
FASTENERS**

**MOUNTING HOLES
FOR STUDS**

**FILTER ELEMENT
BYPASS HOLE**

#12 ALLEN O-RING BOSS PLUG

**AIR FITTING FOR
EMPTYING THE FLUID
OUT OF THE FILTER
ASSEMBLY**

#12 JIC OUTLET FITTING

**FILTER ELEMENT
SEAL MACHINED
GROOVES**

FILTER BASE

**RADIAL GROOVE
OPENINGS**

**3/8" FINE
THREAD
MOUNTING
STUD**

**OUTLET
PASSAGES**

**FILTER ELEMENT
BYPASS VALVE**

CLEAR VIEW FILTRATION'S GUARANTEE (IMPORTANT!! READ BEFORE INSTALLING) THIS OIL FILTER IS GUARANTEED FOR ONE YEAR FROM DATE OF PURCHASE TO BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP. WE SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES, OR DAMAGES TO PERSONS OR PROPERTY ARISING FROM THE USE OF THIS PRODUCT. THIS INCLUDES DOWN TIME, LOSS OF USE OF THE PRODUCT, MACHINERY, OR VEHICLE. ALSO TOWING, RENTING OR BUYING A VEHICLE DURING DOWN TIME. IF THERE IS EVER A PROBLEM WITH THE FILTER ASSEMBLY, THE FILTER MUST BE SENT BACK TO CLEAR VIEW FILTRATION FOR ALL WARRANTIES OR GUARANTEE IS VOID. WE SHALL NOT BE LIABLE FOR SHIPPING COSTS OF THE FILTER ASSEMBLY, OR LABOR COSTS TO UNHOOK OR REINSTALL THE FILTER ASSEMBLY. IF THE FILTER ASSEMBLY IS INSTALLED THE PURCHASER AND OR USER OF THE PRODUCT IS AGREEING TO THE TERMS ABOVE. IF THE PURCHASER AND OR USER OF THE PRODUCT DOES NOT AGREE TO THE TERMS ABOVE, AND THE FILTER ASSEMBLY WAS NOT DAMAGED, SCRATCHED, OR INSTALLED THEN CONTACT US AT CLEAR VIEW FILTRATION AND SEND THE FILTER ASSEMBLY BACK AND WE WILL GIVE THE PURCHASER A FULL REFUND.

4" HI-FLOW FILTER DIRECTIONS **READ BEFORE INSTALLING**

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THE FILTER ASSEMBLY NEEDS BE MOUNTED FLAT SO THE SIGHT WINDOW IS FACING UP AND BE MOUNTED SO THE INLET AND OUTLET HOSES ARE LEVEL OR GOING UP TO THE FILTER ASSEMBLY. IF THE HOSES ARE GOING DOWN TO THE FILTER ASSEMBLY, AFTER DRAINING THE FILTER ASSEMBLY THE OIL OR FLUID WILL RUN BACK INTO THE FILTER ASSEMBLY COVERING UP THE FILTER ELEMENT AND FILTERED PARTICLES. THE FILTER ASSEMBLY SHOULD BE MOUNTED USING AT LEAST TWO OF THE 3/8" COARSE THREADED MOUNTING HOLES IN THE BOTTOM OF THE FILTER BASE.

THE FILTER ASSEMBLY HAS OUTLET AND INLET THREADED OPENINGS AT EITHER END OF THE FILTER ASSEMBLY. IF ONLY ONE INLET OR OUTLET IS BEING USED THE OTHER END NEEDS TO BE PLUGGED. BOTH INLETS AND OUTLETS CAN BE USED WHICH WILL DOUBLE THE VOLUME OF FLUID THAT WILL FLOW THROUGH THE FILTER ASSEMBLY. FLUID WILL ONLY FLOW AS MUCH AS THE SMALLEST ORIFICE IN A FLUID SYSTEM. FOR EXAMPLE THE OUTLET ORIFICE ON A BIG BLOCK CHEVY IS 5/8" OR .625" DIAMETER HOLE. ONE INLET OPENING ON THE FILTER ASSEMBLY HAS A LARGER THAN 5/8" OR .625" DIAMETER AREA OPENING, SO ONLY ONE #12 INLET AND OUTLET OPENING NEED TO BE USED. IF THE FILTERING APPLICATION WAS A LARGE INDUSTRIAL ENGINE THAT HAS A 3/4" OR .750" DIAMETER OR LARGER OPENING THAN BOTH INLET AND OUTLET OPENINGS SHOULD BE USED. MOST APPLICATIONS ONLY NEED ONE INLET AND OUTLET OPENING.

THE THREADED INLET AND OUTLET OPENINGS ARE THREADED TO 1 1/16" 12 THREADS PER INCH. ALSO CALLED #12 STRAIGHT THREAD. THE FITTINGS USED IS A #12 STRAIGHT THREAD WITH O-RING OR A #12 O-RING BOSS FITTING THAT THREADS INTO THE FILTER, AND THE OTHER END COMES IN MANY DIFFERENT FITTING TYPES TO MAKE IT EASY TO HOOK UP TO DIFFERENT APPLICATIONS AND FLUID SYSTEMS. MOST APPLICATIONS USE A #12 O-RING BOSS ON ONE END AND A #12 JIC MALE ON THE HOSE END OF THE FITTING. THE NUT OF THE FITTING MUST BE 1 1/4" SOME ALUMINUM FITTINGS HAVE 1 3/8" NUT WHICH CAN HIT EACH OTHER IF BOTH INLET AND OUTLET OPENINGS ARE AT THE SAME END.

WE OFFER BLOCK ADAPTERS FOR HOOKING THE FILTER ASSEMBLY TO DIFFERENT ENGINES. THEY ARE A HIGH FLOW DESIGN THAT WILL NOT RESTRICT ANY OIL FLOW. THE BLOCK ADAPTERS HAVE THE SAME INLET AND OUTLET FITTINGS THAT THE FILTER ASSEMBLY DOES THIS INSURES THE BLOCK ADAPTER, FITTINGS, HOSES, AND FILTER ASSEMBLY WILL FLOW MORE OIL WITHOUT RESTRICTION! IF USING ONE OF OUR BLOCK ADAPTER THE INLET AND OUTLET OPENINGS ARE ENGRAVED IN AND OUT. TO HOOK UP THE OIL LINES CORRECTLY, THE OUT OR OUTLET OPENING OF THE BLOCK ADAPTER NEEDS TO BE HOOKED TO THE IN OR INLET OPENING OF THE REMOTE FILTER. THEN HOOK THE OUT OR OUTLET OF THE REMOTE FILTER TO THE IN OR INLET OPENING OF THE BLOCK ADAPTER. **LOOK UP DISPOSABLE FILTER FOR APPLICATION TO MAKE SURE THE THREAD SIZE MATCHES THE ADAPTER.**

THE FILTER ASSEMBLIES FILTER ELEMENT IS STAINLESS STEEL MESH WITH A VITON RUBBER SEAL AROUND THE INSIDE AND THE OUTSIDE OF THE FILTER ELEMENT. VITON RUBBER IS HEAT, CHEMICAL, AND ALSO ALCOHOL RESISTANT. THESE SEALS FIT INTO GROOVES MACHINED INTO THE FILTER BASE AND TOP HOUSINGS. THE FILTER ELEMENT CAN BE PUT IN WITH EITHER SIDE FACING UP OR DOWN. MAKE SURE THE FILTER ELEMENT SEALS ARE IN THE MACHINED GROOVES, OR IT COULD DAMAGE THE VITON RUBBER SEALS. AFTER THE FILTER ELEMENT IS SET ON THE FILTER BASE WITH THE SEALS IN THE MACHINED GROOVES, THE TOP OF THE FILTER ASSEMBLY CAN BE PUT ON. THE FOUR 3/8" STUDS IN THE FILTER BASE WILL ALIGN THE TOP HOUSING. INSTALL THE TOP HOUSING AND BOLT TOGETHER USING THE FOUR 3/8" AN FLAT WASHERS AND THE 3/8" FINE THREAD 12 POINT NUTS. TIGHTEN ALL FOUR NUTS GRADUALLY USING A DEEP 7/16" - 12 POINT SOCKET. DO NOT TIGHTEN ONE NUT ALL THE WAY, MAKE SURE TO TIGHTEN ALL FOUR A LITTLE AT A TIME THAN SNUG ALL 4 NUTS, **DO NOT OVER TIGHTEN IT COULD DAMAGE THE FILTER ELEMENT SEALS.** FILTER ELEMENT SEALS WILL WEAR OUT OVER TIME CREATING LEAKS, WE RECOMMEND HAVING A SPARE ELEMENT!

THE FILTER ASSEMBLIES ARE PACKAGED WITH THE FOUR 12 POINT MOUNTING NUTS LOOSE SO MAKE SURE TO TIGHTEN! THESE FOUR NUTS ARE THE ONLY FASTENERS THAT NEED TO BE TAKEN OFF TO CLEAN OR CHANGE THE FILTER ELEMENT. THE FILTER TOP ASSEMBLY HAS THREE VITON RUBBER O-RINGS, WHICH SEAL THE VIEWING WINDOW AND WINDOW RETAINER INTO THE FILTERS TOP HOUSING. THESE CAN BE CHANGED EASILY BY TAKING OUT THE EIGHT #10 - 24 THREADS PER INCH ALLEN HEAD FASTENERS, THESE ARE PUT IN WITH BLUE LOC TIGHT. WHEN THE EIGHT FASTENERS ARE OUT, THE WINDOW RETAINER AND THE VIEWING WINDOW WILL COME OUT. THE O-RING ON THE WINDOW RETAINER IS A 161 VITON, THE O-RING IN THE VIEWING WINDOW IS A 159 VITON, AND THE O-RING IN THE TOP HOUSING WHICH SEALS AROUND THE WINDOW IS A 162 VITON. THESE ARE COMMON O-RINGS THAT CAN BE PURCHASED AT LOCAL O-RING STORE OR PURCHASED THROUGH CLEAR VIEW FILTRATION. WHILE REPLACING THE THREE O-RINGS PUT A LITTLE OIL ON THEM. HOLD THE TOP HOUSING LIKE IT GOES ON THE FILTER WITH THE TOP SIDE FACING UP. NOW INSTALL THE WINDOW FROM THE BOTTOM WITH THE O-RING IN THE GROOVE OF THE WINDOW FACING UP. IT WILL TAKE A LITTLE FORCE TO PUSH THE WINDOW IN. THEN INSTALL THE WINDOW RETAINER WITH THE O-RING IN THE GROOVE FACING UP. THIS WILL ENSURE THE O-RINGS WILL STAY IN THEIR O-RING GROOVES. NOW HOLD THE ENTIRE TOP ASSEMBLY TOGETHER AND FLIP IT OVER AND INSTALL THE EIGHT ALLEN HEAD FASTENERS. USE A LITTLE BLUE LOC TIGHT AND HAND TIGHTEN. THESE ARE SMALL FASTENERS, DO NOT OVER TIGHTEN, OR IT COULD STRIP OUT THE THREADS. IF THIS HAPPENS YOU MUST PUT A HELI-COIL OR FIX THE THREADS IN THE FILTER TOP. THERE IS A LOT OF FORCE APPLIED TO THESE FASTENERS AND THE FILTER MUST HAVE THEM ALL TIGHT AND WITH GOOD THREADS, THIS IS IMPORTANT.

VERY IMPORTANT! THE CLEAR SIGHT WINDOW IS 1/2" THICK POLY CARBONATE, IT HAS AN AR2 COATING THAT IS HEAT, CHEMICAL AND SCRATCH RESISTANT TO A CERTAIN POINT, IT WILL SCRATCH IF SCOTCH BRITE, SAND PAPER OR COARSE CLOTH COMES INTO CONTACT WITH THE WINDOW. TO CLEAN THE VIEWING WINDOW USE A SOFT CLOTH AND GLASS CLEANER, MAKE SURE WINDOW IS CLEAR OF DIRT OR ROCKS BEFORE CLEANING. REPLACEMENT WINDOWS ARE AVAILABLE AND EASY TO INSTALL IF DAMAGED.

WHEN THE FILTER ASSEMBLY IS MOUNTED AND EVERY THING IS TIGHT START THE ENGINE. LOOK FOR LEAKS INCASE ANYTHING WAS LEFT LOOSE. WHEN THE MOTOR IS NOT RUNNING, THE FILTER ASSEMBLY CAN BE EMPTIED OF OIL OR FLUID BY SIMPLY USING COMPRESSED AIR AND AN AIR CHUCK TO APPLY A QUICK SHOT OF AIR PRESSURE TO THE AIR FITTING ON THE SIDE OF THE INLET OPENING. THERE IS NO NEED TO HOLD THE AIR PRESSURE STEADY ON THE AIR FITTING. IF THE FILTER DOES NOT EMPTY COMPLETELY ON THE FIRST SHOT OF AIR GIVE IT A SECOND QUICK SHOT. IT WILL EMPTY AND ALLOW VISUAL INSPECTION OF THE FILTERED PARTICLES. FOR QUICK EASY ENGINE INSPECTION WITHOUT DRAINING OR LEAKING ANY OIL, UNBOLTING OR LOOSENING ANY FASTENERS OR FITTINGS AND WITHOUT THE LOSS OF ANY OIL OUT OF THE SYSTEM.

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