

Engine Specifications	EH12-2	EH17-2	EH18V	EH25-2	EH30	EH34	EH36	EH41	EH63	EH64	EH65	EH63V	EH65V	EY15	EY15V	EY20	EY20V	EY28	EY35	EY40	
Cylinder (Inside Diameter)	60-60.019mm 2.3622-2.3630in	67-67.019mm 2.6378-2.6385in	67.000-67.019mm 2.6378-2.6385in	75-75.019mm 2.9528-2.9535in	78.000-78.019mm 3.071-3.072in	84.000-84.022mm 3.307-3.308in	89.000-89.022mm 3.504-3.505in	89.000-89.022mm 3.504-3.505in	80.000-80.019mm 3.1496-3.1504in	80.000-80.019mm 3.1496-3.1504in	80.000-80.019mm 3.1496-3.1504in	80.000-80.019mm 3.1496-3.1504in	80.000-80.019mm 3.1496-3.1504in	63-63.019mm 2.4803-2.4811in	63-63.019mm 2.4803-2.4811in	67-67.019mm 2.6378-2.6385in	67-67.019mm 2.6378-2.6385in	75-75.019mm 2.9528-2.9535in	78.000-78.019mm 3.071-3.072in	84.000-84.019mm 3.3071-3.3078in	
Piston Size (At Skirt In Thrust Direction)	59.96-59.98mm 2.3606-2.3614in	66.98-67.00mm 2.6370-2.6378in	66.96-66.98mm 2.6362-2.6370in	74.98-75.00mm 2.9520-2.9528in	77.96-77.98mm 3.069-3.070in	83.96-83.98mm 3.305-3.306in	88.96-88.98mm 3.502-3.503in	88.96-88.98mm 3.502-3.503in	79.968-79.988mm 3.148-3.149in	79.968-79.988mm 3.148-3.149in	79.968-79.988mm 3.148-3.149in	79.968-79.988mm 3.148-3.149in	79.968-79.988mm 3.148-3.149in	62.96-62.98mm 2.4787-2.4795in	62.96-62.98mm 2.4787-2.4795in	66.96-66.98mm 2.6362-2.6370in	66.96-66.98mm 2.6362-2.6370in	74.96-74.98mm 2.9512-2.9520in	77.911-77.951mm 3.0674-3.0689in	83.911-83.951mm 3.3036-3.3052in	
Limit for Piston Size (At Skirt In Thrust Direction)	59.87mm 2.3571in	66.89mm 2.6335in	66.87mm 2.6327in	74.89mm 2.9484in	77.87mm 3.066in	83.87mm 3.302in	88.87mm 3.499in	88.87mm 3.499in	79.878mm 3.145in	79.878mm 3.145in	79.878mm 3.145in	79.878mm 3.145in	79.878mm 3.145in	62.88mm 2.4755in	62.88mm 2.4755in	66.88mm 2.6331in	66.88mm 2.6331in	74.88mm 2.9480in	77.851mm 3.0650in	83.851mm 3.3012in	
Piston Ring Groove Side Clearance																					
Top Ring	.030-.075mm .0012-.0030in	.035-.080mm .0014-.0031in	.050-.095mm .0019-.0037in	.050-.090mm .002-.0035in	.05-.09mm .002-.0035in	.05-.09mm .002-.0035in	.05-.09mm .002-.0035in	.05-.09mm .002-.0035in	.05-.09mm .002-.0035in	.05-.09mm .002-.0035in	.05-.09mm .002-.0035in	.05-.09mm .002-.0035in	.05-.09mm .002-.0035in	.090-.135mm .0035-.0053in	.090-.135mm .0035-.0053in	.050-.095mm .0020-.0037in	.050-.095mm .0020-.0037in	.050-.090mm .0020-.0035in	.050-.090mm .0020-.0035in	.050-.090mm .0020-.0035in	
Second Ring	.030-.075mm .0012-.0030in	.025-.070mm .0010-.0028in	.040-.085mm .0016-.0030in	.030-.070mm .0012-.0028in	.03-.07mm .0012-.0028in	.03-.07mm .0012-.0028in	.03-.07mm .0012-.0028in	.03-.07mm .0012-.0028in	.03-.07mm .0012-.0028in	.03-.07mm .0012-.0028in	.03-.07mm .0012-.0028in	.03-.07mm .0012-.0028in	.03-.07mm .0012-.0028in	.060-.105mm .0024-.0041in	.060-.105mm .0024-.0041in	.010-.055mm .0004-.0022in	.010-.055mm .0004-.0022in	.010-.065mm .0004-.0026in	.010-.065mm .0004-.0026in	.010-.065mm .0004-.0026in	
Oil Ring	.020-.075mm .0008-.0030in	.010-.065mm .0004-.0026in	0-.035mm 0-.0014in	.010-.065mm .0004-.0026in	.01-.065mm .0004-.0026in	.01-.065mm .0004-.0026in	.045-.140mm .0018-.0055in	.045-.140mm .0018-.0055in	.057-.175mm .0022-.0069in	.057-.175mm .0022-.0069in	.057-.175mm .0022-.0069in	.057-.175mm .0022-.0069in	.057-.175mm .0022-.0069in	.010-.065mm .0004-.0026in	.010-.065mm .0004-.0026in	.010-.065mm .0004-.0026in	.010-.065mm .0004-.0026in	.010-.065mm .0004-.0026in	.030-.085mm .0012-.0033in	.030-.085mm .0012-.0033in	
Limit for Piston Groove Side Clearance	.15mm .006in	.15mm .006in	.16mm .006in	.15mm .006in	.15mm .006in	.15mm .006in	1st, 2nd, 15mm .006in Oil .20mm .0078in	1st, 2nd, 15mm .006in Oil .20mm .0078in	.15mm .006in	.15mm .006in	.15mm .006in	.15mm .006in	.15mm .006in	.15mm .0059in	.15mm .0059in	.15mm .0059in	.15mm .0059in	.15mm .0059in	.15mm .0059in	.15mm .0059in	
Piston Ring End Gap																					
Top Ring	.2-.4mm .008-.016in	.2-.4mm .008-.016in	.05-.25mm .0020-.098in	.1-.3mm .004-.012in	.2-.4mm .0079-.0157in	.2-.4mm .0079-.0157in	.15-.35mm .0059-.0138in	.15-.35mm .0059-.0138in	.2-.4mm .0079-.0157in	.2-.4mm .0079-.0157in	.2-.4mm .0079-.0157in	.2-.4mm .0079-.0157in	.2-.4mm .0079-.0157in	.2-.4mm .0079-.0157in	.2-.4mm .0079-.0157in	.05-.25mm .0020-.098in	.05-.25mm .0020-.098in	.1-.3mm .0039-.0118in	.1-.3mm .0039-.0118in	.1-.3mm .0039-.0118in	
Second Ring	.2-.4mm .008-.016in	.2-.4mm .008-.016in	.05-.25mm .0020-.098in	.1-.3mm .004-.012in	.2-.4mm .0079-.0157in	.2-.4mm .0079-.0157in	.4-.6mm .0157-.0236in	.4-.6mm .0157-.0236in	.2-.4mm .0079-.0157in	.2-.4mm .0079-.0157in	.2-.4mm .0079-.0157in	.2-.4mm .0079-.0157in	.2-.4mm .0079-.0157in	.2-.4mm .0079-.0157in	.2-.4mm .0079-.0157in	.05-.25mm .0020-.098in	.05-.25mm .0020-.098in	.1-.3mm .0039-.0118in	.1-.3mm .0039-.0118in	.1-.3mm .0039-.0118in	
Oil Ring	.2-.4mm .008-.016in	.05-.25mm .002-.010in	.3-.9mm .0118-.0354in	.1-.3mm .004-.012in	0.1-0.3mm .004-.0118in	0.1-0.3mm .004-.0118in	.2-.7mm .0079-.0276in	.2-.7mm .0079-.0276in	.2-.7mm .0079-.0276in	.2-.7mm .0079-.0276in	.2-.7mm .0079-.0276in	.2-.7mm .0079-.0276in	.2-.7mm .0079-.0276in	.2-.4mm .0079-.0157in	.2-.4mm .0079-.0157in	.05-.25mm .0020-.098in	.05-.25mm .0020-.098in	.1-.3mm .0039-.0118in	.2-.9mm .0079-.0354in	.2-.9mm .0079-.0354in	
Limit for Piston Ring End Gap	1.5mm .0591in	1.5mm .0591in	1.5mm .0591in	1.5mm .0591in	1.5mm .0591in	1.5mm .0591in	1.5mm .0591in	1.5mm .0591in	1.5mm .0591in	1.5mm .0591in	1.5mm .0591in	1.5mm .0591in	1.5mm .0591in	1.5mm .0590in	1.5mm .0590in	1.5mm .0590in	1.5mm .0590in	1.5mm .0590in	1.5mm .0590in	1.5mm .0590in	
Connecting Rod (Big End Inside Diameter)	26-26.013mm 1.0236-1.0241in	30-30.016mm 1.1811-1.1817in	26.000-26.013mm 1.0236-1.0241in	34-34.016mm 1.3386-1.3392in	38.000-38.016mm 1.4961-1.4967in	38.000-38.016mm 1.4961-1.4967in	38.000-38.016mm 1.4961-1.4967in	38.000-38.016mm 1.4961-1.4967in	39.000-39.016mm 1.5354-1.5361in	39.000-39.016mm 1.5354-1.5361in	39.000-39.016mm 1.5354-1.5361in	39.000-39.016mm 1.5354-1.5361in	39.000-39.016mm 1.5354-1.5361in	24-24.013mm .9449-.9454in	24-24.013mm .9449-.9454in	26-26.013mm 1.0236-1.0241in	26-26.013mm 1.0236-1.0241in	28-28.013mm 1.1024-1.1029in	34.000-34.016mm 1.3386-1.3392in	34.000-34.016mm 1.3386-1.3392in	
Connecting Rod (Small End Inside Diameter)	13.010-13.021mm .5122-.5126in	16.010-16.021mm .6303-.6308in	14.010-14.021mm .5516-.5520in	18.010-18.021mm .7091-.7095in	21.010-21.023mm .8272-.8277in	21.010-21.023mm .8272-.8277in	21.010-21.023mm .8272-.8277in	21.010-21.023mm .8272-.8277in	21.010-21.023mm .8272-.8277in	21.010-21.023mm .8272-.8277in	21.010-21.023mm .8272-.8277in	21.010-21.023mm .8272-.8277in	21.010-21.023mm .8272-.8277in	14.010-14.021mm .5516-.5520in	14.010-14.021mm .5516-.5520in	14.010-14.021mm .5516-.5520in	14.010-14.021mm .5516-.5520in	16.010-16.021mm .6303-.6307in	20.020-20.033mm .7882-.7887in	20.020-20.033mm .7882-.7887in	
Crankpin Outside Diameter	25.967-25.980mm 1.0223-1.0228in	29.967-29.980mm 1.1798-1.1803in	25.950-25.963mm 1.0217-1.0221in	33.959-33.975mm 1.3370-1.3376in	37.956-37.970mm 1.4943-1.4949in	37.956-37.970mm 1.4943-1.4949in	37.956-37.970mm 1.4943-1.4949in	37.956-37.970mm 1.4943-1.4949in	38.956-38.970mm 1.5337-1.5343in	38.956-38.970mm 1.5337-1.5343in	38.956-38.970mm 1.5337-1.5343in	38.956-38.970mm 1.5337-1.5343in	38.956-38.970mm 1.5337-1.5343in	23.950-23.963mm .9429-.9434in	23.950-23.963mm .9429-.9434in	25.950-25.963mm 1.0216-1.0221in	25.950-25.963mm 1.0216-1.0221in	27.967-27.980mm 1.1010-1.1015in	33.914-33.930mm 1.3352-1.3358in	33.914-33.930mm 1.3352-1.3358in	
Valve Stem Outside Diameter																					
Intake	5.440-5.455mm .2142-.2148in	5.440-5.455mm .2142-.2148in	5.440-5.455mm .2142-.2148in	5.975-5.990mm .2352-.2358in	6.535-6.550mm .2573-.2579in	6.535-6.550mm .2573-.2579in	5.970-5.985mm .2350-.2356in	5.970-5.985mm .2350-.2356in	5.970-5.985mm .2350-.2356in	5.970-5.985mm .2350-.2356in	5.970-5.985mm .2350-.2356in	5.970-5.985mm .2350-.2356in	5.970-5.985mm .2350-.2356in	6.460-6.475mm .2543-.2549in	6.460-6.475mm .2543-.2549in	6.460-6.475mm .2543-.2549in	6.460-6.475mm .2543-.2549in	6.460-6.475mm .2543-.2549in	7.945-7.970mm .3128-.3138in	7.945-7.970mm .3128-.3138in	
Exhaust	5.426-5.444mm .2136-.2143in	5.426-5.444mm .2136-.2143in	5.426-5.444mm .2136-.2143in	5.960-5.975mm .2346-.2352in	6.522-6.544mm .2568-.2576in	6.522-6.544mm .2568-.2576in	5.960-5.975mm .2346-.2352in	5.960-5.975mm .2346-.2352in	5.960-5.975mm .2346-.2352in	5.960-5.975mm .2346-.2352in	5.960-5.975mm .2346-.2352in	5.960-5.975mm .2346-.2352in	5.960-5.975mm .2346-.2352in	6.422-6.444mm .2528-.2537in	6.422-6.444mm .2528-.2537in	6.422-6.444mm .2528-.2537in	6.422-6.444mm .2528-.2537in	6.422-6.444mm .2528-.2537in	7.910-7.930mm .3114-.3122in	7.910-7.930mm .3114-.3122in	
Limit Intake and Exhaust	5.35mm .2106in	5.35mm .2106in	5.35mm .2106in	5.85mm .2303in	6.45mm .2539in	6.45mm .2539in	5.85mm .2303in	5.85mm .2303in	5.85mm .2303in	5.85mm .2303in	5.85mm .2303in	5.85mm .2303in	5.85mm .2303in	6.35mm .25in	6.35mm .25in	6.35mm .25in	6.35mm .25in	6.35mm .25in	7.85mm .309in	7.85mm .309in	
Clearance between valve stem and valve guide																					
Intake	.045-.078mm .0018-.0031in	.045-.078mm .0018-.0031in	.045-.078mm .0018-.0031in	.045-.078mm .0018-.0031in	.050-.087mm .0022-.0034in	.050-.087mm .0022-.0034in	.050-.083mm .0022-.0033in	.050-.083mm .0022-.0033in	.050-.083mm .0022-.0033in	.050-.083mm .0022-.0033in	.050-.083mm .0022-.0033in	.050-.083mm .0022-.0033in	.050-.083mm .0022-.0033in	.025-.062mm .0010-.0024in	.025-.062mm .0010-.0024in	.025-.062mm .0010-.0024in	.025-.062mm .0010-.0024in	.025-.062mm .0010-.0024in	.030-.091mm .0012-.0036in	.030-.091mm .0012-.0036in	
Exhaust	.056-.092mm .0022-.0036in	.056-.092mm .0022-.0036in	.056-.092mm .0022-.0036in	.060-.093mm .0024-.0037in	.056-.100mm .0022-.0039in	.056-.100mm .0022-.0039in	.060-.093mm .0024-.0037in	.060-.093mm .0024-.0037in	.060-.093mm .0024-.0037in	.060-.093mm .0024-.0037in	.060-.093mm .0024-.0037in	.060-.093mm .0024-.0037in	.060-.093mm .0024-.0037in	.056-.100mm .0022-.0039in	.056-.100mm .0022-.0039in	.056-.100mm .0022-.0039in	.056-.100mm .0022-.0039in	.056-.100mm .0022-.0039in	.070-.126mm .0028-.0050in	.070-.126mm .0028-.0050in	
Limit	.3mm .0118in	.3mm .0118in	.3mm .0118in	.3mm .0118in	.3mm .0118in	.3mm .0118in	.3mm .0118in	.3mm .0118in	.3mm .0118in	.3mm .0118in	.3mm .0118in	.3mm .0118in	.3mm .0118in	.3mm .0118in	.3mm .0118in	.3mm .0118in	.3mm .0118in	.3mm .0118in	.3mm .0118in	.3mm .0118in	
Valve Clearance In. & Ex. When Cold	.08-.12mm .0031-.0047in	.08-.12mm .0031-.0047in	.085-.115mm .0034-.0045in	.08-.12mm .0031-.0047in	.085-.115mm .0034-.0045in	.085-.115mm .0034-.0045in	.085-.115mm .0034-.0045in	.085-.115mm .0034-.0045in	.085-.115mm .0034-.0045in	.085-.115mm .0034-.0045in	.085-.115mm .0034-.0045in	.085-.115mm .0034-.0045in	.085-.115mm .0034-.0045in	.08-.12mm .0031-.0047in	.08-.12mm .0031-.0047in	.08-.12mm .0031-.0047in	.08-.12mm .0031-.0047in	.08-.12mm .0031-.0047in	.08-.12mm .0031-.0047in	.08-.12mm .0031-.0047in	
Spark Plug	NGK B6ES	NGK B6HS	Champion L86C	NGK B6HS	NGK B6ES	NGK B6ES	NGK BP6ES	NGK BP6ES	NGK BP6ES	NGK BP6ES	NGK BP6ES	NGK BP6ES	NGK BP6ES	NGK B6HS	NGK BM4A	NGK B6HS	NGK BM4A	NGK B6HS	NGK BP6HS	NGK B6HS	
Spark Plug Gap	.6-.7mm .0236-.0275in	.6-.7mm .0236-.0275in	.6-.7mm .0236-.0275in	.6-.7mm .0236-.0275in	.6-.7mm .0236-.0275in	.6-.7mm .0236-.0275in	.7-.8mm .0275-.0315in	.7-.8mm .0275-.0315in	.7-.8mm .0275-.0315in	.7-.8mm .0275-.0315in	.7-.8mm .0275-.0315in	.7-.8mm .0275-.0315in	.7-.8mm .0275-.0315in	.6-.7mm .0236-.0275in	.6-.7mm .0236-.0275in	.6-.7mm .0236-.0275in	.6-.7mm .0236-.0275in	.6-.7mm .0236-.0275in	.6-.7mm .0236-.0275in	.6-.7mm .0236-.0275in	
CrankCase Capacity (Oil Capacity)	.6 L	.65 L	.5 L	1.0 L	1.2 L	1.2 L	1.2 L	1.2 L	1.55 L	1.55 L	1.55 L	2.0 L	2.0 L	.6 L	.56 L	.6 L	.56 L	.85 L	1.2 L	1.2 L	
Torques Specs																					
Cylinder Head Bolts																					