

Dodge® Heavy Duty Gearing: Breathers

A breather is an essential component of a gearbox. If a breather is not installed, pressure can build up and cause oil to leak by one or more seals from the gearbox. Oil loss from the reducer can increase heat generation, lead to more wear of internal components, and ultimately gearbox failure.

A typical breather prevents this pressure from building by allowing hot air to escape and fresh, cooler air to come in. The quality of the air going into the gearbox can be completely different depending on the environment the gear box is used in. Dodge sells various types of breathers that are used in its heavy-duty gearbox applications. Please see the various types of breathers and the gearbox type/size they go to from the below information.

Standard Filter Breather (Torque Arm Family)

(Inside/Moderate Outdoor Environments)

The standard filter breather for all Torque Arm Family of gearboxes provides protection in more moderate environments. The felt filter inside the breather will capture mainly larger particulates from the air. This unit is the normal breather that is installed at the factory for Torque Arm family gearboxes.

Gearbox Sizes	Breather P/N
TXT 1-4 TA0107-TA3203 MTA 2-3	900287
TXT 5-10 TA4207-TA12608 MTA 4-12	904287
TXT 12 TDT 13-15	271040



Standard Breather (Maxum XTR and MagnaGear XTR)

(Inside/Moderate Outdoor Environments)

The standard breather provided for Maxum XTR and MagnaGear XTR gives adequate protection in moderate environments. The breather consists of internal splash guard baffles that prevent oil loss while letting the gearbox breathe into the atmosphere. The Maxum XTR breather contains the cap with splash guard whereas the MagnaGear XTR also contains the built-in dipstick. This unit is the normal breather that is included from factory for Maxum XTR and MagnaGear XTR gearboxes.

Gearbox Sizes	Breather P/N
Maxum XTR CR50-CR130	269585
MagnaGear XTR G100-G285	453300*
MagnaGear XTR G390-G920	454329*



*Note: the dipstick is cut to a specific length for each gearbox from the manufacturing facility



40 Micron Filter Breather:

(Inside/Moderate Outdoor Environments)

For those wanting a little more protection, the next breather that is supplied is the 40 micron filter breather. This breather uses a ceramic filter inside to capture smaller particulates than the standard breather.

Gearbox Sizes	Breather P/N
TXT 1-4 TA0107-TA3203 MTA2-3	430048
TXT 5-12 TDT 13-15 TA4207-TA12608 MTA 4-12	
Maxum XTR CR50-CR130	430049
MagnaGear XTR G100-G920	



Hydra-Lock Desiccant Breather:



(Harsh and Humid Environments)

The Hydra-Lock desiccant breather is used for harsher and more humid surroundings than the standard or 40-micron breathers. The silica gel desiccant in this breather turns from blue to pink when the unit has absorbed its maximum capacity of water from the air. This visual cue alerts maintenance personnel that it is time to change the breather out. This breather also features filtration down to 3 microns for maximum protection. They can also be used for washdown applications and even installed on gearboxes kept in long term storage. More information on this breather can be found in our Dodge literature library at https://dodgeindustrial.com/document-library/

Gearbox Sizes	Breather P/N
TXT 1-4 TA0107-TA3203 MTA 2-3	964372
TXT 5-9 TA4207-TA9415 MTA 4-9	964364
Maxum XTR CR50-CR80	
TXT 10-12 TDT13-15 TA10507-TA12608	
MTA 10-12 Maxum XTR CR90-CR130	964366
MagnaGear XTR G100-G390	
MagnaGear XTR G525-G920	964368





DODGE

OPTIFY Breather

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OPTIFY™ Breather:

(Harsh and Humid Environments with OPTIFY technology)

The OPTIFY Breather is the next generation of desiccant breather, allowing the user to tap into the power of OPTIFY condition monitoring platform to remotely monitor breather status - enhancing gearbox reliability and streamlining maintenance. Within OPTIFY, the breather life, airflow, temperature, rate of saturation, battery life and saturation direction can all be viewed to efficiently monitor plant-wide gearbox health. More information on this breather can be found in our Dodge literature library at https://dodgeindustrial.com/document-library/

Gearbox Sizes	Breather P/N
TXT 1-9 TA0107-TA9415 MTA 2-8	750020 (OB1)
Maxum XTR CR50-CR80	
TXT 10-12 TA10507-TA12608 MTA 9-12	
Maxum XTR CR90-CR130	750021 (OB4)
MagnaGear XTR G100-G920	

Totally Enclosed Chamber Breather:



(Harshest Environments)

The totally enclosed chamber breather is best for extremely high humidity or hot/dusty environments. This breather allows no outside air to enter the gearbox. An elastic diaphragm, enclosed in the breather's steel chamber, expands and contracts with internal pressure changes in the gearbox. This is the highest level of protection from the elements, but it is also the most expensive.

Gearbox Sizes	Breather P/N
TXT 1-10 TA0107-TA9415 *MTA 2-3	240050
TXT 12 TDT13-15 TA10507-TA12608 *MTA 4-12 Maxum XTR CR50-CR130 MagnaGear XTR G100-G920	240051

*Note: This is the recommended breather for any MTA mounted in position D (order kit 472300)

