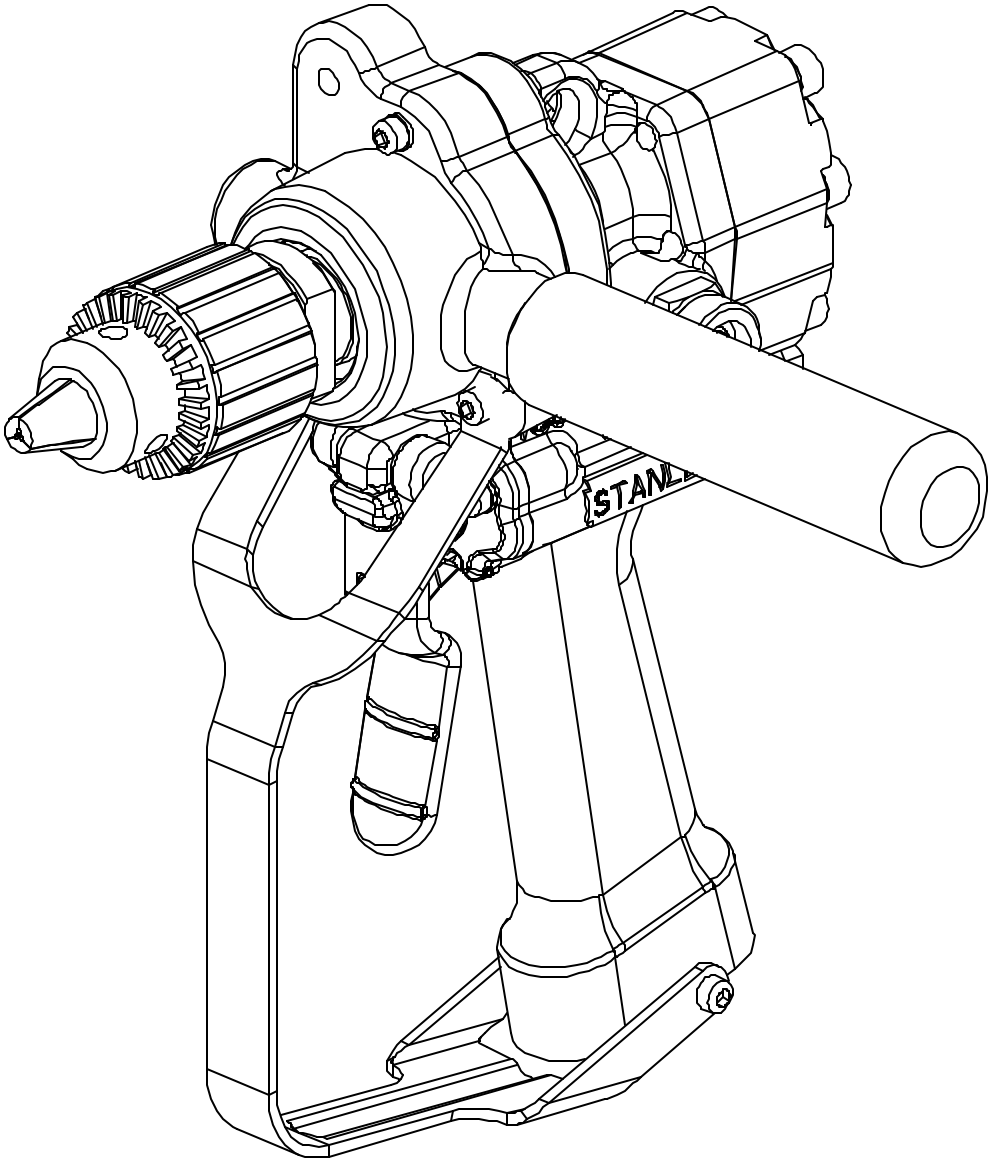
STANLEY®

Service Manual

DL07
Hydraulic Drill



DANGER

SERIOUS INJURY OR DEATH COULD RESULT FROMTHEIMPROPERREPAIRORSERVICEOF THISTOOL.

REPAIRS AND/OR SERVICE TO THIS TOOL MUSTONLYBEDONEBYANAUTHORIZEDAND CERTIFIEDDEALER.

USA&CEVersion
607897/2003 Ver. 1

Table of Contents

DL07
Hydraulic Drill

SERVICING THE DL07HYDRAULIC DRILL:

ThismanualcontainsSafety, Operation,andTroubleshooting information.Stanley HydraulicTools recommends that servicingof hydraulictools,otherthanroutine maintenance, mustbeperformedby an authorized andcertifieddealer. PleasereadtheDANGERwarning on thecoverandtheSAFETY warningbelow.

SAFETY FIRST

It is the responsibility of the operator and service technician to read rules and instructions for safe and proper operation andmaintenance.

A cautious worker using common sense is thegreatestsafetydevice.

Certificate of Conformity

CERTIFICATE OFCONFORMITY
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CERTIFICATDECONFORMITECEE
D'UNMARTEAU-PIQUEUROU D'UNBRISE-BETONEXAMINE
CERTIFICADODECONFORMIDAD
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STANLEY
HydraulicTools

I,theundersigned:
Ich,derUnterzeichnende:
Jesoussigné:
Elabajofirmante:
losottoscritto:

Burrows, James

SurnameandFirstnames/FamiliennnameundVemamen/Nometprénoms/Nombreyapellido/Cognomeenome

herebycertifythattheconstructionplantorequipmentspecifiedhereunder:
bestätigthiermit,daßdieKonstruktionundAusrüstungwie folgtspezifiziertist:
attestequelebrise-béton:
porelpresentecertificoquelafabricaoelequipoespecificadoacontinuacion:
certificochel'impiantool'attrezzaturasottospecificata:

1. Category: Drill
   Kategorie:
   Catégorie:
   Categoria:
   Categoria:

2. Make/Ausführung/Marque/Marca/Fabbricazion: **Stanley**

3. Type/Typ/Type/Tipo/Tipo:DL0755001

4. Type serialnumberofequipment:
   TypundSerien-Nr.derAusrüstung:
   Numérodanslasériedutypedematériel:
   Numerodeserietipodelequipo:
   Matricoladell´attrezzatura:

   ALL

5. Year ofmanufacture/Baujahr/annéedefabrication/Añodefabricacion/Annodifabbricazione: 2003

hasbeenmanufacturedinconformity with-EECTypeexaminationasshown.
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Directive Richtlinie Directivesparticulières Directriz Direttiva	No. Nr Numéro No n.	Date Datum Date Fecha Data	Approvedbody Prüfungdurch Organismeagréé Aprobado Collaudato	Dateofexpiry Ablaufdatum Dated´expiration Fechadecaducidad Datadiscadenza
EN ENISO EN	792-3 3744 28662-1	1994 1995 1988	Self Self Self	NA NA NA

6. SpecialProvisions: **None**
   SpezielleBestimmungen:
   Dispositionsparticulières:
   Provisionesespeciales:
   Misurespecial:

SoundLevel: <80dBA
VibrationLevel: 1.2m/s2

Doneat/Ort/Faità/Dadoen/Fattoa **StanleyHydraulicTools,Milwaukie,Oregon USA** Date/Datum/le/Fecha/Data 7/23/03

Signature/Unterschrift/Signature/Firma/Firma

Position/Position/Fonction/Puesto/Posizione **EngineeringManager**

Specifications

DriveSize_____1/2in./1.3cm3-JawAdjustable 5/8 - 16THDChuck
PressureRange_____1000-2000psi/70-140bar
FlowRange_____4-12 gpm/15-45lpm
OptimumFlow_____8gpm/30lpm
System Type__openorclosedcenter,HTMATYPEI-III
Porting_____-8SAEO-ring
ConnectSize&Type___3/8 in.NPTMaleAdapter
Weight_____8lbs./3.6kg
OverallLength_____9in./23cm

Width_____3-1/2 in./9cm
Motor_____ Integral
DrillTorque___20ftlbs/27Nmat2000psi/140bar
DrillSpeed_____1000rpmat8gpm/30lpm
RPM Range_____350-1500
Max. Fluid Temp._____ 140° F / 60° C
HTMAClass II_____7-9 gpm @ 2000 psi

EHTMACategory_____30 lpm @ 138 bar
Sound Power Level_____87.6 dBA
Vibration Level_____ 0.9 m/s^2

Torque and Drill Speeds

TORQUE
(Proportionalto oilpressure)

USA	METRIC
4ftlbs@500psi	0.5Nm@35bar
9ftlbs@1000psi	1.2Nm@70bar
14ftlbs@1500psi	1.9Nm@105bar
19ftlbs@2000psi	2.6Nm@140bar

DRILLSPEED
(Proportional tooilflow)

HYDRAULICFLOW	DRILLSPEED
3gpm(11.3lpm)	350 rpm
4gpm(15lpm)	475 rpm
6gpm(23lpm)	750 rpm
8gpm(30lpm)	1000 rpm
10gpm(38lpm)	1250 rpm

General Safety Instructions

Alwaysobservesafetysymbols.They areincluded for your safety andtheprotection ofthetool.

⚠ DANGER

Thissafetysymbolmayappearon thetool.Itisusedtoalertthe operatorof anactionthatcould placehim/herorothersinalife threateningsituation.

⚠ WARNING

Thissafetysymbolappearsinthese instructionstoidentifyanaction thatcouldcausebodilyinjurytothe operatororotherpersonnel.

⚠ CAUTION

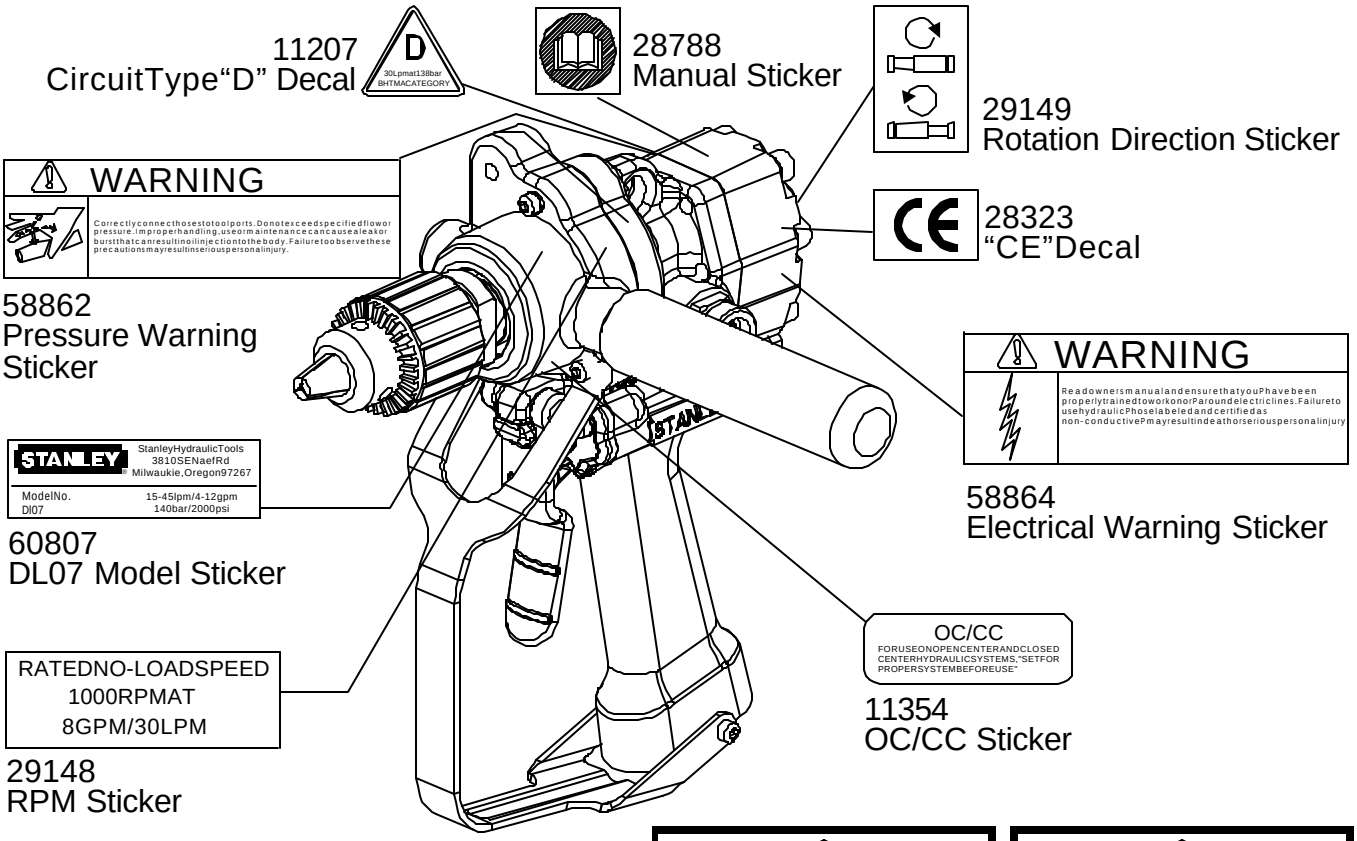
This safetysymbolappearsinthese instructions to identify an action or condition that could result in damage to the tool or other equipment.

This toolwillprovidesafeanddependableserviceifoperatedinaccordancewiththeinstructions given in thismanual.Readandunderstandthismanualandanystickersandtagsattachedtothe tool and hoses before operation. Failure to do so could result in personal injury or equipment damage.

- Operatormuststartinaworkareawithoutbystanders.Theoperatormustbefamiliarwithallprohibited workareassuchasexcessiveslopesanddangerousterrainconditions.
- Establishatrainingprogramforalloperatorstoensuresafeoperations.
- Donotoperatethetoolunlessthoroughlytrainedorunderthesupervisionofaninstructor.
- Alwayswearsafetyequipmentsuchasgoggles,headprotection,andsafetyshoesatalltimeswhen operatingthe tool.
- Donotinspectorcleanthetoolwhilethehydraulicpowersourceisconnected.Accidentalengagementof the toolcancauseseriousinjury.
- DonotoperatethistoolwithoutfirstreadingtheOperatingInstructions.
- Donotinstallorremovethistoolwhilethehydraulicpowersourceisconnected.Accidentalengagement of thetoolcancauseseriousinjury.
- Neveroperatethetoolifyoucannotbesurethatundergroundutilitiesarenotpresent.Underground electricalutilitiespresentanelectrocutionhazard.Undergroundgasutilitiespresentanexplosionhazard. Otherundergroundutilitiesmaypresentotherhazards.
- Donotoperateinapotentiallyexplosiveatmosphere.
- Donotwearloosefittingclothingwhenoperatingthetool.Loosefittingclothingcangetentangledwith the toolandcauseseriousinjury.
- Supplyhosesmusthaveaminimumworkingpressureratingof2500psi/175bar.
- Besureallhoseconnectionsaretight.
- Thehydraulic circuitcontrolvalvemustbeinthe“OFF”positionwhencouplingoruncouplingthetool. Wipeallcouplerscleanbeforeconnecting.Failuretodosomayresultindamagetothequickcouplers andcauseoverheating. Useonlylint-freecloths.
- Donotoperatethetoolatoiltemperaturesabove140° F/60° C.Operationathigheroiltemperaturescan causeoperatordiscomfortandmaycausedamagetothetool.
- Donotoperateadamaged,improperlyadjusted,orincompletelyassembledtool.
- To avoidpersonalinjuryorequipmentdamage,alltoolrepair,maintenanceandservicemustonlybe performedbyauthorizedandproperlytrainedpersonnel.
- Donotexceedtheratedlimitsofthetoolorusethetoolforapplicationsbeyonditsdesigncapacity.
- Alwayskeepcriticaltoolmarkings,suchaslabelsandwarningstickerslegible.

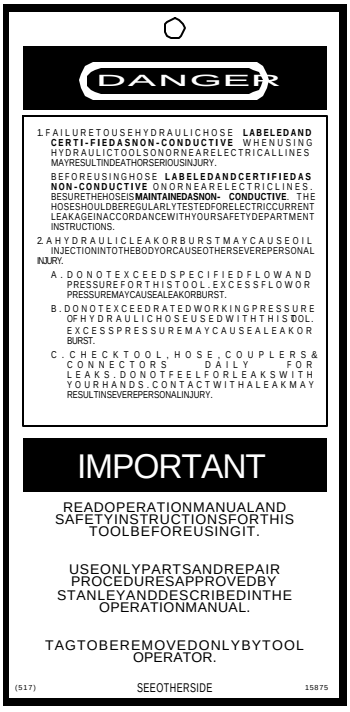
Tool Decals & Tags

ANameTagStickerisattachedtothetool.Neverexceedtheflowandpressurelevelsspecifiedon thissticker.Theinformationlistedonthenametagstickermustbelegibleatalltimes.Replacethis sticker if it becomes worn or damaged. A replacement is available from your local Stanley distributor.



* Not allstickersarefurnishedonalltoolmodels. Consultpartslistandmodelnumberfordetails.

TheSAFETYTAG,P/N15875,shownatright,smaller thanactualsize,isattachedtothetoolwhenshipped from the factory. Read and understand the safety instructions listed on this tag before removal. We suggest you retain this tag andattach it to the tool whennotinuse.



Hydraulic Hose Requirements

HOSETYPES

HydraulichosetypesauthorizedforusewithStanleyHydraulicToolsareasfollows:

❶ Certifiednon-conductive
❷ Wire-braided(conductive)
❸ Fabric-braided(notcertifiedorlabelednon-conductive)

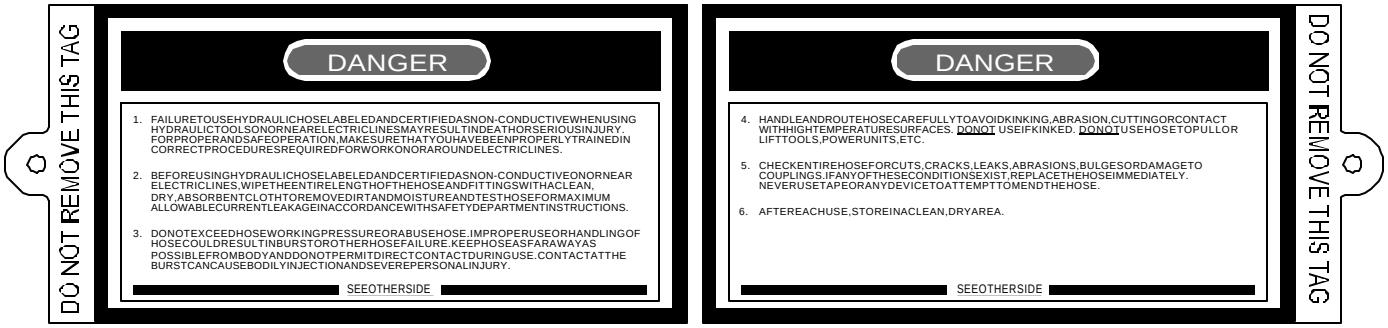
Hose ❶ listedaboveistheonlyhoseauthorizedforusenearelectricalconductors.
Hoses ❷ and ❸ listedaboveare **conductive** and **mustnever** benearelectricalconductors.

HOSESAFETYTAGS

TohelpensureyourSafety,thefollowingDANGERtagsareattachedtoallhosespurchasedfromStanley HydraulicTools.DONOTREMOVETHESETAGS.

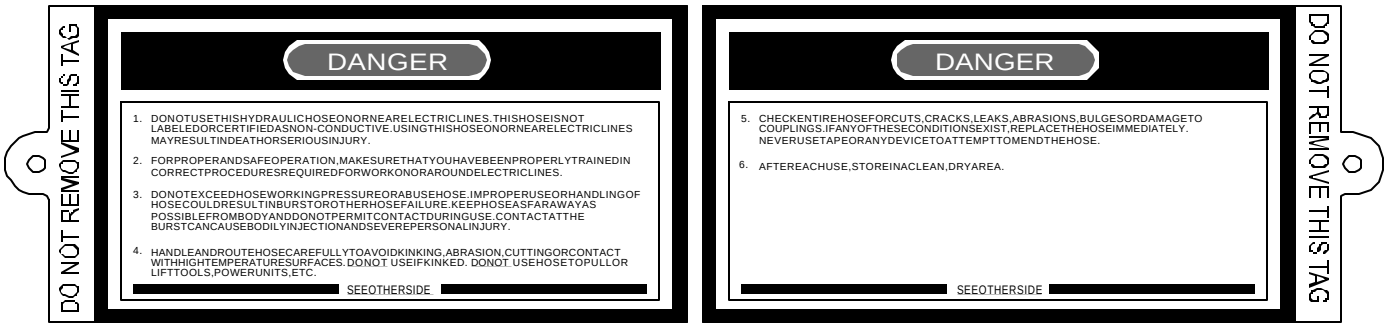
Iftheinformationinatagisillegible becauseofwearordamage,replacethetagimmediately.Anewtag maybeobtainedatnochargefromyourStanleyDistributor.

This Tag attachedto“CertifiedNon-Conductive” hose.
(shownsmaller thanactualsize) p/n27987



Side 1 Side 2

This Tag attachedto“Conductive” hose.
(shownsmaller thanactualsize) p/n29144



Side 1 Side 2

HOSEPRESSURERATING

Theratedworkingpressureofthehydraulichosemustbeequaltoorhigherthanthereliefvalvesettingon thehydraulicsystem.

HTMA Requirements

Hydraulic System Requirements	Tool Category  Type I	 Type II		Type III
Flowrate ToolOperatingPressure (atthepowersupplyoutlet)	4-6gpm (15-23lpm) 2000psi (138bar)	7-9gpm (26-34lpm) 2000psi (138bar)	10.5-11.6gpm (36-44lpm) 2000psi (138bar)	11-13 gpm (42-49lpm) 2000psi (138bar)
Systemreliefvalvesetting (atthepowersupplyoutlet)	2100-2250psi (145-155bar)	2100-2250psi (145-155bar)	2100-2250psi (145-155bar)	2100-2250psi (145-155bar)
Maximumbackpressure (attoolendofthereturnhose)	200psi (14bar)	200psi (14bar)	200psi (14bar)	200 psi (14bar)
Measuredatamax.fluidviscosityof: (atmin.operatingtemperature)	400ssu* (82centistokes)	400ssu* (82centistokes)	400ssu* (82centistokes)	400 ssu* (82centistokes)
Temperature Sufficientheatrejectioncapacity tolimitmax.fluidtemperature to: (atmax.expectedambienttemperature)	140° F (60°C)	140° F (60°C)	140° F (60°C)	140° F (60°C)
Min.coolingcapacity atatemperaturedifference of betweenambientandfluidtemps	3hp (2.24kW) 40° F (22°C)	5hp (3.73kW) 40° F (22°C)	6hp (4.47kW) 40° F (22°C)	7hp (5.22kW) 40° F (22°C)
NOTE: Donotoperatethetoolatoil temperaturesabove140°F(60°C).Operation athighertemperaturescancauseoperator discomfortatthetool.				
Filter				
Min.full-flow filtration Sizedforflowofatleast: (Forcoldtemp.startupandmax.dirt-holding capacity)	25 microns 18 gpm (68lpm)	25microns 30gpm (114lpm)	25microns 35gpm (132lpm)	25microns 40gpm (151lpm)
Hydraulicfluid				
Petroleumbased (premiumgrade,anti-wear,non-conductive) Viscosity (atmin.andmax.operatingtemps)	100-400 ssu* (20-82centistokes)	100-400 ssu* (20-82centistokes)	100-400 ssu* (20-82centistokes)	100-400 ssu* (20-82centistokes)
NOTE: Whenchoosinghydraulicfluid,the expectedoiltemperatureextremesthatwillbe experiencedinservicedeterminethe mostsuitabletemperatureviscosity characteristics.Hydraulicfluidswithaviscosity indexover140willmeettherequirementsover awiderangeofoperatingtemperatures.				
*SSU=SayboltSecondsUniversal				

NOTE:Thesearegeneralhydraulicsystemrequirements.Seetool Specificationpagefortoolspecific requirements.

Operating Instructions

Pre-OperationProcedures

InstallChuck

Screw the chuckontotheoutputshaft.Tightento 50ftlbs/68Nmtorque,lubricated.

⚠ CAUTION

Usetheflatsontheshafttoholdtheshaftduringtighteningor looseningofthechuck.

Check Power Source

1. Using a calibratedflowmeterandpressure gauge, checkthatthehydraulicpowersource developsaflowof4-12gpm/15-45lpmat 1000-2000psi/70-140bar.

2. Makecertainthatthehydraulicpowersource is equippedwithareliefvalvesettoopenat 2100psi/145barmaximum.

Connect Hoses

1. Wipeallhosecouplers with a cleanlint-free clothbeforemakingconnections.

2. Connecthosesfromthe hydraulicpower supplytothetoolquickdisconnects.Itisa goodpracticetoconnectthereturnhosefirst anddisconnect itlasttominimize oravoid trappedpressurewithinthedrill.

3. Observethearrowonhose couplers to ensure thatthe flow is in the properdirection.The malecoupleronthecircuithoseendisthe supply(pressure) coupler.

4. MakesurethecircuitPRESSUREhose(with malequickdisconnect)isconnectedtothe port atthebackofthedrillhandle.Thecircuit RETURN hose(withfemalequickdisconnect) is connectedtothe portclosest tothetrigger.

5. Movethehydrauliccircuitcontrolvalvetothe **ON** positiontodirecthydraulicflowtothe drill.

NOTE:Ifuncoupledhosesare left inthe sun, pressure increase inside the hose mayresult inmakingthemdifficultto connect. Whenever possible, connectthefreeendsofthehoses together.

Drill Operation

1. Observeallsafetyprecautions.

2. Placetheselecteddrillbitfullyintothechuck. Center thebitandtightenthechuckusingthe keyprovided.Removethekeyandstoreaway fromthedrill.

3. Momentarilypressthetrigger to ensurethat the drillbitrotatesclockwiseandrunstrue.

⚠ CAUTION

Makecertainthatthechuckhasbeensecurelymounted.

4. Selectaworkpositionthatgivessecure footing andbalancewhileoperatingthedrill.

5. Pressthedrillagainsttheworkandsqueeze the trigger.

Thedrillingmethodusedisdeterminedbythe materialbeingdrilledandthesizeanddepth requirements ofthehole.

Brittlematerialsuchasrock,brickorconcretecan bedrilledefficientlywhenthe bitiscausedto strike (hammer) theholebottomtobreakupthe material. Without hammering,therotatingbitwill onlygrinddownandbecomedull.TheStanley HD08 shouldbeusedforthisapplication.

Ductilematerial such asmetalorwoodisdrilled efficientlywhenasteadydownforceisappliedto the drillcentertocausethebittoslicechipsof materialfrom theholebottom.Whendrillingin metal,useacuttinglubricanttoprolongbitlife and reducetheamountofforcerequiredtodrill effectively.

Largedrill holesaremoreproductivelycreated fromsmall drillholes.Drillbits areincrementally selectedtoenlargetheholeuntilthedesiredhole sizeis obtained. Eachbitselectedmustalways be toolargetothreadandjamintoanexistinghole;

otherwisethebitmaybreakandendangerthe operator.

Cold Weather Operation

Ifthetoolistobeusedduringcoldweather,preheat the hydraulicfluidatlowenginespeed.Whenusing the normally recommendedfluids,fluid temperature should beatorabove50°F/10°C(400ssu/82 centistokes)beforeuse.

Damage to thehydraulicsystemortoolcanresult from use withfluidthatistooviscousorthick.

Open Center/ Closed Center Setup (OC/CC)

This toolcanbeconfiguredtorunonbothopencenter andclosedcentersystems.Setforpropersystem beforeuse.

1. Determine systemtype.
2. Remove hexplug(81)fromspringcapusinga 3/16in.Hex.

ClosedCenter — Usinga3/16in.Hex,reach throughthe hole inthespringcap andturntheselectorscrewfully clockwise.Whentheselector screw bottoms,closedcenter operationisselected.

OpenCenter — Usinga3/16in.Hex,reach throughthe hole inthespringcap andturntheselectorscrew counter-clockwise untilmeeting resistance(fromtheretaining ring).Turntheselectorclockwise andthencounter-clockwisetobe suretheselectorisbeingstopped bytheretainingring.Donotforce theselectorscrew.Opencenter Operationisnowselected.

⚠ CAUTION

To prevent damagetotheretaining ring, do not attempt to force the selector screw counter-clockwise beyondthepointofinitialresistance.

3. Reinstallhexplug.Failuretoinstallplugmay introducecontaminantstothe spool boreresulting inreplacementofthevalvespoolandmain Housing.

Service Instructions

Note: For orientation of partsin thefollowing procedures, refer tothepartsdrawinglaterinthis manual.

Prior to Disassembly

1. Cleantheexteriorofthetoolandplaceonaclean worksurface.

2. Obtainthe seal kitlistedonthePARTSLISTsoall sealsexposedduringdisassemblycanbereplaced.

Prior to Reassembly

1. Cleanallpartswithadegreasingsolution.

2. Blowdryallpartsoruselint-freecloths.

3. Ensurethatallsealsexposedduringdisassembly are replacedwithnewparts.

4. Applycleangrease oro-ringlubricanttoallparts duringassembly.

Tool Disassembly

Gear Housing

1. Removethechuck(33)fromtheoutputshaft(36)by holdingthesealnut(35)withanopenendwrenchand turningthe chuckcounter-clockwise.

2. Removethecapscrews(31)andlockwashers(32) securingthegearhousing(69)tothemainhousing assembly(76).Ifthetoolhasatriggerguard(80), remove capscrew(34), nut(20)andtriggerguard beforeremovingthe gearhousing.

3. Removetheringgear(27),rollpin(5)andgasket (71).

4. Removetheretainingring(29)neartheplanetshafts (23)beforeremovingtheplanetshafts.Removethe sealnut(35)byusingtheplanetshaftholestokeepthe outputshaftfromturning.Pulltheoutputshaftwith attachedparts fromthegearhousing.

5. Removetheplanetgears(26)fromtheoutputshaft. Inspectshafts,gearsandgearborebushings(see CLEANINGANDINSPECTIONprocedure).

6. Spintheballbearing(28)ontheoutputshaft.The bearingshouldturnsmoothly.Toreplacethebearing, supporttheouterraceandpressdownontheoutput shaftfromthechuckend.Donotreusetheballbearing onceithasbeenremovedfromtheoutputshaft.

7. Removetheoutputshaftseal(30)bypressingit fromthegearhousingbore.

8. Checktheendfacesofthesealnutandoutputshaft for nicksandwar(seeCLEANINGAND INSPECTIONprocedure).

Motor Cap

9. Removethesixcapscrews(41)andlockwashers(3) securingthemotorcapassembly(46)tothemain housingassemblyandliftoffthemotorcapassembly. Donotinanywayexcessivelyforcethemotorcapoff the mainhousingassembly.

10. Removetheo-ring(9)fromthemotorcap.

MainShaftand Idler Shaft

11. Taponthesmallgearendofthemainshaft(5) andpushtheshaftfromthemainbody.

12. Removetheidlergear(45)andidlershaft(47).

13. Removetheretainingring(16)andthenpickout the sealwasher(44),back-upring(39)ando-ring(4) fromthemainhousing.

Valve Spool

14. Unscrewthespringcap(66),pickoutthespring (79)andpushthevalvespool(59)outthespringcap endofthemainhousing.

Trigger

15. Removethetriggerbyfirstremovingthe capscrews(8)andlockwashers(32)andremovingthe trigger andtriggermount(78)asanassembly.Drive outtherollpin(21).

ReversingSpool

16. Removetheretainingrings(67)andendcaps(65).

17. Unscrewthesealcaps(64)andslidethereversing spool(68)outofthemainhousing.Makesuretheidler shafthasbeenremovedpriortocompletingthisstep.

Cleaning and Inspection

Cleaning

Cleanallpartswithade-greasingsolution.Blowdry withcompressedairoruselint-freecloths.

Gear Chamber(MotorCap)

Thechamberboresandbottomsaroundtheshaft bushingsshouldbepolishedandnotroughorgrooved. Ifthebushingboresareyellow-bronze,replacethem andinvestigatethe causeofwear.

Theflatsurfacesaroundthechamberandboltholes shouldbeflatandfreeofnicksorburrsthat could causemisalignmentorleaks.

Bushings

Theinsideofthebushingsshouldbegraywithsome bronze showingthrough.Ifsignificantyellow-bronze shows,replacethe bushings.Inspectthemotorshaft andidlershaftforcorrespondingwearandreplaceas required.

Gears

Thedriveandidlergearsshouldhavestraighttips withoutnicks, squaretoothendsandhaveasmooth evenpolishontheteethandendfaces.Replacethe gear if cracks arepresent.

MainHousingAssembly

Thesurfacenearthegearsshouldshowtwo interconnectingpolishedcircleswithoutastep.

Shafts

Theshaftdiameteratthebearingandseallocations mustbesmooth.Grooves,roughnessorareduced diameter indicatefluidcontaminationordamaged bushings.Gritparticlesmayhavebeenimbeddedin the bushings,grindingintothe hardenedshaft. If abnormalshaftwearasnotedaboveoccurs(morethan normalpolishing),replaceboththeshaftand associatedbushings.

Alsocheckthehydraulicsystemforexcess contaminationinthefluidandforfiltercondition. Operatingconditionsmayrequirechangingfroma25-micronfiltertoanoversized10-micronfilter.

Tool Reassembly

1. Lubricateandinstallanewo-ring(4)andback-upring (39)intothemainhousing.Installthesealback-upwasher (44)andretainingring(16).

2. Slidethereversingspool(68)intothemainhousing assembly.Insertthe spoolwiththeslottowardtheidler shaftholeandthenarrowsideofthedepressioninthe spoolfacinguptowardthetopofthemainhousing.

3. Inserttheidlershaft(47)topreventthereversingspool fromturning.

4. Lubricate andinstallanewwiperseal(63),o-ring(10), back-upring(17)ando-ring(2)intoeachsealcap (64). Installeachsealcapontothemainhousingassembly.

5. Installeachendcap(65)andsecurewithsnapring(67).

6. Lubricatesealareaofmainshaft(50)andinstallitinto the mainhousing.Installtheidlergear(45)ontotheidler shaft.

7. Lubricateandinstallanewo-ring(9)ontothemotor cap(46).Lubricate capscrewthreads(41)withananti-seizecompoundandinstallthemotorcapwiththe capscrewsandlockwashers(3).Tightenboltsto15-17ft lbs / 20-23Nminacrosspattern.

⚠ CAUTION

Donotforcepartstogether.

8. Lubricateandinstallanewo-ring(19)inthemain housingandanewsealwiper(61)inthetriggermount (78). Securethetrigger(77)totriggermountwithrollpin (21). Installtriggerassemblytomainhousingwith capscrews(8)andlockwashers(32).

9. Lubricateandinstallanewo-ring(18)onthevalve spool(59)beforeinstallingvalvespoolintothemain housingfromthespringcapend.Donotinstallthevavle spoolfromthetriggersideofthemainhousingasthiswill resultinspoolsealdamage.Ensurethatthetabonthe valvespoolnoseisalignedwiththeslotinthetrigger. Installspring(79)behindvalvespool.UsingLoctite™ 242,installthespringcap(66)tothemainhousing.

10. Lubricate andinstalltheshaftseal(30)intothegear

housing. Installshaftkeeper(24)andbearing keeper(25)beofreinstallingbearing(28)on outputshaft(36).Installplanetgears(26)into outputshaftandinstalltheoutputshaftwith aqttachedpartsintothegearhousing(69).Install the ringgear(27)intothegearhousingandsecure withtherollpin(5).Installthesealgasket(71) aroundtheringgear.

11. Lubricateandinstalltheo-ring(4)onthe outputshaft.Installthesealnut(35),usingthe planetshaftborestopreventtheoutputshaftfrom turning. Installtheplanetshafts(23)andsecure themwithretainingring(29).Hstallthegear chamberandattachedpartstothemainhousing usingcapscrews(31)andlockswashers(32).If the tool hasatriggerguard(80),installguardwith capscrew(34)andnut(20)atthistime.

12. Lubricate theoutputshaftthreadsandinstall the chuck(33).Whileholdingthesealnutsecure withanopenendwrench,torquethechuckto50 ftlbs / 69Nm.

Troubleshooting

Thissectiondescribeshowtofindandresolveproblemsusersmayexperience.Ifasituationoccursthatisnotcovered, callyourStanleyCustomerServicerepresentativeforassistance.

⚠ WARNING

Inspectingthetoolorinstallingpartswiththehydraulichosesconnectedcanresultinseverepersonalinjuryorequipment damage.
Topreventaccidentalstartup, disconnectthehydraulicpowerbeforebeginninganyinspectionorinstallationtask.

Ifsymptomsofpoorperformancedevelop,thefollowingchartcanbeusedasaguidetocorrecttheproblem.

Whendiagnosingfaultsinoperationofthetool,alwayscheckthatthehydraulicpowersourceissupplyingthecorrect hydraulicflowandpressuretothetoolaslistedinthetable.Useaflowmeterknowntobeaccurate.Checktheflow withthehydraulicoiltemperatureatleast80°F/27°C.

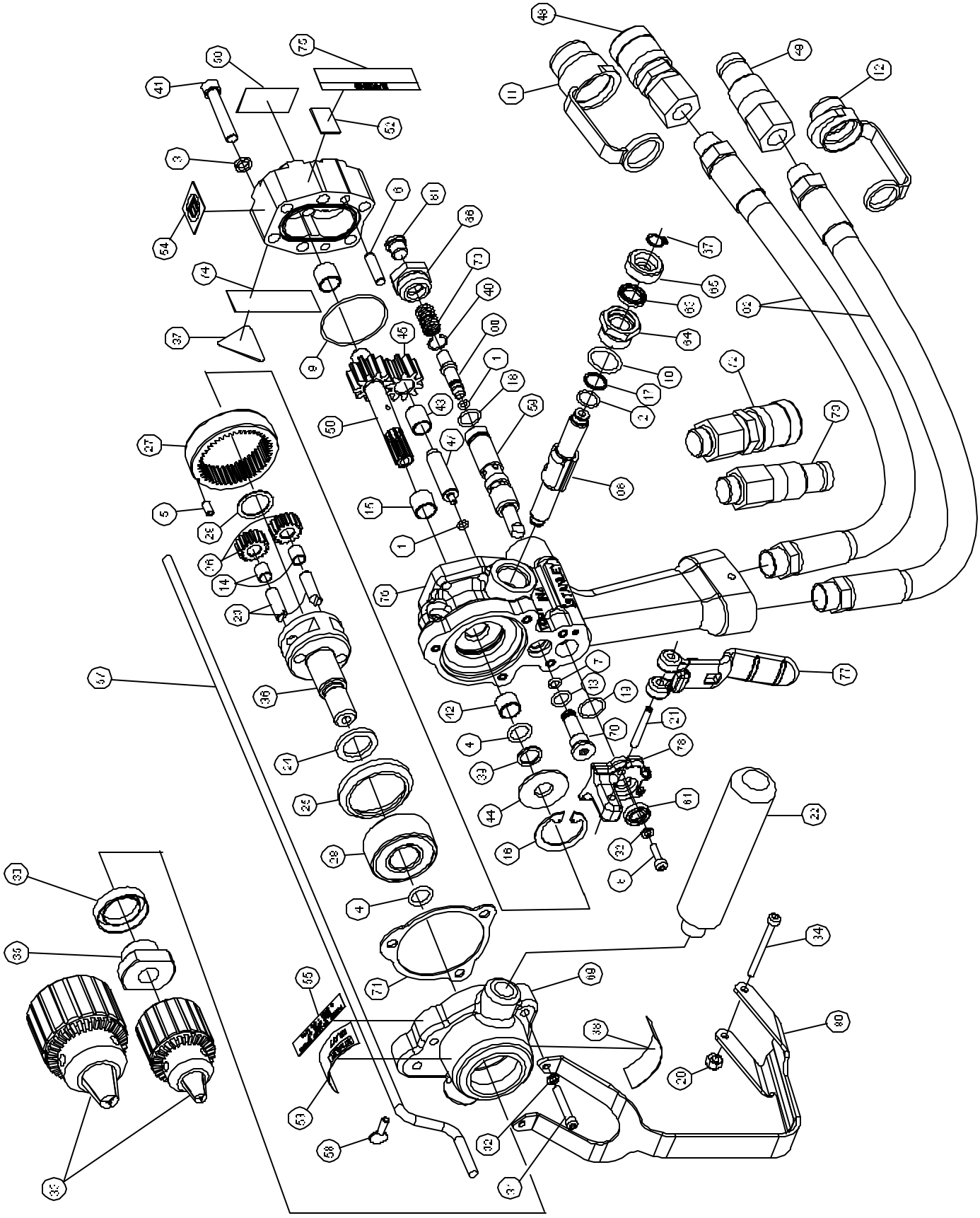
Symptom	Possible Cause	Solution
Tool will not start.	Power notbeingsupplied.	Check to make certainthatboth hosesare connected.
		Turn hydraulliccircuitcontrolvalve ON.
	Defectivequick disconnects.	Check eachquick disconnect separately. Replaceasnecessary.
Low drilling torque.	Relief valvesetting toolow.	Setreliefvalveat2100psi/145bar.
	Fluid restriction in hoseorvalve. Excessflowandpressure loss.	Locateandremoverestriction.
		Usecorrectfluid.
		Fluidnotwarmed-up.Preheat system.
		Hoses toolongforhoseI.D.Use shorter hose.
		Hoses I.D.toosmallforhose length.Uselarger I.D. hose.
Low tool speed.	Fluidflowrateistoolow.	Check circuit flow rate.
Tool speed too high.	Fluidflowrateisexcessive.	Check circuit flow rate; add a proper flow control valveorreduce the pumpRPM.
Oilleaks around gearhousing.	Hydraulicpressure andreturn hosesreversed.	Correct hose connections. Pressure should be to thehandle port away fromthetrigger,return is near the trigger;thenreplace themain shaft oil seal.
	Main shaft seal o-ringleaking.	Replace seal;check seal contact surfaces.

continued

Troubleshooting

Symptom	Possible Cause	Solution
Oil getshot, power unit working hard.	Open center tool onaclosedcenter circuit andviceversa.	Usetoolstomatchcircuit.
	Circuit relief set toolow.	Adjust relief valve to 2100 psi/ 145 bar.
	Toomuch oil goingthrough tool.	Adjust flow for 12gpm/45lpm maximum, or less.
Oilleaks at reversing spool.	Damaged o-rings.	Replaceasrequired.
	Wronghydraulic fluid. Circuit too hot.	SeeOPERATINGINSTRUCTIONS for correctfluid/ circuit specifications.
Oilleakatmotor capface.	Fasteners loose.	Refer toSERVICEMANUAL
	Faceo-ringwornormissing.	Replaceasrequired.
	Motorcap/ mainhousing damaged.	Replaceasrequired.

DL07 Parts Illustration



DL07 Parts List

Item	Part	Qty.	Description	Notes
1	00026	2	O-ring3/16x5/16x1/16-008	
2	00175	2	O-ring1/2x5/8x1/16-014	
3	00231	6	Lockwasher5/16"I.D	
4	00354	2	O-ring1/2x11/16x3/32-112	
5	00563	1	RollPin3/16O.D.x.375LG.	
6	00713	2	DowelPin1/4x1	
7	00717	1	O-ring1/4x3/8x1/16-010	
8	00803	2	HSHCS10-24x5/8	
9	01262	1	O-ring1-3/4x1-7/8x1/16-031	
10	01604	1	O-ring.755x.949x.097-910	
11	02324	1	Cap&Plug½in.	ModelDL07552SUPOnly
12	03288	1	Cap&Plug3/8in.	ModelDL07552SUPOnly
13	03364	1	O-ring.441x.558x.072-905	
14	05206	2	Bushing	
15	05207	2	Bushing	
16	06635	1	RetainingRing	
17	07224	2	BackupRing-014	
18	07626	1	O-ring1/2x5/8x1/16-014	
19	07627	1	O-ring5/8x3/4x1/16-016	
20	07724	1	NylockNut10-24unc	
21	07970	1	RollPin3/16O.d.x1.375LG.	
22	08130	1	Handle	ModelsDL07652,552S,552SUP,572SOnly
23	08161	2	PlanetShaft	
24	08162	1	ShaftKeeper	
25	08163	1	BearingKeeper	
26	08165	2	PlanetGearAssembly	IncludesItem#14
27	08166	1	RingGear	
28	08175	1	BallBearing	
29	08440	1	RetainingRing	
30	09621	1	ShaftSeal	
31	09622	3	HSHCS10-24x1-1/4	
32	09623	5	Lockwasher#10	
33	09624	1	½in.DrillChuck	ModelsDL07550,5001,652,552S,552SUPOnly
	27628	1	5/8in.DrillChuck	ModelDL07572SOnly
34	09687	1	HSHCS10-24x2.000	
35	09778	1	SealNut	
36	09779	1	OutputShaft	
37	11207	1	Circuittype“D”Sticker	ModelDL0755001Only
38	11354	1	OC/CCSticker	
39	13995	1	Back-upRing-112	
40	16070	1	RetainingRing	
41	18206	6	HSHCS5/16-18x1-3/4	
42	20758	1	Bushing	
43	20760	1	Bushing	
44	27067	1	SealBack-upWasher	
45	20769	1	IdlerGearAssembly	IncludesItem#43
46	20770	1	MotorCapAssembly	IncludesItem#6and15
47	20782	1	IdlerShaft	
48	24058	1	3/8in.Flush-faceCouplerBody3/8npt	PartofSet24069-ModelsDL07552S,552SUP,572S Only
49	24059	1	3/8in.Flush-faceCouplerNose3/8npt	PartofSet54069-ModelsDL07552S,552SUP,572SOnly
50	24271	1	MainShaft	
51	25610	1	RailroadHelpDeskSticker	ModelsDL07552S,552SUP,572SOnly
52	28323	2	Sticker“CE”12mm	ModelDL0755001Only
53	60807	1	DL07ModelNo.Sticker	
54	28788	2	Sticker-Manual	
55	29148	1	RPMSticker	ModelDL0755001Only
56	29149	1	RotationDirectionSticker	ModelDL0755001Only
57	38676	1	DepthGageRod	ModelsDL07552S,572SOnly
58	38685	1	ThumbScrew10-32UNFx.375	ModelsDL07552S,572SOnly
59	48987	1	ValveSpool	
60	48989	1	SelectorScrew	
61	49139	1	SealWiper	
62	56725	2	HoseAssy471ST-05-01-08-06-08-18	ModelsDL07552S,552SUP,572SOnly
63	56747	2	SealWiper	
64	56749	2	SealCap	

DL07 Parts List

Item	Part	Qty.	Description	Notes
65	56757	2	EndCap	
66	56758	1	SpringCap	
67	56764	2	RetainingRing	
68	56765	1	ReversingSpool	
69	58403	1	GearHousingMachining	
70	58462	1	ReliefCartridgePlugAssembly	IncludesItems#7and13
71	58635	1	SealGasket	
72	58856	1	3/8in.Flush-faceCouplerBody-8(½)MaleSAE	PartofSet58718-ModelsDL07550,55001,652Only
73	58857	1	3/8in.Flush-faceCouplerNose-8(½)MaleSAE	PartofSet58718-ModelsDL07550,55001,652Only
74	58862	1	WarningSticker - Pressure	ModelsDL07550,652,552S,552SUP,572SOnly
75	58864	1	WarningSticker - Electrical	ModelsDl07550,652,552S,552SUP,572SOnly
76	59049	1	MainHousingAssembly	IncludesItems#15and42
77	60677	1	TriggerCasting	
78	60678	1	TriggerMountCasting	
79	60679	1	Spring	
80	60710	1	TriggerGuard	
81	350041	1	HollowHexPlug-4SAE	

NOTE:
Use Part Number and
Description whenordering.

SealKitP/N60792			
1	00026	O-ring,3/16x5/16x1/16-008	2
2	00175	O-ring,1/2x5/8x1/16-014	2
4	00354	O-ring,1/2x11/16x3/32-112	2
7	00717	O-ring,1/4x3/8x1/16-010	1
9	01262	O-ring,1-3/4x1-7/8x1/16-031	1
10	01604	O-ring,.755x.949x.097-910	2
13	03364	O-ring,.441x.558x.072-905	1
17	07224	Backupring,-014	2
18	07626	O-ring,½x5/8x1/16-014	1
19	07627	O-ring,5/8x3/4x1/16-016	1
30	09621	ShaftSeal	1
39	13995	Backupring-112	1
63	49139	SealWiper	1
65	56747	SealWiper	2
73	58635	SealGasket	1

Accessories

NOTE:
Use Part Number and Description when ordering.

Part	Description
	WoodAugerBits,5/8 in.Hex
27845	9/16in.diax18in.CarbideTippedAugerBit(22in.oal)
27847	13/16in.diax18in.CarbideTippedAugerBit(22in.oal)
	WoodAugerBits,7/16in.Hex
27850	9/16in.dia.x8in.CarbideTippedAugerBit(12in.oal)
27851	11/16in.dia.x8in.CarbideTippedAugerBit(12in.oal)
27852	13/16in.dia.x8in.CarbideTippedAugerBit(12in.oal)
27853	15/16in.dia.x8in.CarbideTippedAugerBit(12in.oal)
27854	1-1/16 in.dia.x8in.CarbideTippedAugerBit(12in.oal)
27855	9/16in.dia.x12in.CarbideTippedAugerBit(16in.oal)
27856	11/16in.dia.x12in. CarbideTippedAugerBit(16in.oal)
27857	13/16in.dia.x12in.CarbideTippedAugerBit(16in.oal)
27858	15/16in.dia.x12in.CarbideTippedAugerBit(16in.oal)
27859	1-1/16 in.dia.x12in.CarbideTippedAugerBit(16in.oal)
27860	9/16in.dia.x18in.CarbideTippedAugerBit(22in.oal)
27861	11/16in.dia.x18in.CarbideTippedAugerBit(22in.oal)
27862	13/16in.dia.x18in.CarbideTippedAugerBit(22in.oal)
27863	15/16in.dia.x18in.CarbideTippedAugerBit(22in.oal)
27864	1-1/16 in.dia.x18in.CarbideTippedAugerBit(22in.oal)
27869	13/16in.diax36in.CarbideTippedAugerBit(48in.oal)
32399	11/16in.diax15in.CarbideTippedAugerBit(18in.oal)
32400	13/16in.diax15in.CarbideTippedAugerBit(18in.oal)

Warranty

StanleyHydraulicTools(hereinaftercalled“Stanley”),subjecttotheexceptionscontainedbelow,warrantsnewhydraulictoolsforaperiodofone yearfromthedateofsaletothefirstretailpurchaser,orforaperiodof2yearsfromtheshippingdatefromStanley,whicheverperiodexpiresfirst,to befreeofdefectsinmaterialand/orworkmanshipatthetimeofdelivery,andwill,atitsoption,repairorreplaceanytoolorpartofatool,ornew part,whichisfounduponexaminationbyaStanleyauthorizedserviceoutletorbyStanley’sfactoryinMilwaukie,OregontobeDEFECTIVEIN MATERIALAND/ORWORKMANSHIP.

EXCEPTIONSFROMWARRANTY

NEWPARTS: Newpartswhichareobtainedindividuallyarewarranted,subjecttotheexceptionsherein,tobefreeofdefectsinmaterialand/or workmanshipatthetimeofdeliveryandforaperiodof6monthsafterthedateoffirstusage. Sealsanddiaphragmsarewarrantedtobefreeof defectsinmaterialand/orworkmanshipatthetimeofdeliveryandforaperiodof6monthsafterthedateoffirstusage or2yearsafterthedateof delivery,whicheverperiodexpiresfirst. Warrantyfornewpartsislimitedtoreplacementofdefectivepartsonly. Laborisnotcovered.

FREIGHTCOSTS: Freightcosts toreturnpartstoStanley,ifrequestedbyStanleyforthepurposeofevaluatingawarrantyclaimforwarrantycredit, arecoveredunderthispolicyiftheclaimedpartorpartsareapprovedforwarrantycredit. Freightcostsforanypart orpartswhicharenotapproved forwarrantycreditwillbetheresponsibilityoftheindividual.

SEALS&DIAPHRAGMS: Sealsanddiaphragmsinstalledinnewtoolsarewarrantedtobefreeofdefectsinmaterialand/orworkmanshipfora periodof6monthsafterthedateoffirstusage,orforaperiodof2yearsfromtheshippingdatefromStanley,whichever periodexpiresfirst.

CUTTINGACCESSORIES: Cuttingaccessoriessuchasbreakertoolbitsarewarrantedtobefreeofdefectsinmaterialandorworkmanshipatthe timeofdeliveryonly.

ITEMSPRODUCEDBYOTHERMANUFACTURERS: ComponentswhicharenotmanufacturedbyStanleyandarewarrantedbytheirrespective manufacturers.

a.CostsincurredtoremoveaStanleymanufacturedcomponentinordertoserviceanitemmanufacturedbyother manufacturers.

ALTERATIONS&MODIFICATIONS: Alterationsormodificationstoanytoolorpart. Allobligationsunderthiswarrantyshallbeterminatedifthe newtoolorpartisalteredormodifiedinanyway.

NORMALWEAR: Anyfailureorperformancedeficiencyattributabletonormalwearandtearsuchastoolbushings,retainingpins,wearplates, bumpers,retainingringsandplugs,rubberbushings,recoilsprings,etc.

INCIDENTAL/CONSEQUENTIALDAMAGES: Tothefullestextentpermittedbyapplicablelaw,innoeventwillSTANLEYbeliableforany incidental,consequentialorspecialdamagesand/orexpenses.

FREIGHTDAMAGE: Damagecausedbyimproperstorageorfreighthandling.

LOSSTIME: Lossofoperatingtimetotheuserwhilethetool(s)isoutofservice.

IMPROPEROPERATION: Anyfailureorperformancedeficiencyattributabletoafailuretofollowtheguidelinesand/orproceduresasoutlinedin thetool’soperationandmaintenancemanual.

MAINTENANCE: Anyfailureorperformancedeficiencyattributabletonotmaintainingthetool(s)ingoodoperatingconditionasoutlinedinthe OperationandMaintenanceManual.

HYDRAULICPRESSURE&FLOW,HEAT,TYPEOFFLUID: Anyfailureorperformancedeficiencyattributabletoexcesshydraulicpressure, excesshydraulicback-pressure,excesshydraulicflow,excessiveheat,orincorrecthydraulicfluid.

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MIS-APPLICATION: Anyfailureorperformancedeficiencyattributabletomis-application.“Mis-application”isdefinedasusageofproductsfor whichtheywerenotoriginallyintendedorusageofproductsinsuchamatterwhichexposesthemtoabuseoraccident,withoutfirstobtainingthe writtenconsentofStanley. PERMISSIONTOAPPLYANYPRODUCTFORWHICHITWASNOTORIGINALLYINTENDEDCANONLYBE OBTAINEDFROMSTANLEYENGINEERING.

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