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Fleet Solutions - Fan Clutch Application Guide

2010

12 – Fan Clutches

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Part Number	Type	Page #

Type "O" = OEM P/N, Type "S" = Service P/N

If OEM part # is not found on page listed, refer to the MCR for applicable cross reference.

PURPOSE OF THIS SECTION

This section is designed as a reference for Haldex Commercial Vehicle Systems new and remanufactured air brake system components and accessories, sold under the Haldex and Midland product names. Products described include all pertinent information needed to replace an OEM installed component or to help design an original installation. If there is a service number for a given part, it is noted in the product number table.

DESIGN FLEXIBILITY

The products presented in this section are described by function and usage. Technical data and mounting configurations are also provided. Throughout this section, reference is made to numerous specific OEM applications. This section is not, however, intended to be a mutually exclusive listing of all part numbers and designs available. Should the need for a design not presented occur, contact your Haldex Commercial Vehicle Systems sales representative for additional information.

WARRANTY INFORMATION

Proper service and repair are important to the safe, reliable operation of any motor vehicle. To prevent personal injury and/or vehicle damage, careful and cautious service procedures recommended by the vehicle manufacturer should be followed by anyone servicing a motor vehicle. For details on warranty of Haldex Commercial Vehicle air brake system components and accessories, refer to L20221 Aftermarket Warranty Policy. For warranty returns, use L90005 Warranty Adjustment Form. To obtain further information, visit the **www.haldex.com** website, select **North America/English** in drop down box then search for **Warranty**.

ORDERING PROCEDURE

Most customers can place electronic orders on the www.haldex.com website by obtaining a username and password or by using EDI. For additional information about electronic orders or to place an order by phone or fax, contact Customer Service in U.S. or Canada at numbers listed below:

U.S. Customer Service:
Phone: 800–643–2374
Fax: 800–533–1941
Mail: Commercial Vehicle Systems
Haldex Brake Products Corporation
Attn: Customer Service Department
10930 N. Pomona Ave.
Kansas City, MO 64153

Canada Customer Service:
Phone: 800–267–9247
Fax: 519–621–3924
Mail: Commercial Vehicle Systems
Haldex Limited
Canadian Distribution Centre
Attn: Customer Service Department
500 Pinebush Road, Unit 1
Cambridge, Ontario N1T 0A5

IMPORTANT NOTICE

The data listed herein is correct to the best of Commercial Vehicle Systems knowledge and belief, having been compiled from reliable and official sources of information. However, COMMERCIAL VEHICLE SYSTEMS CANNOT ASSUME ANY RESPONSIBILITY for possible error or misapplication of the product. Final determination of the suitability of the products for the use contemplated by the Buyer is the sole responsibility of the Buyer. Commercial Vehicle Systems shall have no responsibility in connection with this suitability. It is not our intention to imply that any of the components in this catalog in connection with an engine make or model are made by any engine manufacturer.

WHAT YOU NEED TO LOOK FOR:

1. Core is complete and not disassembled. The fan clutch core must include a bracket, sheave, PFD (piston friction disk),and an air chamber.

2. The fan clutch core cannot be broken, cracked, welded or galled.

3. The sheave and air chamber must spin freely.

4. Core has not been damaged by non–operational causes such as fire, rust, or rough handling.

5. The fan clutch core must be a part number specified by Haldex that is acceptable for exchange.

APPLICABLE CREDIT:

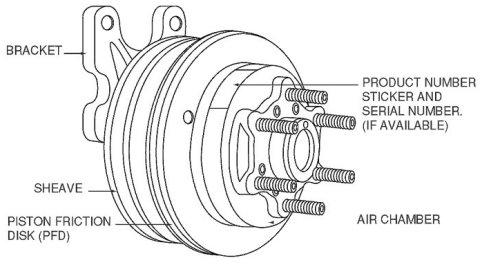
1. If none of the above conditions exist (1, 2, 3 or 4), full credit is applicable.

2. If any **one** of the above conditions exist, fifty percent (50%) credit is applicable.

3. If **two or more** of the above conditions exist, no credit is applicable.

Refer to Core Policy L00036 for additional information on core credits, core return procedures, core changes, core acceptance, core refunds, and freight.

PRINCIPLE COMPONENT PARTS:



PROCEDURES FOR CORE IDENTIFICATION:

A. Sticker Check	A "Good" core should have a product number which matches the listed acceptable product numbers. (If sticker is not available, go to steps B & C).
B. Visual Check	A "Good" core should match match one of the graphics and notes listed on the following pages.

CASTING NUMBER LOCATIONS:

Sheave	On the edge of the back rim
Bracket	Front surface near shaft
Air Chamber	Front surface (smooth type has no casting numbers)

VEHICLE MODEL & YEAR	ENGINE MAKE & MODEL	OEM #	HORTON REMAN NUMBER	MIDLAND SERVICE NUMBER
BLUEBIRD				
1988 & UP, School Bus	Cummins C–Series	980008	790012	**RF790012X**
FORD				
1974–86, CL9000	Caterpillar 3406	990058	790005	**RF790005X**
1973 & UP, L9000, W9000	Cummins PT270, NTC Series	990019	790008	**RF790008X**
1977 & UP, CL9000	Cummins NTC Series	990026	790002	**RF790002X**
1974 & UP, L9000	Detroit Diesel 8V71, 6V92	990031	790003	**RF790003X**
1975 & UP, W–WT9000	Detroit Diesel 8V71T, TT, TA, 6V92T, TT 8V92TA	990031	790003	**RF790003X**
1978 & UP, CL9000	Detroit Diesel 6V92TT, 8V92TT	990031	790003	**RF790003X**
FREIGHTLINER				
10/88 & UP, ALL	Caterpillar 3176	990083	790015	**RF790015X**
1988 & UP, ALL	Caterpillar 3406 ATTAC	991022	791008	**RF791008X**
1989 & UP, ALL	Caterpillar 3406 ATAAC	991021	791007	**RF791007X**
1989 & UP, Replaces HT550 & D.H.	Caterpillar 3406	–	791013	**RF791013X**
1990 & UP, ALL	Caterpillar 3306	991050	791012	**RF791012X**
1975 & UP, ALL	Cummins NTC Series	990026	790002	**RF790002X**
1987 & UP, ALL	Cummins NTC Series, Big Cam IV	991015	791016	**RF791016X**
1988 & UP, ALL	Cummins NTC Series	991084	791009	**RF791009X**
1989, COE & Conventional	Cummins L–10	990006	790010	**RF790010X**
1990 & UP, FLD112	Cummins L–10	990092	790016	**RF790016X**
1989 & UP, ALL	Cummins L–10	990007	790017	**RF790017X**
1970 & UP, ALL	Detroit Diesel 8V71N & T	990031	790003	**RF790003X**
1975 & UP, ALL	Detroit Diesel 8V92T, TA, 8V71	990047	790004	**RF790004X**
1988 & UP, ALL	Detroit Diesel 60 Series	990041	790009	**RF790009X**

VEHICLE MODEL & YEAR	ENGINE MAKE & MODEL	OEM #	HORTON REMAN NUMBER	MIDLAND SERVICE NUMBER
HENDRICKSON				
1975 & UP, ALL	Detroit Diesel 8V71N & T, 6V92TT, 8V92T	990031	790003	**RF790003X**
INTERNATIONAL				
1988 & UP, 8000 Series, 9400 & Paystar	Caterpillar 3176	991023	791015	**RF791015X**
4/1974 & UP, 4070B, Transtar II	Caterpillar 3406	990058	790005	**RF790005X**
1975 & UP, 4200–4300 Conventional Transtar II	Caterpillar 3406	–	790005	**RF790005X**
1981–82, C09670 & Eagle	Caterpillar 3406	990058	790005	**RF790005X**
1983 & UP, C09670 & Eagle	Caterpillar 3406	990063	790005	**RF790005X**
1984 & UP, 9370 Conventional	Caterpillar 3406	–	790005	**RF790005X**
8/86–11/86, 9370, 9670	Caterpillar 3406 ATAAC	991007	791002	**RF791002X**
1987 & UP, 9300, 9600 & 9700	Caterpillar 3406 ATAAC	991016	791003	**RF791003X**
1987 & UP, 9400	Caterpillar 3406	991032	791017	**RF791017X**
1973–74, 4200–4300 Conventional Transtar II	Cummins Super 250, 270, NTA 370	990012	790000	**RF790000X**
1973 & UP, Paystar 5000	Cummins Super 250	990023	790001	**RF790001X**
1974 & UP, 4070B Transtar II NTC 290, 350, NTA 400	Cummins Super 250	990023	790001	**RF790001X**
1975 & UP 4100 Conco	Cummins F290/NTC 290, 350, 400	990026	790002	**RF790002X**
1981 & UP, C09670 & Eagle	Cummins NTC 400	990012	790000	**RF790000X**
Paystar 5050, 5070	Cummins NTC Series	990012	790000	**RF790000X**
1985 & UP, S–Series, 8300	Cummins B.C.IV	991001	791000	**RF791000X**
1988 & UP, 9300, 9600 & 9700	Cummins NT88	991001	791000	**RF791000X**
1986 & UP, ALL	Cummins L–10	991000	791001	**RF791001X**
1991 & UP, 8000	Cummins L–10	991039	791018	**RF791018X**
1991 & UP, 8000, 9000	Cummins N14	991044	791019	**RF791019X**
1994 & UP, 8000	Cummins N14	991106	791026	**RF791026X**
1973 & UP, Paystar 5000	Detroit Diesel 6V92, 8V92, 8V71N & T	990031	791003	**RF790003X**

VEHICLE MODEL & YEAR	ENGINE MAKE & MODEL	OEM #	HORTON REMAN NUMBER	MIDLAND SERVICE NUMBER
INTERNATIONAL (Cont.)				
ALL, 4070B, Transtar II, 4100 Conco	Detroit Diesel 8V92, 8V71N & T, 6V92TT	990031	790003	**RF790003X**
1978 & UP, S–2225	Detroit Diesel 6–71	990031	790003	**RF790003X**
1983 & UP, Paystar 5000	Detroit Diesel 6V92, 8V71, 8V92	990032	790003	**RF790003X**
1983 & UP, C09670 & Eagle	Detroit Diesel 6V92, 8V71TTA, 8V92	990034	790003	**RF790003X**
1983 & UP, 4200 & 4300, 9370 Conventional	Detroit Diesel 6V92 Not Turbo Charged	990032	790003	**RF790003X**
1991 & UP, 9400	Detroit Diesel 60 Series	991062	791023	**RF791023X**
1991 & UP, 9600, 9700	Detroit Diesel 60 Series	991061	791031	**RF791031X**
KENWORTH				
1988 & UP, ALL	Caterpillar 3176	990081	790014	**RF790014X**
1992 & UP, T–450	Caterpillar 3176	991082	791025	**RF791025X**
1975 & UP, ALL	Caterpillar 3406	990058	790005	**RF790005X**
1988 & UP, T–600	Caterpillar 3406	990062	790007	**RF790007X**
ALL, W900B, T600A, T800	Caterpillar 3406	991009	791005	**RF791005X**
1990 & UP, T–600, T–800	Caterpillar 3406	991046	791020	**RF791020X**
1992 & UP, T–600, T–800	Caterpillar 3406	991076	791014	**RF791014X**
1974 & UP, ALL	Cummins NTA, NTC Series	990012	790000	**RF790000X**
1975 & UP, ALL	Cummins NTA, NTC Series	990026	790000	**RF790000X**
1985 & UP, T–600	Cummins NTC, BC III & IV	991004	791004	**RF791004X**
1985 & UP, T–600	Cummins NTC, BC III & IV	991005	791006	**RF791006X**
ALL	Cummins L–10 OAC	990006	790010	**RF790010X**
ALL, T–400A, T–450	Cummins C–Series	990080	790013	**RF790013X**
1970–74, ALL	Detroit Diesel 6V71, 8V71T	990032	790003	**RF790003X**
1975 & UP, ALL 6V92, 6V71, 12V71	Detroit Diesel 8V71N, T, 8V92N, T	990048	790004	**RF790004X**
ALL, 4 GR. S	Detroit Diesel 60 Series	990041	790009	**RF790009X**

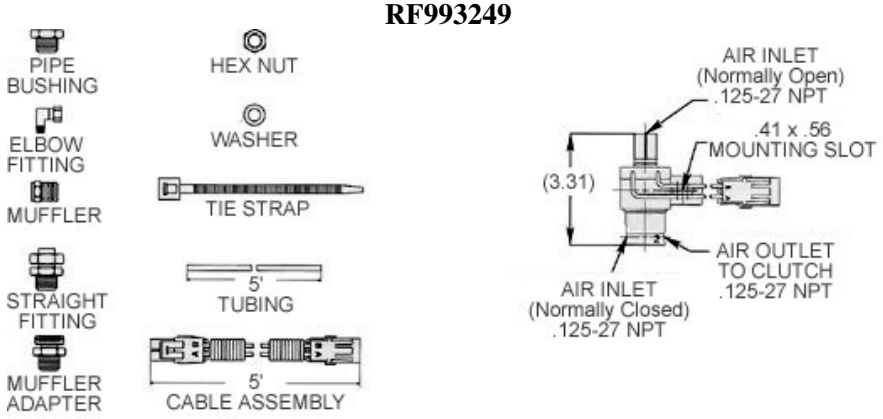
VEHICLE MODEL & YEAR	ENGINE MAKE & MODEL	OEM #	HORTON REMAN NUMBER	MIDLAND SERVICE NUMBER
KENWORTH (Cont.)				
1990 & UP, 4 GR. HT/S	Detroit Diesel 60 Series	991051	791011	**RF791011X**
1990 & UP, ALL	Detroit Diesel 60 Series	990099	790018	**RF790018X**
1990 & UP, ALL	Detroit Diesel 60 Series	991064	791024	**RF791024X**
1988 & UP, ALL	Caterpillar 3176	990081	790014	**RF790014X**
MACK				
1976 & UP, ALL 1:1	Cummins NTC Series	990012	790000	**RF790000X**
1976 & UP, ALL 1.2:1	Cummins NTC, NTA 400	990026	790002	**RF790002X**
1976 & UP, ALL 1:1	DDC 8V71N, T, 6V92TT, 8V92T	990031	790003	**RF790003X**
1976 & UP, ALL .8:1	DDC 8V71N, T, TV92T, 12V71	990047	790004	**RF791004X**
MARMON				
1975 & UP, ALL	Caterpillar 3406	990058	790005	**RF790005X**
1975 & UP, ALL	Cummins NTC 290, 335, 350, NH 230, Super 250	990023	790001	**RF790001X**
ALL	Cummins L–10	990006	790010	**RF790010X**
1975 & UP, ALL	DDC 8V71N, T, 6V92TT, 8V92T	990031	790003	**RF790003X**
ALL	DDC Series 60	990077	790009	**RF790009X**
OSHKOSH				
1975 & UP, ALL	Cummins NTC Series	990026	790002	**RF790002X**
PETERBILT				
1992 & UP, 320 Cement Truck	Caterpillar 3306	991090	791028	**RF791028X**
1975 & UP, Conventional & & COE	Caterpillar 3406	990059	790005	**RF790005X**
1972–74, ALL	Cummins NTC Series	990012	790000	**RF790000X**
1975 & UP, Conventional & COE	Cummins NTC 230–350	990026	790002	**RF790002X**
1985 & UP, 375, 377, 379	Cummins NTC @2 230, 250	991040	791010	**RF791010X**

VEHICLE MODEL & YEAR	ENGINE MAKE & MODEL	OEM #	HORTON REMAN NUMBER	MIDLAND SERVICE NUMBER
PETERBILT (Cont.)				
1986 & UP, ALL	Cummins L–10	990006	790010	**RF790010X**
1988 & UP, 320	Cummins C–Series	990080	790013	**RF790013X**
4/78 & UP, Conventional & COE 1:1	DDC ALL "V" Engines	990032	790003	**RF790003X**
1975 & UP, Conventional & COE .8:1	DDC ALL "V" Engines	990048	790004	**RF791004X**
ALL	DDC 60 Series	990077	790009	**RF790009X**
1976 & UP, ALL .8:1	DDC 8V71N & T, 8V92T, 12V71	990047	790004	**RF791004X**
VOLVO WHITE GMC				
1976–1985	Caterpillar 3306	990810	791012	**RF791012X**
ALL, WCA	Caterpillar 3176	990089	790014	**RF790014X**
1975 & UP, Autocar	Caterpillar 3406	990059	790005	**RF790005X**
1976 & UP, Volvo White	Caterpillar 3406	990059	790005	**RF790005X**
1976 & UP, General	Caterpillar 3406	990060	790005	**RF790005X**
1991 & UP, ALL	Caterpillar 3406	991067	791027	**RF791027X**
ALL, Astro DR	Caterpillar 3406	990060	790005	**RF790005X**
1975 & UP, Autocar 1:1	Cummins NTC Series	–	790000	**RF790000X**
1975 & UP, Autocar 1.2:1	Cummins NTC Series	990023	790001	**RF790001X**
1975 & UP, Autocar .8:1	Cummins NTC Series	990026	790002	**RF790002X**
1985 & UP, Autocar	Cummins L–10	990006	790010	**RF790010X**
ALL, WC, WJ, WI, WX	Cummins L–10	990006	790010	**RF790010X**
1991, ALL 1:1	Cummins L–10, N14	991056	791021	**RF791021X**
1991, ALL 1.2:1	Cummins L–10, N14	991055	791022	**RF791022X**
1975 & BEFORE, HV & JV 9500 Conventional	DDC 6V53	–	790003	**RF790003X**
1975 & UP, Autocar 1:1	DDC 8V71N & T, 6V92TT, 8V92T	990031	790003	**RF790003X**
1975 & UP, Autocar 8:1	DDC 8V71N & T, 8V92T, 12V71	990047	790004	**RF790004X**

VEHICLE MODEL & YEAR	ENGINE MAKE & MODEL	OEM #	HORTON REMAN NUMBER	MIDLAND SERVICE NUMBER
VOLVO WHITE GMC (Cont.)				
1978 & BEFORE, DP9502	DDC 12V71 Astro/Titan	–	790004	**RF790003X**
1988 & UP	Detroit Diesel 60 Series	990040	790011	**RF790011X**
ALL, Road Boss II	Detroit Diesel ALL "V" Engines, Road Commander II, Road Expediter II	990048	790004	**RF791004X**
ALL, W–G	Detroit Diesel 60 Series	990077	790009	**RF790009X**
WESTERN STAR				
1976 & UP, ALL	Caterpillar 3406	990058	790005	**RF790005X**
1975 & UP, ALL	Cummins NTC Series	990026	790002	**RF790002X**
1975 & UP, ALL 1:1	DDC 8V71N & T, 6V92TT, 8V92T	990031	790003	**RF790003X**

Pneumatic Fan Clutch Controls
Solenoid Valve Illustrations

RF993249



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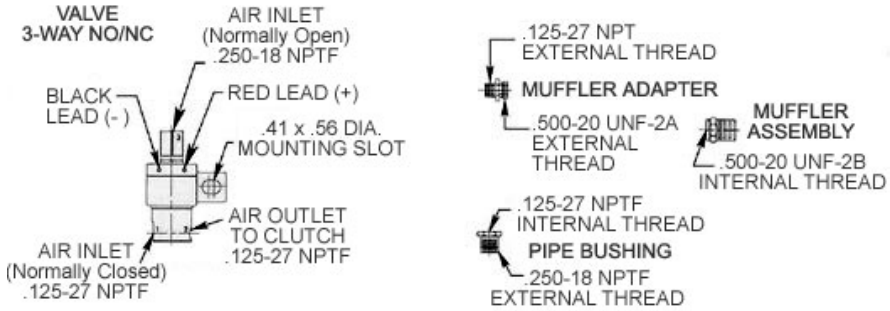

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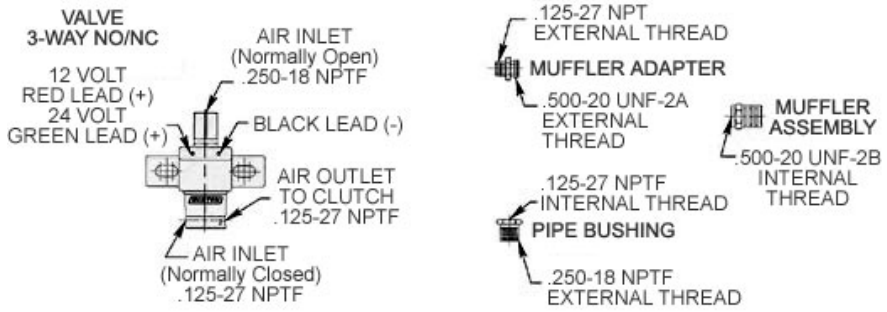
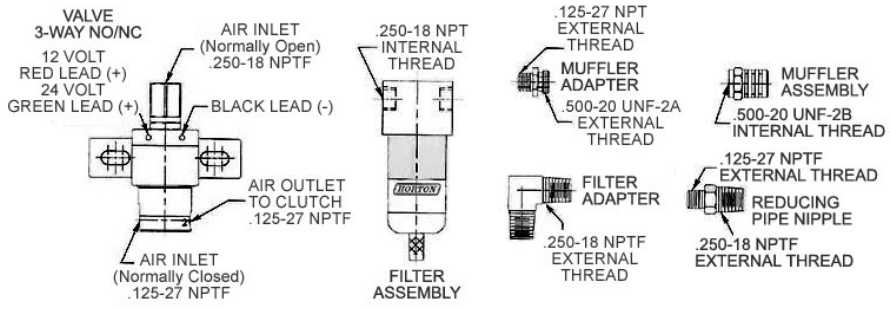
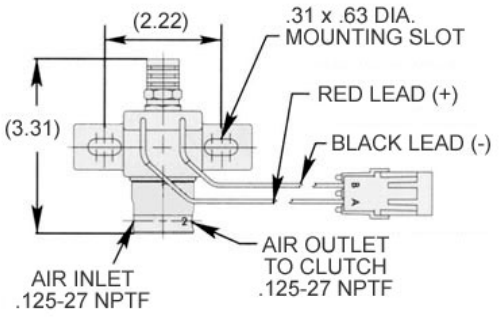


RF993293 and RF003294



Pneumatic Fan Clutch Controls
Solenoid Valve Illustrations

RF993284



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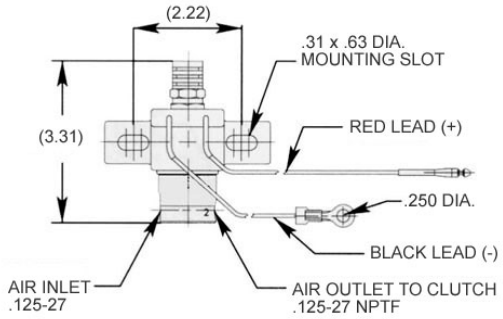

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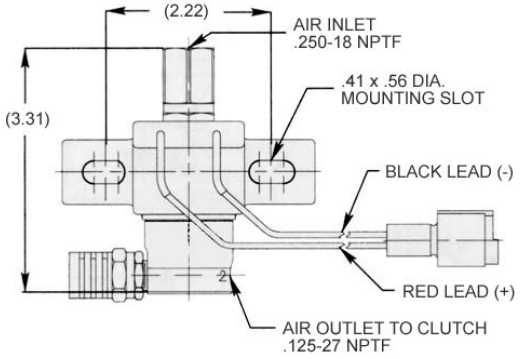

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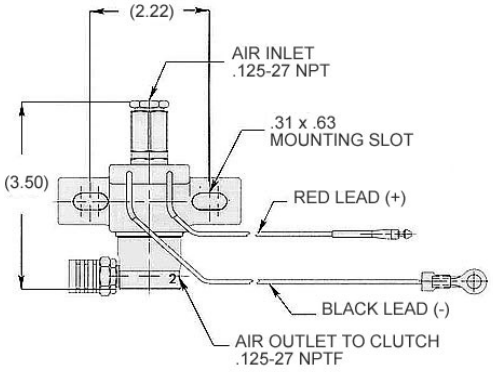

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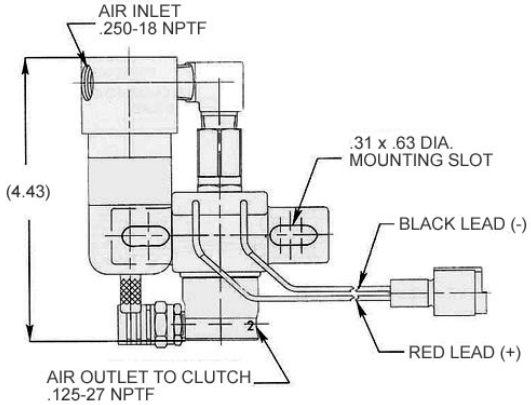

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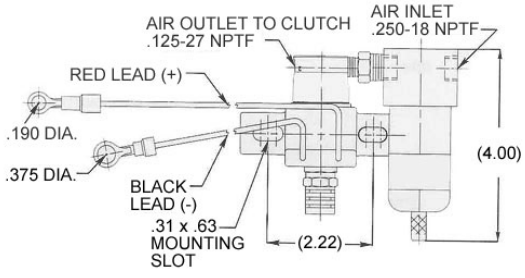

HORTON FAN CLUTCH TO REPAIR KIT QUICK REFERENCE

STANDARD PART #	ADVANTAGE PART #	MINOR SEAL KIT PART #	MAJOR KIT PART #	SUPER KIT PART #
RF590000X	RF790000X	RF994205	RF994314	RF994307
RF590001X	RF790001X	RF994205	RF994314	RF994307
RF590002X	RF790002X	RF994205	RF994314	RF994307
RF590003X	RF790003X	RF994205	RF994314	RF994307
RF590004X	RF790004X	RF994205	RF994314	RF994307
RF590005X	RF790005X	RF994205	RF994314	RF994307
RF590007X	RF790007X	RF994205	RF994314	RF994307
RF590008X	RF790008X	RF994205	RF994314	RF994307
RF590009X	RF790009X	RF994205	RF994314	RF994307
RF590010X	RF790010X	RF994205	RF994314	RF994307
RF590011X	RF790011X	RF994205	RF994314	RF994307
RF590012X	RF790012X	RF994205	RF994314	RF994307
RF590013X	RF790013X	RF994205	RF994314	RF994307
RF590014X	RF790014X	RF994205	RF994314	RF994307
RF590015X	RF790015X	RF994205	RF994314	RF994307
RF590016X	RF790016X	RF994205	RF994314	RF994307
RF590017X	RF790017X	RF994205	RF994314	RF994307
RF590018X	RF790018X	RF994205	RF994314	RF994307
RF591000X	RF791000X	RF994205	RF994315	RF994342
RF591001X	RF791001X	RF994205	RF994315	RF994342
RF591002X	RF791002X	RF994205	RF994315	RF994342
RF591003X	RF791003X	RF994205	RF994315	RF994342
RF591004X	RF791004X	RF994205	RF994315	RF994342
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RF591012X	RF791012X	RF994205	RF994315	RF994342
RF591013X	RF791013X	RF994205	RF994315	RF994342
RF591014X	RF791014X	RF994205	RF994315	RF994342
RF591015X	RF791015X	RF994205	RF994315	RF994342
RF591016X	RF791016X	RF994205	RF994315	RF994342
RF591017X	RF791017X	RF994205	RF994315	RF994342
RF591018X	RF791018X	RF994205	RF994315	RF994342
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RF591021X	RF791021X	RF994205	RF994315	RF994342
RF591022X	RF791022X	RF994205	RF994315	RF994342
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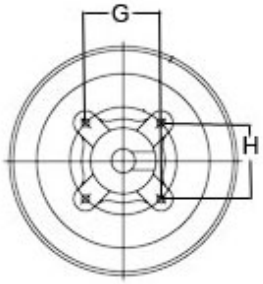
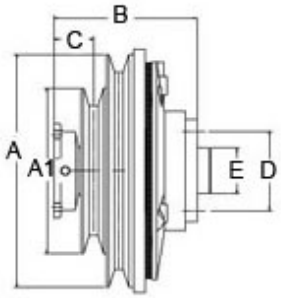
N/A	RF791036X	RF994205	RF994315	RF994342
N/A	RF791037X	RF994205	RF994315	RF994342
N/A	RF791038X	RF994205	RF994315	RF994342
N/A	RF791039X	RF994205	RF994315	RF994342
N/A	RF791040X	RF994205	RF994315	RF994342
N/A	RF791041X	RF994205	RF994315	RF994342

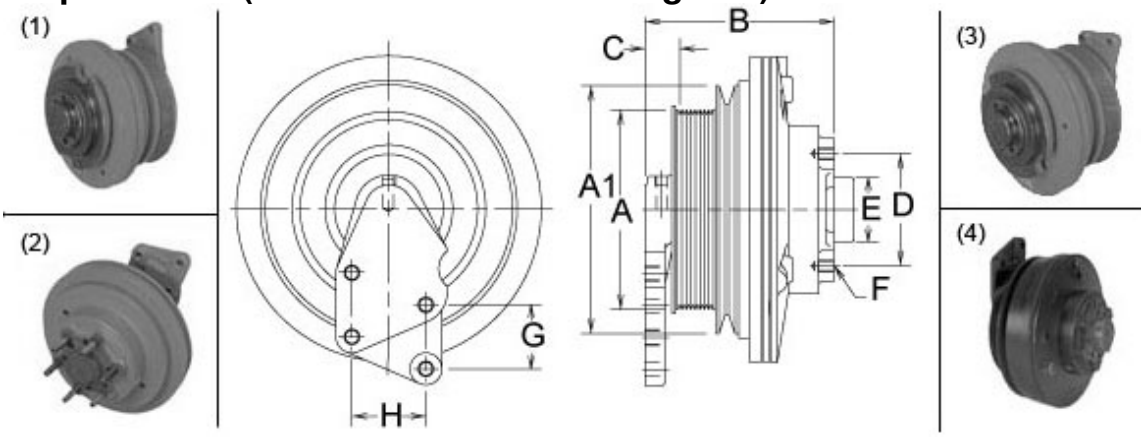
Caterpillar, Cummins, & Detroit in MCI Applications (HT/S Advantage ™)





SKU#	Product Description	A	A1	B	C	D	E	G	H	Drive Ratio	Approx. Weight	Core Group
RF791039X	2 Groove Reman. Caterpillar, Cummins, Detroit, Advantage Series (Model HT/S)	7.27"	8.77"	6.33"	1.75"	3.50"	2.00"	3.17"	3.17"	1:1	46 lbs.	FC10H1
RF791040X	2 Groove Reman. Caterpillar, Cummins, Detroit, Advantage Series (Model HT/S)	7.27"	9.25"	6.33"	1.75"	3.50"	2.00"	3.17"	3.17"	1:1	48 lbs.	FC10H1
RF791041X	2 Groove Reman. Caterpillar, Cummins, Detroit Diesel, Advantage Series (Model HT/S) in MCI Applications	6.95"	9.25"	6.33"	1.75"	3.50"	2.00"	3.17"	3.17"	1:1	48 lbs.	FC10H1

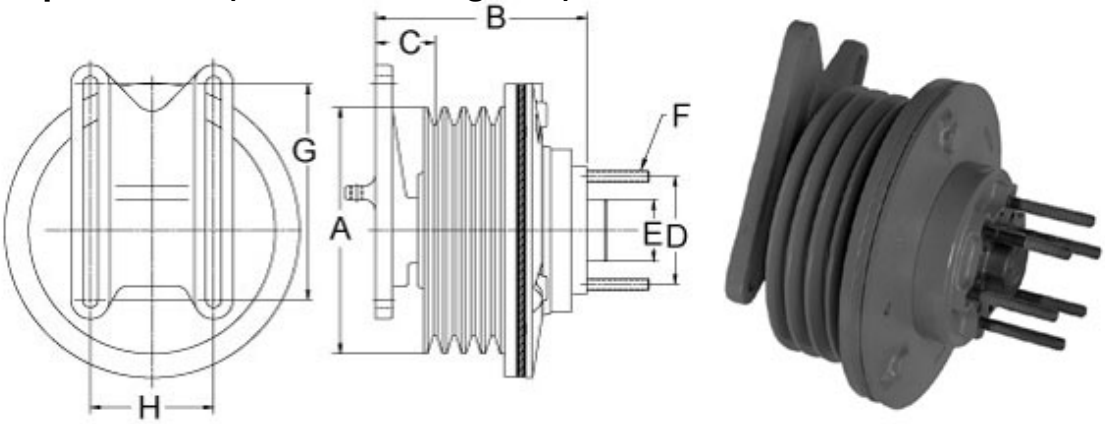
Caterpillar 3176 (Model S & HT/S Advantage ™)



8K Poly V, 1V Belt Groove

SKU#	Product Description	A	A1	B	C	D	E	F	G	H	Drive Ratio	Approx. Weight	Pic. #	Core Group
RF790014X	Reman. Caterpillar 3176 Advantage Series (Model S)	7.50"	7.75"	5.21"	1.08"	6.00"	5.00"	5/16–18 TAP	2.00"	2.32"	1:1	40 lbs.	1	FC00H1
RF790015X	Reman. Caterpillar 3176 Advantage Series (Model S)	6.25"	9.00"	7.07"	1.08"	3.50"	2.00"	1.25" 2.50" 2.75"	2.00"	2.32"	–	40 lbs.	2	FC00H1
RF791015X	Reman. Caterpillar 3176 Advantage Series (Model HT/S)	7.50"	7.75"	6.08"	1.08"	6.00"	5.00"	5/16–18 TAP	2.00"	2.32"	1.2:1	44 lbs.	3	FC10H1
RF791025X	Reman. Caterpillar 3176 Advantage Series (Model HT/S)	7.50"	7.75"	6.08"	1.08"	6.00"	5.00"	5/16–18 TAP	2.00"	2.32"	–	44 lbs.	3	FC10H1
RF791035X	Reman. Caterpillar 3176 Advantage Series (Model HT/S)	6.25"	9.00"	6.72"	1.08"	3.50"	2.00"	1.00"	2.00"	2.32"	1.12:1	45 lbs.	4	FC10H1

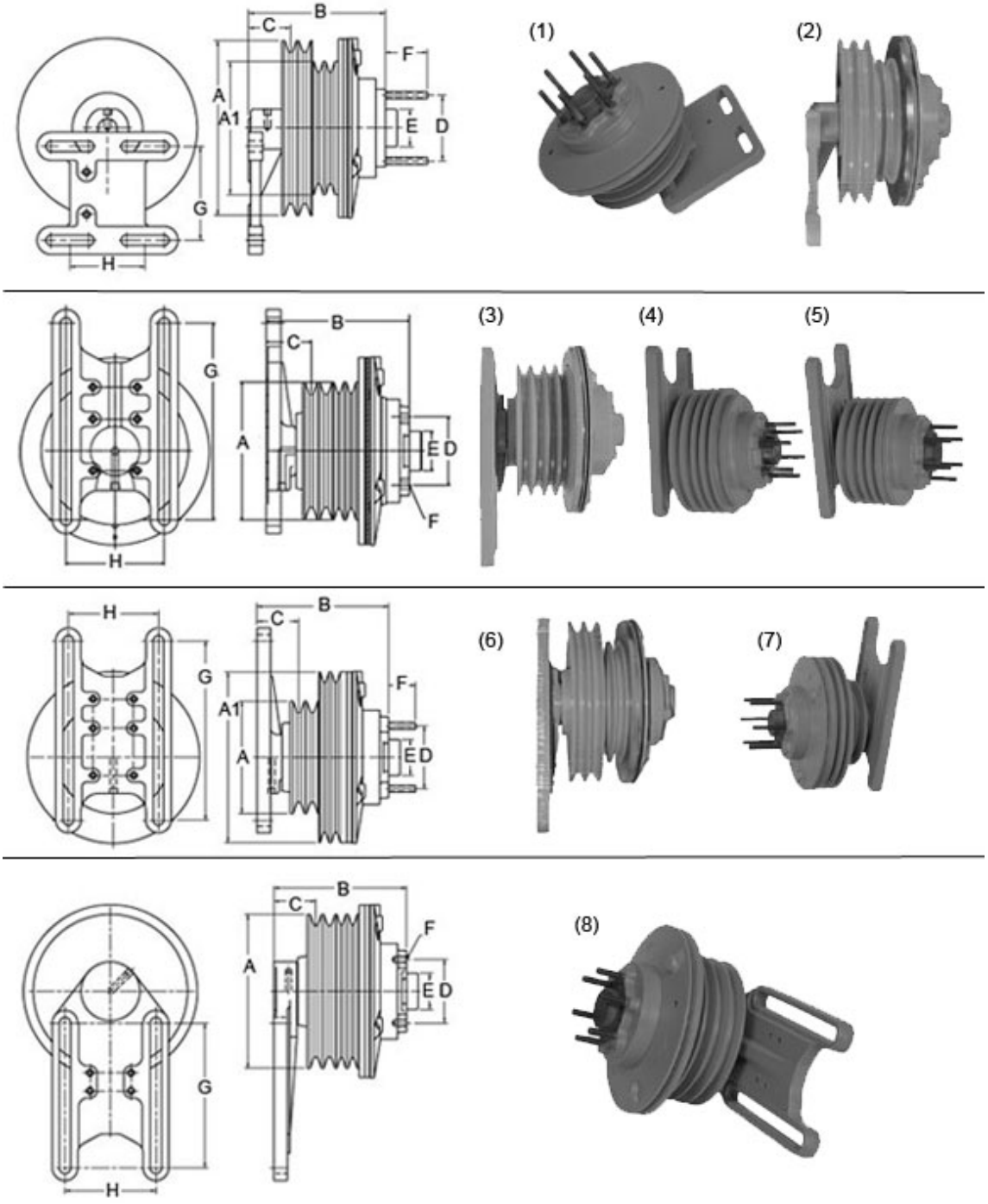
Caterpillar 3306 (HT/S Advantage ™)



SKU#	Product Description	A	B	C	D	E	F	G	H	Belt Groove	Drive Ratio	Approx. Weight	Core Group
RF791012X	Reman. Caterpillar 3306 Advantage Series (Model HT/S)	7.16"	6.86"	1.93"	3.50" 6.00"	1.99" 2.00" 4.99"	5/16–18 TAP 1.50" 2.50"	7.00"	4.00"	5	–	44 lbs.	FC10H1
RF791028X	Reman. Caterpillar 3306 Advantage Series (Model HT/S)	8.00"	6.86"	1.93"	3.50"	1.99"	2.00" 2.50"	7.00"	4.00"	4	0.8:1 1:1	44 lbs.	FC10H1

Caterpillar 3406 (Model S & HT/S Advantage ™)

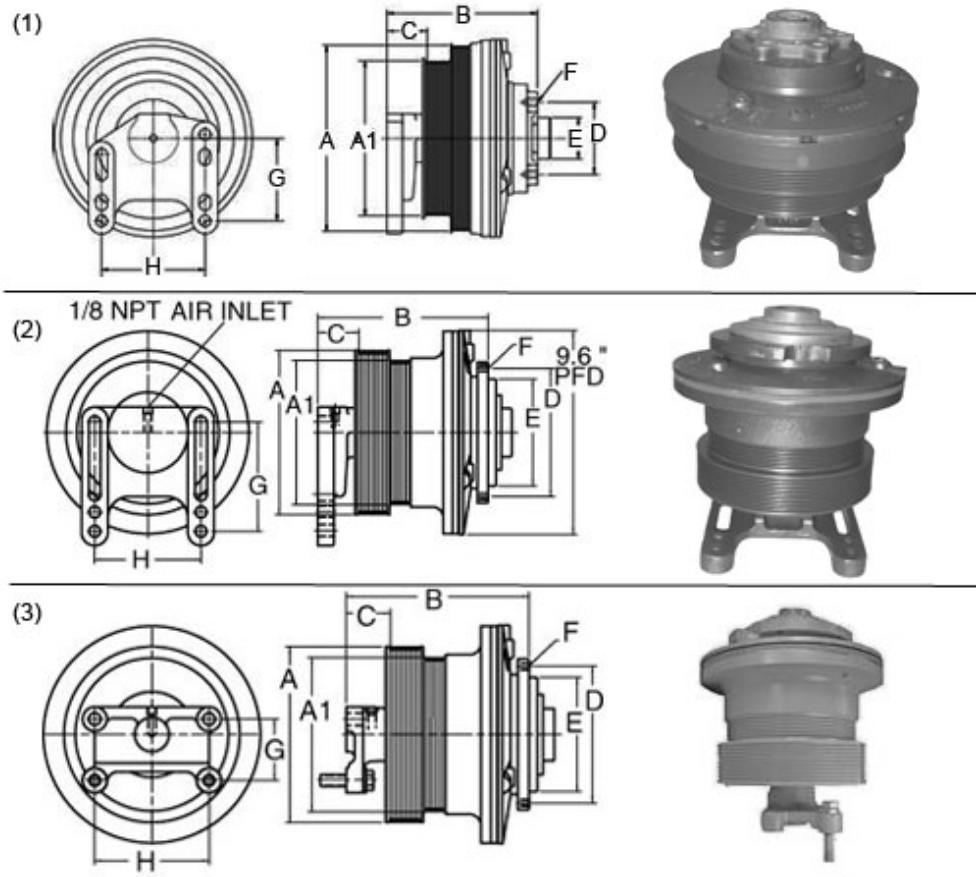
4 Belt Groove



SKU#	Product Description	A	A1	B	C	D	E	F	G	H	Drive Ratio	Approx. Weight	Pic. #	Core Group
RF790005X	4 Groove Reman. CAT 3406 Advantage Ser. (Model S)	8.50"	–	7.28"	2.31"	3.50"	1.99"	1.50" 2.00" 2.50" 3.25"	10.00"	5.00"	0.88:1	52 lbs.	4	FC00H1
RF790007X	4 Groove Reman. CAT 3406 Advantage Ser. (Model S)	7.50"	–	7.28"	2.31"	3.50"	1.99"	1.50" 2.50"	10.00"	5.00"	1:1	43 lbs.	5	FC00H1
RF791002X	4 Groove Reman. CAT 3406 Advantage Ser. (Model HT/S)	7.08"	–	7.28"	2.32"	3.50"	1.99"	2.00" 2.50"	5.00"	4.00"	1.07:1	44 lbs.	1	FC10H1
RF791003X	4 Groove Reman. CAT 3406 Advantage Ser. (Model HT/S)	9.30"	7.08"	7.28"	2.24"	3.50"	1.99"	2.50"	5.00"	4.00"	1.05:1	44 lbs.	2	FC10H1
RF791005X	4 Groove Reman. CAT 3406 Advantage Ser. (Model HT/S)	8.50"	–	7.29"	2.30"	3.50"	1.99"	–	8.00"	5.00"	0.88:1 1:1	44 lbs.	8	FC10H1
RF791007X	4 Groove Reman. CAT 3406 Advantage Ser. (Model HT/S)	6.25"	9.50"	7.28" 8.51"	2.31"	3.50"	1.99"	1.00" 1.25" 2.50"	10.00"	5.00"	1.2:1	55 lbs.	7	FC10H1
RF791008X	4 Groove Reman. CAT 3406 Advantage Ser. (Model HT/S)	7.50"	9.50"	7.28"	2.31"	3.50"	1.99"	2.50"	10.00"	5.00"	1:1	50 lbs.	7	FC10H1
RF791013X	4 Groove Reman. CAT 3406 Advantage Ser. (Model HT/S)	6.25"	9.50"	7.28"	2.31"	6.00"	5.00"	5/16–18 TAP	10.00"	5.00"	–	50 lbs.	7	FC10H1
RF791014X	4 Groove Reman. CAT 3406 Advantage Ser. (Model HT/S)	7.00"	–	7.29"	2.30"	3.50"	1.99" 2.00"	1.50"	7.00"	5.00"	–	51 lbs.	8	FC10H1
RF791017X	4 Groove Reman. CAT 3406 Advantage Ser. (Model HT/S)	9.30"	7.08"	7.30"	2.31" 2.32"	3.50"	1.99" 2.00"	2.50"	10.00"	5.00"	1.13:1	50 lbs.	6	FC10H1
RF791020X	4 Groove Reman. CAT 3406 Advantage Ser. (Model HT/S)	7.00"	–	7.29"	2.30"	3.50"	1.99"	–	8.00"	5.00"	1.2:1	55 lbs.	8	FC10H1
RF791027X	4 Groove Reman. CAT 3406 Advantage Ser. (Model HT/S)	7.50"	–	7.28"	2.31"	3.50"	1.99"	1.50" 2.50"	10.00"	5.00"	1.13:1	55 lbs.	3	FC10H1

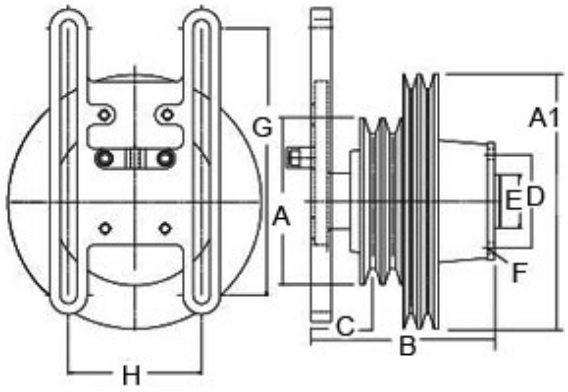
Caterpillar 3406 (Model S & HT/S Advantage ™)

6, 8, 10K Multi–Groove



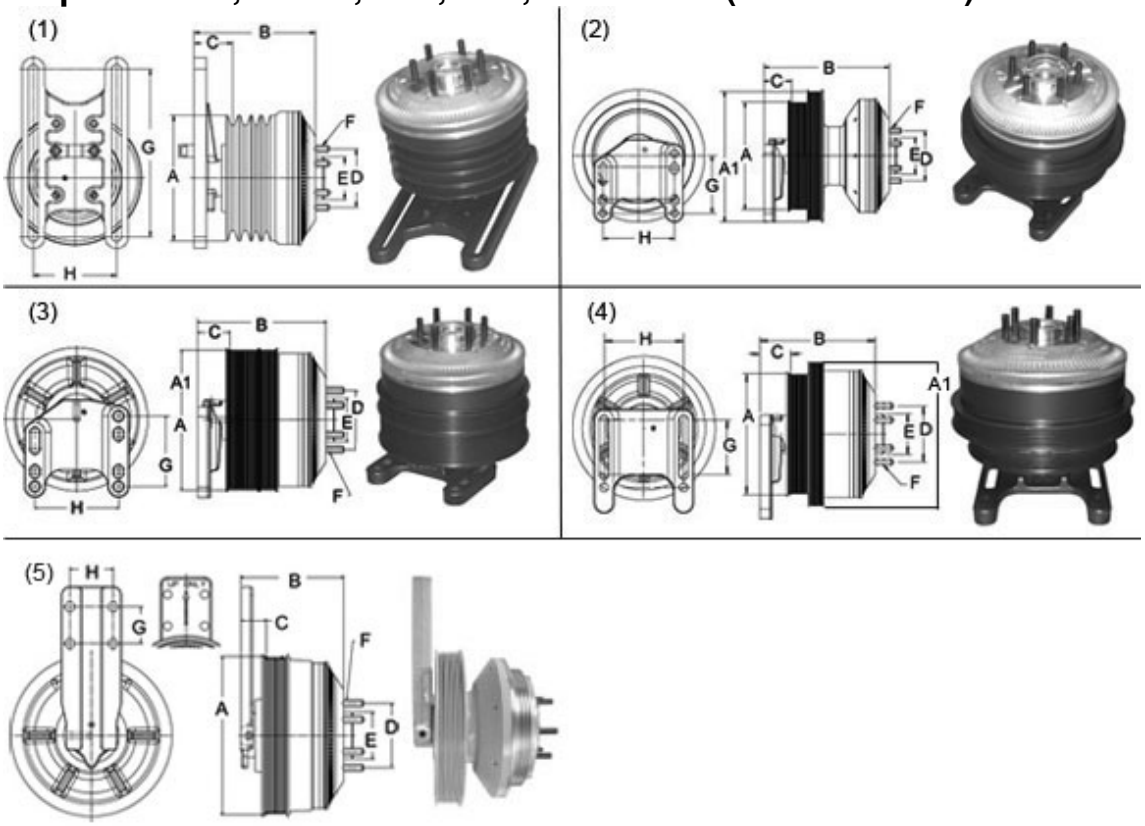
SKU#	Product Description	A	A1	B	C	D	E	F	G	H	Drive Ratio	Approx. Weight	Pic. #	Core Group
RF791038X	10K, 6K Multi–Groove Reman. Caterpillar 3406 Advantage Series (Model HT/S)	7.70"	6.77"	8.00"	1.93"	6.00"	4.99"	5/16"–18 TAP	2.69"	5.00"	1.2:1	44 lbs.	3	FC10H1
RF791069X	8K, 6K Multi–Groove Reman. Caterpillar 3406 Advantage Series (Model HT/S)	7.50"	9.00"	7.28"	1.94"	3.50"	1.99"	–	4.18"	5.00"	–	49 lbs.	1	FC10H1
RF791076X	10K, 6K Multi–Groove Reman. Caterpillar 3406 Advantage Series (Model HT/S)	7.70"	6.77"	8.00"	1.93"	6.00"	4.99"	–	4.22"	5.00"	–	62 lbs.	2	FC10H1

Caterpillar 3406, 3406B (Direct Drive)



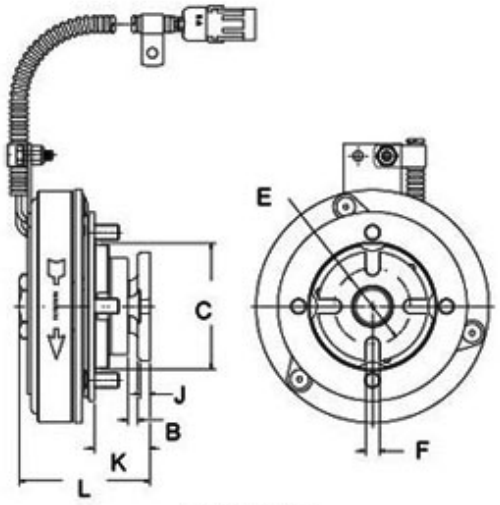
SKU#	Product Description	A	A1	B	C	D	E	F	G	H	Drive Ratio
RF991918	New 4 Groove CAT 3406, 3406B (Direct Drive)	7.50"	–	6.25"	2.32"	3.50"	1.99"	–	10.00"	5.00"	1.13:1

Caterpillar 3406, 3406E, C11, C13, C15 & C16 (DriveMaster®)

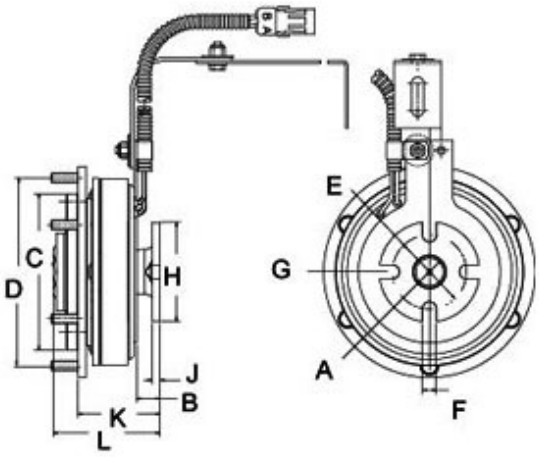


SKU#	Product Description	A	A1	B	C	D	E	F	G	H	Drive Ratio	Wt.	Pic. #	Core Group
RF799103X	Reman. 4 Groove CAT 3406, 3406E, C15 & C16 (DriveMaster)	7.50"	–	7.28"	2.31"	3.50"	2.56"	1.07"	10.00"	5.00"	1.2:1	49 lbs.	1	FC99H1
RF799334X	Reman. 8K, 6K Multi–Groove CAT C15 & C16 ACERT (DriveMaster)	7.54"	9.04"	7.09"	1.94"	3.50"	2.56"	1.07"	4.00"	5.00"	1.2:1	53 lbs.	2	FC99H1
RF799339X	Reman. 8PK Multi–Groove CAT C11 & C13 (DriveMaster)	8.25"	–	5.59"	1.38"	3.50"	2.56"	1.07"	2.00"	2.36"	–	–	5	FC99H1
RF799437X	Reman. 8PK, 6PK Multi–Groove CAT C15 & C16 (DriveMaster)	7.24"	8.68"	7.28"	1.94"	3.50"	2.56"	1.07"	3.96"	5.00"	1.25:1	51 lbs.	4	FC99H1
RF799809X	Reman. 12K, 6K Multi–Groove CAT C15 (DriveMaster)	8.31"	8.31"	7.68"	1.94"	3.50"	2.56"	1.07"	4.19"	5.00"	1.3:1	53 lbs.	3	FC99H1
RF999809	New 12K, 6K Multi–Groove CAT C15 (DriveMaster PolarExtreme®)	8.31"	8.31"	7.68"	1.94"	3.50"	2.56"	1.07"	4.19"	5.00"	1.3:1	53 lbs.	3	–

Cummins (EC450®)



RF996048

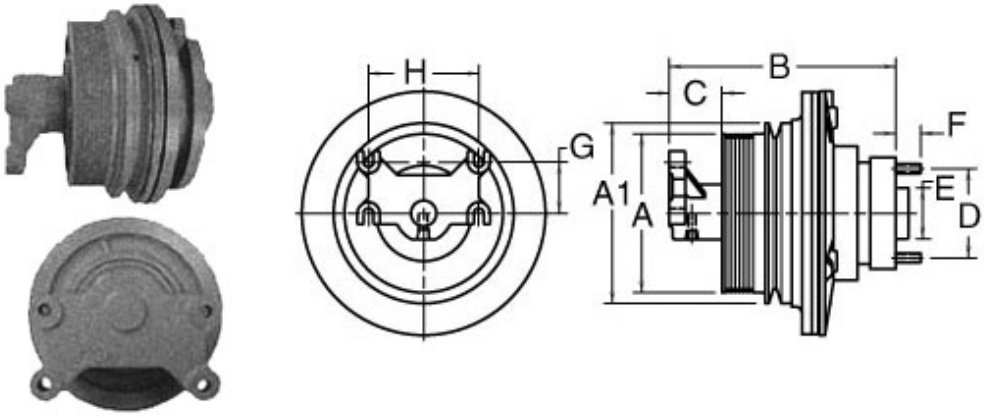


RF996019

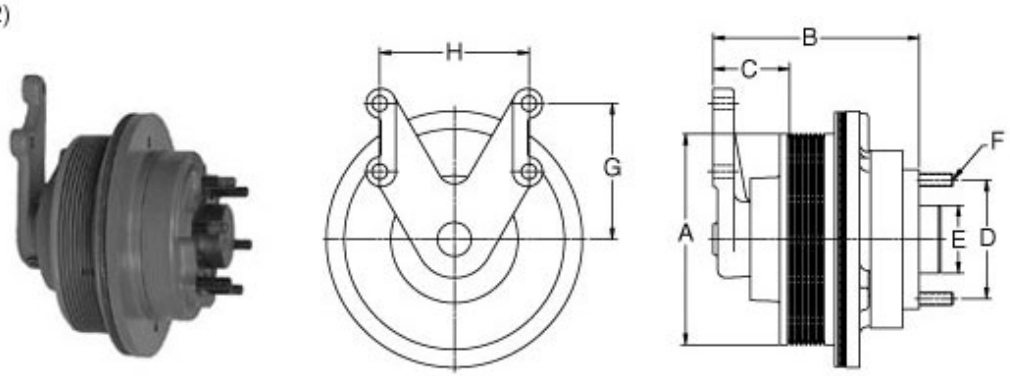
SKU#	Product Description	A	B	C	D	# of Bolts	E	F	# of Slots/Holes	H	J	K	L
RF996019	New 12 Volts Cummins "B" & "C" Series, ISB, ISC (EC450®) Freightliner	1.00"	0.74"	5.00"	6.00"	6	2.36"	0.43"	4	3.20"	0.25"	2.60"	3.41"
RF996048	New 12 Volts Cummins "C" Series (EC450®) Ford	–	0.37"	5.00"	–	6	3.20"	0.44"	4	–	0.25"	1.32"	3.41"

Cummins "C" Series (Model S)

(1)

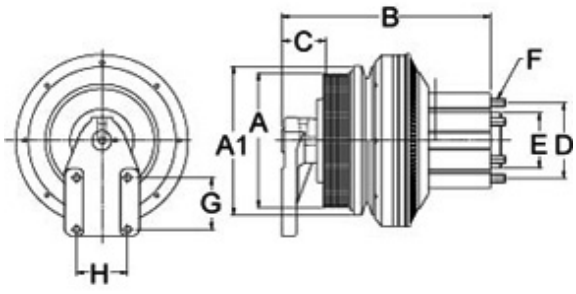


(2)



SKU#	Product Description	A	A1	B	C	D	E	F	G	H	Drive Ratio	Approx. Weight	Pic. #	Core Group
RF790012X	8K POLY V Reman. Cummins "C" Advantage Series (Model S)	6.22"	–	6.08"	2.25"	3.50"	1.99"	1.00"	4.01"	4.41"	–	40 lbs.	2	FC00H1
RF790013X	8K POLY V, 1V Belt Groove Reman. Cummins "C" Advantage Series (Model S)	6.22"	7.07"	6.38"	2.25"	6.00"	4.99"	5/16–18 TAP	2.01"	4.41"	1.1:1	50 lbs.	1	FC00H1

Cummins ISB (DriveMaster®)

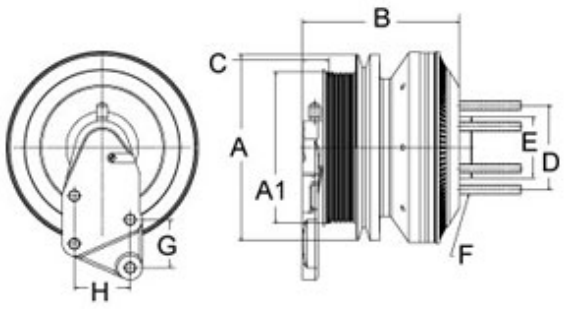


Notes:

1) Dimension B = 6.77" without 2.88" fan spacer (included)

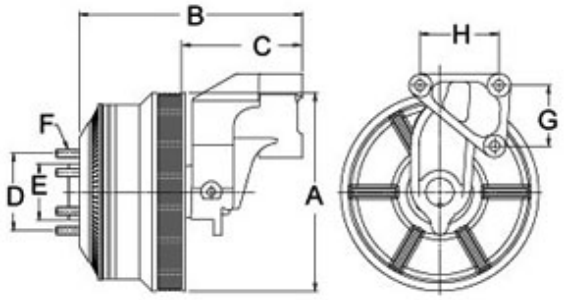
SKU#	Product Description	A	A1	B	C	D	E	F	G	H	Drive Ratio	Approx. Weight
RF999110	New 8K, 1V Multi–Groove Cummins ISB (DriveMaster®)	6.21"	6.88"	9.64"	2.04"	3.50"	2.56"	3.57"	2.40"	2.36"	1.2:1	–

Cummins ISL (DriveMaster®)



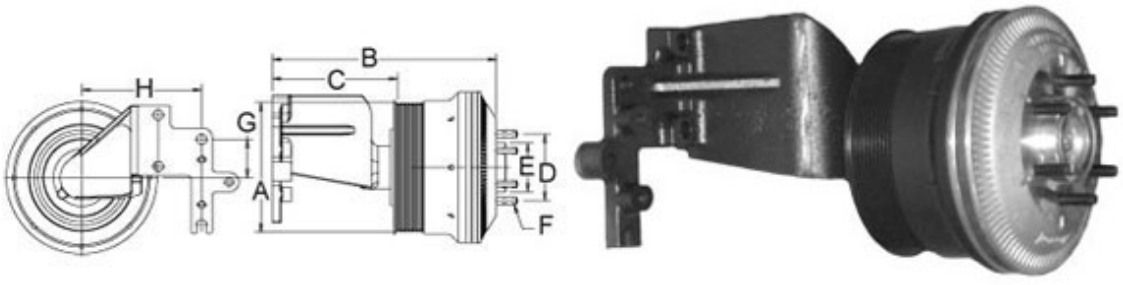
SKU#	Product Description	A	A1	B	C	D	E	F	G	H	Drive Ratio	Approx. Weight
RF999416	New 8K, 1V Multi–Groove Cummins ISL (DriveMaster®)	6.29"	7.75"	6.54"	1.08"	3.50"	2.56"	2.57"	2.00"	2.32"	1.25:1	–

Cummins ISM (DriveMaster®)



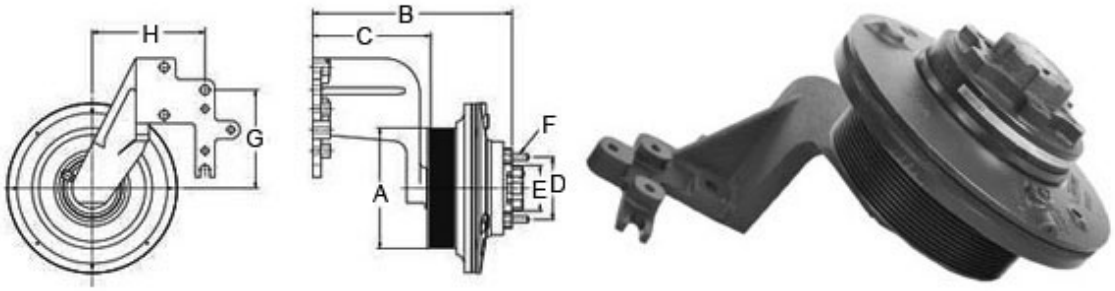
SKU#	Product Description	A	B	C	D	E	F	G	H	Drive Ratio	Approx. Weight	Core Group
RF799011X	8K Multi–Groove Reman. Cummins ISM (DriveMaster)	7.50"	10.12"	5.55"	3.50"	2.56"	1.00"	2.76"	3.58"	1.2:1	–	FC99H1

Cummins ISX (DriveMaster®)



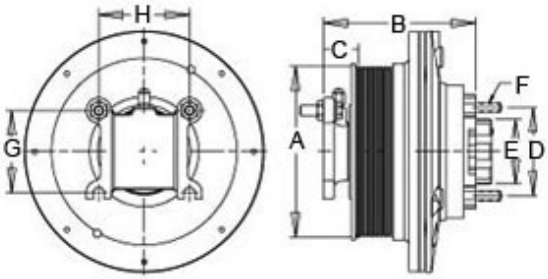
SKU#	Product Description	A	B	C	D	E	F	G	H	Drive Ratio	Approx. Weight	Core Group
RF799168X	10K Multi–Groove Reman. Cummins ISX (DriveMaster)	6.82"	11.89"	6.65"	3.50"	2.56"	1.07"	2.02"	6.36"	1.2:1	50 lbs.	FC99H1
RF999801	New 12K Multi–Groove Cummins ISX (DriveMaster PolarExtreme®)	7.35"	11.57"	6.66"	3.50"	2.56"	1.07"	2.02"	6.36"	1.3:1	50 lbs.	–

Cummins ISX (HT/S Advantage ™)



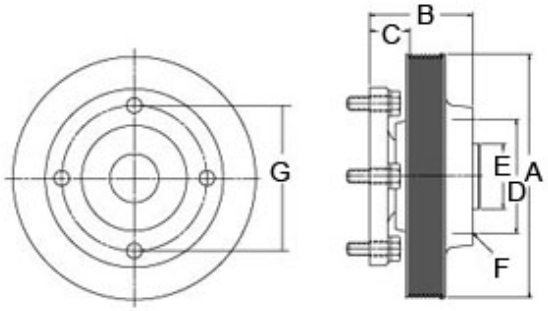
SKU#	Product Description	A	B	C	D	E	F	G	H	Drive Ratio	Approx. Weight	Core Group
RF791093X	10K Multi–Groove Reman. Cummins ISX (Model HT/S)	6.77"	11.22"	6.65"	3.50"	2.56"	1.00"	5.53"	6.36"	–	52 lbs.	FC10H1

Cummins ISX & N14 (HT/S Advantage ™)



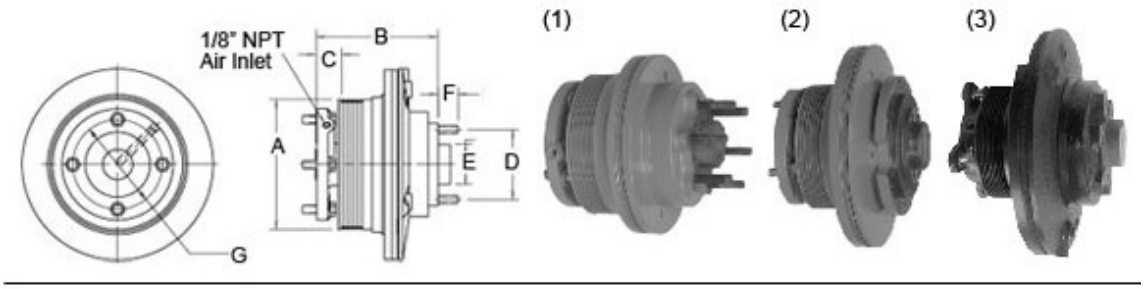
SKU#	Product Description	A	B	C	D	E	F	G	H	Drive Ratio	Approx. Weight	Core Group
RF791073X	10K Multi–Groove Reman. Cummins ISX & N14 (Model HT/S)	6.77"	6.09"	1.40"	3.50"	2.56"	1.00"	3.27"	3.63"	–	37.5 lbs.	FC10H1

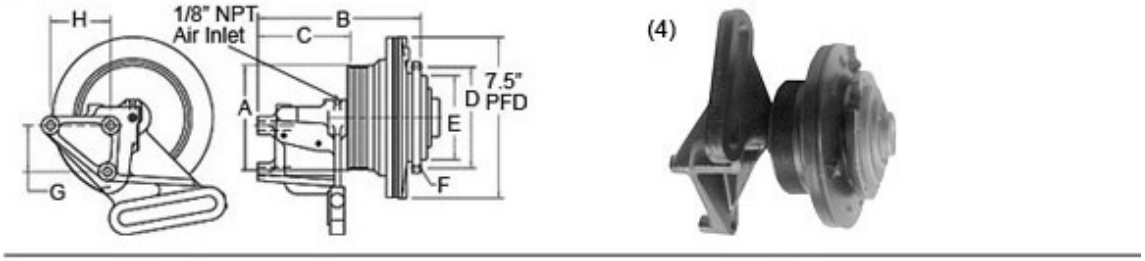
Cummins L10 Series (Direct Drive)

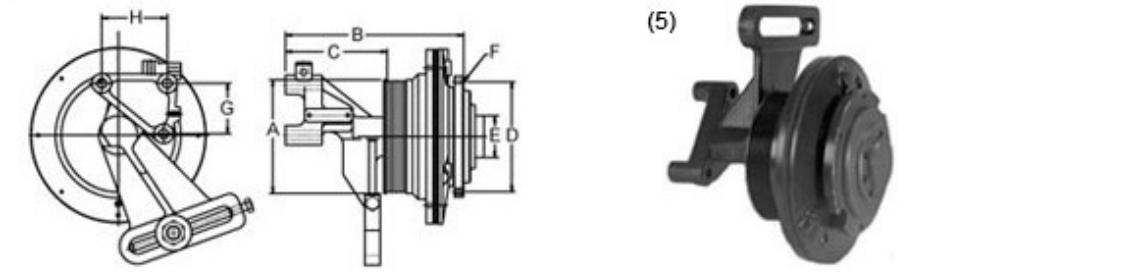


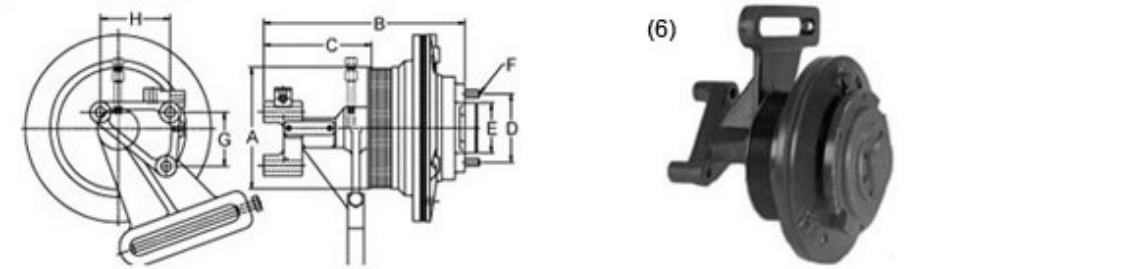
SKU#	Product Description	A	B	C	D	E	F	G	Drive Ratio
RF991900	New 8K Multi–Groove Cummins L10 Series (Direct Drive)	5.98"	3.18"	1.25"	3.50"	1.99"	–	4.49"	1:1

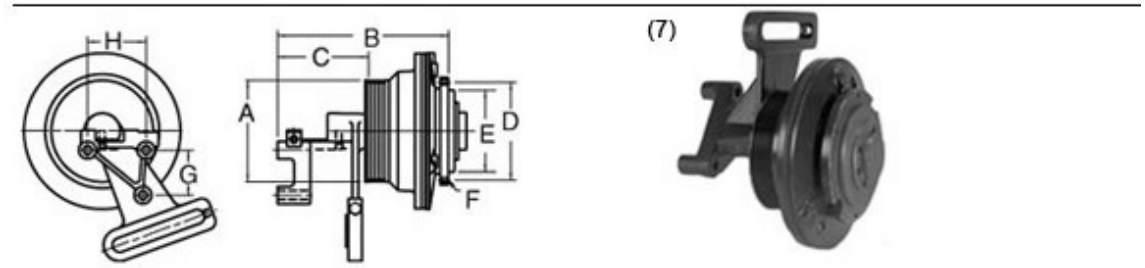
Cummins L10 Series (Model S & HT/S Advantage ™)





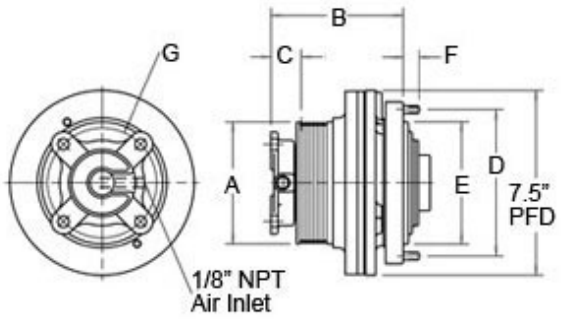






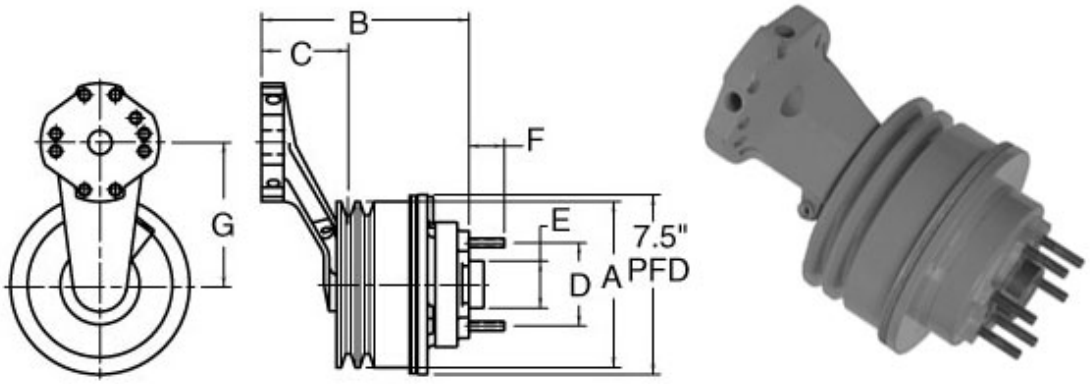
SKU#	Product Description	A	B	C	D	E	F	G	H	Drive Ratio	Wt.	Pic. #	Core Group
RF790010X	8K POLY V Reman. CUM L10 Advantage Ser. (Model S)	5.98"	6.04"	1.25"	3.50"	1.99"	1.00" 2.50"	4.49"	–	1:1	40 lbs.	1	FC00H1
RF790016X	8K POLY V Reman. CUM L10 Advantage Ser. (Model S)	4.98"	5.43"	1.25"	6.00"	4.99"	5/16–18 TAP	4.49"	–	1.2:1	40 lbs.	2	FC00H1
RF790017X	8K POLY V Reman. CUM L10 Advantage Ser. (Model S)	4.98"	6.04"	1.25"	3.50"	1.99"	0.75" 1.50"	4.49"	–	1.2:1	40 lbs.	1	FC00H1
RF790023X	8K POLY V Reman. CUM L10 Advantage Ser. (Model S)	6.59"	6.04"	1.25"	3.50"	1.99"	1.25" 1.50"	4.49"	–	0.91:1 0.92:1	40 lbs.	1	FC00H1
RF791001X	8K POLY V Reman. CUM L10 Advantage Ser. (Model HT/S)	6.51"	6.04" 6.42"	1.25"	3.50"	1.99"	1.00" 1.50"	4.49"	–	1.15:1 1.35:1	44 lbs.	1	FC10H1
RF791018X	8K POLY V Reman. CUM L10 Advantage Ser. (Model HT/S)	6.22"	5.42"	1.25"	6.00"	4.99"	5/16–18 TAP	4.49"	–	1.2:1	43 lbs.	1	FC10H1
RF791021X	8K POLY V Reman. CUM L10 Advantage Ser. (Model HT/S)	5.98"	5.42" 5.68"	1.25"	6.00"	4.99"	5/16–18 TAP	4.49"	–	1:1 1.12:1	44 lbs.	2	FC10H1
RF791022X	8K POLY V Reman. CUM L10 Advantage Ser. (Model HT/S)	4.98"	5.42" 5.68"	1.25"	6.00"	4.99"	5/16–18 TAP	4.49"	–	1:1 1.2:1	44 lbs.	2	FC10H1
RF791029X	8K POLY V Reman. CUM L10 Advantage Ser. (Model HT/S)	6.22"	9.73"	5.55"	6.00"	4.99"	5/16–18 TAP	2.76"	3.58"	–	44 lbs.	5	FC10H1
RF791030X	8K POLY V Reman. CUM L10 Advantage Ser. (Model HT/S)	6.22"	9.73"	5.55"	6.00"	4.99"	5/16–18 TAP	2.76"	3.58"	1.2:1	54 lbs.	6	FC10H1
RF791032X	8K POLY V Reman. CUM L10 Advantage Ser. (Model HT/S)	6.22"	10.40"	5.55"	6.00"	4.99"	5/16–18 TAP	2.76"	3.58"	1.2:1	44 lbs.	7	FC10H1
RF791034X	8K POLY V Reman. CUM L10 Advantage Ser. (Model HT/S)	6.22"	9.73"	5.55"	6.00"	4.99"	5/16–18 TAP	2.76"	3.58"	1.2:1	44 lbs.	4	FC10H1
RF791036X	8K POLY V Reman. CUM L10 Advantage Ser. (Model HT/S)	4.98"	6.04"	1.25"	3.50"	1.99"	1.50" 2.00"	4.49"	–	1.2:1	44 lbs.	3	FC10H1

Cummins L10 & N14 (Model S)



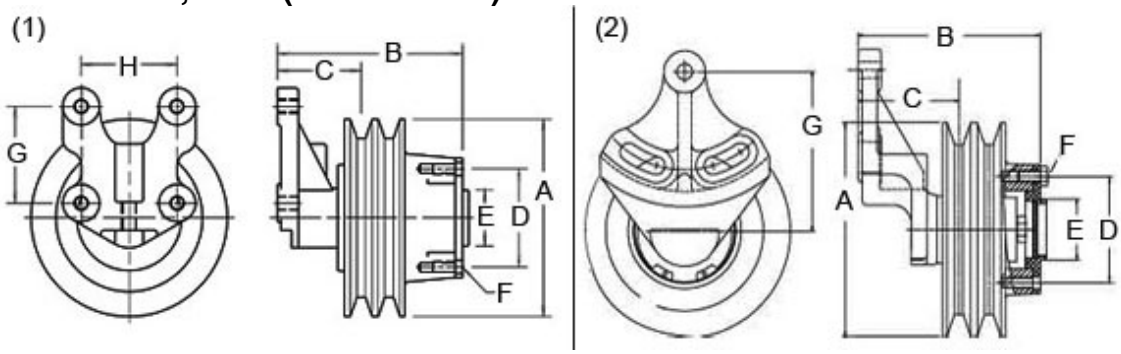
SKU#	Product Description	A	B	C	D	E	F	G	Drive Ratio	Approx. Weight	Core Group
RF790021X	8K Multi–Groove Reman. Cummins L10 & N14 (Model S)	4.98"	5.43"	1.25"	6.00"	4.99"	–	4.49"	–	33.5 lbs.	FC00H1

Cummins Ford NTC Series (Model S)



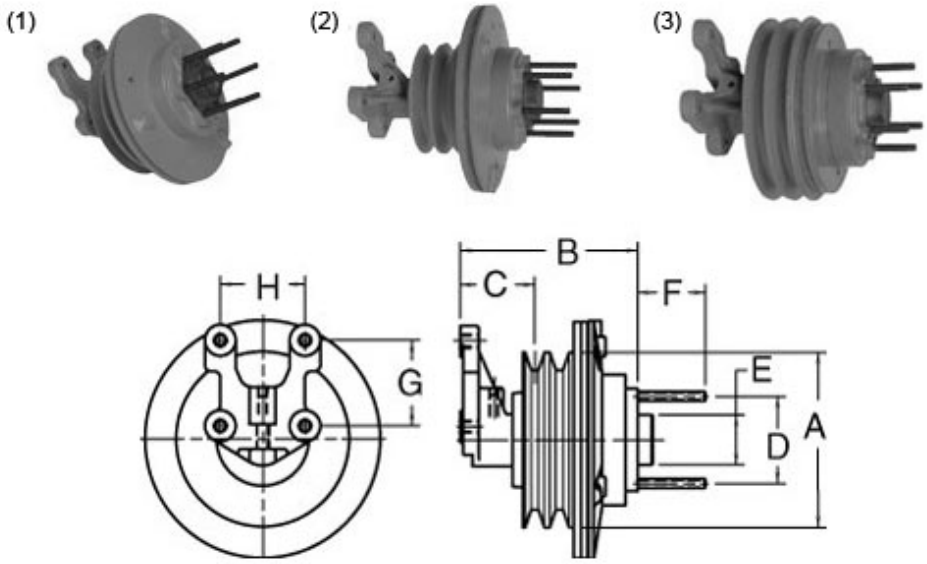
SKU#	Product Description	A	B	C	D	E	F	G	Belt Groove	Drive Ratio	Approx. Weight	Core Group
RF790008X	Reman. Cummins Ford NTC Advantage Series (Model S)	7.00"	8.74"	3.66"	3.50"	1.99"	1.50"	6.10"	2	1:1	40 lbs.	FC00H1

Cummins NT, NTC (Direct Drive)



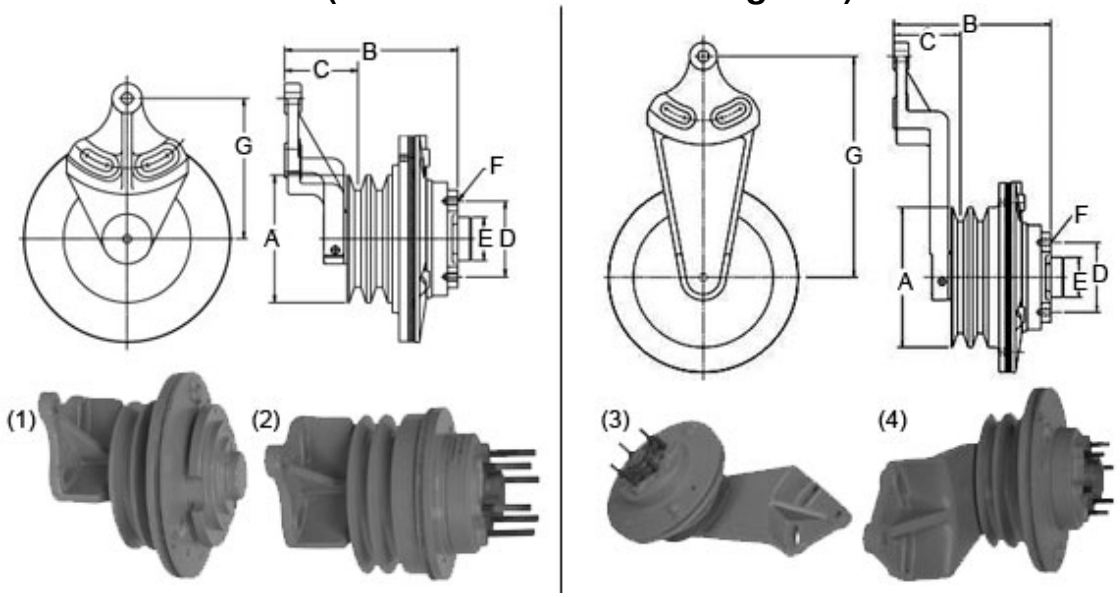
SKU#	Product Description	A	B	C	D	E	F	G	H	Drive Ratio	Picture Number
RF991902	New 2 Groove Cummins NT, NTC (Direct Drive)	7.03"	6.63"	3.00"	3.50"	1.99"	–	3.44"	3.44"	1.1:1	1
RF991903	New 2 Groove Cummins NT, NTC Big Cam IV (Direct Drive)	7.03"	6.38"	3.00"	3.50"	2.56"	–	3.44"	3.44"	1:1	1
RF991933	New 2 Groove Cummins NTC (Direct Drive)	7.03"	6.05"	3.35"	3.50"	1.99"	–	5.25"	–	–	2

Cummins NTC, NT88, 444 Series (Model S & HT/S Advantage ™)



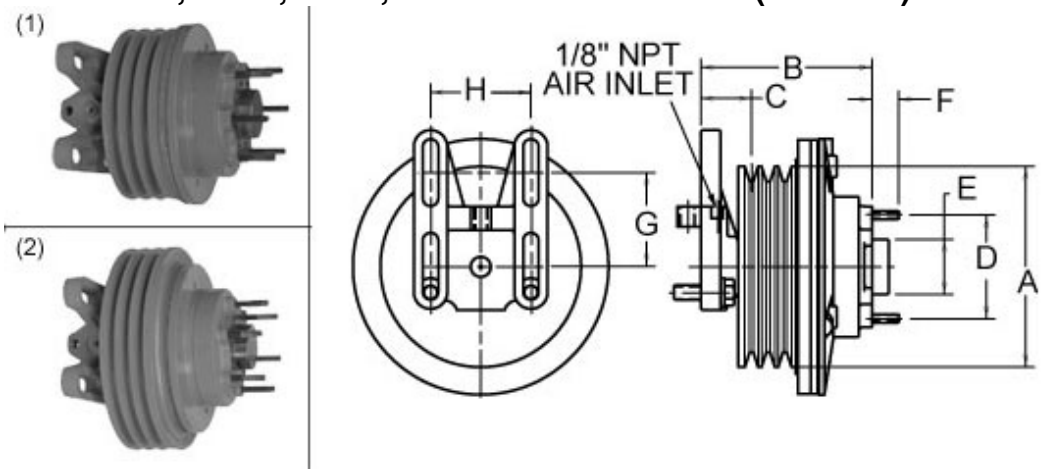
SKU#	Product Description	A	B	C	D	E	F	G	H	Belt Groove	Drive Ratio	Approx. Weight	Pic. #	Core Group
RF790000X	Reman. Cummins NTC, NT88, 444 Advantage Series (Model S)	7.03"	7.19"	3.03"	3.50"	1.99"	1.50" 2.50" 2.75" 3.25"	3.44"	3.44"	2	1:1	35 lbs.	3	FC00H1
RF790002X	Reman. Cummins NTC, NT88, 444 Advantage Series (Model S)	8.19"	7.19"	3.03"	3.50"	1.99" 2.00"	1.50" 2.50"	3.44"	3.44"	2	0.86:1	40 lbs.	3	FC00H1
RF791000X	Reman. Cummins NTC, NT88, 444 Advantage Series (Model HT/S)	7.03"	7.19"	3.03"	3.50"	1.99"	1.50" 2.75"	3.44"	3.44"	2	1:1 1.25:1	42 lbs.	1	FC10H1
RF791016X	Reman. Cummins NTC, NT88, 444 Advantage Series (Model HT/S)	5.75"	8.38" 9.00"	3.06"	3.50"	1.99"	1.50"	3.44"	3.44"	2	1.2:1	44 lbs.	2	FC10H1

Cummins N14 Series (Model S & HT/S Advantage ™)



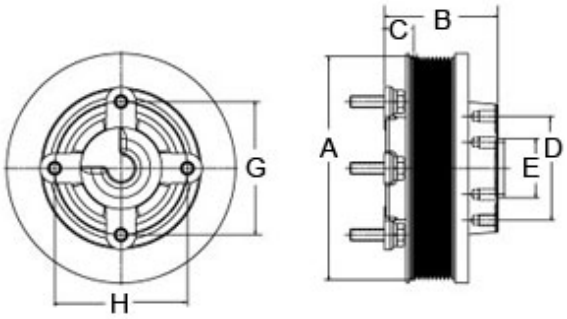
SKU#	Product Description	A	B	C	D	E	F	G	Drive Ratio	Approx. Weight	Pic. #	Core Group
RF790001X	2 Belt Groove Reman. Cummins N14 Advantage Series (Model S)	7.04"	8.25"	3.31"	3.50"	1.99"	2.00" 2.50"	5.25"	1:1	40 lbs.	2	FC00H1
RF791004X	2 Groove Reman. Cummins N14 Advantage Series (Model HT/S)	6.38"	7.90"	3.36"	3.50"	1.99"	1.00" 1.50"	11.05"	1.1:1	44 lbs.	3	FC10H1
RF791006X	2 Groove Reman. Cummins N14 Advantage Series (Model HT/S)	7.03"	7.90"	3.36"	3.50"	1.99"	1.00"	11.05"	1:1	52 lbs.	4	FC10H1
RF791009X	2 Groove Reman. Cummins N14 Advantage Series (Model HT/S)	5.88"	8.00"	3.36"	3.50"	1.99"	1.00" 1.50"	6.50"	–	44 lbs.	1	FC10H1
RF791010X	2 Groove Reman. Cummins N14 Advantage Series (Model HT/S)	7.03"	6.86"	3.35"	6.00"	4.99"	5/16"–18 TAP	5.25"	1:1	45 lbs.	1	FC10H1
RF791019X	2 Groove Reman. Cummins N14 Advantage Series (Model HT/S)	7.03"	7.27"	3.36"	6.00"	4.99"	5/16"–18 TAP	7.72"	1.2:1	47 lbs.	1	FC10H1
RF791026X	2 Belt Groove Reman. Cummins N14 Advantage Series (Model HT/S)	7.03"	7.89"	3.35"	3.50"	1.99"	1.25"	5.25"	–	47 lbs.	1	FC10H1

Detroit 6V92, 8V92, 8V71, 6V71 & 12V71 Series (Model S)



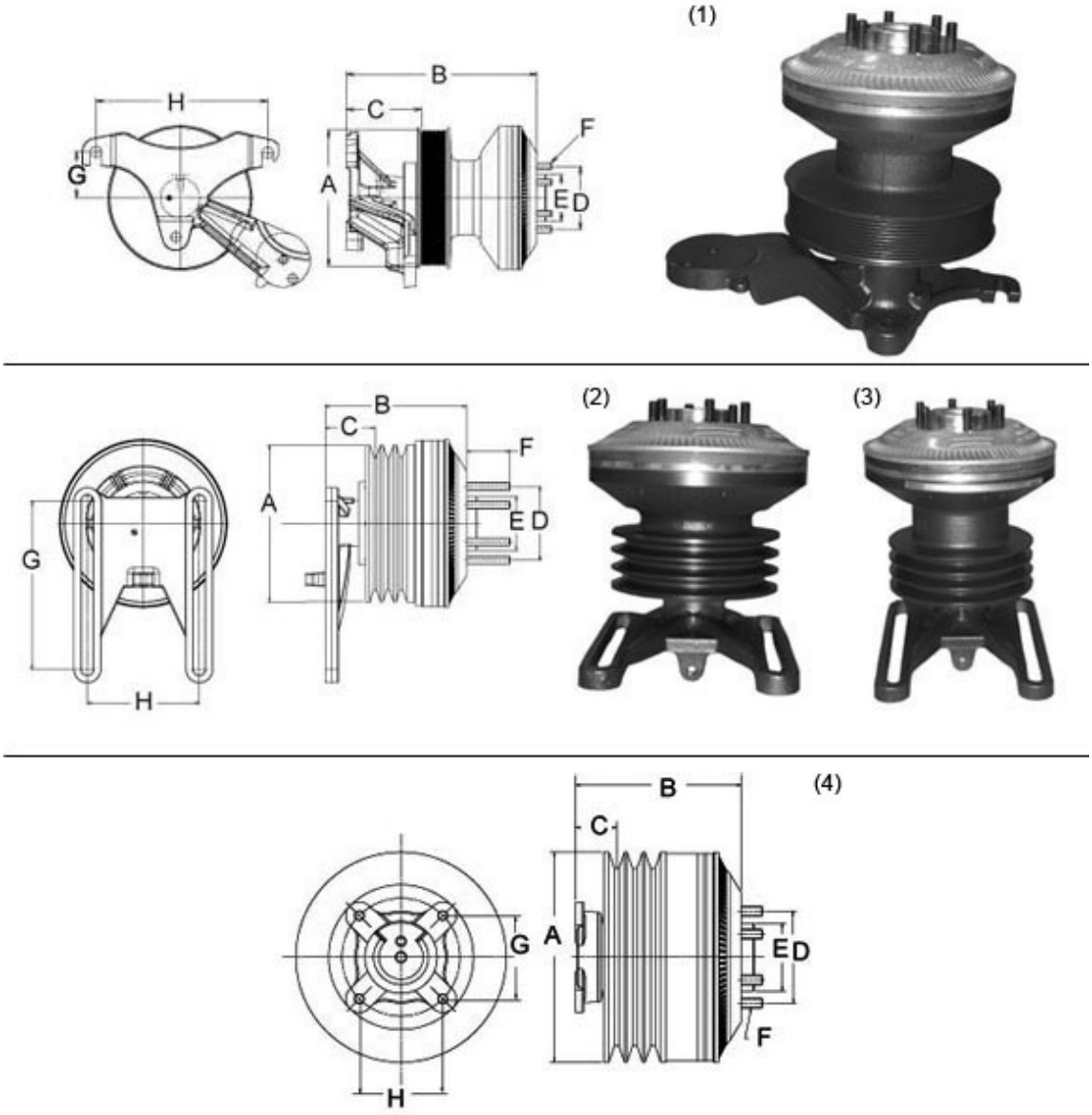
SKU#	Product Description	A	B	C	D	E	F	G	H	Belt Groove	Drive Ratio	Approx. Weight	Pic. #	Core Group
RF790003X	Reman. Detroit 6V92, 8V92, 8V71, 6V71, 12V71 Advantage Series (Model S)	7.25"	6.39"	1.89"	3.50" 3.88"	1.99" 2.05"	0.75" 1.00" 1.25" 1.50" 2.75"	3.47"	3.75"	3	1:1	40 lbs.	1	FC00H1
RF790004X	Reman. Detroit 6V92, 8V92, 8V71, 6V71, 12V71 Advantage Series (Model S)	9.12"	6.39" 7.50"	1.89"	3.50" 3.88" 4.50"	1.99" 2.05" 2.49"	1.00 1.50"	3.47"	3.75"	3	0.8:1 1:1	40 lbs.	2	FC00H1

Detroit 60 Series (Direct Drive)



SKU#	Product Description	A	B	C	D	E	G	H
RF992013	New 10K Multi–Groove Detroit 60 Series (Direct Drive)	7.50"	3.83"	0.97"	3.50"	2.00"	3.17"	3.17"

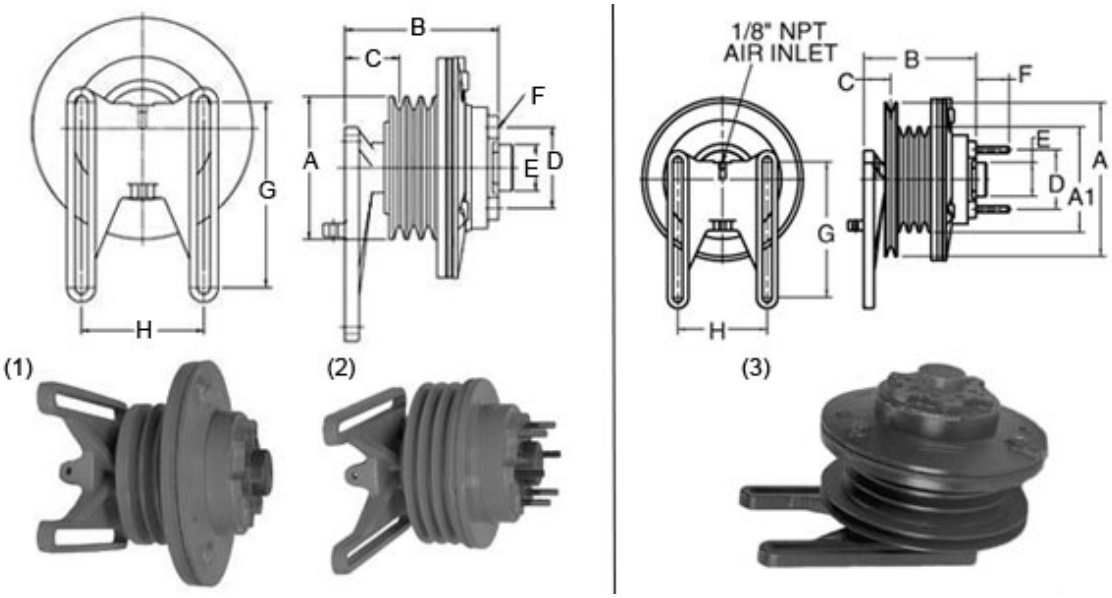
Detroit 60 Series (DriveMaster®)



SKU#	Product Description	A	B	C	D	E	F	G	H	Drive Ratio	Approx. Weight	Pic. #	Core Group
RF799065X	3 Groove Reman. Detroit 60 Series (DriveMaster®)	6.20"	7.93"	2.37"	3.50"	2.56"	0.81"	8.00"	5.32"	1.2:1	39.5 lbs.	2	FC99H1
RF799067X	3 Groove Reman. Detroit 60 Series (DriveMaster®)	6.20"	8.93"	2.37"	3.50"	2.56"	0.81"	8.00"	5.32"	–	41.7 lbs.	3	FC99H1
RF799223X	10K Multi–Groove Reman. Detroit 60 Series (DriveMaster®)	7.54"	10.55"	4.17"	3.50"	2.56"	0.81"	2.56"	9.53"	1.2:1	53.7 lbs.	1	FC99H1
RF999285	New 3 Groove Detroit 60 Series (DriveMaster®)	8.00"	6.24"	1.55"	3.50"	2.56"	0.81"	3.17"	3.17"	1.08:1	–	4	–

Detroit 60 Series (Model S & HT/S Advantage ™)

3 & 4 Belt Groove

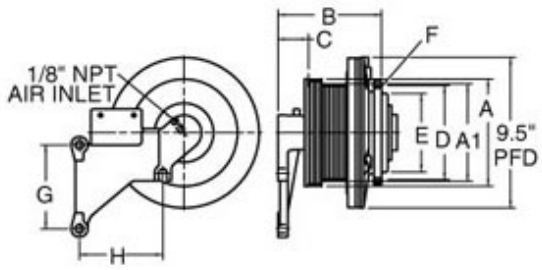


SKU#	Product Description	A	A1	B	C	D	E	F	G	H	Drive Ratio	Approx. Weight	Pic. #	Core Group
RF790009X	4 Groove Reman. Detroit 60 Advantage Series (Model S)	9.06"	7.25"	6.51"	1.61"	3.50"	1.99"	1.25" 2.00"	8.58"	5.32"	1.01:1 1.02:1 1.06:1	46 lbs.	3	FC00H1
RF790011X	4 Groove Reman. Detroit 60 Advantage Series (Model S)	10.00"	8.00"	6.51"	1.61"	3.50"	1.99"	1.25"	8.58"	5.32"	–	40 lbs.	3	FC00H1
RF790018X	3 Groove Reman. Detroit 60 Advantage Series (Model S)	7.25"	–	6.51"	2.37"	3.50"	1.99"	0.75" 1.25" 1.50"	8.58"	5.32"	1:1	40 lbs.	2	FC00H1
RF791011X	4 Groove Reman. Detroit 60 Advantage Series (Model HT/S)	9.06"	6.20"	6.68"	1.61"	3.50"	1.99"	2.00"	8.58"	5.32"	1.19:1	44 lbs.	3	FC10H1
RF791024X	3 Groove Reman. Detroit 60 Advantage Series (Model HT/S)	6.20"	–	6.68"	2.37"	3.50"	1.99"	2.00"	8.58"	5.32"	1.2:1	43 lbs.	1	FC10H1
RF791037X	4 Groove Reman. Detroit 60 Advantage Series (Model HT/S)	9.06"	7.25"	6.68"	1.61"	3.50"	1.99"	2.00	8.58"	5.32"	1:1	54 lbs.	3	FC10H1

Detroit 60 Series (Model S & HT/S Advantage ™)

6, 10, 14K Multi–Groove

(1)



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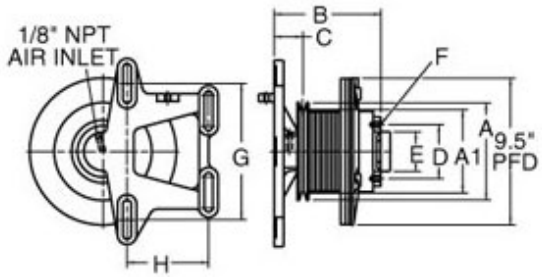

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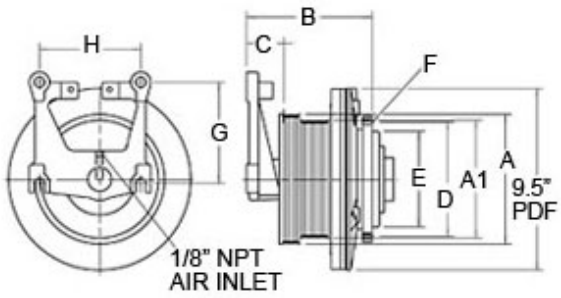
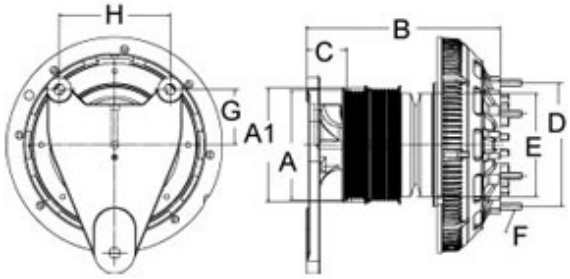


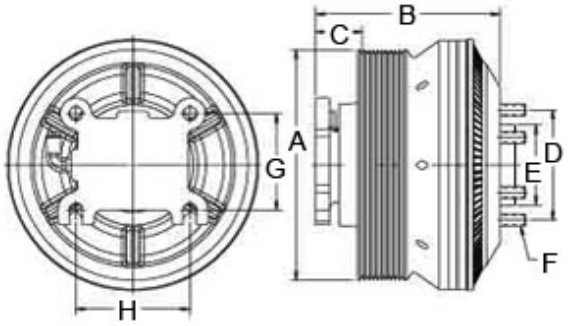
SKU#	Product Description	A	A1	B	C	D	E	F	G	H	Drive Ratio	Approx. Weight	Pic. #	Core Group
RF791023X	6K & 10K POLY V Reman. Detroit 60 Advantage Series (Model HT/S)	6.81"	6.18"	6.60"	1.96"	6.00"	4.99"	5/16"–18 TAP	5.32"	5.32"	12:1	44 lbs.	3	FC10H1
RF791031X	6K & 10K POLY V Reman. Detroit 60 Advantage Series – International (Model HT/S)	6.81"	6.18"	6.60"	1.96"	6.00"	4.99"	5/16"–18 TAP	5.32"	5.32"	1.2:1	44 lbs.	1	FC10H1
RF791033X	14K POLY V, 1V Reman. Detroit 60 Advantage Series – Ford (Model HT/S)	6.36"	5.44"	6.95"	1.88"	3.50"	2.56"	3/8"–16 TAP	8.86"	5.32"	–	44 lbs.	2	FC10H1

Mack ASET AI (DriveMaster® Two–Speed)



SKU#	Product Description	A	A1	B	C	D	E	F	G	H	Drive Ratio
RF999947	New 6PK, 10PK, 1V Multi–Groove Mack ASET AI (DriveMaster Two–Speed)	5.00"	5.19"	9.43"	2.00"	6.00"	5.00"	1.05"	2.69"	5.39"	1.77:1

Volvo VE D12 (DriveMaster PolarExtreme®)



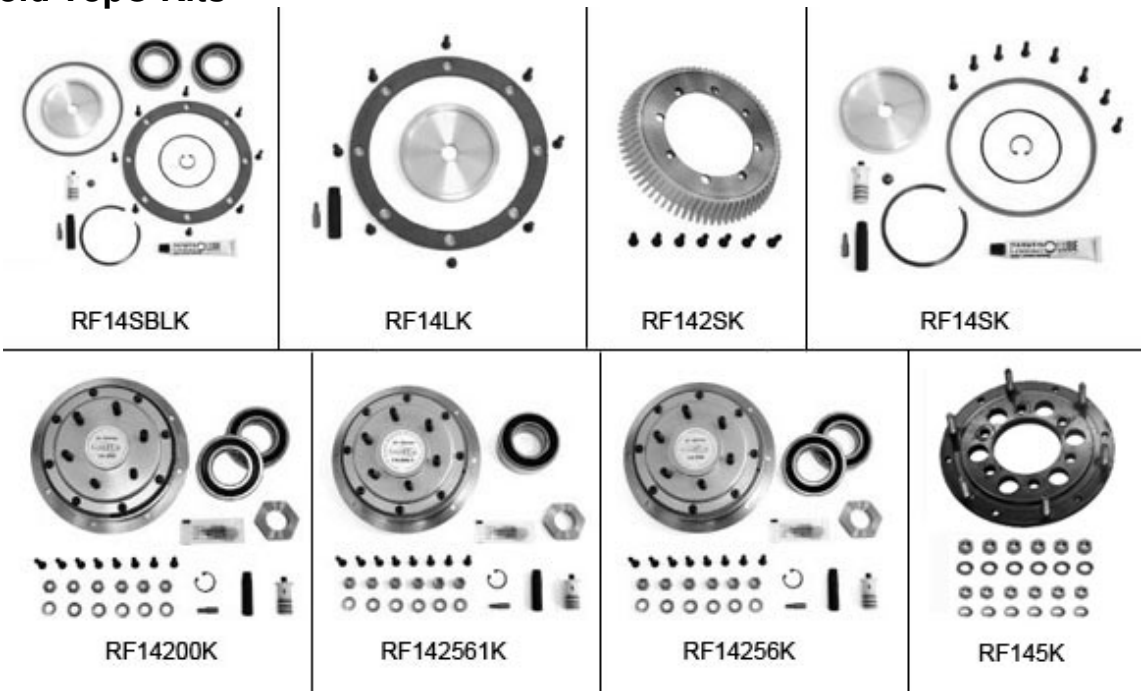
SKU#	Product Description	A	B	C	D	E	F	G	H	Drive Ratio
RF999820	New 12PK Multi–Groove Volvo VE D12 (DriveMaster PolarExtreme®)	6.99"	6.61"	1.47"	3.50"	2.56"	0.81"	3.27"	3.63"	1.41:1

Kysor ™/Borg Warner Style Fan Clutches

Specifications:

SKU#	Product Description	Model/Type	OEM Number	Approx. Weight	Core Group
RF80001X	Reman. Fan Clutch	K–22 Front Air	1090–08000–01	14 lbs.	FC101KF
RF80005X	Reman. Fan Clutch for Mack Application	K–22 Front Air	1090–08000–05	14 lbs.	FC101KF
RF85001X	Reman. Fan Clutch (Most Popular Application)	K–22 Rear Air	1090–08500–01	14 lbs.	FC101KR
RF85002X	Reman. Fan Clutch for Ford Application	K–22 Rear Air	1090–08500–02	14 lbs.	FC101KR
RF85003X	Reman. Fan Clutch for Ford Application	K–22 Rear Air	1090–08500–03	14 lbs.	FC101KR
RF88001X	Reman. Fan Clutch	K–26 Rear Air	1090–09500–01	14 lbs.	FC102KR
RF88003X	Reman. Fan Clutch	K–26 Rear Air	1090–09500–03	14 lbs.	FC102KR

Gold Top® Kits



SKU#	Product Description	Pilot/Nose Cone	Pulley Bearing
RF14200K	Gold Top® Kit for Horton–Style Post 2000 Kits	2"	2
RF142561K	Gold Top® Kit for Horton–Style Post 2000 Kits	2.56"	1
RF14256K	Gold Top® Kit for Horton–Style Post 2000 Kits	2.56"	2
RF142SK	Gold Top® 2 Speed Kit for Horton–Style Post 2000 Kits	–	–
RF145K	Gold Top® 2 Speed Adapter Plate Kit for Horton–Style Post 2000 Kits	5"	–
RF14LK	Gold Top® Lining Kit for Horton–Style Post 2000 Kits	–	–
RF14SBLK	Gold Top® Seal, Bearing & Lining Kit for Horton–Style Post 2000 Kits	–	–
RF14SK	Gold Top® Seal Kit for Horton–Style Post 2000 Kits	–	–

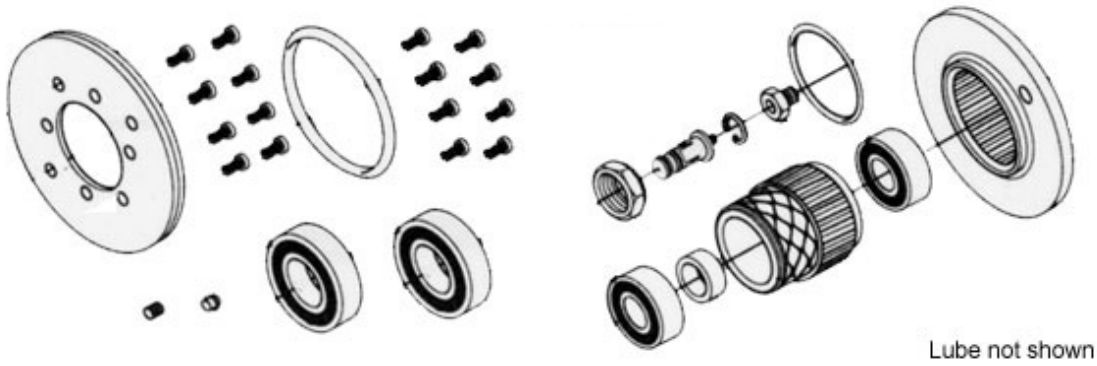
Major Overhaul Kits

RF994314

RF994315

SKU#	Product Description	Kit Contains	Kit Contains Continued
RF994314	'S' Major Kit with Standard Friction Facing for Horton Fan Clutch	(1pr.) Sheave Bearing, (1) Friction Facing, (6) S Cap Screws, (1) Large O–Ring Seal, (1) Locknut, (1) Cartridge Assembly,	(1) Face Seal Assembly, (1) Small O–Ring Seal, (8) Cap Screws, (1) O–Ring Lube, (1) System Sentry ™ and (1)Umbrella Check Valve.
RF994315	'HT/S' Major Kit with Standard Friction Facing for Horton Fan Clutch	(1pr.) Sheave Bearing, (1) Friction Facing, (8) HT/S Cap Screw, (1) Large O–Ring Seal, (1) Locknut, (1) Cartridge Assembly,	(1)Face Seal Assembly, (1) Small O–Ring Seal, (8) Cap Screws, (1) O–Ring Lube, (1) System Sentry ™ and (1) Umbrella Check Valve.

Super Kits



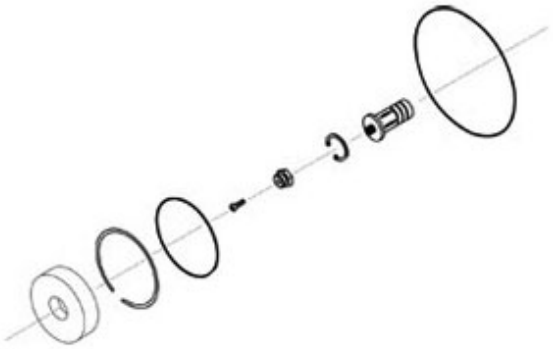
SKU#	Product Description	Kit Contains	Kit Contains Continued
RF994305	'HT/S' Advantage Super Kit with Standard Friction Facing for Horton Fan Clutch	(1pr.) Sheave Bearing, (1) Friction Facing, (8) Socket Head Cap Screws – friction facing, (1) Piston Assembly, (1) Large O–Ring, (1) Locknut,	(1) Cartridge Assembly, (1) Face Seal Assembly, (1) Small O–Ring, (8) Socket Head Screws – air chamber, (1) O–Ring Lube, (1) Spline Lube, (1) Spline Lube Brush (1) System Sentry ™ and (1) Umbrella Check Valve.
RF994307	'S' Advantage Super Kit with Standard Friction Facing for Horton Fan Clutch	(1pr.) Sheave Bearing, (1) Friction Facing, (6) S Cap Screws, (1) S Piston Assembly, (1) Large O–Ring, (1) Locknut,	(1) Cartridge Assembly, (1) Face Seal Assembly, (1) Small O–Ring, (8) Cap Screws, (1) O–Ring Lube, (1) System Sentry ™ and (1) Umbrella Check Valve.
RF994322	HT/S Advantage Super Kit with Sintered Friction Liner for Horton Fan Clutch	(1) O–Ring Lube, (1) Spline Lube, (1) Spline Lube Brush, (1 pr.) Sheave Bearings, (1) Friction Facing, (8) Socket Head Cap Screw – friction facing, (1) Piston Assembly,	(1) Large O–Ring, (1) Lock Nut, (1) Cartridge Assembly, (1) Face Seal Assembly, (1) Small O–Ring, (8) Socket Head Screws – air chamber, (1) Umbrella Check Valve
RF994343	'HT/S' Advantage Super Kit with Sintered Friction Facing for Horton Fan Clutch	(1pr.) Sheave Bearing, (1) Friction Facing, (8) S Cap Screws, (1) HT/S Piston Assembly, (1) Large O–Ring Seal, (1) Locknut,	(1) Cartridge Assembly, (1) Face Seal Assembly, (1) Small O–Ring Seal, (8) Cap Screws, (1) O–Ring Lube, (1) System Sentry ™ and (1) Umbrella Check Valve.
RF994900	Drivemaster Polarextreme Super Kit for Horton Fan Clutch	(1) T55 Torx Plus Driver, (1) O–Ring Lubricant, (1 pr.) Sheave Bearings, (1) Bearing Nut, (1) O–Ring Seal, (1) Fan Mounted Disc/Studs, (8) Button Head Screws,	(1) Air Chamber Seal, (1) Face Seal, (2) Retaining Rings, (1) Air Cartridge Assembly, (1) Friction Liner, (1) Spring Housing/Piston, (1) Cage Nut – used for repairs only.
RF994985	Drivemaster Super Kit for Horton Fan Clutch	(1) T55 Torx Plus Driver, (1) O–Ring Lubricant, (1 pr.) Sheave Bearings, (1) Bearing Nut, (1) O–Ring Seal, (1) Fan Mounted Disc/Studs, (8) Button Head Screws,	(1) Air Chamber Seal, (1) Face Seal, (2) Retaining Rings, (1) Air Cartridge Assembly, (1) Friction Liner, (1) Spring Housing/Piston, (1) Cage Nut – used for repairs only.

Seal Kit

RF994205

O-Ring, Spline Lube, Lube Brush and Wrench not shown

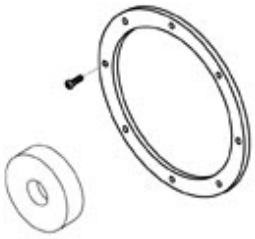
RF994346



T55 Torx Plus Driver and O-Ring Lubricant not shown

SKU#	Product Description	Kit Contains	Kit Contains Continued
RF994205	'S' and 'HT/S' Seal Kit for Horton Fan Clutch	(1) Large O–Ring Seal, (1) Cartridge Assembly, (1) Face Seal Assembly, (1) Small O–Ring Seal, (8) Cap Screws,	(1) O–Ring Lube, (1) Spline Lube, (1) Spline Lube Brush, (1) System Sentry ™, (1) Umbrella Check Valve and (1) Wrench.
RF994346	Drivemaster Seal Kit for Horton Fan Clutch	(1) T55 Torx Plus Driver, (1) O–Ring Lubricant, (1) O–Ring Seal, (8) Button Head Screws, (1) Air Chamber Seal,	(1) Face Seal, (1) Retaining Ring, (1) Air Cartridge Assembly, (1) Retaining Ring and (1) Cage Nut – used for repairs only.

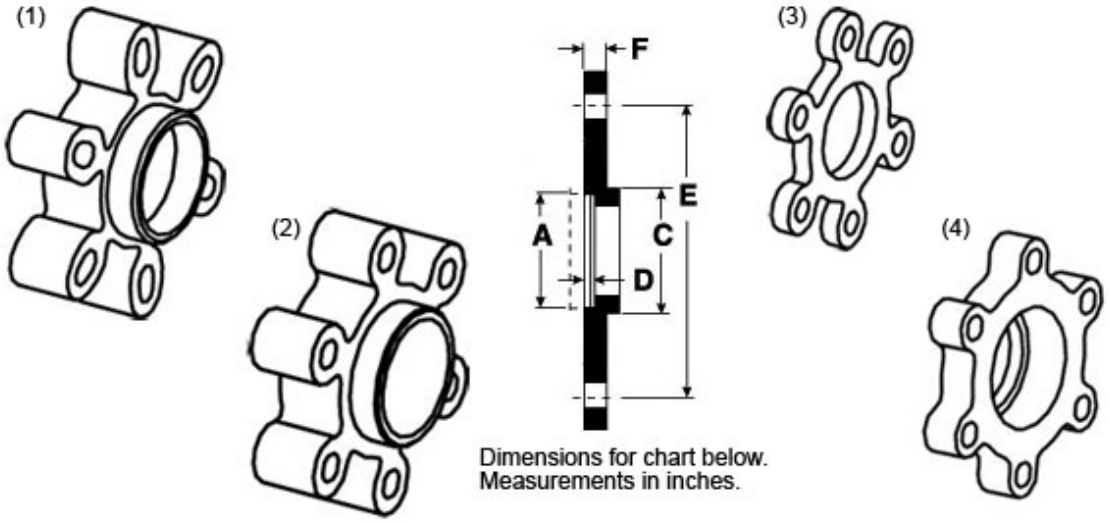
Facing/Liner Kit



RF994349 Shown

SKU#	Product Description	Kit Contains
RF994319	'HT/S' Advantage Facing Kit for Horton Fan Clutch	'HT/S' Sintered Friction Facing
RF994349	Drivemaster Friction Liner Kit for Horton Fan Clutch	(1) T55 Torx Plus Driver, (8) Button Head Screws, (1) Friction Liner and (1) Cage Nut – used for repairs only.

Spacers & Adapters



SKU#	Product Description	Female Pilot Dia. (A)	Male Pilot Dia. (C)	Female Pilot Depth (D)	Bolt Circle (E)	Thickness (F)	Comments	OEM #	FIG. #
RF994039	Spacer for Horton Fan Clutch	2.06"	2.00"	.62"	3.5"–4.0"	1.00"	For DDA Drives	984081	1
RF994040	Spacer for Horton Fan Clutch	2.00"	2.00"	.62"	3.50"	1.00"	–	984080	2
RF994052	Spacer for Horton Fan Clutch	2.00"	2.00"	.75"	3.50"	1.23"	–	984086	2
RF994053	Spacer for Horton Fan Clutch	2.00"	2.56"	0.75"	3.50"	.62"	–	984087	4
RF994072	Spacer for Horton Fan Clutch	2.00"	2.00"	.75"	3.50"	2.25"	–	984089	2
RF994073	Spacer for Horton Fan Clutch	2.00"	2.00"	.26"	3.50"	.62"	–	984090	2
RF994074	Spacer for Horton Fan Clutch	2.00"	–	Thru Hole	3.50"	.25"	Flat Spacer Thru Holes	984091	3

Thermal Switches

Features:

- The thermal switch is an integrated temperature control and/or overheat protective device.
- The switching circuit features mechanical load switching, designed for frequent or high current switching.
- Controls include the fan clutch, radiator shutters and engine shutdown (overtemp).

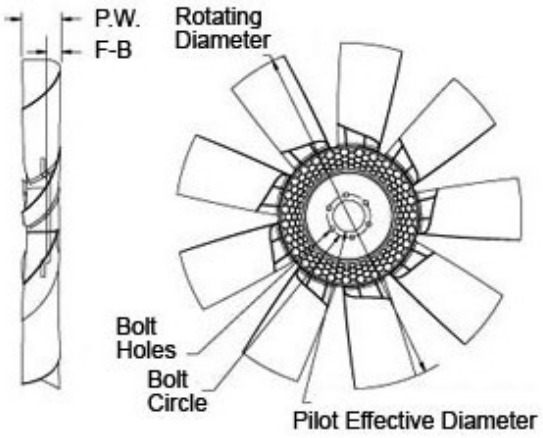
SKU#	Product Description	Circuit Type	Temperature	Pipe Thread Size
RF993603	Thermal Switch for Horton Fan Clutch	Normally Closed	190° F	.500"
RF993605	Thermal Switch for Horton Fan Clutch	Normally Closed	195° F	.500"
RF993606	Thermal Switch for Horton Fan Clutch	Normally Closed	200° F	.500"
RF993607	Thermal Switch for Horton Fan Clutch	Normally Closed	205° F	.500"
RF993610	Thermal Switch for Horton Fan Clutch	Normally Open	195° F	.375"
RF993615	Thermal Switch for Horton Fan Clutch	Normally Open	180° F	.500"
RF993616	Thermal Switch for Horton Fan Clutch	Normally Open	185° F	.500"
RF993617	Thermal Switch for Horton Fan Clutch	Normally Open	190° F	.500"
RF993619	Thermal Switch for Horton Fan Clutch	Normally Closed	185° F	.500"
RF993625	Thermal Switch for Horton Fan Clutch	Normally Open	215° F	.500"
RF993626	Thermal Switch for Horton Fan Clutch	Normally Open	220° F	.500"
RF993630	Thermal Switch for Horton Fan Clutch	Normally Closed Dual Function	185° /195° F	.500"
RF993653	Thermal Switch for Horton Fan Clutch	Normally Open	195° F	.500"
RF993654	Thermal Switch for Horton Fan Clutch	Normally Open	200° F	.500"
RF993655	Thermal Switch for Horton Fan Clutch	Normally Open	205° F	.500"
RF993658	Thermal Switch for Horton Fan Clutch	Normally Closed	150° F	.500"
RF993665	Thermal Switch for Horton Fan Clutch	Normally Closed	215° F	.500"

Solenoid Valve & Filter

SKU#	Product Description	Applications	Volts	Circuit Type	Diode	Notes	OEM Number
RF993249	Solenoid Valve	International	12	Normally Open / Normally Closed	Yes	–	–
RF993272	Solenoid Valve	All / Freightliner	12	Normally Open / Normally Closed	Yes	Single–Hole Mounting Bracket	–
RF993273	Solenoid Valve	All	24	Normally Open / Normally Closed	Yes	Single–Hole Mounting Bracket	–
RF993280	Solenoid Valve	Dina	12	Normally Open / Normally Closed	No	–	–
RF993282	Solenoid Valve	All	12	Normally Open / Normally Closed	Yes	Two–Hole Mounting Bracket	–
RF993284	Solenoid Valve	Kenworth / Navistar	12	Normally Closed	Yes	–	983236
RF993286	Solenoid Valve	Peterbilt	12	Normally Closed	Yes	–	983238
RF993287	Solenoid Valve	Unspecified	12	Normally Open	Yes	–	983239
RF993293	Solenoid Valve	All / Freightliner	12	Normally Closed / Normally Open	Yes	With Filter	983246 (NC) 983246 (NO)
RF993294	Solenoid Valve	All	24	Normally Open / Normally Closed	Yes	With Filter	983247 (NO) 993248 (NC)
RF993295	Solenoid Valve	Ford	12	Normally Open	Yes	–	983249
RF993296	Solenoid Valve	Freightliner	12	Normally Open	Yes	–	983250
RF993343	Solenoid Valve	All	–	Normally Open	Yes	Volvo Universal Kit	–
RF993412	Solenoid Valve	International	12	Normally Closed	Yes	–	983410
RF993427	Solenoid Valve	Ford	12	Normally Open	Yes	With Filter	983424
RF993428	Solenoid Valve	Freightliner	12	Normally Closed	Yes	With Filter	983425
RF994002	Solenoid Valve Filter Assembly	–	–	–	–	–	–

Fan Blades

8 Blade

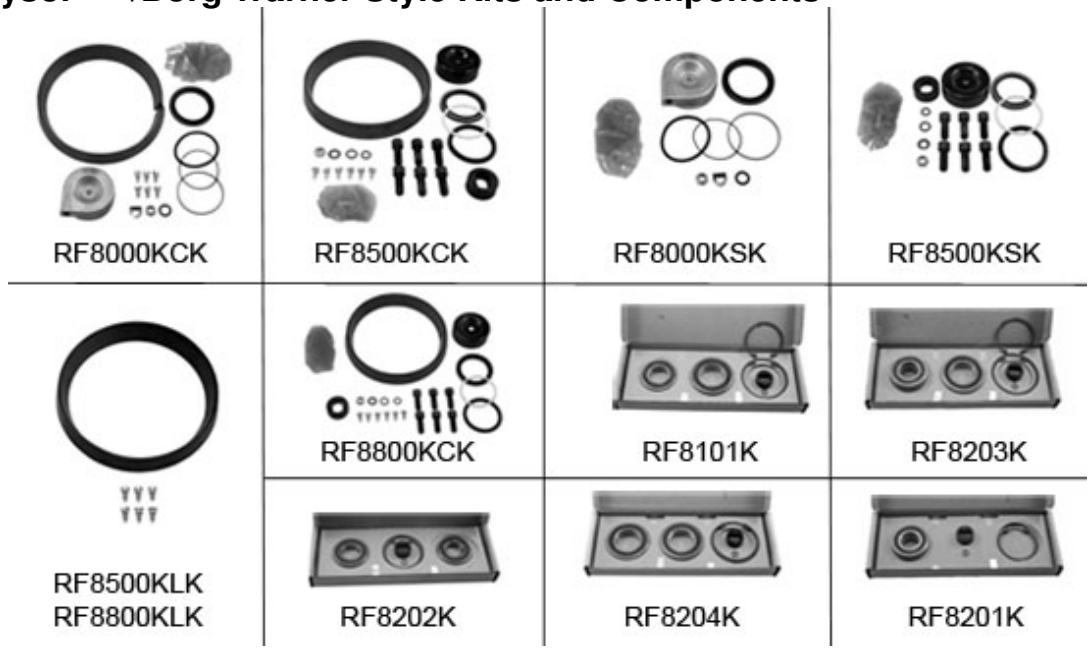


9 Blade

Clockwise Rotation

SKU#	Product Description	Blade Dia.	Pilot Dia.	Bolt Circle	Pitch Width	Front Tip of Blade to Back of Mounting Disc	Back of Mounting Disc to Back Tip of Blade	Approx. Weight
RF991762202	9 Blade for Horton Fan Clutch	30.0	2.00	3.50	3.50	1.29	2.21	12.1 lbs.
RF991762502	9 Blade for Horton Fan Clutch	30.0	5.00	6.00	3.50	1.29	2.21	11.6 lbs.
RF991813253	9 Blade for Horton Fan Clutch	32.0	2.56	3.50	3.50	1.94	1.56	12.6 lbs.
RF994105	8 Blade for Horton Fan Clutch	26.0	2.00	3.50	3.34	1.13	2.21	6.2 lbs.
RF994116	8 Blade for Horton Fan Clutch	28.0	5.00	6.00	3.46	1.14	2.32	6.5 lbs.
RF994117	8 Blade for Horton Fan Clutch	30.0	5.00	6.00	3.56	1.18	2.38	7.1 lbs.
RF994155	8 Blade for Horton Fan Clutch	28.0	2.00	3.50	3.46	2.20	1.26	6.5 lbs.
RF994156	8 Blade for Horton Fan Clutch	30.0	2.00	3.50	3.56	1.30	2.26	7.1 lbs.

Kysor ™/Borg Warner Style Kits and Components



SKU#	Product Description	Model/Type	OEM Number
RF8000KCK	Combo Seal/Lining Kit	K–22 Front Air	1033–05435–02
RF8000KSK	Seal Kit	K–22 Front Air	–
RF8101K	Pulley Bearing Kit	–	1033–07781–01
RF8201K	Pulley Bearing Kit	–	1033–07782–01
RF8202K	Pulley Bearing Kit	–	1033–07782–02
RF8203K	Pulley Bearing Kit	–	1033–07782–03
RF8204K	Pulley Bearing Kit	–	1033–07782–04
RF8500KCK	Combo Seal/Lining Kit	K–22 Rear Air	1033–05435–03
RF8500KLK	Lining Kit	K–22 Front/Rear Air	1033–08250–01
RF8500KSK	Seal Kit	K–22/K–26 Rear Air	1033–08233–01
RF8800KCK	Combo Seal/Lining Kit	K–26 Rear Air	1033–09339–01
RF8800KLK	Lining Kit	K–26 Rear Air	1033–09340–01

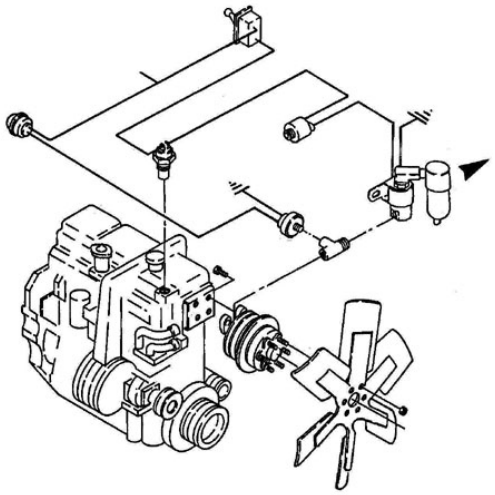
Temperature Controls/Shutterstats

SKU#	Product Description	Circuit Type	Temperature	Port Size
RF35029	Temperature Control/Shutterstats for Kysor ™ Style Clutch	Normally Closed	185° F	1/8–27 NPTF
RF35030	Temperature Control/Shutterstats for Kysor ™ Style Clutch	Normally Closed	190° F	1/8–27 NPTF
RF35031	Temperature Control/Shutterstats for Kysor ™ Style Clutch	Normally Closed	195° F	1/8–27 NPTF
RF36029	Temperature Control/Shutterstats for Kysor ™ Style Clutch	Normally Open	185° F	1/8–27 NPTF
RF36030	Temperature Control/Shutterstats for Kysor ™ Style Clutch	Normally Open	190° F	1/8–27 NPTF
RF36031	Temperature Control/Shutterstats for Kysor ™ Style Clutch	Normally Open	195° F	1/8–27 NPTF

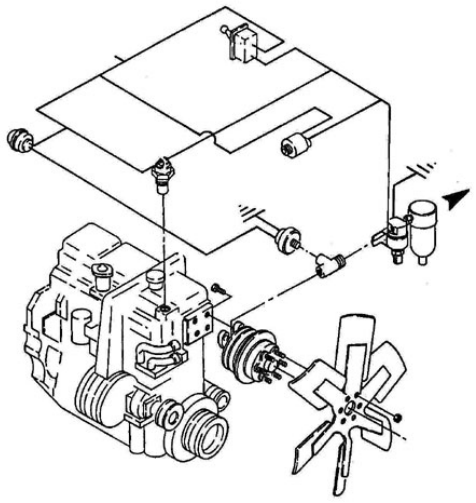
COOLING SYSTEM CONTROLS

- A **Normally Closed Electric Control System** has a normally closed Thermal Switch and a normally open Solenoid Valve.
- A **Normally Open Electric Control System** has a normally open Thermal Switch and a normally closed Solenoid Valve.

NORMALLY CLOSED



NORMALLY OPEN



Normally Closed Fan Clutches

Problem	Possible Cause	Solution
Fan won't engage when manual override is turned on.	Manual override switch, air solenoid valve or related plumbing or wiring is faulty.	Replace faulty component.
Fan won't cycle on when air conditioning test is performed.	Outside air temperature is too low, there is a low refrigerant charge or refrigerant pressure switch is faulty.	1. Check air conditioning system. 2. Replace pressure switch if required.
Overtemp warning activates before fan engages.	Defective overtemp warning switch.	Replace overtemp warning switch.
Engine appears to overheat. (Fan won't engage when engine coolant temp gauge is above 195–205°F or overtemp warning activates before fan engages.)	1. Air Solenoid valve may be plumbed incorrectly 2. Overtemp warning switch faulty (warning light activates prematurely). 3. Overtemp warning switch is too far away from the fan temp switch. 4. Temp gauge is faulty (reads high). 5. Fan temp switch is faulty.	1. Check solenoid plumbing. Replumb solenoid valve. 2. Replace overtemp warning switch. 3. Move overtemp warning switch as close to the fan temp switch as possible. 4. Replace temp gauge. 5. Replace fan temp switch.
Fan engages at low engine temperatures while vehicle is moving.	1. Normal condition in extremely hot weather or at slow vehicle speeds in warm weather. 2. Faulty temp gauge. 3. A/C system overcharged or condenser covered with debris. 4. Refrigerant pressure switch may be faulty. 5. Fan temp switch is faulty, if fan engages at low engine temp and A/C is **OFF**.	1. Normal condition in hot weather. 2. Replace temp gauge or sender. 3. Check A/C system. 4. Replace pressure switch if necessary. 5. Replace fan temp switch.
Fan won't run under any condition.	1. Air line may be leaking (Horton/Evans air–on fan drives). 2. Wiring may be shorted and/or fuses, circuit breakers blown. 3. Air solenoid may be faulty. Test air solenoid valve by shorting across the terminals of the temp switch to energize the air solenoid valve and to activate the fan drive.	1. Check air lines. Fix where necessary. 2. Check wiring, fuses, and circuit breakers. 3. If solenoid does not activate, replace solenoid.

Normally Closed Fan Clutches

Problem	Possible Cause	Solution
Fan runs all the time when the air conditioning is OFF.	1. Manual override switch is ON. 2. Air solenoid valve may be faulty or plumbed incorrectly. 3. Air line to clutch may be leaking (Bendix/Kysor air–off fan drives). 4. Fan temp switch may be stuck open; with engine temp below 180°F short across terminals, if fan turns off, switch is faulty. 5. Pressure switch may be stuck open; turn off A/C system, if fan continues to run, short across pressure switch, if fan stops, pressure switch is defective.	1. Turn manual override off. 2. Check air solenoid valve plumbing, replace valve if faulty. 3. Check air lines, fix where necessary. 4. Replace fan temp switch. 5. Replace pressure switch.
Fan runs all the time when the air conditioning is ON.	1. This is a normal condition in extremely hot weather; spray water on A/C condenser (fan should disengage for a short period of time and then re–engage after water evaporates). 2. Air conditioning system may be over–charged or condenser covered with debris. Turn OFF the A/C system; if the fan stops, the refrigerant pressure switch is functioning. 3. Pressure switch may have drifted out of calibration; use pressure gauge to compare actual fan–on and fan–off pressures vs. specified pressures.	1. Normal condition in hot weather. 2. Service A/C system. Check A/C pressure and condenser. 3. If out of calibration, replace pressure switch.
Fan operation is erratic.	1. Loose electrical connection. 2. Fan temp or pressure switch may be faulty.	1. Check wiring; fix where necessary. 2. If other system components and connections check out okay, (a) replace pressure switch if erratic fan operation is associated with air conditioning at idle or (b) replace fan temp switch if the erratic operation occurs primarily when the engine is hot.
Fan cycles frequently when engine is hot.	The fan should remain engaged long enough to reduce temperature 7–10 F. The fan temp switch is defective if the fan disengages after only a 3–4 reduction.	Replace fan temp switch.

Normally Closed Fan Clutches

Problem	Possible Cause	Solution
Fan cycles frequently when vehicle is stationary with A/C **ON**.	Up to 4 cycles per minute is a normal condition for conventional control systems; turn off air conditioning system and cycling should stop.	To reduce cycling by up to 90%, install an Index K7 fan control system.
Fan turns on whenever ignition is on (turns off when engine gets hot).	Air solenoid valve plumbed backwards.	Check solenoid installation instructions; plumb correctly.
Control system fuses blown.	1. If fuse blows whenever the ignition is turned on, the problem is most likely related to a fault in the wiring. 2. If the fuses blow only when the fan engages, the fault is probably associated with the solenoid valve.	1. Check wiring, fix where necessary. 2. Use an ohmmeter to check for a shorted solenoid coil (the coil resistance should be greater than 14 ohms). If shorted, replace air solenoid valve.

Normally Open Fan Clutches

Problem	Possible Cause	Solution
Fan won't engage when manual override is turned on.	Manual override switch, air solenoid valve or related plumbing or wiring is faulty.	Replace faulty component.
Fan won't cycle on when air conditioning test is performed.	Outside air temperature is too low, there is a low refrigerant charge or refrigerant pressure switch is faulty.	1. Check air conditioning system. 2. Replace pressure switch if required.
Override warning activates before fan engages.	Defective overtemp warning switch.	Replace overtemp warning switch.
Engine appears to overheat. (Fan won't engage when engine coolant temp gauge is above 195–205°F or overtemp warning activates before fan engages.)	1. Air Solenoid valve may be plumbed incorrectly 2. Overtemp warning switch faulty (warning light activates prematurely). 3. Overtemp warning switch is too far away from the fan temp switch. 4. Temp gauge is faulty (reads high). 5. Fan temp switch is faulty.	1. Check solenoid plumbing. Replumb solenoid valve. 2. Replace overtemp warning switch. 3. Move overtemp warning switch as close to the fan temp switch as possible. 4. Replace temp gauge. 5. Replace fan temp switch.
Fan engages at low engine temperatures while vehicle is moving, with air conditioning **ON**.	1. Normal condition in extremely hot weather or at slow vehicle speeds in warm weather. 2. Faulty temp gauge. 3. A/C system overcharged or condenser covered with debris. 4. Refrigerant pressure switch may be faulty. 5. Fan temp switch is faulty if fan engages at low engine temp and A/C is **OFF**.	1. Normal condition in hot weather. 2. Replace temp gauge or sender. 3. Check A/C system. 4. Replace pressure switch if necessary. 5. Replace fan temp switch.
Fan won't run under any condition.	1. Air line may be leaking (Horton/Evans air–on fan drives). 2. Wiring may be shorted and/or fuses, circuit breakers blown. 3. Air solenoid may be faulty. Test air solenoid valve by shorting across the terminals of the temp switch to energize the air solenoid valve and to activate the fan drive.	1. Check air lines. Fix where necessary. 2. Check wiring, fuses, and circuit breakers. 3. If solenoid does not activate, replace solenoid.

Normally Open Fan Clutches

Problem	Possible Cause	Solution
Fan runs all the time when the air conditioning is OFF.	1. Manual override switch is ON. 2. Air solenoid valve may be faulty or plumbed incorrectly. 3. Air line to clutch may be leaking (Bendix/Kysor air–off fan drives). 4. Fan temp switch may be stuck closed; with engine temp below 180°F disconnect wiring, if fan turns off, switch is faulty. 5. Pressure switch may be stuck closed; turn off A/C system, if fan continues to run, disconnect wiring to pressure switch, if fan stops, pressure switch is defective.	1. Turn manual override off. 2. Check air solenoid valve plumbing, replace valve if faulty. 3. Check air lines, fix where necessary. 4. Replace fan temp switch. 5. Replace pressure switch.
Fan runs all the time when the air conditioning is ON.	1. This is a normal condition in extremely hot weather; spray water on A/C condenser (fan should disengage for a short period of time and then re–engage after water evaporates). 2. Air conditioning system may be over–charged or condenser covered with debris. Turn OFF the A/C system; if the fan stops, the refrigerant pressure switch is functioning. 3. Pressure switch may have drifted out of calibration; use pressure gauge to compare actual fan–on and fan–off pressures vs. specified pressures.	1. Normal condition in hot weather. 2. Service A/C system. Check A/C pressure and condenser. 3. If out of calibration, replace pressure switch.
Fan operation is erratic.	1. Loose electrical connection. 2. Fan temp or pressure switch may be faulty.	1. Check wiring; fix where necessary. 2. If other system components and connections check out okay, (a) replace pressure switch if erratic fan operation is associated with air conditioning at idle or (b) replace fan temp switch if the erratic operation occurs primarily when the engine is hot.
Fan cycles frequently when engine is hot.	The fan should remain engaged long enough to reduce temperature 7–10 F. The fan temp switch is defective if the fan disengages after only a 3–4 F reduction.	Replace fan temp switch.

Normally Open Fan Clutches

Problem	Possible Cause	Solution
Fan cycles frequently when vehicle is stationary with A/C **ON**.	Up to 4 cycles per minute is a normal condition for conventional control systems; turn off air conditioning system and cycling should stop.	To reduce cycling by up to 90%, install an Index K7 fan control system.
Fan turns on whenever ignition is on (turns off when engine gets hot).	Air solenoid valve plumbed backwards.	Check solenoid installation instructions; plumb correctly.
Control system fuses blown.	1. If fuse blows whenever the ignition is turned on, the problem is most likely related to a fault in the wiring. 2. If the fuses blow only when the fan engages, the fault is probably associated with the solenoid valve.	1. Check wiring, fix where necessary. 2. Use an ohmmeter to check for a shorted solenoid coil (the coil resistance should be greater than 14 ohms). If shorted, replace air solenoid valve.

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