

## Lingenfelter LSA, LS9, LS3, & L92 Cylinder Head Dowel Pin Locator Tool



PN: L950075307



## Parts List

### Lingenfelter LSA, LS9, LS3, & L92 Cylinder Head Dowel Pin Locator Tool

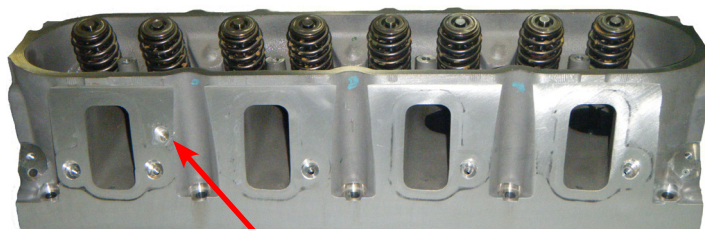
#	Part number	Description
1	XX03952-0018	Dowel pin drill fixture
2	8486A49	Drill bushing
2	47539-2	M6x1.0x70 SHCS
2	47393	M6 washer
1	8854A23	10mmx3/x1.000x2-11/16 square end mill
1	57485K68	10mm ID set collar
4	N/A	Instructions
1	L920010000	LPE 9" decal

### Tools & Materials Required

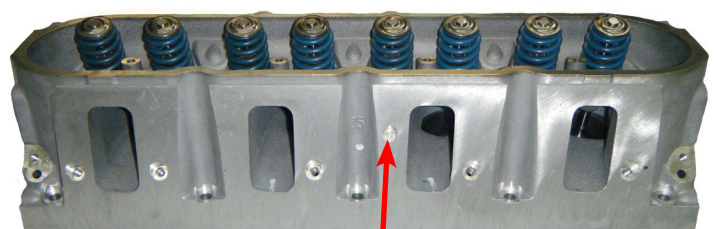
- 3/8" drill
- masking tape
- 5mm Allen key (or equivalent)
- 2.5mm Allen key (or equivalent)

Thank you for purchasing the Lingenfelter Performance Engineering (LPE) LSA, LS9, LS3, and L92 cylinder head dowel pin locator tool. In order to assure that the rectangular port cylinder heads are installed with the correct intake manifold, GM places a dowel pin on the intake manifold and a matching dowel hole on the cylinder head itself. The location of this dowel pin will be different depending on whether the engine is supercharged (i.e. LSA, LS9) or naturally aspirated (i.e. LS3, L92). The LPE cylinder head dowel pin locator tool can be used to precisely position and drill a new dowel pin hole in a different position. For example, this tool could be used on naturally aspirated LS3 heads to allow for the installation of a LSA or LS9 supercharger, or the tool could be used when installing LSA/LS9 heads on an engine with an LS3 or L92 intake manifold. This tool works not only for the four cylinder heads mentioned above, but for virtually any GM rectangular port cylinder head, including LY6 truck heads.

**LSA Cylinder Head**

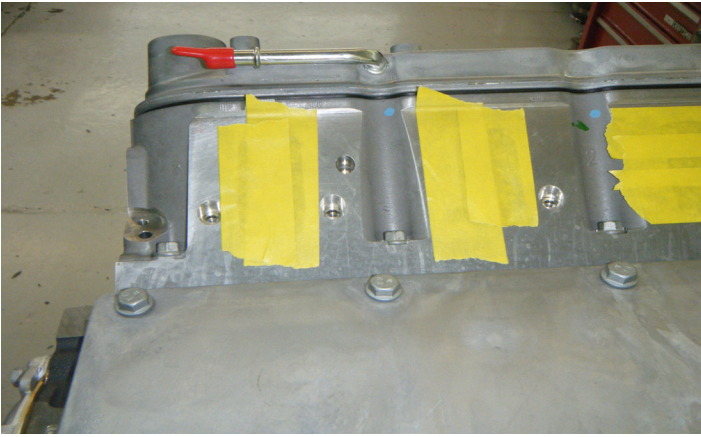


**LS3 Cylinder Head**



## For LS3 and L92 Cylinder Heads

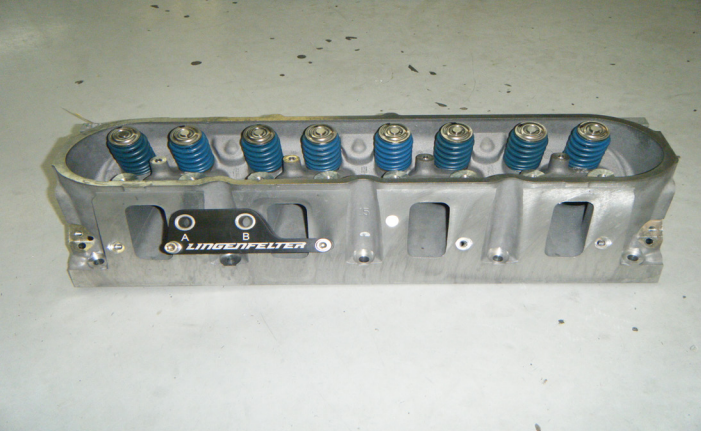
1. Using masking tape, tape off the intake ports to ensure that no debris is able to enter the engine.



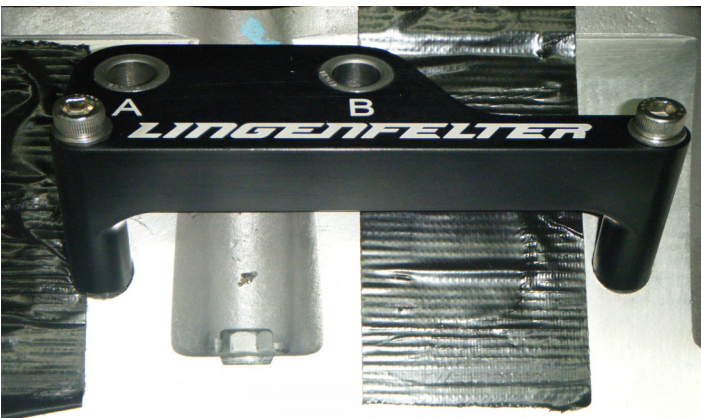
2. Using a 2.5mm Allen key, install the supplied 10mm inner diameter set collar (57485K68) onto the supplied end mill (PN: 8854A23). The distance from the tip of the tool to the bottom of the set collar should be 35.5mm (1.4 inches). Insert the end mill assembly into an electric drill.



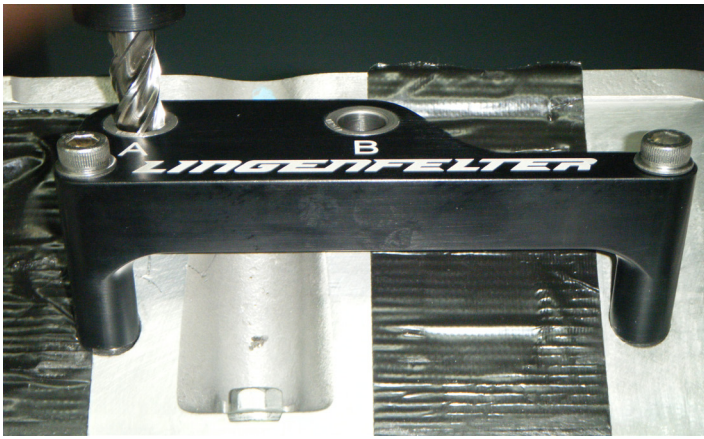
3. Locate the correct mounting location in the LS3/L92 cylinder head, as shown in the adjacent illustration.



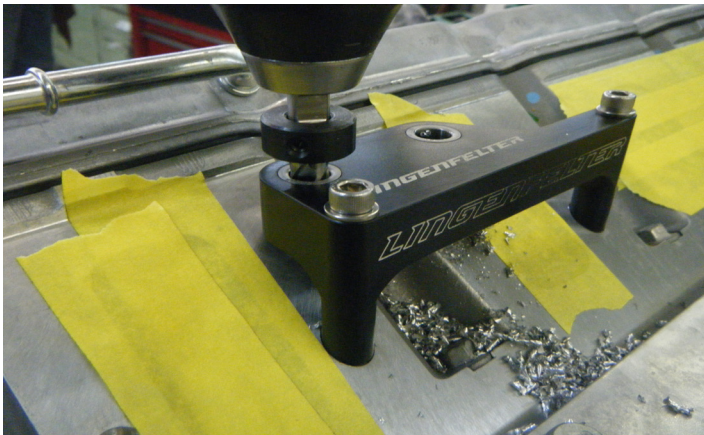
4. Secure the drilling fixture to the head using (2) M6x1x70mm socket head cap screws (PN: 47539-2) and (2) M6 washers (PN: 47393), which are included in the kit.



**⚠ CAUTION**



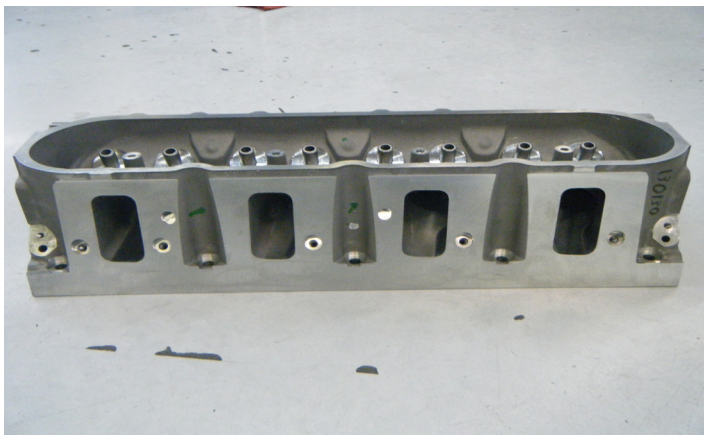
5. Insert the end mill into the drilling fixture bushing labeled as "A".



6. Drill the new dowel hole until the bottom of the set collar contacts the top of the drilling fixture.



7. Repeat steps 3-6 for the other cylinder head.



8. Thoroughly remove all drilling debris from the valley tray and cylinder heads
9. Remove the tape from the cylinder head ports.

**Relocation of the LS3/L92 cylinder head dowel pins is now complete.**

## For LSA and LS9 Cylinder Heads

1. Using masking tape, tape off the intake ports to ensure that no debris is able to enter the engine.



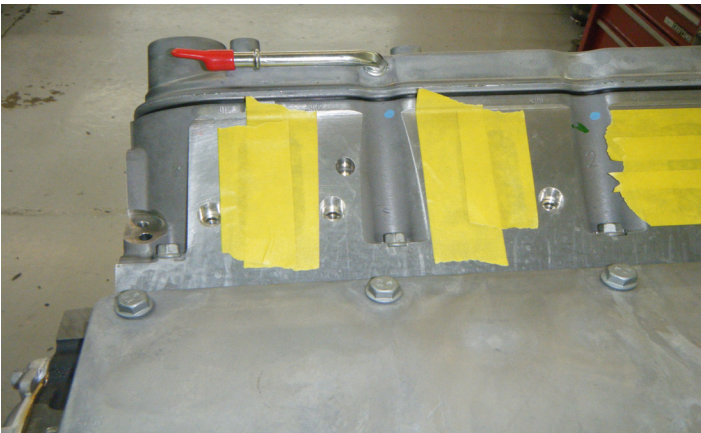
2. Using a 2.5mm Allen key, install the supplied 10mm inner diameter set collar (57485K68) onto the supplied end mill (PN: 8854A23). The distance from the tip of the tool to the bottom of the set collar should be 35.5mm (1.4 inches). Insert the end mill assembly into an electric drill.



3. Locate the correct mounting location in the LSA/LS9 cylinder head, as shown in the adjacent illustration.



4. Secure the drilling fixture to the head using (2) M6x1x70mm socket head cap screws (PN: 47539-2) and (2) M6 washers (PN: 47393), which are included in the kit.





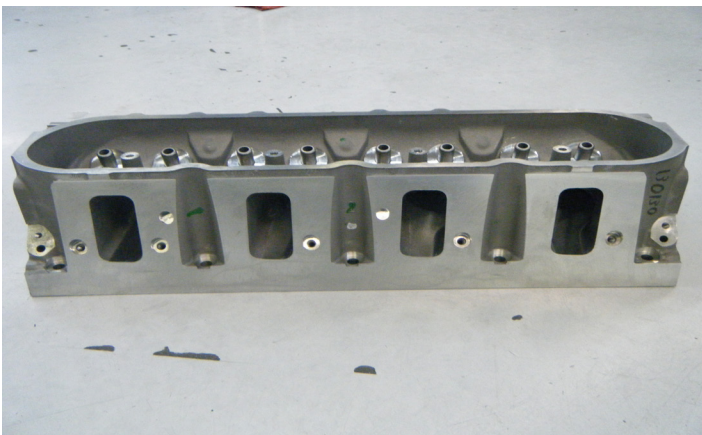
5. Insert the end mill into the drilling fixture bushing labeled as "B".



6. Drill the new dowel hole until the bottom of the set collar contacts the top of the drilling fixture.



7. Repeat steps 3-6 for the other cylinder head.



8. Thoroughly remove all drilling debris from the valley tray and cylinder heads
9. Remove the tape from the cylinder head ports.

**Relocation of the LS4/LS9 cylinder head dowel pins is now complete.**

For additional product installation information and technical support, contact LPE or your LPE products distributor. You can also find technical support and usage discussions regarding this product and many other LPE products in our Internet forums:

<http://www.lingenfelter.com/LPEforumfiles>



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