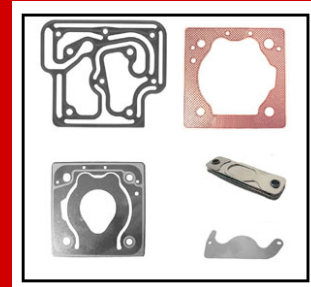
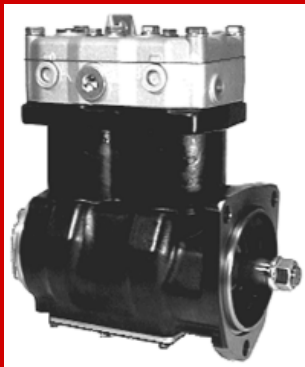


WABCO® AIR COMPRESSOR INFORMATION and COMPONENTS CUMMINS®, MACK®, & VOLVO®



WABCO HEAD REPLACEMENTS

9111539202

**CUMMINS
B & C
SERIES**

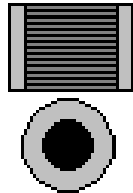
SS318

85MM

18.7 CFM



**3/4 - 16
STOR**



FITS COMPRESSOR #'S

9111535200X

9111535330X

9111535313X

9111535300X

3936810

4936214

3944524

3966522

3944526

3944525

3558163

9111539212

**CUMMINS
ISX**

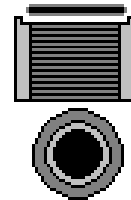
SS318

85MM

18.7 CFM



**M18 - 1.5
STOR**



FITS COMPRESSOR #'S

9111535100X

3681904

3681902

3104216

9111539312

MACK

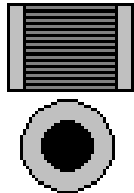
SS318

85MM

18.7 CFM



**1/2"
STOR**



**FITS
COMPRESSOR #'S**

**9111535400X
9111535410X
9111530550X
9111530560X
9111530557X
9111530567X
303GB5129M
303GB5129M2
303GB5129AM**

9111549202



Not available at this time

CUMMINS

SS250

**3/4" - 16
STOR**

75MM

18.7 CFM

***ALL
HEAD ASSEMBLIES INCLUDE:***

**ASSEMBLED HEAD
(Including Unloader Assembly)**

TORQUE-to-YIELD BOLTS

ALL VALVES & GASKETS

Installation Guide for WABCO 85MM Replacement Cylinder Head

WARNING:

- To prevent serious eye injury, always wear eye protection when performing vehicle maintenance.
- Remove all pressure from the air system before you disconnect any component.
- Park the vehicle on a level surface and block wheels to prevent the vehicle from rolling



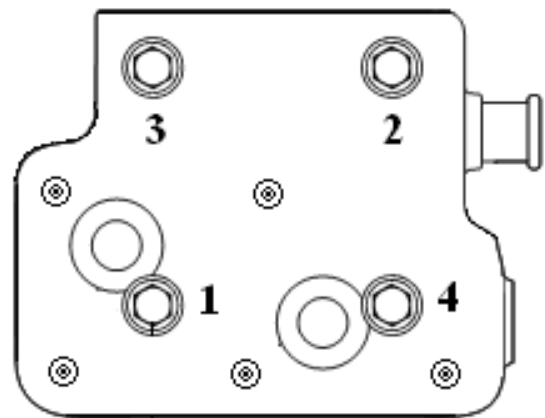
Items included in this Kit:

- 1) Cylinder Head Assembly
- 4) Torque-to-Yield Head Bolts
- 1) Inlet Valve (a)
- 1) Head Gasket (b)
- 1) Sliding Leaf Valve

Cylinder Head Removal

Be sure not to damage crankcase since it is not to be replaced.

1. Set parking brake and block wheels.
2. Drain air pressure from system.
3. Drain engine coolant system and cylinder head of the compressor.
4. Use cleaning solvent to remove dirt and oil from the exterior of the compressor.
5. Remove air and coolant lines from compressor.
6. Remove the four ½" hex head bolts that attach the head to the cylinder block (figure 1)
7. Remove cylinder head and head gasket.
8. Use a cleaning solvent to clean the top of the crankcase.



The piston bore must be kept clean of debris. Place a clean towel over the bore in order to keep clean.

Cylinder Head Installation

1. Flip head upside down as shown in Figure 2
2. Coat the sliding leaf valve (A) lightly with engine oil. This will help hold it in place.
3. Install the sliding leaf valve. Align the two holes of the sliding leaf valve with the two pins on bottom of head as shown in figure 2.
4. Install inlet valve (B). Coat lightly with engine oil. Align valve with the large holes and the alignment sleeves as shown in Figure 2.
5. Notice the notch for the unloader piston guide pin.
6. Install cylinder head gasket (C). Make sure all holes between cylinder head gasket and inlet valve are aligned as shown in Figure 2.

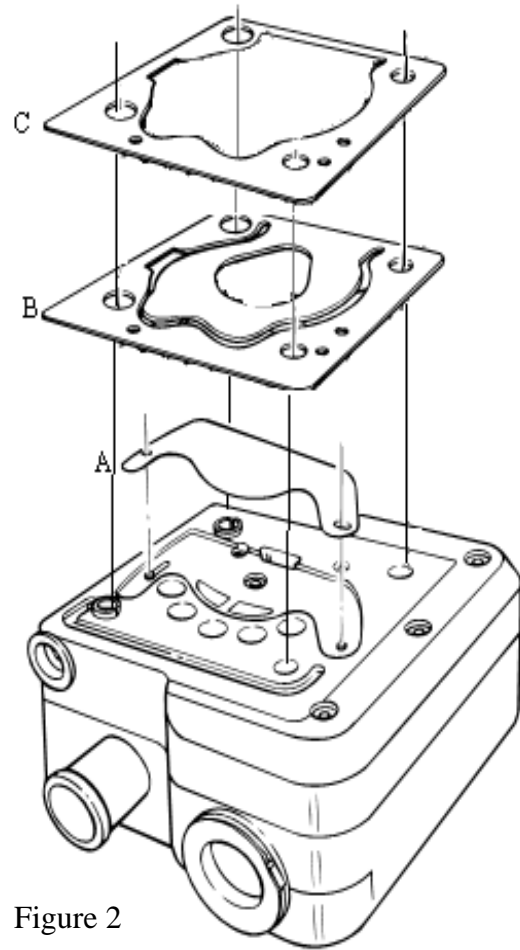


Figure 2

Attaching assembled head to crankcase

1. Carefully flip the assembled head over, paying close attention not to dislodge sliding leaf valve, inlet valve and head gasket.
2. Position the head on top of the crankcase. Make sure the notched pins of the head align within the recesses of the crankcase, as shown in Figure 3.
3. Screw in four hex bolts in by hand, being careful to not damage the gaskets.
4. Tighten in sequence 1-2-3-4 (Figure 4) to 18.5 to ± 2.5 lb-ft. Then apply $90^\circ \pm 15^\circ \pm 5^\circ$ rotation. Use angular gauge to check rotation.
5. Connect all air and coolant lines leading to the air compressor. Tighten per vehicle specifications.

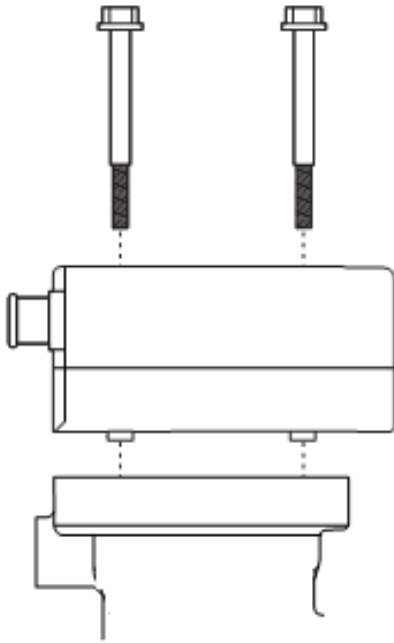


Figure 3

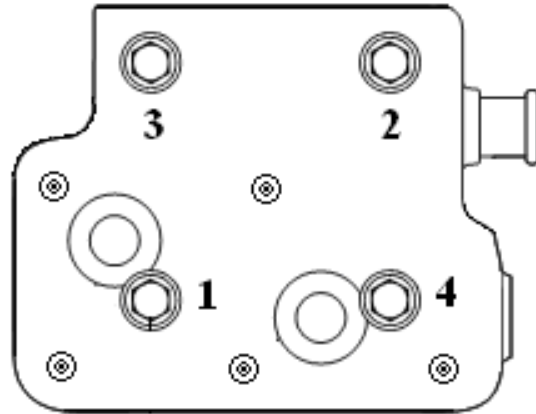


Figure 4

Testing

1. With the parking brake engaged and wheels blocked, bleed down the vehicle air system reservoir gauges (pump brakes several times) to approximately 85psi.
2. With engine running at full governed speed (no load or air accessories being used), the compressor should reach cutout pressure and unload.

If the compressor does not reach governor cutout pressure, check for leaks in the system.

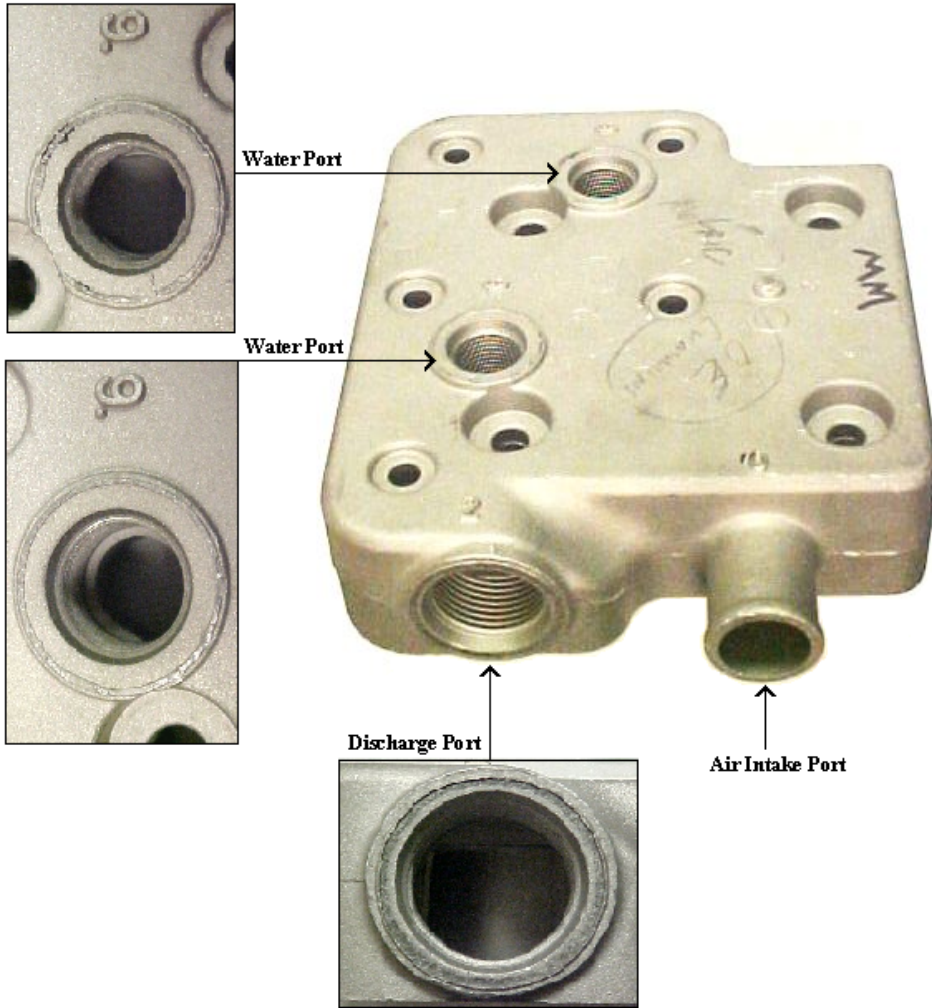
If the compressor fails to unload, make sure governor is working properly

Air System Leak Test

1. Park vehicle on level surface. Engage parking brake. Disconnect any attached or towed vehicle. Block tires. Leave engine on.
2. Release parking brakes.
3. With compressor in pumping mode, engine at idle and service brakes applied, air gauge must stay between 80-90 psi or rise slightly.
4. If pressure is not maintained, check for air leaks in the system. This can be done by listening or the spraying a water and soap solution on the air system.

Helpful Hints:

1. ***This is a good time to check inlet and discharge lines for any restrictions.***
2. ***If cylinder walls show signs of scoring and pumping excess oil, change out the compressor***



9111539202

Water Port
 3/4" – 16
 STOR
Discharge Port
 M27- 2.0
 STOR

9111539212

Water Port
 M18 – 1.5
 STOR
Discharge Port
 M27 – 2.0
 STOR

9111539312

Water Port
 3/8" NPT
Discharge Port
 1/2" NPT

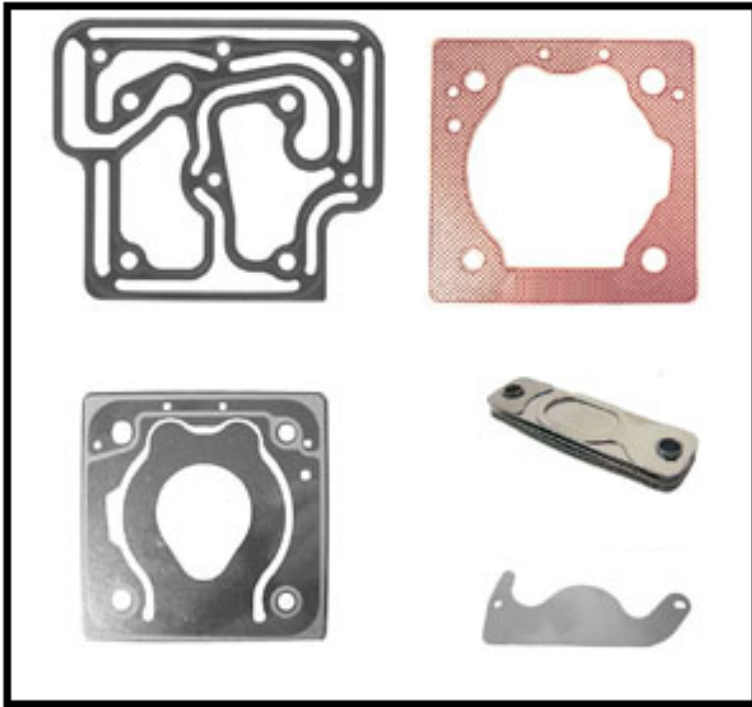
WABCO Heads (Cummins & MACK USA Applications)

All of the 85MM Wabco Heads listed are the same design with the exception of the water and discharge port size

**There are two versions of the valve body for the 85MM.
 (Cummins & MACK)**

The Mack has a drain outlet.

The Mack valve body can also be used for the Cummins, *if* you block off the outlet with a pipe plug.



Part #
854323
(with head bolts)

85MM
Head Kit

854323WO
(without head bolts)
pictured

HEAD KITS

Part #
754323
(with head bolts)

75MM
Head Kit

754323WO
(without head bolts)
pictured



9111535100X

CUMMINS

ISX

SS318

85MM

18.7 CFM

OEM #'S

3681904

3681902

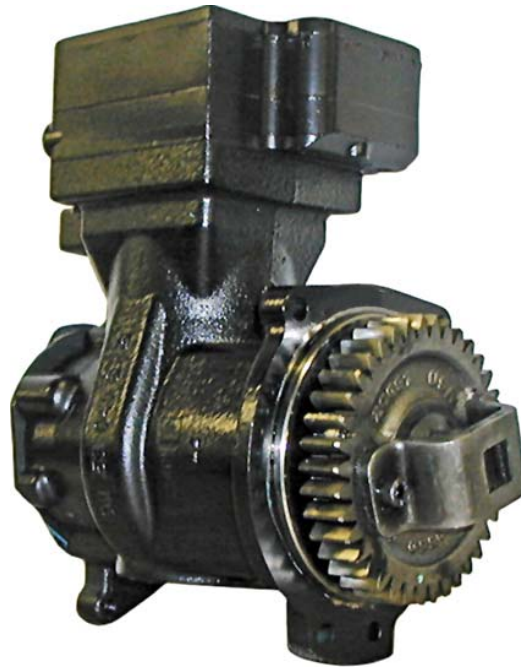
3103413

3104216

4946291

USES HEAD #

9111539212



9111535100X
9111535107X

9111535200X

CUMMINS

**L, M, N
SERIES**

SS318

85MM

18.7 CFM

OEM #'S

3558163

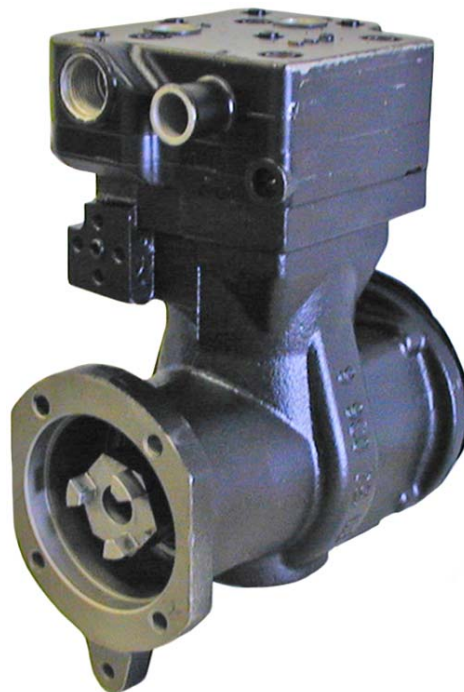
3104324RX

4059825RX

3103403RX

USES HEAD #

9111539202



9111535200X
9111535207X

CUMMINS

ISC

SS318

85MM

18.7 CFM

OEM#’S

3944524

3966522RX

3944526

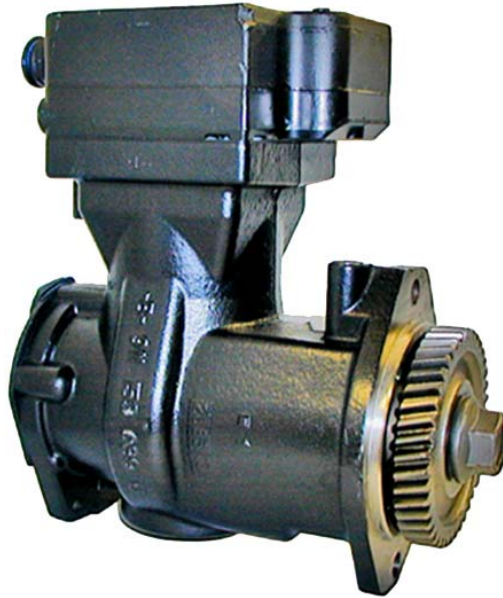
3944525

3948846

4933782

USES HEAD #

9111539202



9111535300X

9111535300X

9111535307X

CUMMINS

B SERIES

SS318

85MM

18.7 CFM

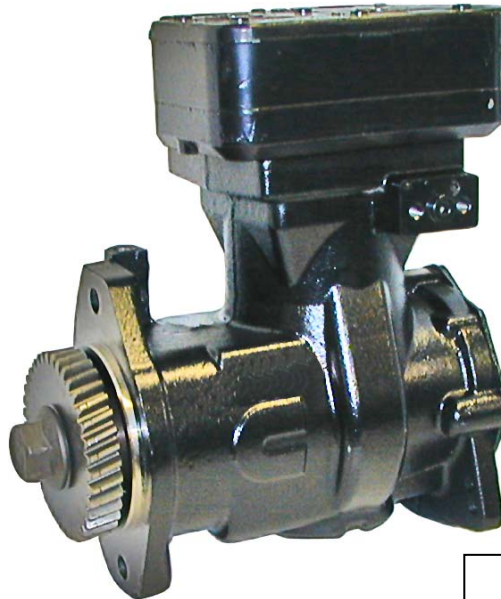
OEM #’S

3936810

3969104

USES HEAD #

9111539202



9111535330X

9111535330X

9111535337X

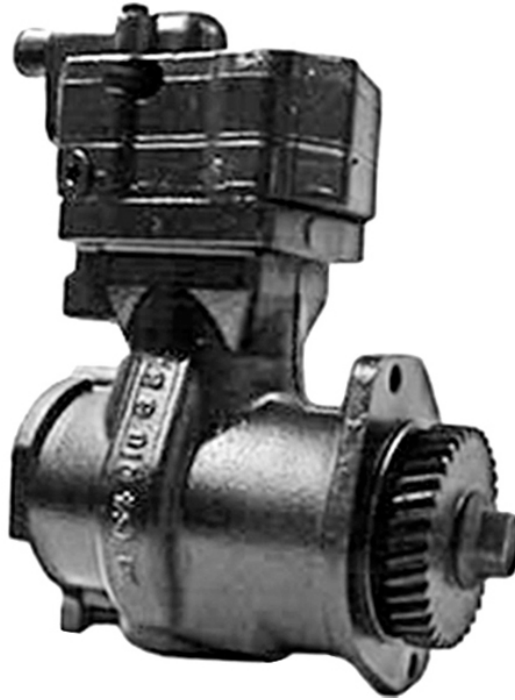
9111545000X

**CUMMINS
B SERIES**

**SS250
75MM
15.2 CFM**

**OEM #'S
3944460
3948842
3976362**

**Uses Head #
9111549202**



**9111545000X
9111545007X**

9111545000

Identification of a Wabco Part Number

**911 154
Product Type**

**500
Version**

**0
Condition**

**Every Wabco™ part has a 10 digit Part Number
The number is grouped in a 3.3.3.1 formation
Using this code, the following can be identified**

Condition:

- 0 New Complete Assembly (Black ID plate fixed to part)**
- 2 Repair Kit or Sub Assembly**
- 4 Individual Part**
- 7 Exchange Unit (Reman...Red ID plate fixed to part)**

Cummins Information	OE Part Number	Model	CFM	Bore Size	Additional Information
911 154 502 2	3936808	75mm		75mm	
	3969102				36 Tooth Gear
911 154 502 0	3936808				11 tooth spline
	3976366				
	3966517				
911 154 502 7	3936808RX				
911 154 515 0	4946294				
911 154 515 7	4946294RX				
911 154 510 7	3976354RX			75MM	11 tooth spline.
	4946291RX				
911 154 510 0	3976354				
	4946291				
911 153 003 0	3949098			85mm	
	3966520				11 tooth spline
911 153 003 7					
911 153 011 0	3969114				
911 153 011 7					42 Tooth Gear
					13 Tooth Spline
911 154 513 0	3976362			75mm	
	4946293				
	3969098				
911 154 513 7	3976362RX				36 Tooth Gear
911 154 650 6	4946293				
906 130 14 15	412 352 002 0				34 Tooth Gear
911 153 520 0	3558163	SS3 18	18.7	85mm	
	4059825				
911 153 520 7					
911 153 510 0	3681904	SS3 18	18.7	85mm	
	3681902				38 Tooth Gear
	3103413				11 Tooth Spline
	4952758				
911 153 510 7					

Cummins Information	OE Part Number	Model	CFM	Bore Size	Additional Information
911 154 500 0	3944460	SS 250	15.2	75mm	
	3948842				
	3976362				
911 154 500 7					
911 153 530 0	3944524	SS 318	18.7	85mm	
	3944526				
	3944525				
	3966522				42 Tooth Gear
	3948846				Can be 11 or 13 tooth spline...13 tooth is standard.
	4933783				
	4933782				9111539202X REMAN HEAD
911 153 530 7					
911 153 533 7					36 Tooth gear 30mm gear bolt
	4933780				
911 153 004 7					
911 153 010 7	3969110RX			85mm	Rear Spline 11T Right Hand
911 153 010 0	3696110				
	911 153 938 0				
911 515 008 7	3103414RX	SS 636			
911 515 008 0					
911 154 001 0	3949096			75mm	
					36 tooth gear (diagonal teeth)
911 154 001 7					Top oil feed.
411 145 003 7					
411 145 005 0					
411 145 005 7					
911 154 511 0	884 596 030 0				
					11 tooth spline

Cummins Information	OE Part Number	Model	CFM	Bore Size	Additional Information
911 154 516 0					11 tooth spline
911 154 503 0					
911 153 013 0	4933745				
911 153 013 7					
911 154 509 0				75mm	
911 153 547 7	4946299				
	494629900				
	4946299RX				
	494629900RX				
	370563613				
911 153 531 0	3948849X			85mm	
	3948849				
911 154 520 0	4946290			75mm	
	494629000				
911 153 014 0	4933559			85mm	Intake is turned toward the drive end of the compressor (front flange)
911 153 014 7	493355900				11 Tooth Spline

**WABCO™
SYSTEM SAVER 318™
MACK E-TECH™ & ASET™
ENGINES**

**WABCO™
SYSTEM SAVER 636™
TWIN CYLINDER for
MACK E-TECH™ ENGINES**

MACK E-TECH™ & ASET™ ENGINES

Front of A/C is mounted to engine

2 Versions

- Non Thru Drive
- Thru Drive
Runs accessories (i.e. hydraulic power
Steering pump, etc)
- Single Cylinder

CFM = 18.7

Flange Mount

- Coupling driven
Inlet air, lub & coolant supplied from engine
- Compression is controlled by the Pneumatic
Pressure Signal from the governor
- Pressure Relief Valve

Consists of 2 Sub Assemblies

- 1)Cylinder Head
Mounts to Crankcase
2 Water Ports, Inlet, Discharge &
Unloader Valving, Integral Relief Valve
- 2)CrankCase
Contains: Cylinder Block, Crankshaft,
Piston & Bearings, Governor Port &
Connecting Rod

**Can Remove Cylinder Head without removing
Whole Air Compressor

**Use Compressor Mounting Gasket #590GB2159
if you are replacing the whole air compressor,
instead of just the cylinder head

Cylinder Head

- 4 Retention Bolts
- 1 Sliding Leaf Valve

MACK E-TECH™ & ASET™ ENGINES

Front of A/C is mounted to engine

1 Version

- Non Thru Drive
Does not have the hookup for any accessories
(i.e. power steering pump, etc)
- Twin Cylinders

CFM = 37.4

Flange Mount

- Coupling Driven
Inlet Air, Coolant, & Lube supplied from
Engine
- Compression is controlled by the Pneumatic
Pressure Signal from the governor
- Integrated Pressure Relief Valve

Consists of 2 Sub Assemblies

- 1)Cylinder Head
Mounts to Crankcase, 2 Water Ports, 1
Inlet port (Inlet port for hose connection),
Inlet, Discharge & Unloader Valving, and
Integral Relief Valve
- 2)Crankcase
Contains: Governor Port & Connecting
Rods, Cylinder Block, Piston, Bearings &
Crankshaft

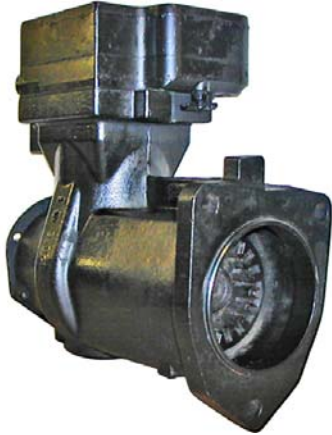
**Can remove Cylinder Head without removing
Whole Air Compressor

**Use Compressor Mounting Gasket #590GB2159 if
you are replacing the whole air compressor, instead of
just the cylinder head

Cylinder Head

- 6 Retention Bolts
- 2 Sliding Leaf Valves

WABCO™ MACK E-TECH™ AND ASET™ ENGINES



Front View Extended Flange with Gear Mounts to Engine	
Models Shown SS318	CFM 18.7
Size 85MM	11 Tooth Spline (thru drive only)



Without Plate



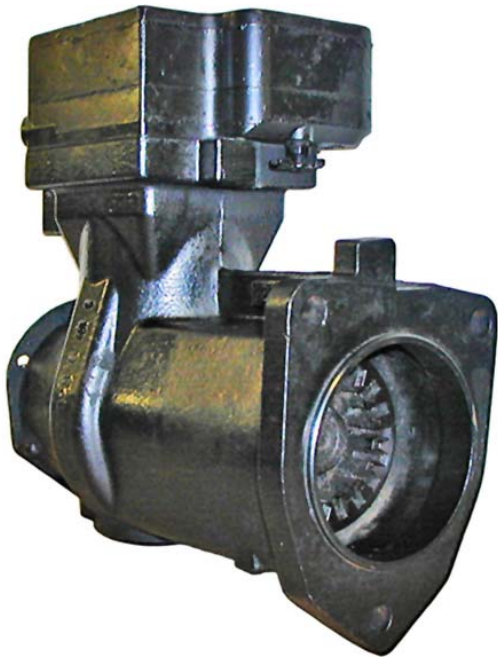
With Plate



9111535400X 9111530557X 9111530550X Thru-Drive (spline shown)
--

9111535410X 9111530567X 9111530560X Non Thru-Drive (solid rear crankcase)
Back View

**911535400X
THRU-DRIVE**



THRU-DRIVE
(for power steering
pump, etc)

**MACK
THRU DRIVE
SS318
85MM
18.7 CFM**

**EXTENDED FLANGE
W/GEAR**

11 TOOTH SPLINE

**OEM #
303GB5129M**

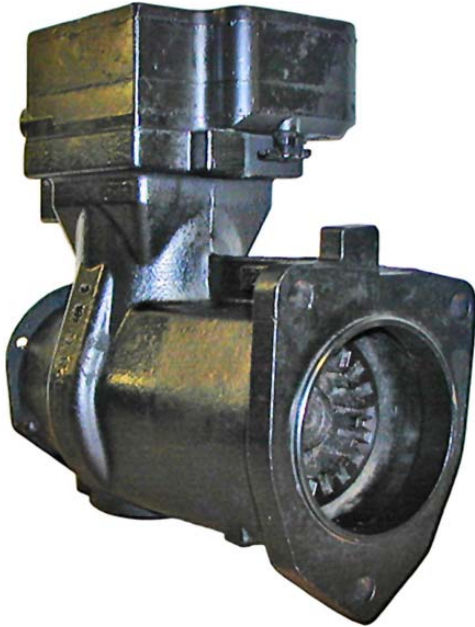
**USES HEAD
#9111539312**

EXCHANGE #'S

**911535400X
911535407X
911530550X
911530557X**

THRU-DRIVE
***With Removable rear plate can be
used to replace Non Thru Drive.***

9111535410X
NON THRU-DRIVE



NON
THRU-DRIVE

MACK
NON THRU-DRIVE
SS318
85MM
18.7 CFM

EXTENDED FLANGE
W/GEAR

SAME AS
9111535400X
***EXCEPT* NO THRU**
DRIVE

USES HEAD
#9111539312

EXCHANGE #

9111535410X
9111535417X
9111530560X
9111530567X
9111530550X
9111530557X

Can be Replaced by the
9111535400X Thru-Drive
(rear plate attached)

9115150080X



MACK ASET™

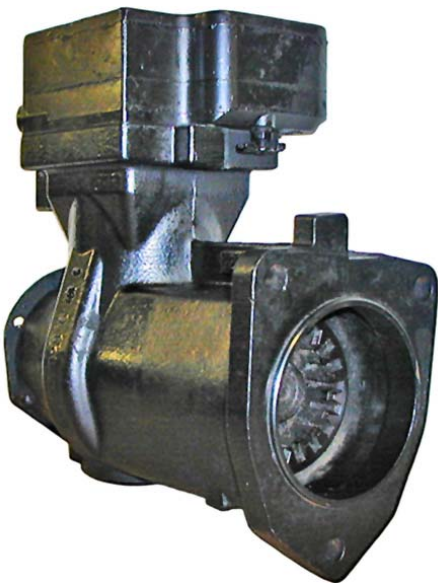
TWIN CYLINDER

EXCHANGE #

9115150080X

9115150087X

9111530567X



MACK ASET™

85MM

18.7CFM

EXCHANGE #

9111530567X

9111530560X

9111535410X

9111535417X

MACK Information	OE Part Number	CFM	Application	Bore Size	Additional Information
911 153 540 0	303GB5129M	18.7	Mack	85mm	
S 911 153 540 0	303GB5129M				
911 153 540 7	303GB5129M				Head Kit
					Part Number 85MMHEADKIT
911 153 541 0	303GB5129M2				
					can be replaced by the 911 153 540 0 through drive with removable rear plate
911 153 541 7					
Crosses to:					
911 153 056 0					
911 153 056 7					
Can Replace With:					
911 153 055 0					
911 153 055 7					
S911 153 055 0	303GB5129AM	18.7	Mack ASET	85mm	
	303GB4225T2				
911 153 055 0	303GB5129AM				Thru Drive With Removeable rear plate can be used to replace non thru drive 911 153 541 0
	303GB4225T2				
S911 153 055 7	303GB5129AM				
	303GB4225T2				
911 153 055 7	303GB5129AM				
	303GB4225T2				
S911 153 540 0	303GB5129AM2				
911 153 540 0	303GB5129AM2				
S911 153 540 7	303GB5129AM2				
911 153 540 7	303GB5129AM2				
911 153 056 0	303GB4225T2	18.7	Mack ASET	85mm	
S911 153 056 0	303GB4225T2				
911 153 056 7	303GB4225T2				
S911 153 056 7	303GB4225T2				
Crosses to:					
911 153 541 0					
911 153 541 7					
Can Replace With:					
911 153 055 0					
911 153 055 7					

MACK Information	OE Part Number	CFM	Application	Bore Size	Additional Information
911 515 008 0			Mack ASET		Twin Cylinder
S911 515 008 0					
911 515 008 7					
S911 515 008 7					
912 142 000 0			Mack HDEP		
S912 142 000 0					
912 142 000 7					
S912 142 000 7					
912 542 001 0	2D774376		Mack HDEP		
S912 542 001 0					Twin Cylinder
912 542 001 7					2 press in inspection caps bottom,
S912 542 001 7					1 inspection cap rear.
Replacement:	912 512 926 2				

VOLVO INFORMATION	OE Part Number	Application	Additional Information
412 704 008 0	20701801	Volvo D12	Twin Cylinder
S412 704 008 0			
412 704 008 7	85000396		
S412 704 008 7			
412 704 008 0			
Replacement for 412 704 001 0			
912 112 000 0		Volvo HDEP	
S912 112 000 0			
912 112 000 7			
S912 112 000 7			
912 512 004 0			Twin Cylinder
S912 512 004 0			
912 512 004 7			
S912 512 004 7			
911 505 150 0	1626060		
911 505 150 7			



**VOLVO
APPLICATION**

**PART#
912112000
912112007X**



WABCO®
Air Compressor
Parts & Information

Bepco, Inc
2475 S Stratford Road
Winston Salem, NC 27103
800-735-1154 fax 336-768-3756