



# ENGINE

## QUICK REFERENCE GUIDE

**GUÍA DE REFERENCIA  
GUIDE DE RÉFÉRENCE FACILE**

**KEEPS YOU GOING.**



- All work performed to current OEM specifications
- Core credits are processed in a fair and timely manner
- 1 year / Unlimited hours warranty – 90 days on oil leaks
- Industry leading engine packaging for safe and efficient engine transportation
- All technicians are A.S.E. certified

**NOTE:** Reman engines are sold as longblocks (valve cover to oil pan) no accessories unless otherwise noted. The contents remaining in the overhaul gasket set are shipped with the engine.

- Todo trabajo es realizado a las especificaciones actuales del fabricante original
- El crédito por el casco es procesado de una manera justa y eficiente
- Garantía de 1 año / ilimitado horas – 90 días para fugas de aceite
- Empaquetamiento de motor líder en la industria para el transporte seguro y eficiente de motores
- Todos los técnicos están certificados en A.S.E.

**NOTA:** Motores reconstruidos se venden como bloques largos (cubierta de válvula y receptáculo de aceite). Los accesorios no vienen incluidos a menos que se indique lo contrario. El resto del contenido del conjunto de juntas que sobran durante la revisión se envía junto con el motor.

- Tout le travail est fait selon les spécifications actuelles du fabricant d'origine
- Les crédits de base sont traités de façon équitable et efficace
- 1an/ Illimité heures de garantie - 90 jours pour les fuites d'huiles
- Leader dans l'industrie pour le conditionnement des moteurs, pour un transport sécuritaire et efficace
- Tous les techniciens sont certifiés A.S.E.

**REMARQUE:** Les moteurs d'occasions remanufacturés sont vendus comme les longblocks (cache-soupape à carter d'huile). Pas d'accessoires inclus, sauf indication contraire. Le reste du contenu dans le kit de joints est livré avec le moteur.

**FORD**

	Part #	Description
	FDVSG411-R	Ford: VSG411I Non-distributor style
	FDVSG413-R	Ford: VSG413I Non-distributor style

	Part #	Description
	FDLRG423-R	Ford: LRG423R
	FDLRG425-R	Ford: LRG425R

**GM**

	Part #	Description
	GM153-R	GM: 153
	GM181-1-R	GM: 181 (1 Piece - rear) GM181-1R
	GM181-2-R	GM: 181 (2 Piece) Two piece rear main seal
	GM181-R	GM: 181 (1 Piece - front) Front sump oil pan
	GM181-TOY-R	GM: 181 Toyota Toyota spec - uses crank bolt
	GM2.2-R	GM: 2.2 Used by Hyster & Yale
	GM250-R	GM: 250

	Part #	Description
	GM4.3NB-R	GM: 4.3 V6 Old Style Steel valve covers, steel timing cover, steel oil pan, no intake manifold
	GM4.3A-R	GM: 4.3 V6 Vortec Plastic valve covers, aluminum front cover with crank sensor
	GM4.3-TOY-R	GM: 4.3 V6 Toyota Plastic valve covers, plastic front cover w/out crank sensor, aluminum oil pan
	GM4.3EV-R	GM: 4.3 V6 Early Style Plastic valve cover, 6 bolt intake manifold, tin oil pan
	GM4.3-R	GM: 4.3 V6 Vortec Plastic valve covers, plastic front cover w/out crank sensor
	GM4.3S-R	GM: 4.3 V6 Vortec Plastic valve covers, plastic front cover with crank sensor
	GM4.3A-TOY-R	GM: 4.3 V6 Toyota Plastic valve covers, aluminum front covers with crank sensor

**HERCULES**

	Part #	Description
	HE1404-HER-R	Hercules: G1600 Includes Komatsu spec front cover
	HE1404-R	Caterpillar: 1404 Includes Caterpillar spec front cover

**MAZDA**

	Part #	Description
	MZD5-R	Mazda: D5
	MZF2SAL-R	Mazda: F2SA 2.2 (Long Nose) Long crankshaft nose - hyd pump runs off of front pulley, includes water pump
	MZF2SA-R	Mazda: F2SA 2.2 (Short Nose) Short crankshaft nose - hyd pump runs off of transmission, includes water pump
	MZF2SM-R	Mazda: F2SM Timing chain style - TCM spec

	Part #	Description
	MZFEL-R	Mazda: FE-LN 2.0 (Long Nose) Long keyed crankshaft nose, includes water pump
	MZFEP-R	Mazda: FE 2.0 (Pin Type) Pin type crankshaft nose, includes water pump
	MZFES-1-R	Mazda: FE 2.0 (Short Nose) Short keyed crankshaft nose, includes water pump, fits Hyster FT and Yale VX trucks
	MZFES-R	Mazda: FE 2.0 (Short Nose) Short keyed crankshaft nose, includes water pump
	MZUAPTO-R	Mazda: UA-PTO PTO style front cover
	MZVA1-R	Mazda: VA-PTO PTO style front cover

**MITSUBISHI**

	Part #	Description
	MB4G32-R	Mitsubishi: 4G32 Includes water pump
	MB4G33-R	Mitsubishi: 4G33 Includes water pump
	MB4G52-R	Mitsubishi: 4G52
	MB4G54B-R	Mitsubishi: 4G54 Balanced Clark spec - hump on the side of the engine block for balance shaft

	Part #	Description
	MB4G54-R	Mitsubishi: 4G54 Non-balanced version
	MB4G63B-R	Mitsubishi: 4G63 Balanced Clark/Doosan/Hyundai spec balanced; includes water pump
	MB4G64B-R	Mitsubishi: 4G64 Balanced Clark/Doosan/Hyundai spec balanced; includes water pump

Part #	Description	Part #	Description
	<b>MB4G63NB-R</b> Mitsubishi: 4G63 Caterpillar/ Mitsubishi spec - non-balanced Includes water pump		<b>MBS4S-R</b> Mitsubishi: S4S Includes complete fuel system
	<b>MB4G64NB-R</b> Mitsubishi: 4G64 Caterpillar/ Mitsubishi spec - non-balanced Includes water pump		<b>MBS6S-R</b> Mitsubishi: S6S Includes complete fuel system
	<b>MB6G72-R</b> Mitsubishi: 6G72 Includes water pump No intake manifold		<b>MBS6ST-R</b> Mitsubishi: S6S Turbo Includes complete fuel system

**NISSAN**

Part #	Description	Part #	Description
	<b>NIA15-R</b> Nissan: A15 TCM spec front cover		<b>NIH20S-R</b> Nissan: H20 Two bolt t-stat. Ships without front cover assy, front cover gaskets supplied
	<b>NIH20-3-R</b> Nissan: H20 Three bolt t-stat. Ships without front cover assy, front cover gaskets supplied		<b>NIJ15-R</b> Nissan: J15 Center motor mount version only, includes front cover
	<b>NIH20-II-R</b> Nissan: H20-II Ships without front cover assy, front cover gaskets supplied		<b>NIK21-R</b> Nissan: K21 Includes PTO style front cover
	<b>NIH25-R</b> Nissan: H25 Ships without front cover assy, front cover gaskets supplied		<b>NIK25-R</b> Nissan: K25 Includes PTO style front cover
	<b>NIH20K-R</b> Nissan: H20-K Two bolt t-stat. Oil filter screws directly onto engine block, ships without front cover, front cover gaskets supplied		<b>NIP40-R</b> Nissan: P40 Ships without front cover assy, front cover gaskets supplied

**NISSAN**

Part #	Description	Part #	Description
 NITB42-43-R	Nissan: TB42 43mm crank nose	 NITB45-R	Nissan: TB45E
NITB42-R	Nissan: TB42 35mm crank nose		

**PEUGOUT**

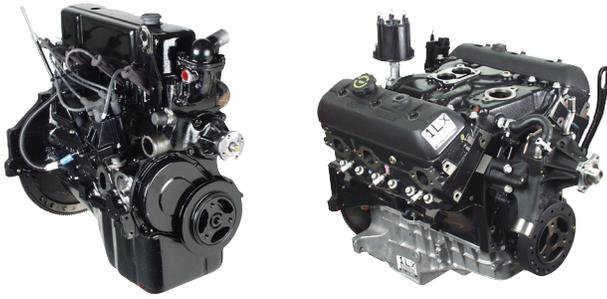
Part #	Description
 PGXN1P-R	Peugout: XNIP

**TOYOTA**

Part #	Description
 TY4Y-R	Toyota: 4Y Ships without front cover assy, front cover gaskets supplied

**ADDITIONAL ENGINES AVAILABLE** LOS MOTORES DISPONIBLES ADICIONALES D'AUTRES MOTEURS DISPONIBLES

Part #	Description	Part #	Description	Part #	Description
CNF163-R	Continental: F163	MZVA2-R	Mazda: VA	TY13Z-R	Toyota: 13Z diesel
CNF227-R	Continental: F227	NIH30-R	Nissan: H30 Ships without front cover assy, front cover gaskets supplied	TY1DZ-2-R	Toyota: 1DZ-II diesel
FD172-R	Ford: 172G	PK1004.42-R	Perkins: 1004.42 diesel	TY1DZ-R	Toyota: 1DZ diesel
FD300-R	Ford: 300	PK1004-R	Perkins: 1004 diesel	TY1Z-R	Toyota: 1Z diesel
GM1.6-R	GM: 1.6	PK1006-R	Perkins: 1006 diesel	TY2F-R	Toyota: 2F
GM2.4-R	GM: 2.4	PK1104-R	Perkins: 1104	TY3F-R	Toyota: 3F
HE1404-LV-R	Hercules: G1600 Daewoo (LG) Daewoo spec front cover - large valve cylinder head	PK4.236DB-R	Perkins: 4.236 diesel balanced	TY4P-LATE-R	Toyota: 4P
HE1404-SV-R	Hercules: G1600 Daewoo (SM) Daewoo spec front cover - small valve cylinder head	PK4.236D-R	Perkins: 4.236 diesel	TY4P-R	Toyota: 4P
KBDF750-R	Kubota: 750	PK4.236GB-R	Perkins: 4.236 gas balanced	TY5R-1-R	Toyota: 5R-late Engine serial # 1602811 and up
MBS4E-R	Mitsubishi: S4E	PK4.236G-R	Perkins: 4.236 gas	TY5RC-R	Toyota: 5R
MBS6E-R	Mitsubishi: S6E Includes complete fuel system	PK4.248D-R	Perkins: 4.248 diesel	TY5R-R	Toyota: 5R-early
MBS6ER-2-R	Mitsubishi: S6E-2 Includes complete fuel system	PK6.354-R	Perkins: 6.354 diesel	WKD155-R	Waukesha: D155G
MZUA-R	Mazda: UA	TY11Z-R	Toyota: 11Z diesel	WKD176-R	Waukesha: D176G



- Designed to work with gasoline, liquid propane gas and natural gas
- Common rear face on most GM Powertrain industrial engines for easy hookup with housing
- Dynamically balanced at hot test

- Diseñados para que funcionen con gasolina, gas propano en liquido y gas natural
- La cara posterior es común en la mayoría de motores industriales, GM powertrain para facilitar su conexión
- Equilibrado dinámicamente en la prueba de manejo

- Conçu pour fonctionner à l'essence, au propane et au gaz naturel
- La face arrière est commune à la plupart des moteurs industriels GM Powertrain afin de faciliter le raccordement
- Equilibre dynamique lors des tests

Part #	Description
GM3.0L	New 3.0L
GM3.0L-TOYOTA	New Toyota
GM4.3L	New
GM4.3LLT	New 4.3L - LPG

Part #	Description
GM4.3LLT-TOYOTA	New Toyota
GM4.3L	New 4.3L
GM5.7LAH	New GM 5.7L



- New engine
- Complete long block with gasket kit
- 1 year warranty

- Nuevo Motor
- Motor completo con el kit de empaquetaduras
- 1 Año de garantía

- Nouveau Moteur
- Moteur complet avec kit des joints
- Garantie d'un an

Part #	Description
TY4Y-NEW	New

<b>Part #</b>	<b>Application</b>	<b>Part #</b>	<b>Application</b>
SY74958	Bare 2.0L	SY74966	Complete 2.0L
			
SY74948	Bare 4G54	SY937509	Complete 2.4L
			
SY74952	Bare 4G63	SY74950	Complete 4G54
			
SY74963	Bare 4G64	SY74949	Complete 4G63
			
SY74964	Bare 4G64	SY74965	Complete 4G64
			
SY74961	Bare 4Y	SY74962	Complete 4Y
			
SY74959	Bare K21 & K25	SY937496	Complete K21 & K25
			
SY74955	Bare S4S		
			

Part#	Application	Part#	Application
 SY52798	Continental F163 Cat models T30-60B & V30-35B with Presto- lite Distributor	 SY86129	Continental F226 & F245 Crab style, cap & rotor
 SY86128	Continental F226 & F227	 SY43721	Continental F227 Cat models T60-120C & V40-60B
 SY302051	Continental F226 & F227	 SY1223183	Continental F227
 SY302350	Continental F226 & F227	 SY31258	Ford 4-172 & 4-192 Hyster models H30- 60H (D003 series)
 SY331056	Continental F226 & F227	 SY302019	Ford 4-172 & 4-192
 SY332042	Continental F226 & F227	 SY32195	GM2.2L
 SY331002	Continental F226 & F227	 SY1223031	GM 2.4L LPG

**IGNITION KITS KITS DEL ENCEDEDOR KITS D'ALLUMAGE**

Part#	Application	Part#	Application
SY1223032	GM 2.4L LPG	SY31264	GM 3.0L 4-cyl. 4-181 Hyster models H45-65XM (D177, H177 & K177 series)
SY1223050	GM 2.4L LPG	SY31437	GM 3.0L 4-cyl. 4-181 Hyster models S40-60XL (C187 series), major kit
SY31438	GM 2.5L 4-cyl. 4-153 Hyster models S40-60XL (A187 series)	SY35418	GM4.3L
SY1223160	GM 2.5L 4-cyl. 4-153 SY1223180	SY35419	GM 4.3L
SY1223180	GM 3.0L	SY47103	GM 4.3L Hyster models H70-155XL (G005 & F006) & S70-155XL (D004 & B024). Engine year 1992, 1996 & 1995
SY1223182	GM 3.0L Hyster models S40-60XL (C187 series), minor kit	SY72049	GM 4.3L
SY1223205	GM 3.0L	SY1223021	GM 4.3L

Part#	Application	Part#	Application
 SY1223156	GM 4.3L	 SY1223019	GM 4.3L Gas & LPG
 SY1223157	GM 4.3L	 SY1223020	GM 4.3L Gas & LPG
 SY1223159	GM 4.3L	 SY47104	GM 4.3L Late Hyster models S100-155XL(S) (B024 & D004 series). Engine year 1994 & 1996-2000
 SY1223186	GM 4.3L Hyster models H70-110XL(S) (G005 series), major kit	 SY1223284	GM 4.3L LPG
 SY1244326	GM 4.3L	 SY1223184	GM6.0L - 250
 SYGM4.3TUKIT	GM 4.3L Early	 SY1223161	Hercules G1600
 SY1223022	GM 4.3L Gas	 SY1223026	Mazda 2.0/2.2L Gas

**IGNITION KITS KITS DEL ENCEDEDOR KITS D'ALLUMAGE**

Part#	Application	Part#	Application
 <p>SY1223027</p>	Mazda 2.0/2.2L LPG	 <p>SY82143</p>	Mazda FE
 <p>SY1223028</p>	Mazda 2.0/2.2L LPG	 <p>SY31435</p>	Mazda M4 - 121
 <p>SY1223030</p>	Mazda 2.0/2.2L LPG	 <p>SY31436</p>	Mazda M4 - 121 Hyster models S40-60XL (series C187) with high energy ignition system
 <p>SY1223207</p>	Mazda 2.0/2.2L LPG	 <p>SY32188</p>	Mazda M4 - 121 Hyster models H25-35XL (series C001) & S25-60XL (series B010 & A187)
 <p>SY23643</p>	Mazda D5	 <p>SY1223181</p>	Mazda M4 - 121G Hyster models S40-60XL (series A187)
 <p>SY23644</p>	Mazda F2 & FE	 <p>SY32683</p>	Mazda UA
 <p>SY31263</p>	Mazda FE	 <p>SY1223158</p>	Mazda UA/VA

Part#	Application	Part#	Application
 SY1223175	Mazda UA/VA	 SY94241	Mitsubishi 4G63/4G64
 SY303013	Mazda VA	 SY1223172	Mitsubishi 4G63/4G64
 SY1223168	Mitsubishi 4G33	 SY1223193	Mitsubishi 4G63/4G64 S
 SY1223169	Mitsubishi 4G52/4G54	 SY1223194	Mitsubishi 4G63/4G64
 SY1223196	Mitsubishi 4G52/4G54	 SY1244323	Mitsubishi 4G63/4G64
 SY1223195	Mitsubishi 4G52/4G54 E	 SY1244328	Mitsubishi 4G63/4G64
 SY304000	Mitsubishi 4G54	 SY1244329	Mitsubishi 4G63/4G64

**IGNITION KITS KITS DEL ENCEDEDOR KITS D'ALLUMAGE**

Part#	Application	Part#	Application
SY86130	Nissan A12, H20, D11 & J15	SY1223177	Nissan H20 II
SY1223189	Nissan A15 & H20	SY1223191	Nissan H20 II
SY22100-TUKIT	Nissan A15, H20 & Z24	SY47912	Nissan H20, J15 & D11
SY1223163	Nissan H20	SY1223166	Nissan J15
SY1223170	Nissan H20	SY1244331	Nissan J15
SY1223188	Nissan H20	SY1223167	Nissan J15 & A15
SY1223192	Nissan H20	SY1223190	Nissan Z24

Part#	Application	Part#	Application
SY86132	Toyota 4P	SY86131	Toyota 5K
SY1223164	Toyota 4P	SY1223206	Toyota 5K
SY82334	Toyota 4Y	SY86133	Toyota 5P
SY86803	Toyota 4Y	SY86134	Toyota 5R
SY1223162	Toyota 4Y	SY1223165	Toyota 5R
SY1223174	Toyota 4Y	SY302362	Waukesha D155

**OVERHAUL KITS** KITS DE RECONSTRUCCIÓN KITS DE RÉVISION

Manufacturer	Engine	Major Overhaul Kit	Minor Overhaul Kit
Continental	F163	SY74905	SY74874
	F227	SY74906	SY74875
	F245	SY74907	SY74876
GM	3.0L 181	SY74909	SY74878
	4.3L 262	SY74910	SY74879
Hercules/Caterpillar	1404	SY74911	SY74880
Isuzu	C240	SY74912	SY74881
Mazda	F2	SY74919	SY74888
	FE	SY74920	SY74889
Mitsubishi	4G32	SY74913	SY74882
	4G33	SY74914	SY74883
	4G52	SY74915	SY74884
	4G54	SY74916	SY74885
	4G63	SY74917	SY74886
4G64	SY74918	SY74887	

Manufacturer	Engine	Major Overhaul Kit	Minor Overhaul Kit
Nissan	H20	SY74925	SY74894
	H20-II	SY74924	SY74893
	H25	SY74926	SY74895
	H30	SY74927	SY74896
	K21	SY937511	SY937510
	K25	SY937513	SY937512
	4.236 Gas	SY74930	SY74899
Peugeot	XN1P	SY74929	SY74936
Toyota	4P	SY74931	SY74900
	4Y	SY74932	SY74901
	5R	SY74933	SY74902
Waukesha	D155	SY74934	SY74903
	D176	SY74935	SY74904

**CHEMICALS** QUÍMICOS PRODUITS CHIMIQUES

Part #	Size	Description	Part #	Size	Description	Part #	Size	Description
SY35857	32oz / 946ml	5W30 Full Synthetic Quart Motor Oil 12 per case, 1176 per skid American Petroleum Institute Certified	SY4152H	32oz / 946ml	Champion 15W40 Heavy Duty Motor Oil	SY4232N	1gal / 3.78L	Champion 10W30 Synthetic Blend Motor Oil
SY35858	32oz / 946ml	10W30 Full Synthetic Quart Motor Oil 12 per case, 1176 per skid American Petroleum Institute Certified	SY4152N	1gal / 3.78L	Champion 15W40 Heavy Duty Motor Oil	SY4116F	1gal / 3.78L	Champion Universal Antifreeze and Coolant - Prediluted Do not water, protects against rust, corrosion and premature water pump failure
SY4033H	32oz / 946ml	Champion SAE 30 Heavy Duty Motor Oil	SY4232H	32oz / 946ml	Champion 10W30 Synthetic Blend Motor Oil	SY4119F	1gal / 3.78L	Champion 50/50 Antifreeze and Coolant Concentrated blend of premium long-lasting inhibitors, may be added to any color antifreeze or coolant

**OIL PANS** CAJAS DE RETENCIÓN BIDONS D'HUILE


**Part #** SYBZ05070  
**Description** 7.5qt / 7.125L  
14.75" x 14.50" x 3.75" Round



**Part #** SYBZ11838  
**Description** 15qt / 14.250L  
24.00" x 18.00" x 6.75"



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